Ceco Door

ASSA ABLOY

Updated 05/08/24

TECH MANUAL

Experience a safer
and more open world

HOLLOW METAL DOORS AND FRAMES

CEC-202-0524 PRINTED

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Ceco Door

ASSA ABLOY

Frames

Experience a safer
and more open world

TECH MANUAL

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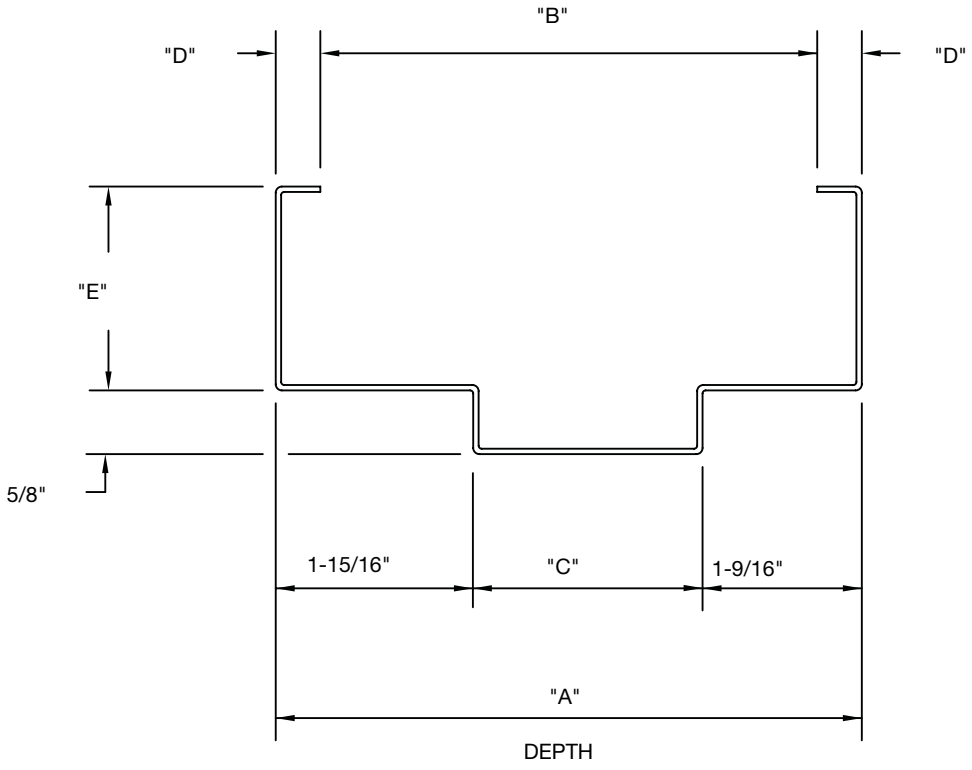
SERIES SU STEEL FRAMES (UNEQUAL RABBET)

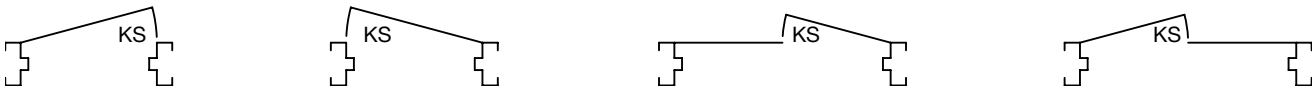
FOR 1-3/4" THICK DOORS - STANDARD WALL APPLICATION, HANDED



DEPTH	A	B	C	D	E	
					HEAD & JAMBS	HEAD & JAMBS
434	4-3/4"	3-3/4"	1-1/4"	1/2"	2"	1"
534	5-3/4"	4-7/8"	2-1/4"	7/16"	2"	1"
634	6-3/4"	5-3/4"	3-1/4"	1/2"	2"	1"
734	7-3/4"	6-3/4"	4-1/4"	1/2"	2"	1"
834	8-3/4"	7-3/4"	5-1/4"	1/2"	2"	1"

SERIES SU, DOUBLE RABBET FRAMES (WITH UNEQUAL RABBETS) ARE ALSO AVAILABLE IN A RANGE OF DEPTHS FROM: 4-5/8" THRU 14" IN 1/8" INCREMENTS. 4" FACE HEADS WITH 2" FACE JAMBS ARE ALSO AVAILABLE IN SELECTED SIZES.

INSIDE



OUTSIDE

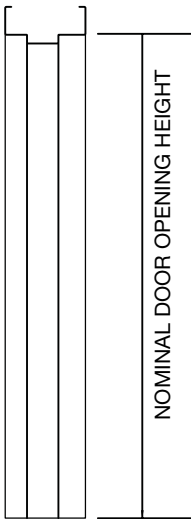
"KS"= KEY SIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

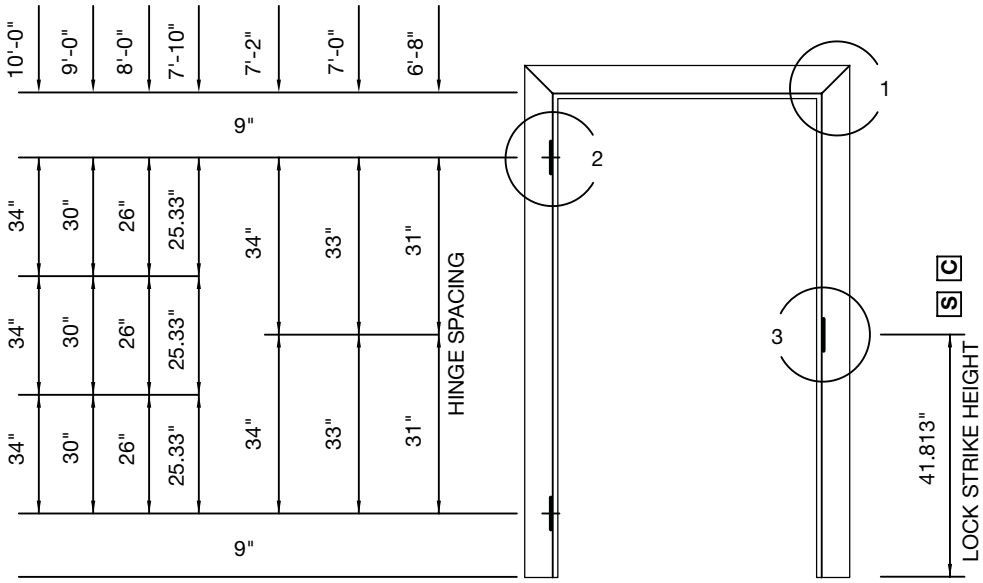
SERIES SU STEEL FRAMES (UNEQUAL RABBET)

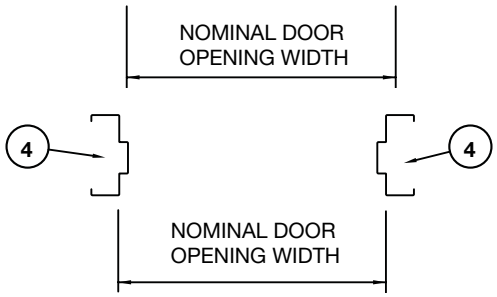
HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS.

VERTICAL SECTION



ELEVATION

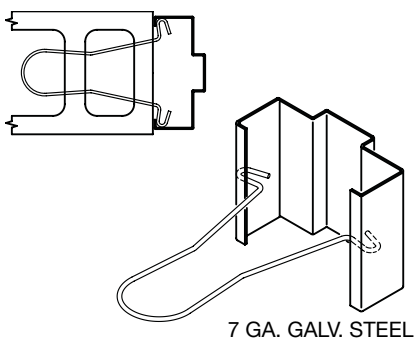




HORIZONTAL SECTION

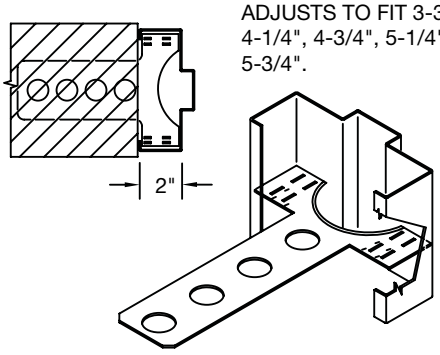
JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS 3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS >7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS >7'6" THRU 10'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL TWO FEET IN HEIGHT OR FRACTION THEREOF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING STUDS AND/OR WALL CONDITIONS.

(4) WIRE MASONRY ANCHOR WMA



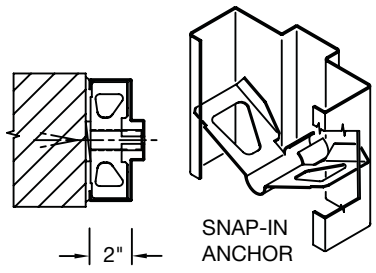
(FOR 3" THRU 8-3/4." DEPTHS)

(4) MASONRY "T" ANCHOR (ADJUSTABLE) MT



ALTERNATE MT ANCHOR DESIGN IS AVAILABLE FOR SPECIAL DEPTH & FACE FRAMES. SEE SECTION F13 FOR DETAILS.

(4) EXISTING OPENING ANCHOR EO

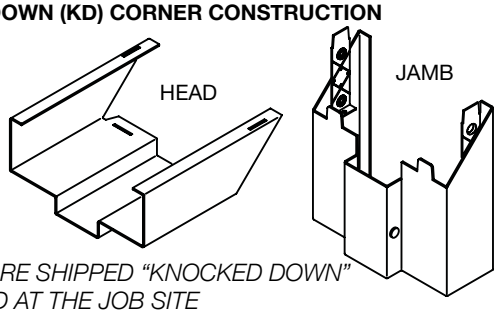


SU PROFILE
EO/S6: 4-3/4" THRU 6-3/4" DEPTH
EO/S8: 6-7/8" THRU 8-3/4" DEPTH

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES SU STEEL FRAMES (UNEQUAL RABBET)

1 KNOCKED DOWN (KD) CORNER CONSTRUCTION



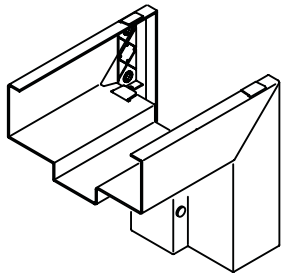
COMPONENTS ARE SHIPPED "KNOCKED DOWN" AND ASSEMBLED AT THE JOB SITE

1 WELDED CORNERS

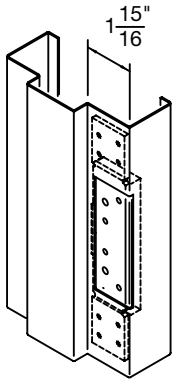
DIE-CUT CORNER WITH CORNER TAB AND FACE WELD SHOWN.

ALSO AVAILABLE WITHOUT TAB AND WELDED OR MITRE SAWED AND WELDED.

ALTERNATIVE WELD OPTIONS ARE ALSO AVAILABLE.

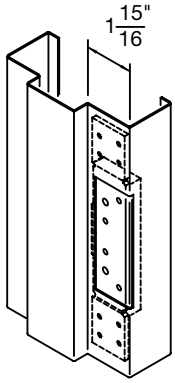


2 HINGE PREPARATION



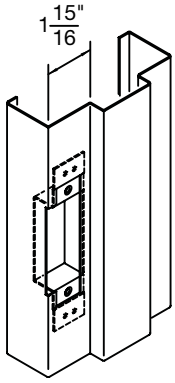
4-1/2" X .134" OR
4-1/2" X .180"
ANSI A156.7 TEMPLATE
7 GAUGE STEEL REINFORCING

2 HINGE PREPARATION



5" X .146" OR
5" X .190"
ANSI A156.7 TEMPLATE
7 GAUGE STEEL REINFORCING

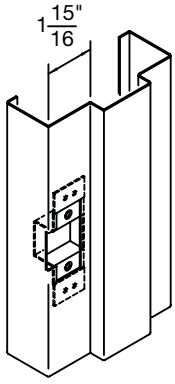
3 LOCK STRIKE PREPARATION



s

UNIVERSAL (4-7 /8")
ANSI A115.1 & 2 TEMPLATE
16 GAUGE STEEL REINFORCING
WITH EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT THREAD
ENGAUGEMENT EQUAL TO 14 GAUGE.
STANDARD FOR 1-3/ 4" DOORS

3 LOCK STRIKE PREPARATION

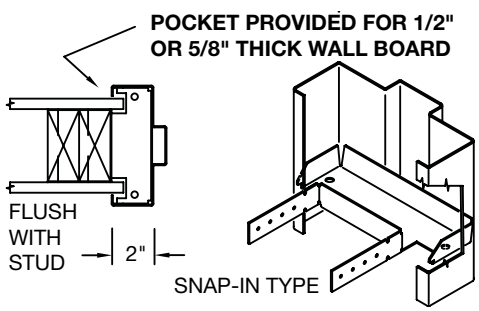


c

CYLINDRICAL (2-3/4")
ANSI A115.3 TEMPLATE
16 GAUGE STEEL REINFORCING
WITH EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT THREAD
ENGAUGEMENT EQUAL TO 14 GAUGE.
OPTIONAL FOR 1-3/ 4" DOORS

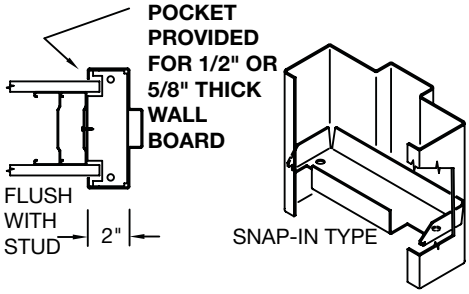
ALSO AVAILABLE WITHOUT LIP NOTCH FOR DEADBOLTS.

4 WOOD STUD ANCHOR WS



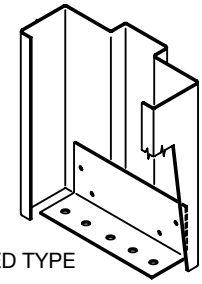
(USED ALSO FOR METAL STUD WALLS)

4 METAL STUD ANCHOR MS



4-3/4" AND 5-3/4" DEPTH ONLY FOR OTHER DEPTHS USE WS TYPE.

4 FIXED FLOOR ANCHOR SA



ONE PIECE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES SU STEEL FRAMES (UNEQUAL RABBET)

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	
5'-0"	10'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY
FACTORY MUTUAL

TEST: UL10B, UL10C, UL1784 & NFPA 252

RATING: 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR, OR 3 HR

MAX. SIZE: 4'0" X 10'0" SINGLE
8'0" X 10'0" PAIR

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS. HOURLY CLASSIFICATIONS ARE NOT SHOWN ON LABEL UNLESS CLASS IS LESS THAN 3 HOURS.

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door Products, Milan, TN or Mason City, IA USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series SU frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008 ...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

Frames are knocked down (K.D.) field assembled type or welded unit type. Head and jamb members of K.D. frames have diecut mitered corners that interlock rigidly when field assembled. Integral door stops are 5/8" high. Jambs are sized to suit wall applications. Twist-in anchors are available for new masonry, wood stud, metal stud, or existing opening wall conditions (indicate which). Floor anchors or extra jamb anchors are provided to anchor sill. Welded-in jamb anchors are also available.

Hardware Provisions: Frames are handed. Hinge jambs are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. The strike jamb is prepared for 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A115.1 &2 (specify which). Plaster guards are provided. Optional closer reinforcement is a 14 gauge steel formed steel sleeve (12 gauge upon request). 3 mute holes are provided per strike jamb and 2 for double swing heads.

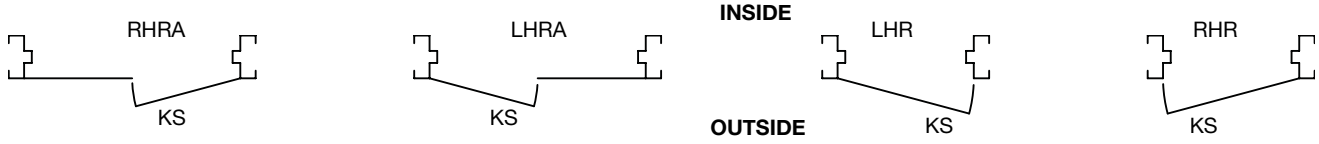
Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available on K.D. frames from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
16 GAUGE STEEL	HEAVY OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT

PERFORMANCE

PHYSICAL ENDURANCE LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST -- 16 & 14 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)



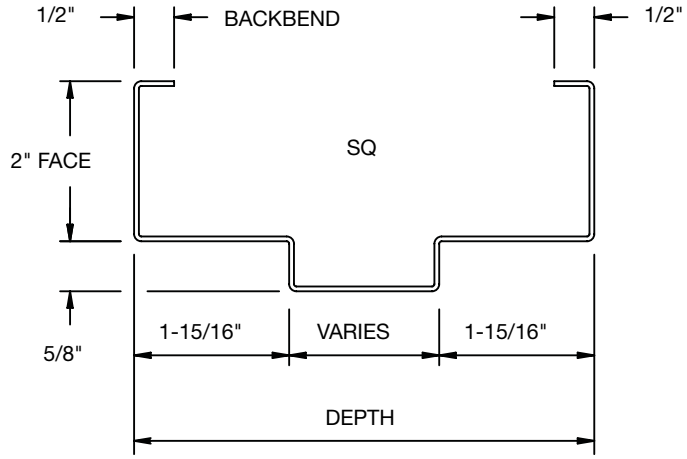
"KS"= KEY SIDE *"SUFFIX"A" = ACTIVE LEAF OF PAIRS*

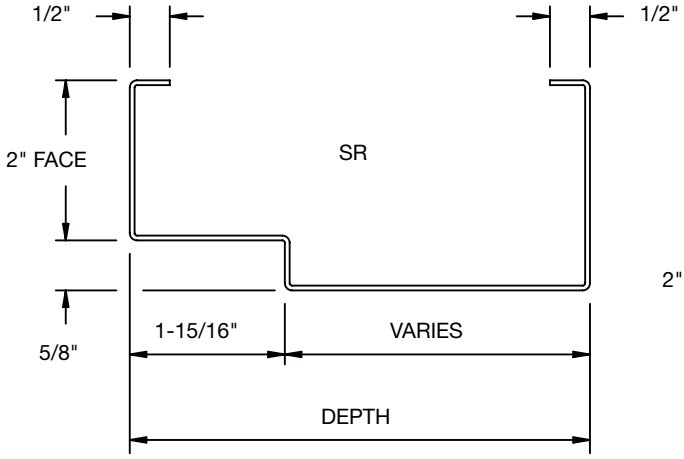
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

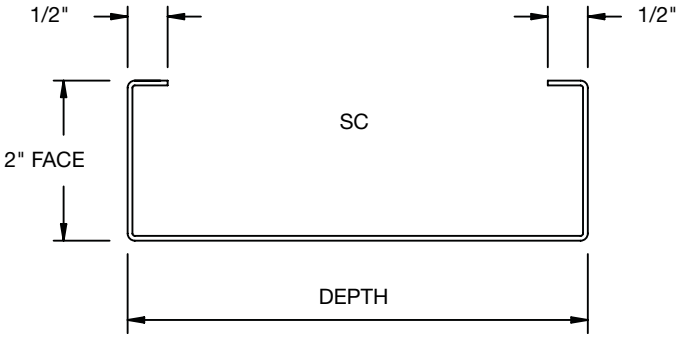
SERIES SQ, SR, AND SC STEEL FRAMES

FOR 1-3/4" DOORS STANDARD WALL APPLICATION, HANDED

** BASIC PROFILES*

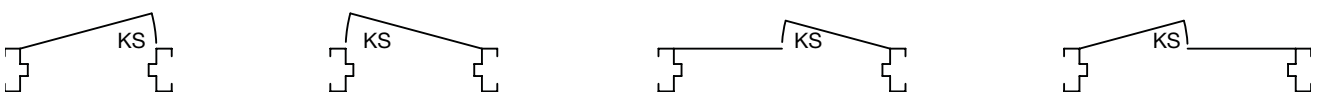






**DEPTH, FACE, SOFFIT, AND BACKBEND DIMENSIONS ARE VARIABLE (MADE TO ORDER) WITHIN LIMITS OF MATERIAL AND TOOLING. HARDWARE PREPARATIONS ARE FOR 1-3/4" THICK DOORS. RABBET DIMENSIONS AND HARDWARE PREPARATIONS TO SUIT OTHER DOOR THICKNESSES ARE ALSO AVAILABLE. BACKBENDS NEED NOT BE THE SAME ON OPPOSITE FACES OF BASIC PROFILE, BUT LIMITS OF MATERIAL AND/OR TOOLING MAY RESTRICT CERTAIN COMBINATIONS OF BACKBENDS AND OTHER PROFILE VARIATIONS. ARE AVAILABLE. PROFILES ARE NOT LIMITED TO THOSE SHOWN ...MANY OTHER DESIGNS AND COMBINATIONS ARE AVAILABLE.*

INSIDE



LH RH RHA LHA

OUTSIDE

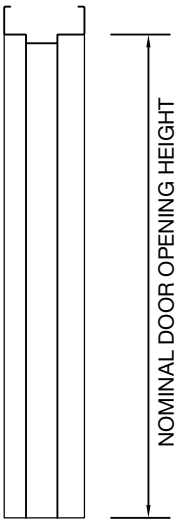
"KS"= KEY SIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

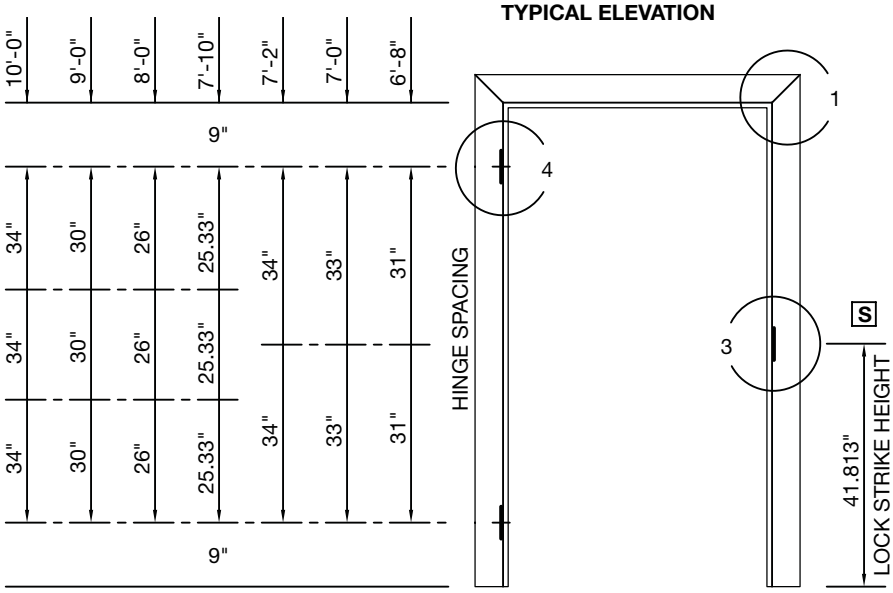
SERIES SQ, SR, AND SC STEEL FRAMES

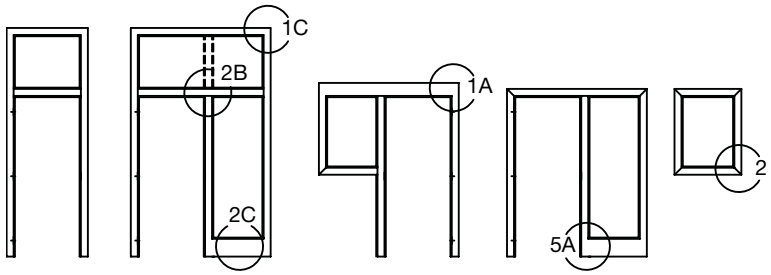
HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS. BASIC DOUBLE RABBET PROFILE SHOWN ... PROFILE VARIATIONS SIMILAR.

VERTICAL SECTION

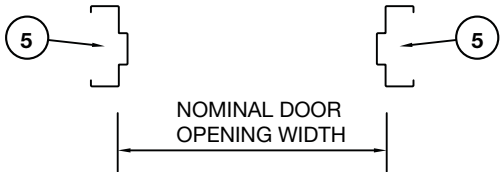


TYPICAL ELEVATION





ELEVATION EXAMPLES



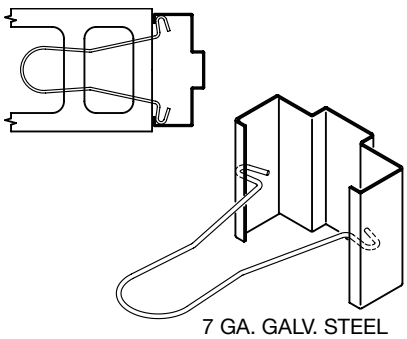
HORIZONTAL SECTION

JAMB ANCHOR QUANTITIES

2 PER JAMB FOR HEIGHTS >3'6" THRU 5'0" AND ONE FLOOR ANCHOR
3 PER JAMB FOR HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR
4 PER JAMB FOR HEIGHTS > 7'2" THRU 7'6" AND ONE FLOOR ANCHOR
5 PER JAMB FOR HEIGHTS >7'6" THRU 10'0" AND ONE FLOOR ANCHOR

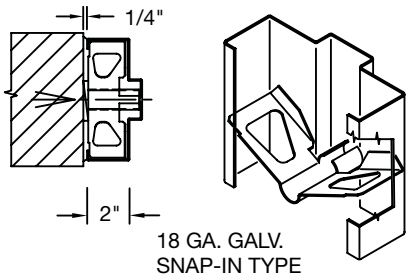
ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL TWO FEET IN HEIGHT OR FRACTION THEREOF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING STUDS AND/OR WALL CONDITIONS.

(5) WIRE MASONRY ANCHOR WMA



(FOR 3" THRU 8-3/4" DEPTHS)

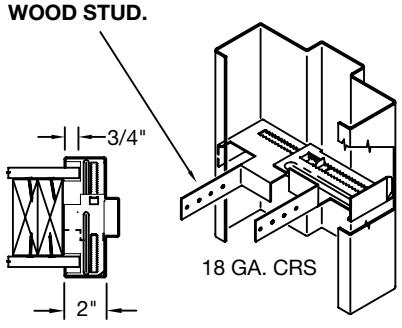
(5) EXISTING OPENING ANCHOR EO



SQ PROFILE *EO/S6: 5-1/8" THRU 6-3/4" DEPTH*
EO/S8: 6-7/8" THRU 8-3/4" DEPTH

(5) ADJUSTABLE ANCHOR FOR STUD WALLS ADJ/STUD

SETUP ANCHORS AND BEND TAILPIECES TO GRIP METAL OR WOOD STUD.

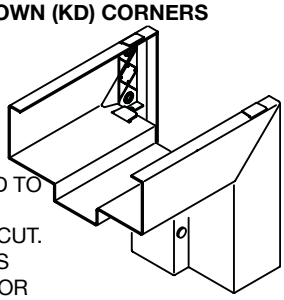


3-3/4" THRU 8-3/4" DEPTH

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

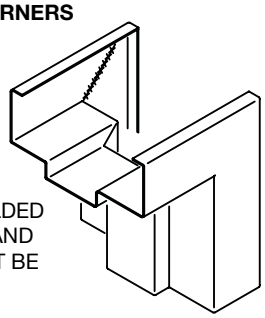
SERIES SQ, SR, AND SC STEEL FRAMES

1 KNOCKED DOWN (KD) CORNERS



NORMALLY LIMITED TO 3 PIECE FRAMES.
CORNERS ARE DIECUT.
HEAD AND 2 JAMBS ARE SHIPPED KD FOR FIELD ASSEMBLY.
SEE BACK OF SHEET FOR FACE LIMITATIONS.
ALSO AVAILABLE SETUP AND WELDED.

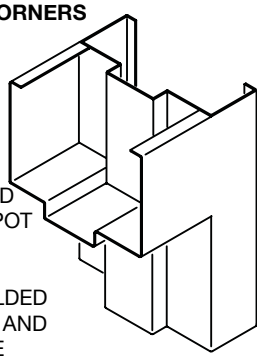
1C WELDED CORNERS



MITERED AND WELDED CORNER -- HEAD AND JAMB FACES MUST BE EQUAL

MITER SEAM IS WELDED AND FACE IS GROUND SMOOTH AND SPOT PRIMERED.

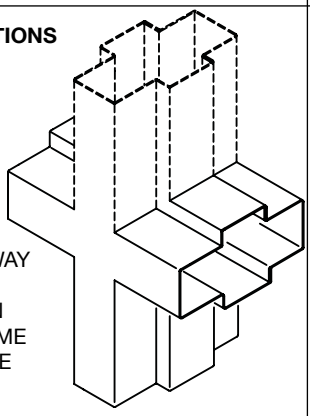
1A WELDED CORNERS



FACE SEAM IS WELDED, GROUND SMOOTH, AND SPOT PRIMERED.

BUTTED AND WELDED CORNER -- HEAD AND JAMBS MAY HAVE UNEQUAL FACES. TYPICALLY, JAMB RUNS THROUGH AND HEAD IS COPED.

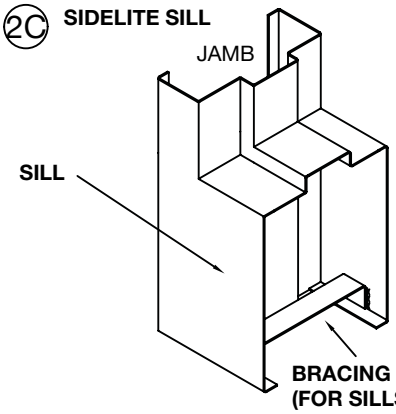
2B INTERSECTIONS



INTERSECTIONS MAY BE 3 OR 4-WAY (4-WAY SHOWN DOTTED) ... OPEN OR CLOSED FRAME PROFILES MAY BE USED.

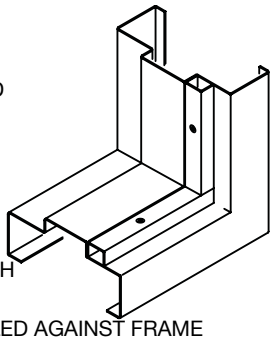
TYPICALLY. VERTICAL SECTIONS RUN THROUGH AND HORIZONTAL BARS ARE COPED. FACE SEAMS ARE WELDED, GROUND SMOOTH, AND SPOT PRIMERED.

2C SIDELITE SILL



FACE SEAM IS WELDED, GROUND SMOOTH, AND SPOT PRIMERED.

2 GLAZING PROVISIONS



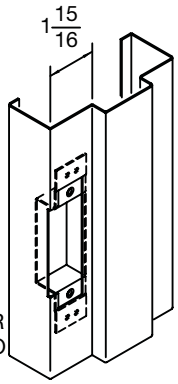
SIDELITES, TRANSOMS, AND BORROWED LITES ARE PROVIDED WITH 5/8" HIGH 18GA. GALV. STEEL GLAZING BEAD. FASTENERS ARE #8X18X1-1/2" POH TEK SCREWS.

BEAD IS INSTALLED AGAINST FRAME STOP WITH ONE SCREW AS STANDARD. BALANCE OF SCREWS ARE SHIPPED LOOSE.

GLASS AND GLAZING ARE BY GLAZING CONTRACTOR

3 LOCK STRIKE PREPARATION

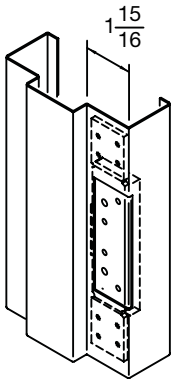
S



UNIVERSAL (4-7 /8") ANSI A115.1 & 2 TEMPLATE.
16 GAUGE STEEL REINFORCING WITH EXTRUDED THREADS EQUAL TO 14 GAUGE.

PREPARATIONS FOR OTHER MECHANICAL OR ELECTRONIC LOCKS, EXIT, OR SECURITY DEVICES ARE ALSO AVAILABLE. ASK FOR DETAILS.

4 HINGE PREPARATION

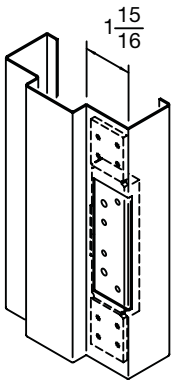


4-1/2" X .134" OR
4-1/2" X .180"
ANSI A156.7
TEMPLATE.
7 GAUGE STEEL
REINFORCEMENT.

PLASTER GUARD IS 26 GAUGE STEEL

BACKSET: 5/16"

4 HINGE PREPARATION

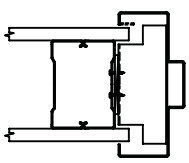


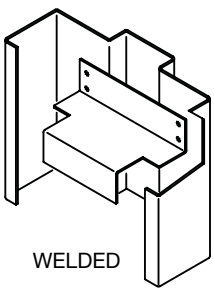
5" X .146" OR
5" X .190"
ANSI A156.7
TEMPLATE.
7 GAUGE STEEL
REINFORCEMENT.

PLASTER GUARD IS 26 GAUGE STEEL

BACKSET: 5/16"

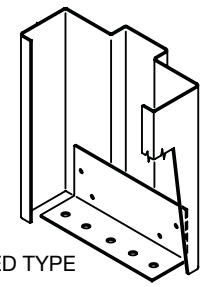
5 METAL STUD "Z" ANCHOR MSZ2





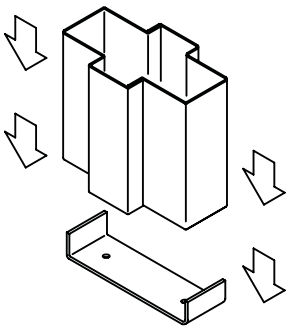
WELDED

5 SPECIAL SIZE FLOOR ANCHOR SA



ONE PIECE WELDED TYPE

5A SIDELITE FLOOR ANCHOR SLFA



SERIES SQ, SR, AND SC STEEL FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2’-0”	4’-0”	
2’-4”	4’-8”	
2’-6”	5’-0”	6’-8”
2’-8”	5’-4”	7’-0”
2’-10”	5’-8”	7’-2”
3’-0”	6’-0”	7’-10”
3’-4”	6’-8”	8’-0”
3’-6”	7’-0”	9’-0”
3’-8”	7’-4”	10’-0”
3’-10”	7’-8”	
4’-0”	8’-0”	
5’-0”	10’-0”	

FIRE DOORS FRAMES

LABELING AGENCIES :
UNDERWRITERS LABORATORY
WARNOCK HERSEY
FACTORY MUTUAL

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR, OR 3 HR

MAX. SIZE: 4’0” X 10’0” SINGLE
8’0” X 10’0” PAIR

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS. HOURLY CLASSIFICATIONS ARE NOT SHOWN ON LABEL UNLESS CLASS IS LESS THAN 3 HOURS.

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door Products, Milan, TN or Mason City, IA, USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series SQ, SR, and SC frames for 1-3/4” doors are formed from commercial quality cold rolled steel conforming to ASTM A1008...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

3 piece door frames are shipped knocked down or welded. Transoms, sidelites and borrowed lites are welded unit type with all exposed welds ground smooth. Oversize frames are shipped in multiple units for field splicing. Integral door stops are 5/8” high. Double rabbet (SQ), single rabbet (SR), or cased opening (SC) profiles are sized to suit wall applications. Elevations conform with approved Ceco shop drawings. Jamb anchors are available for new masonry, wood stud, metal stud or existing opening wall conditions (indicate which). Floor anchors or extra jamb anchors are provided to anchor sill.

Hardware Provisions: Frames are handed. Hinge jambs are mortised for 4-1/2” or 5” high, standard or heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. The strike jamb is prepared for 4-7/8” universal strike in accordance with ANSI A115.1 & 2. Plaster guards are 26 gauge steel. Preparations for various other mechanical and electronic locks and strikes are also available. Optional hardware reinforcement (e.g. closer/holder) is 14 gauge minimum steel welded in place (designate hardware). 3 mute holes are provided per strike jamb and 2 for double swing heads.

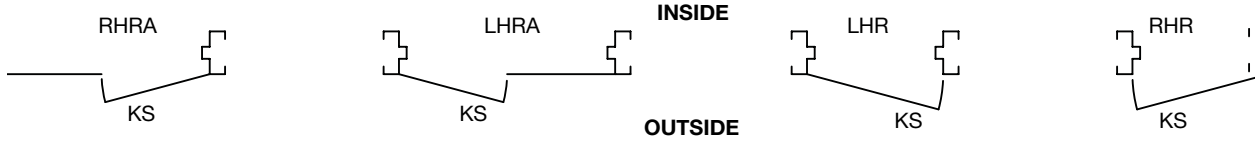
Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10 . The primer coat is a preparatory base for necessary finish painting. “Colorstyle” finish coat is also available on K.D. frames from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
16 GAUGE STEEL	HEAVY OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT

PERFORMANCE

PHYSICAL ENDURANCE LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST -- 16 & 14 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)

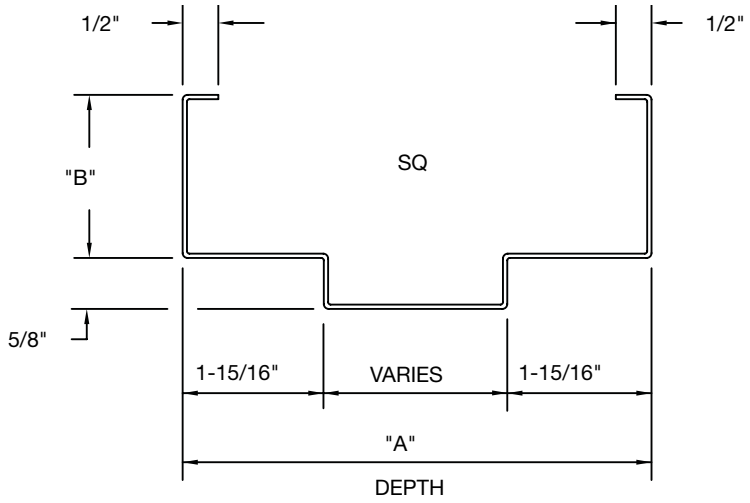


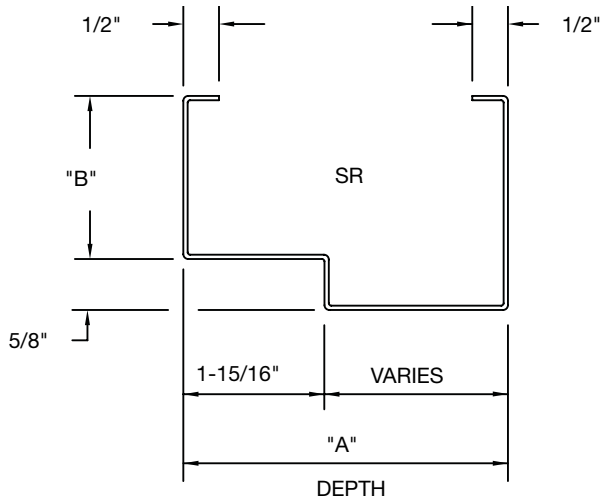
“KS”= KEY SIDE *“SUFFIX”A” = ACTIVE LEAF OF PAIRS*

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

SERIES SQ, 12 GAUGE STEEL FRAMES

FOR 1-3/4" THICK DOORS - STANDARD WALL APPLICATION, HANDED

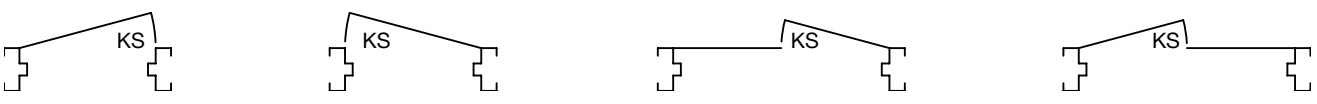




DEPTH	DIM A
DOUBLE RABBET	5-1/4" THRU 11-7/8"
SINGLE RABBET	3-3/4" THRU 6"

FACES	DIM B
JAMB	1", 2" OR 8"
HEAD	2" OR 4"

INSIDE



OUTSIDE

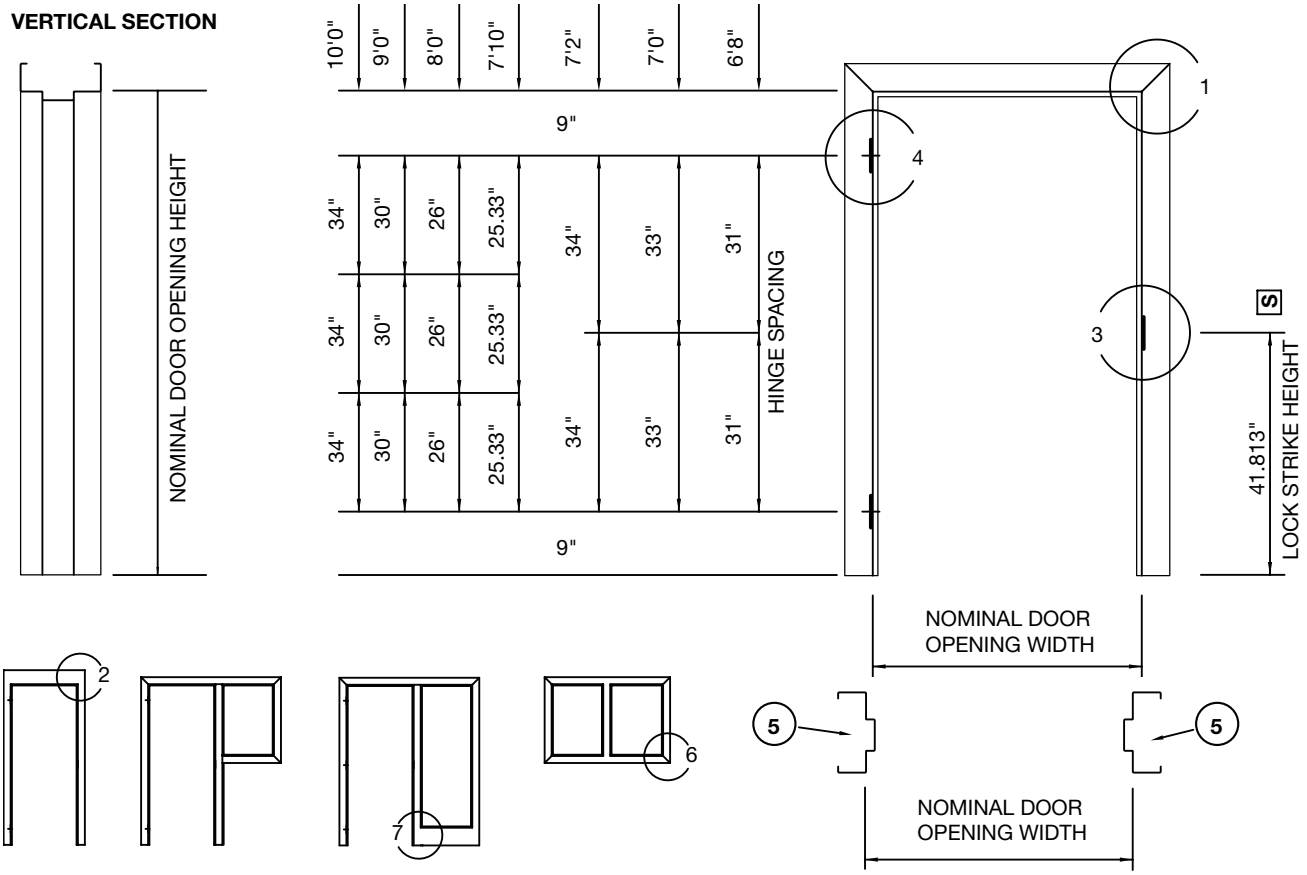
"KS"= KEY SIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES SQ, 12 GAUGE STEEL FRAMES

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS.

VERTICAL SECTION

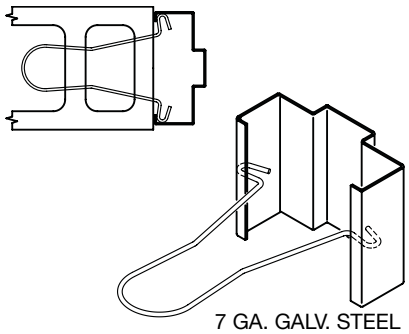


ELEVATION EXAMPLES

HORIZONTAL SECTION

JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS >3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS > 7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS > 7'6" THRU 10'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL TWO FEET IN HEIGHT OR FRACTION THEREOF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EO CONDITIONS

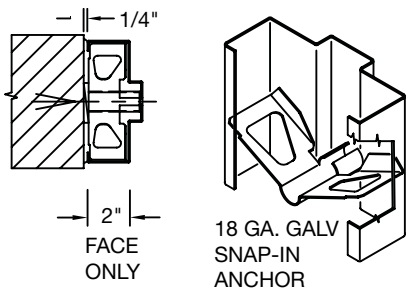
(5) WIRE MASONRY ANCHOR WMA



7 GA. GALV. STEEL
SNAP-IN TYPE

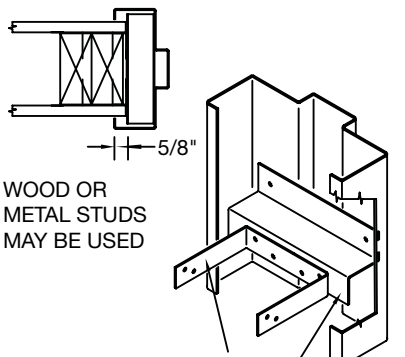
(FOR 3-3/4" THRU 8-3/4" DEPTHS)

(5) EXISTING OPENING ANCHOR EO



SQ PROFILE
EO/SF6: 5-1/8" THRU 6-3/4" DEPTH
EO/SF8: 6-7/8" THRU 8-3/4" DEPTH

(5) WOOD STUD "Z" STRAP ANCHOR WSZS

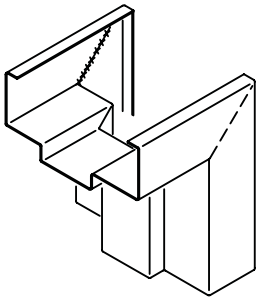


WOOD OR METAL STUDS MAY BE USED

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

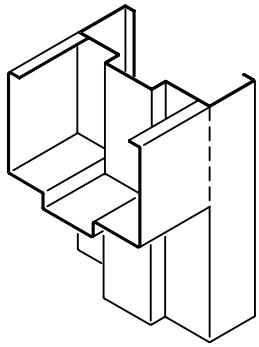
SERIES SQ, 12 GAUGE STEEL FRAMES

1 WELDED CORNERS TYPE V5



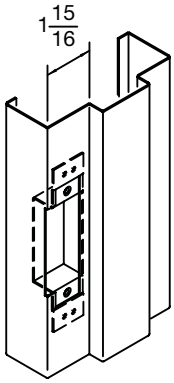
MITERED AND WELDED
CORNER -- HEAD
AND JAMB FACES
MUST BE EQUAL

2 WELDED CORNERS TYPE V6



BUTTED AND WELDED
CORNER -- HEAD AND
JAMB HAVE UNEQUAL
FACES. JAMB RUNS
THROUGH AND HEAD
IS COPED.

3 LOCK STRIKE PREPARATION

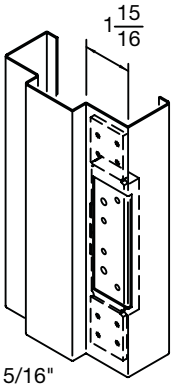


s

UNIVERSAL (4-7 /8")
ANSI A115.1 & 2 TEMPLATE
16 GAUGE STEEL REINFORCING
WITH EXTRUDED THREADS
EQUAL TO 14 GAUGE.

PREPARATIONS FOR VARIOUS
MECHANICAL AND ELECTRONIC
SECURITY DEVICES ARE ALSO
AVAILABLE. ASK FOR DETAILS.

4 HINGE PREPARATION

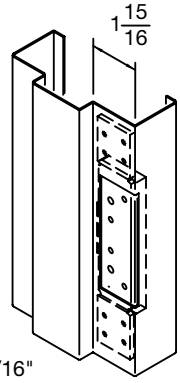


5" X .190"
ANSI A156. 7 TEMPLATE

7 GAUGE STEEL
REINFORCING

BACKSET: 5/16"

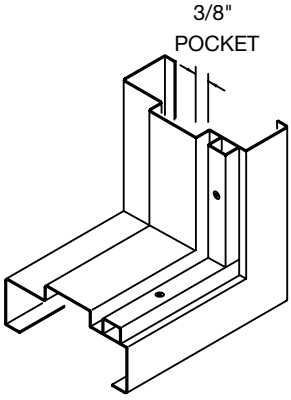
4 HINGE PREPARATION



4-1/2" X .180"
ANSI A156. 7 TEMPLATE
7 GAUGE STEEL
REINFORCING

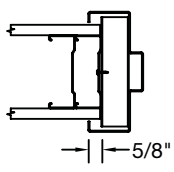
BACKSET: 5/16"

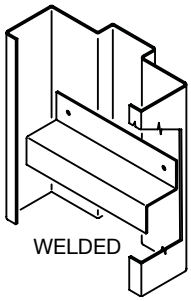
6 GLAZING PROVISIONS



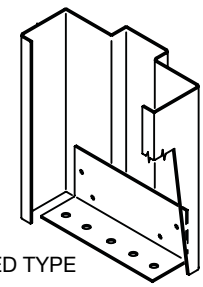
SIDELITES AND BORROWED
LITES ARE PROVIDED WITH 5/8"
HIGH STEEL GLAZING BEAD.
BEAD IS ATTACHED BY
#10 FHSMS.
GLASS AND GLAZING
IS BY GLAZING CONTRACTOR.

5 METAL STUD "Z" ANCHOR MSZ1



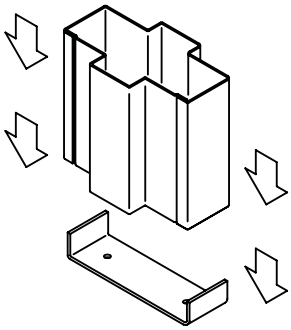


5 FIXED FLOOR ANCHOR SA



ONE PIECE

7 SIDELITE FLOOR ANCHOR SLFA



SERIES SQ, 12 GAUGE STEEL FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES : UL SOLUTIONS WARNOCK HERSEY FACTORY MUTUAL
TEST: UL 10C, UL 10B, UL 1784, & NFPA 252 **RATING:** 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR, OR 3 HR **MAX. SIZE:** 4'0" X 10'0" SINGLE 8'0" X 10'0" PAIR *NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS. HOURLY CLASSIFICATIONS ARE NOT SHOWN ON LABEL UNLESS CLASS IS LESS THAN 3 HOURS.*

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door Products, Milan, TN or Mason City, IA, USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series SQ 12 gauge steel frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

Door frames, sidelites and borrowed lites are welded unit type with all exposed welds ground smooth. Integral door stops are 5/8" high. Double rabbet or single rabbet profiles are sized to suit wall applications. Jamb anchors are available for new masonry, wood stud, metal stud or existing opening wall conditions (indicate which). Floor anchors or extra jamb anchors are provided to anchor sill.

Hardware Provisions: Frames are handed. Hinge jambs are mortised for 4-1/2" or 5" high, heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. The strike jamb is prepared for 4-7/8" universal strike in accordance with ANSI A115.1 & 2. Plaster guards are provided. Preparations for various other mechanical and electronic locks and strikes are also available. Optional hardware reinforcement (e.g. closer/holder) is 14 gauge minimum steel welded in place (designate hardware). 3 mute holes are provided per strike jamb and 2 for double swing heads.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting.

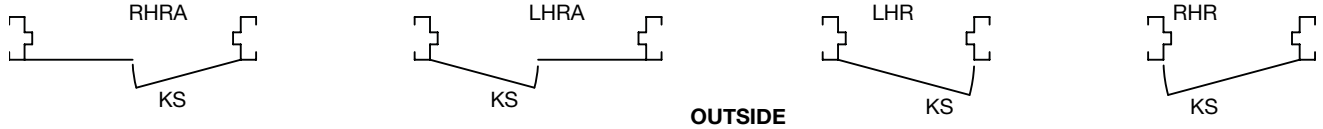
MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV
			A60
12 GAUGE STEEL	ANSI / NAAMM	STD	OPT

PERFORMANCE

PHYSICAL ENDURANCE LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, LEVEL A (1,000,000 CYCLES)

INSIDE



OUTSIDE

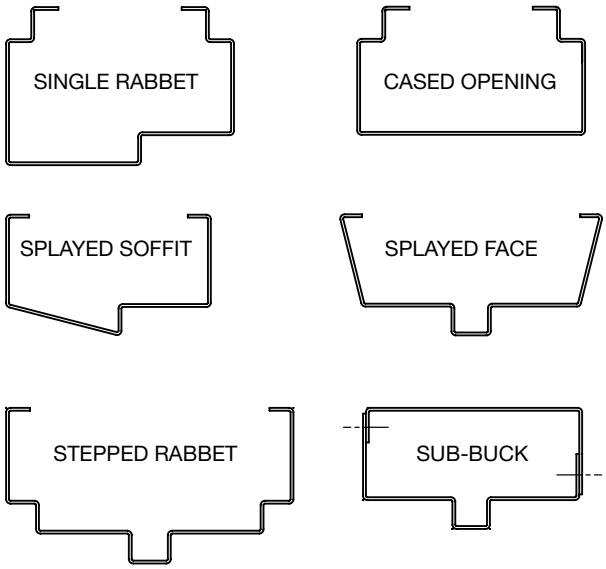
"KS"= KEY SIDE *"SUFFIX"A" = ACTIVE LEAF OF PAIRS*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

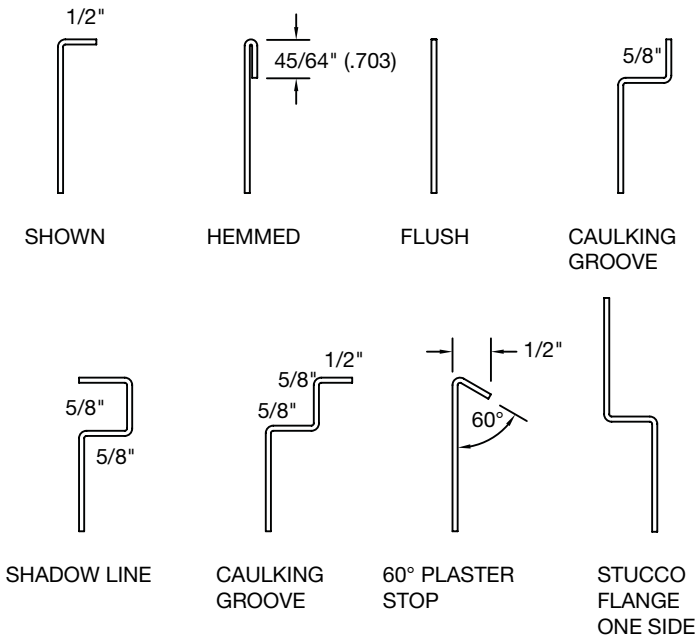
SERIES C CUSTOM FRAME PROFILES

FOR 1-3/4" THICK DOORS - STANDARD WALL FRAME APPLICATION, HANDED

PROFILE VARIATIONS



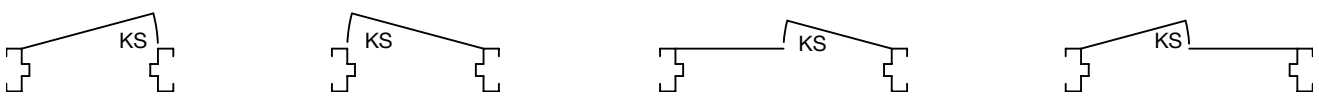
BACKBEND VARIATIONS



SEE PAGE 18 FOR OTHER PROFILES.

DEPTH, FACE, SOFFIT, STOP HEIGHT, RABBETS AND BACKBEND DIMENSIONS ARE VARIABLE (MADE TO ORDER) WITHIN LIMITS OF MATERIAL AND TOOLING. HARDWARE PREPARATIONS ARE FOR 1-3/4" THICK DOORS. RABBET DIMENSIONS AND HARDWARE PREPARATIONS TO SUIT OTHER DOOR THICKNESSES ARE ALSO AVAILABLE. BACKBENDS NEED NOT BE THE SAME ON OPPOSITE FACES OF BASIC PROFILE, BUT LIMITS OF MATERIAL AND/OR TOOLING MAY RESTRICT CERTAIN COMBINATIONS OF BACKBENDS AND OTHER PROFILE VARIATIONS. PROFILES ARE NOT LIMITED TO THOSE SHOWN ...MANY OTHER DESIGNS AND COMBINATIONS ARE AVAILABLE.

INSIDE



OUTSIDE

"KS"= KEY SIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

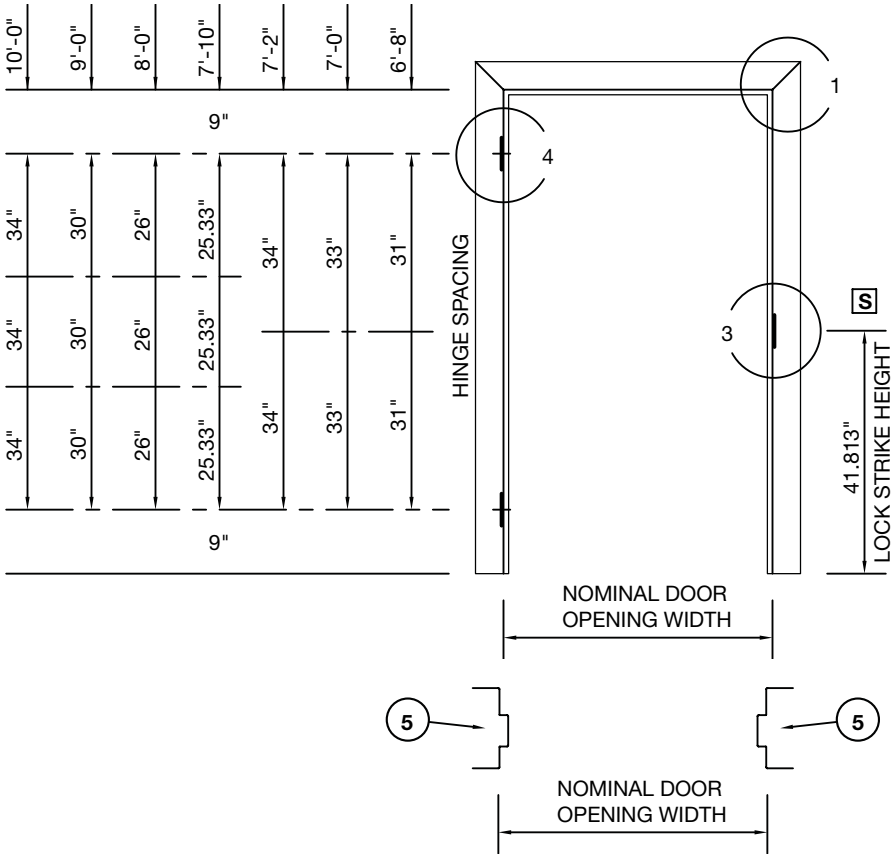
SERIES C CUSTOM FRAME PROFILES

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS.

REFER TO PAGE 12 FOR
CONSTRUCTION
DETAILS OF ITEMS 1,3,4 & 5.

VERTICAL SECTION

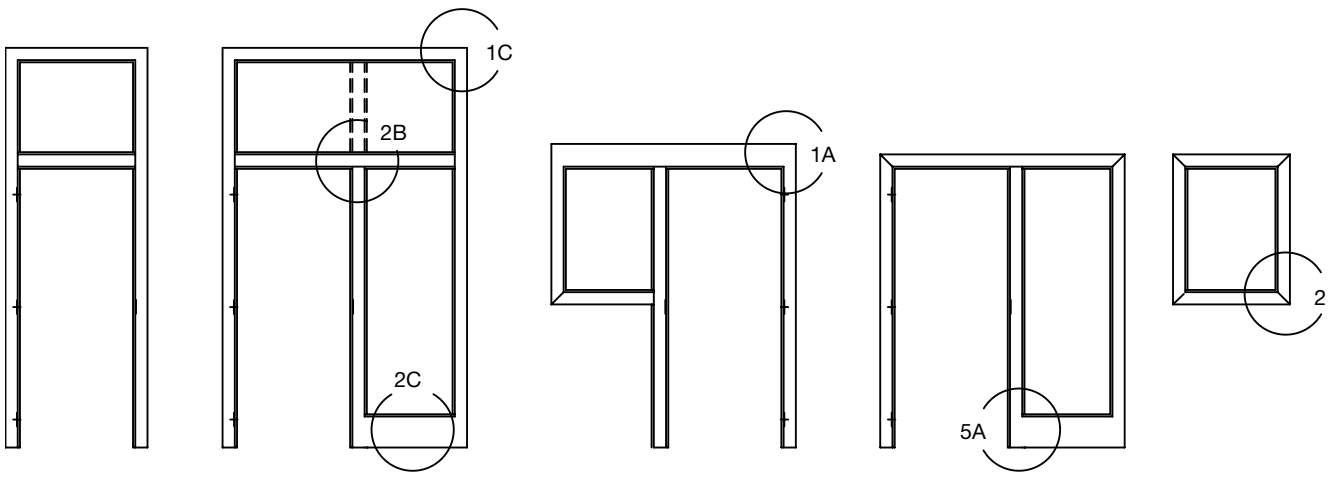
TYPICAL ELEVATION



HORIZONTAL SECTION

ELEVATION EXAMPLES

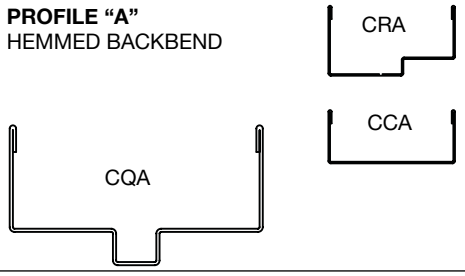
REFER TO PAGE 12 FOR
CORNER CONSTRUCTION DETAILS



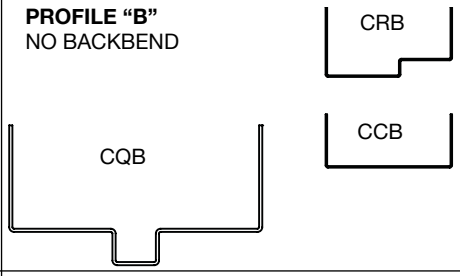
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES C CUSTOM FRAME PROFILES

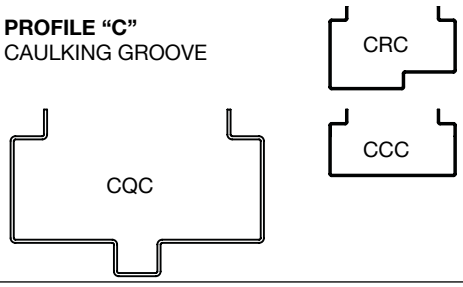
PROFILE "A"
HEMMED BACKBEND



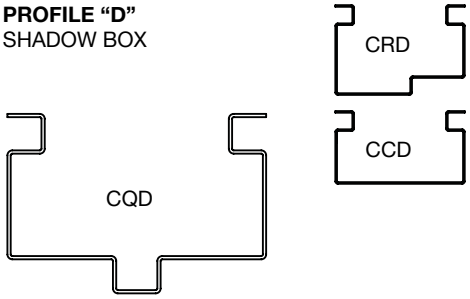
PROFILE "B"
NO BACKBEND



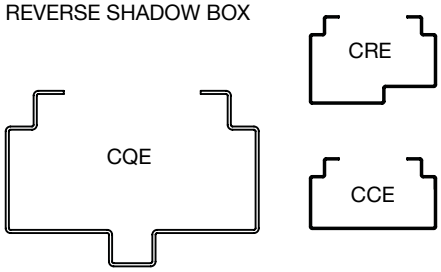
PROFILE "C"
CAULKING GROOVE



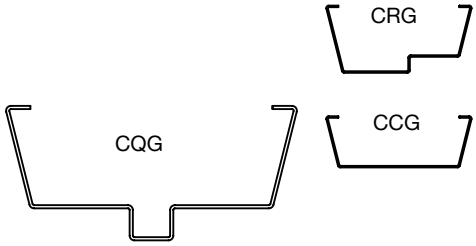
PROFILE "D"
SHADOW BOX



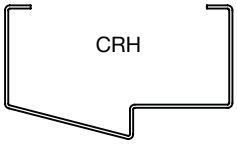
PROFILE "E"
REVERSE SHADOW BOX



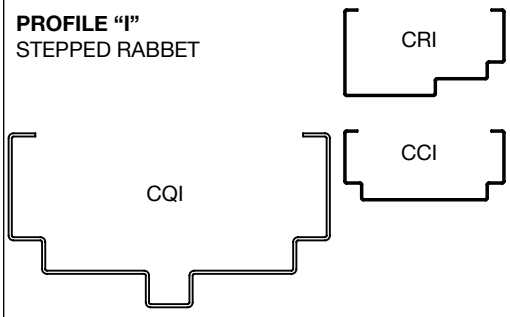
PROFILE "G"
SPLAYED FACE



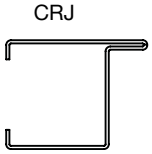
PROFILE "H"
SPLAYED SOFFIT



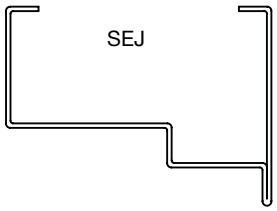
PROFILE "I"
STEPPED RABBET



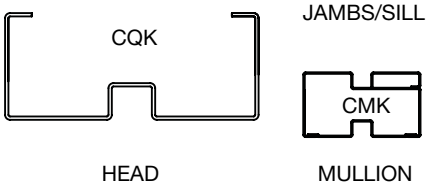
PROFILE "J"
HEMMED STOP



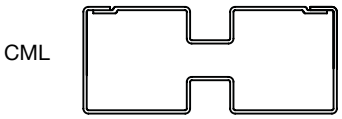
PROFILE "SEJ"
HEMMED STOP



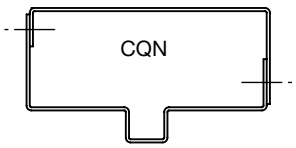
PROFILE "K"
FLUSH GLAZING



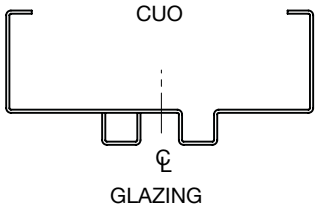
PROFILE "L"
FLUSH GLAZING - MULLION



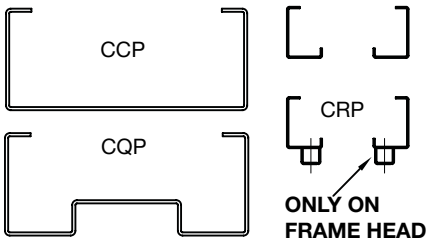
PROFILE "N"
ROUGH BUCK W / SLIP
JAMBS SUB BUCK



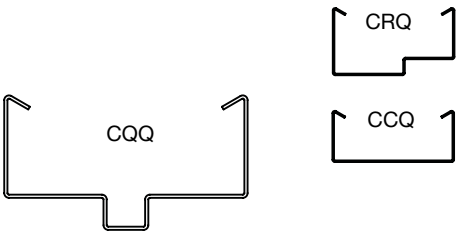
PROFILE "O"
CENTER GLAZED



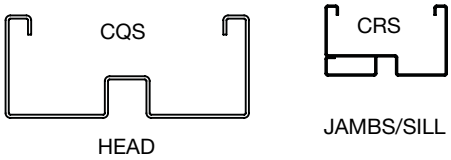
PROFILE "P"
POCKET SLIDE DOOR FRAME



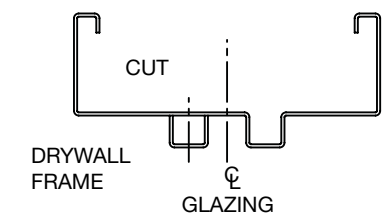
PROFILE "Q"
60' FLUSH PLASTER GROOVE



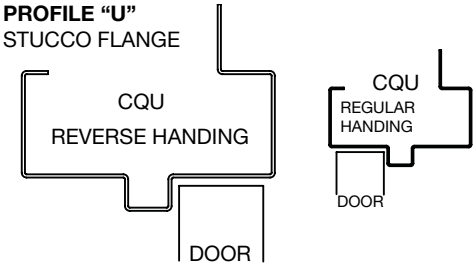
PROFILE "S"
FLUSHED GLAZED DRYWALL CONDITION



PROFILE "T"
CENTER GLAZED DRYWALL CONDITION



PROFILE "U"
STUCCO FLANGE



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES C CUSTOM FRAME PROFILES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS FRAMES

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR, OR 3 HR

MAX. SIZE: 4'0" X 10'0" SINGLE
8'0" X 10'0" PAIR

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, ELEVATIONS AND MATERIALS.

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door Products, Milan, TN, USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series C Custom Profile frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

3 piece door frames are shipped knocked down or welded. Transoms, sidelites and borrowed lites are welded unit type with all exposed welds ground smooth. Oversize frames are shipped in multiple units for field splicing. Integral door stops are 5/8" high. Double rabbet, single rabbet, or cased opening profiles are sized to suit wall applications. Elevations conform with approved Ceco shop drawings. Jamb anchors are available for new masonry, wood stud, metal stud or existing opening wall conditions (indicate which). Floor anchors or additional jamb anchors are provided to anchor sill.

Hardware Provisions: Frames are handed. Hinge jambs are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. The strike jamb is prepared for 4-7/8" universal strike in accordance with ANSI A115.1 & 2. Plaster guards are 26 gauge steel. Preparations for various other mechanical and electronic locks and strikes are also available. Optional hardware reinforcement (e.g. closer/holder) is 14 gauge minimum steel welded in place (designate hardware). 3 mute holes are provided per strike jamb and 2 in double swing heads.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting.

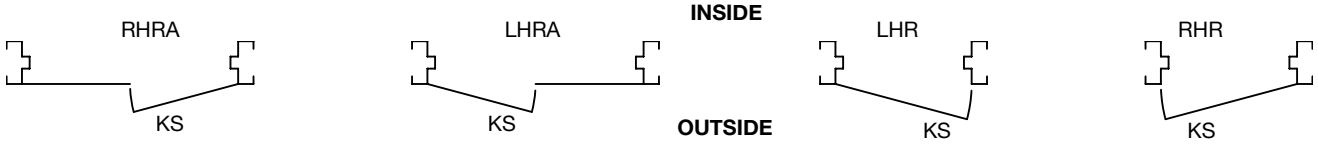
MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
16 GAUGE STEEL	HEAVY OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT
12 GAUGE STEEL	ANSI/NAAMM	STD	OPT	-

**PROFILES THAT ARE NOT AVAILABLE IN 12 GAUGE: A, H, J, L, & Q*

PERFORMANCE

PHYSICAL ENDURANCE LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST -- 16, 14, & 12 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)

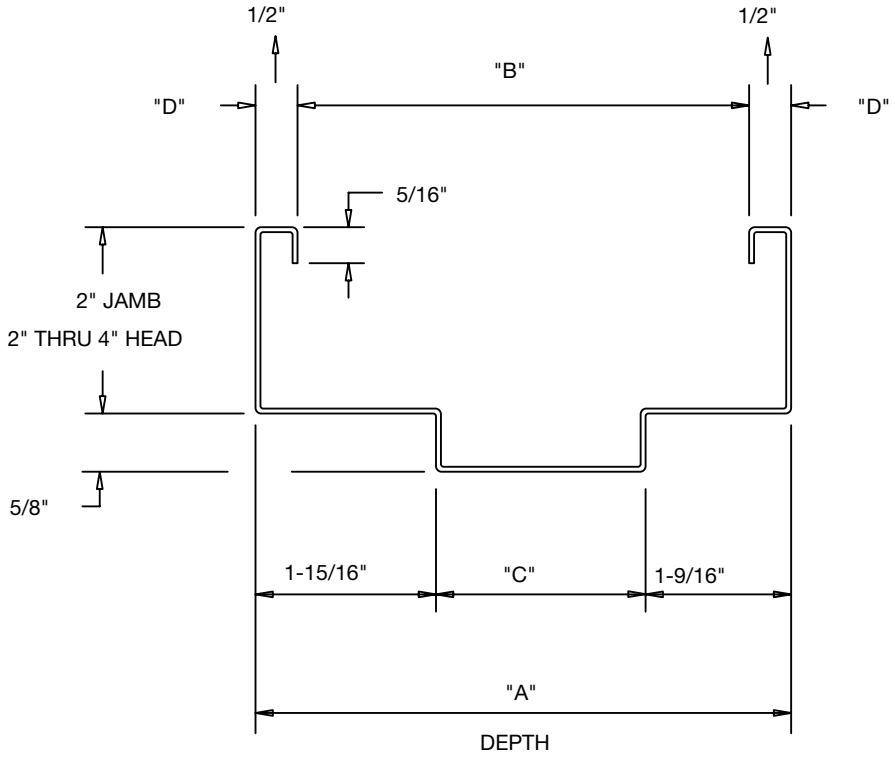


"KS"= KEY SIDE *"SUFFIX"A" = ACTIVE LEAF OF PAIRS*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

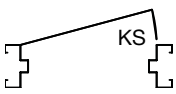
SERIES DU SLIP-ON DRYWALL FRAMES

FOR 1-3/4" THICK DOORS HANDED

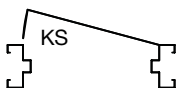


DEPTHS RANGING FROM 4-1/2" TO 14" ARE AVAILABLE.
DIMENSION "D" IS AVAILABLE IN 7/16", 9/16", & 5/8" ON CUSTOM DESIGNS.

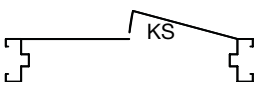
INSIDE



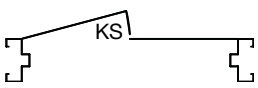
LH



RH



RHA



LHA

OUTSIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

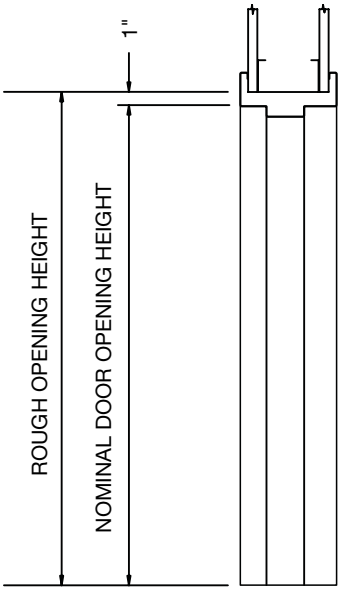
"KS" = KEY SIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

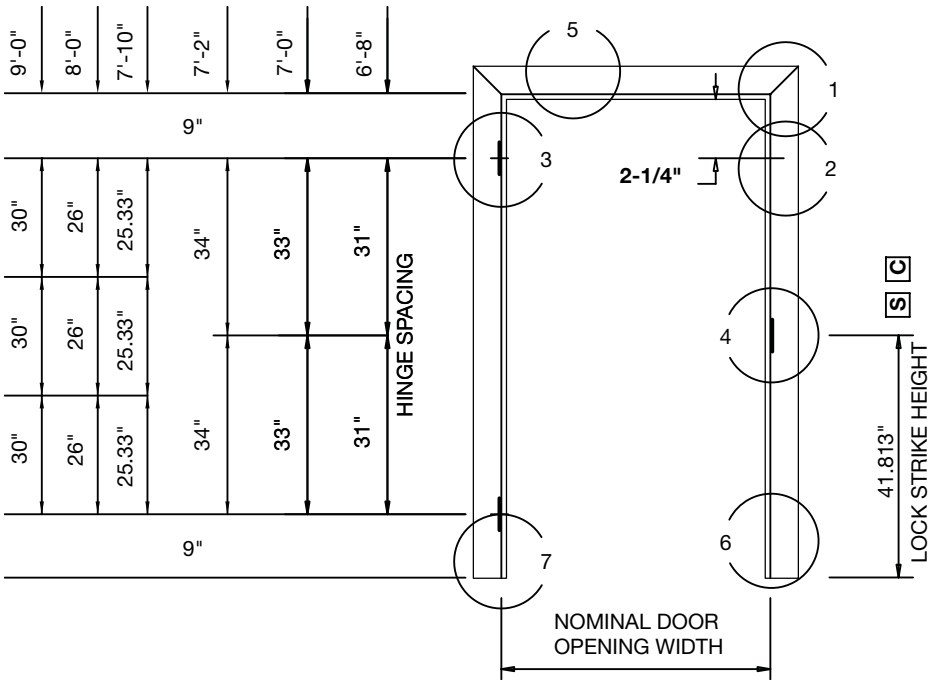
SERIES DU DRYWALL FRAMES

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS.

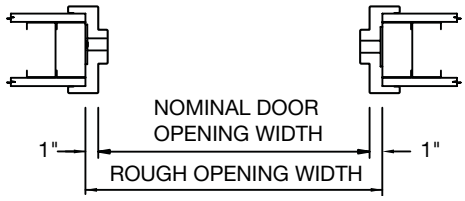
VERTICAL SECTION



ELEVATION

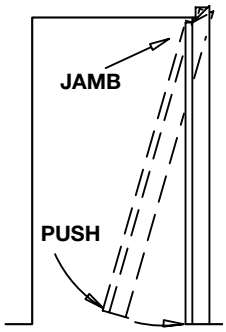


INSTALLATION INSTRUCTIONS
ROUGH OPENING:
DOOR OPENING WIDTH PLUS 2"
DOOR OPENING HEIGHT PLUS 1"



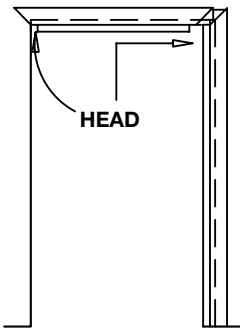
HORIZONTAL SECTION

STEP 1



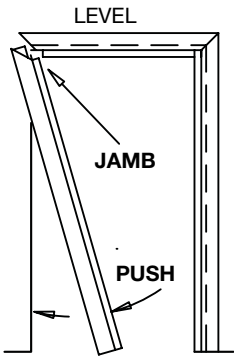
A. PUSH TOP OF ONE JAMB OVER THE WALL.
B. HOLD TOP OF JAMB IN PLACE, THEN PUSH BOTTOM IN TOWARDS AND OVER WALL.

STEP 2



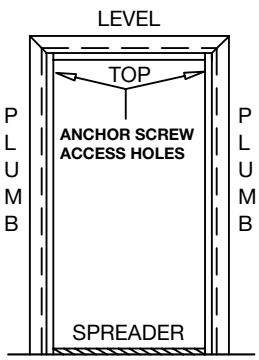
A. POSITION FRAME HEAD OVER THE WALL.
B. ALIGN HEAD TABS WITH JAMB SLOTS, THEN SLIDE HEAD TOWARD JAMB AND ENGAUGE TABS IN SLOTS.

STEP 3



A. PUSH TOP OF REMAINING JAMB OVER WALL AND MATE TABS IN SLOTS.
B. PUSH BOTTOM OF JAMB IN TOWARDS AND OVER WALL.
C. LEVEL HEAD.

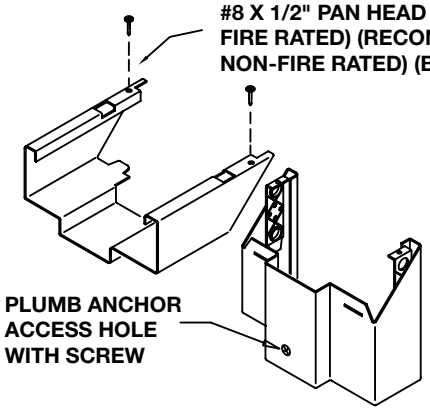
STEP 4



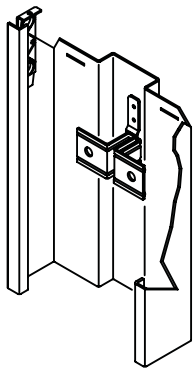
A. ADJUST PLUMB ANCHORS WITH SCREWDRIVER.
B. INSERT (4) #8 X 1/2" MIN. PHSMS THROUGH HOLES IN HEAD BACKBENDS AND FASTEN TO JAMB MITER GUIDES. (REQUIRED FOR LABELED FRAMES)
C. PLUMB HINGE JAMB AND ANCHOR SILL.
D. WITH TEMPORARY SPREADER, ADJUST STRIKE JAMB AND ANCHOR SILL.
E. INSTALL MUTES.

SERIES DU DRYWALL FRAMES

1 KNOCKED DOWN CORNER CONSTRUCTION



2 ADJUSTABLE PLUMB ANCHOR

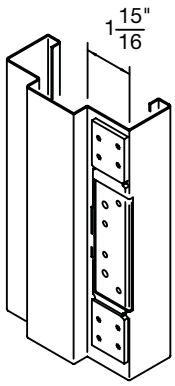


ONE EACH JAMB FOR OPENING HEIGHTS THRU 7'2". ONE ADDITIONAL FOR OPENING HEIGHTS > 7'2".

ADJUST WITH SCREWDRIVER

DUAL PLUMB ANCHORS ARE APPLIED IN DEPTHS GREATER THAN 8-3/4".

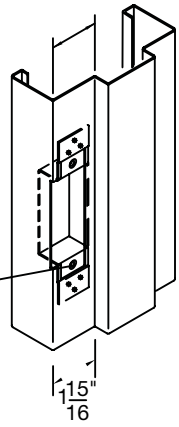
3 HINGE PREPARATION



4-1/2" X .134" OR 4-1/2" X .180"
ANSI A156.7 TEMPLATE
7 GAUGE STEEL
REINFORCING

BACKSET: 5/16"

4 STRIKE PREPARATION

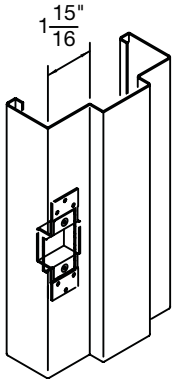


S

UNIVERSAL (4-7/8")
ANSI A115.1 & 2 TEMPLATE

12 GAUGE STEEL REINFORCING
STANDARD FOR 1-3/4" DOORS

4 LOCK STRIKE PREPARATION

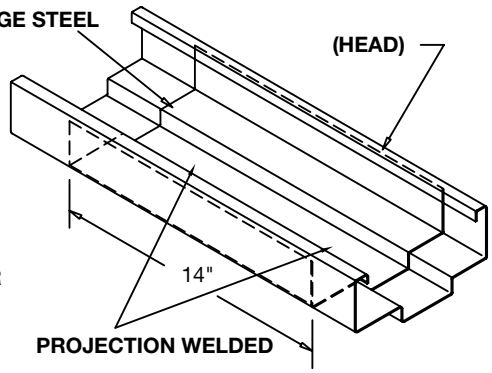


C

CYLINDRICAL (2-3/4")
ANSI A115.3 TEMPLATE
16 GAUGE STEEL REINFORCING
WITH EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT SCREW
ENGAUGEMENT EQUAL TO 14 GAUGE

ALSO AVAILABLE WITHOUT
LIP CUTOUT FOR DEADLOCKS

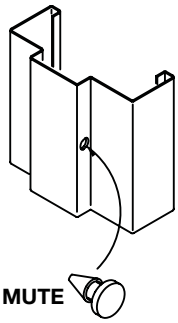
5 CLOSER REINFORCEMENT (OPTIONAL)



FULL DEPTH CLOSER
REINFORCEMENT
(SHOWN)

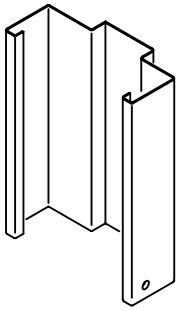
HALF SLEEVE OR
PLATE ALSO AVAILABLE

DOOR SILENCER (MUTE)



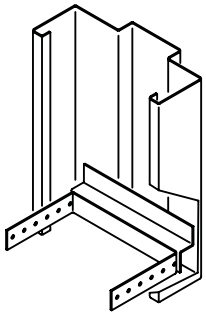
RUBBER MUTE
(3) / STRIKE JAMB
(2) / DOUBLE
SWING HEAD

6 STANDARD SILL ANCHOR



DIMPLED HOLE
FOR #10 FH FASTENER.
FASTENERS ARE BY
CONTRACTOR AND
MUST BE LONG ENOUGH
TO ENGAUGE STUD.

7 OPTIONAL SILL STRAP ANCHOR



FASTENERS ARE BY
CONTRACTOR AND
ENGAUGE STUD

ONE PIECE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES DU DRYWALL FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	8'-0"	
4'-0"		

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY
FACTORY MUTUAL

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1 HR OR 1-1/2 HR

MAX. SIZE: 14 GAUGE STEEL
16 GAUGE STEEL
4'0" X 9'0" SINGLE
8'0" X 9'0" PAIR

18 GAUGE STEEL
4'0" X 7'0" SINGLE
6'10" X 7'0" PAIR

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door, Milan, TN or Mason City, IA, USA. They shall conform to the Steel Door Institute guide specification, ANSI A.250.8-1998. See chart below for performance classifications.

Series DU frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008 ...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

Frames are knocked down, field assembled type. Components have diecut mitered corners that interlock rigidly when field assembled. Integral door stops are 5/8" high and frame faces are 2". Adjustable, compression type anchors are welded to jambs and allow frame installation, plumbing and squaring after wallboard is applied (to adjust anchors use Phillips head screw driver). Components have backbend-returns that protect the wall surface during installation. Sill anchoring is by means of screws through dimpled holes in faces ... welded on sill strap anchors are also available (optional).

Hardware Provisions: Frames are handed. Hinge jambs are mortised for 4-1/2" high, standard or heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. The strike jamb is prepared for 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A115.1 & 2 (specify which). Optional closer reinforcement is 14 gauge min. steel. 3 mute holes are provided per strike jamb and 2 for double swing heads.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A.250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available. Colorstyle finish is electrostatically applied, oven-cured urethane enamel. For accurate co or selector chart ask customer service for a Pantone Colorstyle chart.

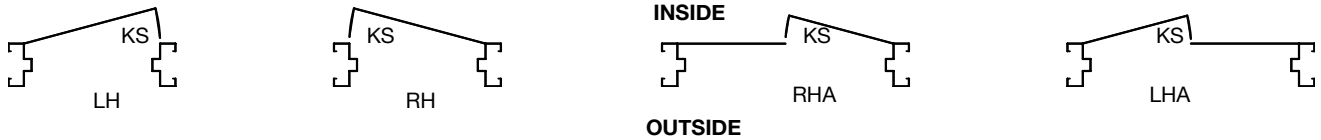
MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
18 GAUGE STEEL	STANDARD DUTY	STD	OPT	N/A
16 GAUGE STEEL	STANDARD, HEAVY, OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT

18 GAUGE STEEL FOR USE WITH 1-3/4" WOOD DOORS.

PERFORMANCE

PHYSICAL ENDURANCE LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST -- 16 & 14 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)

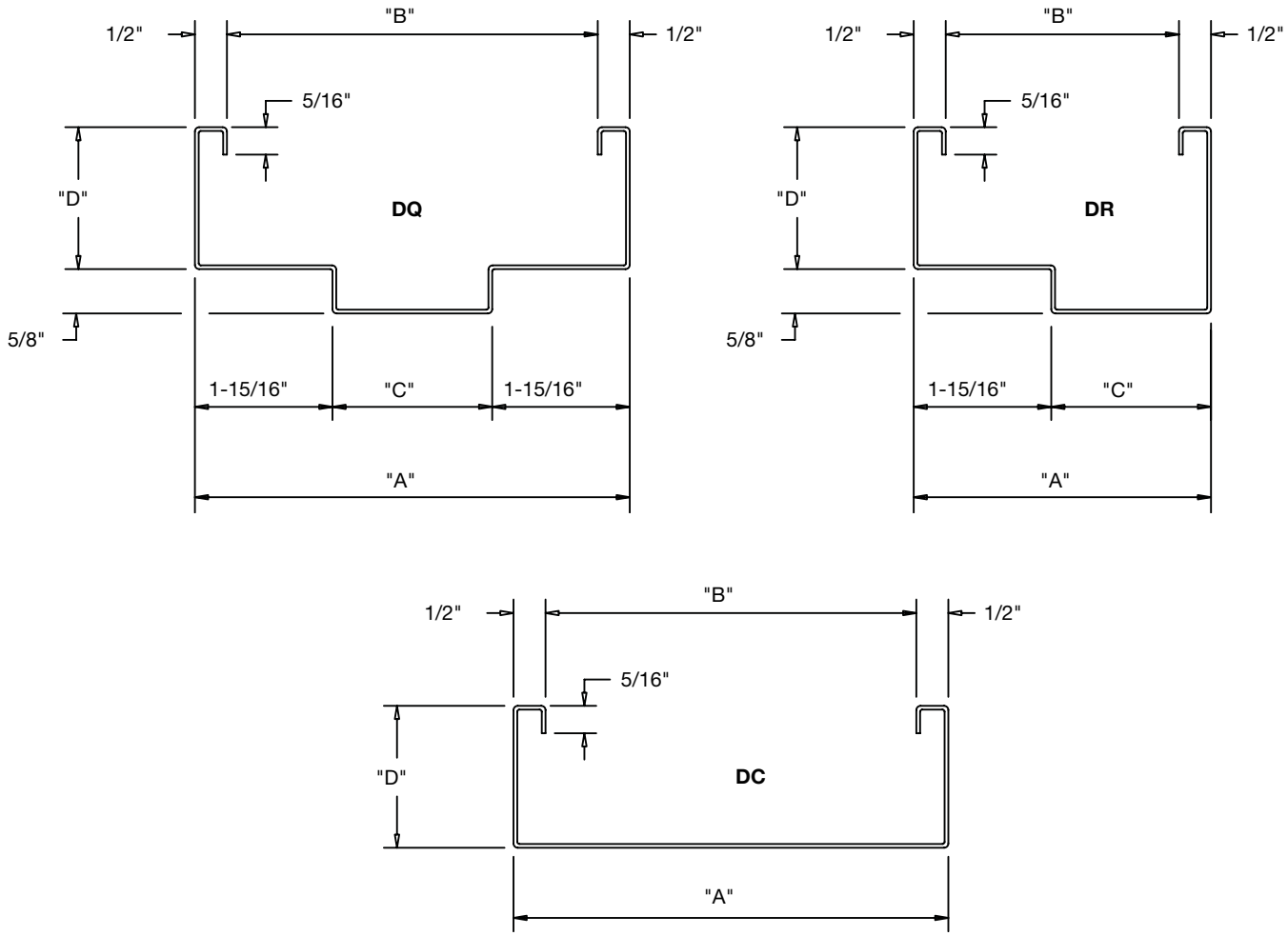


"KS"= KEY SIDE *"SUFFIX"A" = ACTIVE LEAF OF PAIRS*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES DQ, DR, AND DC SLIP-ON DRYWALL FRAME

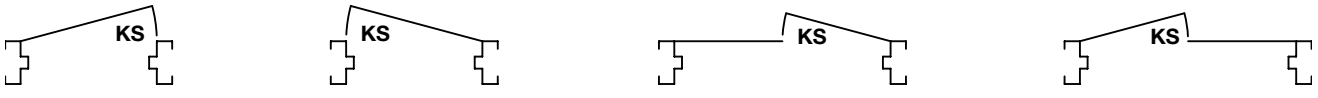
FOR 1-3/4" THICK DOORS HANDED



PROFILE	A (DEPTH)	B (THROAT)	C (SOFFIT WIDTH)	D (FACE)	
				JAM	HEAD
SINGLE RABBET	3" THRU 14"	3" THRU 14"	"A" (-) 1-15/16	2"	2"
DOUBLE RABBET	4-7/8" THRU 14"	4-7/8" THRU 14"	"A" (-) 2(1-15/16)	2"	2" OR 4"
CASED OPENING	3" THRU 14"	3" THRU 14"	OMIT	2"	2"

NOTE: 18 GAUGE LIMITED TO 9-7/8" DEPTH.

INSIDE



LH RH RHA LHA

OUTSIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

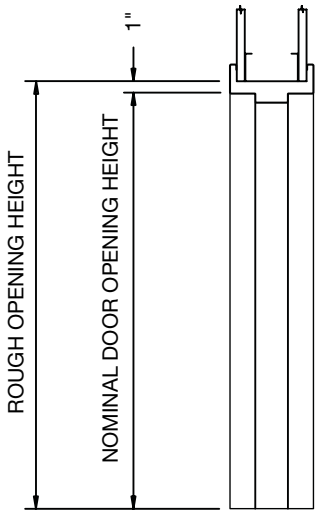
"KS" = KEY SIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

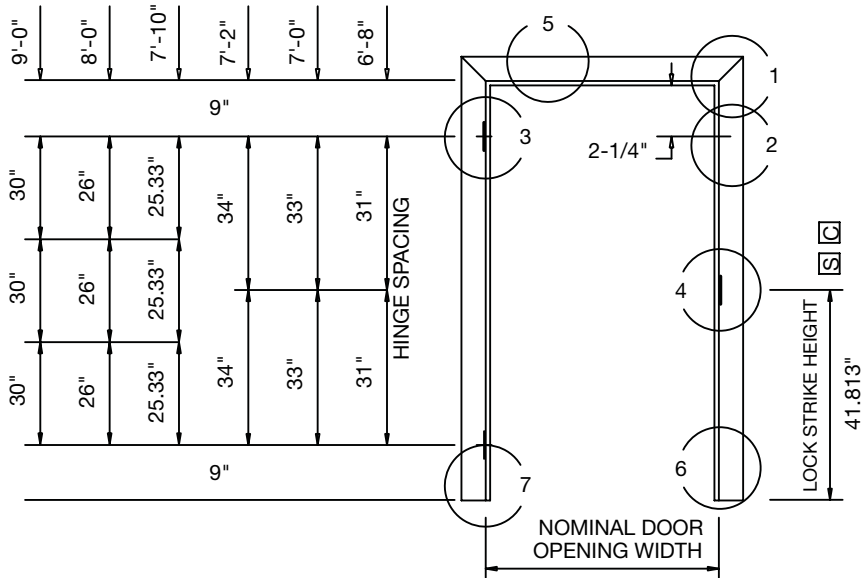
SERIES DQ, DR, AND DC DRYWALL FRAMES

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS. DOUBLE RABBET PROFILES ARE SHOWN, SINGLE RABBET AND CASED OPENING PROFILES ARE SIMILAR.

VERTICAL SECTION



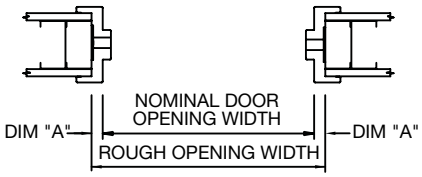
ELEVATION



INSTALLATION INSTRUCTIONS
ROUGH OPENING: DOUBLE RABBET FRAMES, AND SINGLE RABBET FRAMES 4-1/8" DEPTH AND GREATER.
DOOR OPENING HEIGHT PLUS 1"
DOOR OPENING WIDTH PLUS 2"

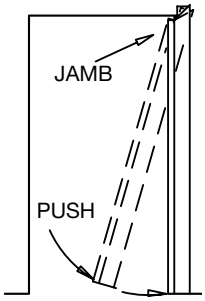
**INSTALLATION INSTRUCTIONS ROUGH OPENING:*
SINGLE RABBET FRAMES 4" DEPTH AND LESS
DOOR OPENING HEIGHT PLUS 1"
DOOR OPENING WIDTH PLUS 2-3/4" AS ANCHORS ARE PLACE IN RABBET.

	DIM "A"
SINGLE RABBET	1" OR * 1-3/8"
DOUBLE RABBET	1"
CASED OPENING	1-3/8"



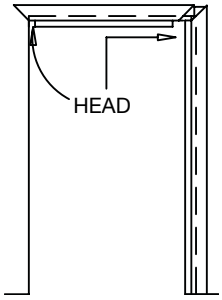
HORIZONTAL SECTION

STEP 1



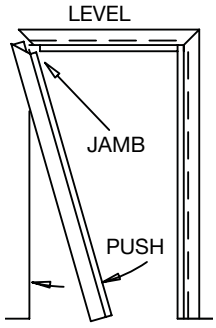
A. PUSH TOP OF ONE JAMB OVER THE WALL.
B. HOLD TOP OF JAMB IN PLACE, THEN PUSH BOTTOM IN TOWARDS AND OVER WALL.

STEP 2



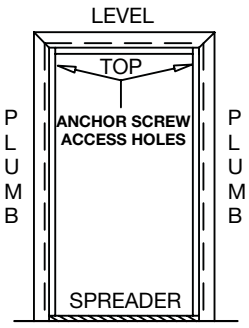
A. POSITION FRAME HEAD OVER THE WALL.
B. ALIGN HEAD TABS WITH JAMB SLOTS, THEN SLIDE HEAD TOWARD JAMB AND ENGAUGE TABS IN SLOTS.

STEP 3



A. PUSH TOP OF REMAINING JAMB OVER WALL AND MATE TABS IN SLOTS.
B. PUSH BOTTOM OF JAMB IN TOWARDS AND OVER WALL.
C. LEVEL HEAD.

STEP 4

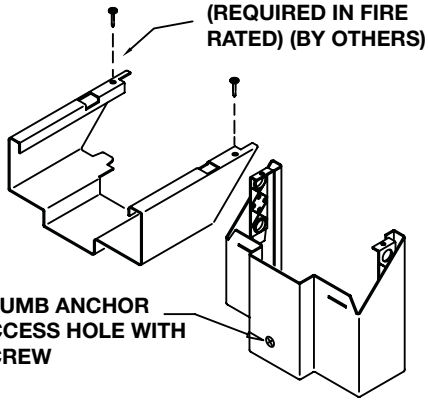


A. ADJUST PLUMB ANCHORS WITH SCREWDRIVER.
B. INSERT (4) #8 X 1/2" MIN. PHSMS THROUGH HOLES IN HEAD BACKBENDS AND FASTEN TO JAMB MITER GUIDES. (REQUIRED FOR LABELED FRAMES)
C. PLUMB HINGE JAMB AND ANCHOR SILL.
D. WITH TEMPORARY SPREADER, ADJUST STRIKE JAMB AND ANCHOR SILL.
E. INSTALL MUTES.

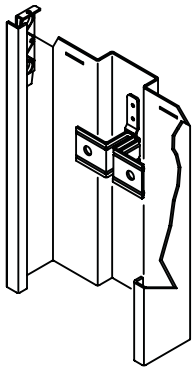
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES DQ, DR, AND DC DRYWALL FRAMES

1 KNOCKED DOWN CORNER CONSTRUCTION



2 ADJUSTABLE PLUMB ANCHOR

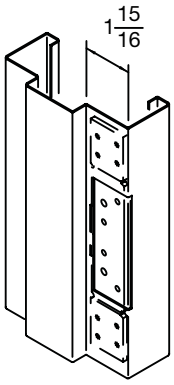


ONE EACH JAMB FOR OPENING HEIGHTS THRU 7'2". ONE ADDITIONAL FOR OPENING HEIGHTS > 7'2".

ADJUST WITH SCREWDRIVER

DUAL PLUMB ANCHORS ARE APPLIED IN DEPTHS GREATER THAN 8-3/4".

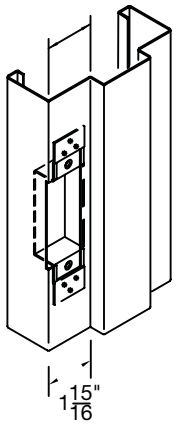
3 HINGE PREPARATION



4-1/2" X .134"
OR 4-1/2" X .180"
ANSI A156.7 TEMPLATE
7 GAUGE STEEL REINFORCING

BACKSET: 5/16"

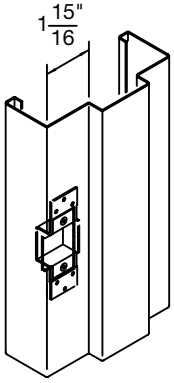
4 STRIKE PREPARATION



UNIVERSAL (4-7/8")
ANSI A115.1 & 2 TEMPLATE
12 GAUGE STEEL REINFORCING
STANDARD FOR 1-3/4" DOORS

DRILLED AND TAPPED
FOR 12-24 MS
(2) PLACES

4 LOCK STRIKE PREPARATION

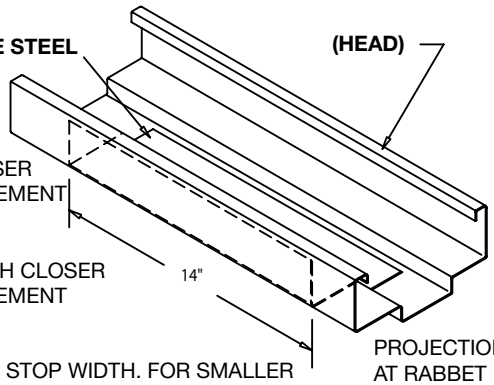


C

CYLINDRICAL (2-3/4")
ANSI A115.3 TEMPLATE
16 GAUGE STEEL REINFORCING
WITH EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT SCREW
ENGAUGEMENT EQUAL TO 14 GAUGE

ALSO AVAILABLE WITHOUT
LIP CUTOUT FOR DEADLOCKS

5 CLOSER REINFORCEMENT (OPTIONAL)



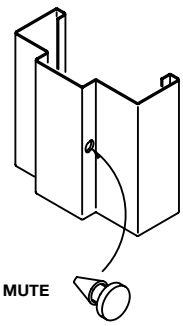
HALF CLOSER
REINFORCEMENT
(SHOWN)

FULL DEPTH CLOSER
REINFORCEMENT
OPTIONAL

1-1/2" MIN. STOP WIDTH. FOR SMALLER STOPS, A 14 GAUGE PLATE IS USED.

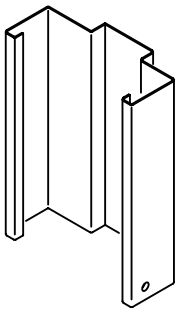
PROJECTION WELDED AT RABBET

DOOR SILENCER (MUTE)



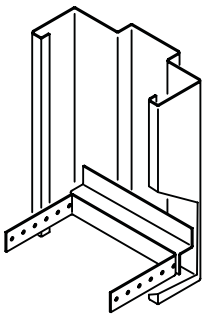
RUBBER MUTE
(3) / STRIKE JAMB
(2) / DOUBLE
SWING HEAD

6 STANDARD SILL ANCHOR



DIMPLED HOLE
FOR #10 FH FASTENER.
FASTENERS ARE BY
CONTRACTOR AND MUST
BE LONG ENOUGH TO
ENGAUGE STUD.

7 OPTIONAL SILL STRAP ANCHOR



FASTENERS ARE BY
CONTRACTOR AND
ENGAUGE STUD

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES DQ, DR, AND DC DRYWALL FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY
FACTORY MUTUAL

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR

MAX. SIZE: 14 GAUGE STEEL
16 GAUGE STEEL
4'0" X 9'0" SINGLE
8'0" X 9'0" PAIR
18 GAUGE STEEL
4'0" X 7'0" SINGLE
6'10" X 7'0" PAIR

SINGLE OR DOUBLE RABBET PROFILES. NOT ALL SIZES ARE AVAILABLE IN ALL RATINGS.

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door, Milan, TN or Mason City, IA, USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series DQ, DR, AND DC slip-on drywall frames for '1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A'1008...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

Frames are knocked down, field assembled type. Components have diecut mitered corners that interlock rigidly when field assembled. Integral door stops are 5/8" high and frame faces are 2" except double rabbet profiles are available with 4" face heads. Adjustable, compression type anchors are welded to jambs and allow frame installation, plumbing and squaring after wallboard is applied (To adjust anchors use Phillips head screw driver). Components have backbend-returns that protect the wall surface during installation. Sill anchoring is by means of screws through dimpled holes in faces ... welded on sill strap anchors are also available (optional).

Hardware Provisions: Frames are handed. Hinge jambs for '1-3/4" doors are mortised for 4-'1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A'156.7. Strike jambs for '1-3/4" doors are prepared for 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A 115. '1&2 (specify which). Optional closer reinforcement is '14 gauge min. steel. 3 mute holes are provided per strike jamb and 2 for double swing heads. Frames for '1-3/8" doors are also available ...ask for details.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250. '10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel. Maximum size: 4090 single and 8090 double swing. For accurate color selectors ask for a Ceco Colorstyle chart.

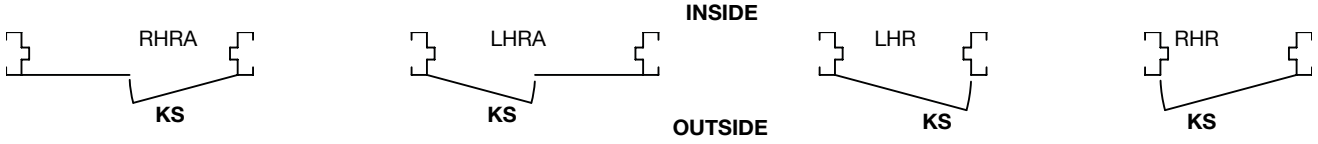
MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV	
			A60	G90
18 GAUGE STEEL	STANDARD DUTY	N/A	STD	N/A
16 GAUGE STEEL	STANDARD, HEAVY, OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT

18 GAUGE STEEL FOR USE WITH 1-3/4" WOOD DOORS.

PERFORMANCE

SOUND TRANSMISSION CLASS:	STC 32 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE])
PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST -- 16 & 14 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)

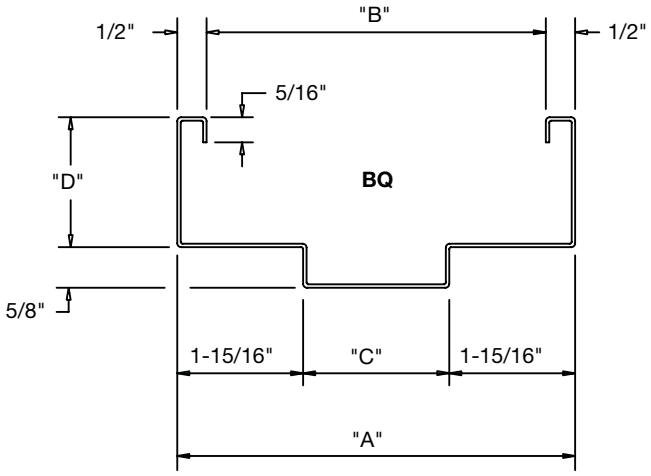


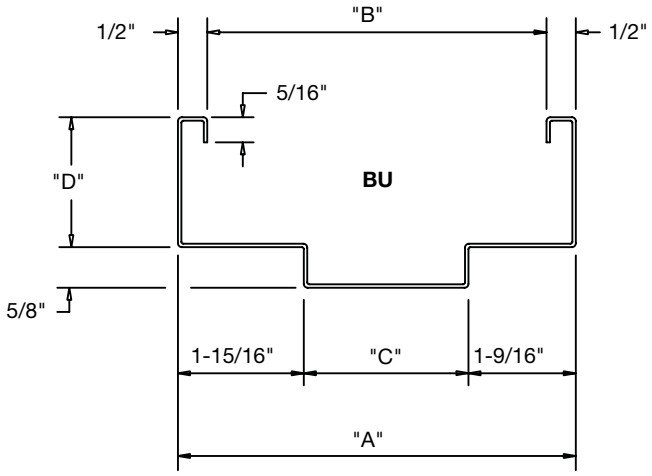
"KS"= KEY SIDE "SUFFIX"A" = ACTIVE LEAF OF PAIRS

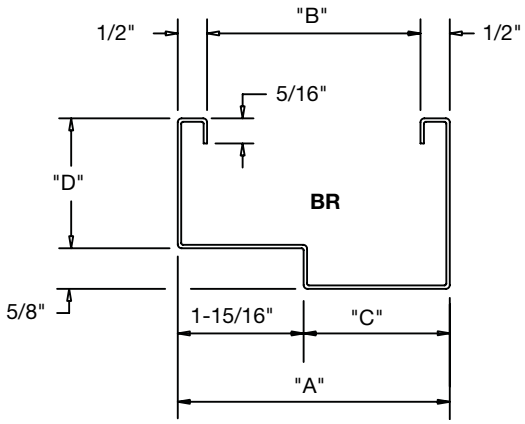
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

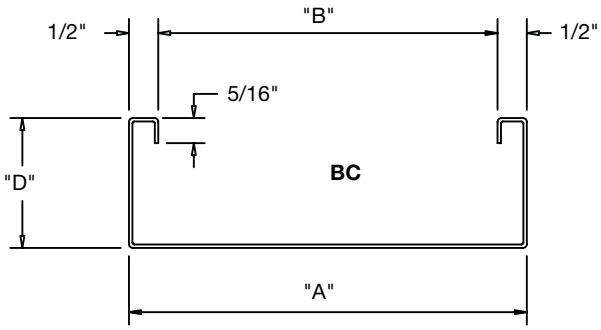
SERIES BQ, BU, BR, AND BC (BEFORE DRYWALL FRAMES)

FOR 1-3/4" DOORS HANDED







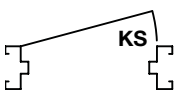


(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

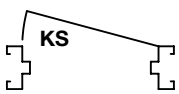
PROFILE	A (DEPTH)	B (THROAT)	C (SOFFIT WIDTH)	D (FACE)	
				JAM	HEAD
SINGLE RABBET	3" THRU 5-7/8"	2" THRU 4-7/8"	"A" (-) 1-15/16	2"	2"
DOUBLE RABBET: BU	4-1/4" THRU 17" 17-7/8"	3-1/4" THRU 16-7/8"	"A" (-) 2 (RABBETS)	1" THRU 4	1" THRU 4
DOUBLE RABBET: BQ	4-5/8" THRU 17-7/8"	3-5/8" THRU 16-7/8"	"A" (-) 2 (RABBETS)	1" THRU 4	1" THRU 4
CASED OPENING	3" THRU 17-7/8"	2" THRU 16-7/8"	OMIT	1" THRU 4	1" THRU 4

NOTE: 18 GAUGE LIMITED TO 9-7/8" DEPTH.

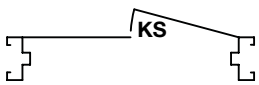
INSIDE



LH



RH



RHA

LHA

OUTSIDE

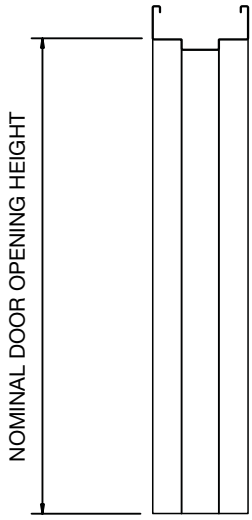
SUFFIX "A" = ACTIVE LEAF OF PAIRS

"KS" = KEY SIDE

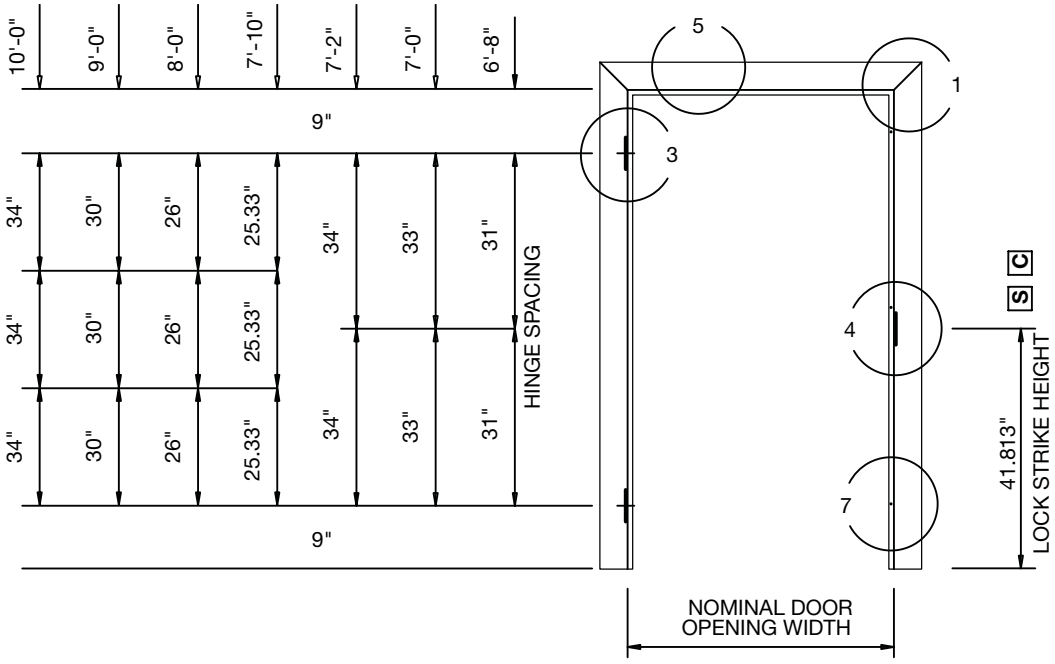
SERIES BQ, BU, BR, AND BC BEFORE DRYWALL FRAMES

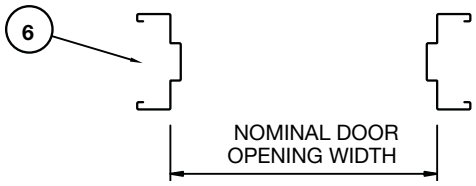
HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS. DOUBLE RABBET PROFILES ARE SHOWN, SINGLE RABBET AND CASED OPENING PROFILES ARE SIMILAR.

VERTICAL SECTION



ELEVATION

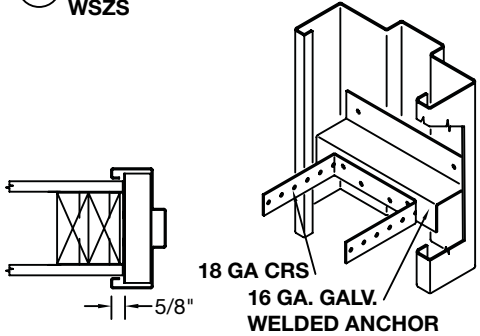




HORIZONTAL SECTION

JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS >3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS >7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS >7'6" THRU 10'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL TWO FEET IN HEIGHT OR FRACTION THEREOF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING STUDS AND/ OR WALLS.

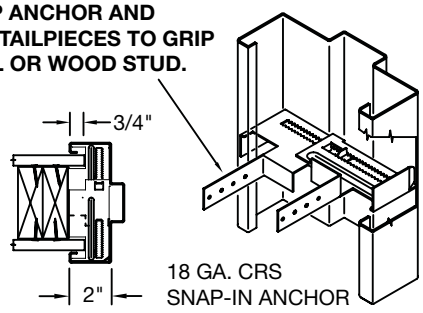
6 WOOD STUD "Z" STRAP ANCHOR WSZS



WOOD OR METAL STUD MAY BE USED

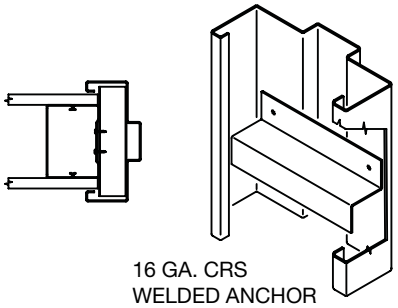
6 ADJUSTABLE ANCHOR FOR STUD WALLS ADJ/STUD

SETUP ANCHOR AND BEND TAILPIECES TO GRIP METAL OR WOOD STUD.



3-3/4" THRU 8-3/4" DEPTH

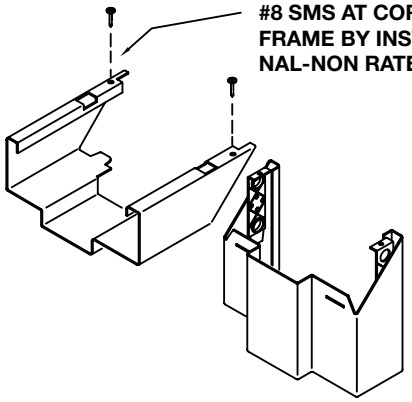
6 METAL STUD "Z" ANCHOR MSZ1



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

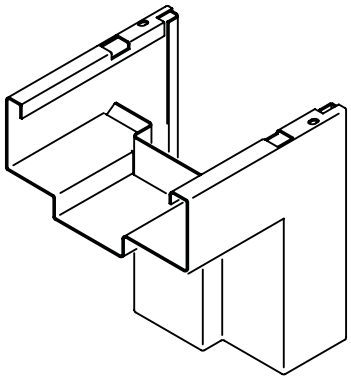
SERIES BQ, BU, BR, AND BC BEFORE DRYWALL FRAMES

1 KNOCKED DOWN CORNER CONSTRUCTION



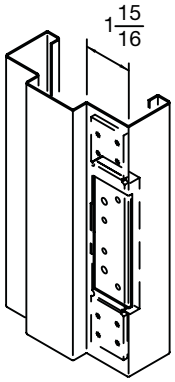
#8 SMS AT CORNER OF LABELED FRAME BY INSTALLER. (OPTIONAL-NON RATED FRAMES)

2 WELDED CORNERS



FRAME IS SETUP AND WELDED WITH TEMPORARY SPREADER AT SILL

3 HINGE PREPARATION

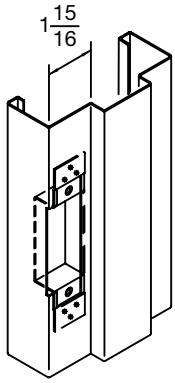


4-1/2" X .134" OR
4-1/2" X .180"
ANSI A156.7 TEMPLATE

7 GAUGE STEEL
REINFORCEMENT
AND 26 GAUGE
PLASTER GUARD

BACKSET: 5/16"

4 LOCK STRIKE PREPARATION



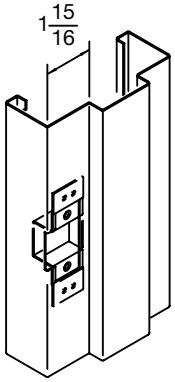
[S]

UNIVERSAL (4-7/8")
ANSI A115.1 & 2 TEMPLATE

16 GAUGE STEEL REINFORCING
WITH EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT THREAD
ENGAUGEMENT EQUAL TO 14 GAUGE

4 LOCK STRIKE PREPARATION

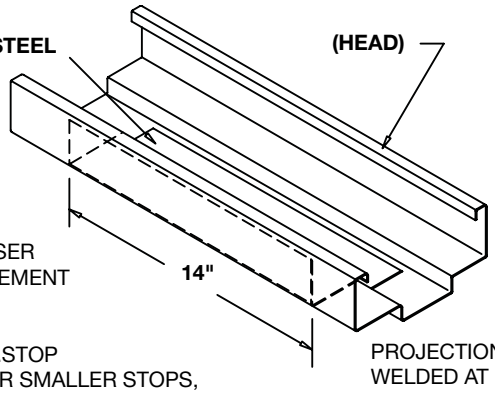
[C]



CYLINDRICAL (2-3/4")
ANSI A115.3 TEMPLATE
16 GAUGE STEEL REINFORCING
WITH EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT THREAD
ENGAUGEMENT EQUAL TO 14 GAUGE

ALSO AVAILABLE WITHOUT LIP NOTCH FOR DEADBOLTS.

5 CLOSER REINFORCEMENT (OPTIONAL)



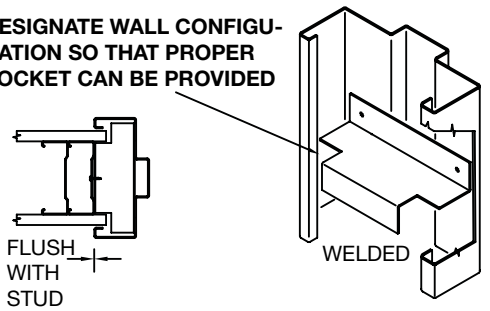
HALF CLOSER
REINFORCEMENT
SLEEVE

1-1/2" MIN.STOP
WIDTH. FOR SMALLER STOPS,
A14 GAUGE PLATE USED.

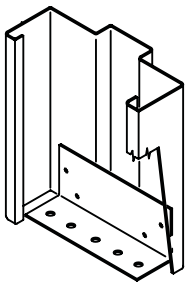
PROJECTION
WELDED AT RABBET

2 METAL STUD "Z" ANCHOR MSZ2

DESIGNATE WALL CONFIGURATION SO THAT PROPER POCKET CAN BE PROVIDED



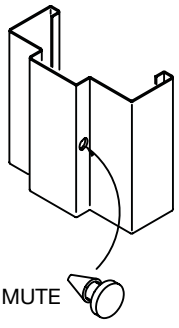
8 SPECIAL SIZE FLOOR ANCHOR SA



WELDED ANCHOR

ONE PIECE

9 DOOR SILENCER (MUTE)



RUBBER MUTE
3/STRIKE JAMB
2/DOUBLE
SWING HEAD

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES BQ, BU, BR, AND BC BEFORE DRYWALL FRAME

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY
FACTORY MUTUAL

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1-1/2 HR, OR 3 HR.

MAX. SIZE: 14 GAUGE STEEL
16 GAUGE STEEL
4'0" X 9'0" SINGLE
8'0" X 9'0" PAIR

18 GAUGE STEEL
4'0" X 7'0" SINGLE
6'10" X 7'0" PAIR

SINGLE OR DOUBLE RABBET PROFILES. NOT ALL SIZES, GAUGES, ETC., ARE AVAILABLE IN ALL RATINGS.

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door, Milan, TN. USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series BQ, BU, BR, and BC before drywall frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

Frames are knocked down, field assembled or welded unit type. Components have diecut mitered corners that interlock rigidly when field assembled. Single rabbet, double rabbet, and cased opening profiles are sized to fit popular wall thicknesses. Integral door stops are 5/8" high and frame faces are 2" except double rabbet profiles are available with 4" face heads. Components have backbend-returns that facilitates installation of wall board. Twist-in or welded jamb-anchors are available for various stud wall conditions; welded floor anchors or extra jamb anchors are furnished at sill (indicate which).

Hardware Provisions: Frames are handed. Hinge jambs for 1-3/4" doors are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. Strike jambs for 1-3/4" doors are prepared for 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A 115.1&2 (specify which). Optional closer reinforcement is a 14 gauge steel formed steel sleeve or 14 gauge minimum plate welded in place. 3 mute holes are provided per strike jamb and 2 for double swing heads. Frames for 1-3/8" doors are also available ...ask for details.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available on K.D. frames from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. Maximum size: 40100 single and 80100 double swing. For accurate color selectors ask for a Ceco Colorstyle chart.

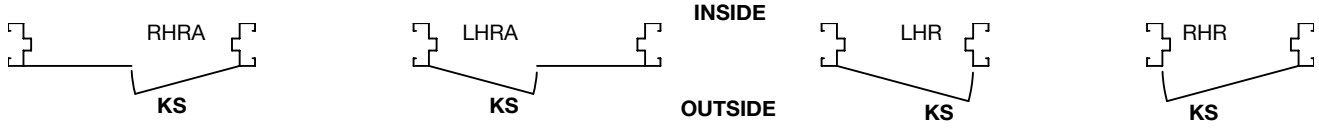
MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV	
			A60	G90
18 GAUGE STEEL	STANDARD DUTY	STD	OPT	N/A
16 GAUGE STEEL	STANDARD, HEAVY, OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT

18 GAUGE STEEL FOR USE WITH 1-3/4" WOOD DOORS.
ALSO AVAILABLE IN 18 GAUGE STEEL FOR 1-3/8" DOORS ...ASK FOR DETAILS

PERFORMANCE

SOUND TRANSMISSION CLASS:	STC 32 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE])
PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, 20 GAUGE: LEVEL B (500,000 CYCLES); 18 AND 16 GAUGE: LEVEL A (1,000,000 CYCLES)

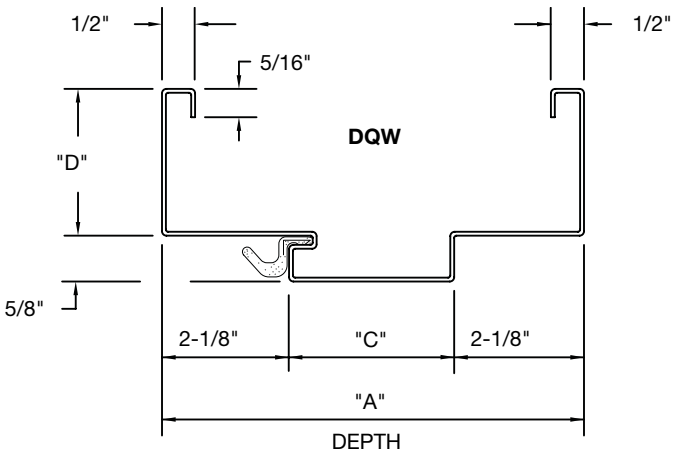


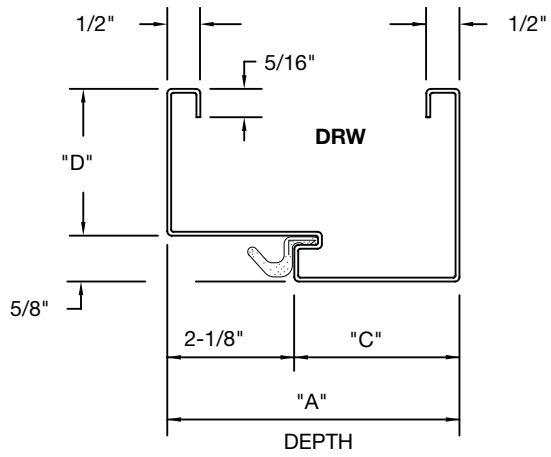
"KS"= KEY SIDE "SUFFIX"A" = ACTIVE LEAF OF PAIRS

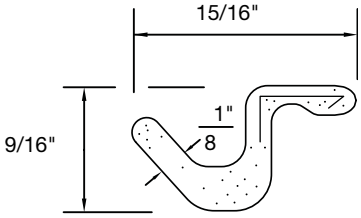
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES DQW AND DRW GASKETED STEEL FRAMES

FOR 1-3/4" THICK DOORS SLIP-ON DRYWALL APPLICATION, HANDED





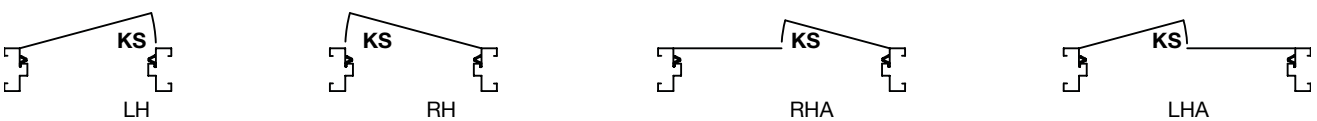


FOAM FILLED GASKET
COMPRESSION TYPE
FIRE RATED

NOTE: GASKET SHIPS LOOSE WHEN FRAME IS PRIME PAINTED. DO NOT INSTALL GASKET UNTIL FRAME HAS BEEN FINISH PAINTED.

PROFILE	A (DEPTH)	B (THROAT)	C (SOFFIT WIDTH)	D (FACE)	
				JAM	HEAD
SINGLE RABBET	3-3/8" THRU 6"	2-3/8" THRU 5"	"A" (-) 2-1/8"	2"	2"
DOUBLE RABBET	5-3/4" THRU 14"	4-3/4" 13"	"A" (-) 2(2-1/8"	2"	2" OR 4

INSIDE



OUTSIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

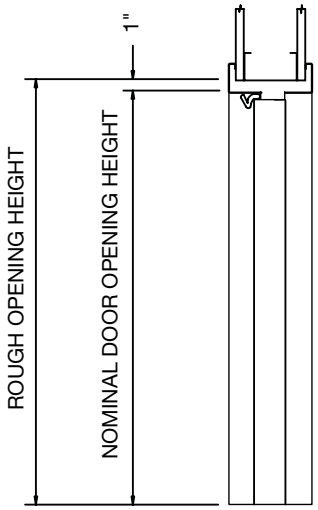
"KS" = KEY SIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

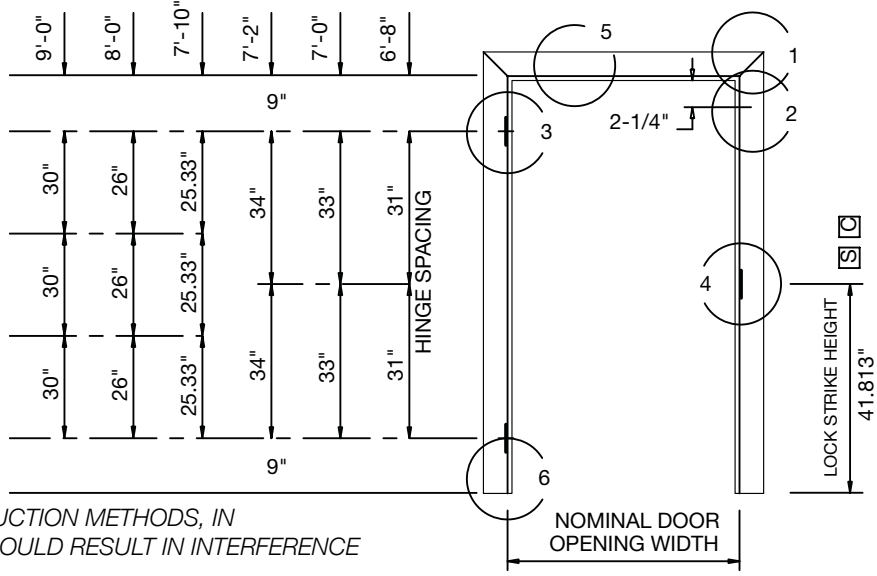
SERIES DQW AND DRW KERFED FRAMES

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS.
DOUBLE RABBET PROFILES ARE SHOWN, SINGLE RABBET AND CASED OPENING PROFILES ARE SIMILAR.

VERTICAL SECTION



ELEVATION

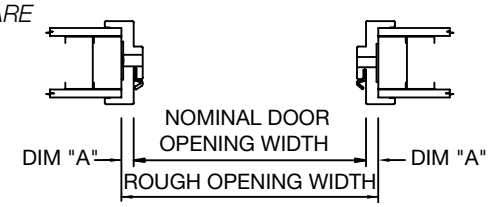


STEEL/WOOD STUD AND DRYWALL CONSTRUCTION METHODS, IN CONJUNCTION WITH FRAME ANCHORAGE, COULD RESULT IN INTERFERENCE BETWEEN THE STUD AND HARDWARE PREP.
NOTCHING OF THE STUD COULD RESULT IN COMPROMISING THE STABILITY OF THE FRAME. CONSIDERATION SHOULD BE GIVEN TO SPECIFYING THE HARDWARE SUITABLY SIZED & THE ANCHOR TYPE TO FIT THE CONFINES OF A STANDARD FRAME OR SPECIFYING ALTERNATE FRAME PROFILES TO ACCOMMODATE THE HARDWARE.

IF NECESSARY TO REMOVE, PLASTER GUARDS ARE BEST REMOVED BEFORE FRAME INSTALLATION

INSTALLATION INSTRUCTIONS
ROUGH OPENING: DOUBLE RABBET FRAMES, AND SINGLE RABBET FRAMES 4-1/8" DEPTH AND GREATER. DOOR OPENING HEIGHT PLUS 1" DOOR OPENING WIDTH PLUS 2"

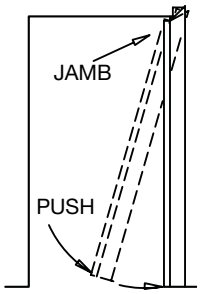
**INSTALLATION INSTRUCTIONS*
ROUGH OPENING: SINGLE RABBET FRAMES 4" DEPTH AND LESS. DOOR OPENING HEIGHT PLUS 1" DOOR OPENING WIDTH PLUS 2-3/4" AS ANCHORS ARE PLACED IN RABBET.



HORIZONTAL SECTION

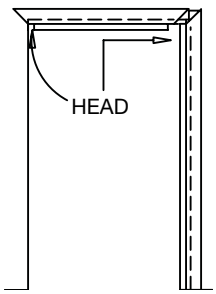
	DIM "A"
SINGLE RABBET	1" OR *1-3/8"
DOUBLE RABBET:	1"

STEP 1



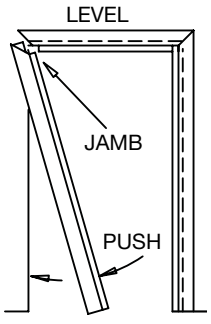
A. PUSH TOP OF ONE JAMB OVER THE WALL.
B. HOLD TOP OF JAMB IN PLACE, THEN PUSH BOTTOM IN TOWARDS AND OVER WALL.

STEP 2



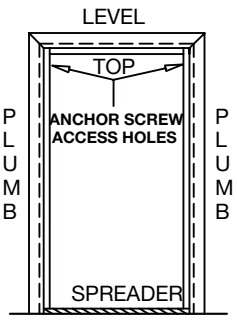
A. POSITION FRAME HEAD OVER THE WALL.
B. ALIGN HEAD TABS WITH JAMB SLOTS, THEN SLIDE HEAD TOWARD JAMB AND ENGAUGE TABS IN SLOTS.

STEP 3



A. PUSH TOP OF REMAINING JAMB OVER WALL AND MATE TABS IN SLOTS.
B. PUSH BOTTOM OF JAMB IN TOWARDS AND OVER WALL.
C. LEVEL HEAD.

STEP 4



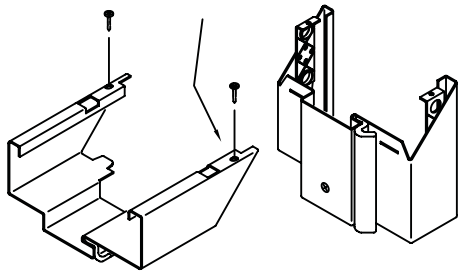
A. ADJUST PLUMB ANCHORS WITH SCREWDRIVER.
B. PLUMB HINGE JAMB AND ANCHOR SILL
C. WITH TEMPORARY SPREADER, ADJUST STRIKE JAMB AND ANCHOR SILL.
E. INSTALL MUTES.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES DQW AND DRW KERFED FRAMES

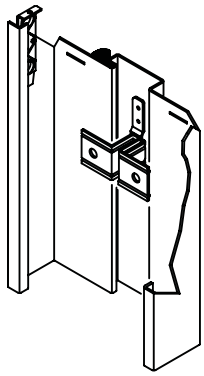
1 KNOCKED DOWN CORNER CONSTRUCTION

#8 SMS AT CORNERS OF LABELED FRAMES ONLY (BY OTHERS)



COMPONENTS ARE SHIPPED "KNOCKED DOWN" AND ASSEMBLED AT THE JOB SITE

2 ADJUSTABLE PLUMB ANCHOR

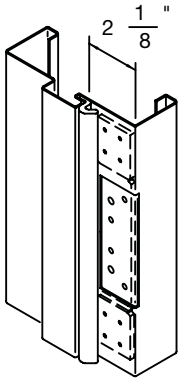


ONE EACH JAMB

ADJUST WITH SCREWDRIVER

DUAL PLUMB ANCHORS ARE APPLIED IN DEPTHS GREATER THAN 8-3/4".

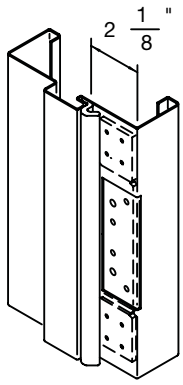
3 HINGE PREPARATION



4-1/2" X .134" OR
4-1/2" X .180"
ANSI A156.7 TEMPLATE

7 GAUGE STEEL REINFORCEMENT

3 HINGE PREPARATION

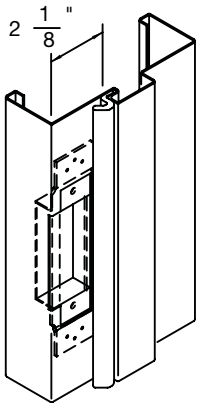


5" X .146" OR
5" X .190"
ANSI A156.7 TEMPLATE

7 GAUGE STEEL REINFORCEMENT

4 LOCK STRIKE PREPARATION

S



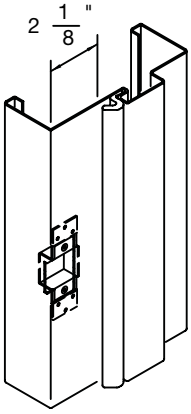
UNIVERSAL (4-7/8")
ANSI A115.1 & 2
TEMPLATE

12 GAUGE STEEL REINFORCEMENT

DRILLED AND TAPPED FOR 12-24 MS (2) PLACES

4 LOCK STRIKE PREPARATION (OPTIONAL)

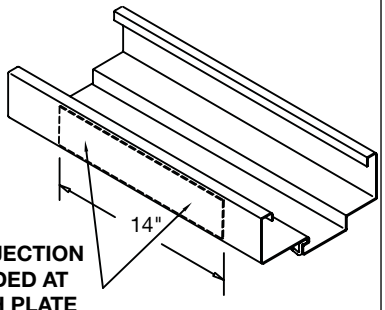
C



CYLINDRICAL (2-3/4")
ANSI A115.3 TEMPLATE
16 GAUGE STEEL REINFORCING
(HOLES ARE DRAWN TO PROVIDE 1/8" MINIMUM THREAD DEPTH)

ALSO AVAILABLE WITHOUT LIP NOTCH FOR DEADBOLTS.

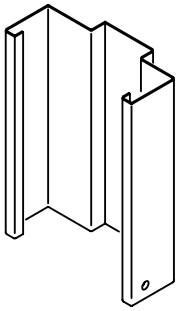
5 CLOSER REINFORCEMENT (OPTIONAL)



14 GAUGE STEEL

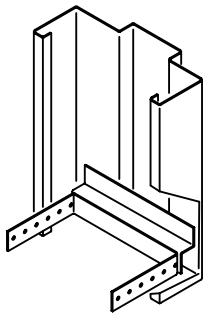
PROJECTION WELDED AT EACH PLATE

6 STANDARD SILL ANCHOR



DIMPLED HOLE FOR #10 FH FASTENER. FASTENER IS BY CONTRACTOR AND MUST BE LONG ENOUGH TO ENGAUGE STUD.

6 OPTIONAL SILL STRAP ANCHOR



FASTENER IS BY CONTRACTOR AND MUST ENGAUGE STUD.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES DQW AND DRW DRYWALL KERFED FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1-1/2 HR

MAX. SIZE: 14 GAUGE STEEL
16 GAUGE STEEL
4'0" X 9'0" SINGLE
8'0" X 9'0" PAIR

18 GAUGE STEEL
3'0" X 7'0" SINGLE
6'10" X 7'0" PAIR

SINGLE OR DOUBLE RABBET PROFILES. NOT ALL SIZES ARE AVAILABLE IN ALL RATINGS.

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door, Milan, TN USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series DQW and DAW slip-on drywall frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008 or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

Frames are knocked down, field assembled type. Components have diecut mitered corners that interlock rigidly when field assembled. Single rabbet and double rabbet profiles are sized to fit wall thicknesses from 2-5/8" thru 13" (in 1/8" increments). Door stops are 5/8" high and have an integral kerf with foam filled, fire rated, compression type gasket (weatherstrip). Frame faces are 2" except double rabbet profiles are available with 4" face heads. Adjustable, compression type anchors are welded to jambs and allow frame installation, plumbing and squaring after wallboard is applied (To adjust anchors use Phillips head screw driver). Components have backbend-returns that protect the wall surface during installation. Sill anchoring is by means of screws through dimpled holes in faces. Welded on sill strap anchors are also available (optional). 18 gauge maximum size is 30x70 single & 60x70 double swing..

Hardware Provisions: Frames are handed. Hinge jambs for 1-3/4" doors are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. Strike jambs for 1-3/4" doors are prepared for 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A115.1&2 (specify which). Optional closer reinforcement is a 14 gauge minimum steel plate welded in place. Frames for 1- 3/8" doors are also available ...ask for details.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. Maximum size:40x90 single and 80x90 double swing. For accurate color selectors ask for a Ceco Colorstyle chart.

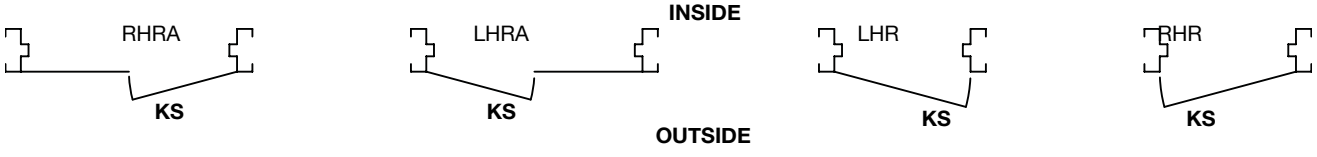
MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV	
			A60	G90
18 GAUGE STEEL	STANDARD DUTY	STD	OPT	N/A
16 GAUGE STEEL	STANDARD, HEAVY, OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT

18 GAUGE STEEL FOR USE WITH 1-3/4" WOOD DOORS.
ALSO AVAILABLE IN 18 GAUGE STEEL FOR 1-3/8" DOORS ...ASK FOR DETAILS

PERFORMANCE

PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST -- 16 & 14 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)

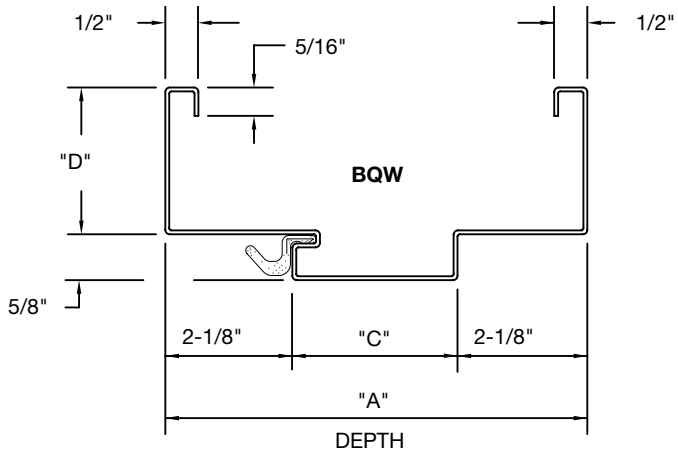


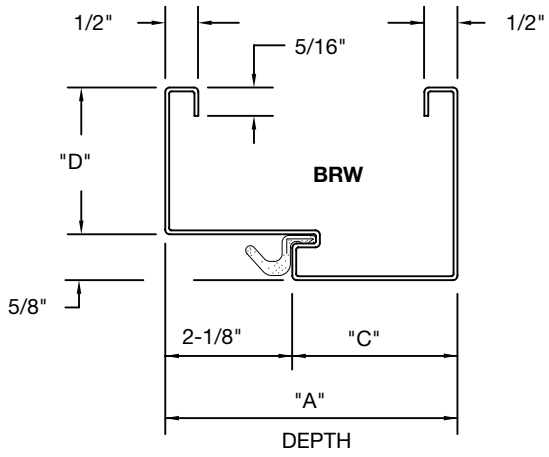
"KS"= KEY SIDE *"SUFFIX"A" = ACTIVE LEAF OF PAIRS*

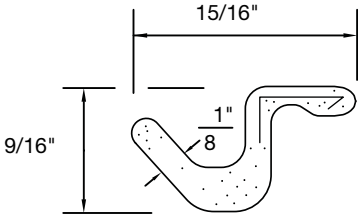
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES BQW AND BRW GASKETED STEEL FRAMES

FOR 1-3/4" THICK DOORS BEFORE DRYWALL APPLICATION, HANDED





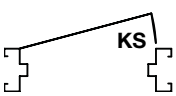


FOAM FILLED GASKET
COMPRESSION TYPE
FIRE RATED

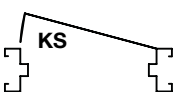
NOTE: GASKET SHIPS LOOSE WHEN FRAME IS PRIME PAINTED. DO NOT INSTALL GASKET UNTIL FRAME HAS BEEN FINISH PAINTED.

PROFILE	A (DEPTH)	B (THROAT)	C (SOFFIT WIDTH)	DIMENSION "D" STD. FACE SIZES	
				JAM	HEAD
SINGLE RABBET	3-3/8" THRU 6"	2-3/8" THRU 5"	"A" (-) 2-1/8"	2"	2"
DOUBLE RABBET	5-1/2" THRU 14"	4-1/2" THRU 13"	"A" (-) 2(2-1/8")	1" THRU 4	1" THRU 4

INSIDE



LH



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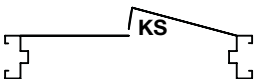
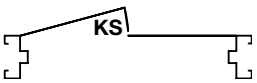


RHA



LHA

OUTSIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

"KS" = KEY SIDE

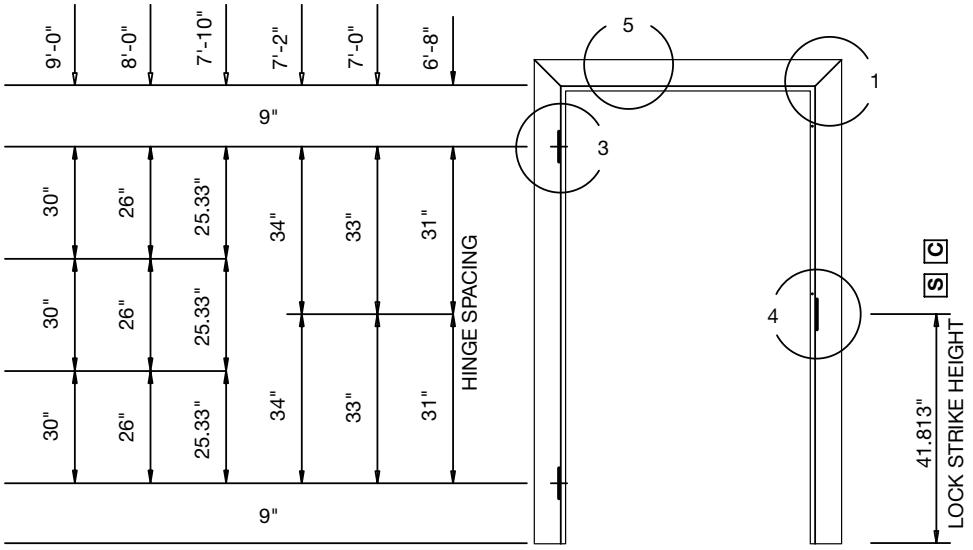
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

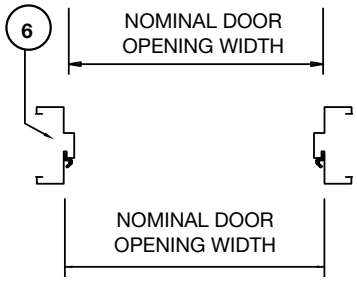
SERIES BQW AND BRW BEFORE DRYWALL FRAMES

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS.
DOUBLE RABBET PROFILES ARE SHOWN, SINGLE RABBET AND CASED OPENING PROFILES ARE SIMILAR.

VERTICAL SECTION

ELEVATION

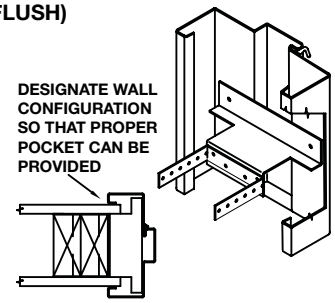




HORIZONTAL SECTION

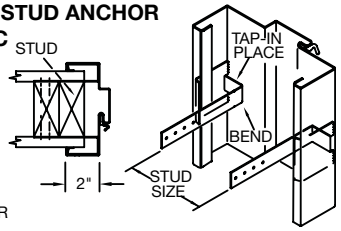
JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS >3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS >7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS >7'6" THRU 9'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL TWO FEET IN HEIGHT OR FRACTION THEREOF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING STUDS AND/OR WALLS. EXISTING OPENING ANCHOR LOCATION & QUANTITY MAY VARY BY DEPTH AND PROFILE. ADDITIONAL ANCHOR OPTIONS SHOWN IN SECTION F13.

6 WOOD STUD "Z" STRAP ANCHOR WSZS (FLUSH)



(USED ALSO FOR METAL STUD WALLS)

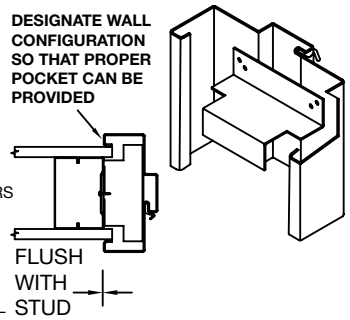
6 WOOD STUD ANCHOR XP/ANC



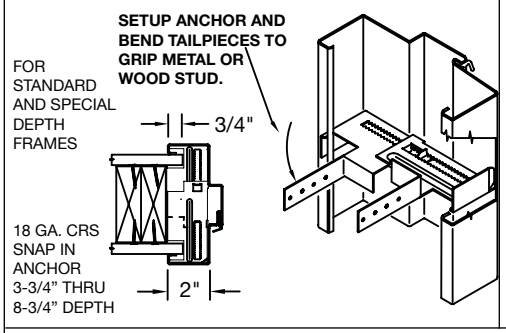
ANCHORS ARE BENT IN FIELD TO THICKNESS OF WALLBOARD. IF STUDS ARE SET BEFORE DOOR FRAME. USE AN ADDITIONAL JAMB ANCHOR AT SILL INSTEAD OF SILL ANCHOR.
(USED ALSO FOR METAL STUD WALLS)

NOTE: FRAME IS SET-UP AND JAMBS ANCHORED BEFORE WALLBOARD IS INSTALLED.

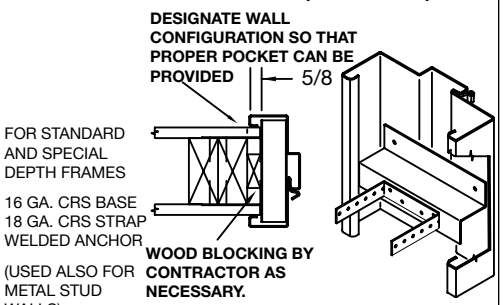
6 METAL STUD "Z"ANCHOR MSZ2



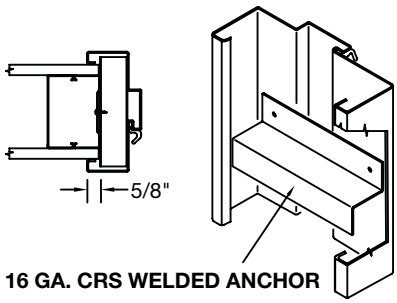
6 ADJUSTABLE ANCHOR FOR STUD WALLS ADJ/STUD



6 WOOD STUD "Z" METAL STUD "Z" STRAP ANCHOR WSZS (RECESSED)



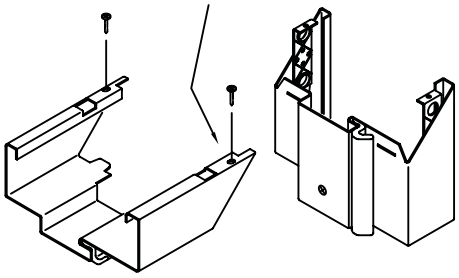
6 METAL STUD "Z"ANCHOR MSZ1



SERIES BQW AND BRW BEFORE DRYWALL FRAMES

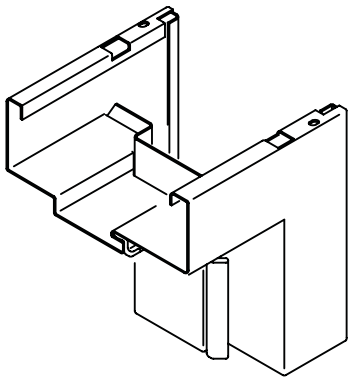
1 KNOCKED DOWN CORNER CONSTRUCTION

#8 SMS AT CORNER OF LABELED FRAMES BY INSTALLER (OPTIONAL NON-FIRE RATED FRAMES)



COMPONENTS ARE SHIPPED "KNOCKED DOWN" AND ASSEMBLED AT THE JOB SITE

1 WELDED CORNERS

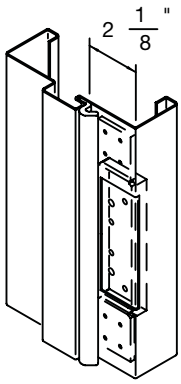


FRAME IS SETUP AND WELDED WITH TEMPORARY SPREADER AT SILL

3 HINGE PREPARATION

4-1/2" X .134" OR
4-1/2" X .180"
ANSI A156.7 TEMPLATE

7 GAUGE STEEL
REINFORCEMENT

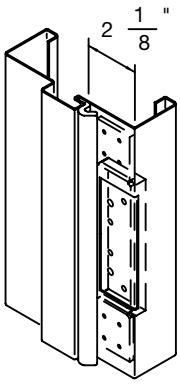


HINGE PLASTER GUARDS ARE APPLIED

3 HINGE PREPARATION

5" X .146" OR
5" X .190"
ANSI A156.7 TEMPLATE

7 GAUGE STEEL
REINFORCEMENT



HINGE PLASTER GUARDS ARE APPLIED

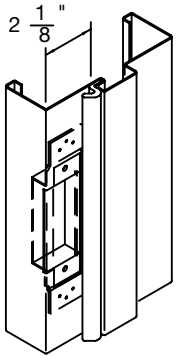
4 LOCK STRIKE PREPARATION

S

UNIVERSAL (4-7/8")
ANSI A115.1 & 2
TEMPLATE

12 GAUGE STEEL
REINFORCEMENT

STRIKE PLASTER GUARDS ARE APPLIED

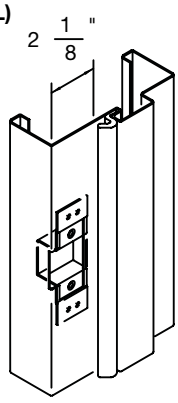


4 LOCK STRIKE PREPARATION (OPTIONAL)

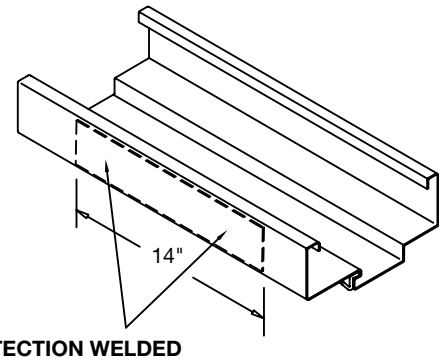
C

CYLINDRICAL (2-3/4")
ANSI A115.3 TEMPLATE
16 GAUGE STEEL REINFORCING
& PLASTER GUARD WITH
EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT THREAD
ENGAUGEMENT EQUAL TO 14 GAUGE

ALSO AVAILABLE WITHOUT LIP NOTCH FOR DEADBOLTS.



5 CLOSER REINFORCEMENT (OPTIONAL)



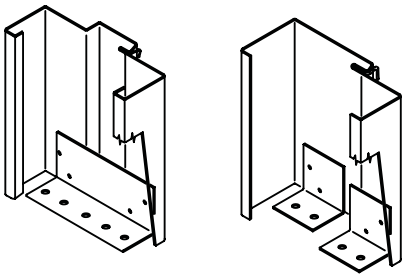
PROTECTION WELDED AT EACH PLATE

14 GAUGE STEEL

6 FLOOR ANCHOR SA

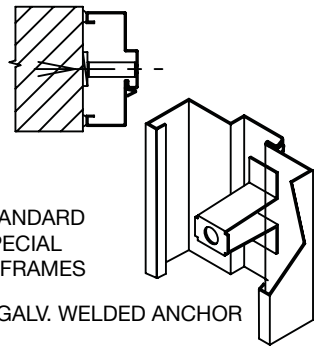
STANDARD DOUBLE RABBET ONE PIECE ANCHOR

SINGLE RABBET



16 GA. WELDED ANCHOR

6 EXISTING OPENING ANCHOR EO/N



FOR STANDARD AND SPECIAL DEPTH FRAMES

16 GA. GALV. WELDED ANCHOR

MIN. DEPTH FOR BRW IS 4-1/8"
MIN. DEPTH FOR BQW IS 6-1/4"
ANCHOR LOCATION & QUANTITY
MAY VARY WITH DEPTH OR PROFILE

SERIES BQW AND BRW BEFORE DRYWALL FRAME

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1-1/2 HR, OR 3 HR.

MAX. SIZE: 14 GAUGE STEEL
16 GAUGE STEEL
4'0" X 9'0" SINGLE
8'0" X 9'0" PAIR

SINGLE OR DOUBLE RABBET PROFILES. NOT ALL SIZES & GAUGES ARE AVAILABLE IN ALL RATINGS.

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door, Milan, TN. USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series BQW, BRW before drywall frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008 ...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

Frames are knocked down, field assembled or welded unit type. Components have die cut mitered corners that interlock rigidly when field assembled. Single and double rabbet profiles are sized to fit popular wall thicknesses. Integral door stops are 5/8" high and frame faces are 2" except double rabbet profiles are available with 4" face heads, as standards. Custom face frames are available. Components have backbend-returns that facilitates installation of wall board. Twist-in or welded jamb-anchors are available for various stud wall conditions; welded floor anchors or extra jamb anchors are furnished at sill (indicate which).

Hardware Provisions: :Frames are handed. Hinge jambs for 1-3/4" doors are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. Strike jambs for 1-3/4" doors are prepared for 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A 115.1&2 (specify which). Optional closer reinforcement is a 14 gauge steel formed sleeve or 14 gauge minimum plate welded in place. 3 door mutes are provided per strike jamb and 2 for double swing heads. Frames for 1-3/8" doors are also available ...ask for details.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available on K.D. frames from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. Maximum size: 4090 single and 8090 double swing. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

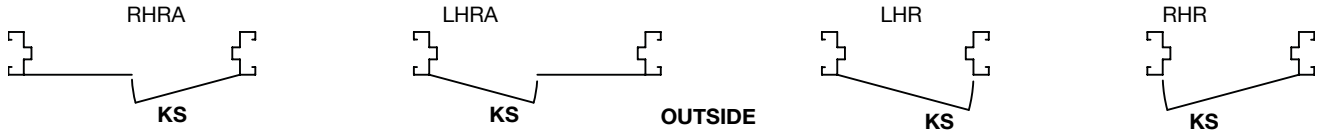
DOOR FACE SHEETS	LEVEL	C.R.	GALV	
			A60	G90
18 GAUGE STEEL	STANDARD DUTY	STD	OPT	N/A
16 GAUGE STEEL	STANDARD, HEAVY, OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT

18 GAUGE STEEL FOR USE WITH 1-3/4" WOOD DOORS.
ALSO AVAILABLE IN 18 GAUGE STEEL FOR 1-3/8" DOORS ...ASK FOR DETAILS

PERFORMANCE

PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST -- 16 & 14 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)

INSIDE

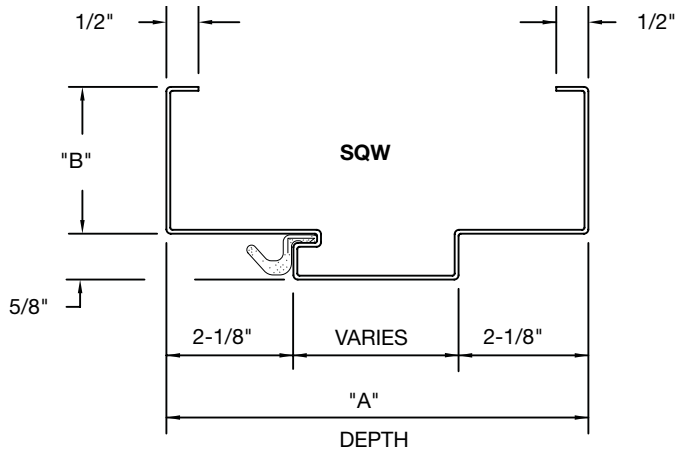


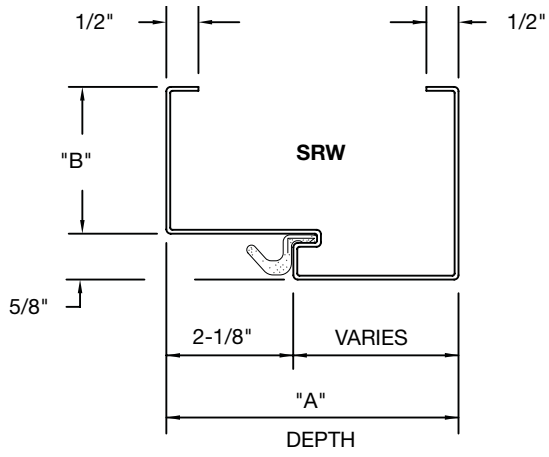
"KS"= KEY SIDE *"SUFFIX"A" = ACTIVE LEAF OF PAIRS*

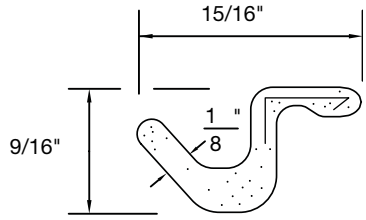
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES SQW AND SRW GASKETED STEEL FRAMES

FOR 1-3/4" THICK DOORS STANDARD WALL APPLICATION, HANDED







FOAM FILLED GASKET
COMPRESSION TYPE
FIRE RATED

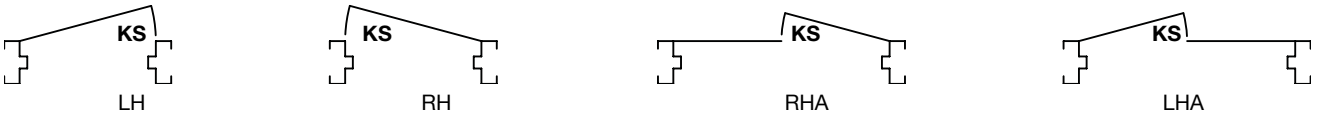
FACE	DIM B
HEAD	1" THRU 4"
JAMBS	1" THRU 4"
SILL	2" THRU 12"
TUBES	1" OR 2"

NOTE: DO NOT INSTALL GASKET PRIOR TO PAINTING FRAME.

PROFILE	A (DEPTH)
DOUBLE RABBET	5-1/2" THRU 14"
SINGLE RABBET	3-5/8" THRU 6"

KNOCKED DOWN (KD) FRAMES ARE AVAILABLE WITH FACES FROM 1" THRU 2" WHEN HEAD AND JAMB FACES ARE THE SAME SIZE. 4" FACE, KD HEADS ARE ALSO AVAILABLE FOR 2", FACE KD JAMBS. SIZE RANGES LISTED ABOVE ARE AVAILABLE IN 1/8" INCREMENTS.

INSIDE



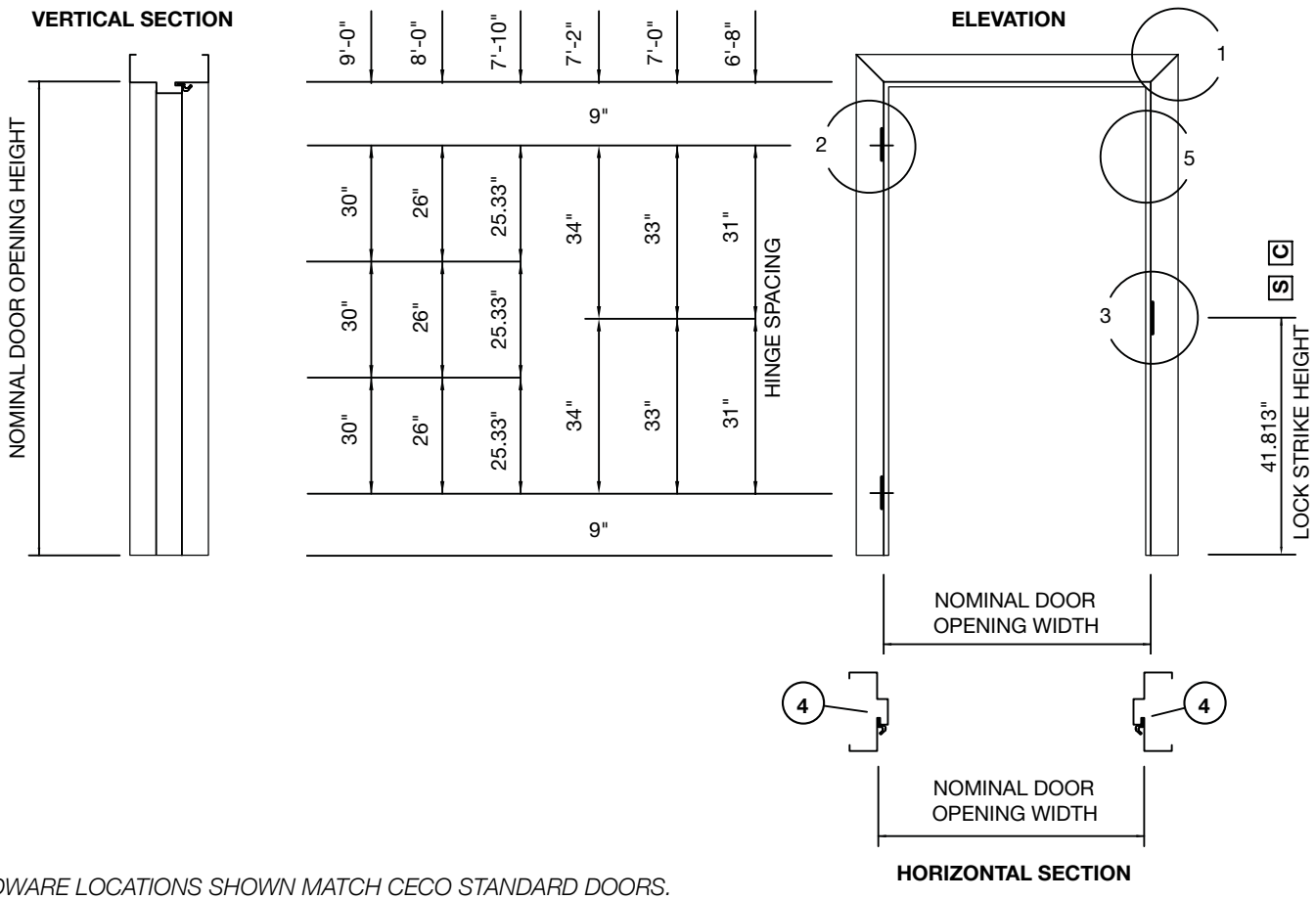
OUTSIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

"KS" = KEY SIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

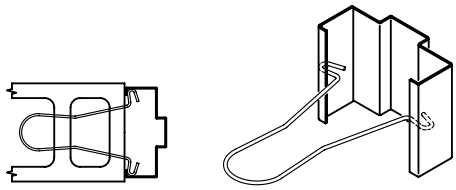
SERIES SQW AND SRW KERFED FRAMES



HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS.

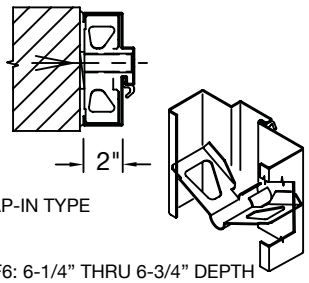
JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS >3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS >7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS >7'6" THRU 9'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL TWO FEET IN HEIGHT OR FRACTION THEREOF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING STUDS AND/OR WALLS.

4 WIRE MASONRY ANCHOR WMA



(FOR 3" THRU 8-3/4" DEPTHS) 7 GA. GALV. STEEL SNAP-IN TYPE

4 EXISTING OPENING ANCHOR EO

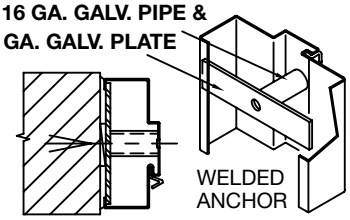


18 GA. CRS SNAP-IN TYPE

SQW PROFILE EO/SF6: 6-1/4" THRU 6-3/4" DEPTH
EO/SF8: 6-7/8" THRU 8-3/4" DEPTH

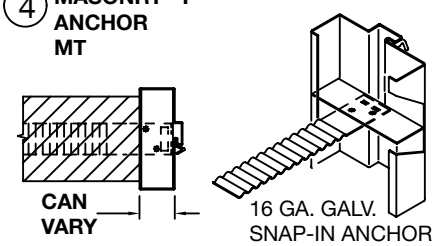
4 EXISTING OPENING PIPE & PLATE ANCHOR EO

16 GA. GALV. PIPE & 12 GA. GALV. PLATE



DEPTHS OVER 14" DUAL EO ANCHORS SIDE BY SIDE ACROSS SOFFIT, WILL BE APPLIED.

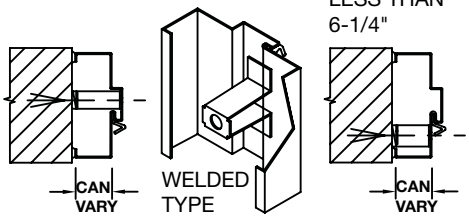
4 MASONRY "T" ANCHOR MT



SUPPLIED FOR ALL DEPTHS OTHER THAN SHOWN FOR ADJUSTABLE MT ANCHOR

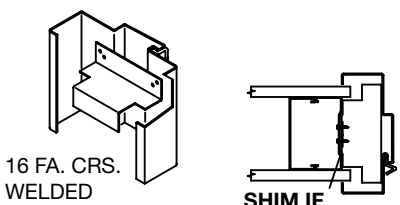
4 EO/N

FOR DEPTHS LESS THAN 6-1/4"



DEPTHS OVER 14" REQUIRE TWO EO/N ANCHORS PLACED ACROSS SOFFIT

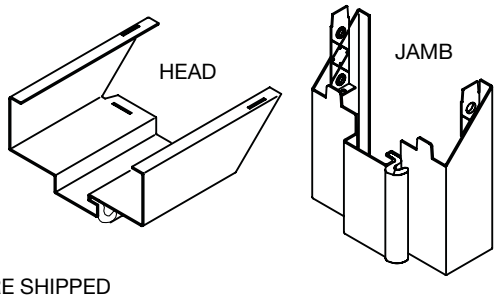
4 METAL STUD "Z" ANCHOR MSZ2



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES SQW AND SRW KERFED FRAMES

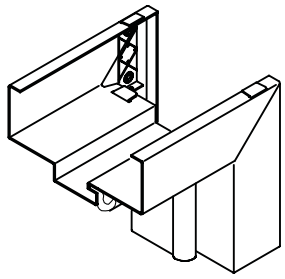
1 KNOCKED DOWN CORNER CONSTRUCTION



COMPONENTS ARE SHIPPED
"KNOCKED DOWN" AND
ASSEMBLED AT THE JOB SITE

1 WELDED CORNERS

DIE-CUT CORNER WITH CORNER TAB AND FACE WELD SHOWN. ALSO AVAILABLE WITHOUT TAB AND WELDED OR MITRE SAWED AND WELDED. ALTERNATIVE WELD OPTIONS ARE ALSO AVAILABLE.

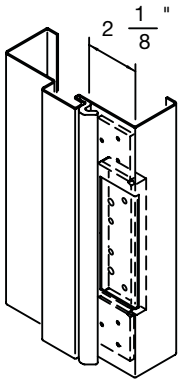


2 HINGE PREPARATION

4-1/2" X .134" OR
4-1/2" X .180"
ANSI A156.7 TEMPLATE

7 GAUGE STEEL
REINFORCEMENT

& 26 GAUGE STEEL
PLASTER GUARD



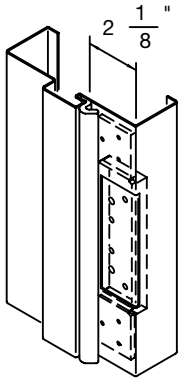
HINGE PLASTER GUARDS ARE APPLIED

2 HINGE PREPARATION

5" X .146" OR
5" X .190"
ANSI A156.7 TEMPLATE

7 GAUGE STEEL
REINFORCEMENT

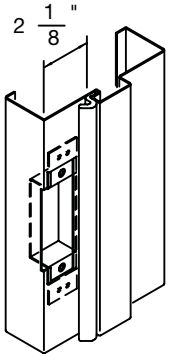
& 26 GAUGE STEEL
PLASTER GUARD



3 LOCK STRIKE PREPARATION

UNIVERSAL (4-7/8") S
ANSI A115.1 & 2
TEMPLATE

16 GAUGE STEEL REINFORCING
WITH EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT THREAD
ENGAUGEMENT EQUAL TO 14
GAUGE

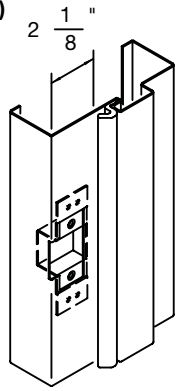


3 LOCK STRIKE PREPARATION (OPTIONAL)

C

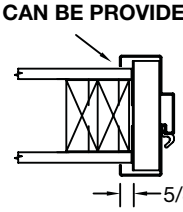
CYLINDRICAL (2-3/4")
ANSI A115.2 TEMPLATE
16 GAUGE STEEL REINFORCING
WITH EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT THREAD
ENGAUGEMENT EQUAL TO 14 GAUGE

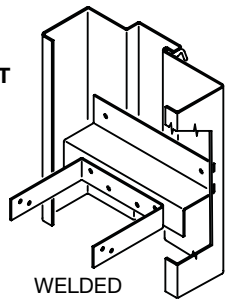
ALSO AVAILABLE WITHOUT LIP
NOTCH FOR DEADBOLTS.



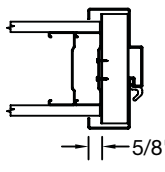
4 WOOD STUD "Z" STRAP ANCHOR WSZS

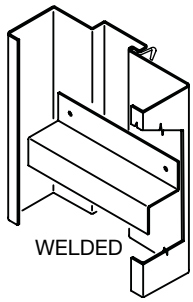
DESIGNATE WALL CONFIGURATION SO THAT PROPER POCKET CAN BE PROVIDED



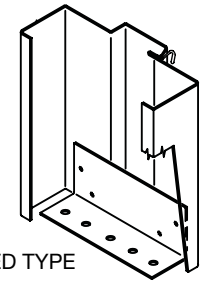


4 METAL STUD "Z" ANCHOR MSZ1





4 SPECIAL SIZE FLOOR ANCHOR SA



ONE PIECE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES SQW AND SRW KERFED FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR, OR 3 HR

MAX. SIZE:
8'0" X 9'0" PAIR

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, ELEVATIONS, AND MATERIALS. HOURLY RATINGS ARE NOT SHOWN ON LABEL UNLESS RATING IS LESS THAN 3 HOURS.

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door Products, Milan, TN or Mason City, IA, USA They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series SQW and SRW frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008 ...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

Frames are knocked down (K.D.) field assembled type or welded unit type. Head and jamb members of K.D. frames have diecut mitered corners that interlock rigidly when field assembled. Door stops are 5/8" high and have an integral kerf with foam filled, fire rated, compression type gasket (weatherstrip). Single or double rabbet profile sizes are available in depths from 3-5/8" thru 14" (in 1/8" increments). Twist-in anchors are available for new masonry, wood stud, metal stud or existing opening wall conditions (indicate which). Welded floor anchors or extra jamb anchors are provided to anchor sill. Welded-in jamb anchors are also available.

Hardware Provisions: Frames are handed. Hinge jambs are mortised for 4- 1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. The strike jamb is prepared for 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A 115.1&2 (specify which). Plaster guards are 26 gauge steel. Optional hardware reinforcement (for O/H closer or holder) is 14 gauge minimum steel welded in place.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. Maximum size: 4090 single and 8090 double swing. For accurate color selectors ask for a Ceco Colorstyle chart.

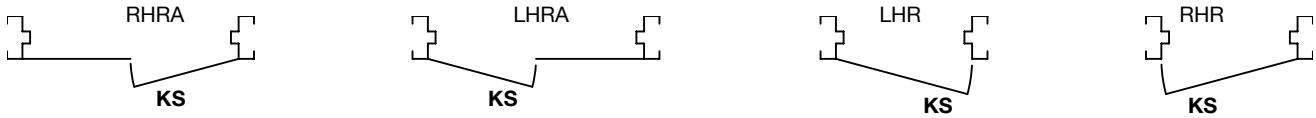
MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV	
			A60	G90
16 GAUGE STEEL	STANDARD, HEAVY, OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT

PERFORMANCE

PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST -- 16 & 14 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)

INSIDE



OUTSIDE

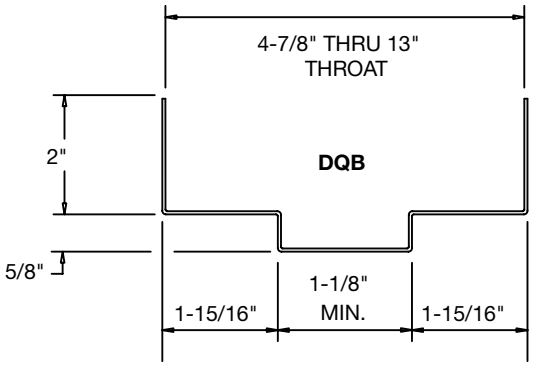
"KS"= KEY SIDE *"SUFFIX"A" = ACTIVE LEAF OF PAIRS*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

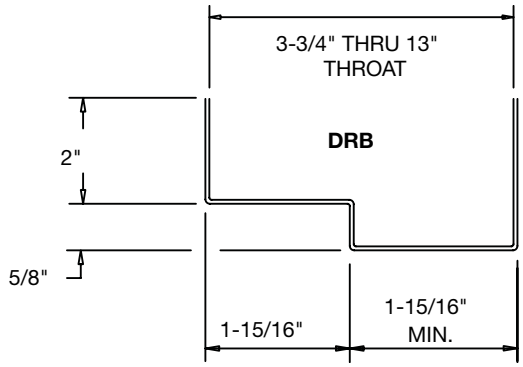
SERIES DQB, DUB, DRB & DCB SLIP-ON DRYWALL NAILER FRAMES

FOR 1-3/4" THICK DOORS STANDARD WALL APPLICATION, HANDED

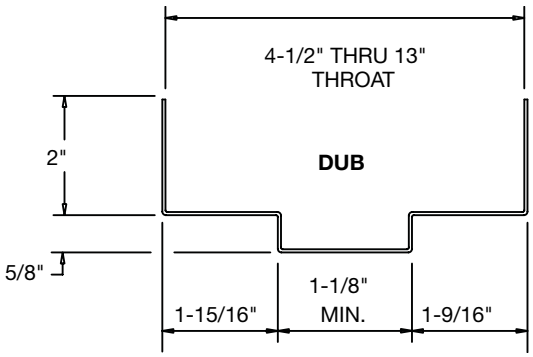
EQUAL RABBET



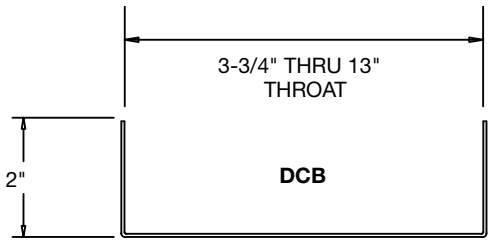
SINGLE RABBET



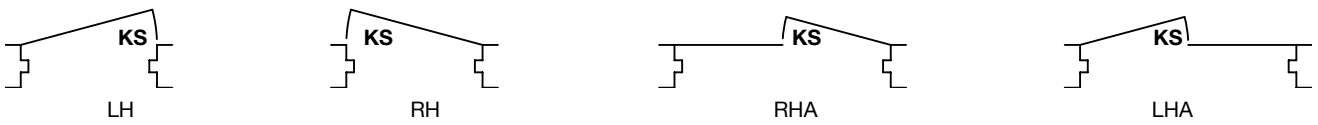
UNEQUAL RABBET



CASED OPEN



INSIDE



OUTSIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

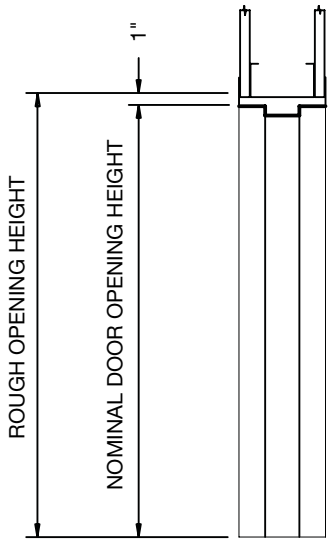
"KS" = KEY SIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

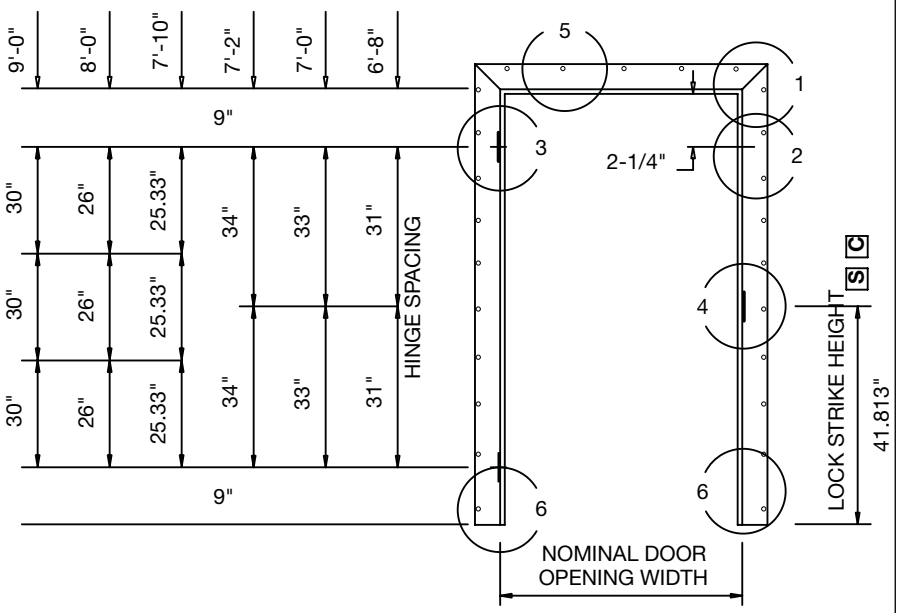
SERIES DQB, DUB, DRB & DCB DRYWALL NAILER FRAME

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS. DOUBLE RABBET PROFILES ARE SHOWN, SINGLE RABBET AND CASED OPENING PROFILES ARE SIMILAR.

VERTICAL SECTION



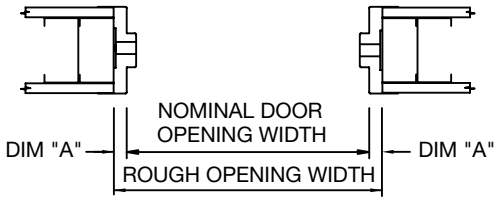
ELEVATION



INSTALLATION INSTRUCTIONS
ROUGH OPENING: DOUBLE RABBET FRAMES, AND SINGLE RABBET FRAMES 4-1/8" DEPTH AND GREATER.
DOOR OPENING HEIGHT PLUS 1"
DOOR OPENING WIDTH PLUS 2"

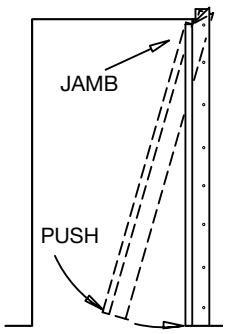
**INSTALLATION INSTRUCTIONS ROUGH OPENING:*
SINGLE RABBET FRAMES 4" DEPTH AND LESS
DOOR OPENING HEIGHT PLUS 1"
DOOR OPENING WIDTH PLUS 2-3/4"
AS ANCHORS ARE PLACE IN RABBET.

	DIM "A"
SINGLE RABBET	1" OR * 1-3/8"
DOUBLE RABBET	1"
CASED OPENING	1-3/8"



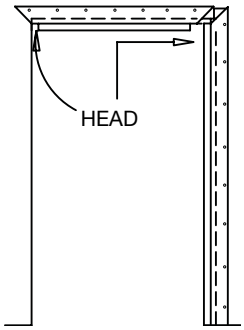
HORIZONTAL SECTION

STEP 1



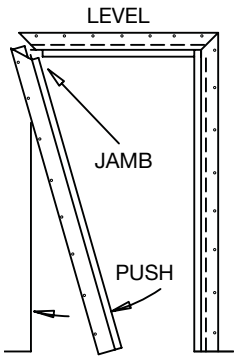
A. PUSH TOP OF ONE JAMB OVER THE WALL.
B. HOLD TOP OF JAMB IN PLACE, THEN PUSH BOTTOM IN TOWARDS AND OVER WALL.

STEP 2



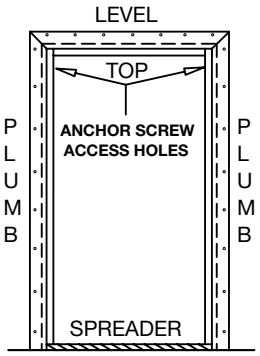
A. POSITION FRAME HEAD OVER THE WALL.
B. ALIGN HEAD TABS WITH JAMB SLOTS, THEN SLIDE HEAD TOWARD JAMB AND ENGAUGE TABS IN SLOTS.

STEP 3



A. PUSH TOP OF REMAINING JAMB OVER WALL AND MATE TABS IN SLOTS.
B. PUSH BOTTOM OF JAMB IN TOWARDS AND OVER WALL.
C. LEVEL HEAD.

STEP 4



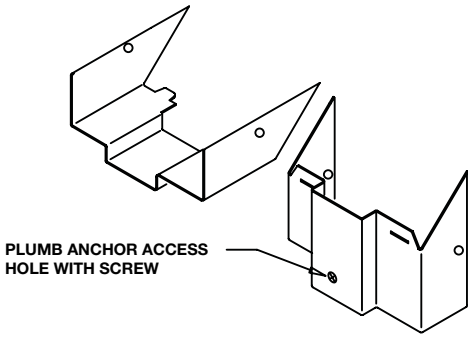
A. ADJUST PLUMB ANCHORS WITH SCREWDRIVER.
B. PLUMB HINGE JAMB.
C. WITH TEMPORARY SPREADER, ADJUST STRIKE JAMB.

STEP 5

ONCE FRAME IS INSTALLED SQUARE & PLUMB, AND WITH SPREADER STILL IN PLACE, FASTENERS SHOULD BE APPLIED THRU THE FRAME FACE HOLES ON ALL FRAME COMPONENTS. STEEL FASTENERS ARE PROVIDED BY OTHERS. CHECK FOR PLUMB & SQUARE AFTER EACH FASTENER IS INSTALLED. INSTALL MUTES.

SERIES DQB, DUB, DRB, DCB DRYWALL FRAMES

1 KNOCKED DOWN CORNER CONSTRUCTION

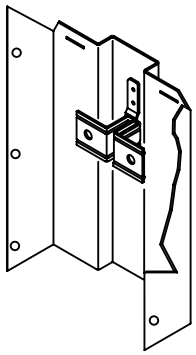


2 ADJUSTABLE PLUMB ANCHOR

ONE EACH JAMB

ADJUST WITH SCREWDRIVER

DUAL PLUMB ANCHORS ARE
APPLIED IN DEPTHS GREATER THAN
8-3/4".

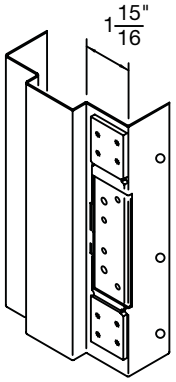


3 HINGE PREPARATION

4-1/2" X .134" OR
4-1/2" X .180"
ANSI A156.7 TEMPLATE

7 GAUGE STEEL
REINFORCING

BACKSET: 5/16"

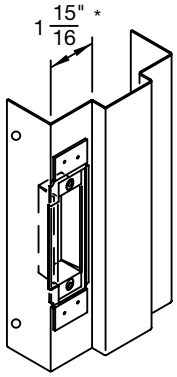


4 STRIKE PREPARATION

S

UNIVERSAL (4-7/8")
ANSI A115.1 & 2 TEMPLATE
12 GAUGE STEEL REINFORCING
STANDARD FOR 1-3/4" DOORS

DRILLED AND TAPPED
FOR 12-24 MS
(2) PLACES

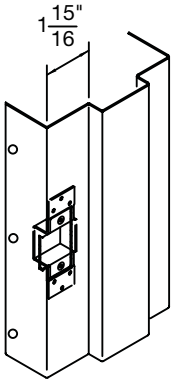


4 LOCK STRIKE PREPARATION

C

CYLINDRICAL (2-3/4")
ANSI A115.2 TEMPLATE
16 GAUGE STEEL REINFORCING
WITH EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT THREAD
ENGAUGEMENT EQUAL TO 14 GAUGE

ALSO AVAILABLE WITHOUT
LIP CUTOUT FOR DEADLOCKS

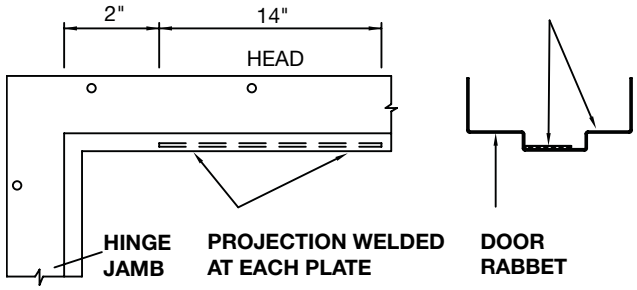


STRIKE PLASTER GUARDS ARE APPLIED

5 CLOSER REINFORCEMENT (OPTIONAL)

14 GAUGE STEEL 1-3/4" X 14" REINFORCEMENT PLATE

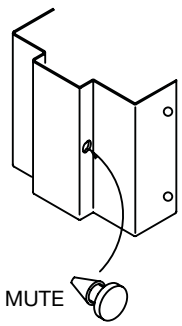
PLATE LOCATION DETERMINED
BY CLOSER ATTACHMENT LOCATION.



CLOSER PLATE REINFORCEMENT NOT ALLOWED IN FRAME FACE.

DOOR SILENCER (MUTE)

RUBBER MUTE
(3)/STRIKE JAMB
(2)/DOUBLE SWING
HEAD



6 FACE ANCHORING

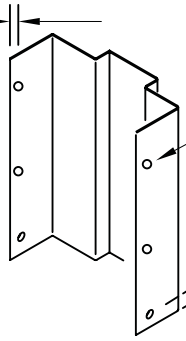
APPROX. 1/2" TO CENTERLINE
OF FACE HOLE

FACE HOLES ARE 16"
MAXIMUM ON CENTER.

**STANDARD FACE HOLE
DIAMETER = 0.190"**

OPTIONAL FACE HOLE
DIAMETER = 9/32" OR 5/16"

FACE HOLE FASTENERS
ARE BY CONTRACTOR
AND MUST BE LONG
ENOUGH ENGAUGE
STUD.



2" MAX. FROM EACH END

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES DQB, DUB, DRB, DCB DRYWALL FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10C, UL 10B,
UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR,
1 HR OR 1-1/2 HR

MAX. SIZE:
14 GAUGE STEEL
16 GAUGE STEEL
4'0" X 9'0" SINGLE
8'0" X 9'0" PAIR

18 GAUGE STEEL
8'0" X 7'0" PAIR
4'0" X 7'0" SINGLE

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door, Milan, TN., USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8.

Series DQB, DUB, DRB & DCB frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008 ...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

Frames are knocked down, field assembled type. Components have diecut mitered corners that interlock rigidly when field assembled. All frame profiles are sized to fit popular wall thicknesses. Integral door stops are 5/8" high and frame faces are 2". Adjustable, compression type anchors are welded to jambs and allow frame installation, plumbing and squaring after wallboard is applied (to adjust anchors use Phillips head screw driver). Components have face holes, allowing fasteners to attach frame to stud.

Hardware Provisions: :Frames are handed. Hinge jambs are mortised for 4- 1/2" high, standard or heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. The strike jamb is prepared for 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A 115.1&2 (specify which). Optional closer reinforcement is a 14 gauge steel plate welded in place. Closer reinforcement not allowed in frame face, which is due to face holes and interference with installation. 3 mute holes are provided per strike jamb and 2 for double swing heads. DCB frames do not have hinges, strikes or frame stops.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available. Colorstyle finish is electrostatically applied, oven-cured urethane enamel. For accurate color selector chart ask customer service for a Pantone Colorstyle chart.

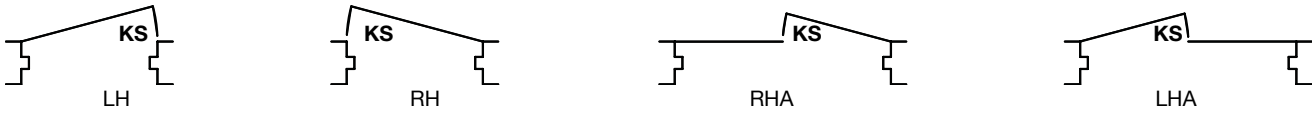
MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV	
			A60	G90
18 GAUGE STEEL	STANDARD DUTY	STD	OPT	N/A
16 GAUGE STEEL	STANDARD, HEAVY, OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT

PERFORMANCE

PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST -- 16 & 14 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)

INSIDE



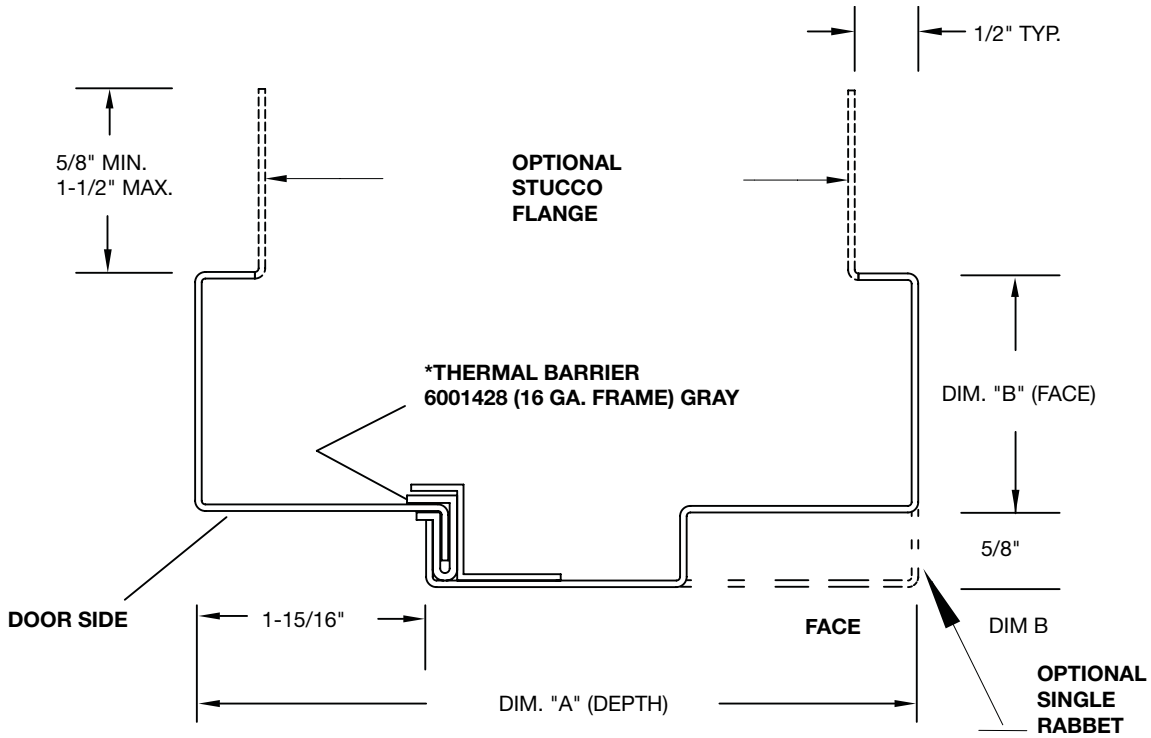
OUTSIDE

"KS"= KEY SIDE *"SUFFIX"A" = ACTIVE LEAF OF PAIRS*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

MERCURY SERIES TQ3 (EQUAL RABBET), TU3 (UNEQUAL RABBET) AND TR3 (SINGLE RABBET) THERMAL BREAK FRAMES

FOR 1-3/4" THICK DOORS STANDARD WALL APPLICATIONS, HANDED



** FACTORY INSTALLED 1/16" THICK THERMAL BARRIER.*

PEMKO S44 SHIPS LOOSE WITH FRAME, TO BE FIELD INSTALLED AFTER FINISH PAINT

PROFILE	DIM A (DEPTH)
DOUBLE RABBET	5-3/4" THRU 14"
SINGLE RABBET	3-1/2" THRU 14"

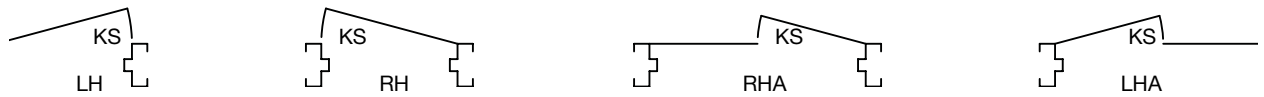
GAUGE	16 OR 14
MATERIAL	ASTM A60 GALVANNEALED ASTM G90 GALVANIZED
FINISH	PRIME PAINTED
CORNER CONDITION	KD WELDED (V2), LIMITED (**V3)

FACE	DIM B
HEAD	1" THRU 4"
JAMBS	1" THRU 4"

SIZE RANGES LISTED ABOVE ARE AVAILABLE IN 1/8" INCREMENTS.

*** NOTE: THERMALLY BROKEN FRAMES ORDERED WITH V3 WELDS WILL BE LIMITED TO FACE MITER WELDS AND HEAD AND JAMB RABBET SEAM WELDS ONLY.*

INSIDE



OUTSIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

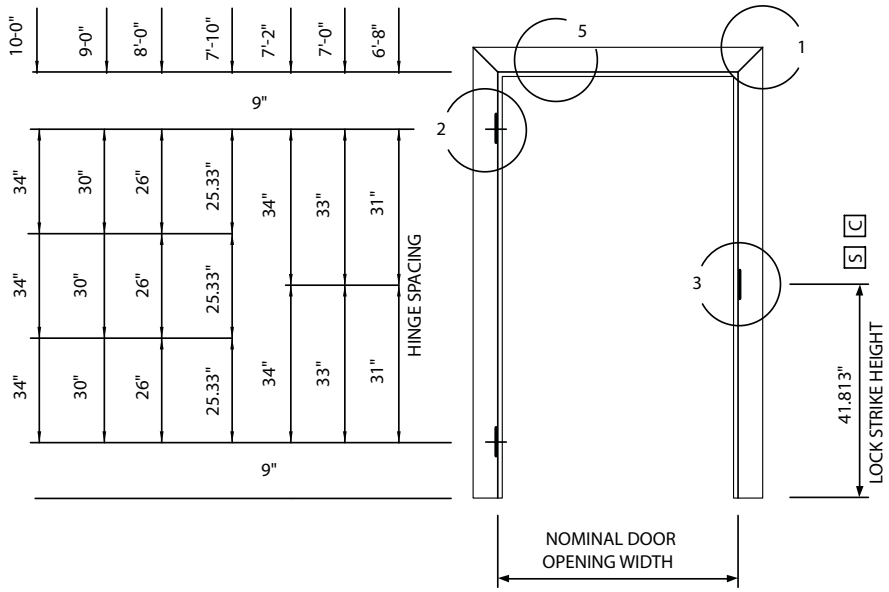
"KS" = KEY SIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

TQ3, TU3 AND TR3 THERMAL BREAK FRAMES

VERTICAL SECTION

ELEVATION



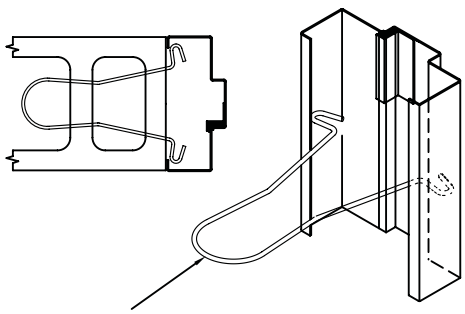
HORIZONTAL SECTION

NOTE: IT HAS BEEN FOUND THAT GROUTING ALLOWS AN EXCESS OF THERMAL BRIDGING FROM ONE SIDE OF THE FRAME COMPONENT TO THE OTHER. THEREFORE, GROUTING IS NOT RECOMMENDED IN A THERMAL BREAK FRAME

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS.

JAMB ANCHOR QUANTITIES	2 PER JAMB FOR STANDARD HEIGHTS 3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR STANDARD HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR STANDARD HEIGHTS >7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR STANDARD HEIGHTS >7'6" THRU 10'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL TWO FEET IN HEIGHT OR FRACTION THEREOF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING STUDS AND/OR WALL CONDITIONS ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING OPENING ANCHORS EXISTING OPENING DIMPLED HOLES MAY BE PUNCHED IN A DIFFERENT LOCATION, DUE TO HARDWARE INTERFERENCE.

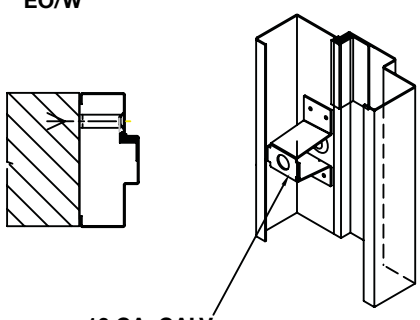
4 WIRE MASONRY ANCHOR WMA



7 GA. GALV STEEL SNAP-IN ANCHOR

(FOR 3-3/4" THRU 8-3/4" DEPTHS)

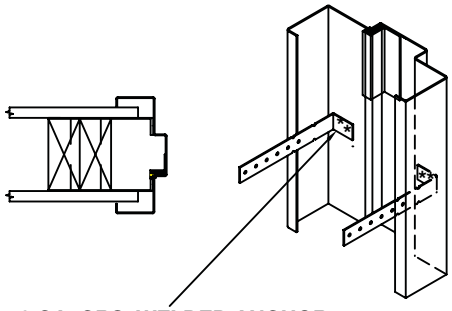
4 EXISTING OPENING ANCHOR EO/W



16 GA. GALV. WELDED ANCHOR

DEPTHS OVER 8-3/4": EO/N ANCHORS WILL BE APPLIED ON BOTH FRAME RABBETS ANCHOR LOCATION.

4 WOOD STUD FLAT STRAP ANCHOR WSFS



18 GA. CRS. WELDED ANCHOR

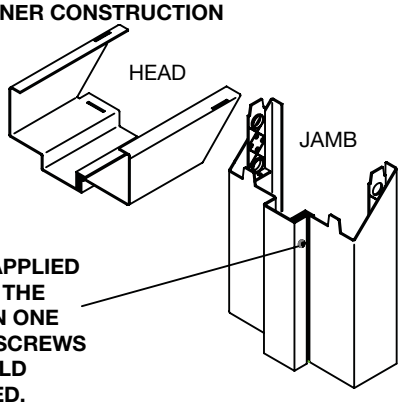
ALSO USED FOR METAL STUD WALLS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

TQ3, TU3 AND TR3 THERMAL BREAK FRAMES

1 KNOCKED DOWN CORNER CONSTRUCTION

KNOCKED
DOWN CORNER
CONSTRUCTION



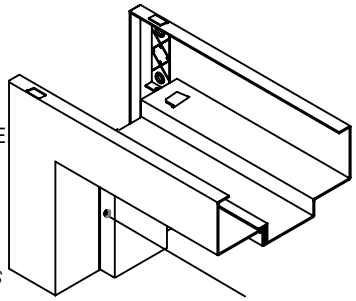
SCREW WILL BE FACTORY APPLIED ON THE FRAME STOP NEAR THE TOP OF EACH JAMB AND ON ONE END OF THE FRAME HEAD. SCREWS TO BE REMOVED IN THE FIELD BEFORE S44 SEAL IS APPLIED.

COMPONENTS ARE SHIPPED "KNOCKED DOWN" AND ASSEMBLED AT THE JOB SITE

1 WELDED CORNERS

DIE-CUT CORNER WITH CORNER TAB AND FACE WELD SHOWN. ALSO AVAILABLE WITHOUT TAB AND WELDED OR MITRE SAWED AND WELDED. ALTERNATIVE WELD OPTIONS ARE ALSO AVAILABLE.

NOTE : THERMALLY BROKEN FRAMES ORDERED WITH V3 WELDS WILL BE LIMITED TO FACE MITER WELDS AND HEAD AND JAMB RABBET SEAM WELDS ONLY



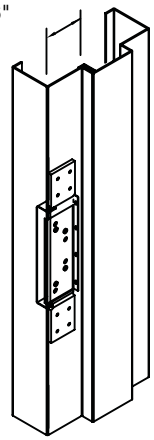
SCREW WILL BE FACTORY APPLIED ON THE FRAME STOP NEAR THE TOP OF EACH JAMB AND ON ONE END OF THE FRAME HEAD. SCREWS TO BE REMOVED IN THE FIELD BEFORE S44 SEAL IS APPLIED.

2 HINGE PREPARATION

4-1/2" X .134" OR
4-1/2" X .180"
ANSI A156.7 TEMPLATE

7 GAUGE STEEL
REINFORCEMENT
& 26 GAUGE STEEL
PLASTER GUARD

1-15/16"

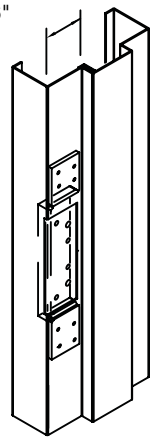


2 HINGE PREPARATION

5" X .146" OR
5" X .190"
ANSI A156.7 TEMPLATE

7 GAUGE STEEL
REINFORCEMENT
& 26 GAUGE STEEL
PLASTER GUARD

1-15/16"

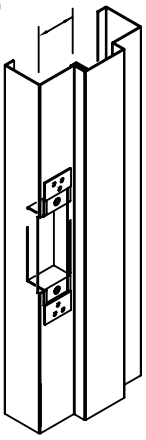


3 LOCK STRIKE PREPARATION

S

UNIVERSAL (4-7/8")
ANSI A115.1 & 2 TEMPLATE
16 GAUGE STEEL REINFORCING
WITH EXTRUDED THREADS
EQUAL TO 14 GAUGE.

1-15/16"

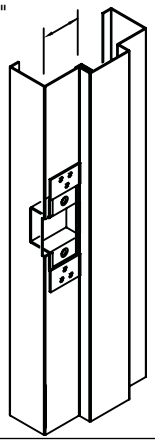


3 LOCK STRIKE PREPARATION (OPTIONAL)

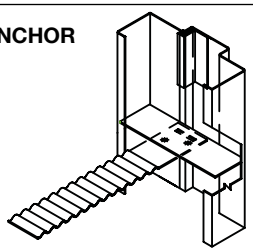
C

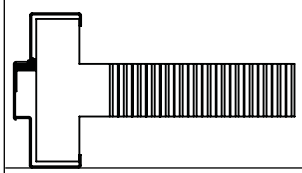
CYLINDRICAL (2-3/4")
ANSI A115.3 TEMPLATE
16 GAUGE STEEL REINFORCING
& PLASTER GUARD WITH
EXTRUDED SCREW HOLES
PROVIDES EQUIVALENT THREAD
ENGAUGEMENT EQUAL TO 14 GAUGE
ALSO AVAILABLE WITHOUT LIP
NOTCH FOR DEADBOLTS

1-15/16"

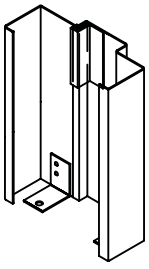


MT MANSONRY ANCHOR



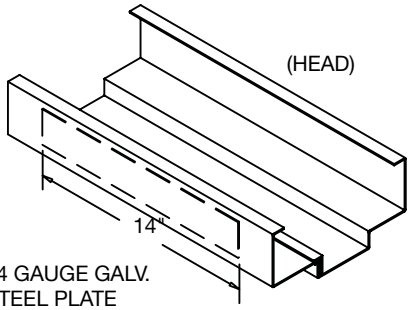


4 SPLIT FIXED FLOOR ANCHOR SFFA



16 GA. WELDED ANCHOR

5 CLOSER REINFORCEMENT (OPTIONAL)



14 GAUGE GALV.
STEEL PLATE
WELDED IN PLACE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

TQ3, TU3 AND TR3 THERMAL BREAK FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	
5'-0"	10'-0"	

FIRE RATING
NOT AVAILABLE

PRODUCT SPECIFICATIONS :

Steel door frames shall be as manufactured by Ceco Door Products, Milan,TN. They shall conform to the Steel Door Institute guide specification, ANSIA250.8. See chart below for performance classifications.

Series TQ3, TU3 and TR3 thermal break frames for 1-3/4" doors are formed from commercial quality hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below. Frames are knocked down (K.D.) fieldassembled type or welded unit type. Head and jamb members of K.D. frames have die cut mitered corners that interlock rigidly when field assembled. Door stops are 5/8" high and have a 1/16" thick, positive thermal break with a Pemko S44 compression type gasket (weatherstrip). Pemko S44 gasket shipped loose with frame. Gasket is applied after finish paint. Single or double rabbet profile sizes are available in 1/8" increments. Thermal barrier anchor applications are available for new masonry, wood stud, metal stud or existing opening wall conditions (indicate which), and to anchor jamb at bottom. To maximize efficiency use with an insulated door, a threshold, and a gasket/sweep at sill. See installation instructions @www.cecodoor.com.

Hardware Provisions: Frames are handed. Hinge jambs are mortised for 4- 1/2" or 5" high, standard or heavyweight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156. 7. The strike jamb is prepared for 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A 115.1 &2 (specify which). Plaster guards are 26 gauge steel. Optional hardware reinforcement (for O/H closer or holder) is 14 gauge minim um steel welded in place.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" factory finish coat is not available.

DOOR FRAME MATERIAL

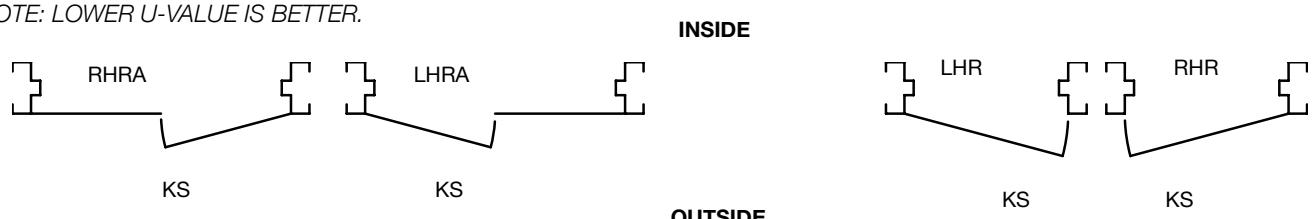
		GALV	
14 GAUGE STEEL	LEVEL	A60	G90
16 GAUGE STEEL	STANDARD, HEAVY, OR EXTRA HEAVY DUTY	STD	OPT

PERFORMANCE

PHYSICAL ENDURANCE /LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST-16 GAUGE STEEL: 14 GA. OPT. LEVEL A (1,000,000 CYCLES)

NFRC 102 "U" VALUE STANDARDIZED THERMAL TRANSMITTANCE & ASTM TEST METHODS	NFRC 400-2023 RESISTANCE TO AIR INFILTRATION & ASTM TEST METHODS
MERCURY 3 FRAME & TRIO-E FLUSH DOOR NFRC 102 "U" VALUE 0.34, "R" VALUE 2.92	MERCURY FRAME & TRIO-E FLUSH DOOR NFRC 400-2023 0.5 L/S/M² (0.1 CFM/FT²)
MERCURY 3 FRAME & LEGION FLUSH DOOR NFRC 102 "U" VALUE 0.43*, "R" VALUE 2.33*	MERCURY FRAME & LEGION FLUSH DOOR NFRC 400-2023 0.5 L/S/M² (0.1 CFM/FT²)
MERCURY 3 FRAME & IMPERIAL FLUSH DOOR NFRC 102 "U" VALUE 0.38*, "R" VALUE 2.63*	MERCURY FRAME & IMPERIAL FLUSH DOOR NFRC 400-2023 0.5 L/S/M² (0.1 CFM/FT²)
MERCURY 3 FRAME & EMBOSSED PANEL IMPERIAL DOOR NFRC 102 "U" VALUE 0.39*, "R" VALUE 2.56*	MERCURY FRAME & EMBOSSED PANEL IMPERIAL DOOR NFRC 400-2023 0.5 L/S/M² (0.1 CFM/FT²)

** U VALUES PER SDI-113 APPLICATION OF ASTM C1363, NFRC 102-2023, ASTM 1199 AND EVALUATION OF PRIOR TEST HISTORY WITH MERCURY TB FRAME - TRIO-E WAS TESTED WITH MERCURY 3 TB FRAME. LEGION AND IMPERIAL PUBLISHED U-VALUES ARE BASED ON PRIOR TEST HISTORY WITH MERCURY. THERMAL PERFORMANCE AND U-VALUE SHOULD BE THE SAME OR BETTER.*
NOTE: LOWER U-VALUE IS BETTER.



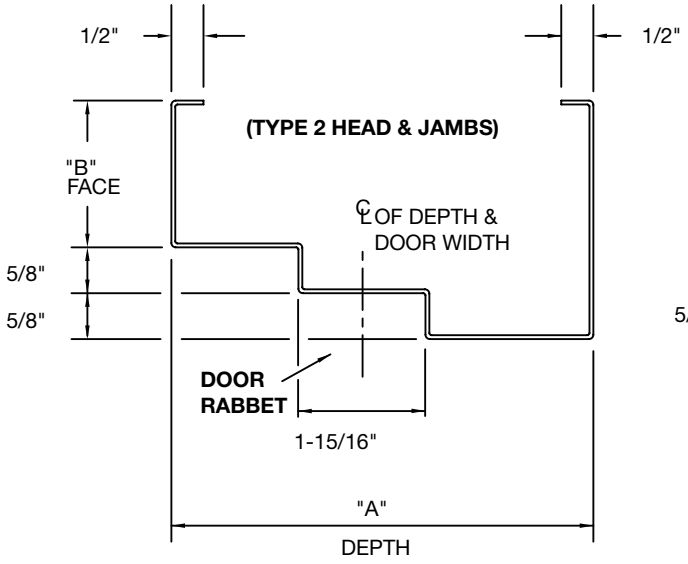
"KS"= KEY SIDE "SUFFIX"A" = ACTIVE LEAF OF PAIRS

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

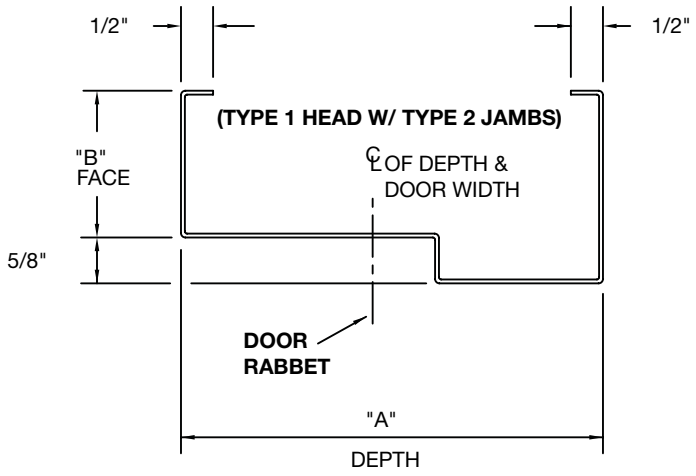
SERIES SE1 AND SE2 DOUBLE EGRESS FRAMES

FOR 1-3/4" THICK DOORS. STANDARD WALL APPLICATION, HANDED

SERIES SE2

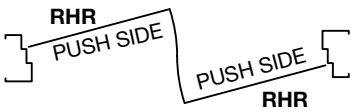


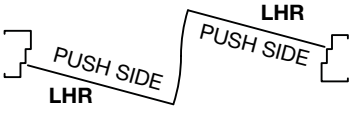
SERIES SE1



CECO REGENT, MEDALLION, LEGION OR IMPERIAL DOORS ARE RECOMMENDED.

PROFILE	DIM A (DEPTH)	DIM A (FACE)
SERIES SE1 & SE2	5-1/4" MIN. THRU 14" MAX.	1-3/8" MIN. THRU 4" MAX.





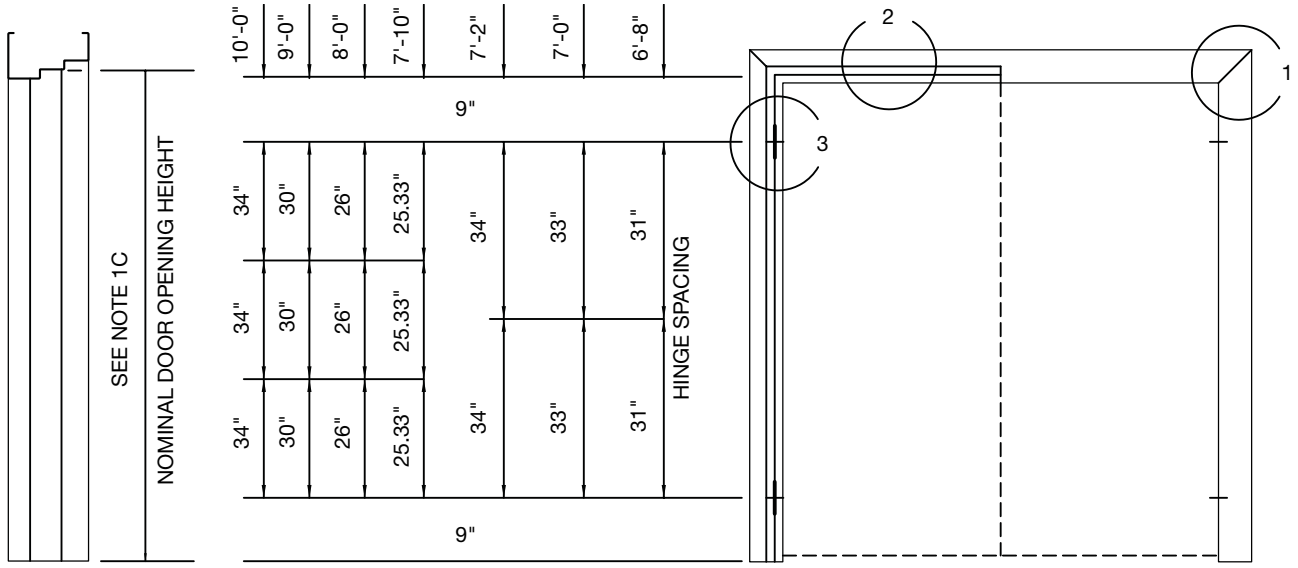
LHR/LHR IS RECOMMENDED FOR RIGHT HAND TRAFFIC FLOW.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES SE1 AND SE2 DOUBLE EGRESS FRAMES

HARDWARE LOCATIONS AND OPENING SIZES SHOWN MATCH CECO STANDARD DOORS (SEE NOTE 1C).

SERIES SE2 (TYPE 2 HEAD & JAMBS)

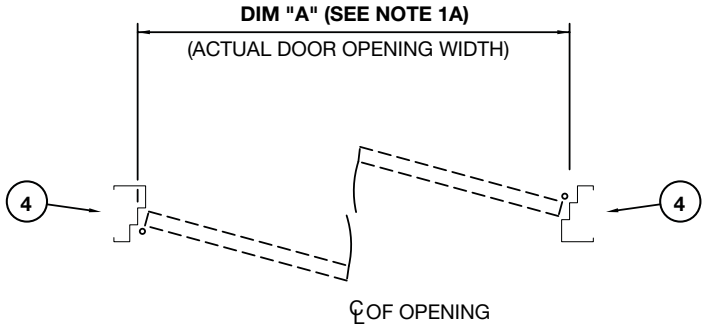


NOTE 1

A). DIM A = NOMINAL DOOR OPENING WIDTH MINUS 3/16", [E.G., 72" (-) 3/16" = 71-13/16" = DIM "A] NOMINAL STANDARD DOOR WIDTHS ARE USED. EXAMPLE: 6'0" NOMINAL DOOR OPENING IS ACTUALLY 71-13/16". DOORS ARE NOMINAL 3'0" WIDE AND ARE NET 35-25/32" STD. CLARIFY OPENING AND DOOR WIDTH SS 09/21/20 ADJUST WMA MIN. DEPTH DIMENSION SS 09/21/20 WIDTH TO THE HIGH SIDE OF THE BEVEL.

B). DOORS (SHOWN DOTTED) REQUIRE PARALLEL BEVEL LOCK EDGE.

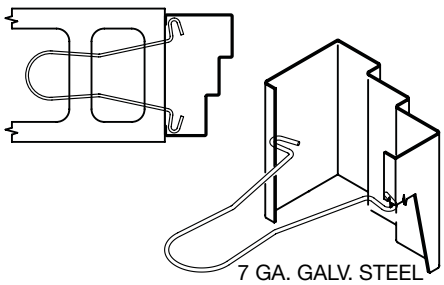
C). CECO STANDARD DOOR UNDERCUT IS 3/4". SPECIAL UNDERCUT MAY BE NECESSARY (E.G., 1/4") WHEN VERTICAL ROD EXIT DEVICES ARE USED WITHOUT THRESHOLD.



HORIZONTAL SECTION

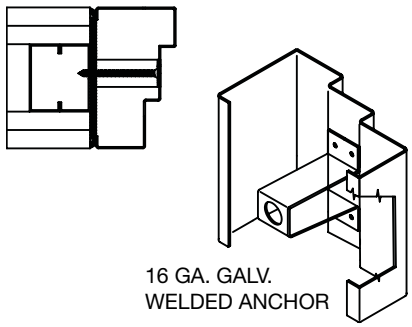
JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS FROM >3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS FROM >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS FROM>7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS FROM >7'6" THRU 10'0" ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL TWO FEET IN HEIGHT OR FRACTION THERE OF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING STUD AND/ OR WALLS.

(4) WIRE MASONRY ANCHOR WMA

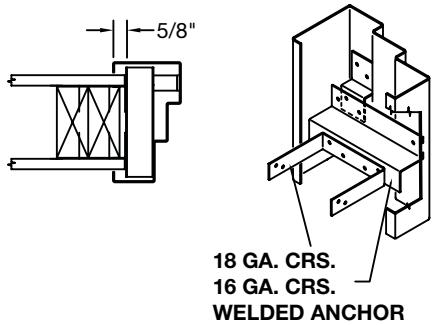


(FOR 5-1/4" THRU 8-3/4" DEPTHS)

(4) EXISTING OPENING ANCHOR EO/N



(4) WOOD STUD "Z" STRAP ANCHOR WSZS



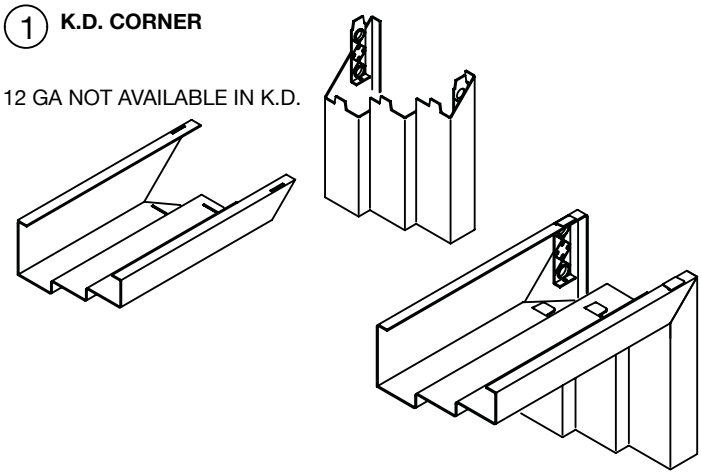
ALSO USED FOR METAL STUD WALLS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES SE1 AND SE2 DOUBLE EGRESS FRAMES

1 K.D. CORNER

12 GA NOT AVAILABLE IN K.D.

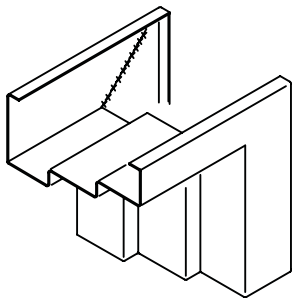


1 WELDED CORNERS

SERIES SE2 HEAD AND JAMB WITH EQUAL FACES

CORNER IS WELDED VISIBLE SURFACES ARE GROUND SMOOTH AND SPOT PRIMERED.

RECOMMENDED FOR BUTTED OR WRAP AROUND APPLICATIONS



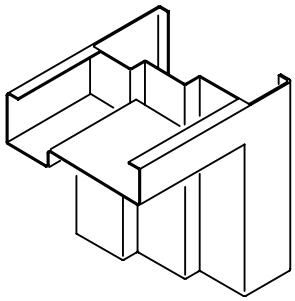
1 WELDED CORNER

SERIES SE1 & SE2 HEAD AND JAMB FACE DIMENSIONS MAY BE UNEQUAL.

CORNER IS WELDED. VISIBLE SURFACES ARE GROUND SMOOTH AND SPOT PRIMERED.

RECOMMENDED FOR BUTTED APPLICATIONS

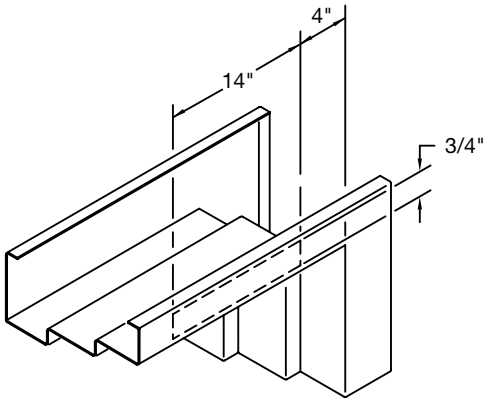
TYPE 1 HEAD



2 CLOSER REINFORCEMENT

12 GAUGE STEEL PLATE WELDED IN PLACE.

TYPICAL REGULAR ARM CLOSER APPLICATION SHOWN... OTHER APPLICATIONS ALSO AVAILABLE.

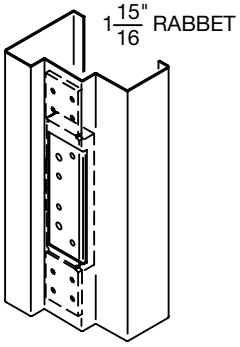


3 HINGE PREPARATION

4-1/2" X .134" OR
4-1/2" X .180"
ANSI A156.7
TEMPLATE.
7 GAUGE STEEL
REINFORCEMENT.

PLASTER GUARD IS 26 GAUGE STEEL.

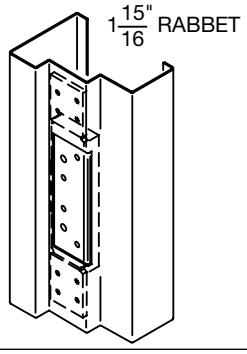
BACKSET: 5/16"



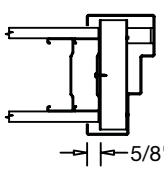
3 HINGE PREPARATION

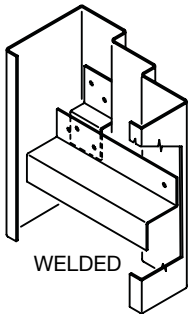
5" X .146" OR
5" X .190"
ANSI A156.7
TEMPLATE.
7 GAUGE STEEL
REINFORCEMENT.
PLASTER GUARD IS 26 GAUGE STEEL.

BACKSET: 5/16"

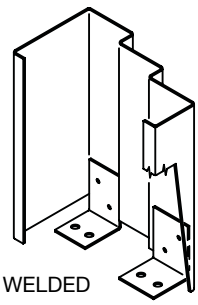


4 METAL STUD "Z" ANCHOR MSZ1



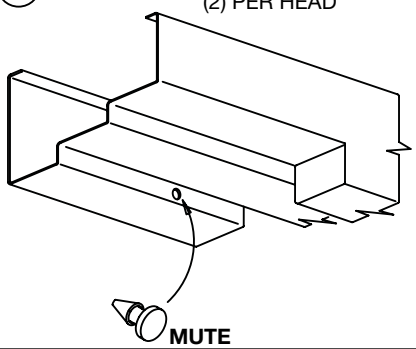


4 FLOOR ANCHOR SA



4 DOOR SILENCER (MUTE)

(2) PER HEAD



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES SE1 AND SE2 DOUBLE EGRESS FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	
DOUBLE	HEIGHT
4’-0”	
4’-8”	
5’-0”	6’-8”
5’-4”	7’-0”
5’-8”	7’-2”
6’-0”	7’-10”
6’-8”	8’-0”
7’-0”	
7’-4”	
7’-8”	
8’-0”	

FIRE DOORS

LABELING AGENCIES : UL SOLUTIONS WARNOCK HERSEY
TEST: UL 10C, UL 10B, UL 1784, & NFPA 252 **RATING:** 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR, OR 3 HR **MAX. SIZE:** 8’0” X 10’0” PAIR *NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, ELEVATIONS, MATERIALS OR HARDWARE SELECTIONS. HOURLY RATINGS ARE NOT SHOWN ON FRAME LABEL.*

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door Products, Milan, TN, USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series SE1 and SE2 frames for 1-3/4” doors are formed from commercial quality cold rolled steel conforming to ASTM A1008 ...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 - see chart below.

Door frames are knock down (K.D.) field assembled type or welded unit type with all exposed welds ground smooth. Single step heads as well as double step jambs and heads in depths from 5-1/4” through 14” may be specified. Integral door stops are 5/8” high. Frame faces from 1-3/8” through 4” may be selected to suit popular hardware and aesthetic conditions. Jamb anchors are available for new masonry, wood stud, metal stud or existing opening wall conditions (indicate which). Welded floor anchors or extra jamb anchors are furnished to anchor sill (specify which).

Hardware Provisions: Frames are handed and are normally sized to match Ceco standard doors with parallel bevel lock edges. Hinge jambs are mortised for 4-1/2” or 5” high, standard or heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. Plaster guards are provided. Optional hardware reinforcement (e.g. OH holder/closer) is 14 gauge minimum steel welded in place (designate hardware). 2 mute holes are included.

Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. “Colorstyle” finish coat is also available on K.D. frames from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV	
			A60	G90
16 GAUGE STEEL	HEAVY OR EXTRA HEAVY DUTY	STD	OPT	OPT
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT
12 GAUGE STEEL	ANSI/NAAMM	STD	OPT	-

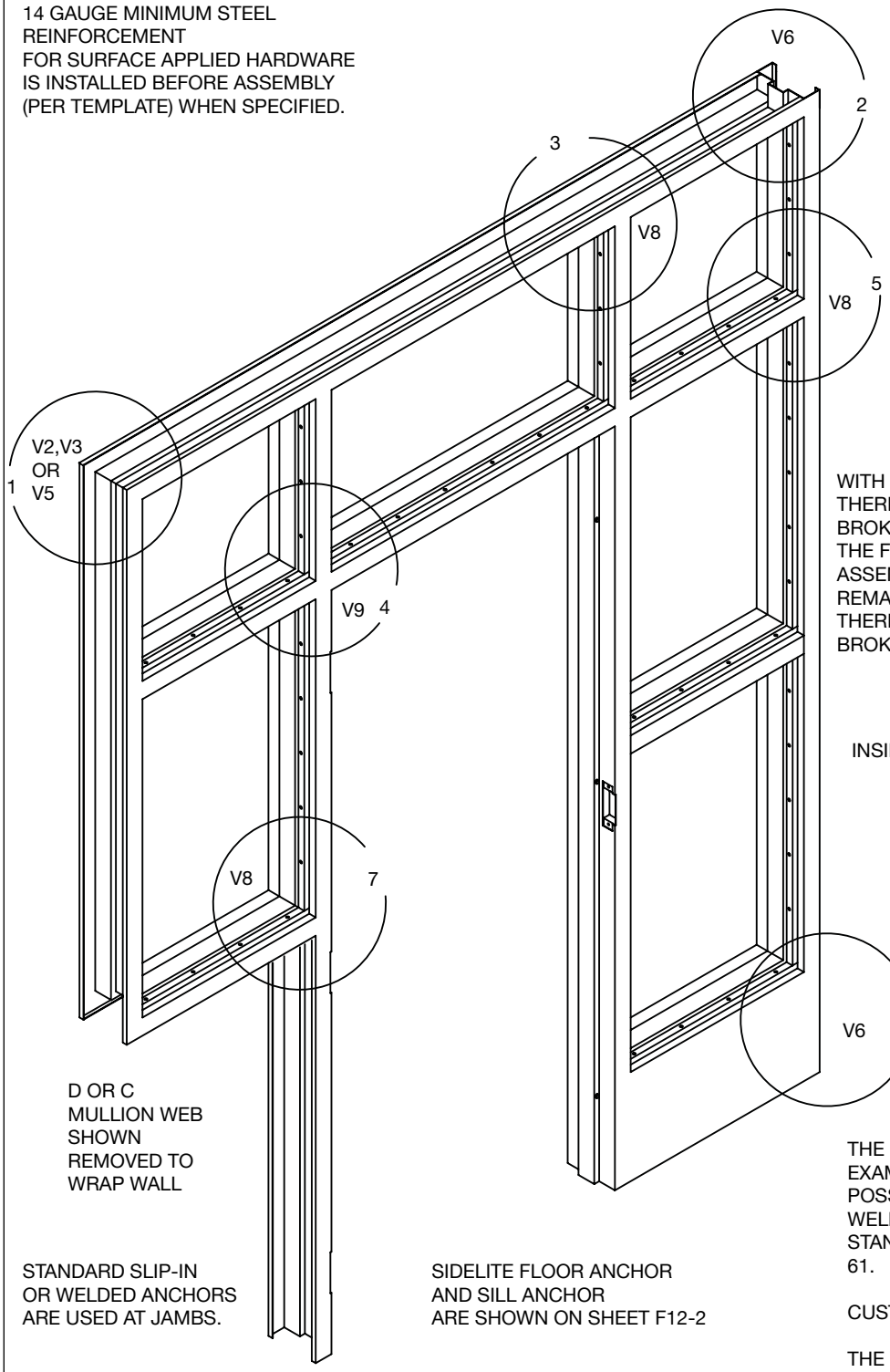
PERFORMANCE

PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST -- 16, 14, & 12 GAUGE STEEL: LEVEL A (1,000,000 CYCLES)

WELDED FRAMES

SERIES SQ, SR, SC, SU, BQ, BR, BC, BU, TQB & TRB AVAILABLE. "S" PROFILE SHOWN

14 GAUGE MINIMUM STEEL REINFORCEMENT FOR SURFACE APPLIED HARDWARE IS INSTALLED BEFORE ASSEMBLY (PER TEMPLATE) WHEN SPECIFIED.



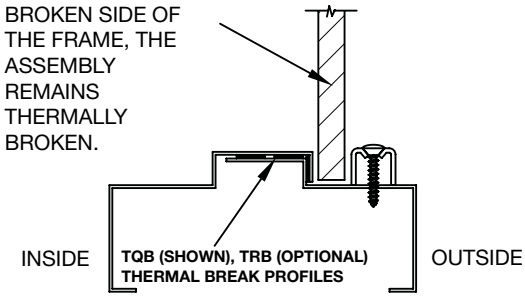
D OR C MULLION WEB SHOWN REMOVED TO WRAP WALL

STANDARD SLIP-IN OR WELDED ANCHORS ARE USED AT JAMBS.

SIDELITE FLOOR ANCHOR AND SILL ANCHOR ARE SHOWN ON SHEET F12-2

CORRECT APPLICATION

WITH GLASS ON THERMALLY BROKEN SIDE OF THE FRAME, THE ASSEMBLY REMAINS THERMALLY BROKEN.



THE ELEVATION SHOWN ABOVE IS A BASIC EXAMPLE OF THE DESIGN FREEDOM POSSIBLE WITH CECO STANDARD SERIES WELDED FRAMES. ADDITIONAL EXAMPLES OF STANDARD ELEVATIONS ARE SHOWN ONPAGE 61.

CUSTOM ELEVATIONS ARE ALSO AVAILABLE.

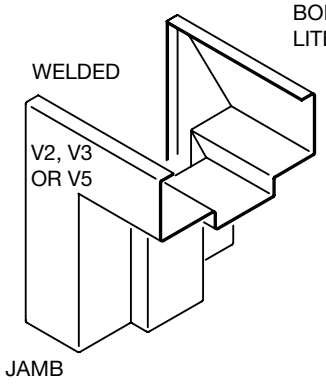
THE WELDED CONNECTIONS ABOVE ARE ILLUSTRATED ON PAGE 59.

FOR MORE ON STANDARD SERIES FRAMES SEE INDEX FOR; STEEL FRAMES, SERIES BQ, BU, BR, AND BC (BEFORE DRYWALL FRAMES)

WELDED FRAMES FRAME CORNER AND INTERSECTION CONNECTIONS.

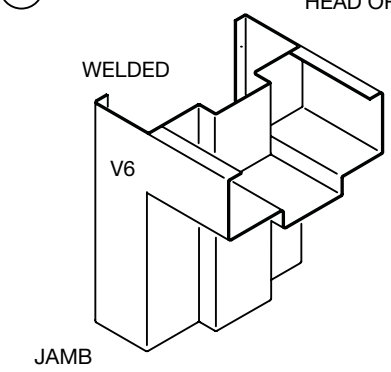
SERIES SQ, SR, SC, SU, BQ, BR, BC, BU, TQB & TRB AVAILABLE.
"S" PROFILE SHOWN

① MITERED



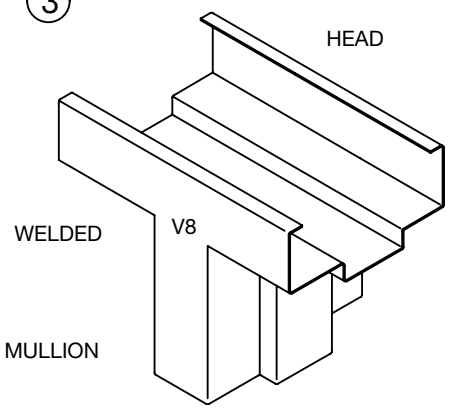
V2=FACE WELD ONLY (DIE MITER)
V3=FULL FACE & WEB WELD (DIE MITER)
V5=FULL FACE & WEB WELD (SAW MITER)

②



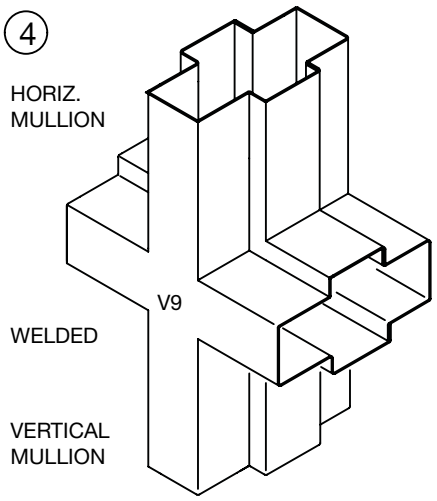
V6=FACE WELD ONLY
(BUTTED CORNER)

③



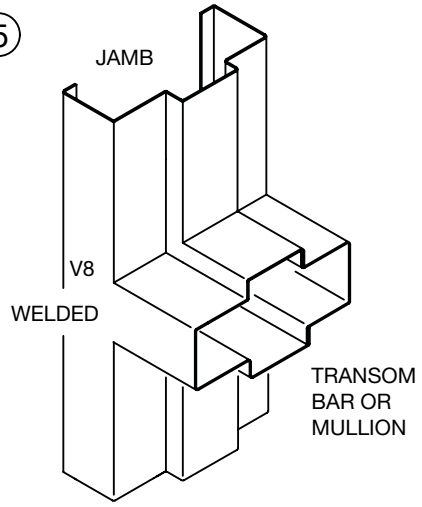
V8=FACE WELD ONLY

④



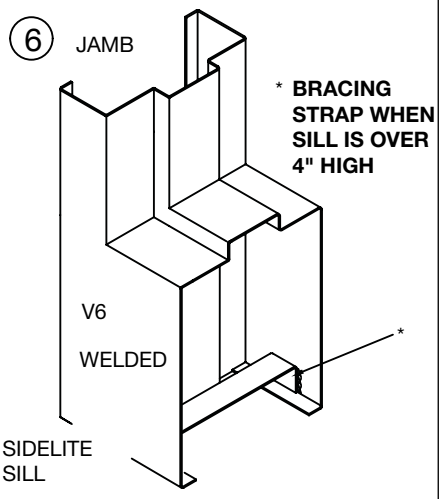
V9=FACE WELD BOTH SIDES

⑤



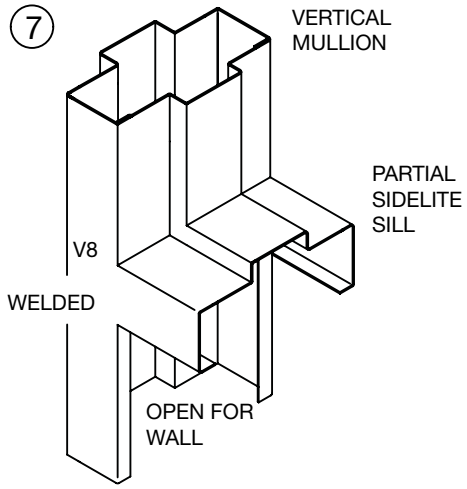
V8=FACE WELD ONLY

⑥

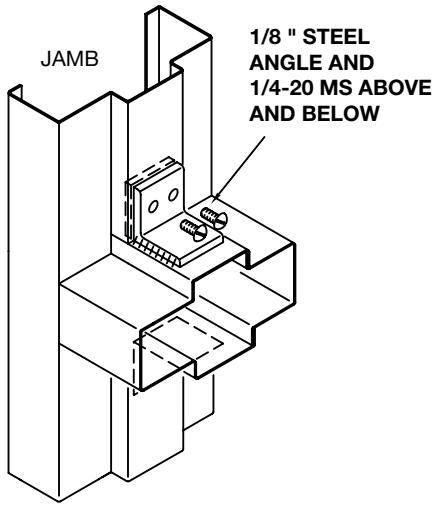


V6=FACE WELD ONLY
(BUTTED SILL)

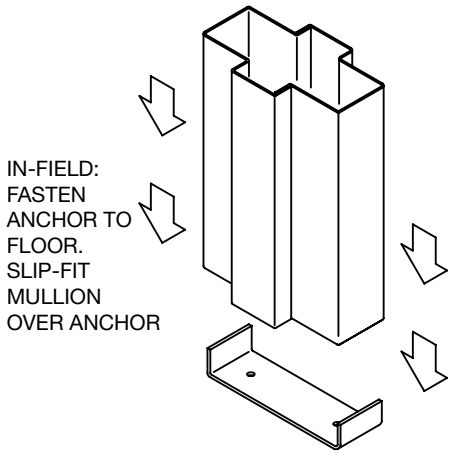
⑦



V8=FACE WELD ONLY



REMOVABLE TRANSOM BAR



SLFA SIDELITE
FLOOR ANCHOR

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

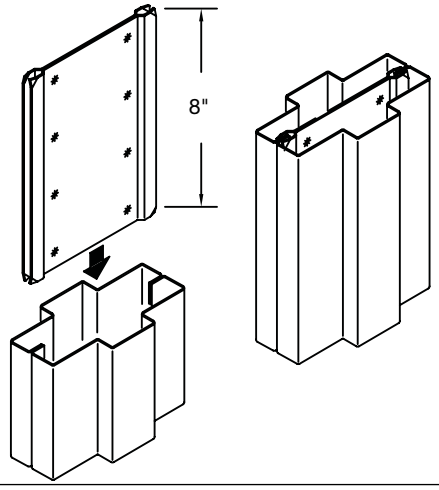
WELDED FRAMES

TYPICAL SERIES SQ (EQUAL DOUBLE RABBET) OR SERIES SU (UNEQUAL DOUBLE RABBET) PROFILES ARE ILLUSTRATED. OTHER OPTIONAL PROFILES ARE SR, SC, BU, BQ, BR, BC, TQB & TRB. EXCEPT WHERE SHOWN, MITERED AND WELDED COMPONENTS ARE NOTCHED OR COPED AS NECESSARY, FITTED TOGETHER AND WELDED. MITERED FRAME CORNERS REQUIRE THAT FACES BE OF EQUAL SIZE. WELDED AREAS ARE GROUND SMOOTH AND SPOT PRIMERED IN PREPARATION FOR NECESSARY FINISH PAINTING. WELDED UNITS MAY REQUIRE SOME FIELD ASSEMBLY, WHEN SIZES EXCEED 8'0" X 8'0". VARIOUS CARRIER LIMITATIONS INVOLVING SIZE, FRAME CONFIGURATIONS, ALONG WITH SAFETY CONCERNS WITH WEIGHT ARE SOME FACTORS THAT REQUIRE FIELD ASSEMBLY. CONTACT CECO FOR SPECIFIC DESIGN DETAILS.

"S" PROFILE SHOWN

FSPA FRAME SPLINE

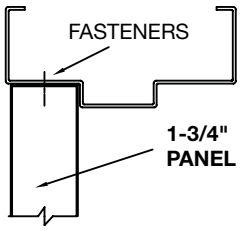
USED TO FIELD ASSEMBLE TWO FRAME SECTIONS ...16 GAUGE STEEL



TYPICAL PANEL APPLICATION

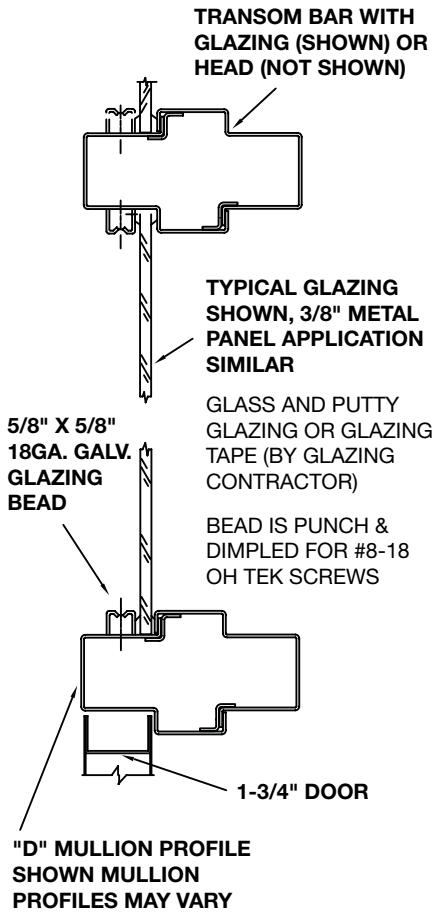
VERTICAL SECTION SHOWN
HORIZONTAL SECTION SIMILAR TO HEAD

APPLICATION SHOWN IS NON-REMOVABLE;
APPLICATIONS WHICH ALLOW PANEL REMOVAL ARE ALSO AVAILABLE.



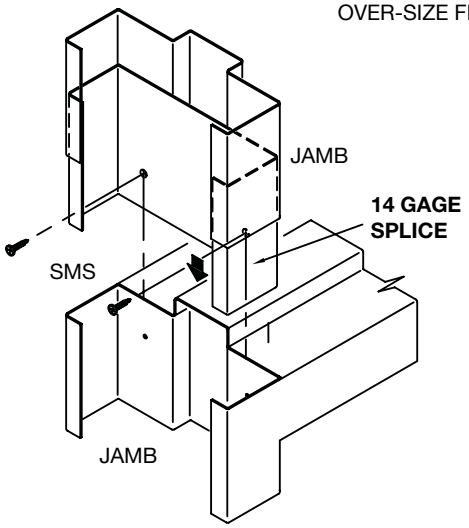
TYPICAL GLAZING DETAILS

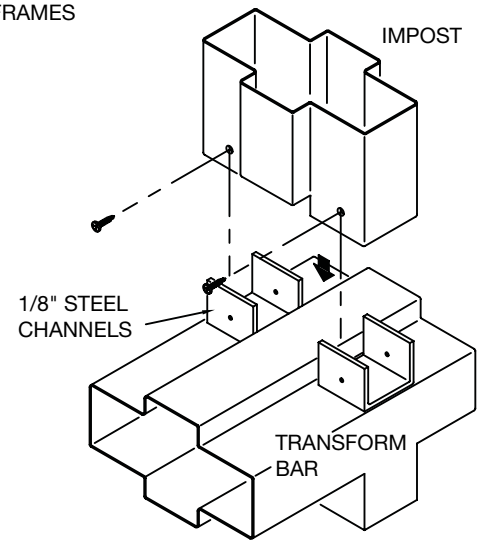
VERTICAL SECTION SHOWN
HORIZONTAL SECTION SIMILAR



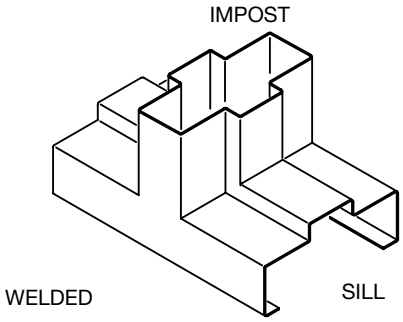
FRAME FIELD SPLICES

USED TO FIELD ASSEMBLE OVER-SIZE FRAMES

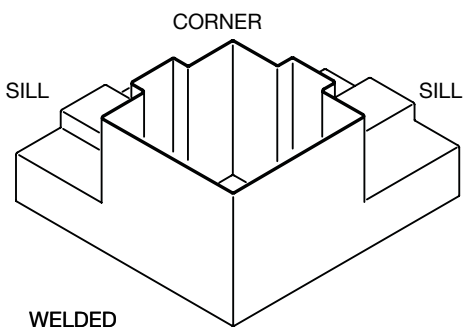




INTERSECTION

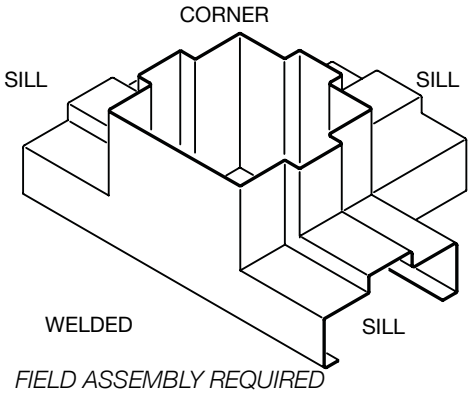


90° CORNER



FIELD ASSEMBLY REQUIRED

"3 WAY" CORNER

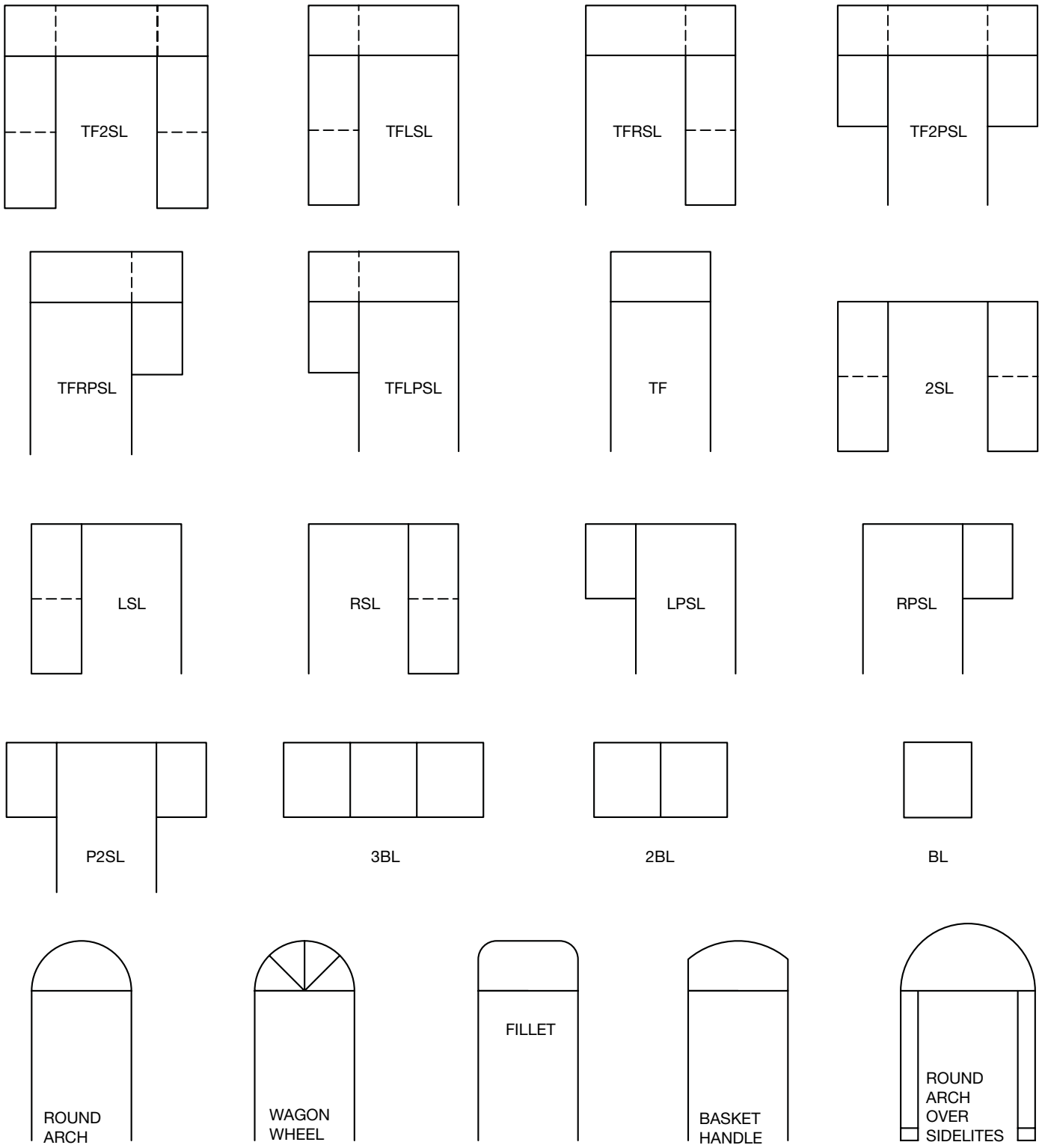


FIELD ASSEMBLY REQUIRED

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

WELDED FRAMES

THE ELEVATIONS ON THIS PAGE REPRESENT, SCHEMATICALLY, A BASIC SELECTION OF POPULAR DESIGNS WHICH SHOULD SATISFY MOST PROJECT NEEDS. THEY HAVE BEEN STANDARDIZED TO EXPEDITE THE ESTIMATING AND ORDERING PROCESS. EASILY TAILORED TO SUIT CONTRACT CONDITIONS (DIMENSIONALLY OR PROPORTIONATELY), THEY CAN ALSO BE MODIFIED BY ADDING ELEMENTS: LITES, DOOR OPENINGS, IMPOSTS, MULLIONS, PANELS, LOUVERS AND SPECIAL HEAD TREATMENTS. BY COMBINING UNITS IN THE FIELD (BY WELDING, SPLINING, SPLICING OR BY USING PRE-ENGINEERED CORNERS), MULTIPLE DOOR OPENINGS OR WINDOW WALLS SPANNING LARGE HORIZONTAL OR VERTICAL SPACES CAN BE ACHIEVED. SINGLE SWING, DOUBLE SWING, BANKS OF DOOR OPENINGS, DUTCH FRAMES, ARCHED FRAMES, COMMUNICATING OPENINGS AND AN EXTENSIVE SELECTION OF FIRE DOOR FRAMES ARE AVAILABLE.

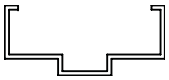


TQB, TRB, BU, BQ, BR AND BC FRAMES ARE NOT AVAILABLE AS ARCHED-TOP.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

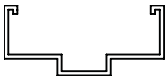
LABELED FIRE DOOR FRAMES

UL SOLUTIONS, WH, OR FM LABELED SERIES SU, SQ & SR THREE SIDED DOOR FRAMES, (KD) FIELD ASSEMBLED TYPE OR SET-UP AND WELDED. FOR SINGLE AND PAIRS OF DOORS



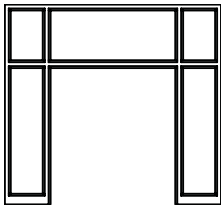
- STANDARD SERIES SQ , SU AND SR PROFILES AND ANCHORS FOR FIRE RATED HOLLOW METAL OR WOOD DOORS.
- CLASSIFIED FOR SWINGING FIRE DOORS RATED AT UP TO 3 HOURS
- UL, WH OR FM:
  18 GA. STEEL 1-1/2 HOURS MAX.
  16, 14 OR 12 GA. STEEL 3 HOURS MAX.
- MAXIMUM DOOR OPENING SIZE:
  4'-0" X 7'-0" (SINGLE) 18 GA.
  8'-0" X 7'-0" (PAIR) 18 GA.
  4'-0" X 10'-0" (SINGLE) 16, 14 OR 12 GA.
  8'-0" X 10'-0" (PAIR) 16, 14 OR 12 GA.
- OPTIONS: MIN. 1" FACE IN MASONRY WALLS.
  MIN. 1-1/4" FACE IN STUD WALLS.
  MAX. 4" FACE ALL CONDITIONS.

UL SOLUTIONS, WH OR FM LABELED SERIES DU, DQ & DR SLIP-ON DRYWALL FRAMES (KD) FIELD ASSEMBLED TYPE. FOR SINGLE AND PAIRS OF DOORS



- STANDARD SERIES DU, DQ AND DR PROFILES AND ANCHORS FOR 1-3/8" OR 1-3/4" THICK HOLLOW METAL OR WOOD DOORS.
- CLASSIFIED FOR SWINGING FIRE DOORS RATED UP TO 1-1/2 HOURS.
- UL SOLUTIONS OR WH: FOR WALLS 2" THROUGH 13" THICK, 16 OR 14 GA. STEEL:
  4'-0" X 9'-0" (SINGLE),
  8'-0" X 9'-0" (PAIR)
  18 GA. STEEL: 4'-0" X 7'-0" (SINGLE)
  8'-0" X 7'-0" (PAIR)
- FM: FOR WALLS 3" THROUGH 9" THICK, 16 GA. STEEL, 4'-0" X 7'-2" (SINGLE)

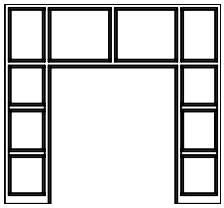
UL SOLUTIONS /WH FIRE-PROTECTIVE LABELED SERIES SU AND SQ TRANSOM/SIDELITE, 45 MINUTE RATED,



INTENDED FOR ONE HOUR RATED WALLS OR PARTITIONS AS SMOKE BARRIERS OR FOR DRAFT-CONTROL. TEST: UL 10C, NFPA 252

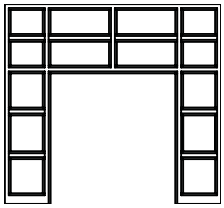
- MAXIMUM AREA PER LITE:
  SEE GLASS MANUFACTURER'S CLASSIFICATION
- MAXIMUM LITE DIMENSIONS:
  SEE GLASS MANUFACTURER'S CLASSIFICATION
- MAXIMUM TRANSOM/SIDELITE OVERALL:
  (MSY) 13'-6" X 12'-0", (DW) 12'-10" X 11'-4"
- MAXIMUM DOOR OPENING:
  (SINGLE) 4'-0" X 10'-0",
  (PAIR) 8'-0" X 10'-0"
- GLAZING: CLASSIFIED MATERIAL FOR 45 MINUTE RATING (BY OTHERS).

UL SOLUTIONS/WH LABELED SERIES SU AND SQ TRANSOM/SIDELITE, 3/4 OR 1-1/2 HOUR RATED, WITH PANELS TESTED WITH HOSE STREAM.



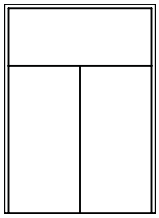
- TRANSOM AREA REQUIRES 3/8" THICK, INSULATED PANELS, (MAXIMUM AREA PER PANEL: TRANSOM 1066 SQ. IN., AND SHALL NOT EXCEED 41" X 26")
- SIDE PANEL AREA MAY HAVE 3/8" THICK PANEL, 1-3/4" WOOD, OR 1-3/4" METAL. (MAXIMUM AREA PER PANEL 1,296 SQ. INCHES AND NOT TO EXCEED 30" X 54")
- MAXIMUM TRANSOM/SIDELITE:
  (MSY) 13'-6" X 12'-0",
  (DW) 11'-4" X 10'-0"
- MAXIMUM DOOR OPENING
  (SINGLE) 4'-0" X 10'-0"
  (PAIR) 8'-0" X 10'-0"
- 1-3/4" THICK SIDE PANELS REQUIRE THE USE OF SPRING BOLTS FOR ATTACHMENT TO FRAME
- TEST: UL 10C, NFPA 252

UL SOLUTIONS/WH FIRE-PROTECTIVE LABELED SERIES SU AND SQ TRANSOM/SIDELITE, MAX. RATING* 1-1/2 HOUR,



- MAXIMUM 1-1/2 HOUR FRAMES USE ANY LISTED GLASS.
  TEST: UL 10C, NFPA 252
  MAXIMUM OVERALL SIZE:
  TRANSOM/SIDELITE (MSY) 13'-6" X 12'0"
  TRANSOM/SIDELITE (DW) 12' 10" X 11'4"
- MAXIMUM EXPOSED GLAZED AREA, MAXIMUM EXPOSED GLAZED WIDTH, MAXIMUM EXPOSED GLAZED HEIGHT: SEE GLASS MANUFACTURER'S CLASSIFICATION LISTING FOR THESE UNITS.
- MINIMUM THROAT: 4-7/8".
- FACE SIZES: 1" THRU 2".
- SILL FACE SIZES: 1" THRU 16".
- MAXIMUM DOOR OPENING: (SGL) 4'-0" X 10'-0", (PAIR) 8'-0" X 10'-0".

UL SOLUTIONS LABELED SERIES SU AND SQ TRANSOM FRAMES WITH 1-3/4" PANEL, UP TO 3 HOUR RATED, TESTED WITH HOSE STREAM.



3 HOUR CLASSIFIED SOLID CORE (SC) PANEL OR 3 HOUR CLASSIFIED HONEYCOMB CORE (HC) PANEL. PANELS ARE AVAILABLE AS FIXED OR REMOVABLE.

- TEST: UL 10C, NFPA 252

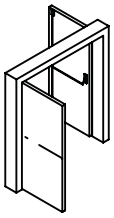
TRANSOM BARS ARE OPTIONAL. FRAME FACE: 1-1/4" TO 4".

- MAXIMUM PANEL SIZE: (SC), (HC) 7'-4" X 4'-0" WH, (SC) (HC) 8'-0" X 4'-0" UL.
- MAXIMUM FRAME HEIGHT OVERALL: 11'-4".
- MAXIMUM DOOR OPENING: 4'-0" X 9'-0" SINGLE, 7'-4" X 8'-0" PAIR WH 8'-0" X 8'-0" UL.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LABELED FIRE DOOR FRAMES

UL/WH LABELED DOUBLE EGRESS FIRE DOOR FRAMES

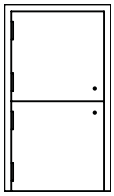


3 HOUR CLASSIFIED (UL/WH) FOR FIRE RESISTANT WALLS AT LEAST 4" THICK.

FRAMES: DOUBLE EGRESS PROFILE - 16 OR 14 GA. STEEL

- DEPTHS: 5-1/4" THROUGH 14"
- MAXIMUM DOOR SIZE: (PAIR) 8'-0" X 10-0":
- PREPARED FOR LISTED VERTICAL ROD F.E.H. AND REINFORCED FOR CLOSERS.

UL/WH LABELED DUTCH FIRE DOORS AND FRAMES



3 HOUR CLASSIFIED WITH NO TEMPERATURE RISE RATING FOR FIRE RESISTANT WALLS AT LEAST 4" THICK.

- DOORS: 1-3/4" MEDALLION (UL) REGENT (WH), (UL)
- 18 OR 16 GA. FACE SHEETS.
- FRAMES: SERIES SU OR SQ DOUBLE RABBET, SR SINGLE RABBET - 16 OR 14 GA. STEEL - KD OR WELDED.
- MAXIMUM SINGLE DOOR SIZE: (UL), (WH) 4'-0" X 7'-2"
- LATCHSET REQUIREMENTS: ONE EACH LEAF, MINIMUM THROW 1/2".

SERIES SQW AND DQW, PROFILE WK WITH INTEGRAL KERF AND FIRE RATED FOAM FILLED WEATHERSTRIP

DOUBLE OR
SINGLE RABBET

DOUBLE OR
SINGLE RABBET

CECO'S WEATHERSTRIPPED SERIES SQW AND DQW DOOR FRAMES ARE THE SAME AS SERIES SQ AND DQ FRAMES EXCEPT THEY FEATURE AN INTEGRAL KERF AND A FIRE RATED DOOR GASKET.

- ELIMINATES LABOR INTENSIVE JOB OF DRILLING AND APPLYING OLD-FASHIONED WEATHERSTRIP... CONSERVE TIME, WORK, MONEY.
- SAVES INTEGRITY OF FRAME BY ELIMINATING SCREW HOLES.
- CLOSED DOOR COMPLETELY CONCEALS AND PROTECTS GASKETING.
- ZONES AREAS FOR HEATING AND AIR CONDITIONING.
- RESISTS SOUND TRANSMISSION.
- CONTROLS WIND, DUST, OR WATER INFILTRATION.

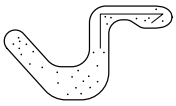
MATERIAL: 18 GA., 16 OR 14 GA. STEEL

SIZES: ALL INDUSTRY STANDARD SIZES THROUGH THE FOLLOWING LIMITS:
16 & 14 GA. 4'-0" X 9'-0" SINGLE,
8'-0" X 9'-0" DOUBLE
18 GA. 3'-0" X 7'-0" SINGLE,
6'-0" X 7'-0" DOUBLE

FIRE RATINGS: ALL LABELED FRAMES WITH INTEGRAL WEATHERSTRIP SHALL BE OF THE TYPE TESTED BY WARMOCK HERSEY OR UNDERWRITERS LABORATORY LLC, IN ACCORDANCE WITH UL 10C AND SHALL BEAR A LABEL OF THAT AGENCY AS EVIDENCE OF COMPLIANCE.

GASKETING: FIRE RATED, INTEGRAL TYPE.

SMOKE CONTROL SYSTEMS



FOAM FILLED
GASKET
COMPRESSION
TYPE FIRE RATED

EXTENSIVE TESTING RELATIVE TO THE CONTROL OF SMOKE AND GASES THROUGH DOOR OPENINGS HAS BEEN CONDUCTED ON SEVERAL CECO DOOR SYSTEMS. THE TEST METHOD USED WAS BASED ON UL TEST 1784 (AIR LEAKAGE TEST OF DOOR ASSEMBLIES) AS INDICATED BY NFPA 105. THE PURPOSE WAS TO ASCERTAIN THE INFILTRATION RATES PRODUCED WHEN ASSEMBLIES ARE SUBJECTED TO VARIOUS POSITIVE PRESSURES, AT BOTH AMBIENT (75°F) AND ELEVATED (400°F) TEMPERATURES. THE TEST ASSEMBLIES UTILIZED INTEGRALLY GASKETED, SERIES SQ AND DQ FRAMES AS WELL AS MANY CECO DOOR LINES, BOTH LABEL AND NON-LABEL. IN THE ABSENCE OF A NATIONALLY RECOGNIZED LABELING PROGRAM FOR THE MEASUREMENT OF SMOKE LEAKAGE.

GENERALLY, AUTHORITIES FEEL THAT LEAKAGE SHOULD NOT EXCEED THE VALUES LISTED BELOW. FOR SPECIFIC REQUIREMENTS FOR SMOKE CONTROL DOOR ASSEMBLIES, CONSULT THE LATEST ISSUES OF NFPA 80, 101 AND 105.

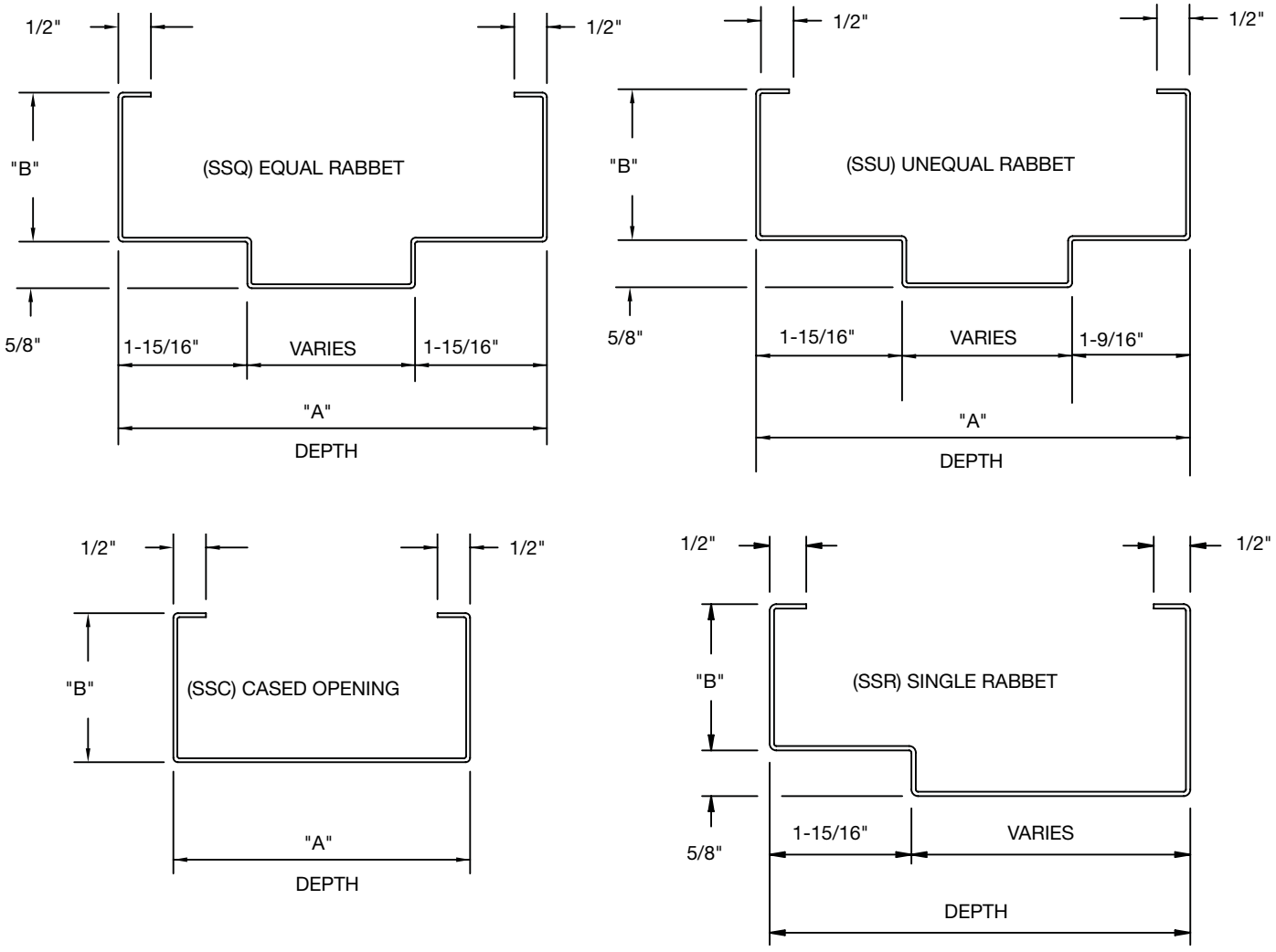
DOOR INSTALLATION	ROOM TO CORRIDOR	AREAS OF REFUGE	ELEV. LOBBY	ELEV W/O LOBBY	CROSS CORRIDOR	STAIR ENCLOSURE	
						NON-PRESS.	PRESS.
*MAXIMUM LEAKAGE	1.5	2	3	3	1	3	11
TEMPERATURE	400*F	400*F	75*F	75*F	400*F	75*F	75*F

** STANDARD CUBIC FT./MIN., PER SQ. FT. OF DOOR OPENING:°C = 5/9 (°F - 32)*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES SSQ, SSU, SSR AND SSC STAINLESS STEEL FRAMES

FOR 1-3/4" THICK DOORS STANDARD WALL APPLICATION, HANDED

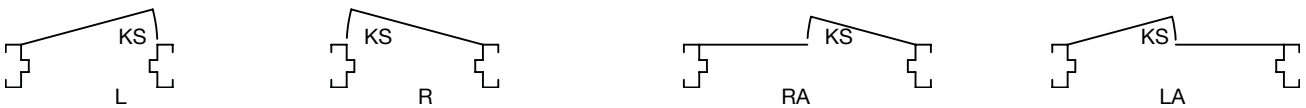


SERIES SBQ, SBU, SBC & SBR
SHOULD BE CONSIDERED
FOR FINISHED WALL PROTECTION.

FACES	DIM B
JAMB	2"
HEAD	2" THRU 4"

DEPTHS	DIM A
DOUBLE RABBET	4-7/8" THRU 14"
CASED OPENING	3-1/2" THRU 14"
SINGLE RABBET	

INSIDE



OUTSIDE

"KS" = KEY SIDE

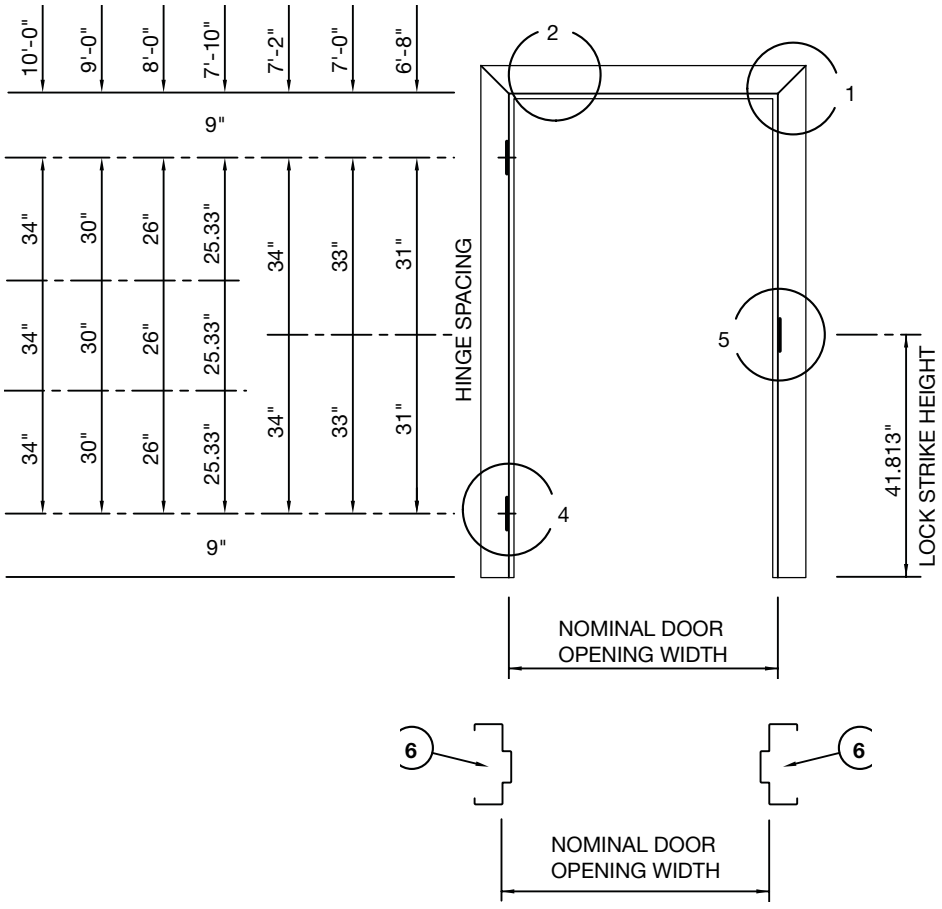
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STAINLESS STEEL FRAMES

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD DOORS.

VERTICAL SECTION

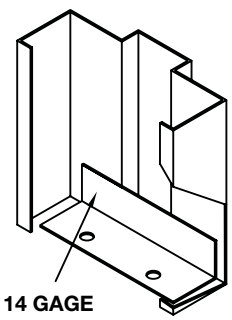
TYPICAL ELEVATION



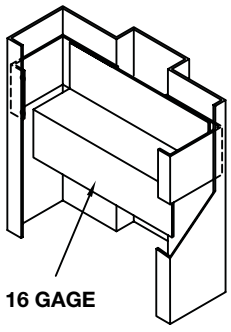
HORIZONTAL SECTION

JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS >3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS >7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS >7'6" THRU 10'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL TWO FEET IN HEIGHT OR FRACTION THEREOF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EO AND WS TYPE CONDITIONS

6 WELDED FLOOR ANCHOR

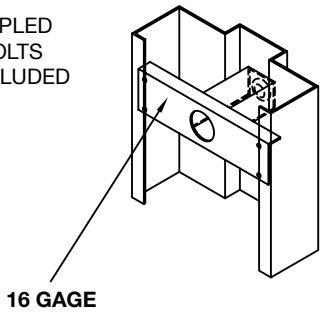


6 WELDED METAL STUD ANCHOR



6 WELDED EXISTING OPENING ANCHOR

3/8" DIMPLED HOLE BOLTS NOT INCLUDED



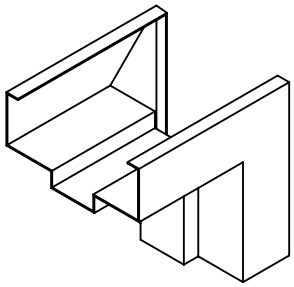
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STAINLESS STEEL FRAMES

1 FACE WELDED CORNERS - STANDARD

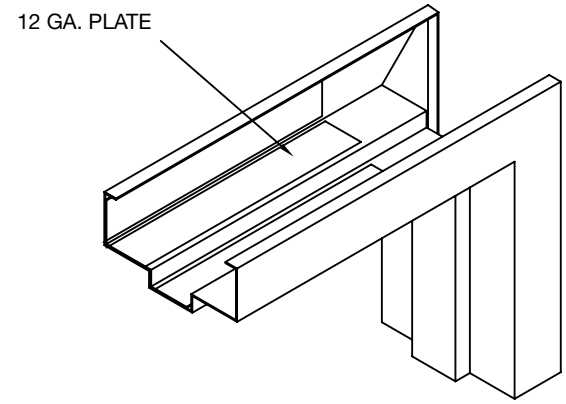
CORNER JOINTS ARE MITERED, STAINLESS FACE WELDED, AND GROUND SMOOTH.

AVAILABLE WITH 4" HEAD



OPTIONAL FULL DEPTH/CONTINUOUS WELD AVAILABLE

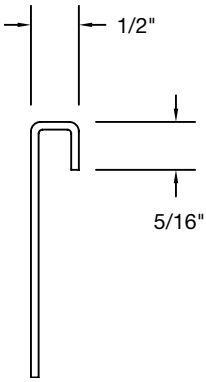
2 OPTIONAL CLOSER REINFORCEMENTS



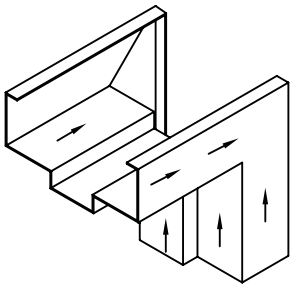
3 OPTIONAL BACKBEND RETURN

SBQ, SBU, SBR & SBC SERIES

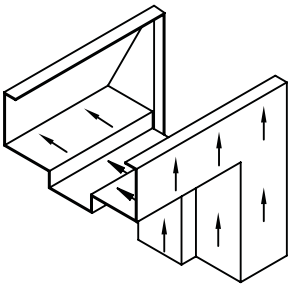
BEFORE DRYWALL APPLICATION



DIRECTION OF GRAIN



OPTIONAL GRAIN DIRECTION



STANDARD GRAIN DIRECTION

STANDARD GRAIN RUNS VERTICALLY ON FRAME FACES AND JAMB FACE, RABBETS & SOFFITS, BUT PERPENDICULAR TO THE HEAD RABBETS & SOFFIT.

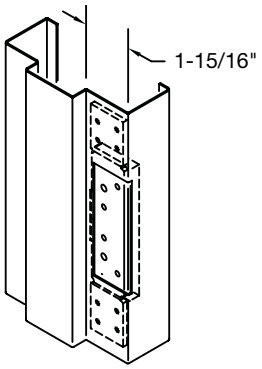
4 HINGE PREPARATION

4-1/2" X .134 OR .180
5" X .146 OR .190

ANSI A156.7 TEMPLATE

7 GAUGE REINFORCING

HINGE BACKSET 3/8"

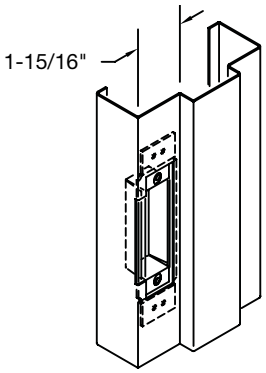


5 LOCK STRIKE PREPARATION

UNIVERSAL (4-7/8") (SHOWN)
ANSI A115.1 & 2 TEMPLATE

ALSO AVAILABLE WITH PREP FOR 2-3/4" "T" STRIKE

12 GAUGE REINFORCING



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STAINLESS STEEL FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS FRAMES

SINGLE : 4'0" X 10'0" MAX.
20 MIN. THRU 3 HOUR
16, 14 AND 12 GAUGE

PAIRS: 8'0" X 10'0" MAX.
20 MIN. THRU 3 HOUR
16, 14 AND 12 GAUGE

PRODUCT SPECIFICATIONS:

Stainless steel door frames shall be as provided by Ceco Door Products. Frames shall conform to NAAMM HMMA 866 guide specification.

Series SSO, SSU, SSR and SSC Stainless Steel Frames for 1-3/4" doors are formed from commercial quality stainless steel conforming to ASTM A240.

3 piece door frames in 304-4 and 316-4 are shipped welded. Integral door stops are 5/8" high. Double rabbet, Single Rabbet or Cased Open profiles are sized to suit wall applications. Stainless steel jamb anchors are available for new masonry, wood stud, metal stud or existing opening wall conditions (indicate which). Stainless Steel floor anchors or extra jamb anchors are provided to anchor sill. Terminated/ Hospital stops are optional. Frames are crated for protection during shipment.

Hardware Provisions: Frames are handed. Hinge jambs are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). 7 gauge hinge reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. The strike jamb is prepared for 4-7/8" universal strike in accordance with ANSI A115.1 & 2. Preparations for other mechanical and electronic locks and strikes are also available. Optional hardware reinforcement (e.g. closer/holder) is 12 gauge steel (designate hardware). 3 mute holes are provided per strike jamb and two (2) for double swing heads.

Finish: Standard finish is the 304-4 satin and optional 316-4 high corrosive resistant #4 brush finish.

MATERIAL

DOOR/FRAME MATERIAL	LEVEL	STAINLESS STEEL TYPE	
		304-4	316
16 GAUGE STAINLESS STEEL	HEAVY OR EXTRA HEAVY-DUTY	STD	OPTIONAL - SEE AVAILABLE FINISH BELOW
14 GAUGE STAINLESS STEEL	MAXIMUM DUTY	STD	
12 GAUGE STAINLESS STEEL	ANSI / NAAMM	STD	

STAINLESS STEEL ALLOY

TYPE 304
STANDARD

TYPE 316
HIGH CORROSIVE RESISTANCE
OPTIONAL

STAINLESS STEEL FINISH FOR 304 AND 31

#4	BRUSH FINISH
#6	SATIN FINISH
#8	MIRROR FINISH
#2B	PAINT GRADE FINISH
XL BLEND	LONG GRAIN BRUSH FINISH

INSIDE

OUTSIDE

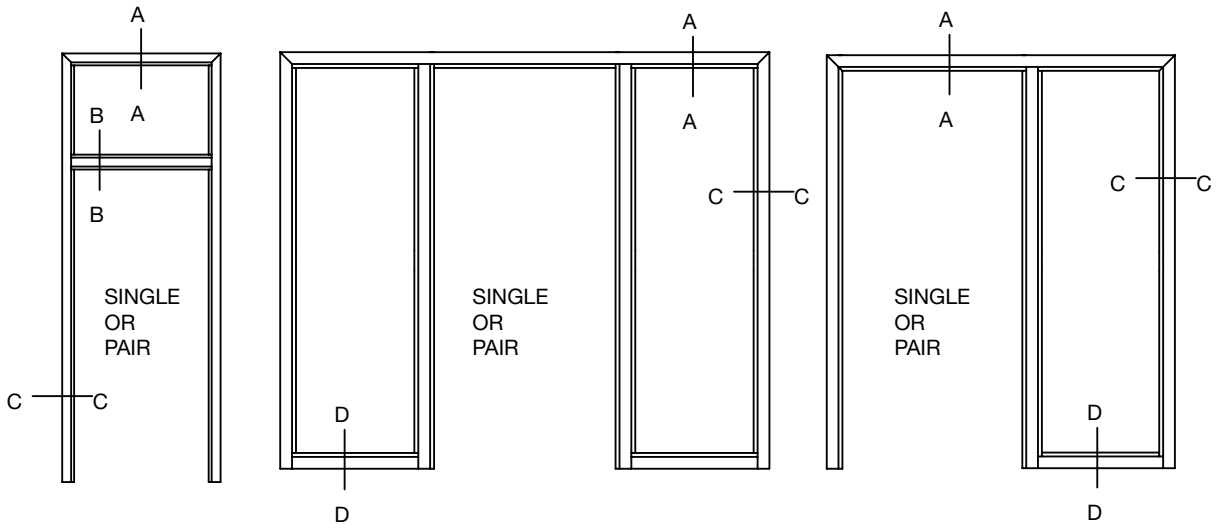
"KS"= KEY SIDE *"SUFFIX"A" = ACTIVE LEAF OF PAIRS*

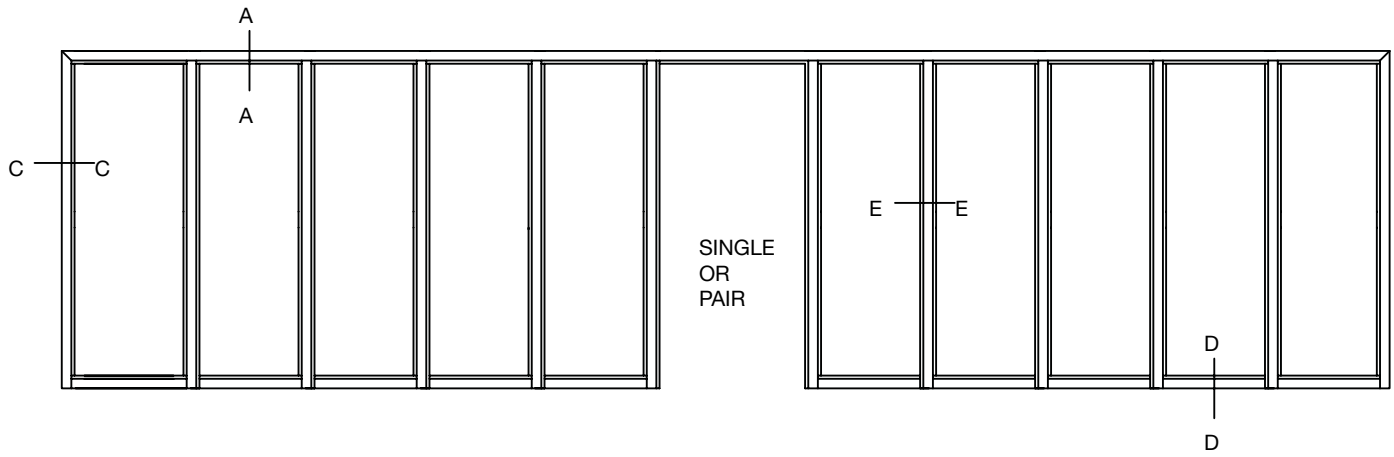
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

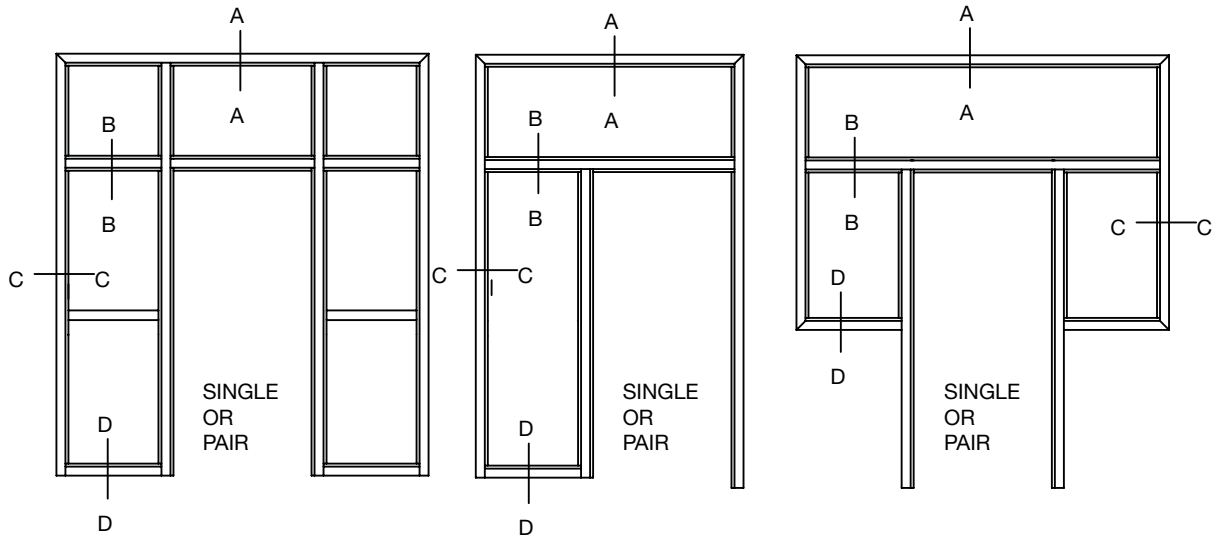
E119 FIRE-RESISTIVE DOOR FRAMES WITH LITES, UL LABELED

FOR 1-3/4" THICK DOORS, HANDED. TO BE INSTALLED IN FIRE RATED GYPSUM BOARD OR MASONRY WALLS

FRAMES ARE FIRE TESTED TO ASTM E119 OR UL 263 AND LIMIT THE TRANSFER OF RADIANT HEAT







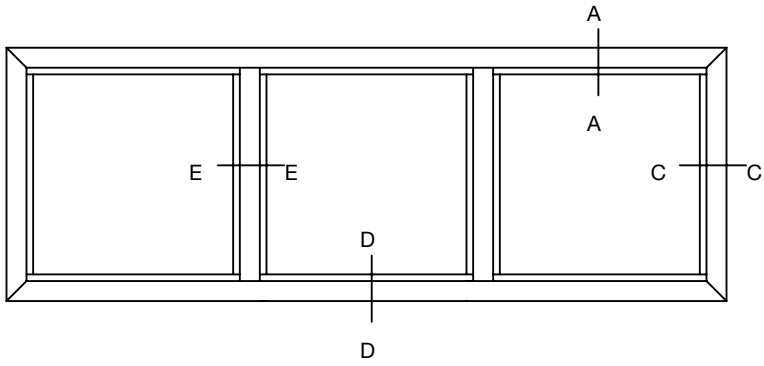
VIEWS SHOWN APPLY TO PAGE 70 THRU PAGE 79

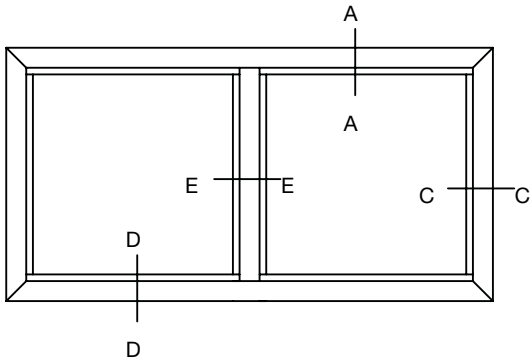
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

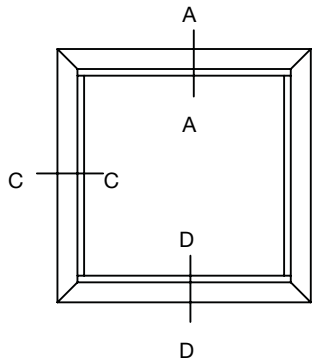
19 FIRE-RESISTIVE DOOR FRAMES WITH LITES, UL LABELED

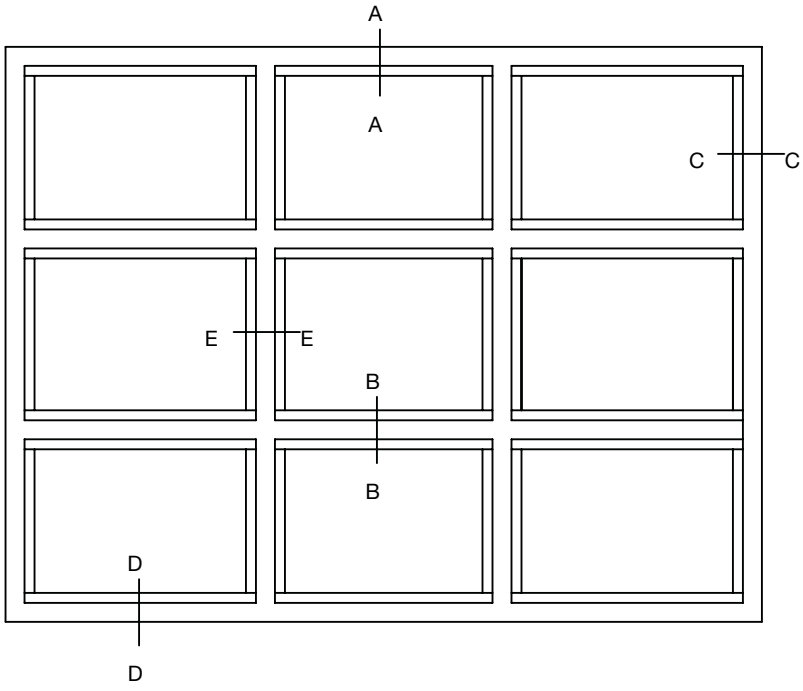
TO BE INSTALLED IN FIRE RATED GYPSUM BOARD OR MASONRY WALLS

FRAMES ARE FIRE TESTED TO ASTM E119 OR UL 263 AND LIMIT THE TRANSFER OF RADIANT HEAT



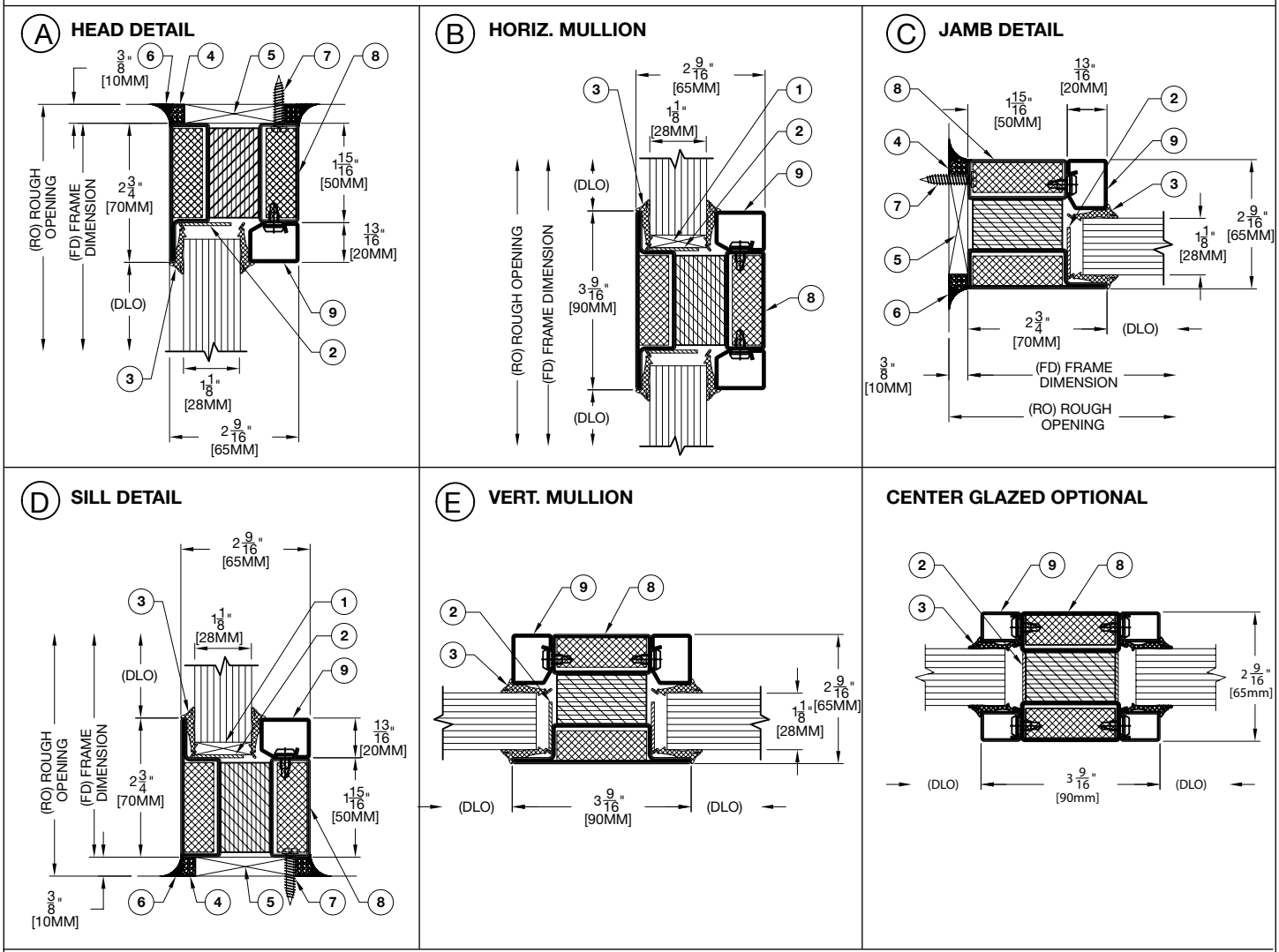






VIEWS SHOWN APPLY TO PAGE 70 THRU PAGE 79

E119 FIRE-RESISTIVE 60 MINUTE FLUSH GLAZING



- 60 MINUTE FLUSH GLAZING
- GLASS: VETROTECH CONTRAFLAM 60
- MAX VISIBLE GLASS 94-13/16" X 94-13/16" NOT TO EXCEED 3283 SQ. IN., PER LITE.
- OVERALL OUT TO OUT FRAME WIDTH & HEIGHT IS NOT LIMITED BY FIRE RATING.
- FACE SHALL BE 1-15/16".
- DEPTH SHALL BE 2-9/16".

NOTES:

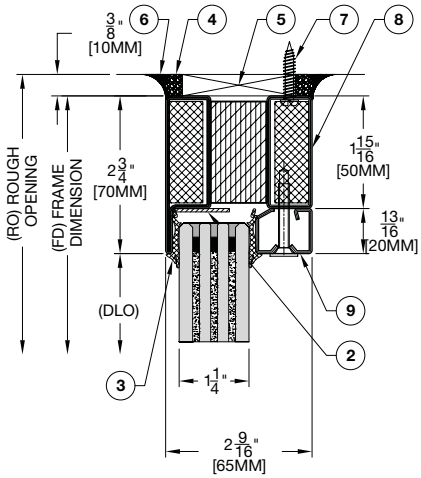
1. *SETTING BLOCK (SILL ONLY) BY OTHERS ALTERNATES BY OTHERS:*
   A. *HARDWOOD*
   B. *CALCIUM SILICATE*
   C. *NEOPRENE (90 DUROMETER)*
2. *CONTINUOUS INTUMESCENT TAPE FURNISHED WITH E119 FRAME INSTALLED BY OTHERS*
3. **GLAZING GASKET (BOTH SIDES) FURNISHED WITH E119 FRAME INSTALLED BY OTHERS*
4. *FIRE RATED SEAL IN SHIM SPACE BY OTHERS. ACCEPTABLE ALTERNATIVES: WELL PACKED ROCKWOOL, CONTINUOUS INTUMESCENT CAULKING, OR CONTINUOUS INTUMESCENT TAPE.*
5. *SHIMS BY OTHERS. ACCEPTABLE ALTERNATES: HARDWOOD, CALCIUM SILICATE,OR CEDAR SHINGLES.*
6. *FINISH SEALANT BY OTHERS.*
7. *ANCHOR HOLES ARE PREDRILLED AT THE FACTORY, PLACED 20" O.C.. ANCHOR SCREWS BY OTHERS. MAX. HEAD DIA. 3/8"; MAX. SHANK DIA. 1/4" X 3" (MIN. LENGTH). SEE NOTES # 10, 11 & 12 FOR ACCEPTABLE ANCHOR SCREWS.*
8. *16 GAUGE FIRE RATED FRAME.*
9. *16 GAUGE STEEL GLAZING BEAD BY CECO DOOR. INSTALL IN FIELD OVER GLAZING BEAD SCREW, FURNISHED WITH FRAME.*
10. *FOR WOOD STUD ANCHOR SCREWS SEE: WWW.MCMASTER.COM/#STANDARD-ANCHORS/=14L1DKP*
11. *FOR STEEL STUD ANCHOR SCREWS SEE: WWW.US.HILTI.COM/SCREW-FASTENING/METAL-CONSTRUCTION-SCREWS/R2007*
12. *FOR MASONRY FASTENERS SEE: WWW.TAPCON.COM/PROFESSIONALS OR WWW.US.HILTI.COM/ANCHOR-SYSTEMS/SCREW-ANCHORS/R6263*
13. *FRAME IS NOT LOAD BERING. ADDITIONAL BUILDING DESIGN FEATURES MAY BE REQUIRED FOR UNITS OVER 12' TALL.*

**NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS)*

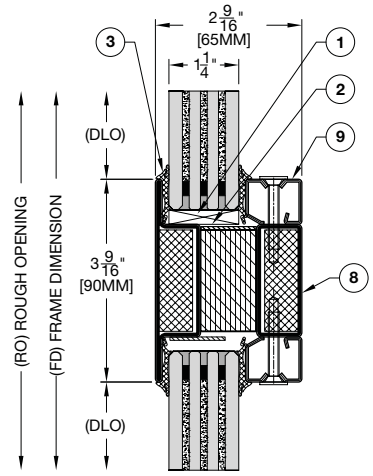
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 FIRE-RESISTIVE 60 MIN. FLUSH STRUCTURE GLAZING

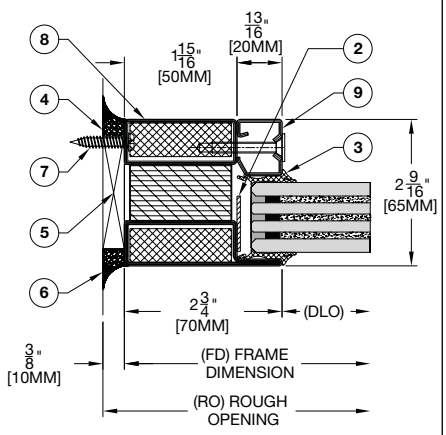
A HEAD DETAIL



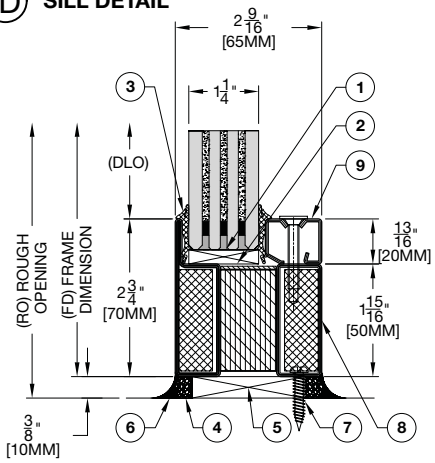
B HORIZ. MULLION



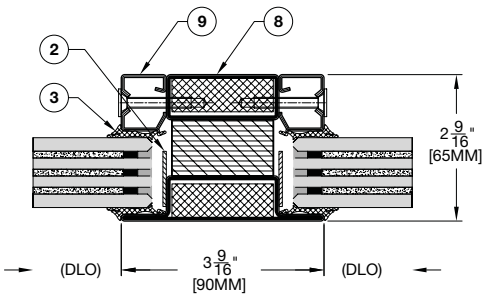
C JAMB DETAIL



D SILL DETAIL



E VERT. MULLION



- 60 MINUTE FLUSH GLAZING
- GLASS: VETROTECH CONTRAFLAM STRUCTURE 60
- MAX VISIBLE GLASS 138-1/2" X 138-1/2" NOT TO EXCEED 7574 SQ. IN., PER LITE.
- OVERALL OUT TO OUT FRAME WIDTH & HEIGHT IS NOT LIMITED BY FIRE RATING.
- FACE SHALL BE 1-15/16".
- DEPTH SHALL BE 2-9/16".

NOTES:

1. SETTING BLOCK (SILL ONLY) BY OTHERS ALTERNATES BY OTHERS:
A. HARDWOOD
B. CALCIUM SILICATE
C. NEOPRENE (90 DUROMETER)
2. CONTINUOUS INTUMESCENT TAPE FURNISHED WITH E119 FRAME INSTALLED BY OTHERS
*3. *GLAZING GASKET (BOTH SIDES) FURNISHED WITH E119 FRAME INSTALLED BY OTHERS*
4. FIRE RATED SEAL IN SHIM SPACE BY OTHERS. ACCEPTABLE ALTERNATIVES: WELL PACKED ROCKWOOL, CONTINUOUS INTUMESCENT CAULKING, OR CONTINUOUS INTUMESCENT TAPE.
5. SHIMS BY OTHERS. ACCEPTABLE ALTERNATES: HARDWOOD, CALCIUM SILICATE, OR CEDAR SHINGLES.
6. FINISH SEALANT BY OTHERS.
7. ANCHOR HOLES ARE PREDRILLED AT THE FACTORY, PLACED 20" O.C.. ANCHOR SCREWS BY OTHERS. MAX. HEAD DIA. 3/8"; MAX. SHANK DIA. 1/4" X 3" (MIN. LENGTH). SEE NOTES # 10, 11 & 12 FOR ACCEPTABLE ANCHOR SCREWS.
8. 16 GAUGE FIRE RATED FRAME.
9. 16 GAUGE STEEL GLAZING BEAD BY CECO DOOR. INSTALL IN FIELD OVER GLAZING BEAD SCREW, FURNISHED WITH FRAME.
10. FOR WOOD STUD ANCHOR SCREWS SEE: WWW.MCMASTER.COM/#STANDARD-ANCHORS/=14L1DKP
11. FOR STEEL STUD ANCHOR SCREWS SEE: WWW.US.HILTI.COM/SCREW-FASTENING/METAL-CONSTRUCTION-SCREWS/R2007
12. FOR MASONRY FASTENERS SEE: WWW.TAPCON.COM/PROFESSIONALS OR WWW.US.HILTI.COM/ANCHOR-SYSTEMS/SCREW-ANCHORS/R6263
13. FRAME IS NOT LOAD BERING. ADDITIONAL BUILDING DESIGN FEATURES MAY BE REQUIRED FOR UNITS OVER 12' TALL.
14. CENTER GLAZED FRAMES NOT AVAILABLE.

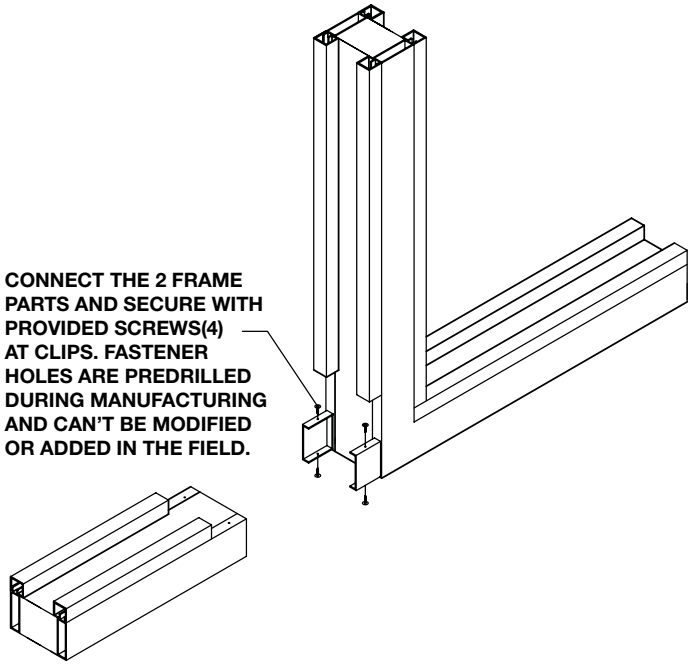
**NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS)*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

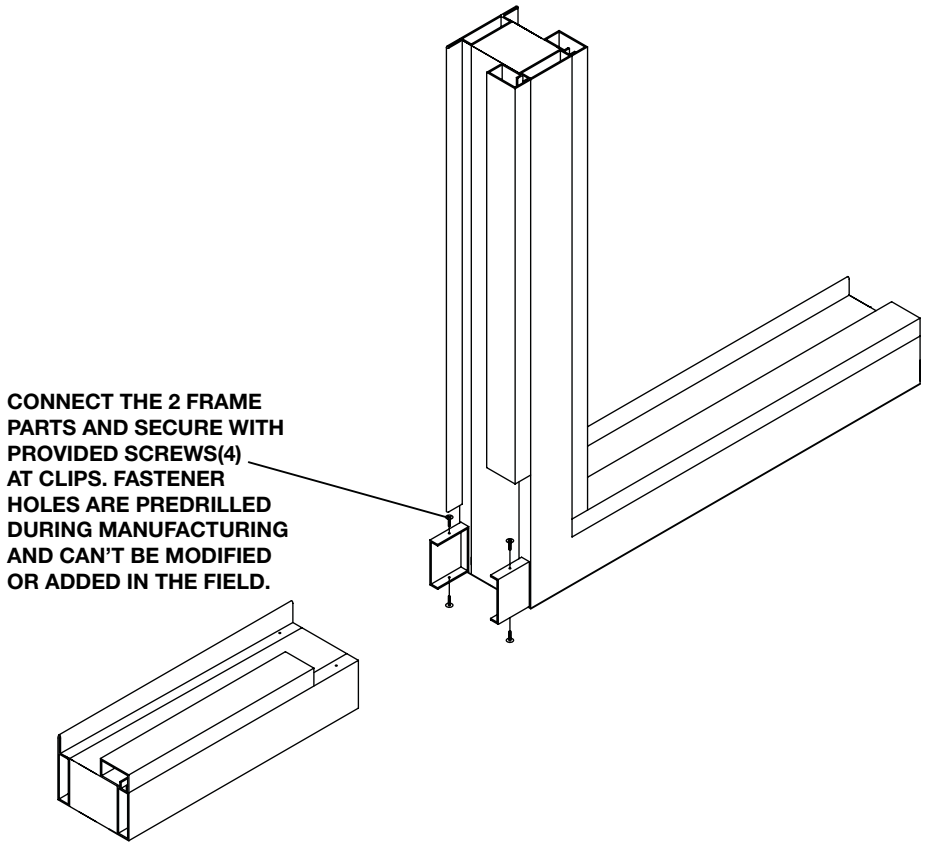
E119 FIRE-RESISTIVE DOOR FRAMES WITH LITES. MECHANICAL JOINT OF 60 MINUTE FRAME COMPONENTS.

MECHANICAL JOINING OF COMPONENTS IS REQUIRED WHEN OVERALL SIZE OF FRAME IS TOO LARGE OR TOO HEAVY TO BE LOADED FOR SHIPPING. MECHANICAL JOINING MAY ALSO BE DUE TO JOB SITE CONDITIONS AND/OR LIMITATIONS RELATED TO SIZE, WEIGHT, AND/OR HANDLING, ETC.

CENTER GLAZED



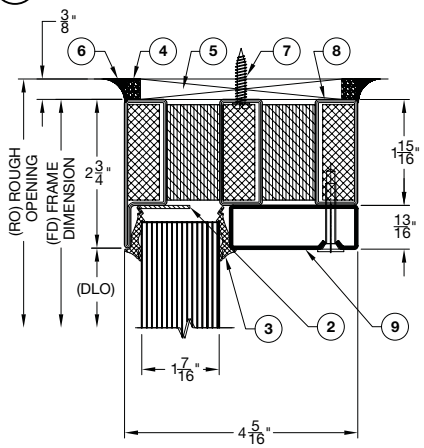
FLUSH GLAZED



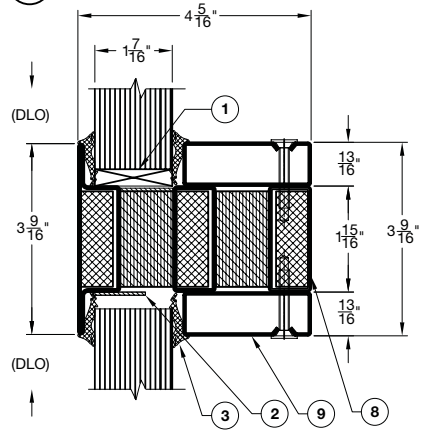
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 FIRE-RESISTIVE 90 MINUTE FLUSH GLAZING

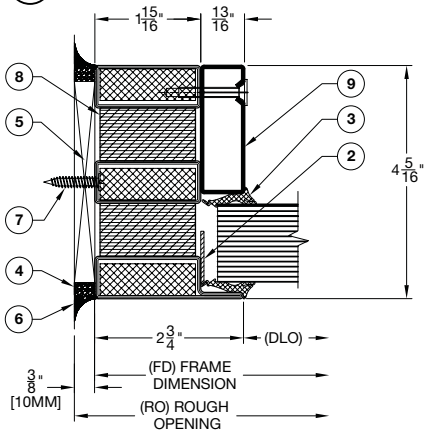
A HEAD DETAIL



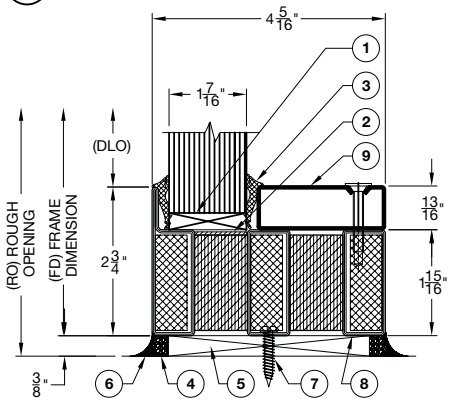
B HORIZ. MULLION



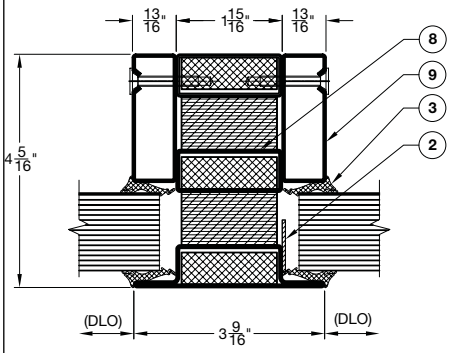
C JAMB DETAIL



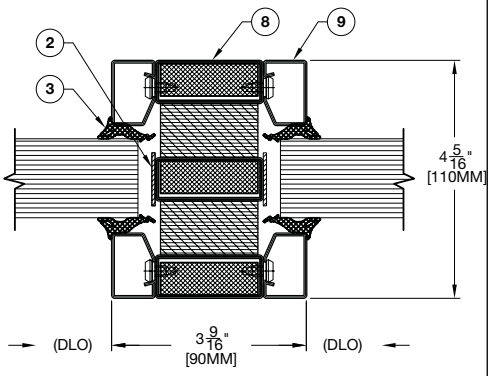
D SILL DETAIL



E VERT. MULLION



CENTER GLAZED OPTIONAL



- 90 MINUTE FLUSH GLAZING
- GLASS: VETROTEC CONTRAFLAM 90
- MAX VISIBLE GLASS 94-13/16" X 94-13/16" NOT TO EXCEED 4435 SQ. IN., PER LITE.
- OVERALL OUT TO OUT FRAME WIDTH & HEIGHT IS NOT LIMITED BY FIRE RATING.
- FACE SHALL BE 1-15/16".
- DEPTH SHALL BE 4-5/16".

NOTES:

1. *SETTING BLOCK (SILL ONLY) BY OTHERS ALTERNATES BY OTHERS:*
   - *A. HARDWOOD*
   - *B. CALCIUM SILICATE*
   - *C. NEOPRENE (90 DUROMETER)*
2. *CONTINUOUS INTUMESCENT TAPE FURNISHED WITH E119 FRAME INSTALLED BY OTHERS*
3. **GLAZING GASKET (BOTH SIDES) FURNISHED WITH E119 FRAME INSTALLED BY OTHERS*
4. *FIRE RATED SEAL IN SHIM SPACE BY OTHERS. ACCEPTABLE ALTERNATIVES: WELL PACKED ROCKWOOL, CONTINUOUS INTUMESCENT CAULKING, OR CONTINUOUS INTUMESCENT TAPE.*
5. *SHIMS BY OTHERS. ACCEPTABLE ALTERNATES: HARDWOOD, CALCIUM SILICATE, OR CEDAR SHINGLES.*
6. *FINISH SEALANT BY OTHERS.*
7. *ANCHOR HOLES ARE PREDRILLED AT THE FACTORY, PLACED 20" O.C.. ANCHOR SCREWS BY OTHERS. MAX. HEAD DIA. 3/8"; MAX. SHANK DIA. 1/4" X 3" (MIN. LENGTH). SEE NOTES # 10, 11 & 12 FOR ACCEPTABLE ANCHOR SCREWS.*
8. *16 GAUGE FIRE RATED FRAME.*
9. *16 GAUGE STEEL GLAZING BEAD BY CECO DOOR. INSTALL IN FIELD OVER GLAZING BEAD SCREW, FURNISHED WITH FRAME.*
10. *FOR WOOD STUD ANCHOR SCREWS SEE: WWW.MCMASTER.COM/#STANDARD-ANCHORS/=14L1DKP*
11. *FOR STEEL STUD ANCHOR SCREWS SEE: WWW.US.HILTI.COM/SCREW-FASTENING/METAL-CONSTRUCTION-SCREWS/R2007*
12. *FOR MASONRY FASTENERS SEE: WWW.TAPCON.COM/PROFESSIONALS OR WWW.US.HILTI.COM/ANCHOR-SYSTEMS/SCREW-ANCHORS/R6263*
13. *FRAME IS NOT LOAD BERING. ADDITIONAL BUILDING DESIGN FEATURES MAY BE REQUIRED FOR UNITS OVER 12' TALL.*

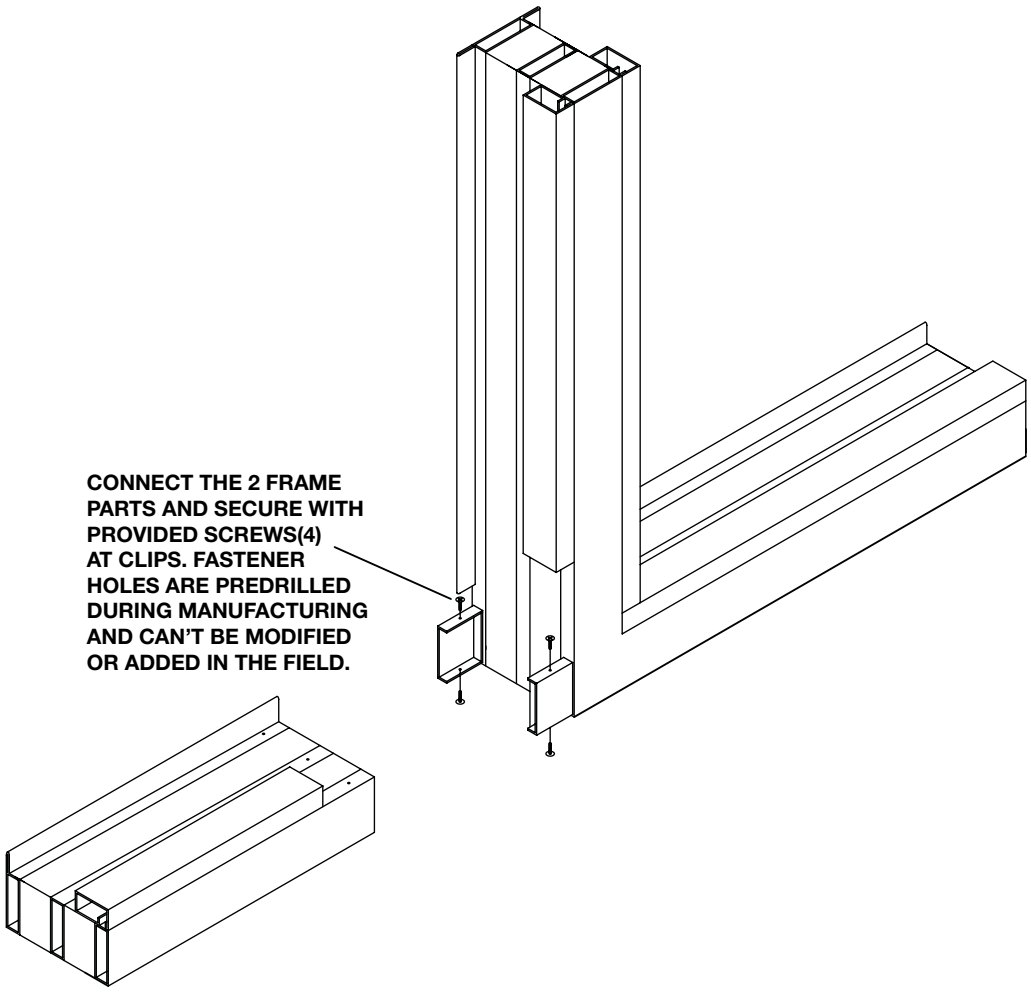
**NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS)*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 FIRE-RESISTIVE DOOR FRAMES WITH LITES. MECHANICAL JOINT OF 90 MINUTE FRAME COMPONENTS.

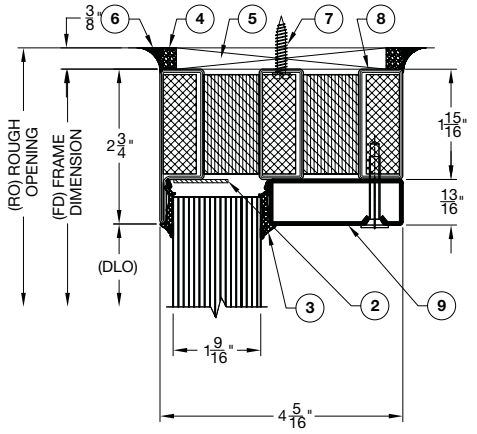
MECHANICAL JOINING OF COMPONENTS IS REQUIRED WHEN OVERALL SIZE OF FRAME IS TOO LARGE OR TOO HEAVY TO BE LOADED FOR SHIPPING. MECHANICAL JOINING MAY ALSO BE DUE TO JOB SITE CONDITIONS AND/OR LIMITATIONS RELATED TO SIZE, WEIGHT, AND/OR HANDLING, ETC.

FLUSH GLAZED

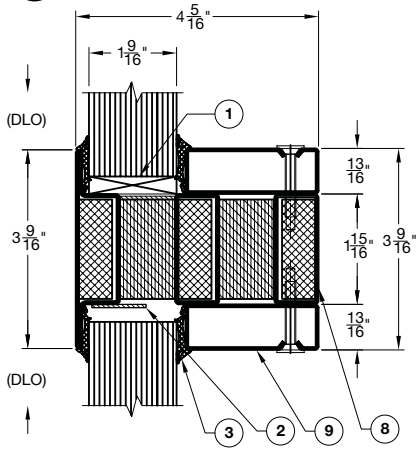


E119 FIRE-RESISTIVE 120 MINUTE FLUSH GLAZING

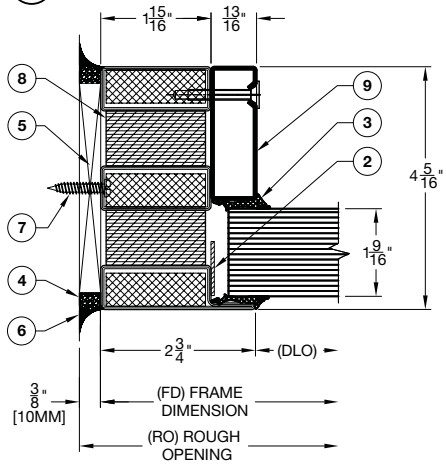
A HEAD DETAIL



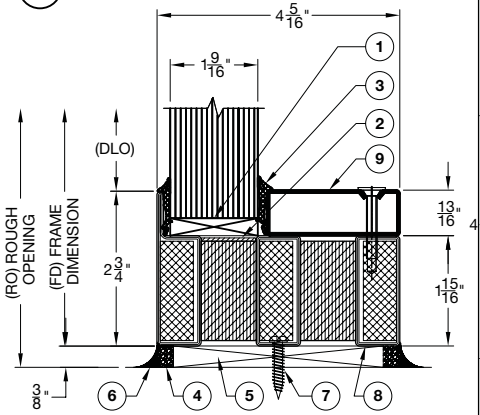
B HORIZ. MULLION



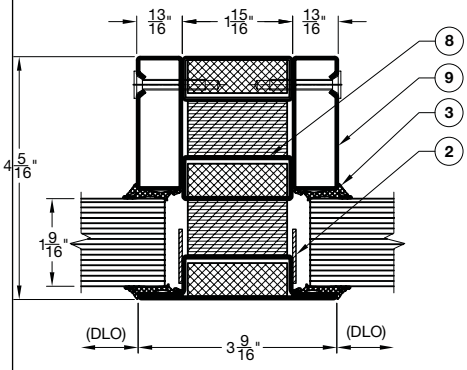
C JAMB DETAIL



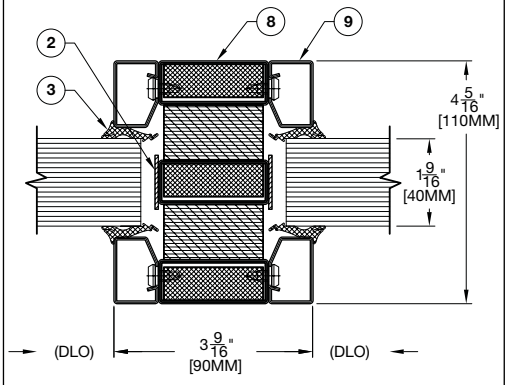
D SILL DETAIL



E VERT. MULLION



CENTER GLAZED OPTIONAL



- 120 MINUTE FLUSH GLAZING
- GLASS: VETROTECH CONTRAFLAM 120
- MAX VISIBLE GLASS 94-5/8" X 94-5/8" NOT TO EXCEED 4435 SQ. IN., PER LITE.
- OVERALL OUT TO OUT FRAME WIDTH & HEIGHT IS NOT LIMITED BY FIRE RATING.
- FACE SHALL BE 1-15/16".
- DEPTH SHALL BE 4-5/16".

NOTES:

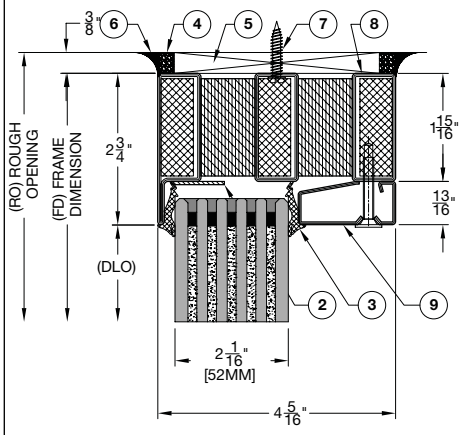
1. *SETTING BLOCK (SILL ONLY) BY OTHERS ALTERNATES BY OTHERS:*
   - *A. HARDWOOD*
   - *B. CALCIUM SILICATE*
   - *C. NEOPRENE (90 DUROMETER)*
2. *CONTINUOUS INTUMESCENT TAPE FURNISHED WITH E119 FRAME INSTALLED BY OTHERS*
3. **GLAZING GASKET (BOTH SIDES) FURNISHED WITH E119 FRAME INSTALLED BY OTHERS*
4. *FIRE RATED SEAL IN SHIM SPACE BY OTHERS. ACCEPTABLE ALTERNATIVES: WELL PACKED ROCKWOOL, CONTINUOUS INTUMESCENT CAULKING, OR CONTINUOUS INTUMESCENT TAPE.*
5. *SHIMS BY OTHERS. ACCEPTABLE ALTERNATES: HARDWOOD, CALCIUM SILICATE, OR CEDAR SHINGLES.*
6. *FINISH SEALANT BY OTHERS.*
7. *ANCHOR HOLES ARE PREDRILLED AT THE FACTORY, PLACED 20" O.C.. ANCHOR SCREWS BY OTHERS. MAX. HEAD DIA. 3/8"; MAX. SHANK DIA. 1/4" X 3" (MIN. LENGTH). SEE NOTES # 10, 11 & 12 FOR ACCEPTABLE ANCHOR SCREWS.*
8. *16 GAUGE FIRE RATED FRAME.*
9. *16 GAUGE STEEL GLAZING BEAD BY CECO DOOR. INSTALL IN FIELD OVER GLAZING BEAD SCREW, FURNISHED WITH FRAME.*
10. *FOR WOOD STUD ANCHOR SCREWS SEE: WWW.MCMASTER.COM/#STANDARD-ANCHORS/=14L1DKP*
11. *FOR STEEL STUD ANCHOR SCREWS SEE: WWW.US.HILTI.COM/SCREW-FASTENING/METAL-CONSTRUCTION-SCREWS/R2007*
12. *FOR MASONRY FASTENERS SEE: WWW.TAPCON.COM/PROFESSIONALS OR WWW.US.HILTI.COM/ANCHOR-SYSTEMS/SCREW-ANCHORS/R6263*
13. *FRAME IS NOT LOAD BERING. ADDITIONAL BUILDING DESIGN FEATURES MAY BE REQUIRED FOR UNITS OVER 12' TALL.*

**NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS)*

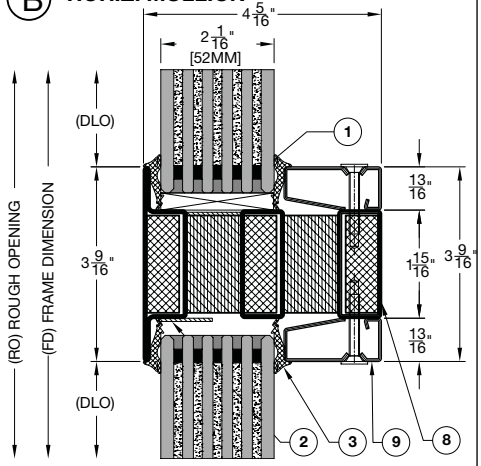
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 FIRE-RESISTIVE 120 MIN. FLUSH STRUCTURE GLAZING

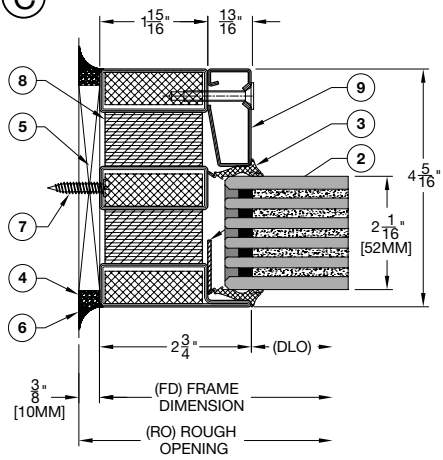
A HEAD DETAIL



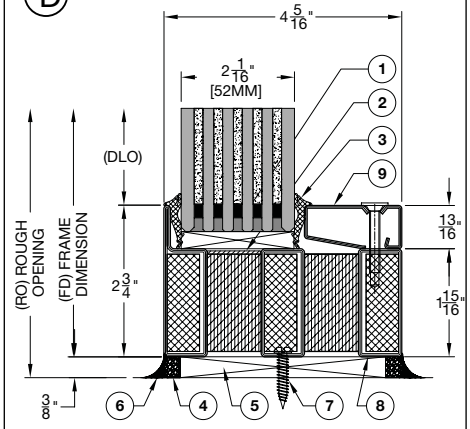
B HORIZ. MULLION



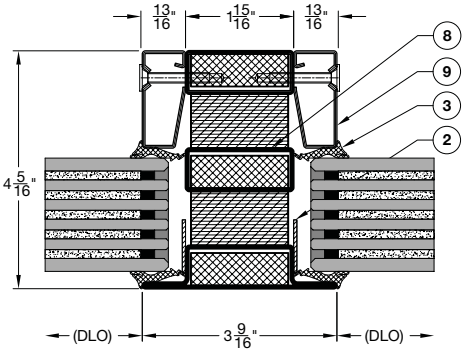
C JAMB DETAIL



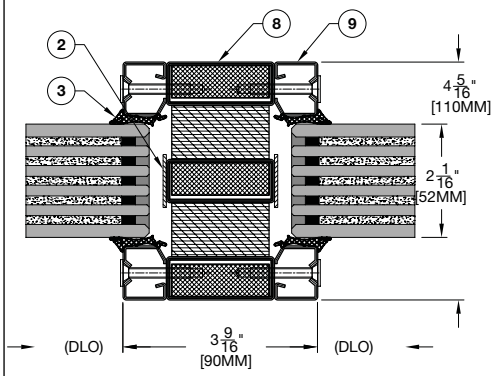
D SILL DETAIL



E VERT. MULLION



CENTER GLAZED OPTIONAL



- 120 MINUTE FLUSH GLAZING
- GLASS: VETROTECH CONTRAFLAM STRUCTURE 120
- MAX VISIBLE GLASS 126" X 126" NOT TO EXCEED 4536 SQ. IN., PER LITE.
- OVERALL OUT TO OUT FRAME WIDTH & HEIGHT IS NOT LIMITED BY FIRE RATING.
- FACE SHALL BE 1-15/16".
- DEPTH SHALL BE 4-5/16".

NOTES:

1. *SETTING BLOCK (SILL ONLY) BY OTHERS ALTERNATES BY OTHERS:*
   - *A. HARDWOOD*
   - *B. CALCIUM SILICATE*
   - *C. NEOPRENE (90 DUROMETER)*
2. *CONTINUOUS INTUMESCENT TAPE FURNISHED WITH E119 FRAME INSTALLED BY OTHERS*
3. **GLAZING GASKET (BOTH SIDES) FURNISHED WITH E119 FRAME INSTALLED BY OTHERS*
4. *FIRE RATED SEAL IN SHIM SPACE BY OTHERS. ACCEPTABLE ALTERNATIVES: WELL PACKED ROCKWOOL, CONTINUOUS INTUMESCENT CAULKING, OR CONTINUOUS INTUMESCENT TAPE.*
5. *SHIMS BY OTHERS. ACCEPTABLE ALTERNATES: HARDWOOD, CALCIUM SILICATE, OR CEDAR SHINGLES.*
6. *FINISH SEALANT BY OTHERS.*
7. *ANCHOR HOLES ARE PREDRILLED AT THE FACTORY, PLACED 20" O.C.. ANCHOR SCREWS BY OTHERS. MAX. HEAD DIA. 3/8"; MAX. SHANK DIA. 1/4" X 3" (MIN. LENGTH). SEE NOTES # 10, 11 & 12 FOR ACCEPTABLE ANCHOR SCREWS.*
8. *16 GAUGE FIRE RATED FRAME.*
9. *16 GAUGE STEEL GLAZING BEAD BY CECO DOOR. INSTALL IN FIELD OVER GLAZING BEAD SCREW, FURNISHED WITH FRAME.*
10. *FOR WOOD STUD ANCHOR SCREWS SEE: WWW.MCMASTER.COM/#STANDARD-ANCHORS/=14L1DKP*
11. *FOR STEEL STUD ANCHOR SCREWS SEE: WWW.US.HILTI.COM/SCREW-FASTENING/METAL-CONSTRUCTION-SCREWS/R2007*
12. *FOR MASONRY FASTENERS SEE: WWW.TAPCON.COM/PROFESSIONALS OR WWW.US.HILTI.COM/ANCHOR-SYSTEMS/SCREW-ANCHORS/R6263*
13. *FRAME IS NOT LOAD BERING. ADDITIONAL BUILDING DESIGN FEATURES MAY BE REQUIRED FOR UNITS OVER 12' TALL.*

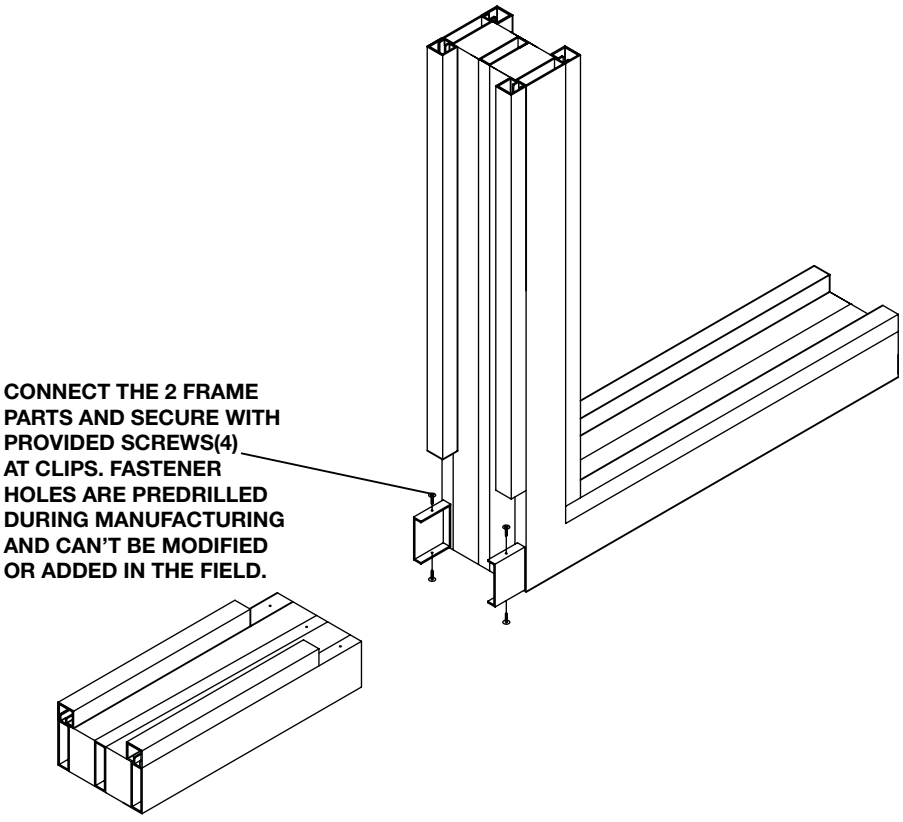
**NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS)*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

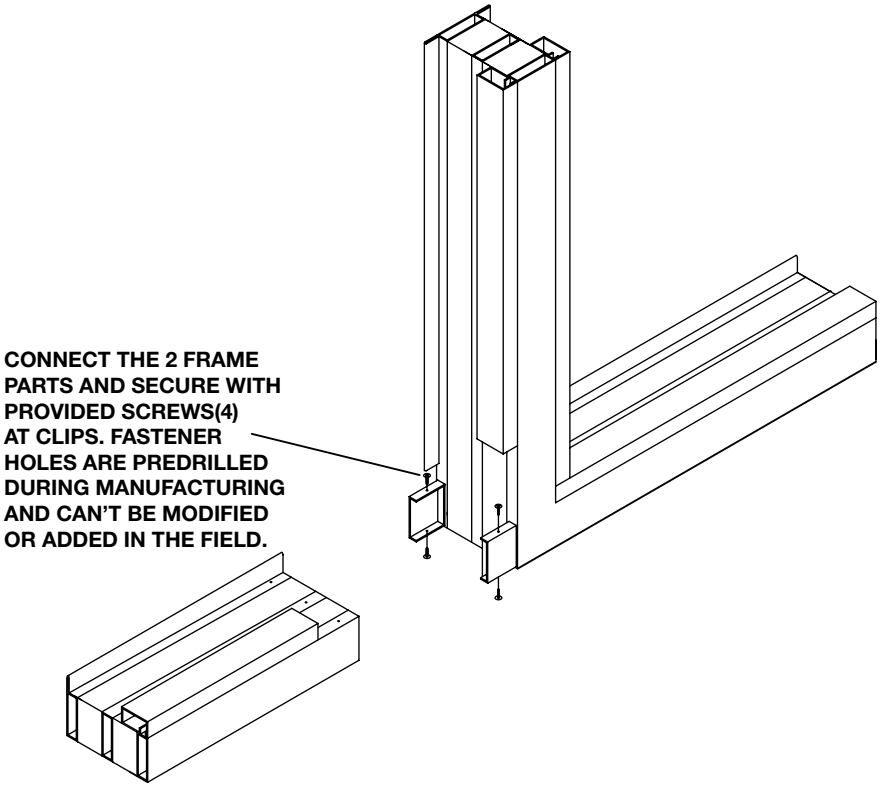
E119 FIRE-RESISTIVE DOOR FRAMES WITH LITES. MECHANICAL JOINT OF 120 MINUTE FRAME COMPONENTS.

MECHANICAL JOINING OF COMPONENTS IS REQUIRED WHEN OVERALL SIZE OF FRAME IS TOO LARGE OR TOO HEAVY TO BE LOADED FOR SHIPPING. MECHANICAL JOINING MAY ALSO BE DUE TO JOB SITE CONDITIONS AND/OR LIMITATIONS RELATED TO SIZE, WEIGHT, AND/OR HANDLING, ETC.

CENTER GLAZED



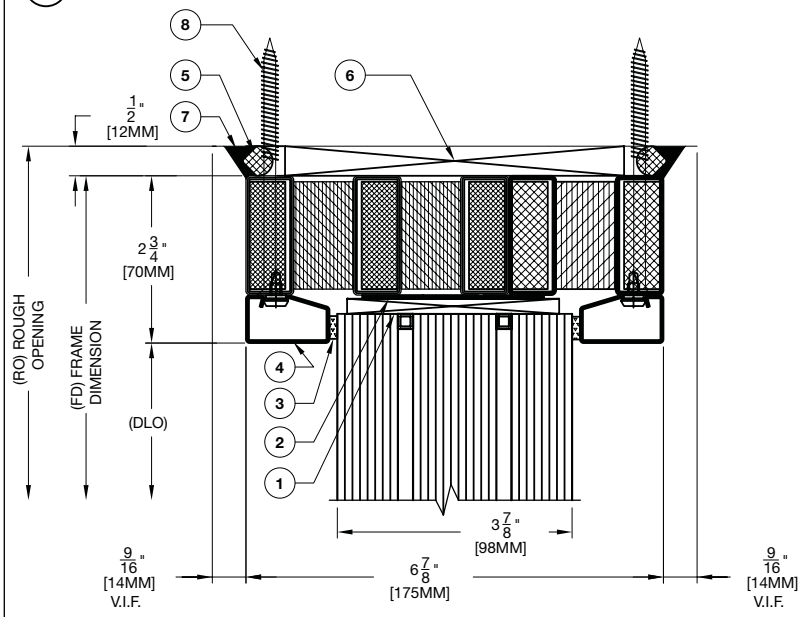
FLUSH GLAZED



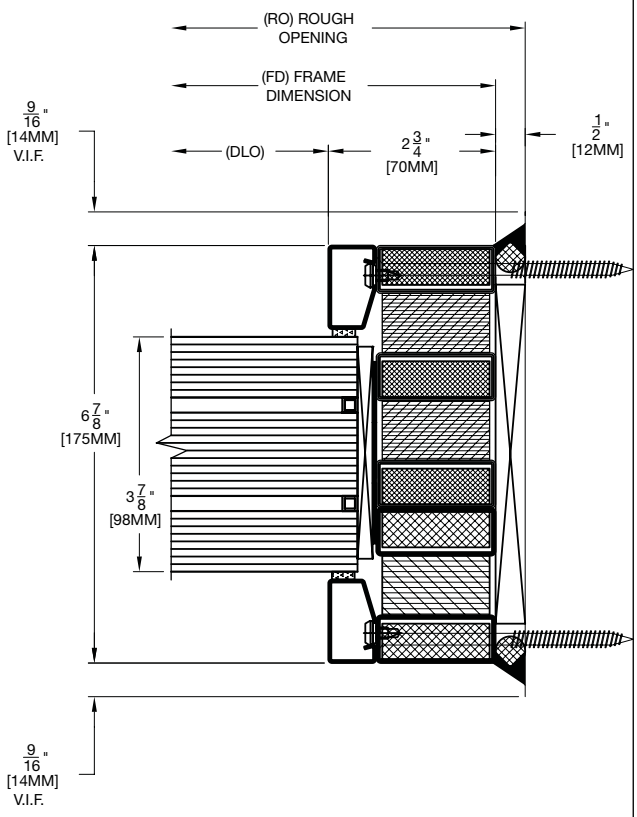
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 FIRE-RESISTIVE 180 MINUTE CENTER GLAZING

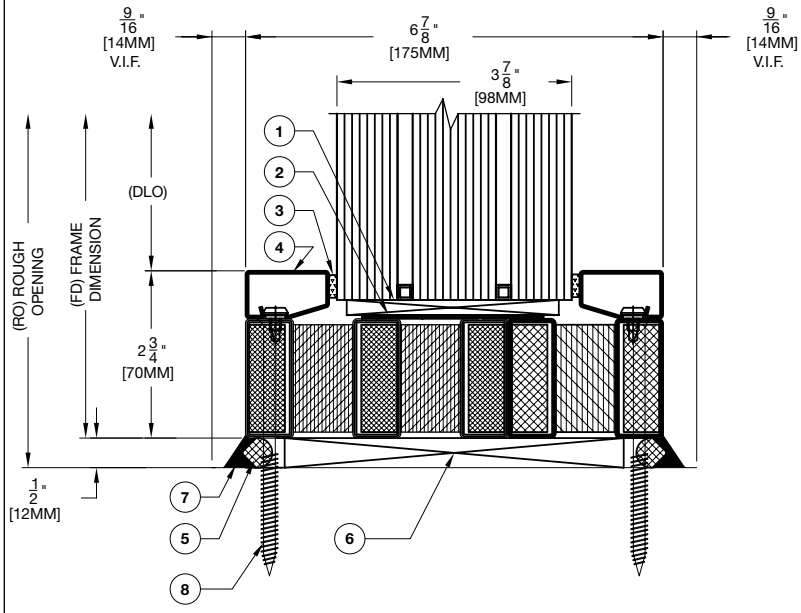
A HEAD DETAIL



C JAMB DETAIL



D SILL DETAIL



- 180 MINUTE CENTER GLAZING
- GLASS: VETROTECH CONTRAFLAM 180 PROVIDED & INSTALLED IN E119 FRAME
- MAX VISIBLE GLASS 48" X 48" NOT TO EXCEED 2304 SQ. IN.. OVERALL OUT TO OUT FRAME WIDTH & HEIGHT IS LIMITED TO 52" X 52".
- DEPTH SHALL BE 6-7/8".
- SINGLE LITE WINDOW (BORROWED LITE) ONLY. MULLIONS NOT AVAILABLE.

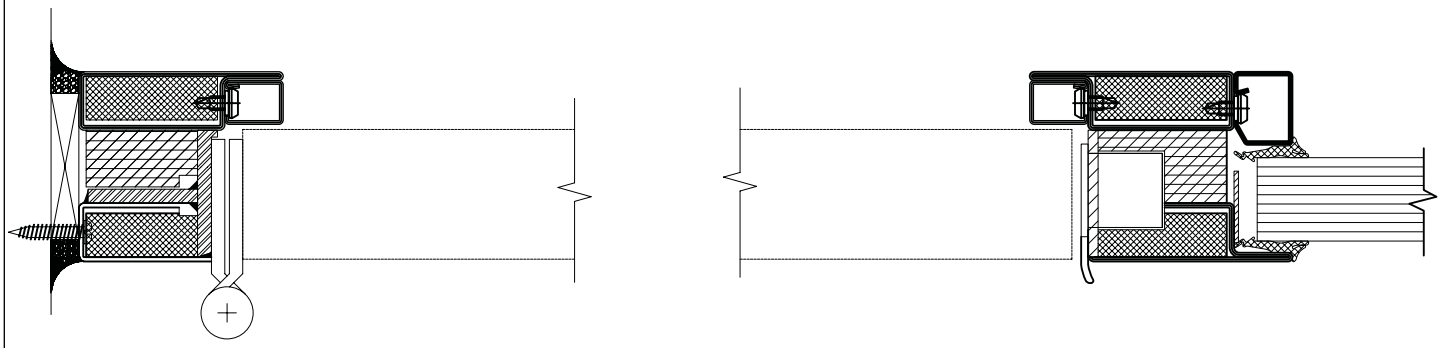
NOTES:

1. *SETTING BLOCK (SILL ONLY) BY OTHERS:*
   - *A. CALCIUM SILICATE*
2. *CONTINUOUS FLEXPAN 200 AROUND PERIMETER (3.750" X .188") FURNISHED WITH E119 FRAME*
3. *GLAZING TAPE (.125" X .750") FURNISHED WITH E119 FRAME*
4. *GLAZING SNAP ON BEADS (1.38"X .750"X .094") FURNISHED WITH E119 FRAME*
5. *FIRE RATED SEAL BY OTHERS:*
   - *A. WELL PACKED ROCKWOOL*
6. *SHIM AS REQUIRED, BY OTHERS.*
7. *FINISH SEALANT BY OTHERS*
8. *ANCHOR HOLES ARE PREDRILLED AT THE FACTORY. ANCHOR SCREWS SUITABLE FOR GROUT FILLED CMU BY OTHERS. ANCHOR SCREWS DETERMINED BY INSTALLER BASED ON WALL CONDITION.*
9. *FLUSH GLAZED FRAMES NOT AVAILABLE*

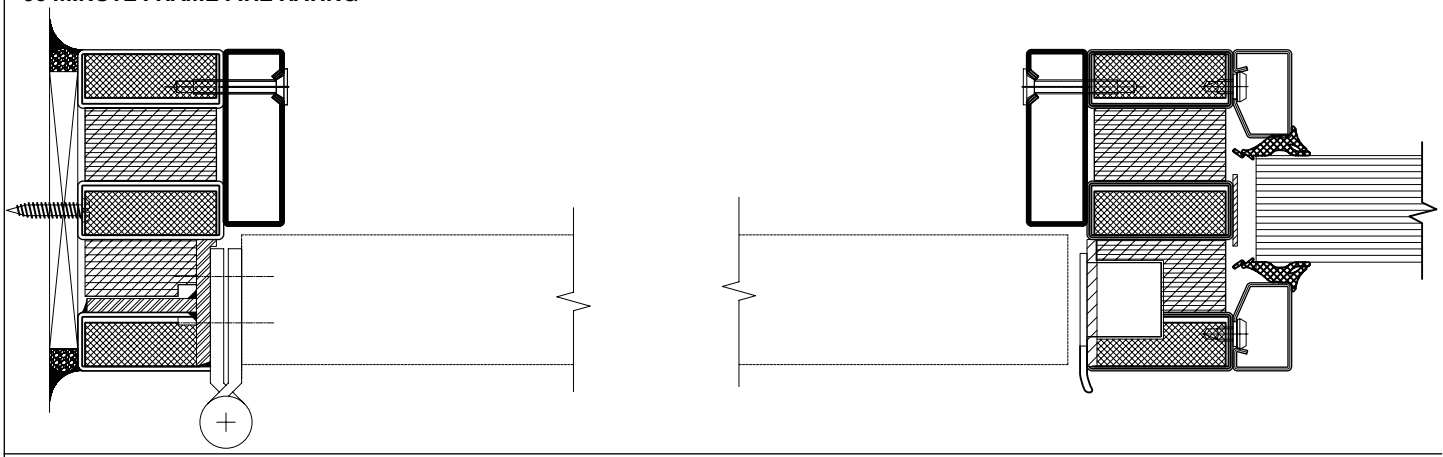
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 FIRE-RESISTIVE 60, 90 & 120 MINUTE FRAME WITH HOLLOW METAL DOOR

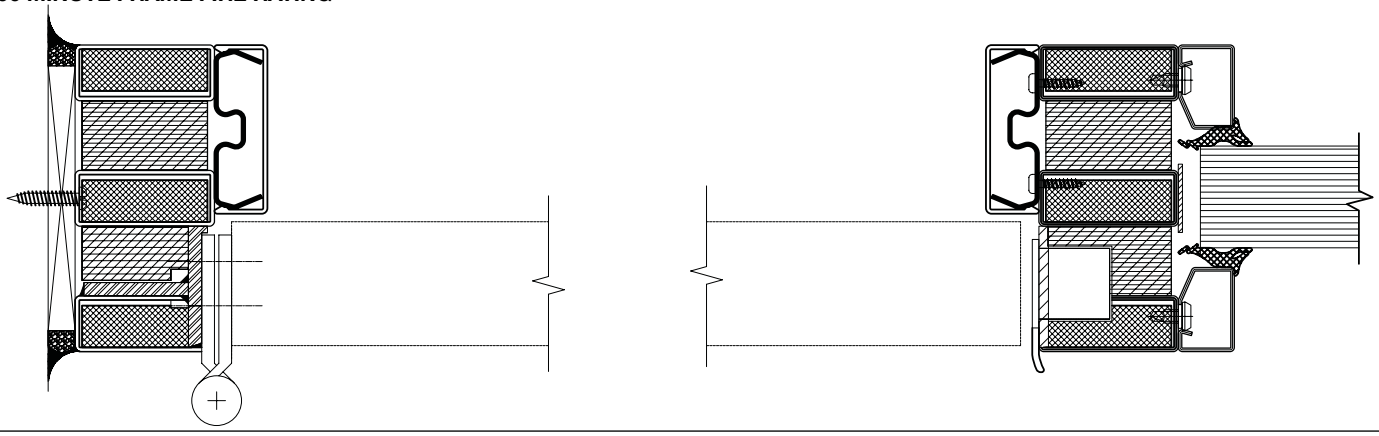
60 MINUTE FRAME FIRE RATING



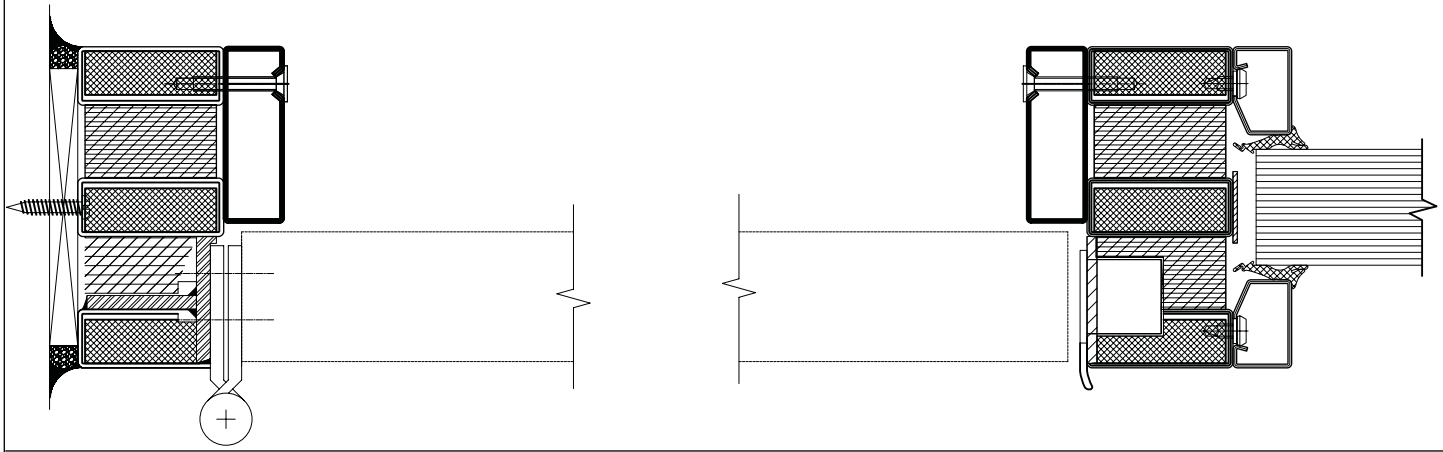
90 MINUTE FRAME FIRE RATING



90 MINUTE FRAME FIRE RATING

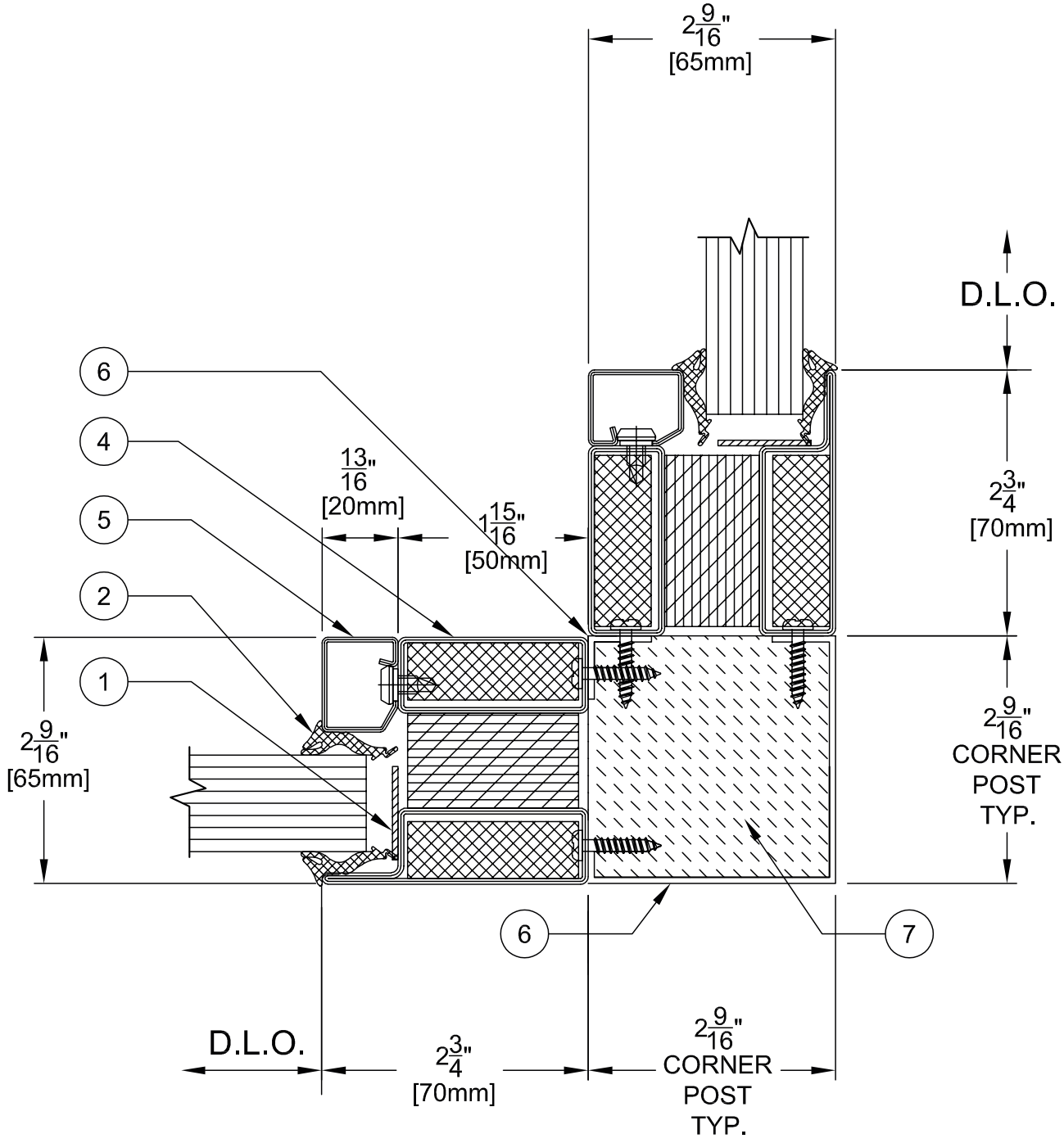


120 MINUTE FRAME FIRE RATING



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 60 MINUTE 90° CORNER FRAME



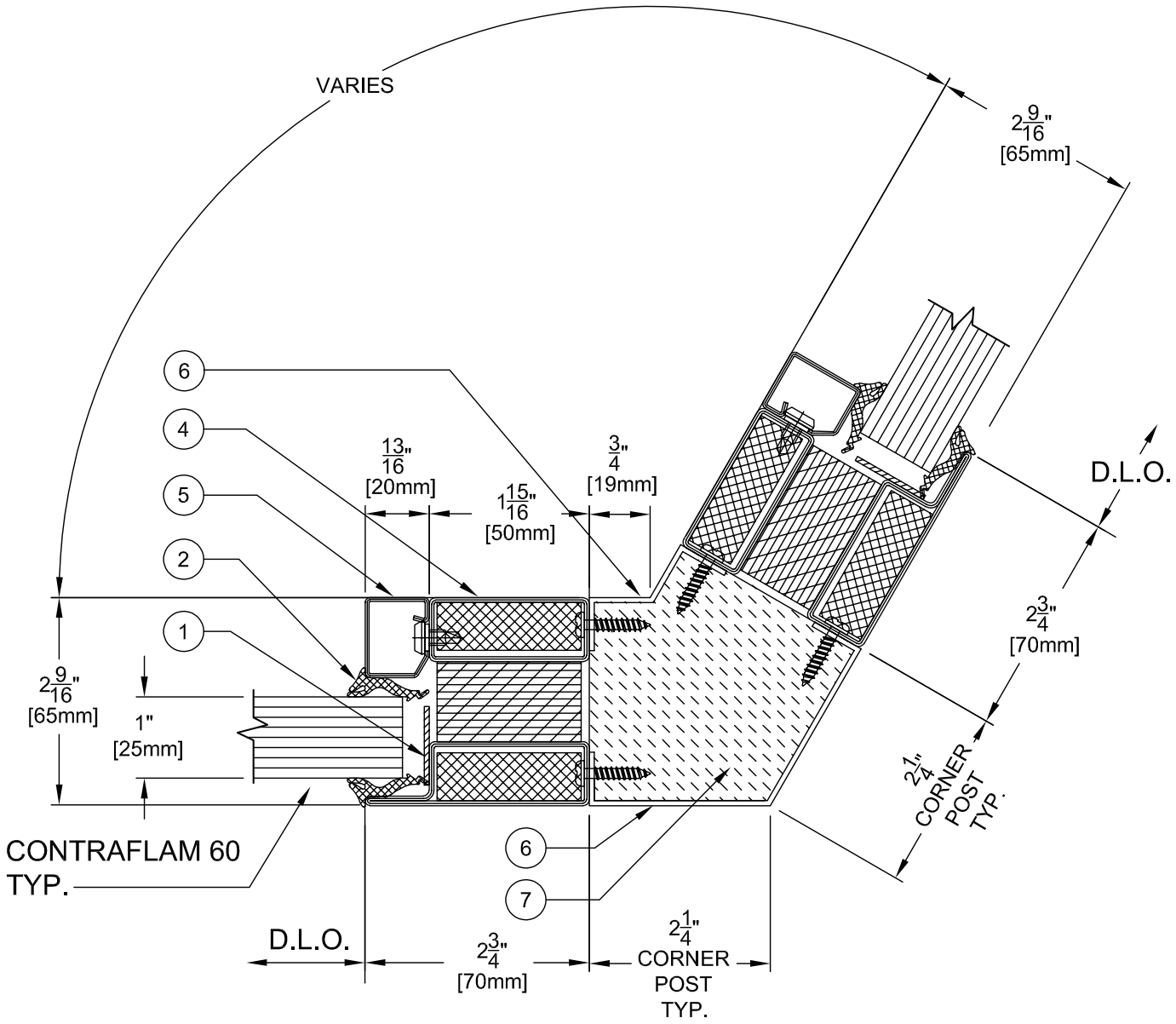
NOTES:

1. *CONTINUOUS INTUMESCENT TAPE FURNISHED WITH E119 FRAME*
2. *GLAZING GASKET (BOTH SIDES) FURNISHED WITH E119 FRAME*
3. *ANCHOR SCREWS BY OTHERS - PLACE 20" O.C. MAX. HEAD DIA. 3/8"; MAX. SHANK DIA. 1/4"*
4. *FIRE RATED E119 FRAME*
5. *STEEL GLAZING BEAD INSTALL OVER GLAZING BEAD SCREW*
6. *16 GA. STEEL SHEET METAL COVER; LENGTH PER E119 FRAME HEIGHT*
7. *INSULATED CORNER POST*

NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 60 MINUTE ANGLED FRAME



NOTES:

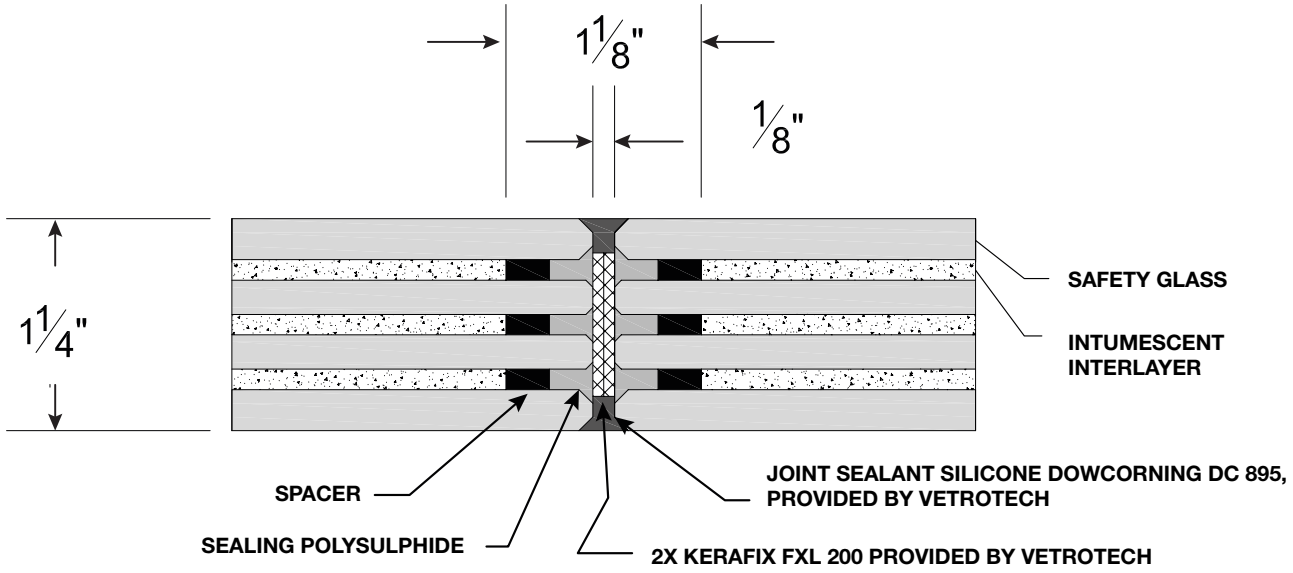
1. *CONTINUOUS INTUMESCENT TAPE FURNISHED WITH E119 FRAME*
2. *GLAZING GASKET (BOTH SIDES) FURNISHED WITH E119 FRAME*
3. *ANCHOR SCREWS BY OTHERS - PLACE 20" O.C. MAX. HEAD DIA. 3/8"; MAX. SHANK DIA. 1/4"*
4. *FIRE RATED E119 FRAME*
5. *STEEL GLAZING BEAD INSTALL OVER GLAZING BEAD SCREW*
6. *16 GA. STEEL SHEET METAL COVER; LENGTH PER E119 FRAME HEIGHT*
7. *INSULATED CORNER POST*

NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS)

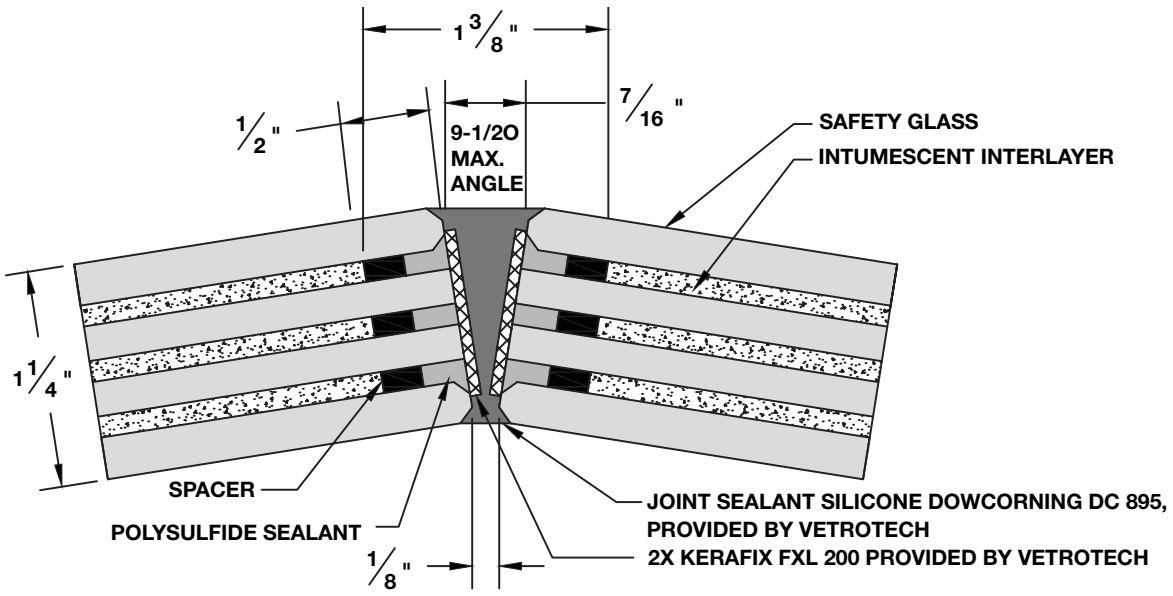
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

CONTRAFLAM 60 STRUCTURE JOINT OPTIONS

CONTRAFLAM 60 STRUCTURE JOINT

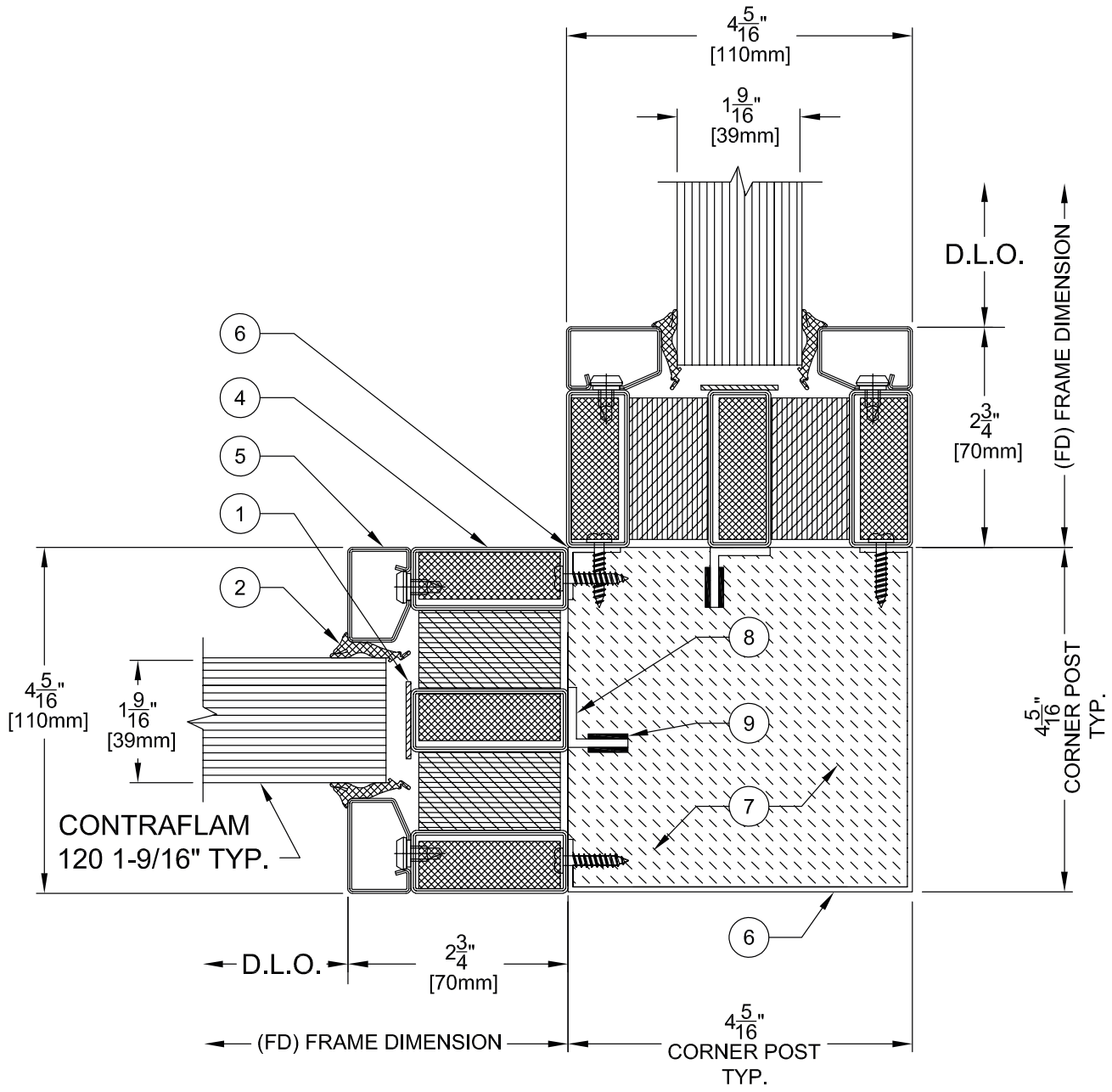


CONTRAFLAM 60 ANGLE STRUCTURE JOINT



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 90 AND 120 MINUTE 90° FRAME CORNER



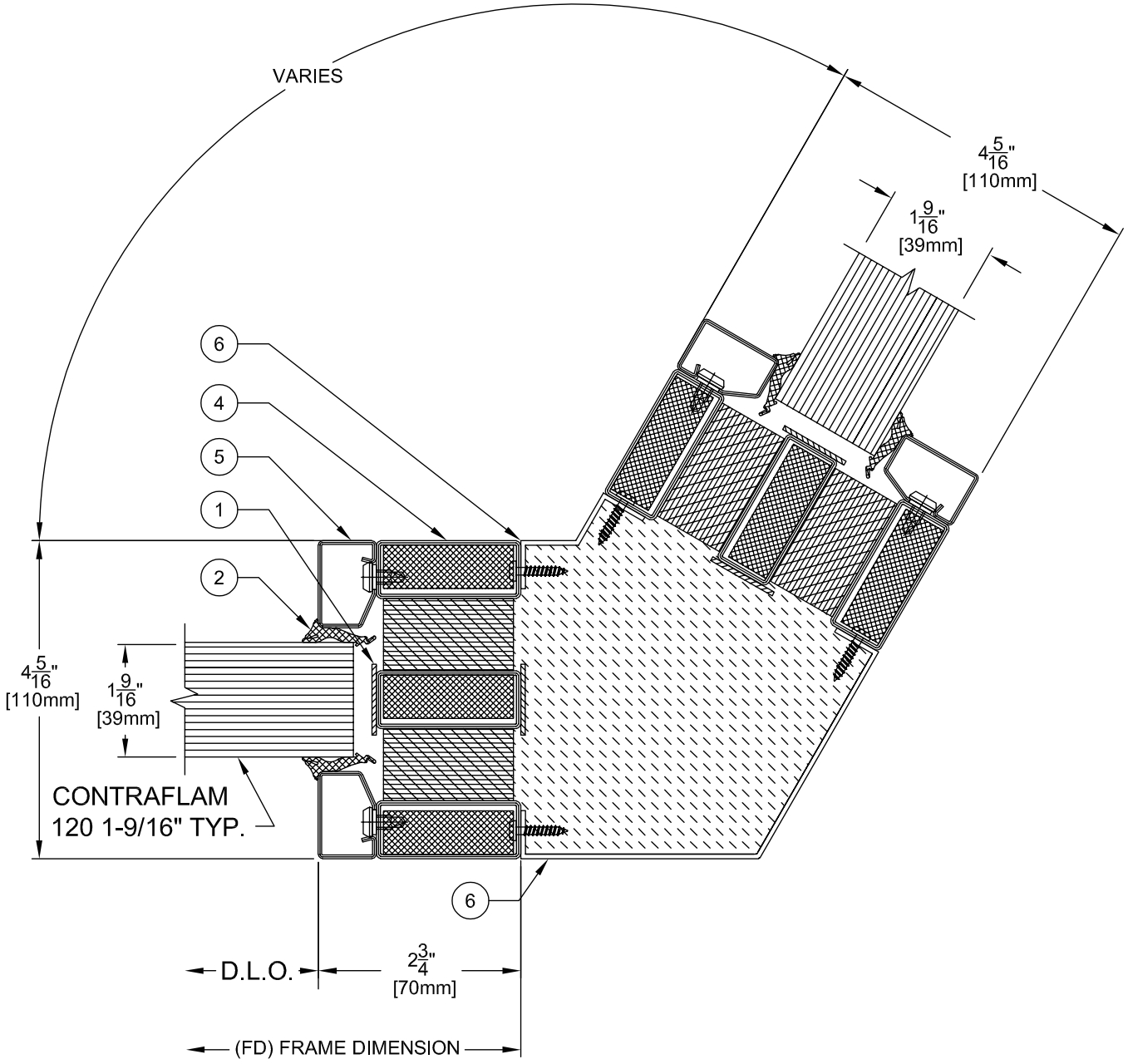
NOTES:

1. *CONTINUOUS INTUMESCENT TAPE FURNISHED WITH E119 FRAME*
2. *GLAZING GASKET (BOTH SIDES) FURNISHED WITH E119 FRAME*
3. *ANCHOR SCREWS BY OTHERS - PLACE 20" O.C. MAX. HEAD DIA. 3/8"; MAX. SHANK DIA. 1/4"*
4. *FIRE RATED E119 FRAME*
5. *STEEL GLAZING BEAD INSTALL OVER GLAZING BEAD SCREW*
6. *16 GA. STEEL SHEET METAL COVER; LENGTH PER E119 FRAME HEIGHT*
7. *INSULATED CORNER POST*

NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 90 AND 120 MINUTE ANGLED FRAME



NOTES:

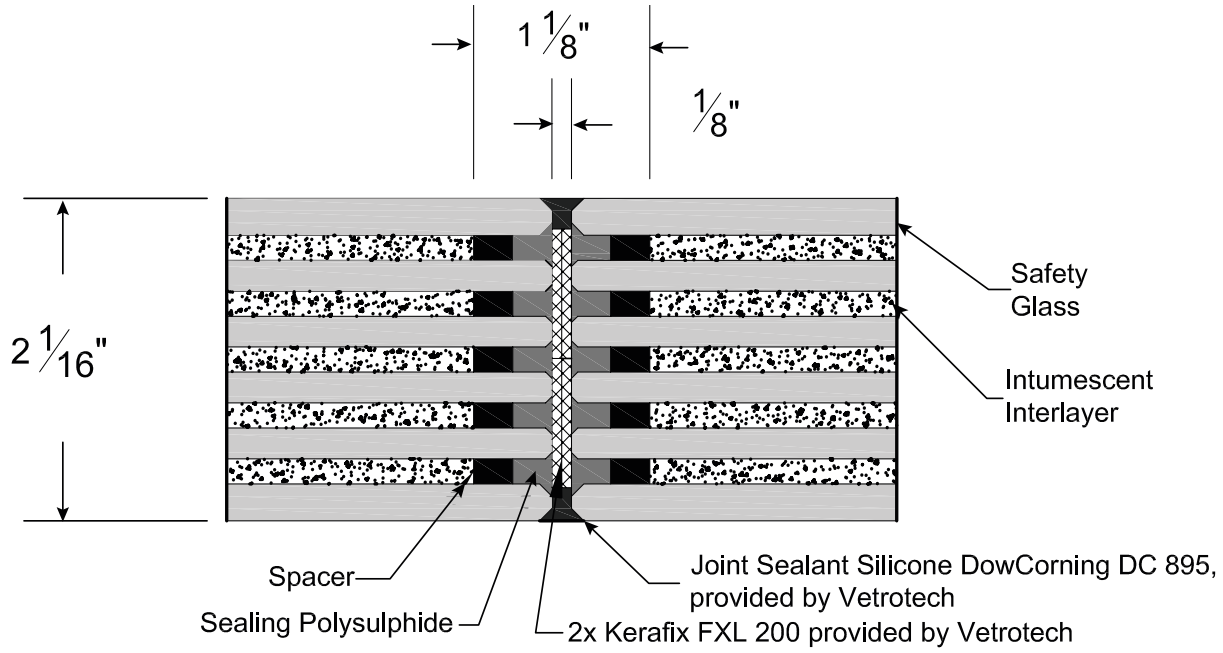
1. *CONTINUOUS INTUMESCENT TAPE FURNISHED WITH E119 FRAME*
2. *GLAZING GASKET (BOTH SIDES) FURNISHED WITH E119 FRAME*
3. *ANCHOR SCREWS BY OTHERS - PLACE 20" O.C. MAX. HEAD DIA. 3/8"; MAX. SHANK DIA. 1/4"*
4. *FIRE RATED E119 FRAME*
5. *STEEL GLAZING BEAD INSTALL OVER GLAZING BEAD SCREW*
6. *16 GA. STEEL SHEET METAL COVER; LENGTH PER E119 FRAME HEIGHT*
7. *INSULATED CORNER POST*

NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS)

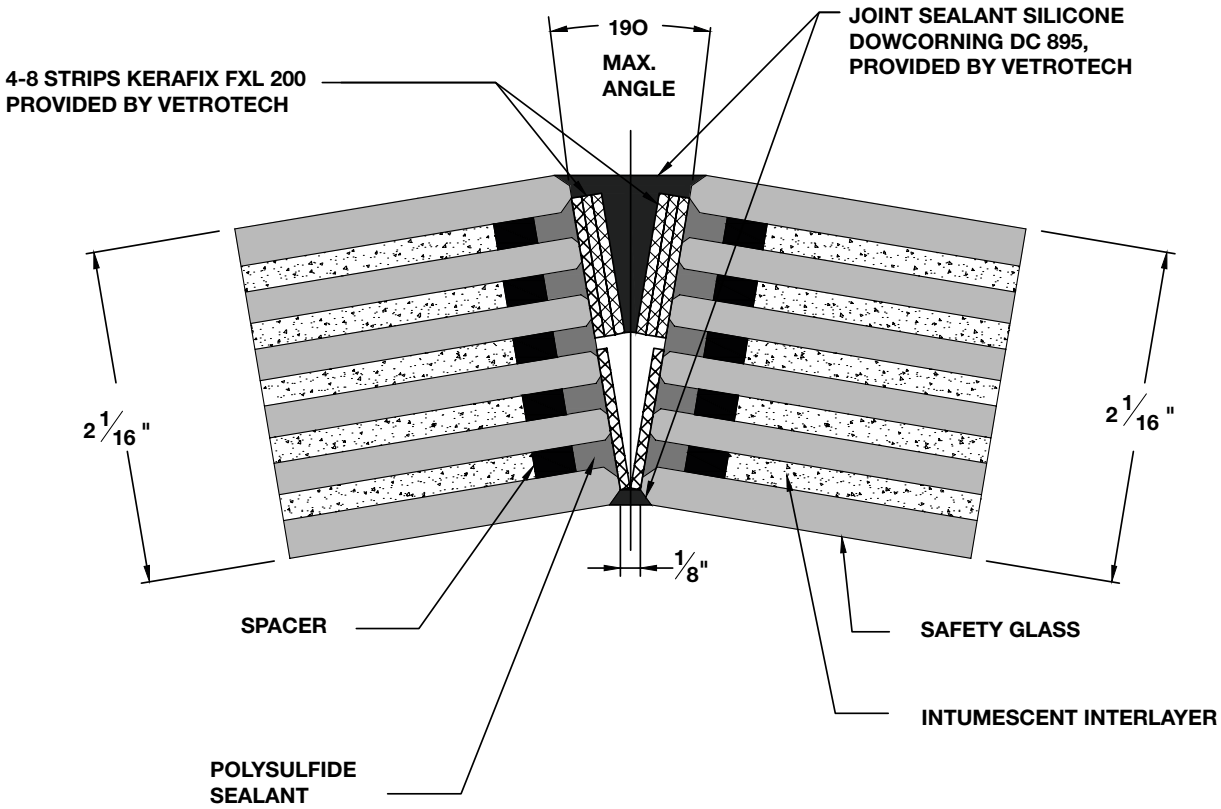
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

CONTRAFLAM 120 STRUCTURE JOINT OPTIONS

CONTRAFLAM 120 STRUCTURE JOINT



CONTRAFLAM 120 ANGLE STRUCTURE JOINT

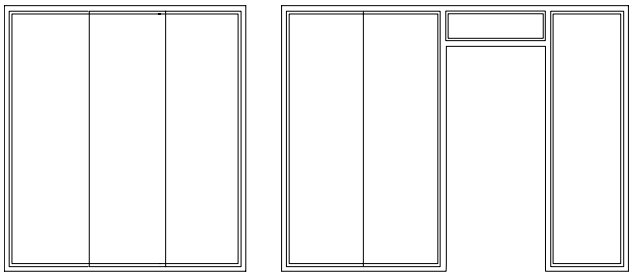


(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

FIRE WINDOW FRAME

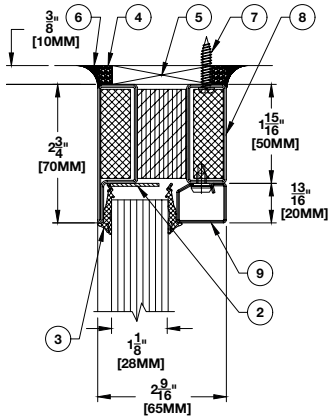
60 OR 120 MINUTE MAXIMUM RATING
FIRE RESISTIVE E119 FRAME ASSEMBLY
CONTRAFLAM STRUCTURE 60 OR 120 WITHOUT VERTICAL MULLIONS

MAY BE USED ON TRANSOMS AND SIDELIGHTS

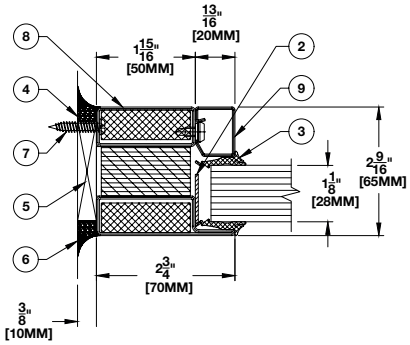


60 MINUTE RATING

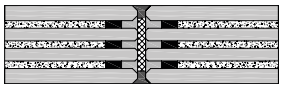
A HEAD DETAIL
6"=1'-0"



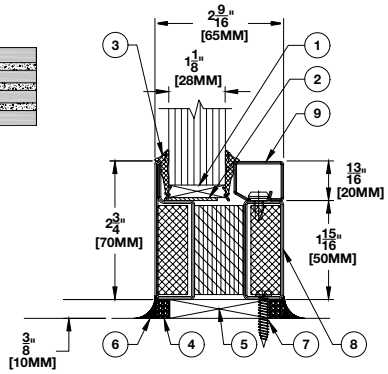
B JAMB DETAIL
6"=1'-0"



C STRUCTURE JOINT
6"=1'-0"

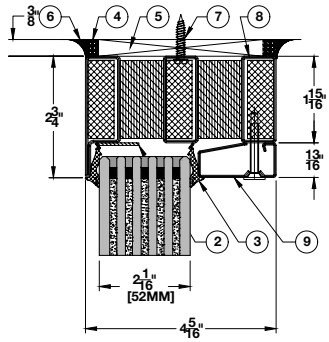


D SILL DETAIL
6"=1'-0"

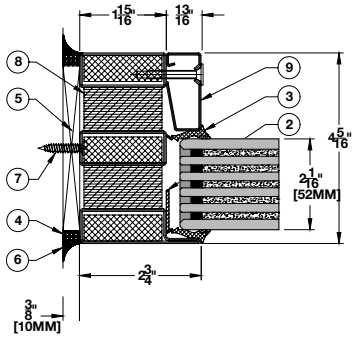


120 MINUTE RATING

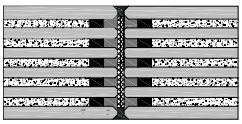
A HEAD DETAIL
6"=1'-0"



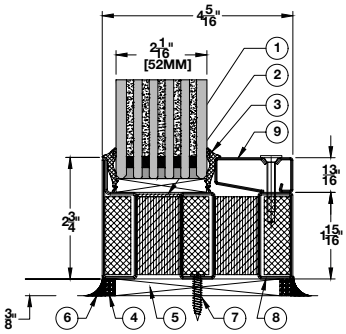
B JAMB DETAIL
6"=1'-0"



C STRUCTURE JOINT
6"=1'-0"



D SILL DETAIL
6"=1'-0"



NOTES:

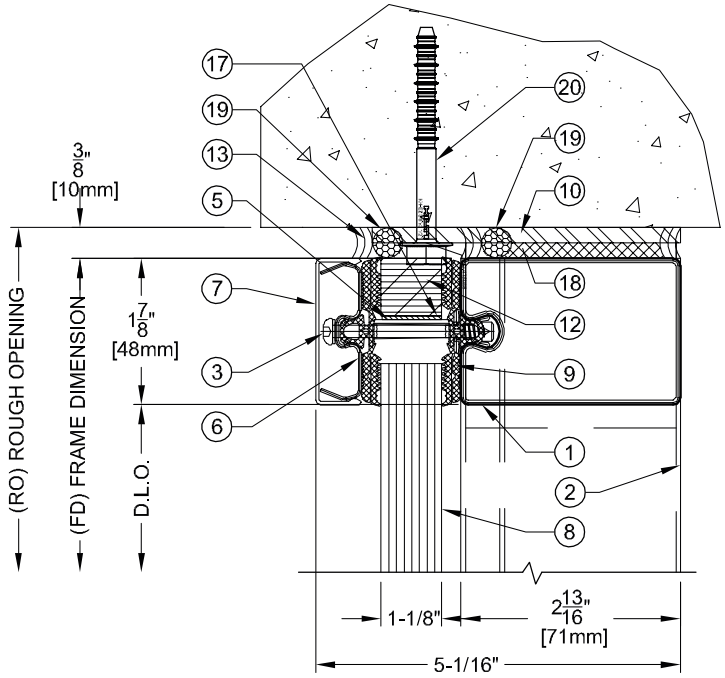
1. *SETTING BLOCK (SILL OR HORIZONTAL MULLION ONLY) BY OTHERS. ALTERNATES BY OTHERS:*
   - *A. HARDWOOD*
   - *B. CALCIUM SILICATE*
   - *C. NEOPRENE (90 DUROMETER)*
2. *CONTINUOUS INTUMESCENT TAPE FURNISHED. E119 FRAME INSTALLED BY OTHERS.*
3. **GLAZING GASKET (BOTH SIDES) FURNISHED. E119 FRAME INSTALLED BY OTHERS*
4. *FIRE RATED SEAL IN SHIM SPACE BY OTHERS.ACCEPTABLE ALTERNATIVES: WELL PACKED ROCKWOOL, CONTINUOUS INTUMESCENT CAULKING,OR CONTINUOUS INTUMESCENT TAPE.*
5. *SHIMS BY OTHERS. ACCEPTABLE ALTERNATES:HARDWOOD, CALCIUM SILICATE, OR CEDAR SHINGLES.*
6. *FINISH SEALANT BY OTHERS*
7. *ANCHOR SCREWS BY OTHERS. PLACE 20" O.C. MAX. HEAD DIA. 3/8"; MAX. SHANK DIA. 1/4".*
8. *FIRE RATED E119 FRAME.*
9. *STEEL GLAZING BEAD. INSTALL WITH SCREWS FURNISHED.*
10. *GLASS: VETROTECH CONTRAFLAM STRUCTURE 60 OR 120 MINUTE.*
11. *60 MINUTE MAXIMUM VISIBLE GLASS 138-1/2" X 138-1/2" NOT TO EXCEED 7574 SQ. IN. 120 MINUTE MAXIMUM VISIBLE GLASS 126" X 126" NOT TO EXCEED 4536 SQ. IN. 12. MAXIMUM FRAME SIZE NOT LIMITED. ASSEMBLY IS CONSIDERED A WALL.*
13. *PRODUCT IS NOT LOAD BEARING. ADDITIONAL BUILDING DESIGN FEATURES MAY BE REQUIRED FOR UNITS OVER 12' TALL.*
14. *CENTER GLAZED FRAMES NOT AVAILABLE.*

**NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS).*

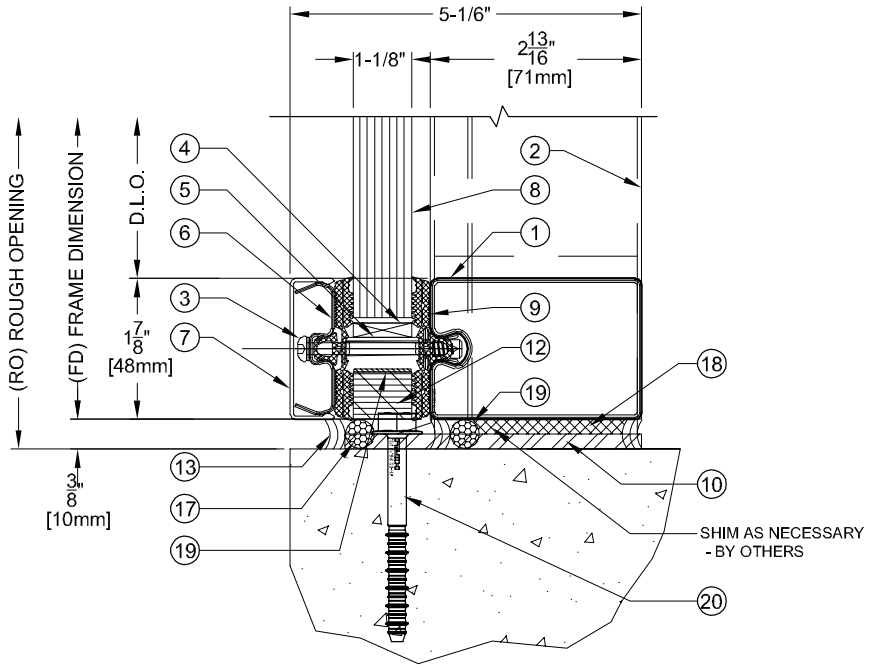
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 60 MINUTE INTERIOR CURTAIN WALL - HEAD AND SILL DETAIL

HEAD DETAIL
SCALE: N.T.S



SILL DETAIL
SCALE: N.T.S



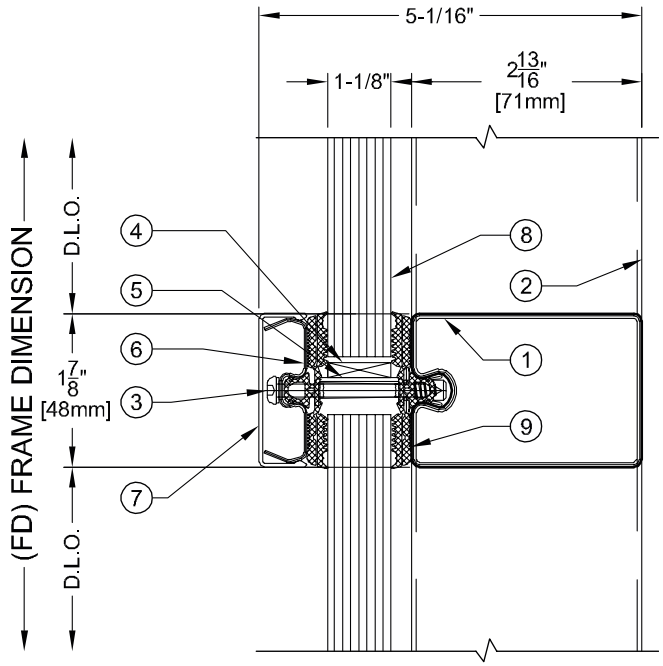
NOTES:

1. *E119 INTERIOR STEEL CURTAIN WALL HORIZONTAL MEMEBER, VARIES, 2-13/16" SHOWN*
2. *E119 INTERIOR STEEL CURTAIN WALL VERTICAL MEMBER, VARIES, 2-13/16" SHOWN*
3. *PRESSURE PLATE LOCKING SCREW W/SPACER*
4. *SETTING BLOCK (BY OTHERS)*
5. *SETTING BLOCK SHELF*
6. *PRESSURE PLATES*
7. *HORIZONTAL COVER CAP*
8. *CONTRAFLAM 60 GLAZING*
9. *HORIZONTAL WEATHER STRIPPING WITH FIN*
10. *FRAME ANCHOR PLATE*
11. *SHEAR LUG FOR VERTICAL PROFILE*
12. *HARDWOOD BLOCK*
13. *FINISH SEALANT (BY OTHERS)*
14. *VERTICAL COVER CAP*
15. *VERTICAL WEATHER STRIPPING*
17. *INTUMESENT TAPE*
18. *MINERAL WOOL (BY OTHERS)*
19. *FIRE STOP & SMOKE SEAL (BY OTHERS)*
20. *ANCHORS (BY OTHERS)*

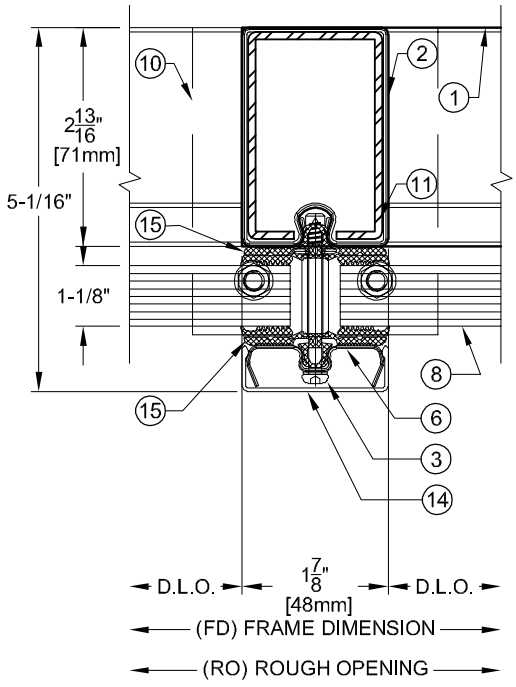
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 60 MINUTE INTERIOR CURTAIN WALL - MULLION DETAILS

HORIZONTAL MULLION DETAIL
SCALE: N.T.S



VERTICAL MULLION
SCALE: N.T.S



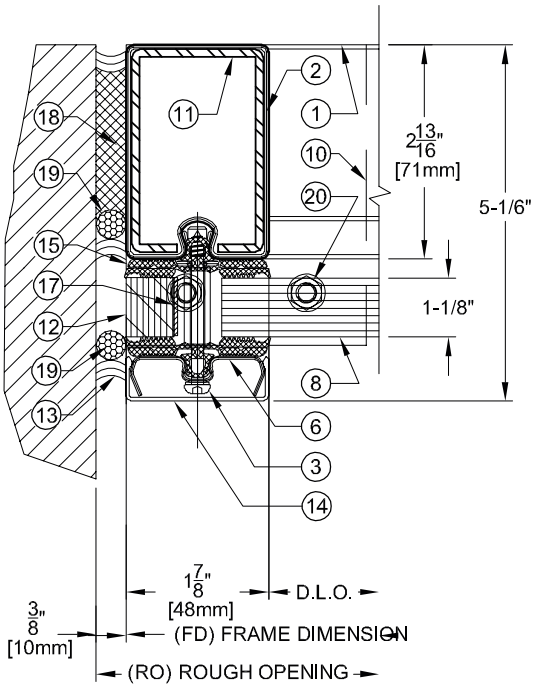
NOTES:

1. *E119 INTERIOR STEEL CURTAIN WALL HORIZONTAL MEMEBER, VARIES, 2-13/16" SHOWN*
2. *E119 INTERIOR STEEL CURTAIN WALL VERTICAL MEMBER, VARIES, 2-13/16" SHOWN*
3. *PRESSURE PLATE LOCKING SCREW W/SPACER*
4. *SETTING BLOCK (BY OTHERS)*
5. *SETTING BLOCK SHELF*
6. *PRESSURE PLATES*
7. *HORIZONTAL COVER CAP*
8. *CONTRAFLAM 60 GLAZING*
9. *HORIZONTAL WEATHER STRIPPING WITH FIN*
10. *FRAME ANCHOR PLATE*
11. *SHEAR LUG FOR VERTICAL PROFILE*
12. *HARDWOOD BLOCK*
13. *FINISH SEALANT (BY OTHERS)*
14. *VERTICAL COVER CAP*
15. *VERTICAL WEATHER STRIPPING*
17. *INTUMESENT TAPE*
18. *MINERAL WOOL (BY OTHERS)*
19. *FIRE STOP & SMOKE SEAL (BY OTHERS)*
20. *ANCHORS (BY OTHERS)*

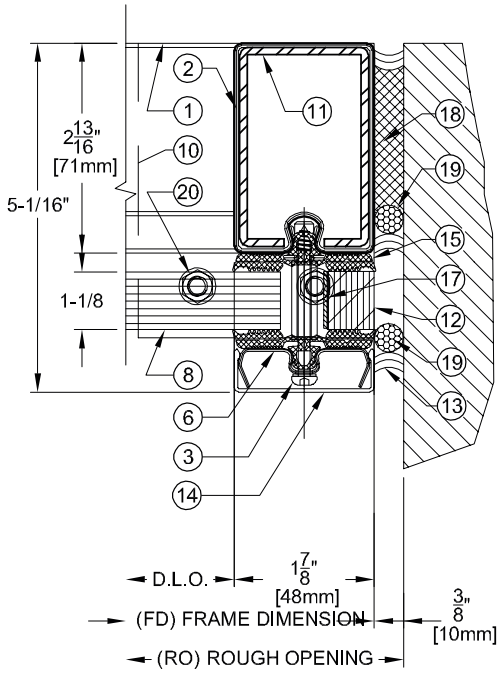
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 60 MINUTE INTERIOR CURTAIN WALL - JAMB DETAILS

JAMB DETAIL - LEFT
SCALE: N.T.S



JAMB DETAIL - RIGHT
SCALE: N.T.S



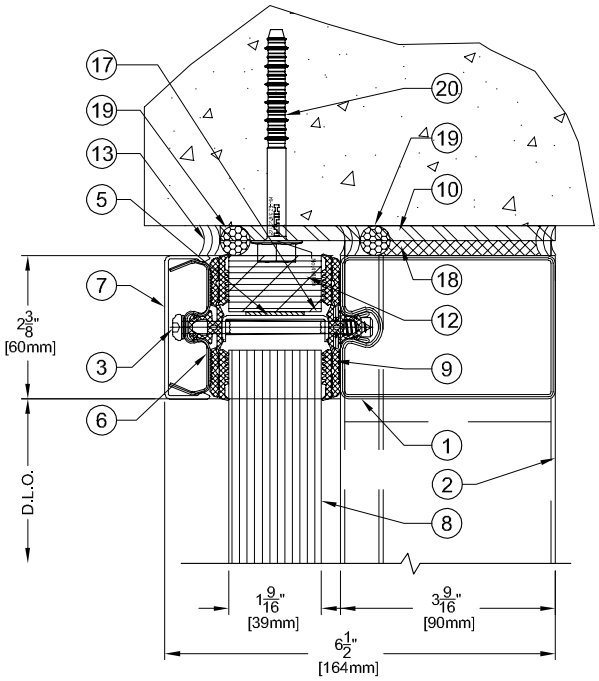
NOTES:

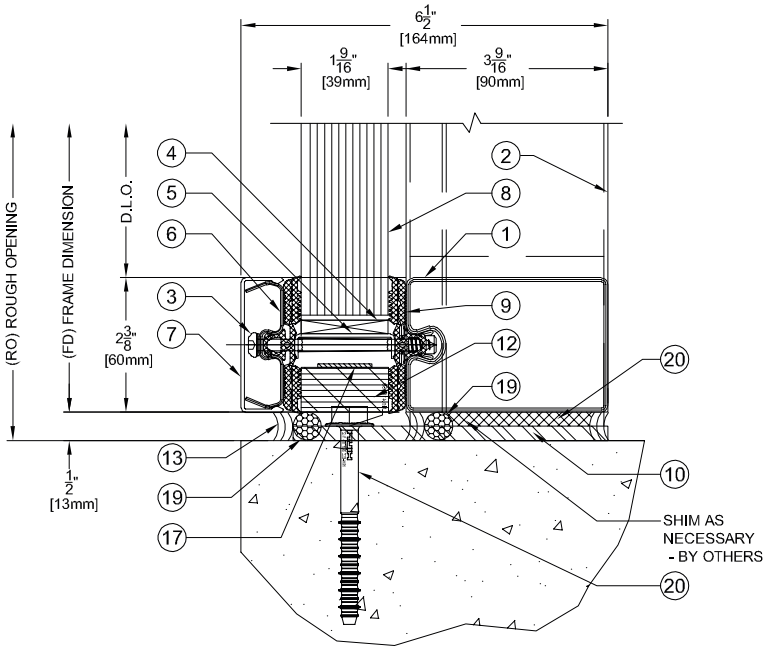
1. *E119 INTERIOR STEEL CURTAIN WALL HORIZONTAL MEMEBER, VARIES, 2-13/16" SHOWN*
2. *E119 INTERIOR STEEL CURTAIN WALL VERTICAL MEMBER, VARIES, 2-13/16" SHOWN*
3. *PRESSURE PLATE LOCKING SCREW W/SPACER*
4. *SETTING BLOCK (BY OTHERS)*
5. *SETTING BLOCK SHELF*
6. *PRESSURE PLATES*
7. *HORIZONTAL COVER CAP*
8. *CONTRAFLAM 60 GLAZING*
9. *HORIZONTAL WEATHER STRIPPING WITH FIN*
10. *FRAME ANCHOR PLATE*
11. *SHEAR LUG FOR VERTICAL PROFILE*
12. *HARDWOOD BLOCK*
13. *FINISH SEALANT (BY OTHERS)*
14. *VERTICAL COVER CAP*
15. *VERTICAL WEATHER STRIPPING*
17. *INTUMESENT TAPE*
18. *MINERAL WOOL (BY OTHERS)*
19. *FIRE STOP & SMOKE SEAL (BY OTHERS)*
20. *ANCHORS (BY OTHERS*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 120 MINUTE INTERIOR CURTAIN WALL - HEAD AND SILL DETAILS

HEAD DETAIL
SCALE: N.T.S





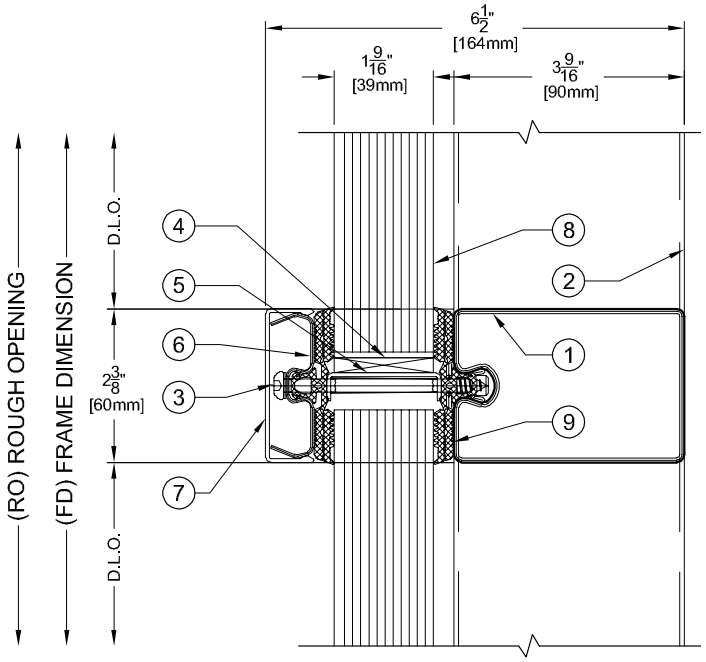
NOTES:

1. *E119 INTERIOR STEEL CURTAIN WALL HORIZONTAL MEMEBER*
2. *E119 INTERIOR STEEL CURTAIN WALL VERTICAL MEMBER*
3. *PRESSURE PLATE LOCKING SCREW W/SPACER*
4. *SETTING BLOCK (BY OTHERS)*
5. *SETTING BLOCK SHELF*
6. *PRESSURE PLATES*
7. *HORIZONTAL COVER CAP*
8. *CONTRAFLAM 120 GLAZING*
9. *HORIZONTAL WEATHER STRIPPING*
10. *FRAME ANCHOR PLATE AT VERTICAL*
11. *SHEAR LUG FOR VERTICAL PROFILE*
12. *HARDWOOD BLOCK*
13. *FINISH SEALANT (BY OTHERS)*
14. *VERTICAL COVER CAP*
15. *VERTICAL WEATHER STRIPPING*
17. *INTUMESENT TAPE*
18. *MINERAL WOOL (BY OTHERS)*
19. *FIRE STOP & SMOKE SEAL (BY OTHERS)*
20. *ANCHORS (BY OTHERS*

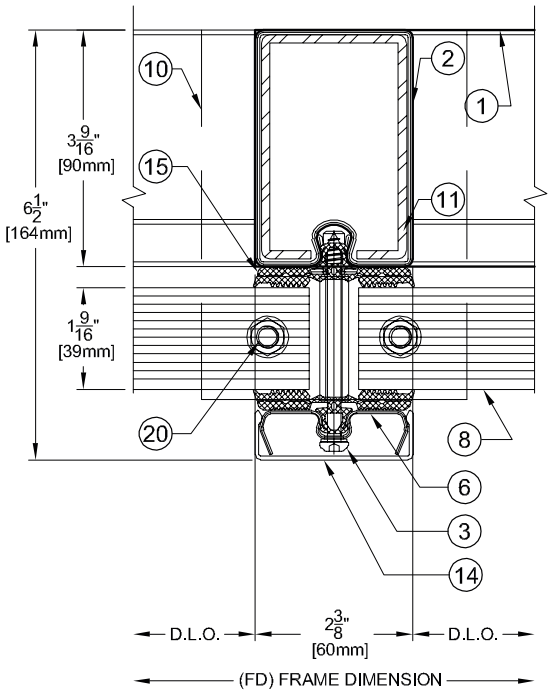
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 120 MINUTE INTERIOR CURTAIN WALL - MULLION DETAILS

HORIZONTAL MULLION DETAIL
SCALE: N.T.S



VERTICAL MULLION
SCALE: N.T.S



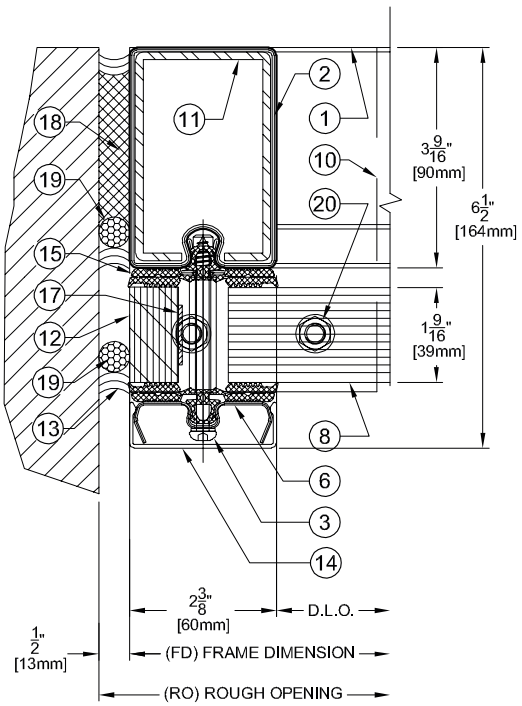
NOTES:

1. *E119 INTERIOR STEEL CURTAIN WALL HORIZONTAL MEMEBER*
2. *E119 INTERIOR STEEL CURTAIN WALL VERTICAL MEMBER*
3. *PRESSURE PLATE LOCKING SCREW W/SPACER*
4. *SETTING BLOCK (BY OTHERS)*
5. *SETTING BLOCK SHELF*
6. *PRESSURE PLATES*
7. *HORIZONTAL COVER CAP*
8. *CONTRAFLAM 120 GLAZING*
9. *HORIZONTAL WEATHER STRIPPING*
10. *FRAME ANCHOR PLATE AT VERTICAL*
11. *SHEAR LUG FOR VERTICAL PROFILE*
12. *HARDWOOD BLOCK*
13. *FINISH SEALANT (BY OTHERS)*
14. *VERTICAL COVER CAP*
15. *VERTICAL WEATHER STRIPPING*
17. *INTUMESENT TAPE*
18. *MINERAL WOOL (BY OTHERS)*
19. *FIRE STOP & SMOKE SEAL (BY OTHERS)*
20. *ANCHORS (BY OTHERS)*

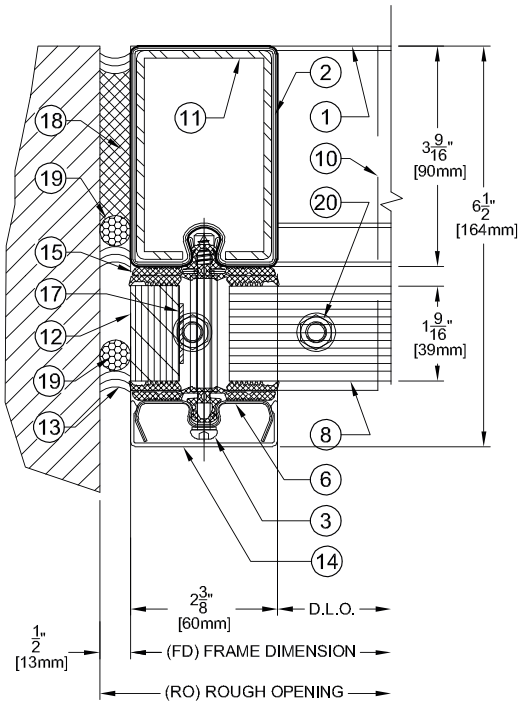
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

E119 120 MINUTE INTERIOR CURTAIN WALL - JAMB DETAILS

JAMB DETAIL - LEFT
SCALE: N.T.S



JAMB DETAIL - RIGHT
SCALE: N.T.S

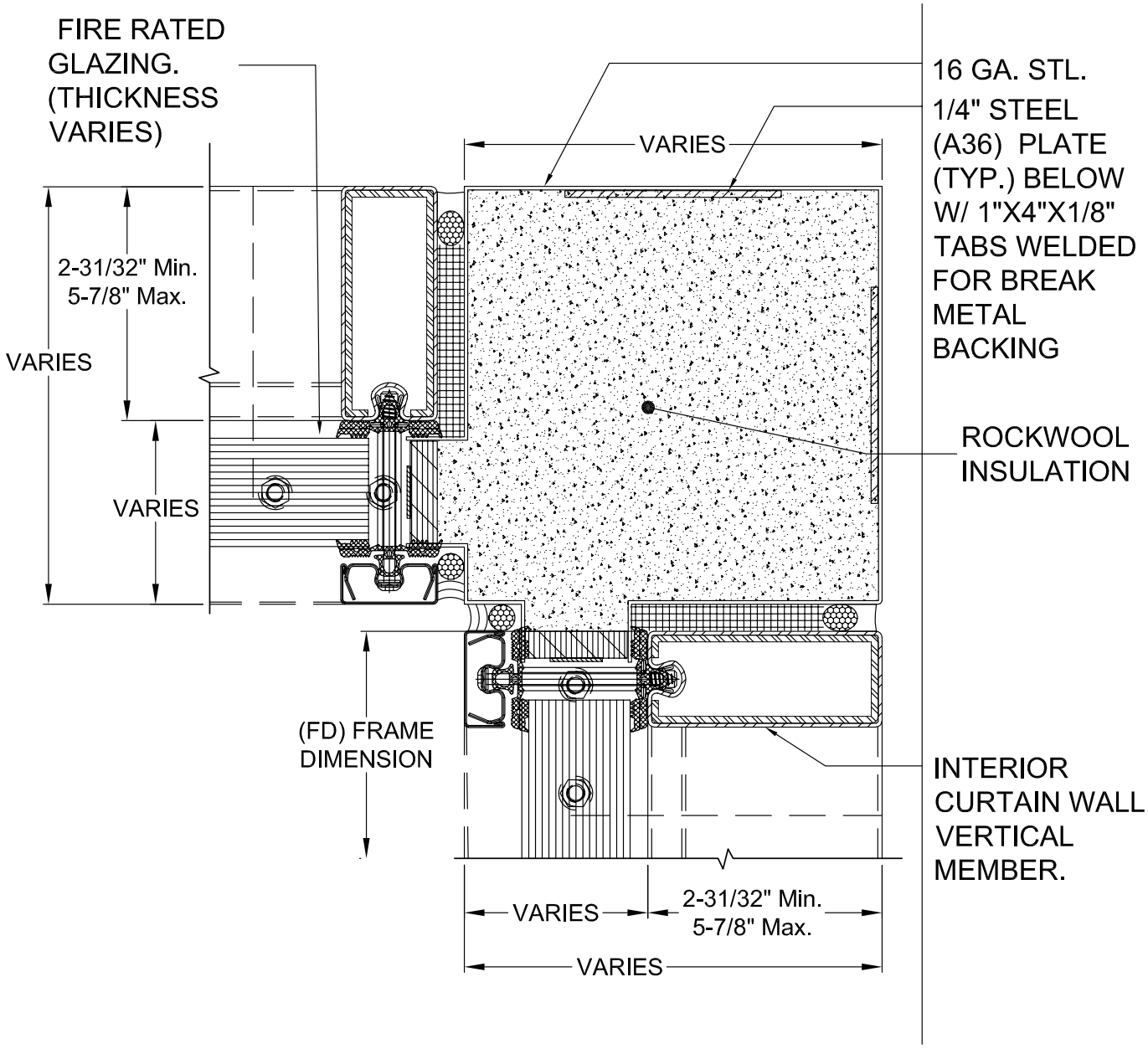


NOTES:

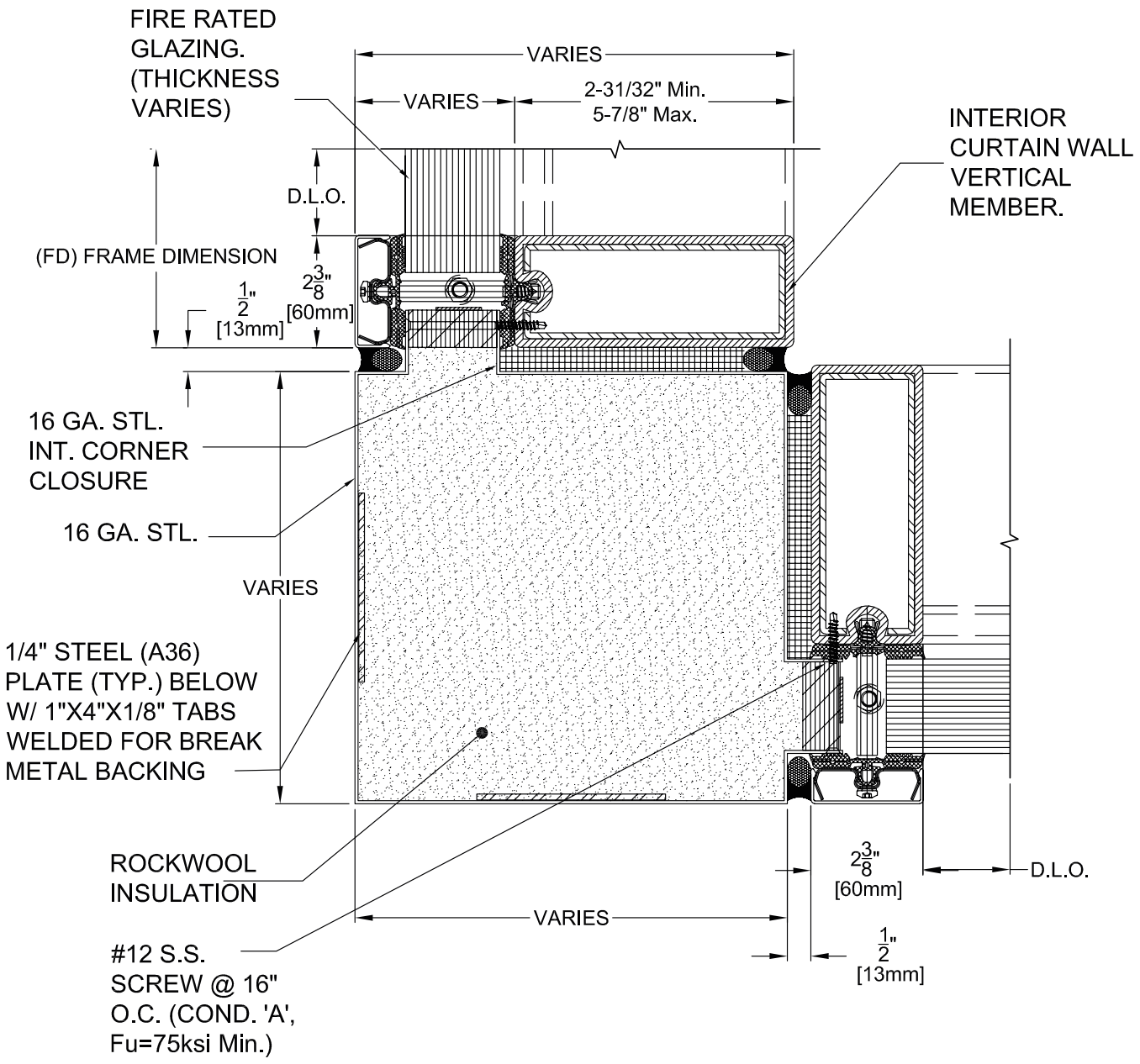
1. *E119 INTERIOR STEEL CURTAIN WALL HORIZONTAL MEMEBER*
2. *E119 INTERIOR STEEL CURTAIN WALL VERTICAL MEMBER*
3. *PRESSURE PLATE LOCKING SCREW W/SPACER*
4. *SETTING BLOCK (BY OTHERS)*
5. *SETTING BLOCK SHELF*
6. *PRESSURE PLATES*
7. *HORIZONTAL COVER CAP*
8. *CONTRAFLAM 120 GLAZING*
9. *HORIZONTAL WEATHER STRIPPING*
10. *FRAME ANCHOR PLATE AT VERTICAL*
11. *SHEAR LUG FOR VERTICAL PROFILE*
12. *HARDWOOD BLOCK*
13. *FINISH SEALANT (BY OTHERS)*
14. *VERTICAL COVER CAP*
15. *VERTICAL WEATHER STRIPPING*
17. *INTUMESENT TAPE*
18. *MINERAL WOOL (BY OTHERS)*
19. *FIRE STOP & SMOKE SEAL (BY OTHERS)*
20. *ANCHORS (BY OTHERS)*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

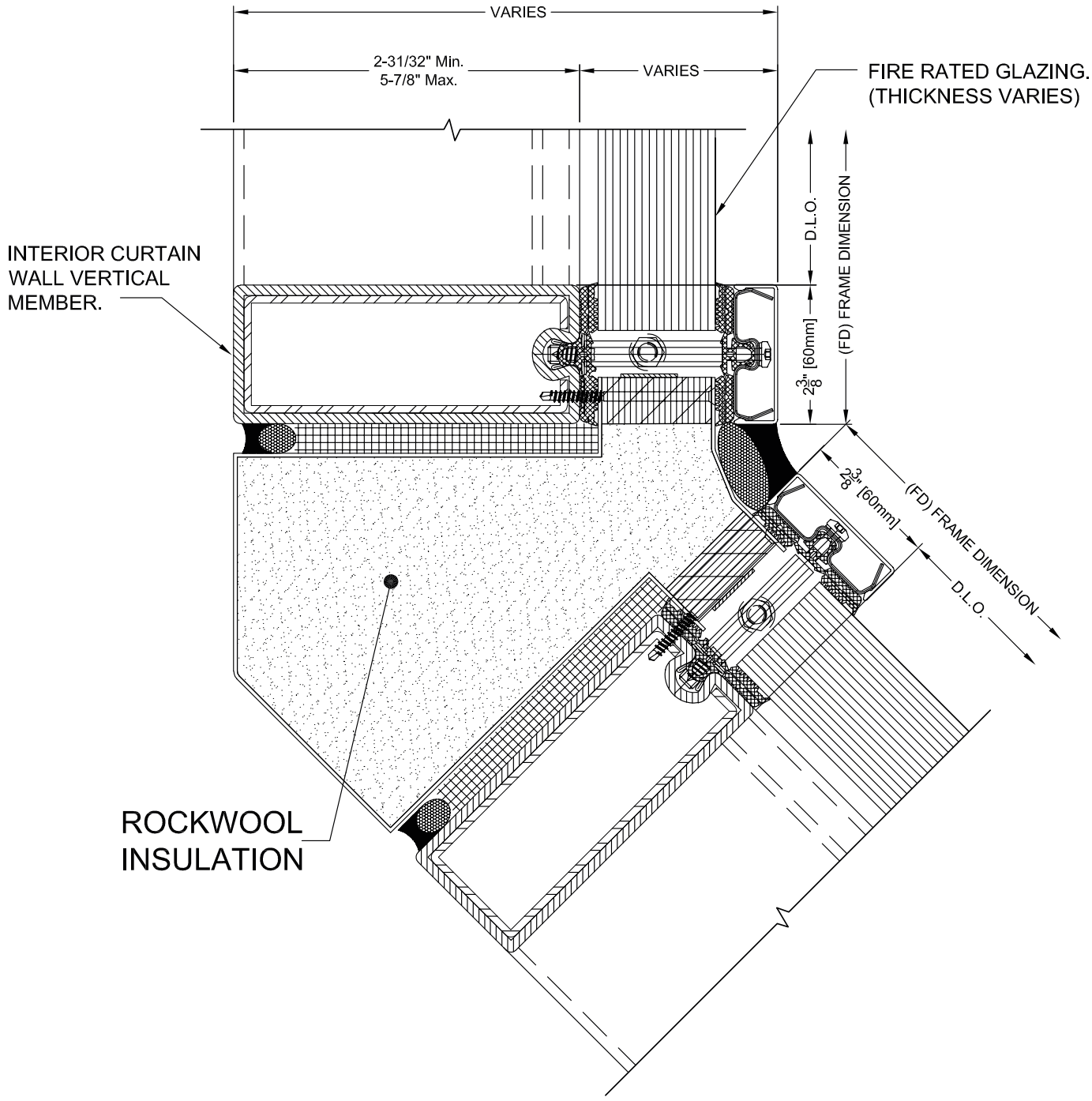
E119 INTERIOR CURTAIN WALL 90° INSIDE CORNER



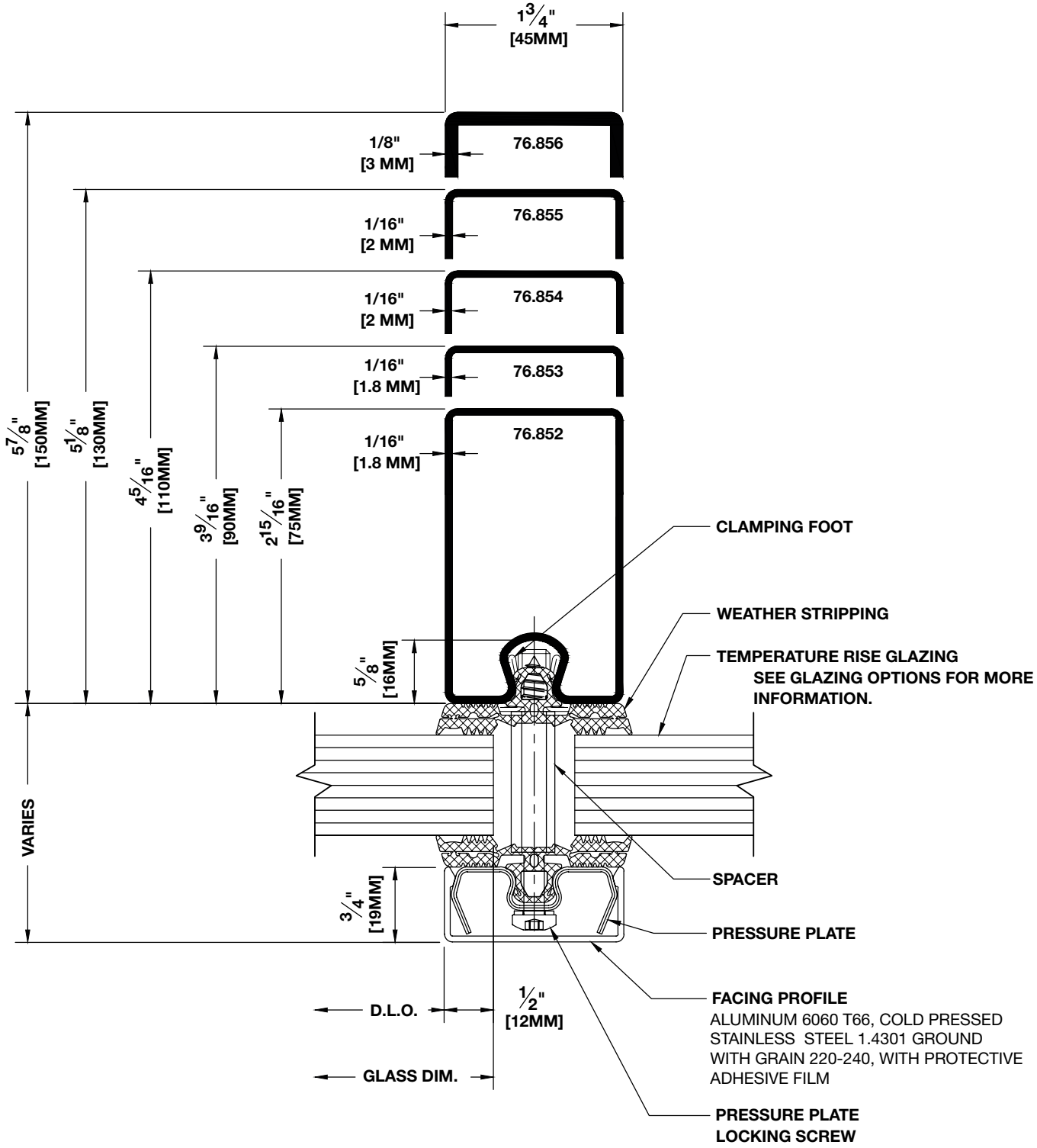
E119 INTERIOR CURTAIN WALL 90º OUTSIDE CORNER



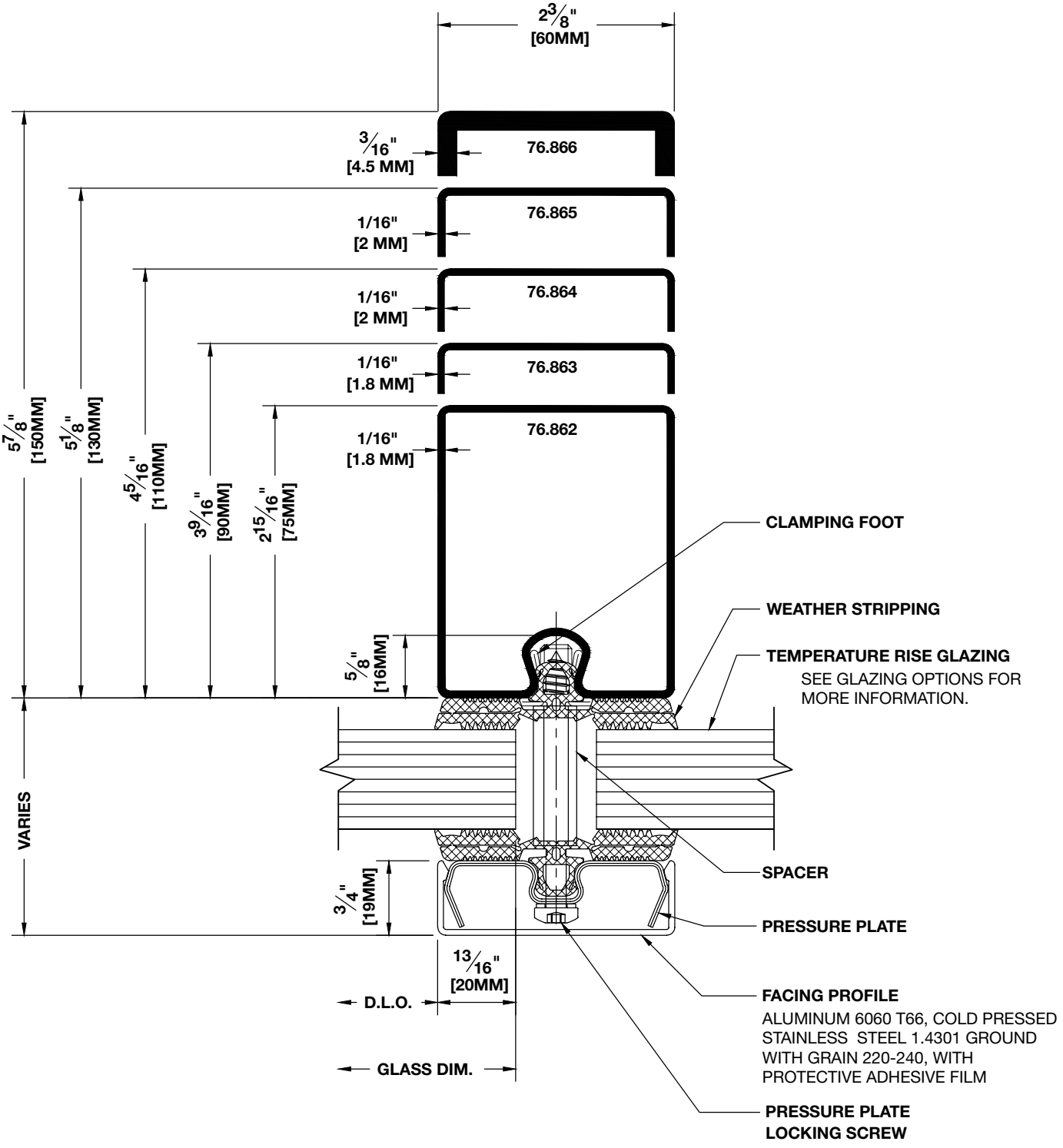
E119 INTERIOR CURTAIN WALL INSIDE ANGLED FRAME



E119 INTERIOR CURTAIN WALL BACK MULLION OPTIONS - 1-3/4" FACE

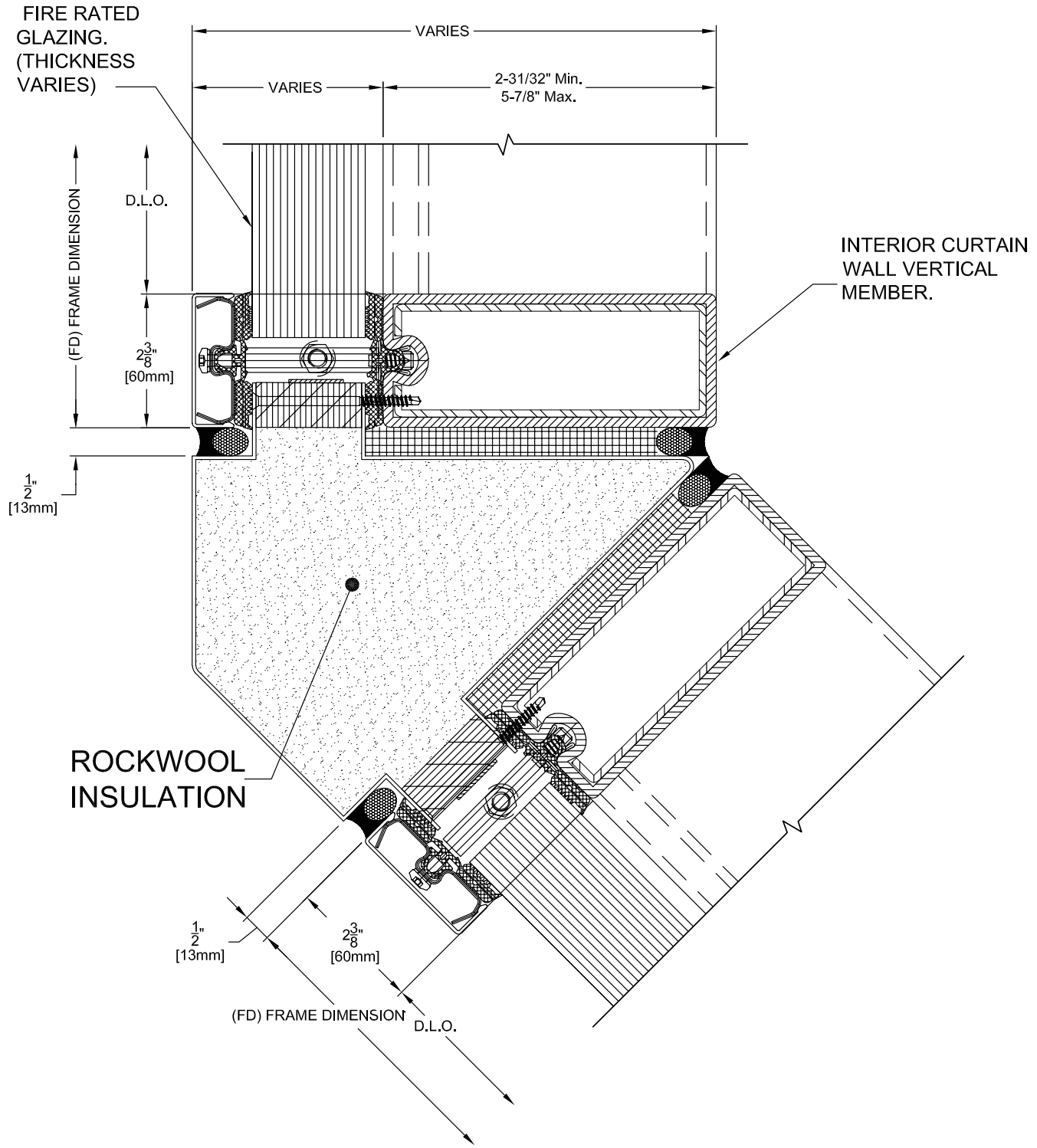


E119 INTERIOR CURTAIN WALL BACK MULLION OPTIONS - 2-3/8” FACE



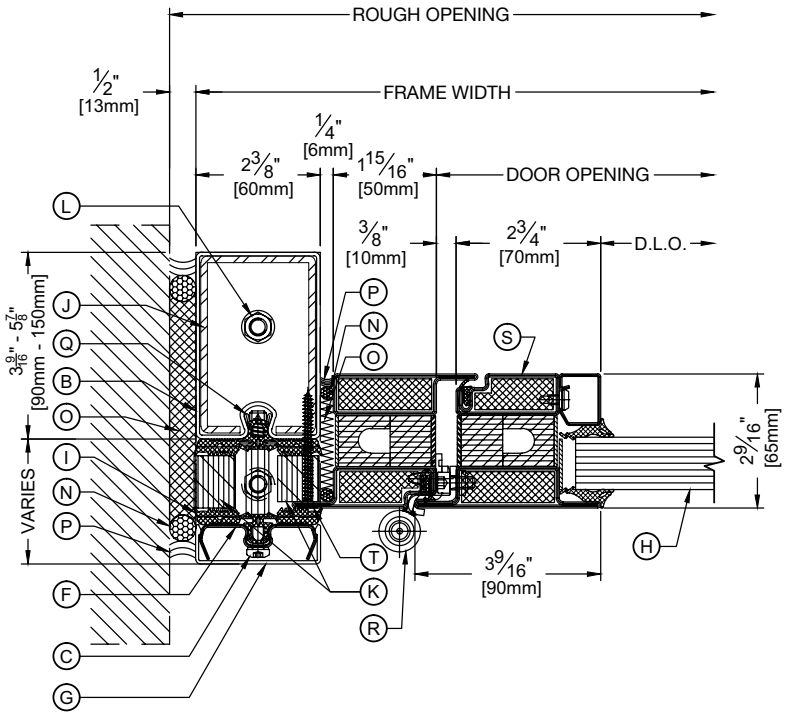
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

E119 INTERIOR CURTAIN WALL OUTSIDE ANGLED FRAME

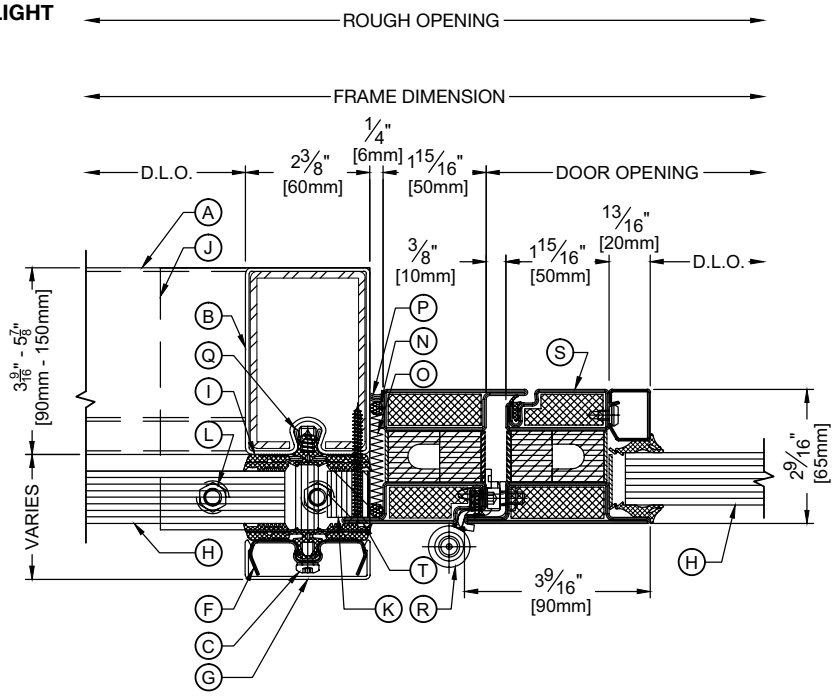


NARROW STILE DOOR JAMB DETAIL/JAMB DETAIL WITH SIDELIGHT

JAMB DETAIL



JAMB DETAIL WITH SIDELIGHT



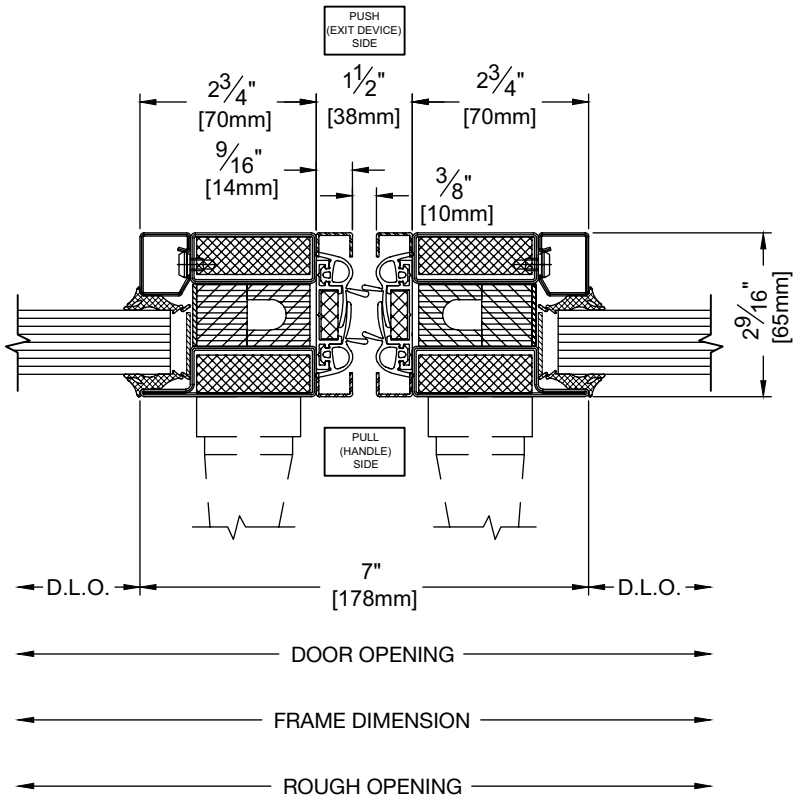
NOTES:

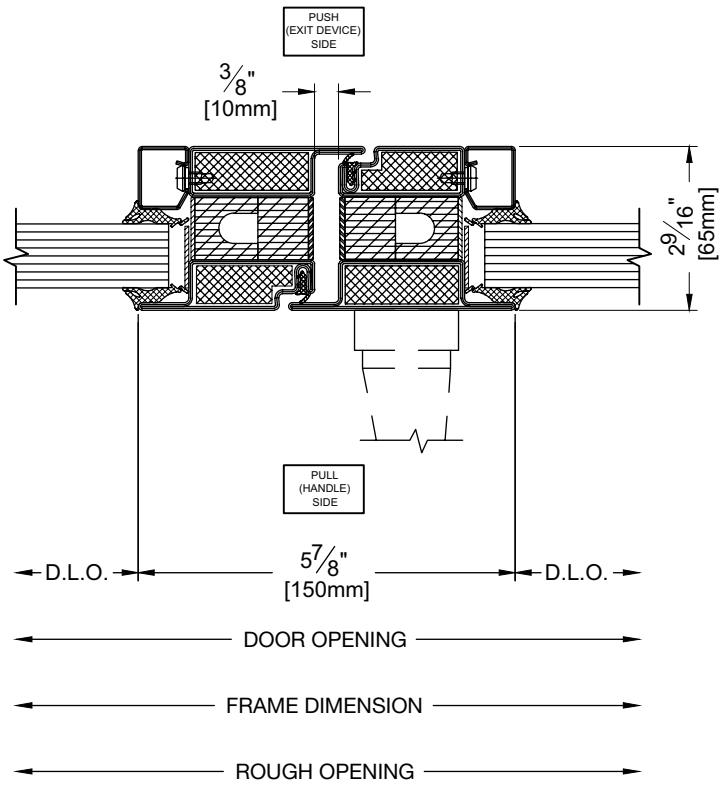
A. STEEL CURTAIN WALL HORIZONTAL MEMBER
B. STEEL CURTAIN WALL VERTICAL MEMBER
C. PRESSURE PLATE LOCKING SCREW
D. SETTING BLOCK (BY OTHERS)
E. SETTING BLOCK SHELF
F. PRESSURE PLATES
G. VERTICAL COVER CAP
I. VEWRTICAL WEATHER STRIPPING
J. SILL AND HEAD PLAT WITH SHEAR LUG AT VERTICAL MULLION
K. HARDWOOD BLOCK
L. ANCHOR (BY OTHERS)
M. SHIM AS NECESSARY (BY OTHERS)
N. FIRE STOP AND SMOKE SEAL (BY OTHERS)
O. FIRE RESISTANT LOOSE INSULATION (BY OTHERS)
P. FINISH SEALANT (BY OTHERS)
Q. CLAMPING FOOT
R. HINGE PER HARDWARE SCHEDULE
S. NARROW STILE 60/90 DOOR
T. DOOR ASSEMBLY FASTENER TO CURTAIN WALL

NOTE: ACTUAL ANCHORING MAY VARY PER PROJECT REQUIREMENTS. DRAWING FOR REFERENCE ONLY.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

NARROW STILE DOOR MEETING EDGE OPTIONS

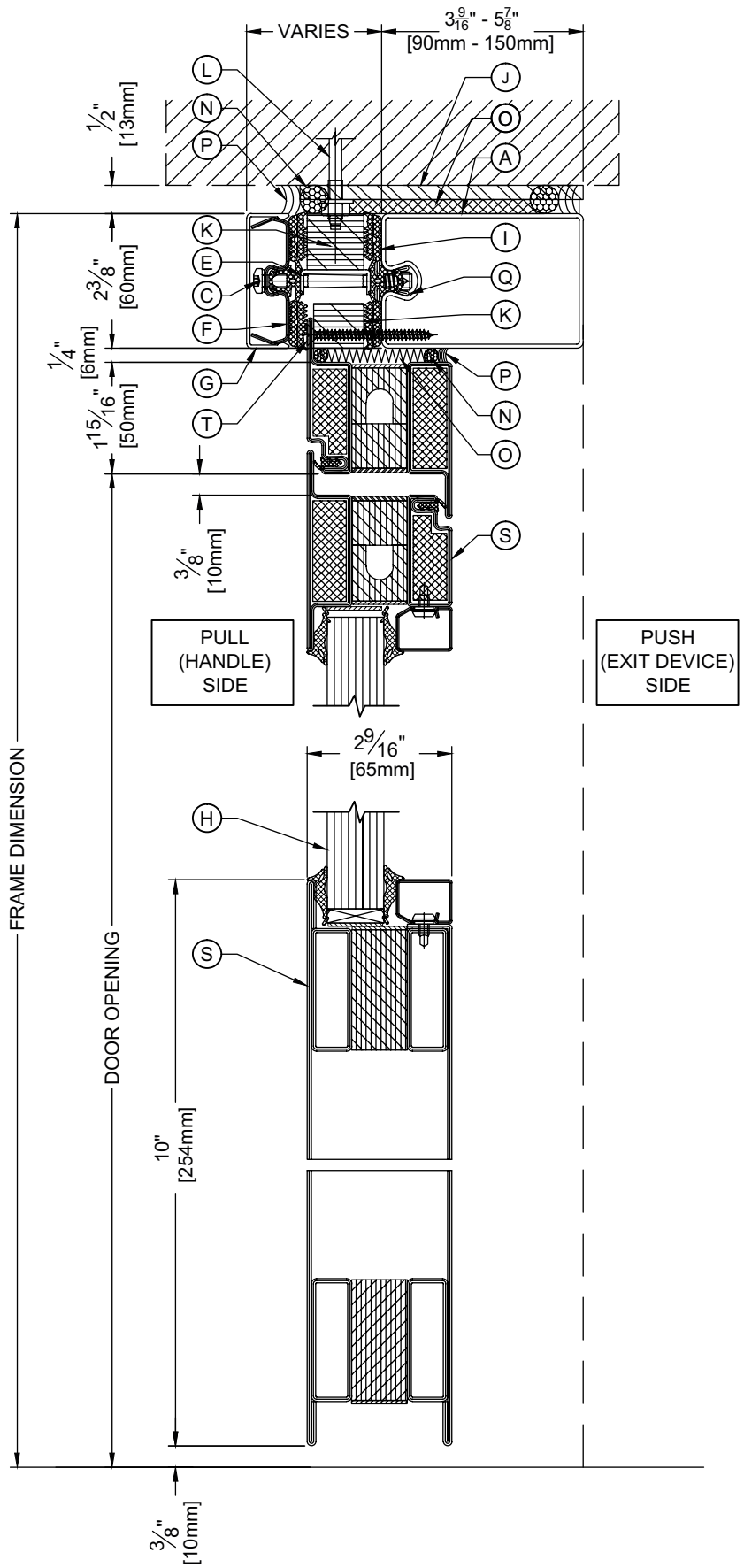




NARROW STILE DOOR VERTICAL CROSS-SECTION

NOTES:

A. STEEL CURTAIN WALL HORIZONTAL MEMBER
B. STEEL CURTAIN WALL VERTICAL MEMBER
C. PRESSURE PLATE LOCKING SCREW
D. SETTING BLOCK (BY OTHERS)
E. SETTING BLOCK SHELF
F. PRESSURE PLATES
G. HORIZONTAL COVER CAP
I. HORIZONTAL WEATHER STRIPPING
J. FRAME BASE PLATE AT VERTICAL
K. HARDWOOD BLOCK
L. ANCHOR (BY OTHERS)
M. SHIM AS NECESSARY (BY OTHERS)
N. FIRE STOP AND SMOKE SEAL (BY OTHERS)
O. FIRE RESISTANT LOOSE INSULATION (BY OTHERS)
P. FINISH SEALANT (BY OTHERS)
Q. CLAMPING FOOT
R. HINGE PER HARDWARE SCHEDULE
S. NARROW STILE 60/90 DOOR
T. DOOR ASSEMBLY FASTENER TO CURTAIN WALL

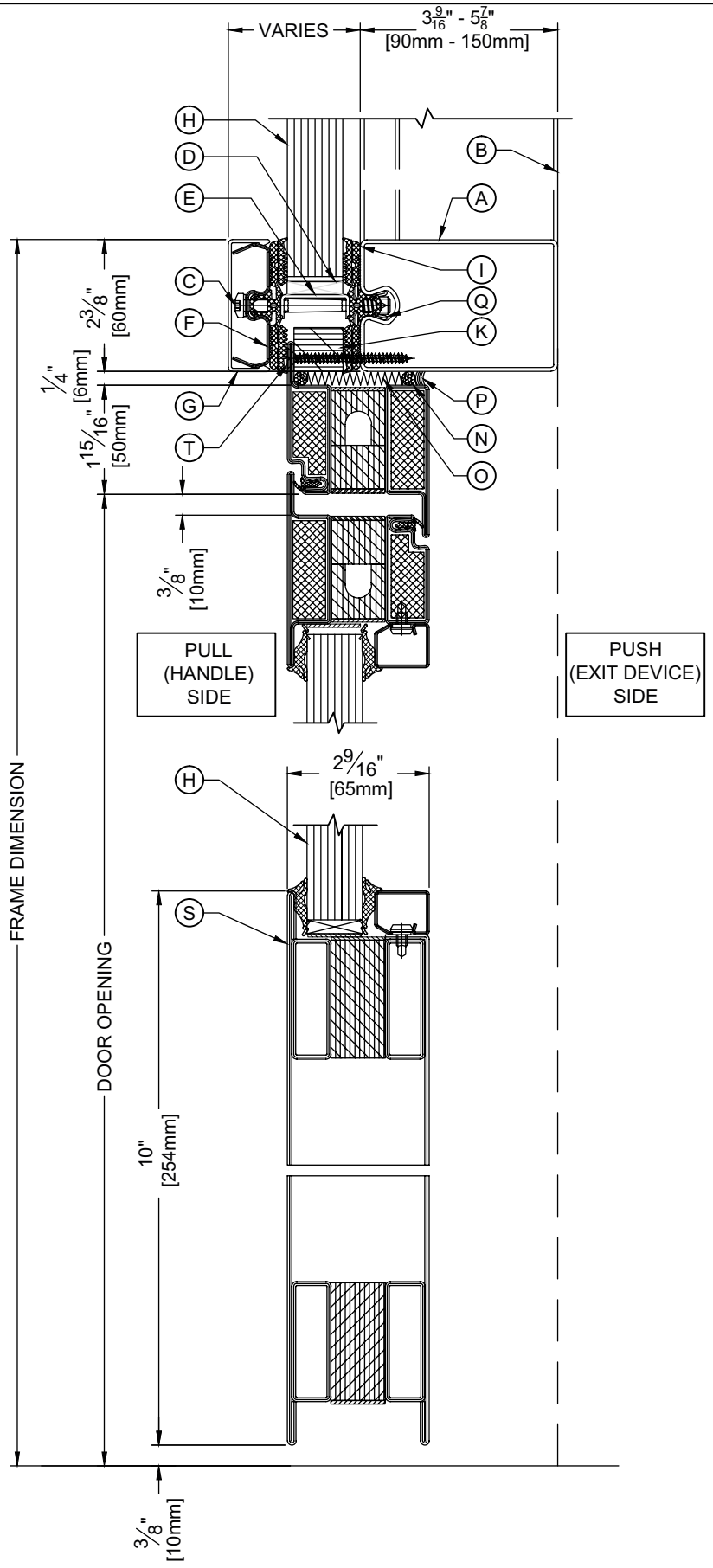


(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

NARROW STILE DOOR VERTICAL CROSS-SECTION WITH TRANSOM

NOTES:

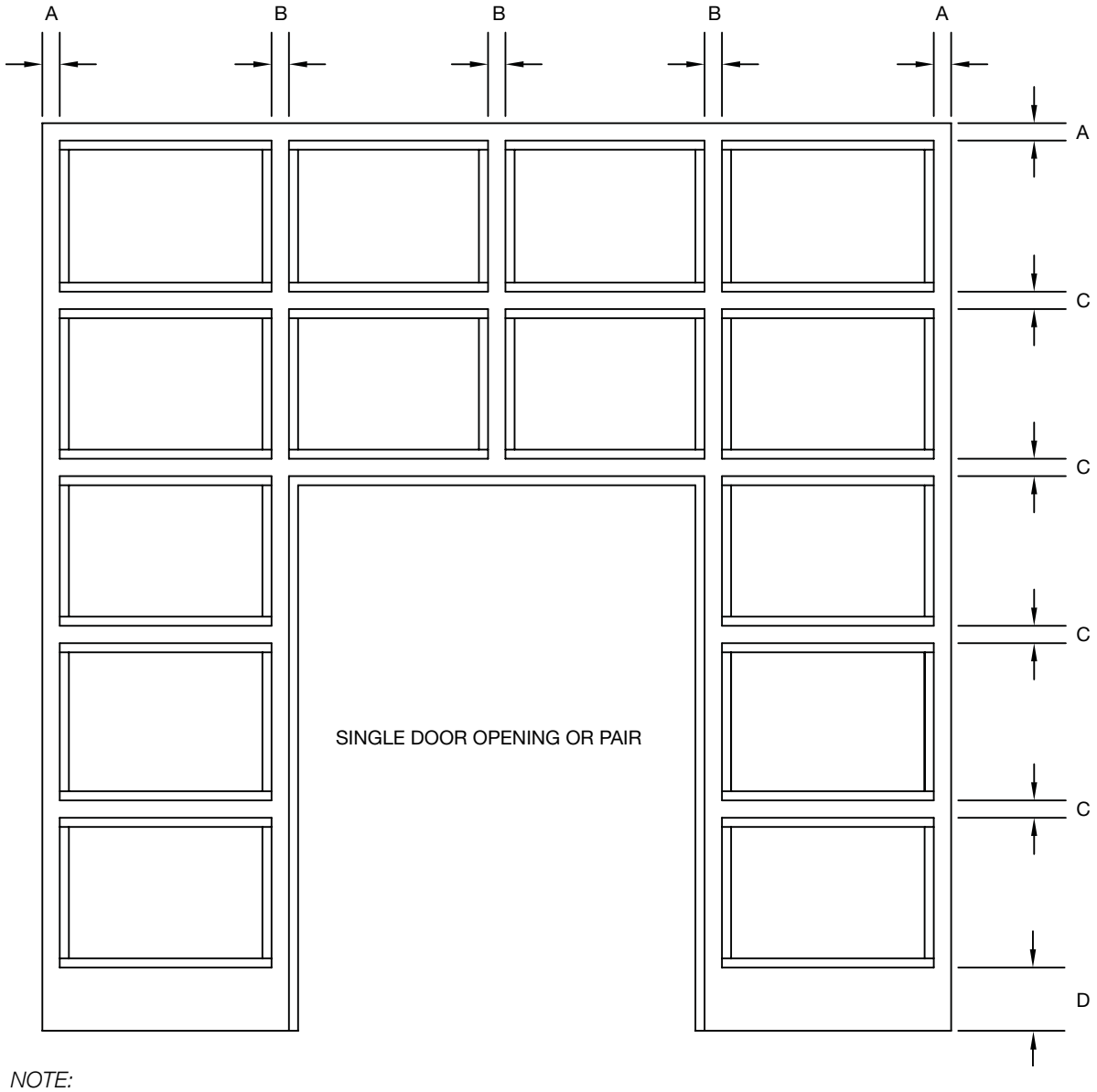
A. STEEL CURTAIN WALL HORIZONTAL MEMBER
B. STEEL CURTAIN WALL VERTICAL MEMBER
C. PRESSURE PLATE LOCKING SCREW
D. SETTING BLOCK (BY OTHERS)
E. SETTING BLOCK SHELF
F. PRESSURE PLATES
G. HORIZONTAL COVER CAP
I. HORIZONTAL WEATHER STRIPPING
J. FRAME BASE PLATE AT VERTICAL
K. HARDWOOD BLOCK
L. ANCHOR (BY OTHERS)
M. SHIM AS NECESSARY (BY OTHERS)
N. FIRE STOP AND SMOKE SEAL (BY OTHERS)
O. FIRE RESISTANT LOOSE INSULATION (BY OTHERS)
P. FINISH SEALANT (BY OTHERS)
Q. CLAMPING FOOT
R. HINGE PER HARDWARE SCHEDULE
S. NARROW STILE 60/90 DOOR
T. DOOR ASSEMBLY FASTENER TO CURTAIN WALL



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

FIRE-PROTECTIVE FRAME GLAZING MATERIAL GUIDELINES

FIRE DOOR FRAMES WITH LITES FIRE TESTED TO UL 10C, NFPA 252



NOTE:

1.) SIDELITE SILL MAY REST ON FLOOR OR REST ON WALL ABOVE FLOOR.

2.) ONE OR MORE HORIZONTAL OR VERTICAL MULLIONS (SHOWN ABOVE) MAY BE NECESSARY SO AS NOT TO EXCEED THE LABEL SIZE LIMITS OF GLASS, OTHERWISE MULLIONS ARE OPTIONAL.

3.) FRAME FACE SIZES ARE SHOWN ON ELEVATION ABOVE. TO OBTAIN EXPOSED-GLASS DIMENSION, FIGURE IN STOP HEIGHT

4.) GLAZING MATERIAL AND GLAZING ARE NOT BY CECO

5.) WALL CONSTRUCTION MAY BE MASONRY OR DRYWALL.

6.) DIM "D" ...WHEN RESTING ON FLOOR, A 12" (MINIMUM) SILL HEIGHT SHOULD BE CONSIDERED ...

7.) DOOR SIZE LIMITS MAY BE LESS THAN FRAME ...IF YOU ENCOUNTER THIS, CONSIDER ALTERNATE DOOR SERIES, ALTERNATE GAUGE AND/OR LATCHING HARDWARE

8.) COVERAGE FOR WH & UL ARE SUBJECT TO VARIATIONS

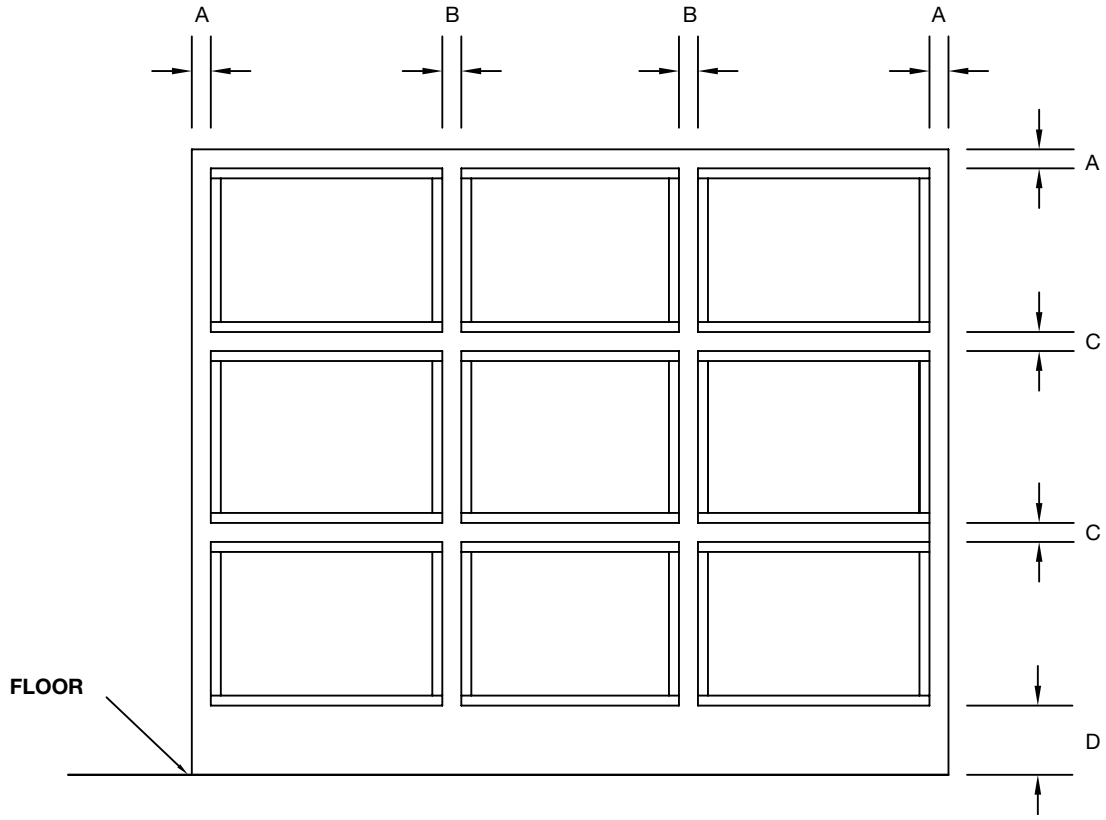
9.) WELDED CONSTRUCTION ONLY.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

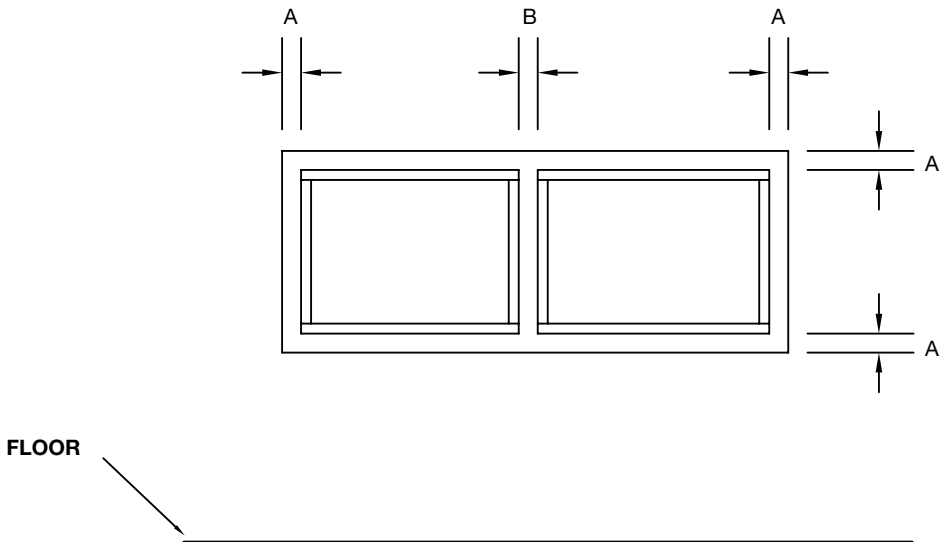
FIRE-PROTECTIVE FRAME GLAZING MATERIAL GUIDELINES

FIRE WINDOW FRAMES FIRE TESTED TO UL 9, NFPA 257

WELDED CONSTRUCTION ONLY



FRAME RESTING ON FLOOR



FRAME INSTALLED ABOVE FLOOR

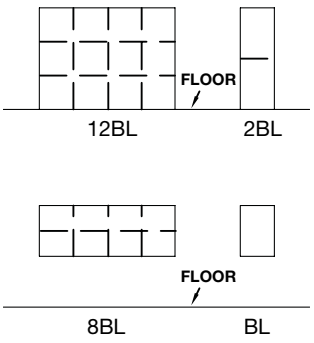
FIRE-PROTECTIVE FRAME GLAZING MATERIAL GUIDELINES

LABELED FIRE WINDOW FRAMES (BORROWED LITES) FIRE TESTED TO UL 9, NFPA 257

GLAZING MATERIAL	FIRE PROTECTION RATING (HOURS)	MIN. STOP HEIGHT (IN.)	MAX. EXPOSED GLAZING (IN.)		MAX. EXPOSED AREA (SQ.IN.)	OVERALL FRAME SIZE (FT.&IN.)							
						FRAME RESTING ON FLOOR				FRAME ABOVE FLOOR			
						DRYWALL		MASONRY		DRYWALL		MASONRY	
			WIDTH	HEIGHT		W	H	W	H	W	H	W	H
NON-IMPACT & SAFETY RATED 1/4" WIRED GLASS	3/4	5/8	54	54	500	11-4	10-0	13-6	12-0	12-10	9-6	13-6	12-0
		3/4			1296								
ANY LISTED GLASS	1/3 OR 3/4	SEE GLASS MANUFACTURER'S CLASSIFICATION LISTING FOR THESE LIMITS				12-10	11-4	13-6	12-0	12-10	9-6	13-6	12-0
	*1					12-10	11-4	13-6	12-0	12-10	9-6	13-6	12-0
	*1 1/2					12-10	11-4	13-6	12-0	12-10	9-6	13-6	12-0

GLAZING MATERIAL	FIRE PROTECTION RATING (HOURS)	FRAME FACES (IN.)								FRAME GAUGE	
		DIM "A"		DIM "B"		DIM "C"		DIM "D"			
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
NON-IMPACT & SAFETY RATED 1/4" WIRED GLASS	3/4	1 1/4	4	1 1/4	4 1/2	1 1/4	8	1 1/4	16	16	12
ANY LISTED GLASS	1/3 OR 3/4	1	2	1	2	1	2	1	16	16	12
	*1	1	2	1	2	1	2	1	16	16	12
	*1 1/2	1	2	1	2	1	2	1	16	16	12

TYPICAL ELEVATIONS



NOTES:

1.) SILL MAY REST ON DOOR OR REST ON WALL ABOVE DOOR.
2.) ONE OR MORE HORIZONTAL OR VERTICAL MULLIONS (SHOWN DOTTED) MAY BE NECESSARY SO AS NOT TO EXCEED THE LABEL SIZE LIMITS OF GLASS ...OTHERWISE, MULLIONS ARE OPTIONAL.
3.) FRAME FACE SIZES ARE SHOWN ON DIMENSIONED ELEVATIONS ONPAGE 104. TO OBTAIN EXPOSED-GLASS DIMENSION, FIGURE-IN STOP HEIGHT.
4.) GLAZING MATERIAL AND GLAZING ARE NOT BY CECO.
5.) WALL CONSTRUCTION MAY BE MASONRY OR DRYWALL.
6.) DIM "D" ...WHEN RESTING ON DOOR, A 12" (MINIMUM) SILL HEIGHT SHOULD BE CONSIDERED ...
7.) WELDED CONSTRUCTION ONLY.

** CHECK BUILDING CODE REQUIREMENTS FOR FRAMES OVER 45 MINUTES, AS THESE FRAMES DO NOT LIMIT THE TRANSFER OF RADIANT HEAT, AND DO NOT MEET ASTM E119 OR UL 263 FIRE TEST STANDARDS.*

FIRE-PROTECTIVE FRAME GLAZING MATERIAL GUIDELINES

FIRE DOOR FRAMES WITH LITES (TRANSOMS AND SIDELITES) FIRE TESTED TO UL 10C, NFPA 252

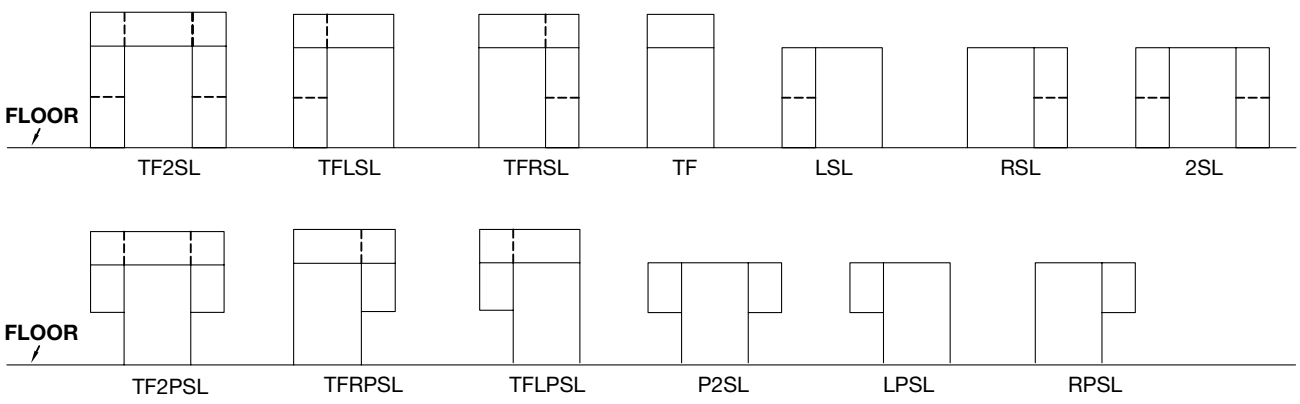
GLAZING MATERIAL	FIRE PROTECTION RATING (HOURS)	MAX. EXPOSED GLAZING (IN.)				MAX. EXPOSED AREA (SQ. IN.)	MIN. STOP HEIGHT (IN.)	OVERALL FRAME SIZE (FT.&IN.)			
		TRANSOM		SIDELITE				DRYWALL		DRYWALL	
		WIDTH	HEIGHT	WIDTH	HEIGHT			WIDTH	HEIGHT	WIDTH	HEIGHT
NON-IMPACT & SAFETY RATED 1/4" WIRED GLASS	3/4	54"	54"	54"	54"	500"	5/8"	12'-10"	11'-4"	13'-6	12'-0"
						1296"	3/4"				
ANY LISTED GLASS	1/3 OR 3/4	SEE GLASS MANUFACTURER'S CLASSIFICATION LISTING FOR THESE LIMITS						12'-10"	11'-4"	13'-6	12'-0"
	*1							12'-10"	11'-4"	13'-6	12'-0"
	*1 1/2							12'-10"	11'-4"	13'-6	12'-0"

(CONTINUED FROM ABOVE) *(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)*

GLAZING MATERIAL	FIRE PROTECTION RATING (HOURS)	MAXIMUM DOOR OPENING (FT.&IN.)		FRAME FACES (IN.)								FRAME GAUGE	
				DIM "A"		DIM "B"		DIM "C"		DIM "D"			
		WIDTH	HEIGHT	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
NON-IMPACT & SAFETY RATED 1/4" WIRED GLASS	3/4	8'-0"	10'-0"	1 1/4	4	1 1/4	4 1/2	1 1/4	8	1 1/4	16	16	12
ANY LISTED GLASS	1/3 OR 3/4	8'-0"	10'-0"	1	2	1	2	1	2	1	16	16	12
	*1	8'-0"	10'-0"	1	2	1	2	1	2	1	16	16	12
	*1 1/2	8'-0"	10'-0"	1	2	1	2	1	2	1	16	16	12

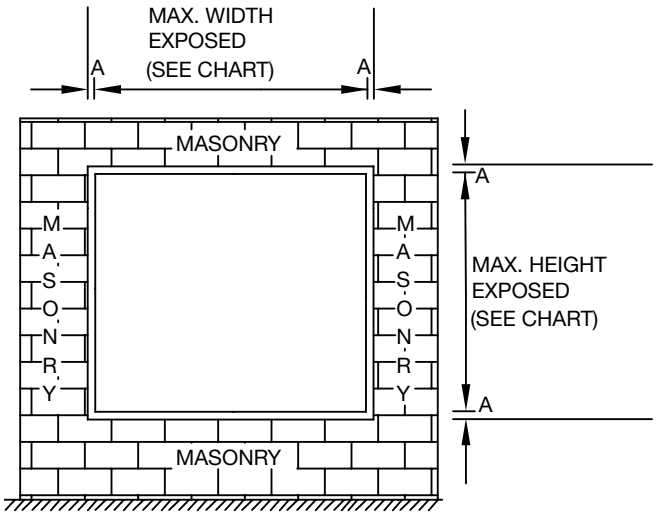
** NOTE: CHECK BUILDING CODE REQUIREMENTS FOR FRAMES OVER 45 MINUTES, AS THESE FRAMES DO NOT LIMIT THE TRANSFER OF RADIANT HEAT, AND DO NOT MEET ASTM E119 OR UL 263 FIRE TEST STANDARDS.*

TYPICAL ELEVATIONS

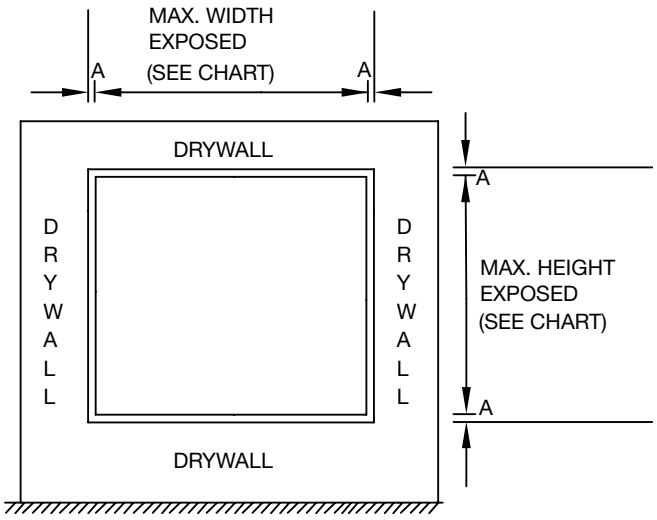


FIRE-PROTECTIVE FRAME GLAZING MATERIAL GUIDELINES

KNOCKED DOWN (KD) FIRE WINDOW FRAME MAXIMUM 1 HOUR FIRE RATING FIRE TESTED TO UL 9 & NFPA 257



MASONRY NON-COMBUSTIBLE SILL



MASONRY NON-COMBUSTIBLE SILL

MASONRY (SHOWN) OR BEFORE DRYWALL

1. 16 OR 14 GA. STEEL FRAMES ONLY
2. KD CORNER CONSTRUCTION
3. MINIMUM THROAT DEPTH = 3-1/2"
4. ONLY LABELED SEALANT OR 100% SILICONE SEALANT MAY BE USED AS GLAZING COMPOUND FOR INSTALLING FIRELITE
5. ANCHORS - ALL TYPES APPROVED
   - A. (LOOSE OR WELDED) MASONRY
   - B. (WELDED ONLY) BEFORE DRYWALL

FINISHED DRYWALL CONDITIONS

1. 16 OR 14 GA. STEEL FRAMES ONLY
2. KD CORNER CONSTRUCTION
3. MINIMUM THROAT DEPTH = 3-1/2"
4. ONLY LABELED SEALANT OR 100% SILICONE SEALANT MAY BE USED AS GLAZING COMPOUND FOR INSTALLING FIRELITE
5. ANCHORS:
   - A. APPROVED COMPRESSION ANCHORS ARE USED. THEY MUST BE INSTALLED IN THE SILL AND HEAD.
   - B. ROUGH OPENING = GLASS OPENING + 2-5/8" (HORIZ.) GLASS OPENING + 2-1/8" (VERT.)

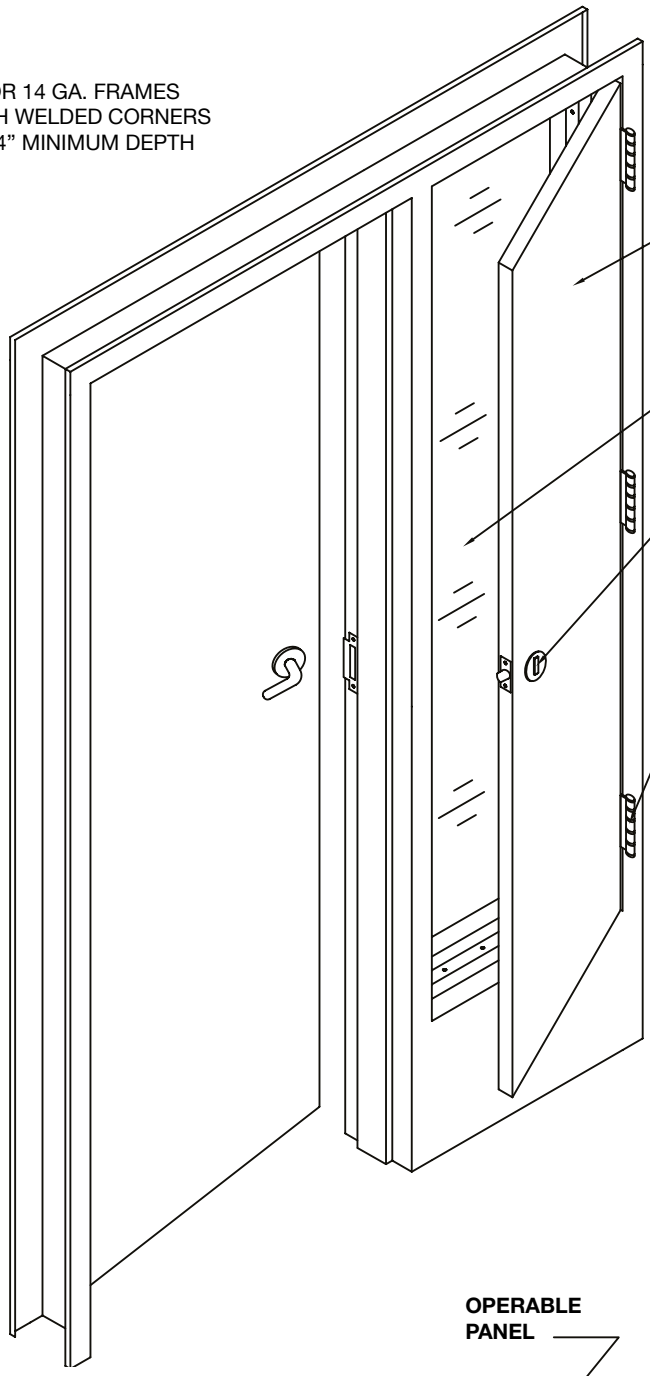
FRAME DESCRIPTION	STOP HEIGHT	MAX. AREA PER LIGHT	MAX. HEIGHT EXPOSED	FIRE RATING	DIM. "A"
SINGLE LITE (NO MULLIONS)	5/8"	5268 SQ. IN.	109-3/4"	20 MIN.	1-1/4"MIN. TO 4"MAX.
	5/8"	1296 SQ. IN.	54"	3/4 HR.	
	5/8"	*,+2721 SQ. IN.	*,+77-3/4"	*,+ 1HR.	

**GLAZING MATERIAL MUST BE FIRELITE .*
+CHECK BUILDING CODE REQUIREMENTS FOR FRAMES OVER 45 MINUTES, AS THESE FRAMES DO NOT LIMIT THE TRANSFER OF RADIANT HEAT, AND DO NOT MEET ASTM E119 OR UL 263 FIRE TEST STANDARDS.

SECURITY SIDELITE

PROVIDES A VISUAL BARRIER TO POTENTIAL INTRUDERS

16 OR 14 GA. FRAMES
WITH WELDED CORNERS
6-3/4" MINIMUM DEPTH



FEATURES

HINGED SECURITY PANEL CLOSES TO CREATE VISUAL BARRIER

GLASS POCKETS AVAILABLE FOR UP TO 1" THICK GLASS

PREPARED FOR SELF LATCHING DEADLATCH TO MEET PROJECT REQUIREMENTS

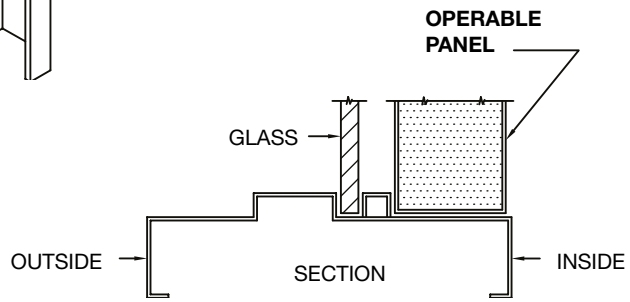
SELF-LATCHING DEADLATCH SARGENT SSL1 OR YALE YSSL10, LATCHING HARDWARE BY OTHERS

STANDARD 4-1/2" X .134 HINGE PREPARATIONS

OPTION:
AVAILABLE WITH MASONRY AND STUD WALL ANCHORS

FIRE RATING:
WARNOCK HERSEY
3/4 HOUR RATING
(1-1/2 HOUR WITH SPECIALTY GLAZING)

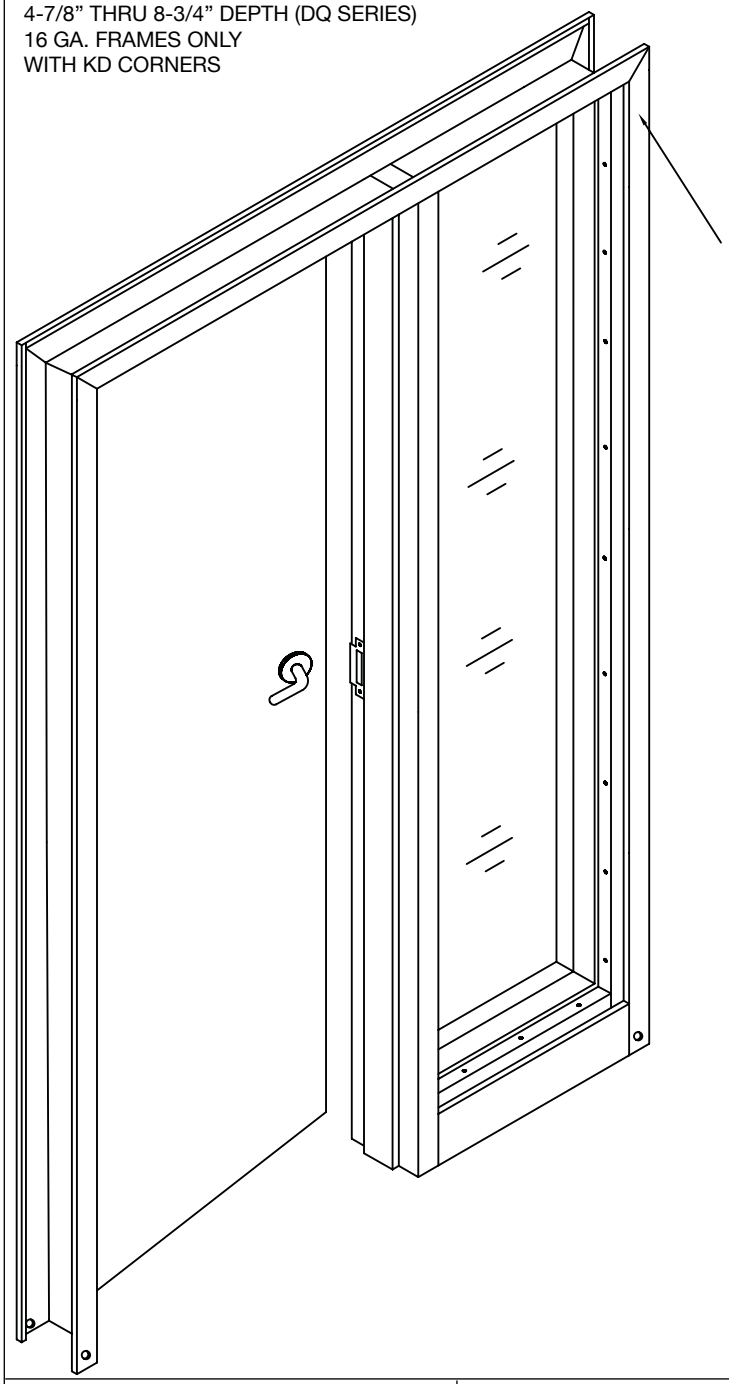
USES :
- CLASSROOMS
- POST OFFICES
- GOVERNMENT FACILITIES
- AIRPORTS



DRYWALL KD SIDELITE

KNOCK-DOWN SIDELITE FRAME WITH COMPRESSION ANCHORS

4-1/2" THRU 8-3/4" DEPTH (DU SERIES)
4-7/8" THRU 8-3/4" DEPTH (DQ SERIES)
16 GA. FRAMES ONLY
WITH KD CORNERS



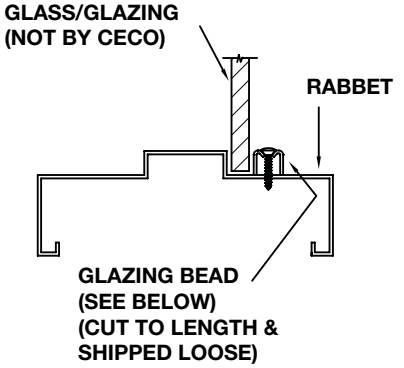
FEATURES:
DRYWALL KD SIDELITE
4-1/2" THRU 8-3/4" DEPTH (DU SERIES)
UP TO 4'-0" X 8'-0" DOOR OPENING
2" FACE WELDING THE FRAME AND INSTALL
ABLE TO ASSEMBLE ONSITE WITHOUT
AFTER WALL IS COMPLETELY FINISHED.
AVAILABLE WITH OR WITHOUT AN ADDITIONAL
VERTICAL MULLION 2-LITE DESIGN.

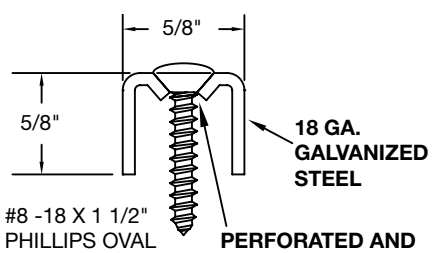
STANDARDS:
NO FIRE RATING.
2" FACE
5/8" HIGHT STOPS
UP TO 4'-0" X 8'-0" DOOR OPENING
(SINGLE OPENING ONLY)
UP TO 8'-4" X 8'-2" OVERALL
MAXIMUM OVERALLS ASSUME A
2" FACE ON ALL PERIMETER COMPONENTS
EXCEPT THE SILL. IF THE FACES DECREASE, THE
OVERALLS WILL DECREASE ACCORDINGLY.
8'-0" MAXIMUM BETWEEN JAMBS.

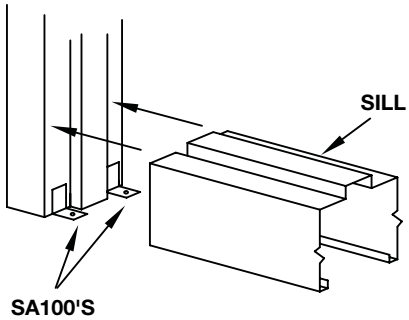
1-1/2" MIN. THRU 6" MAX. FACE SILL
COMPRESSION ANCHORS & DIMPLED SILL HOLES.
HORIZONTAL MULLIONS NOT AVAILABLE

OPTIONS:
AVAILABLE WITH SILL STRAP ANCHORS
(REQUIRED WITH 1-1/2" & 1-3/4" FACE)

USES:
INSURANCE KIOSKS, POST OFFICES,
CLASSROOMS, OFFICE & GOVERNMENT
FACILITIES

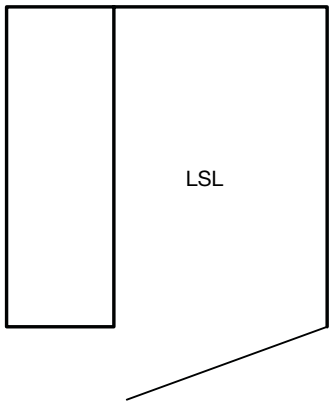


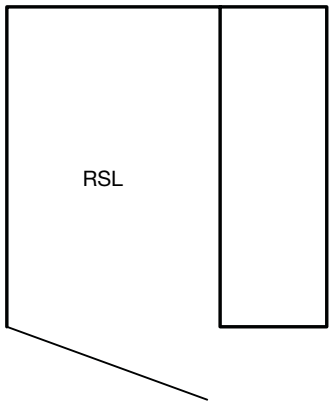


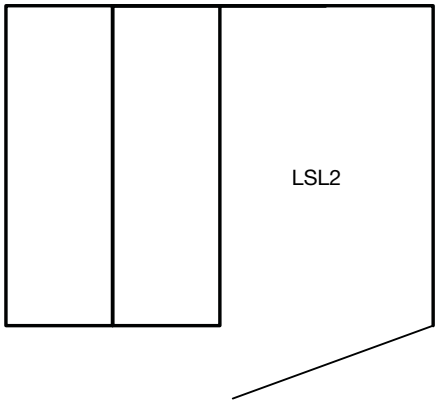


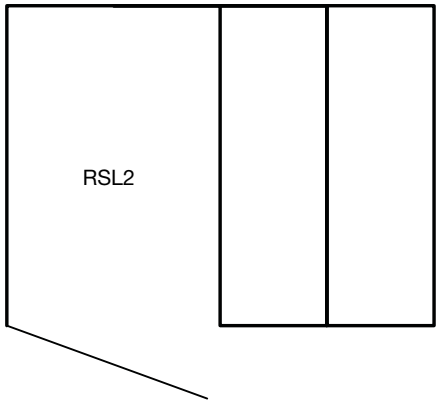
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

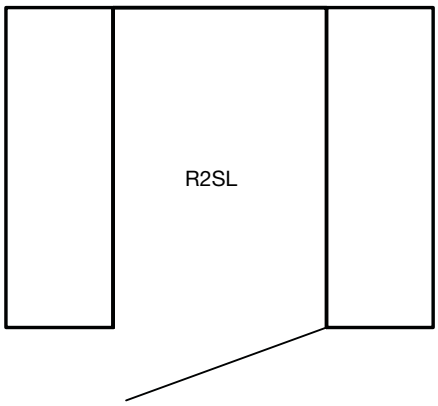
KD SIDELITE CONFIGURATIONS

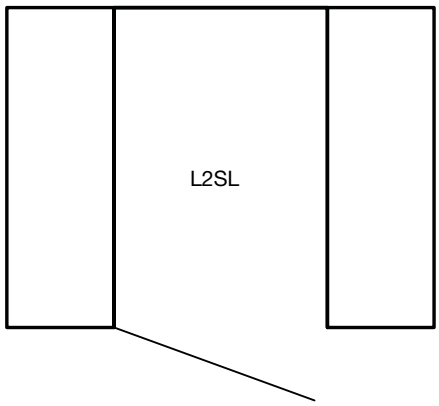












FOR SPECIAL SIZES OR CONFIGURATIONS:
CONTACT CUSTOMER SERVICE FOR AVAILABILITY

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

"D" SERIES KNOCKDOWN SIDELITE STEEL FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	
SINGLE	HEIGHT
2'-0"	
2'-4"	
2'-6"	6'-8"
2'-8"	7'-0"
2'-10"	7'-2"
3'-0"	7'-10"
3'-4"	8'-0"
3'-6"	
3'-8"	
3'-10"	
4'-0"	

PRODUCT SPECIFICATIONS:

Steel door frames shall be as manufactured by Ceco Door Products, Milan, TN or Mason City, IA USA. They shall conform to the Steel Door Institute guide specification, ANSI A250.8. See chart below for performance classifications.

Series DQ/DU frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008 ...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 – see chart below.

Frames are knocked down, field assembled type. Components have diecut mitered corners that interlock rigidly when field assembled. Integral door stops are 5/8" high and perimeter frame faces are 2" maximum. Adjustable, compression type anchors are welded to jambs and allow frame installation, plumbing and squaring after wallboard is applied (to adjust anchors use Phillips head screw driver). Components have backbend-returns that protect the wall surface during installation. Bottom of perimeter jambs are anchored by screws through dimpled holes in faces ... welded on sill strap anchors are also available (optional). The frame sill member is friction fit below the glass/glazing and between the anchored perimeter jamb and mullion.

Hardware Provisions: Frames are handed. Hinge jambs are mortised for 4-1/2" high, standard or heavy weight hinges (specify which). 7 gauge steel reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. The strike mull is prepared for 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A 115.1 &2 (specify which). Optional closer reinforcement is a 14 gauge steel sleeve or plate. 3 mute holes are provided per opening.

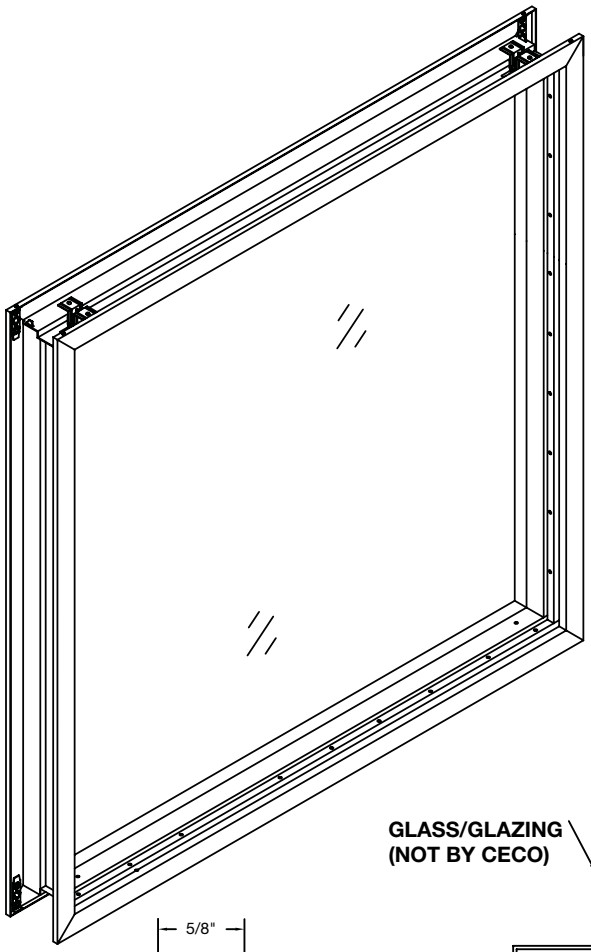
Paint: Steel door frames are provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10 . The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available on K.D. frames from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV A60
16 GAUGE STEEL	HEAVY OR HEAVY DUTY	STD	OPT

DRYWALL KD BORROWED LITE

KNOCK-DOWN BORROWED LITE FRAME WITH COMPRESSION ANCHORS



FEATURES:
Saves time and expense as frame is assembled on site and installed after wall is completely finished.

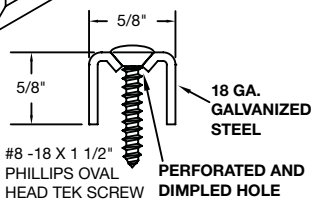
STANDARDS:
2" Face only, 16 Ga. only
5/8" High Stops only
Up to 6'0" x 6'0" rabbet to rabbet opening.
Up to 6'4" x 6'4" overall
Compression anchor
Horizontal and vertical mullions not available

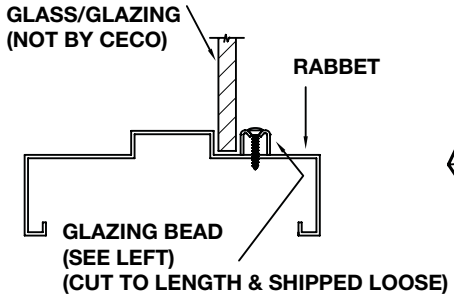
USES: corridors, offices, museums & governments facilities

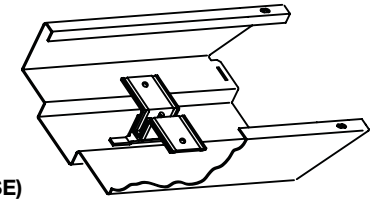
TO DETERMINE ROUGH OPENING FOR DU, DQ & *DR PROFILES, USE GLASS OPENING RABBET TO RABBET & ADD 2-5/8" TO WIDTH & ADD 2-1/8" TO HEIGHT. DR PROFILE 4" DEPTH AND LESS ADD 2-7/8" TO HEIGHT.

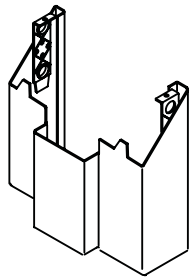
TO DETERMINE DU, DQ OR DR GLASS OPENING RABBET TO RABBET SIZE, USE ROUGH OPENING SIZE AND SUBTRACT 2-5/8" FROM WIDTH & 2-1/8" FROM ROUGH OPENING HEIGHT. DR PRO LE 4" DEPTH & LESS SUBTRACT 2-7/8" FROM HEIGHT.

NOTE: GLASS OPENING SIZE IS NOT ACTUAL GLASS SIZE.









FIRE-PROTECTIVE WINDOW FRAMES

LABELING AGENCIES:

- UL SOLUTIONS
- WARNOCK HERSEY

TEST: UL9, NFPA 257

RATING: 20 MINUTE
MAXIMUM SIZE:
70-3/4" VISIBLE WIDTH OR HEIGHT
(5268 MAX. VISIBLE SQ. IN.)

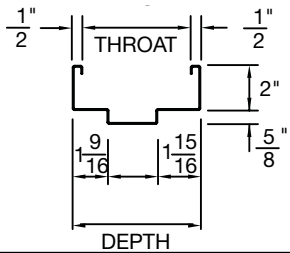
RATING: 3/4 HOUR
MAXIMUM SIZE:
54"VISIBLE WIDTH OR HEIGHT
(1296 MAX. VISIBLE SQ. IN.)

RATING:* 1 HOUR
MAXIMUM SIZE:
54" VISIBLE WIDTH X 77-3/4"
VISIBLE HEIGHT (*2721 SQ. IN.)

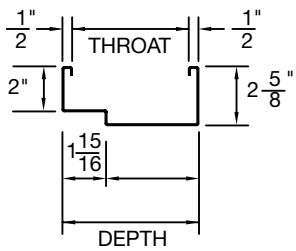
NOT ALL RATINGS ARE AVAILABLE IN ALL MATERIALS AND SIZES.

PROFILES

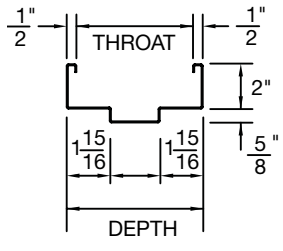
DU



DR



DQ



SERIES DU	SERIES DQ	SERIES DR
MINIMUM DEPTH	MINIMUM DEPTH	MINIMUM DEPTH
4-1/2"	4-7/8"	3"

MAXIMUM DEPTH
14"

ANCHORS
(2) PLUMB ANCHORS ARE WELDED TO EACH HORIZONTAL COMPONENT FOR OPENING WIDTHS UNDER 5'0".
#8 -18 X 1 1/2" PERFORATED AND DIMPLED HOLE 18 GA. GALVANIZED STEEL PHILLIPS OVAL HEAD FINAL EDITS CS 02/14/12 REVISION OF TEXT SS 04/05/13 RABBET TEK SCREW

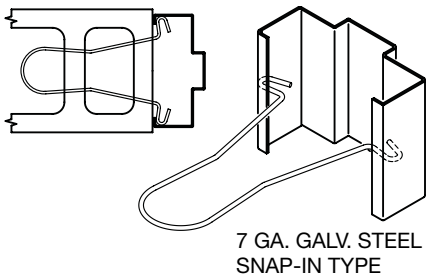
(1) ADDITIONAL PLUMB ANCHOR IS WELDED IN THE CENTER OF THE HORIZONTAL COMPONENTS 5'0" & OVER.
USE SCREWDRIVER TO ADJUST PLUMB ANCHORS.

**SINGLE RABBET FRAMES FROM 3" DEPTH UP TO AND INCLUDING 4" DEPTH, PLUMB ANCHOR WILL BE PLACED ON THE RABBET. SINGLE RABBET FRAMES OVER 4" DEPTH, PLUMB ANCHOR WILL BE PLACED IN SOFFIT.*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

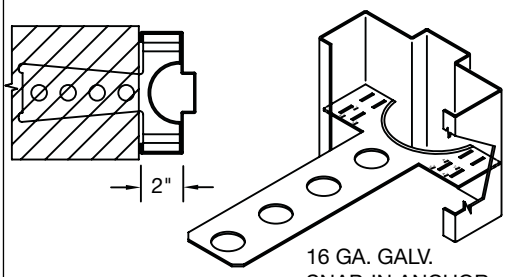
DOOR FRAME ANCHORS

WIRE MASONRY ANCHOR WMA



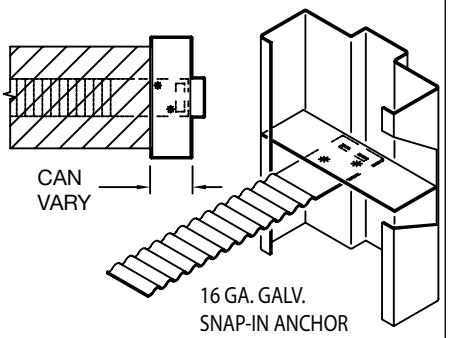
(FOR 3" THRU 8-3/4" DEPTHS)

MASONRY "T" ANCHOR (ADJUSTABLE) MT



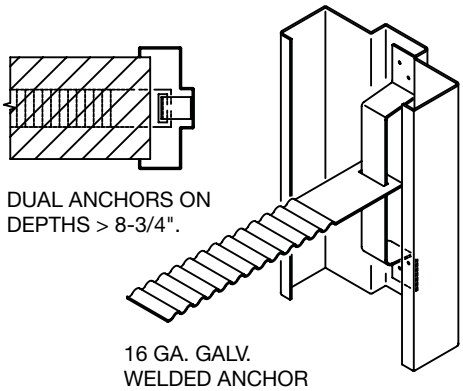
SUPPLIED FOR 3-3/4", 4-1/4", 4-3/4", 5-1/4", AND 5-3/4" DEPTHS & FACE SHOWN

MASONRY "T" ANCHOR MT

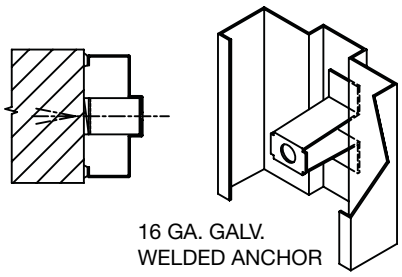


SUPPLIED FOR ALL DEPTHS OTHER THAN SHOWN FOR ADJUSTABLE MT ANCHOR

YOKE AND STRAP MASONRY ANCHOR YS

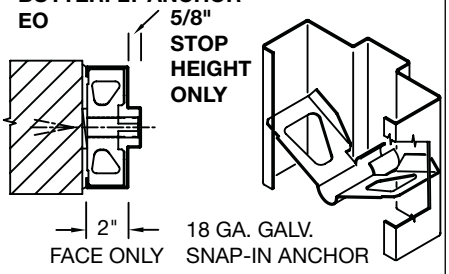


EXISTING OPENING ANCHOR EO/N



DEPTHS OVER 14" REQUIRE TWO EO/N ANCHORS, SIDE BY SIDE ACROSS SOFFIT, EXCLUDING SQT, B SERIES & DOUBLE EGRESS PROFILES.

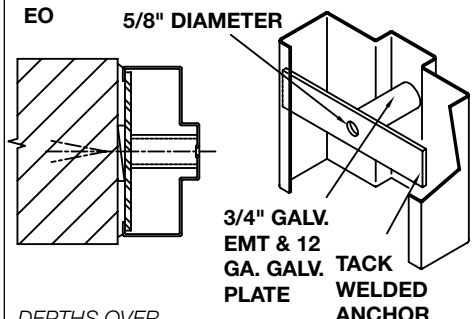
EXISTING OPENING BUTTERFLY ANCHOR EO



SU EO/SF6: 4-3/4" THRU 6-3/4" DEPTH PROFILE EO/SF8: 6-7/8" THRU 8-3/4" DEPTH

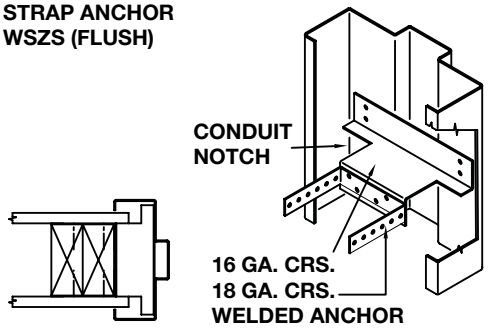
SQ EO/SF6: 5-1/8" THRU 6-3/4" DEPTH PROFILE EO/SF8: 6-7/8" THRU 8-3/4" DEPTH

EXISTING OPENING PIPE & PLATE ANCHOR EO



DEPTHS OVER 14" DUAL EO ANCHORS SIDE BY SIDE ACROSS SOFFIT, WILL BE APPLIED. EXCLUDING SQT, B SERIES & DOUBLE EGRESS PROFILES

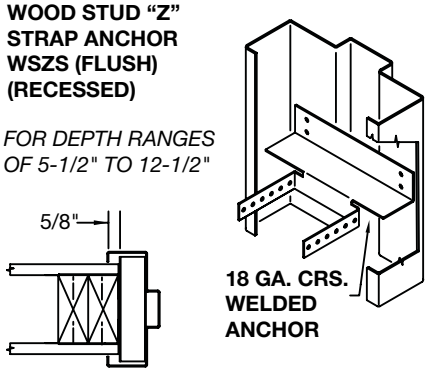
WOOD STUD "Z" STRAP ANCHOR WSZS (FLUSH)



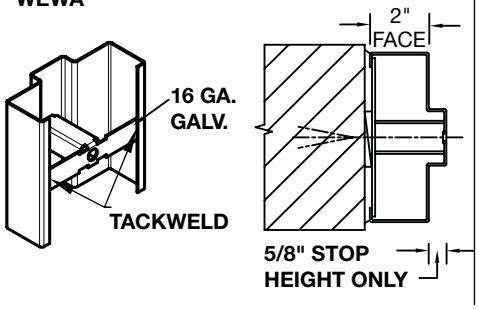
FOR DEPTH RANGES OF 5-1/2" TO 12-1/2"

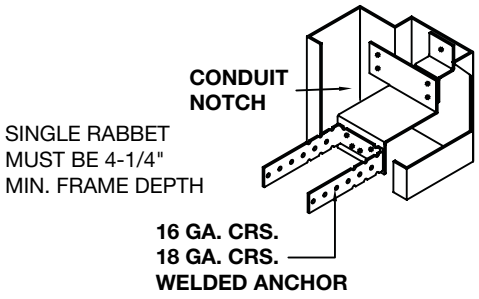
WOOD STUD "Z" STRAP ANCHOR WSZS (FLUSH) (RECESSED)

FOR DEPTH RANGES OF 5-1/2" TO 12-1/2"

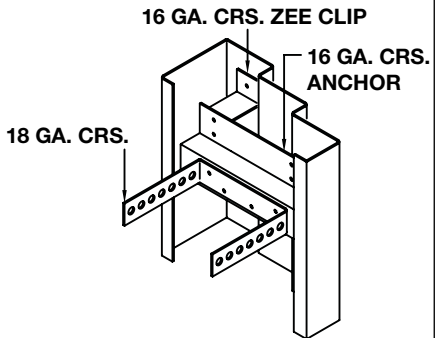


EXISTING OPENING WEWA





ALSO USED ON DOUBLE EGRESS FRAMES (USED ALSO WITH METAL STUD WALLS)



ALSO USED ON SINGLE RABBET FRAMES (USED ALSO WITH METAL STUD WALLS)

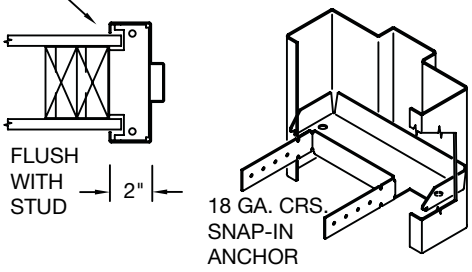
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

DOOR FRAME ANCHORS

QUANTITIES JAMB ANCHOR	2 PER JAMB FOR HEIGHTS >3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS >7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS >7'6" THRU 10'-0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL 24" IN HEIGHT OR FRACTION THEREOF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING STUDS AND/OR WALLS

WOOD STUD ANCHOR WS

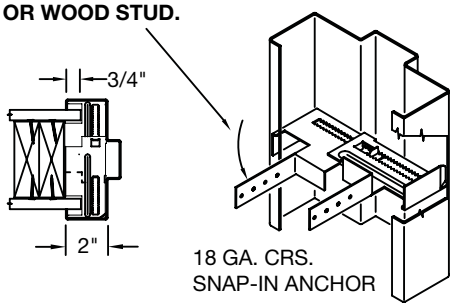
POCKET PROVIDED FOR 1/2" OR 5/8" THICK WALL BOARD



AVAILABLE 4-3/4", 5-3/4", 6-1/4", 6-3/4", 7-1/8", 7-1/4", 7-3/4", 8-1/4" & 8-3/4" DEPTHS. (USED ALSO WITH METAL STUD WALLS)

ADJUSTABLE ANCHOR FOR STUD WALLS ADJ/STUD

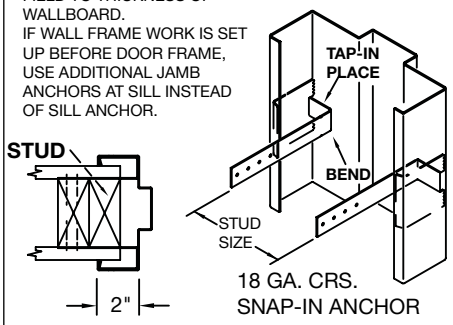
SETUP ANCHOR & BEND TAILPIECES TO GRIP METAL OR WOOD STUD.



3-3/4" THRU 8-3/4" DEPTH

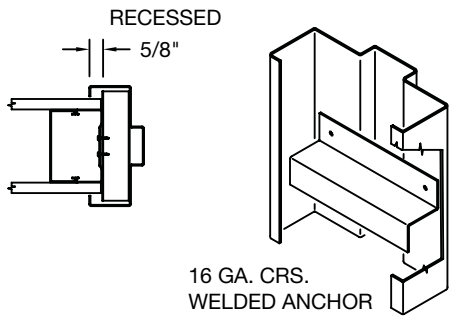
WOOD STUD ANCHOR XP/ANC

ANCHORS ARE BENT IN FIELD TO THICKNESS OF WALLBOARD.
IF WALL FRAME WORK IS SET UP BEFORE DOOR FRAME, USE ADDITIONAL JAMB ANCHORS AT SILL INSTEAD OF SILL ANCHOR.

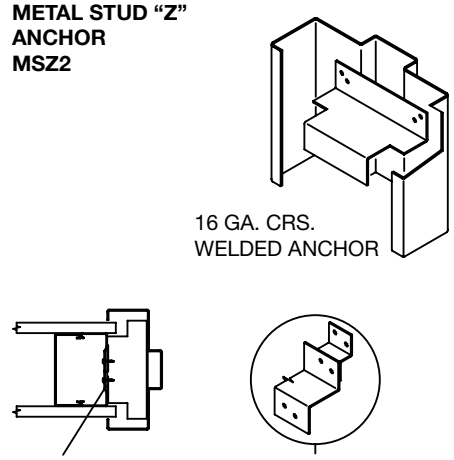


NOTE: FRAME IS SET-UP AND JAMBS ANCHORED BEFORE WALLBOARD IS INSTALLED. (USED ALSO WITH METAL STUD WALLS)

METAL STUD "Z" ANCHOR MSZ1

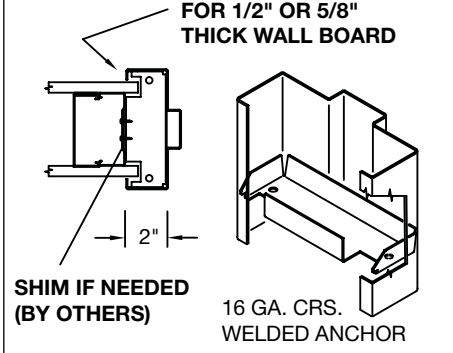


METAL STUD "Z" ANCHOR MSZ2



METAL STUD ANCHOR MS

POCKET PROVIDED FOR 1/2" OR 5/8" THICK WALL BOARD

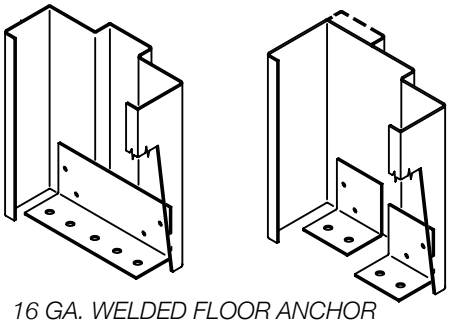


4-3/4" AND 5-3/4" DEPTH ONLY. FOR OTHER DEPTHS USE WS TYPE.

FLOOR ANCHOR SA

STANDARD DOUBLE RABBET ONE PIECE ANCHOR

SINGLE RABBET OR DOUBLE RABBET DOUBLE EGRESS



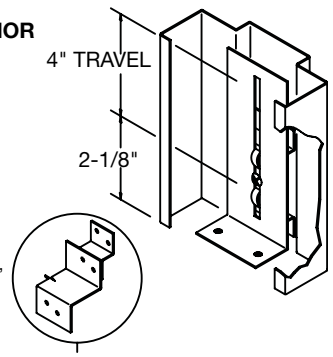
16 GA. WELDED FLOOR ANCHOR

FLOOR ANCHOR ADJFL

ANGLE:
1-1/2" X 6-3/4" @ 2-3/4" LONG

SCREW:
#10 X 3/8" PHIL THSMS

HAT:
1-5/8" WIDE X 3/4" LEGS X 9/16" OFFSET @ 3-1/4" LONG

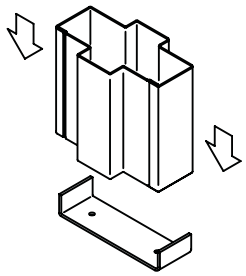


DOUBLE EGRESS AND SINGLE RABBET FRAMES.

16 GA. WELDED ADJUSTABLE FLOOR ANCHOR

SLFA

IN-FIELD:
FASTEN ANCHOR TO FLOOR.
SLIP-FIT FRAME OVER ANCHOR



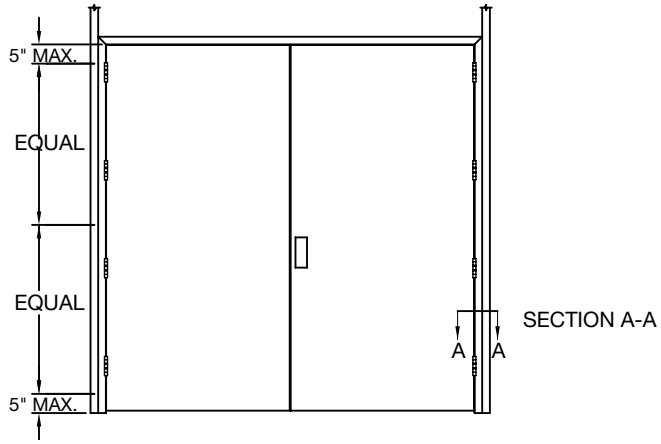
12 GA. GALV. SIDELITE FLOOR ANCHOR

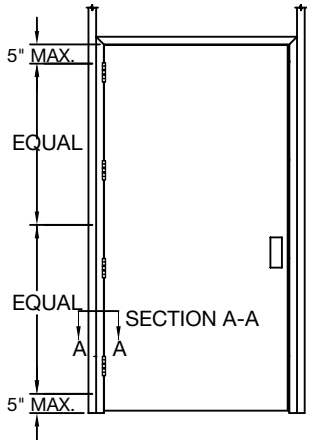
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

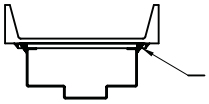
FRAME INSTALLATION

FIRE RATED. WELD TO STEEL BUILDING STRUCTURE WELDING INSTRUCTIONS AND LOCATIONS

SEE ALL NOTES LISTED BELOW

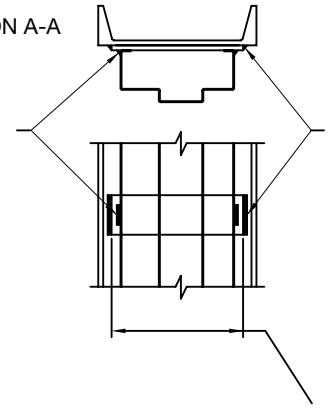






FILL GAPS WITH INTUMESCENT CAULK AS REQUIRED

SECTION A-A



WELD HOLLOW METAL FRAME TO BUILDING STRUCTURE OR OPTIONAL SHIM WITH 3/16 " WELD, 1" LONG BOTH SIDES OF FRAME.

OPTIONAL STEEL SHIMS (1/4" MAX., 3/16" MIN. THICK X 2" WIDE TYPICAL) WELDED TO STRUCTURAL BUILDING MEMBER ON BOTH ENDS OF SHIM WITH FILLET WELDS MEASURING 2" LONG AND SIZED TO THE SAME THICKNESS AS THE SHIM. MAX. SHIM SPACE 1/4" FOR ONE SIDE OF OPENING WIDTH. MAX. ROUGH OPENING IS 3/8" LARGER THAN OVERALL FRAME WIDTH.

SHIM IS MINIMUM OF 3/4 " GREATER THAN FRAME DEPTH

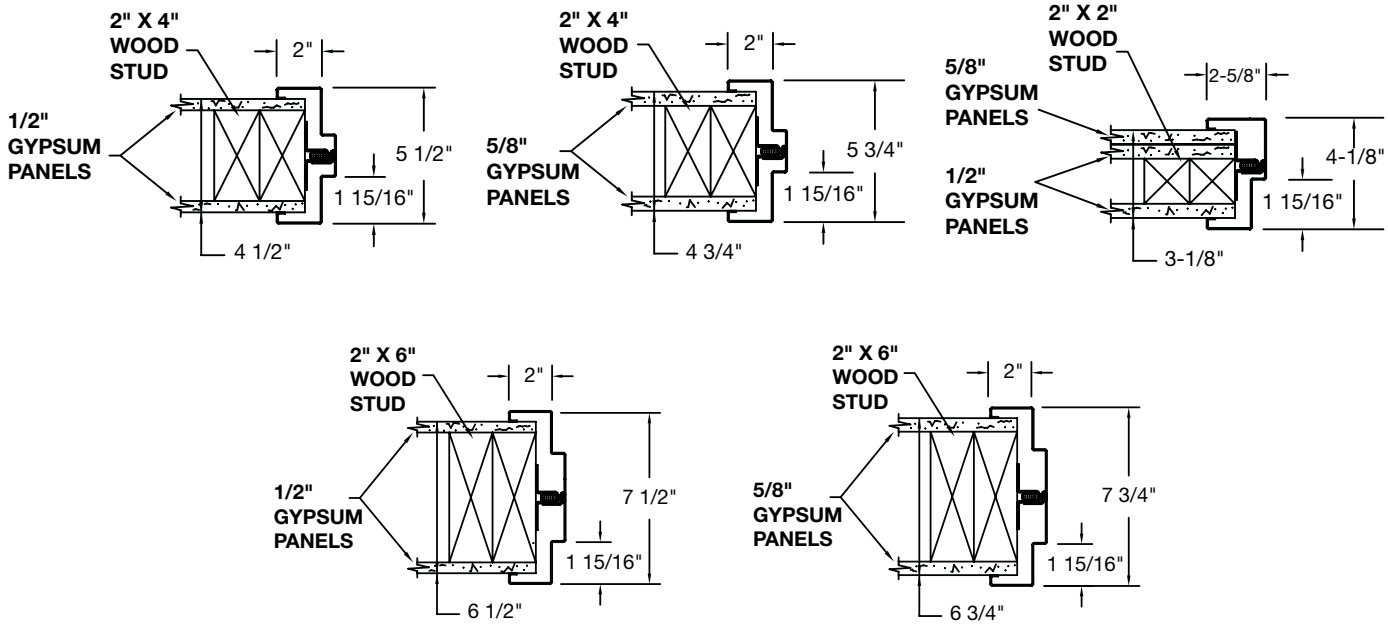
NOTES:

1) *ALL ELEVATION ANCHOR WELD LOCATIONS ARE TO THE CENTERLINE OF WELDS.*
2) *THIS ANCHORING OPTION APPLIES TO ALL FRAME PROFILES AND FRAME SERIES, THREE OR FOUR SIDED FRAMES, TRANSOM, SIDELITE & WINDOW FRAMES.*
3) *THE ANCHOR SPACING WILL BE THE SAME FOR ALL FRAME HEIGHTS.*
4) *ANCHOR OPTION DOESN'T APPLY TO SLIP-ON DRYWALL FRAMES.*
5) *MIXING OF ANCHOR TYPES ON THE SAME JAMB OR FRAME IS NOT ALLOWED. BOTH JAMBS MUST BE WELDED TO BUILDING STRUCTURE. FRAME HEAD IS NOT REQUIRED TO BE ANCHORED OR WELDED TO BUILDING STRUCTURE.*
6) *FOUR HINGES ARE SHOWN, BUT ARE NOT A REQUIREMENT ON ALL OPENING SIZES.*
7) *THREE OR FOUR SIDED FRAMES WITH KD OR WELDED CORNERS ARE ALLOWED.*
8) *SHIMS ARE PROVIDED BY OTHERS.*

DOOR FRAME WALL APPLICATIONS

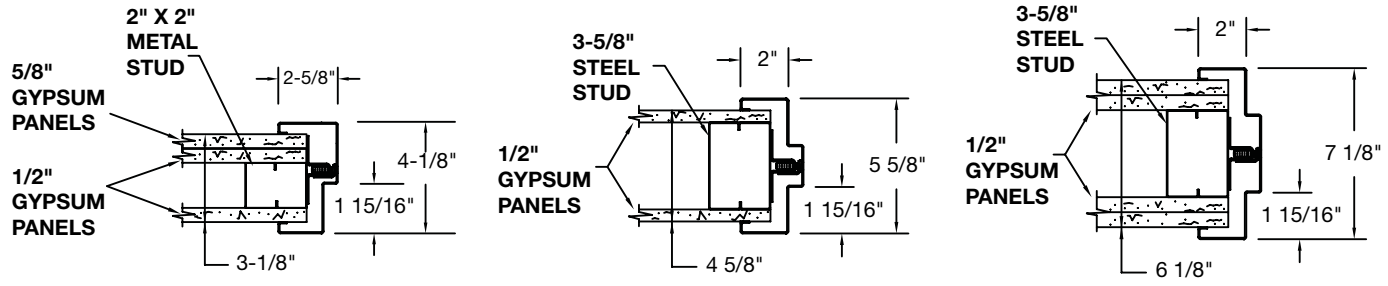
EXISTING OPENING, MASONRY BLOCK, WOOD STUD, METAL STUD, SLIP ON DRYWALL

SLIP ON DRYWALL - WOOD STUD DETAILS
INSTALLED AFTER THE DRYWALL



SEE INSTALLATION INSTRUCTIONS FOR ROUGH OPENING SIZE ...

SLIP ON DRYWALL - METAL STUD DETAILS
INSTALLED AFTER THE DRYWALL

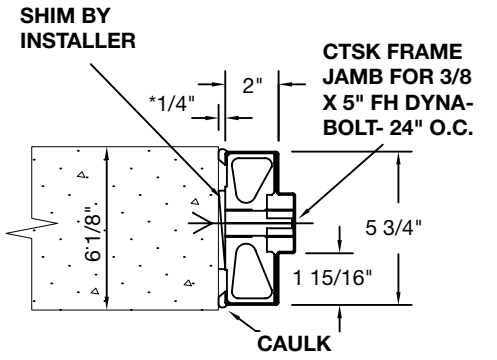


SEE INSTALLATION INSTRUCTIONS FOR ROUGH OPENING SIZE ...

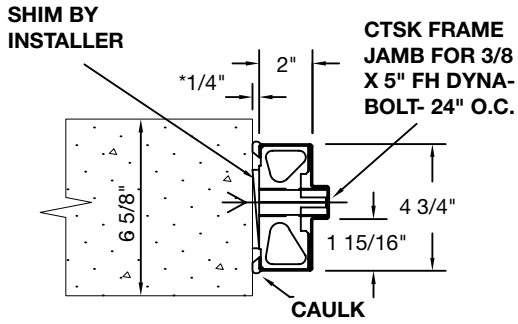
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

DOOR FRAME WALL APPLICATIONS

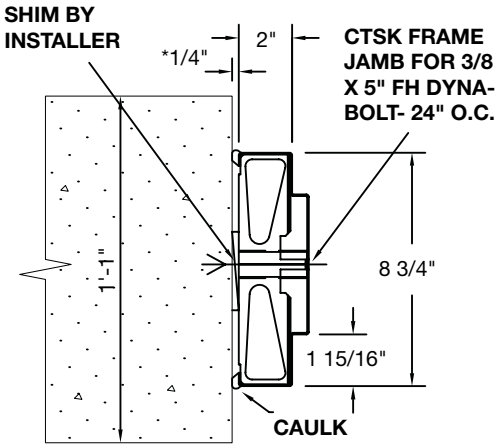
TYPICAL EXISTING OPENING ANCHOR DETAILS
PRECAST, CAST IN PLACE CONCRETE, OR WOOD



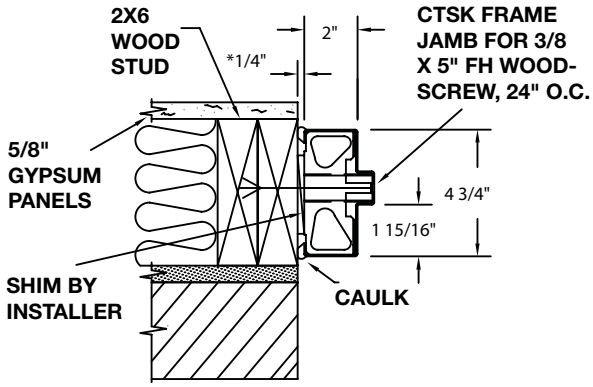
BUTTED SERIES SU OR SQ



BUTTED SERIES SU OR SQ



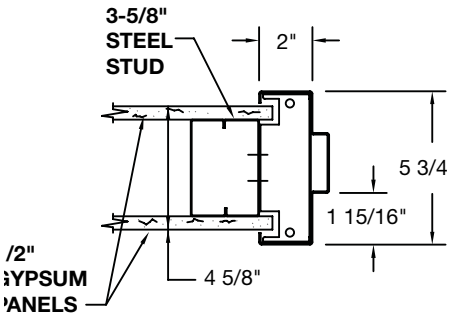
BUTTED SERIES SU OR SQ



BUTTED SERIES SU OR SQ

** 1/4" MAX. FOR ONE JAMB AND FRAME HEAD,*
3/8" TOTAL MAX. FOR BOTH JAMBS.

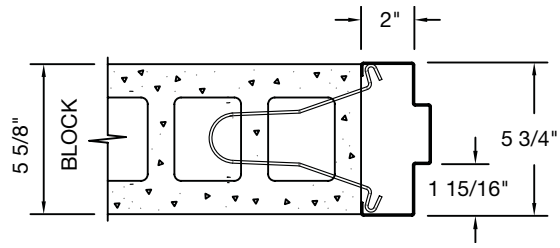
TYPICAL METAL STUD ANCHOR WALL DETAILS
INSTALLED BEFORE THE WALL



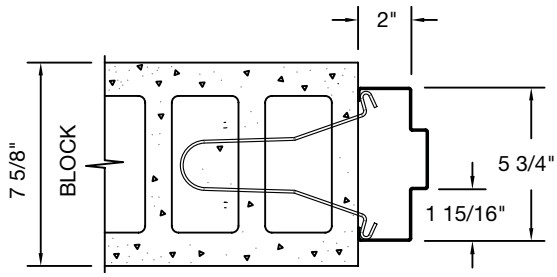
WRAP AROUND - SERIES SU OR SQ

DOOR FRAME WALL APPLICATIONS

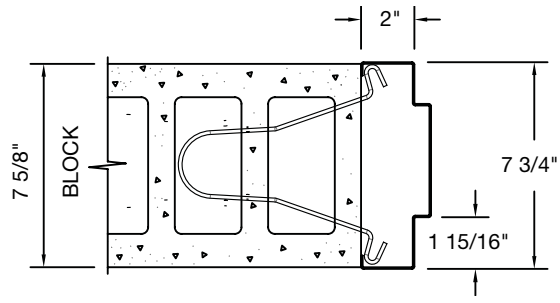
TYPICAL MASONRY BLOCK ANCHOR DETAILS



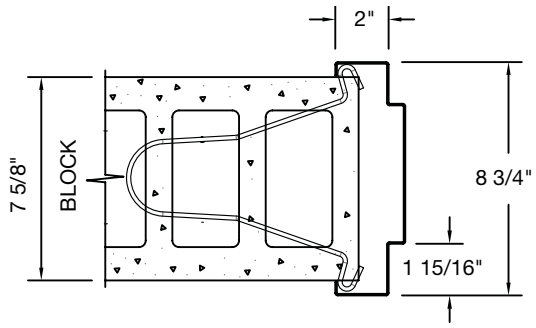
BUTTED SERIES SU OR SQ



BUTTED SERIES SU OR SQ

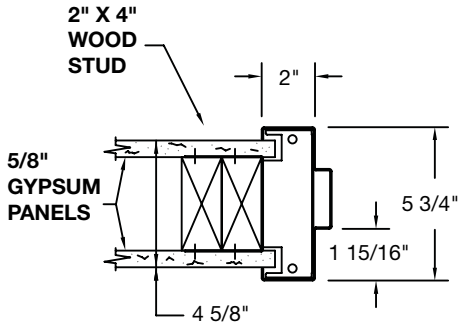


BUTTED SERIES SU OR SQ



BUTTED SERIES SU OR SQ

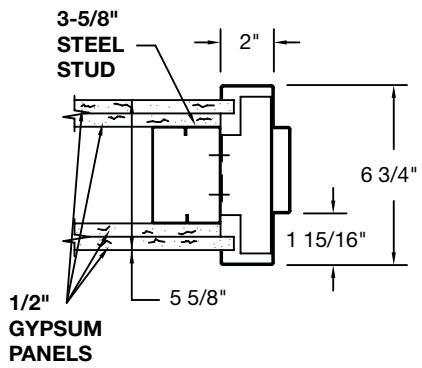
TYPICAL WOOD STUD WALL DETAILS
INSTALLED BEFORE THE DRYWALL



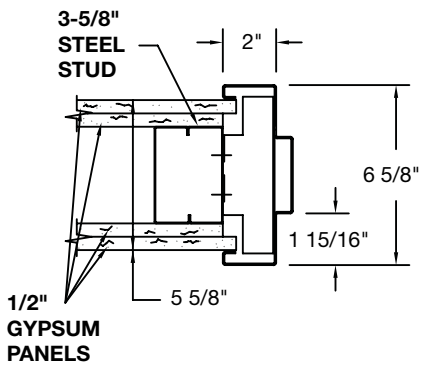
WRAP AROUND - SERIES SU OR SQ

DOOR FRAME WALL APPLICATIONS

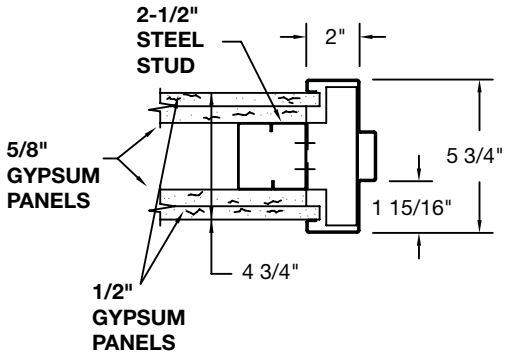
WELDED JAMB ANCHORS - METAL STUD WALL DETAILS
INSTALLED BEFORE THE DRYWALL



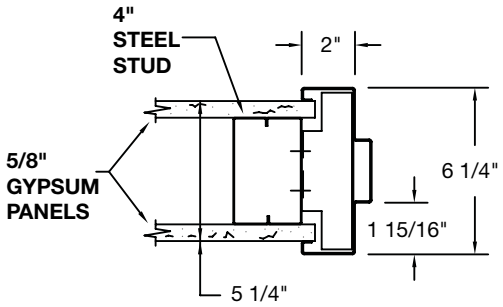
SERIES SU



SERIES BQ



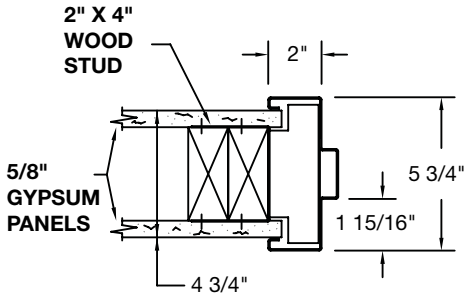
SERIES BQ



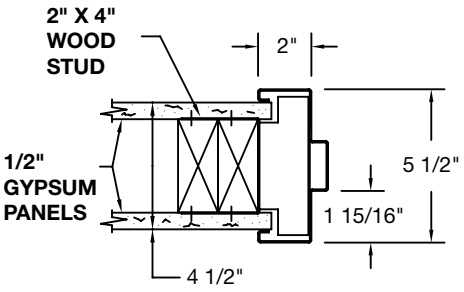
SERIES BQ

SEE INSTALLATION INSTRUCTIONS FOR ROUGH OPENING SIZE ...

WELDED JAMB ANCHORS - WOOD STUD DETAILS
INSTALLED BEFORE THE DRYWALL



SERIES BQ



SERIES BQ

SEE INSTALLATION INSTRUCTIONS FOR ROUGH OPENING SIZE ...

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

DOOR FRAME WALL APPLICATIONS

ROUGH OPENING REFERENCE CHART

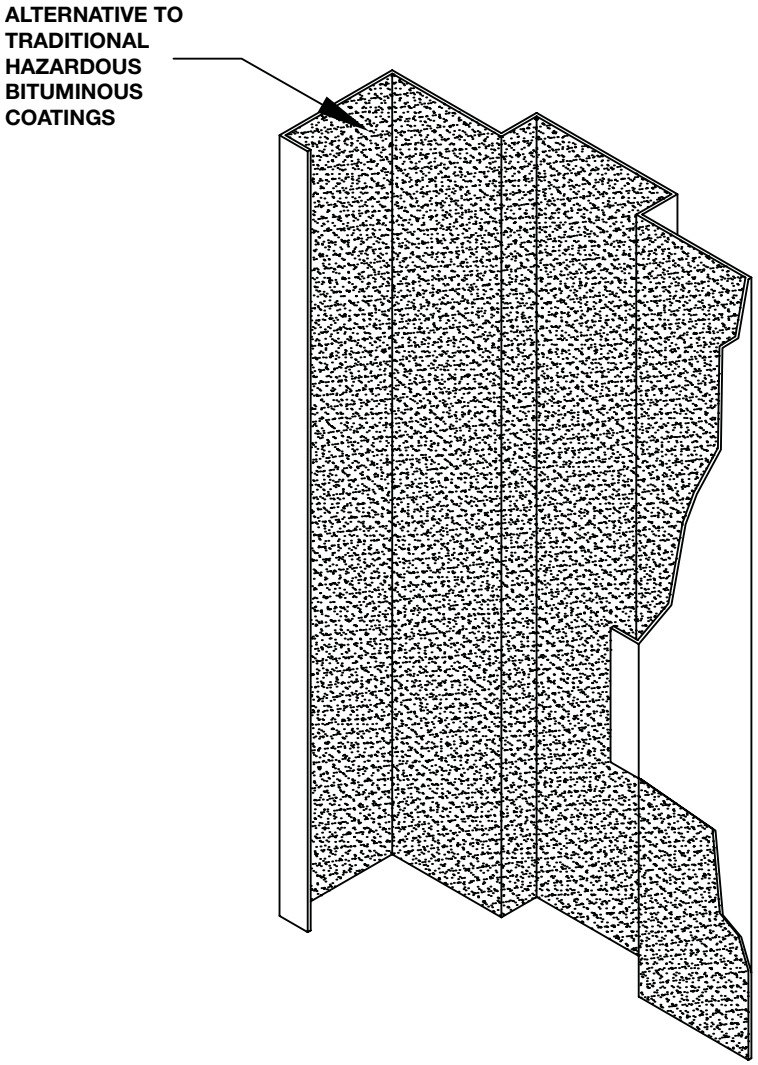
FRAME SERIES & STYLE	NOMINAL DOOR WIDTH PLUS...	NOMINAL DOOR HEIGHT PLUS...	FRAME FACE
3PC “S, SC, SE, B, BC, & BE” SERIES (WMA, MT & MT/Y&S) (BUTTED APPLICATION)	4-3/8”	2-1/4”	2”
3PC “S, SC, SE, B, BC & BE SERIES (EO) BUTTED APPLICATION)	4-3/8”	2-1/4”	2”
3PC “S, SC, SE, B, BC, & BE” SERIES (MSZ1 & WSZS (RECESSED)) (WRAPPED APPLICATION)	2-3/4”	1-3/8”	2”
3PC “S, SC, SE, B, BC, & BE” SERIES (MSZ2, WSZS (FLUSH) , ADJ/WS*, & ALL LOOSE WOOD* & METAL STUD*)	4-3/8”	2-1/8”	2”
3PC DU, DQ, DQW, **DR, **DRW SERIES	2”	1”	2”
3PC DC, ***DR, ***DRW SERIES 2-3/4” 1” 2”	2-3/4”	1”	2”
DWBLITE (DU, DQ & **DR SERIES)	2-5/8”	2-1/8”	2”
DWBLITE (DC, ***DR SERIES)	2-5/8”	2-7/8”	2”

NOTEWORTHY “RULES OF THUMB”

1) FOR SIDELITES, BORROWED LITES, OR TRANSOM FRAMES, THE ABOVE WILL APPLY PER SERIES AND ANCHORING.
2) IF A FRAME EXCEEDS 8-3/4” DEPTH, MT & XP ANCHORS ARE THE ONLY LOOSE ANCHORS AVAILABLE. ALL OTHER ANCHOR TYPES MUST BE WELDED IN.
3) ”S” & “B” SERIES SIDELITES, BORROWED LITES, & TRANSOM FRAMES WILL BE SUPPLIED WELDED UNLESS THE SIZE OF THE UNIT OR JOB CONDITIONS REQUIRED THE FRAME TO BE SPLIT FOR FIELD ASSEMBLY WITH SPLINES AND/OR WELDING. KD IS ONLY AN OPTION ON SOME BORROWED LITES & A LIMITED CONFIGURATION OF “D” SERIES SIDELITES.
4) FOR ANY ODD PROFILES OR FACES OTHER THAN 2” FACE, CONSULT THE FACTORY FOR ROUGH OPENINGS OR OR ANCHOR AVAILABILITY. 1-3/8” IS STANDARD LOW SIDE FACE ON DOUBLE EGRESS FRAMES.
5) EO ANCHORS WILL BE PREPPED FOR TWO IN THE SO T WHEN THE DEPTH EXCEEDS 14”.
6) EO ANCHORS WILL BE POSITIONED IN THE RABBET FOR SR & BR SERIES IF THE DEPTH FALLS BELOW 4-1/2”, ALL SQT, SRT, TQB, TRB, SE & BE SERIES FRAMES, ANCHORS WILL BE IN THE RABBET.
7) SU FRAME PROFILE WITH EO/SF6 ANCHORS MIN. DEPTH IS 4-3/4”. SQ FRAME PROFILE WITH EO/SF6 MIN. FRAME DEPTH IS 5-1/8”. 4-1/2” DEPTH SU FRAME PROFILE REQUIRES A09 ANCHOR.
8) EO ANCHORS: WHEN FRAME DEPTH IS OVER 8-3/4” UP THRU AND INCLUDING 14”, AND ANCHORS ARE ATTACHED, ANCHORS WILL BE PIPE AND PLATE TYPE.
9) EO ANCHOR WALL CONDITION SHALL HAVE A 1/4” MAX. GAP BETWEEN ONE JAMB AND FRAME HEAD AND WALL, AND THE ROUGH OPENING SHALL BE A MAX. OF 3/8” WIDER THAN THE OVERALL WIDTH OF THE FRAME.

*(*THE ONLY LOOSE ANCHORS AVAILABLE ON SE OR BE SERIES FRAMES ARE WMA’S OR MT’S)*
*** DR & DRW FRAMES WITH DEPTHS OVER 4” PLUMB ANCHORS ARE LOCATED IN THE SO T.*
**** DR, DRW & DC FRAMES WITH 4” DEPTHS OR LESS PLUMB ANCHORS ARE LOCATED IN THE RABBET.*

ASPHALTIC FRAME UNDERCOATING



FEATURES:
- Applied to KD or welded frames
- Factory or Field applied
- UL Solutions & WH classified
- Provides corrosion resistance
- Available with primed & finish coat paint
- Available in aerosol spray cans

ADVANTAGES:
- GreenGuard Certified
- Water-based
- Moisture Resistant
- Dries Quickly - Approximately 10min. @ 70 degrees F. Forced ventilation speeds cure time
- Excellent Adhesion
- VOC (Volatile Organic Compounds) Free
- HAPS (Hazardous Air Pollutants) Free
- Virtually Odorless
- Dries Semi-Gloss & non-tacky

USES:
- Moisture resistant barrier when grout is required

CONTAINER SIZE	ESTIMATED SQ. FT COVERAGE @ 1 MIL.	ESTIMATED # OF 3'0" X 7'0", 5-3/4" DEPTH FRAMES PER CONTAINER
5 GALLON	3375	211
1 GALLON	675	42
AEROSOL CAN	85	5

FIRE RATED FRAMES SHALL HAVE A MAX. OF 3.5 DFT APPLIED.
DESIGNED TO SPRAY @ 5 MIL. WFT OR DIPPED & CURE TO 3 MIL DFT.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

Ceco Door

ASSA ABLOY

Doors

Experience a safer
and more open world

TECH MANUAL

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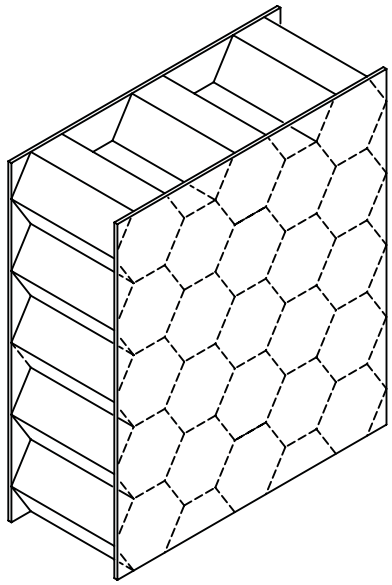
1-3/4" REGENT (RI) HONEYCOMB CORE DOORS

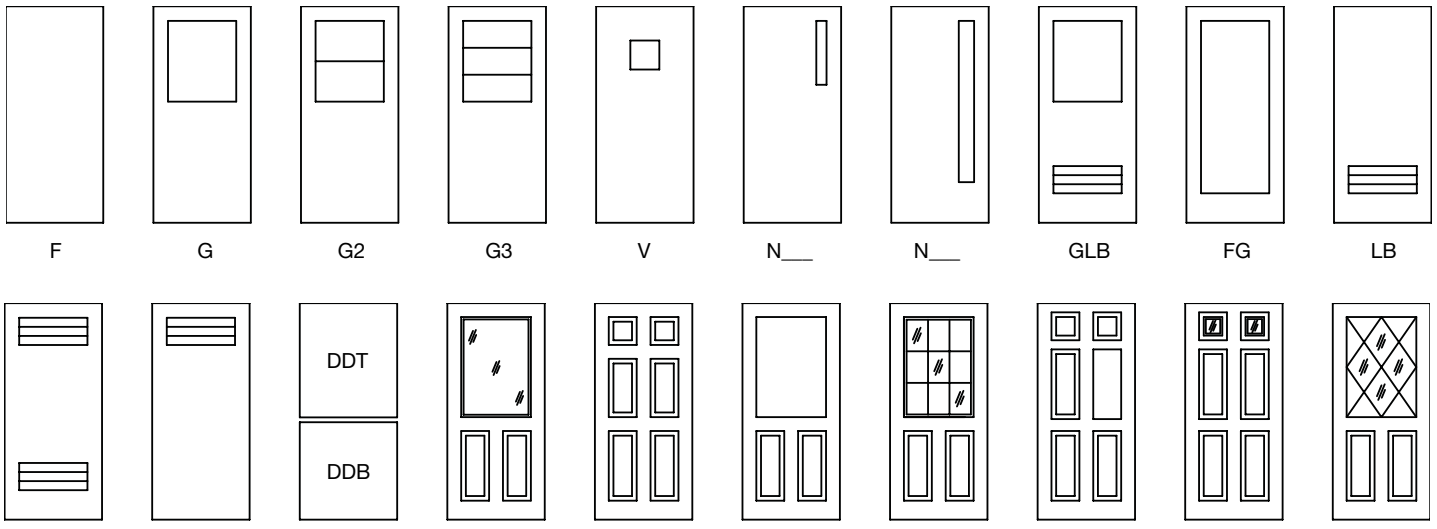
FLUSH AND EMBOSSED PANEL STEEL DOORS BEVELED LOCK EDGE, HANDED



Kraft fiber honeycomb slab, bonded to the inside of both face sheets with a water resistant, contact adhesive.

SUGGESTED USE:
- Interior or Exterior ...
- Office
- Motel/Hotel
- Apartment
- Urban Renewal
- Health Care
- Institutional
- Mercantile
- Public Utility
- Factory
- Warehouse

DOOR DESIGNS



F | G | G2 | G3 | V | N___ | N___ | GLB | FG | LB

LD | LT | DUTCH V, G, & N DESIGNS AVAILABLE | E603 | E601, EN61 | E602, EN62, EN63 | E605, E606 EN66 | E607, E608 | E609, EN69 | E604, EN63

EMBOSSED 6 PANEL ORDER CODES AND DOOR WIDTHS	
2'6, 2'8" NARROW 6 PANEL	2'8", 3'0" STD. 6 PANEL
EN61	E603
EN62	E601
EN63	E602
EN66	E605
E607	E606
E608	E607
EN69	E608
EN63	E609
E603	E604

6 PANEL	
MAX. SIZE	3'0"X7'0"
MIN. SIZE	2'6"X6'8"

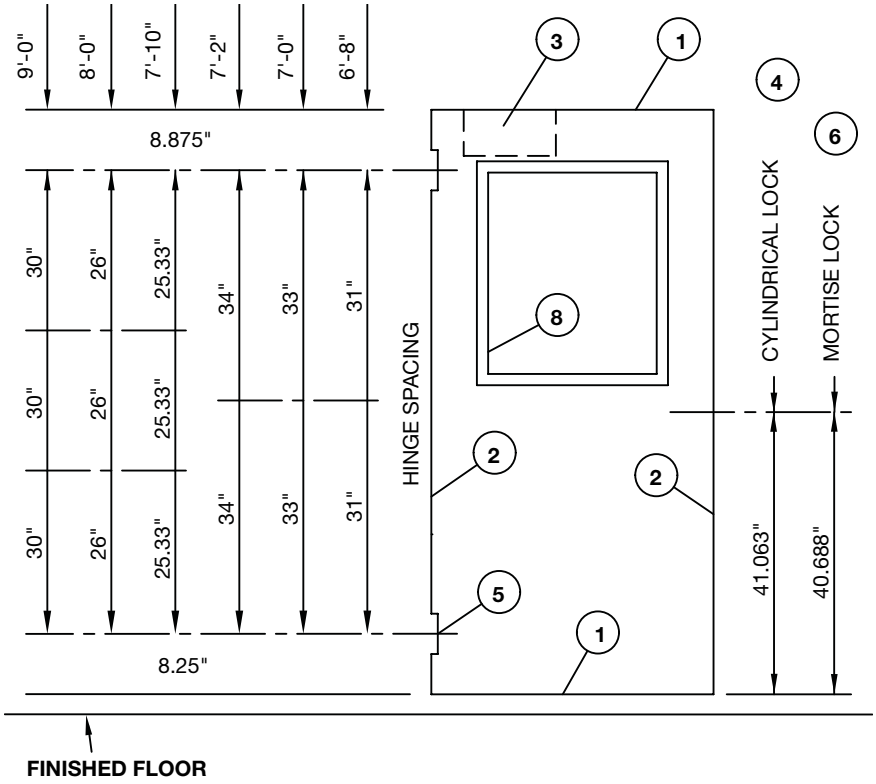
ALL 6 PANEL EMBOSSED DESIGNS WILL BE CENTER EDGE SEAM CONSTRUCTION

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

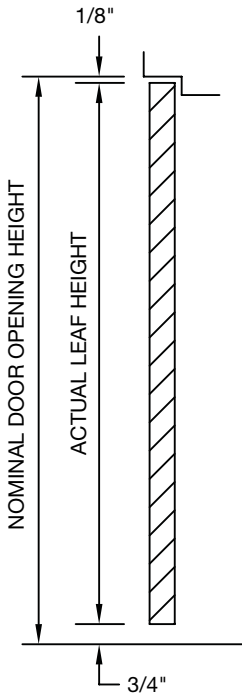
REGENT DOORS

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

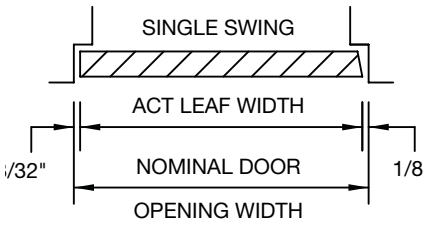
DOOR ELEVATION

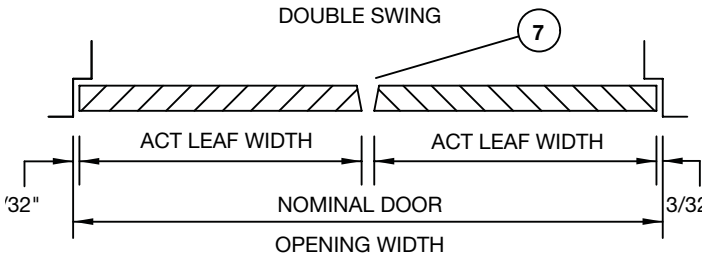


VERTICAL SECTION

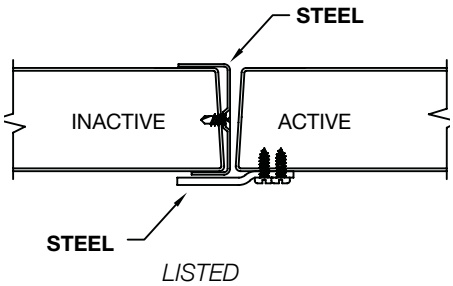


HORIZONTAL SECTIONS



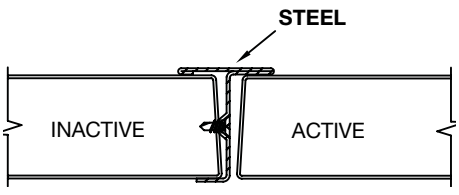


7 OVERLAPPING ASTRAGAL 4441
FOR 1-3/4" THICK DOORS



LISTED

7 OVERLAPPING ASTRAGAL 4471
FOR 1-3/4" THICK DOORS

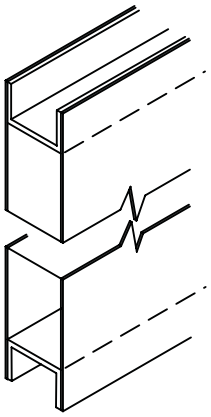


LISTED

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

REGENT DOORS

1 16 GAUGE STEEL END CHANNELS

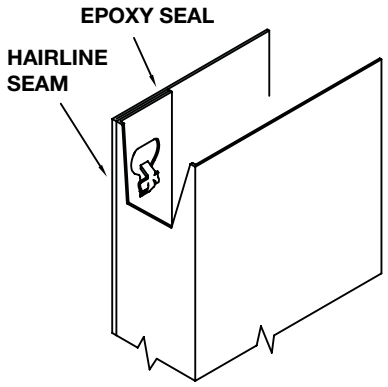


WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES



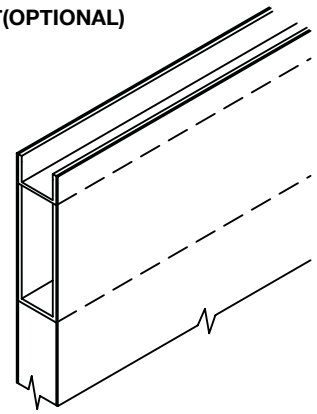
MECHANICALLY INTERLOCKED HEMMED EDGES

14 GAUGE DOORS WILL BE CENTER EDGE SEAM CONSTRUCTION

OPTIONAL : SEAMLESS (WELDED OR BODY FILLER)

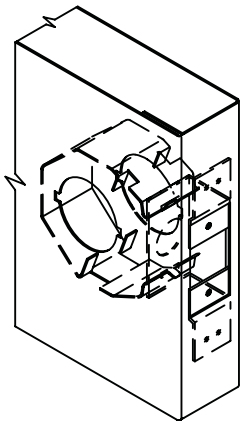
ALL 6 PANEL EMBOSSED DESIGNS WILL BE CENTER EDGE SEAM CONSTRUCTION.

3 CLOSER REINFORCEMENT(OPTIONAL)



14 GAUGE STEEL CHANNEL 20" LONG

4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE



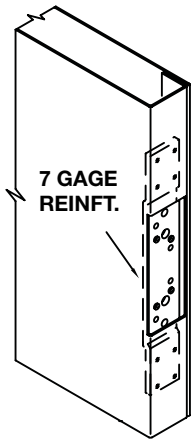
(LC1)

(ANSI A115.2)

2-3/4"BACKSET

LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

5 HINGE PREPARATION

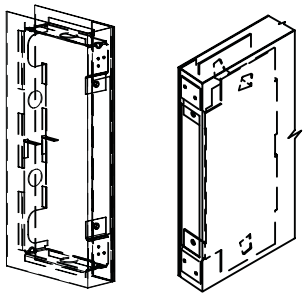


4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

HINGE EDGE IS HANDED AND NOT BEVELED.

ANSI A156.7 TEMPLATE

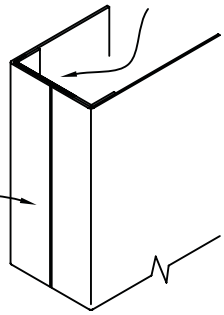
6 LOCK PREPARATION



GOV. 86, ANSI/ BHMA A115.1 MORTISE TYPE

NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.
LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

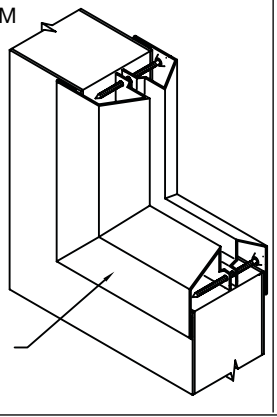
2 VERTICAL EDGES



ALL 6 PANEL DESIGNS ARE CENTER EDGE SEAM CONSTRUCTION

WELD SEAMLESS AND BODY FILLER SEAMLESS IS OPTIONAL

8 GLAZING TRIM SLIMTRIM

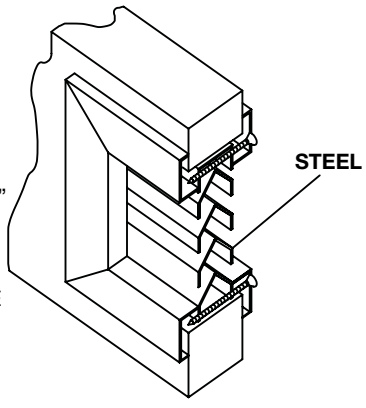


FOR ALL FIRE DOORS

3/8" WIDE GLAZING POCKET

LISTED

9 FIXED SLAT TYPE LOUVER 4634



FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

REGENT DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES : UNDERWRITERS LABORATORY WARNOCK HERSEY FACTORY MUTUAL
TEST: UL 10C, UL 10B, UL 1784, & NFPA 252 **RATING:** 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR, OR 3 HR **MAX. SIZE:** 4'0" X 9'0" SINGLE 8'0" X 9'0" PAIR **DESIGNS:** F, G, FG, N, V E6 & EN6 *NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.*

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be as manufactured by Ceco Door Products. Doors shall conform to the Steel Door institute guide specification, ANSI A250.8; see chart below for performance classifications.

REGENT doors are made full-flush or (optional) seamless style. Face sheets are commercial quality cold rolled steel conforming to ASTM A1008 ... or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 -- see chart below.

Regent full-flush doors have mechanically interlocked, hemmed, hairline seams on vertical edges and have no visible seams on faces. Embossed 6 panel doors will have center edge seam construction. Doors specified "seamless" have no visible seams on faces or vertical edges (S.D.I. Model 2). A one piece, kraft honeycomb core is securely bonded to both face sheets under pressure with contact adhesive. The top and bottom door edges are closed with 16 gauge steel channels welded to bath face sheets.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1 : 16) and is prepared for Gov. series 86, 160/161 , or 90 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel channel

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

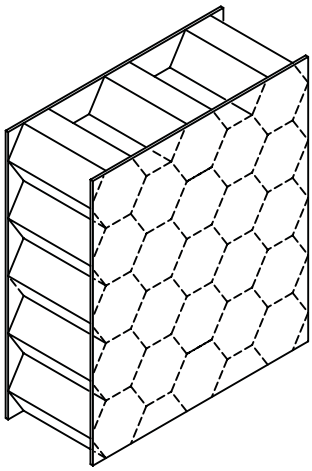
DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
20 GAUGE STEEL (4080 MAX.)	STANDARD DUTY	N/A	STD	N/A	16 GAUGE STEEL
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	OPT	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT	14 OR 12 GAUGE STEEL

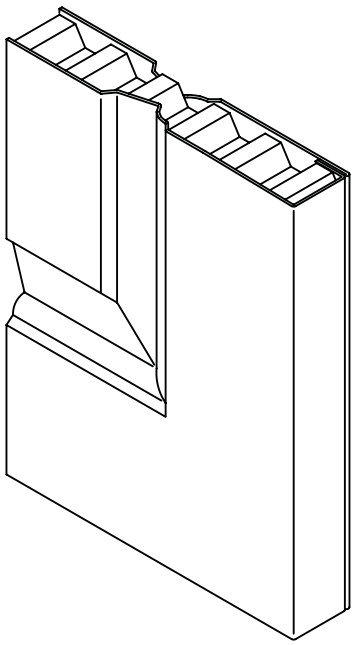
PERFORMANCE

SOUND TRANSMISSION CLASS:	STC 32 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE])
PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, 20 GAUGE: LEVEL B (500,000 CYCLES); 18 AND 16 GAUGE: LEVEL A (1,000,000 CYCLES)

1-3/4” OMEGA (OI) HONEYCOMB CORE DOORS

FLUSH AND EMBOSSED PANEL STEEL DOORS UNIVERSAL, NON-HANDED



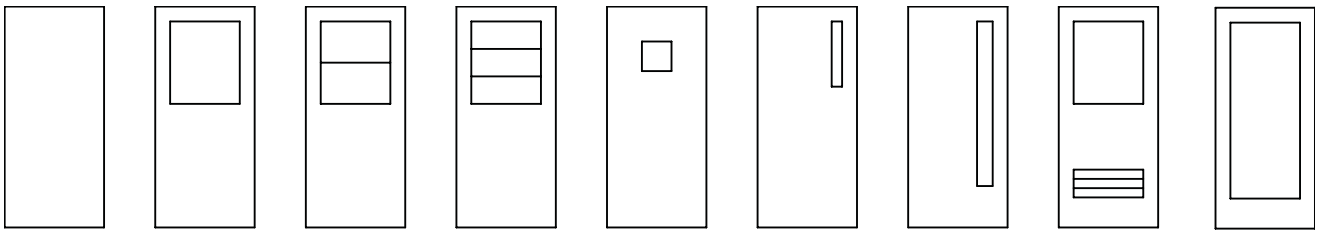


Kraft fibre honeycomb slab, bonded to the inside of both face sheets with a waterproof, contact adhesive.

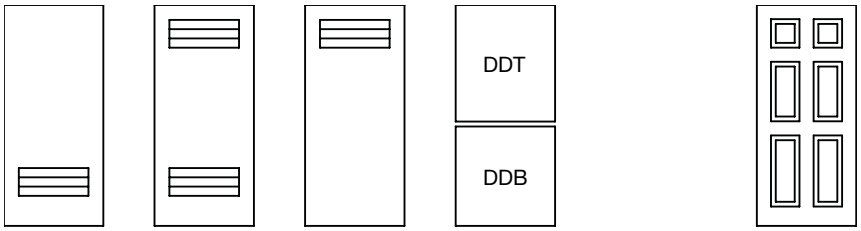
SUGGESTED USE:

- Interior or Exterior ...
- Office
- Motel/Hotel
- Apartment
- Urban Renewal
- Health Care
- Institutional
- Mercantile
- Public Utility
- Factory
- Warehouse

DOOR DESIGNS



F G G2 G3 V N___ N___ GLB FG



LB LD LT DUTCH V, G, & N DESIGNS AVAILABLE

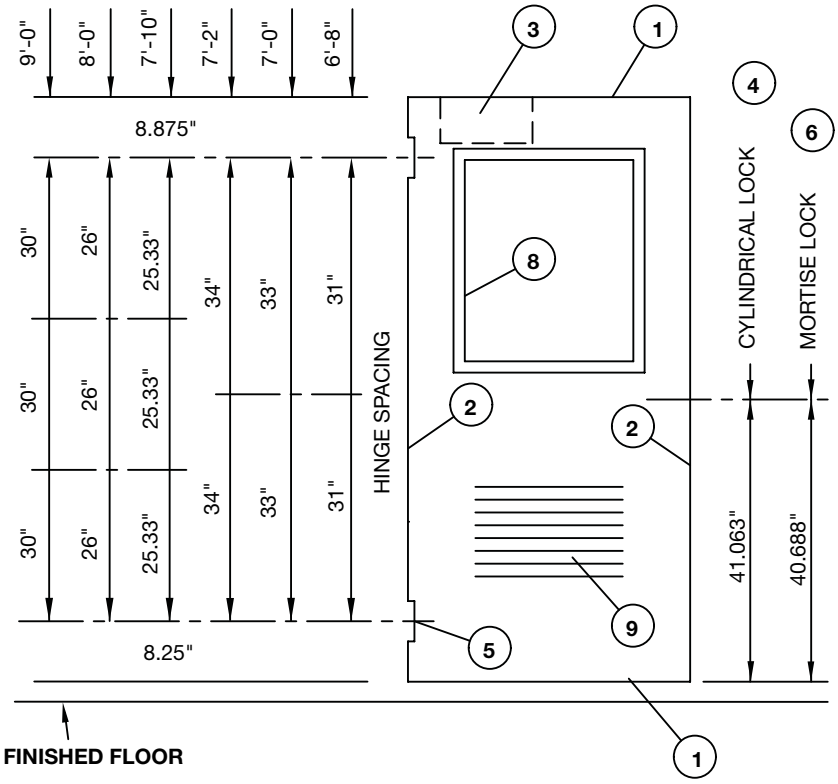
E601, EN61

6 PANEL	
MAX. SIZE	3’0”X7’0”
MIN. SIZE	2’6”X6’8”

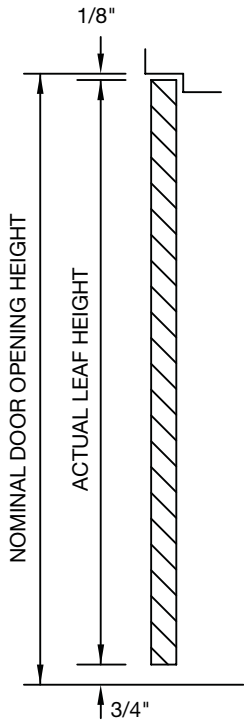
ALL 6 PANEL EMBOSSED DESIGNS WILL BE CENTER EDGE SEAM CONSTRUCTION

OMEGA DOORS

DOOR ELEVATION

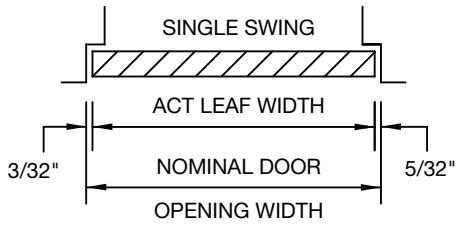


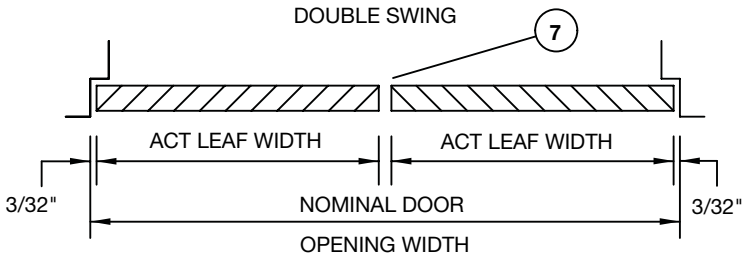
VERTICAL SECTION



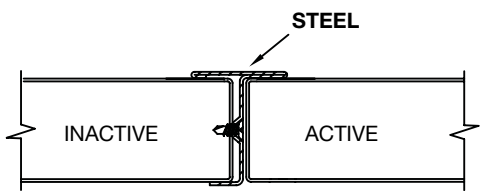
HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

HORIZONTAL SECTIONS



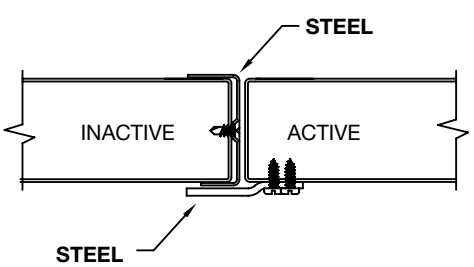


(7) **OVERLAPPING ASTRAGAL** 4441
FOR 1-3/4" THICK DOORS



LISTED

(7) **OVERLAPPING ASTRAGAL** 4471
FOR 1-3/4" THICK DOORS

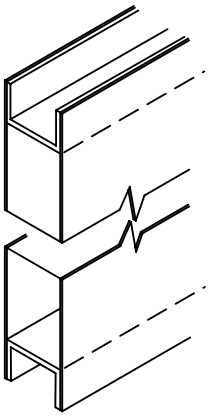


LISTED

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

OMEGA DOORS

1 16 GAUGE STEEL END CHANNELS

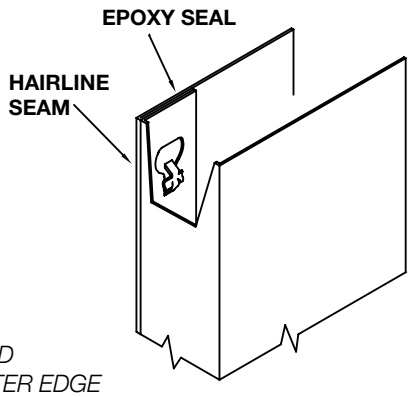


WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

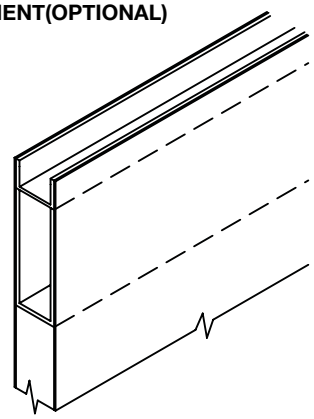


MECHANICALLY INTERLOCKED HEMMED EDGES

OPTIONAL : SEAMLESS (WELDED OR BODY FILLER)

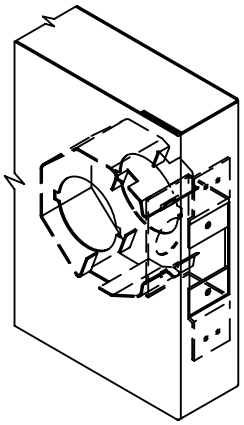
ALL 6 PANEL EMBOSSED DESIGNS WILL BE CENTER EDGE SEAM CONSTRUCTION.

3 CLOSER REINFORCEMENT(OPTIONAL)



14 GAUGE STEEL CHANNEL 20" LONG

4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE



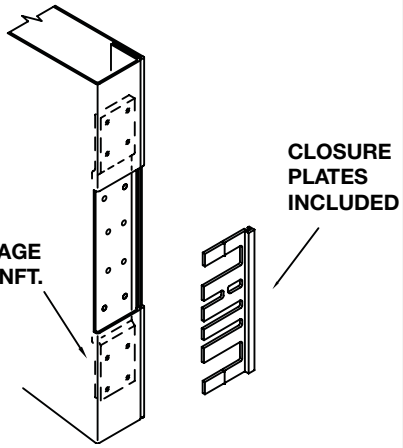
(LC1)

(ANSI A115.2)

2-3/4"BACKSET

LOCK EDGE IS SQUARE

5 HINGE PREPARATION

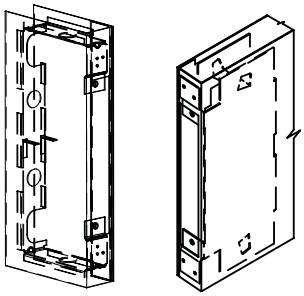


4-1/2" X .134" HIGH, STANDARD OR HEAVY WT. FULL MORTISE HINGE PREPS

ANSI A156.7 TEMPLATE

NON-HANDED

6 LOCK PREPARATION

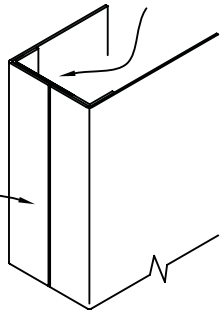


GOV. 86, ANSI/ BHMA A115.1 MORTISE TYPE

NOTE: EITHER OF THE LOCK REINFORCEMENTS/ GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

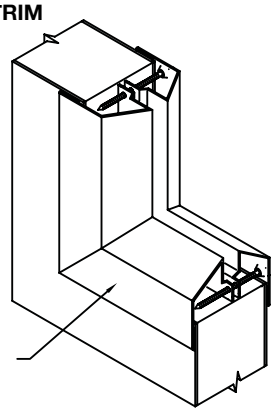
LOCK EDGE IS SQUARE

2 VERTICAL EDGES



WELD SEAMLESS AND BODY FILLER SEAMLESS IS OPTIONAL

8 GLAZING TRIM



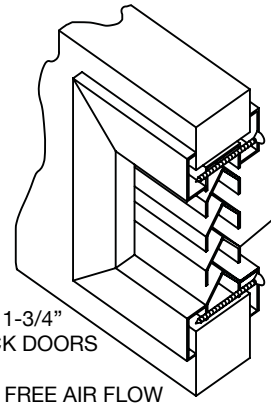
SLIMTRIM

FOR ALL FIRE DOORS

3/8" WIDE GLAZING POCKET

LISTED

9 FIXED SLAT TYPE LOUVER 4634



FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

OMEGA DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY
FACTORY MUTUAL

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR, OR 3 HR

MAX. SIZE: 4'0" X 9'0" SINGLE
8'0" X 9'0" PAIR

DESIGNS: F, G, FG, N, V
E6 & EN6

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be as manufactured by Ceco Door Products. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8; see chart below for performance classifications.

OMEGA doors are made full-flush or (optional) seamless style. Faces sheets are commercial quality cold rolled steel (conforming to ASTM A1008 ... or (optional) hot-dipped Galvannealed or galvanized steel (conforming to ASTM A924 and A653) - see chart below.

Omega full-flush doors have mechanically interlocked, hemmed, hairline seams on vertical edges and have no visible seams on faces. Embossed 6 panel designs will have center edge seam construction. Doors specified «seamless" have no visible seams on faces or vertical edges (S.D.I. Design 2). A one piece, kraft honeycomb core is securely bonded to both face sheets under pressure with contact adhesive. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets.

Hardware Provisions: Hinge preparations are non-handed. Hinge edges are mortised for 4-1/2" standard and heavy weight hinges. 7 gauge steel reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156. 7. Hinge closing plates are included. The lock edge is square and is prepared for Gov. series 86, or 160/161 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel channel.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
20 GAUGE STEEL (4080 MAX.)	STANDARD DUTY	N/A	STD	N/A	16 GAUGE STEEL
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	OPT	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL

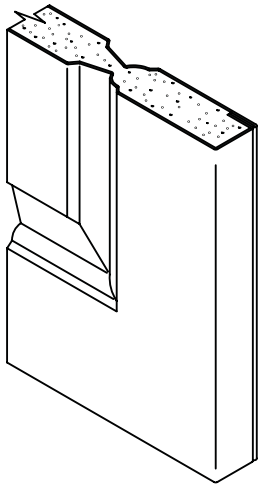
PERFORMANCE

SOUND TRANSMISSION CLASS:	STC 32 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE])
PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, 20 GAUGE: LEVEL B (500,000 CYCLES); 18 AND 16 GAUGE: LEVEL A (1,000,000 CYCLES)

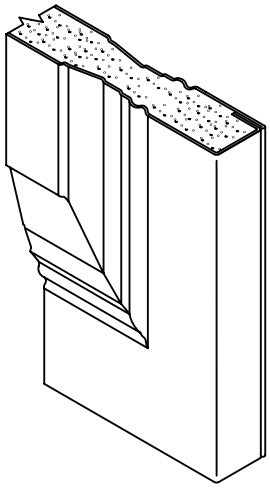
1-3/4" IMPERIAL (IU) POLYURETHANE CORE

FLUSH AND EMBOSSED PANEL STEEL DOORS BEVELED LOCK EDGE, HANDED

FLUSH DESIGNS SIMILAR LESS EMBOSSED PANEL



**EMBOSSED PANEL DESIGNS:
6 PANEL
CROSSBUCK**



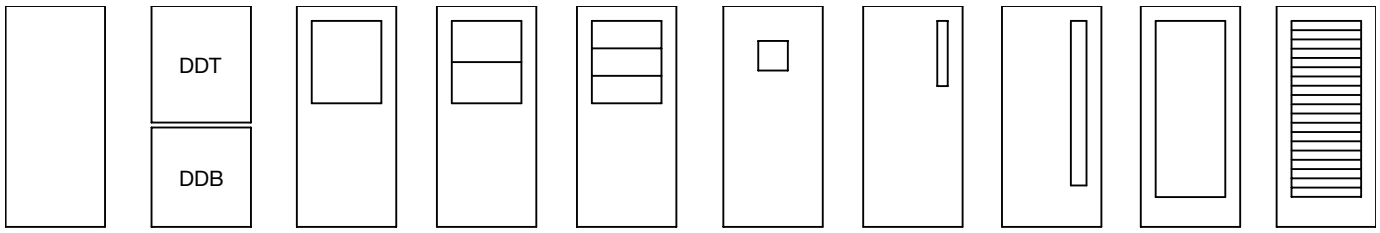
HIGH DEFINITION EMBOSSED PANEL DESIGNS: 1 & 2 PANEL

Full flush or seamless style... Foamed-in-place polyurtehane core fills entire door cavity. Core is chemically bonded to all interior surfaces. High impact resistance. Excellent insulation characteristics.

SUGGESTED USE:
- Interior or Exterior ...
- Condominiums
- Dormitories
- Motels/Hotels
- Office buildings
- Urban renewal
- Health care
- Institutional
- Data processing
- Mercantile
- Food processing

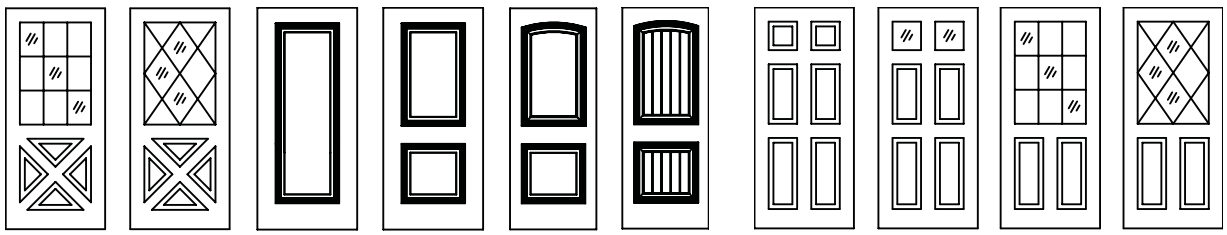
DOOR DESIGNS

FLUSH DESIGNS



F | DUTCH V, G, & N DESIGNS AVAILABLE | G | G2 | G3 | V | N___ | N___ | FG | LF

EMBOSSED PANEL DESIGNS



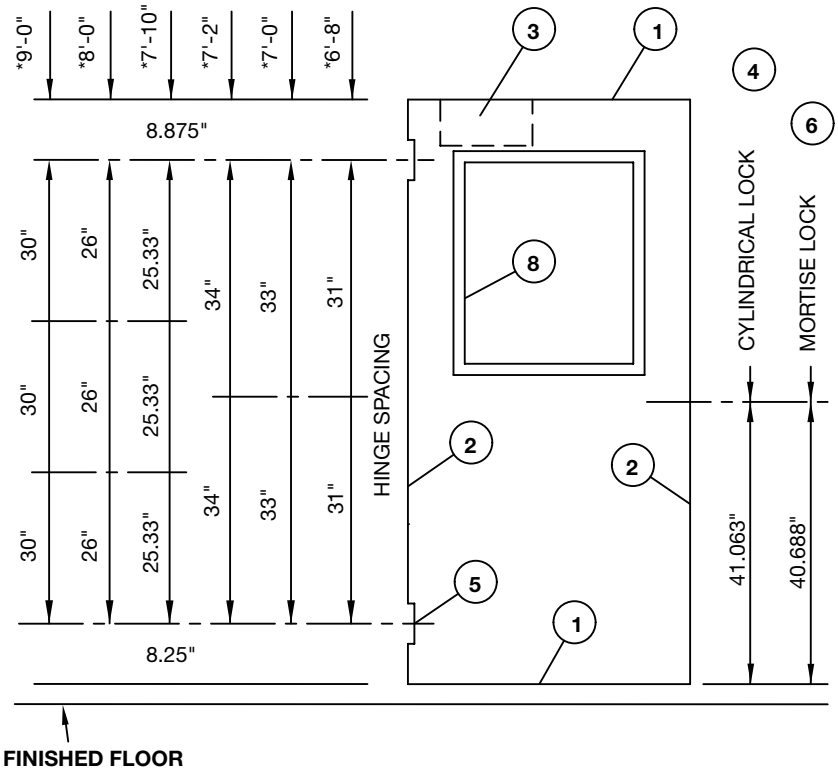
EC05 | EC04 | E101 | E201 | E202 | E203 | E601 | E609 | E605 | E604

	1 PANEL	2 PANEL	6 PANEL	CROSS BUCK & LITES
MAX. SIZE	3'0X8'0"	3'0X8'0"	3'0X7'0"	3'0X7'0"
MIN. SIZE	2'8X6'8"	2'8X6'8"	2'8X6'8"	2'8X6'8"

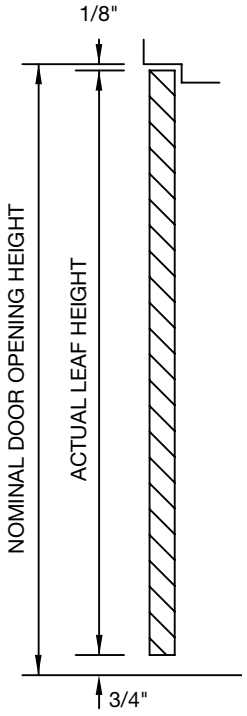
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

IMPERIAL DOORS

DOOR ELEVATION

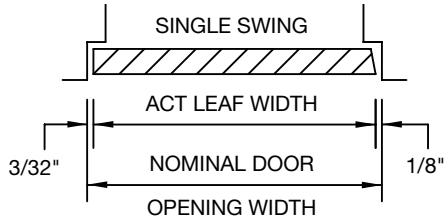


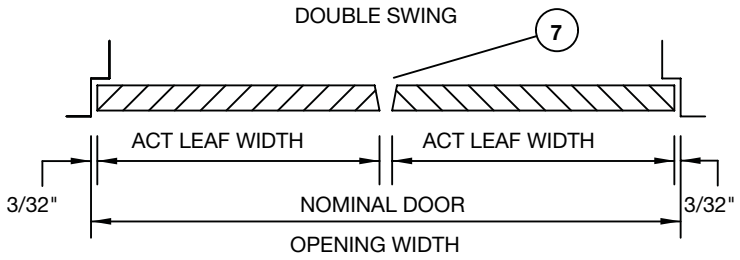
VERTICAL SECTION



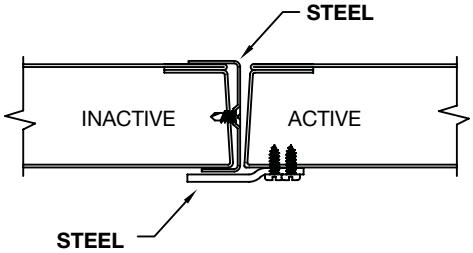
HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

HORIZONTAL SECTIONS



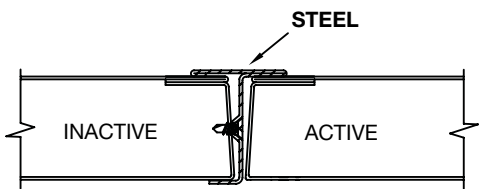


(7) **OVERLAPPING ASTRAGAL 4441**
FOR 1-3/4" THICK DOORS



LISTED

(7) **OVERLAPPING ASTRAGAL 4471**
FOR 1-3/4" THICK DOORS



LISTED

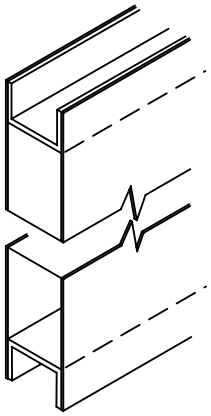
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

IMPERIAL DOORS

1 16 GAUGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

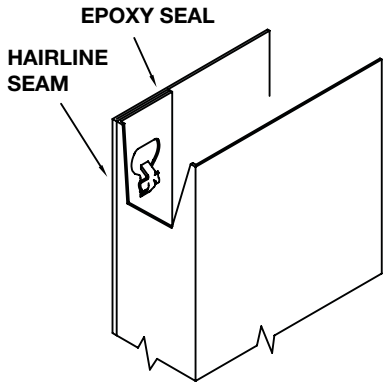


OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

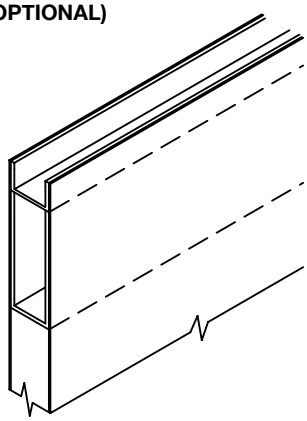
MECHANICALLY INTERLOCKED HEMMED EDGES

ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)



3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAUGE STEEL CHANNEL 20" LONG

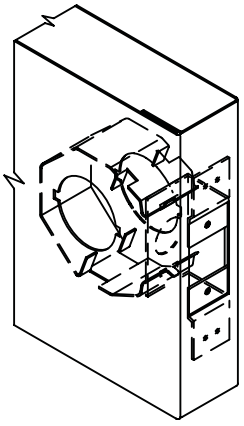


4 LOCK PREPARATION
GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4"BACKSET



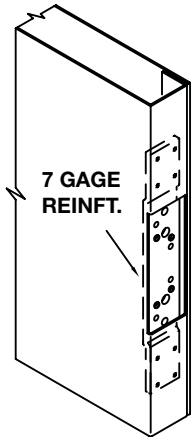
LOCK EDGE IS BEVELED 1:8" IN 2" (1:16)

5 HINGE PREPARATION

4-1/2" OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGE PREPS

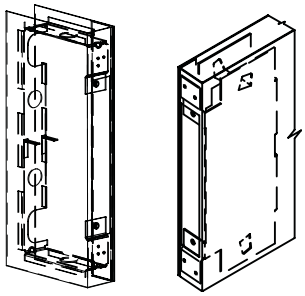
ANSI A156.7 TEMPLATE

HINGE EDGE IS HANDED AND NOT BEVELED.



6 LOCK PREPARATION
GOV. 86, ANSI/BHMA A115.1 MORTISE TYPE

(LM0)

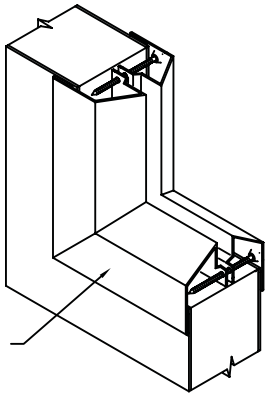


NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

8 GLAZING TRIM

SLIMTRIM

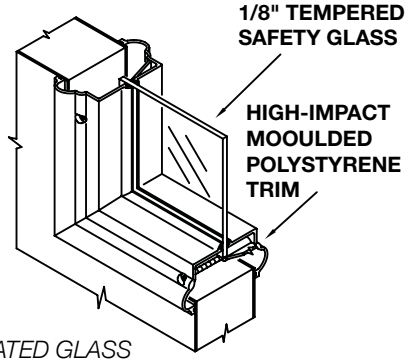
3/8" WIDE GLAZING POCKET



LISTED

9 GLAZING SYSTEM

FOR STANDARD 2'8" & 3'0" WIDE, 6'8" & 7'0" HIGH NON-LABELED EMBOSSED 2, 6 & CROSSBUCK PANEL DOORS



OPTIONAL: 1/2" INSULATED GLASS

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

IMPERIAL DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: (18,16 & 14 GAUGE) 1/3 HR, 3/4 HR, 1 HR, 1-1/2 OR 3HR.

MAX. SIZE: 4'0" X 7'0" SINGLE
6'0" X 7'0" PAIR

DESIGNS: F, G, FG, N, V
E6 & EN6

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be as manufactured by Ceco Door Products, Milan, TN USA. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8; see chart below for performance classifications.

IMPERIAL doors are made full-flush or (optional) seamless style. Face sheets are commercial quality cold rolled steel conforming to ASTM A1008 and A568 ... or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 -- see chart below.

Imperial full-flush doors have mechanically interlocked, hemmed, hairline seams on vertical edges and have no visible seams on faces. Doors specified "seamless" have no visible seams on faces or vertical edges (S.D.I. Model 2). Face sheets are totally supported by a foamed-in-place polyurethane core. The core fills the entire door cavity and is chemically bonded to all interior surfaces. Density of foam exceeds 1.8 pcf and it has a crush strength of 3600 psf. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1 :16) and is prepared for Gov. series 86, 160/161, or 90 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel channel.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base or necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

SIZE LIMITS - DESIGNS

	FLUSH DESIGNS	1 & 2 PANEL	6 PANEL	CROSS BUCK & LITES
MAX	4'0"x9'0"	3'0"x8'0"	3'0"x7'0"	3'0"x7'0"
MIN	2'0"x6'8"	2'8"x6'8"	2'6"x6'8"	2'0"x6'8"

E1, E2 & E6 DESIGNS: MORTISE LOCK PREPARATION LIMITED TO 3'0" WIDTH.
1 & 2 PANEL DOORS ARE AVAILABLE IN 18 GAUGE FACE SHEETS ONLY.
CROSSBUCK DOORS ARE AVAILABLE IN 20 & 18 GAUGE FACE SHEETS ONLY.
6 PANEL IS AVAILABLE IN 20, 18, & 16 GAUGE.
PANEL DESIGN DOOR FACE SHEETS ARE FORMED FROM A40 GALVANNEALED STEEL.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
20 GAUGE STEEL (4080 MAX.)	STANDARD DUTY	N/A	STD	N/A	16 GAUGE STEEL
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	OPT	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL

PERFORMANCE

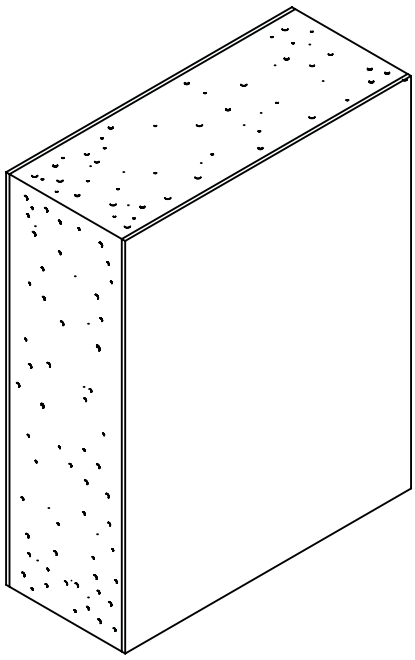
THERMAL	CORE CALCULATED (ASTM C518)
CHARACTERISTIC VALUE	NFRC 102-2014 & ASTM FLUSH DOOR WITH MERCURY FRAME NFRC 102-2014 & ASTM FLUSH DOOR WITH WEATHERKERF FRAME NFRC 102-2014 & ASTM FLUSH DOOR WITH STANDARD FRAME NFRC 102-2014 & ASTM EMBOSSED DOOR WITH MERCURY FRAME NFRC 102-2014 & ASTM EMBOSSED DOOR WITH WEATHERKERF FRAME NFRC 102-2014 & ASTM EMBOSSED DOOR WITH STANDARD FRAME

NFRC102-2014: THE GENERAL REQUIREMENTS OF TESTING SHALL BE AS DEFINED IN NFRC 102, ASTM C1199 AND ASTM C1363.

SOUND TRANSMISSION CLASS	STC 26 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE])
PHYSICAL ENDURANCE LEVEL	MEETS ANSI A250.4 PERFORMANCE TEST, 20 GAUGE: LEVEL B (500,000 CYCLES); 18 AND 16 GAUGE: LEVEL A (1,000,000 CYCLES)

1-3/4” IMPERIAL MAXIM (IU) 14 GAUGE STEEL

POLYURETHANE FOAM CORE, SEAMLESS, CUSTOM TYPE BEVELED LOCK EDGE, HANDED



Designed to Take Extreme People Punishment, Insulated.. Foamed-in-Place Polyurethane core fills entire cavity. Core is chemically bonded to all interior surfaces. High impact resistance. Excellent insulation characteristics. Heavy weight hinge preparations.

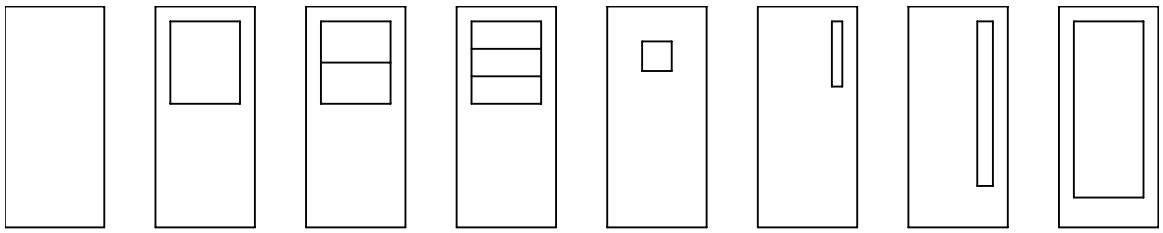
SUGGESTED USE:

- Interior or Exterior ...
- Primary Schools*
- Middle Schools/High Schools*
- College/Universities*
- Vocational Training Centers*
- Rehabilitation Centers
- Mental Health Care Facilities

**DOOR HAS FULL LIFETIME WARRANTY WHEN USED IN SCHOOLS*

DOOR DESIGNS

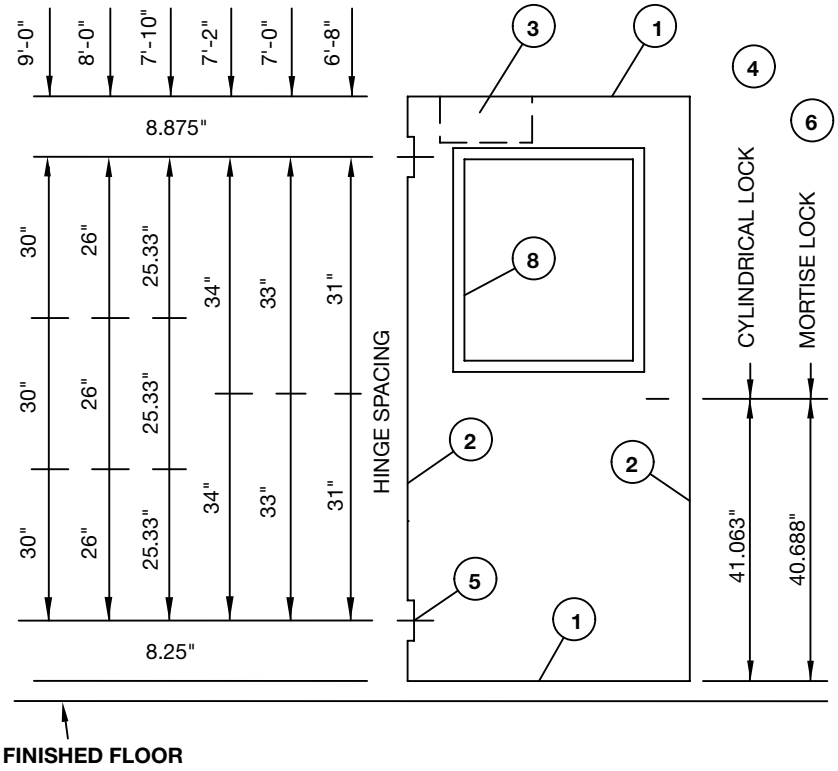
FLUSH DESIGNS



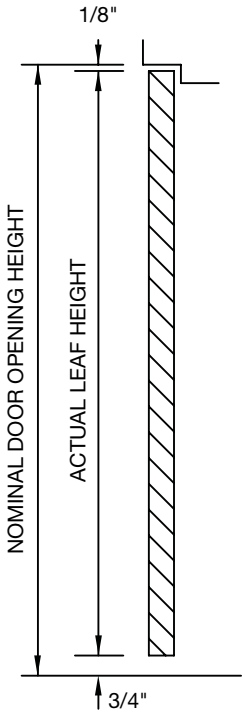
IMPERIAL MAXIM DOORS

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

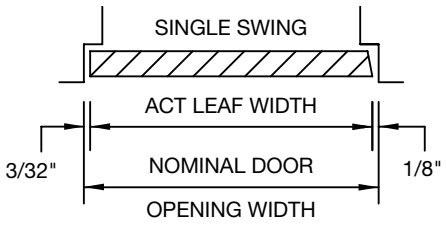
DOOR ELEVATION

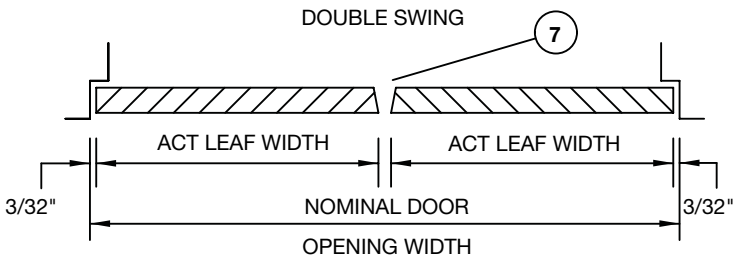


VERTICAL SECTION

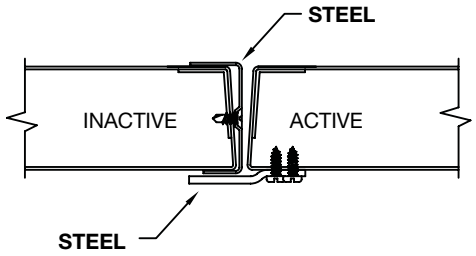


HORIZONTAL SECTIONS



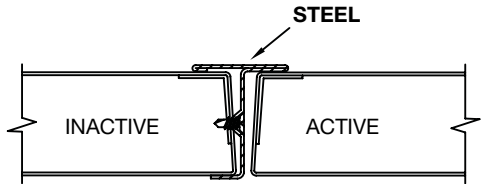


(7) **OVERLAPPING ASTRAGAL** 4441
FOR 1-3/4" THICK DOORS



LISTED

(7) **OVERLAPPING ASTRAGAL** 4471
FOR 1-3/4" THICK DOORS

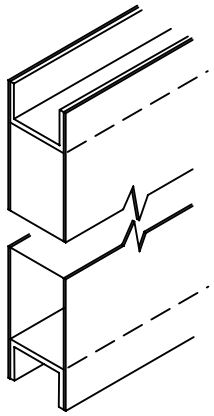


LISTED

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

IMPERIAL MAXIM DOORS

1 16 GAUGE STEEL END CHANNELS

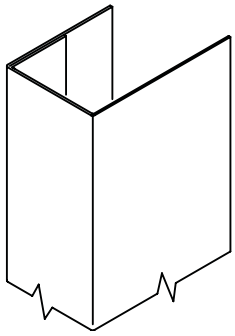


WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

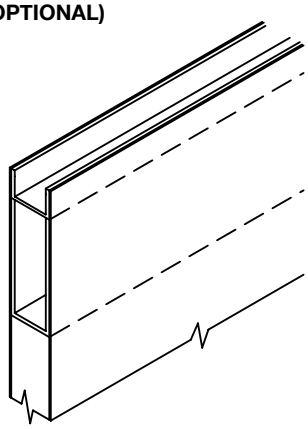
2 VERTICAL EDGES



SEAMLESS VERTICAL EDGES

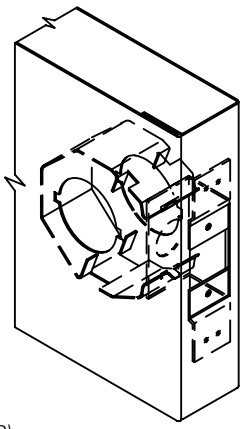
CONTINUOUS SEAM WELDED FULL HEIGHT AND GROUND SMOOTH

3 CLOSER REINFORCEMENT (OPTIONAL)



14 GAUGE STEEL CHANNEL 20" LONG

4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE



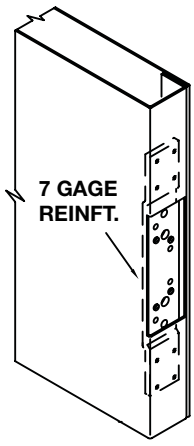
(LC1)

(ANSI A115.2)

2-3/4" BACKSET

LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

5 HINGE PREPARATION

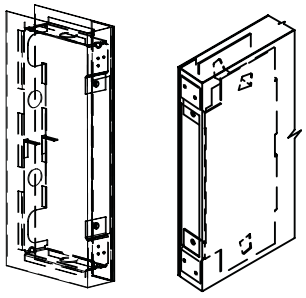


4-1/2 OR 5 IN. HIGH HEAVY WEIGHT, FULL MORTISE HINGES

ANSI A156.7 TEMPLATE

HINGE EDGE IS HANDED AND NOT BEVELED.

6 LOCK PREPARATION

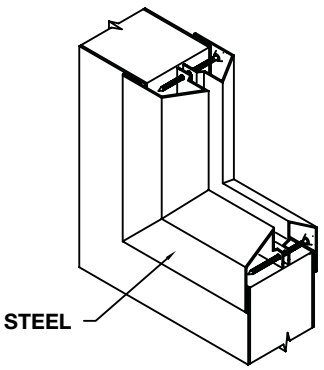


(LM0)

GOV. 86, ANSI/ BHMA A115.1 MORTISE TYPE

NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

8 GLAZING TRIM SLIMTRIM

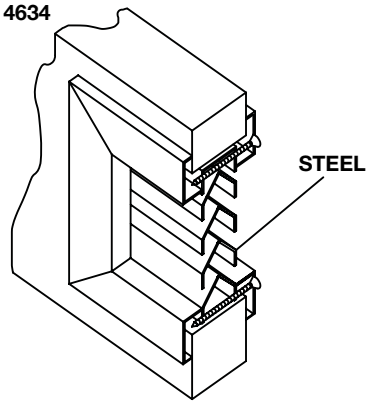


FOR ALL FIRE DOORS

3/8" WIDE GLAZING POCKET

LISTED

9 FIXED SLAT TYPE LOUVER 4634



FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

IMPERIAL MAXIM DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES : UL SOLUTIONS WARNOCK HERSEY
TEST: UL 10C, UL 10B, UL 1784, & NFPA 252 **DESIGNS:** F, G, N, V **RATING:** 1/3 HR, 3/4 HR, 1-1/2 HR, OR 3 HR. **MAX. SIZE:** 4'0" X 7'0" SINGLE **RATING:** 1/3 HR, 3/4 HR, 1-1/2 HR, OR 3HR MAX. SIZE: (2) 4'0" X 7'0" WITH MULLION

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be as manufactured by Ceco Door Products, Milan, TN USA. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8; see chart below for performance classifications.

IMPERIAL MAXIM doors are seamless design. Faces sheets are commercial quality cold rolled steel conforming to ASTM A1008...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 -- see chart below.

Door face sheets are flush with no visible seams; vertical edges are welded the full height and ground smooth with no visible seams. Face sheets are totally supported by a foamed-in-place polyurethane core. The core fills the entire door cavity and is chemically bonded to all interior surfaces. Density of foam exceeds 1. 8 pcf and it has a crush strength of 3600 psf. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets. Door has Full Lifetime Warranty when used in Schools.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1:16) and is prepared for Gov. series 86 or 160/161 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel channel.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT	12 OR 14 GAUGE STEEL

PERFORMANCE

THERMAL CHARACTERISTIC VALUE	CORE CALCULATED (ASTM C518)	R = 11.01	U = 0.091

THERMAL	CORE CALCULATED (ASTM C518)	R = 11.01	U = 0.091
CHARACTERISTIC VALUE	NFRC 102-2014 & ASTM FLUSH DOOR WITH MERCURY FRAME	R = 2.63	U = 0.38
	NFRC 102-2014 & ASTM FLUSH DOOR WITH WEATHERKERF FRAME	R = 2.63	U = 0.38
	NFRC 102-2014 & ASTM FLUSH DOOR WITH STANDARD FRAME	R = 2.50	U = 0.40

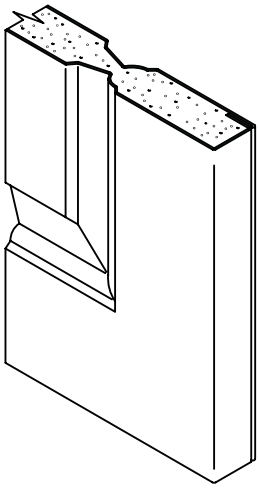
NFRC102-2014: THE GENERAL REQUIREMENTS OF TESTING SHALL BE AS DEFINED IN NFRC 102, ASTM C1199 AND ASTM C1363.

SOUND TRANSMISSION CLASS	STC 26 (F DESIGN), ASTM E90 & E413 [FULLY OPERABLE]
PHYSICAL ENDURANCE LEVEL	MEETS ANSI A250.4 PERFORMANCE TEST LEVEL A (1,000,000 CYCLES)

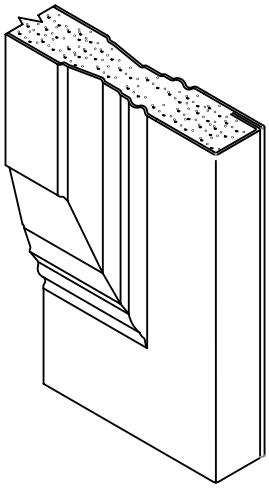
1-3/4" VERSADOOR (VU)

POLYURETHANE FOAM CORE, FLUSH AND EMBOSSED PANEL STEEL DOORS, NON-HANDED

FLUSH DESIGNS SIMILAR LESS EMBOSSED PANEL



EMBOSSED PANEL DESIGNS:
6 PANEL CROSSBUCK



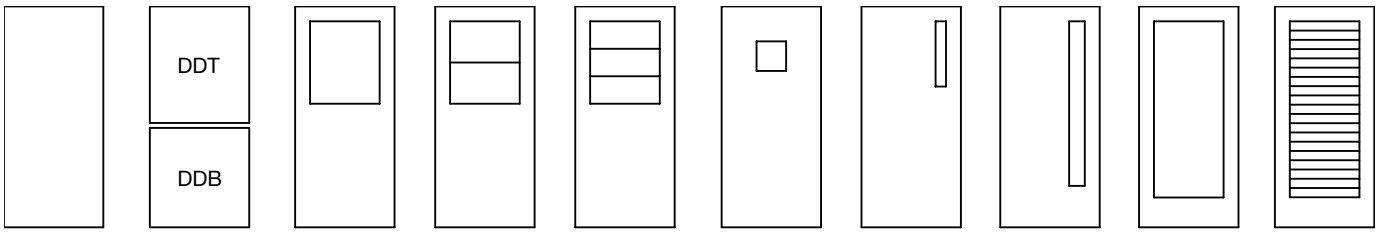
HIGH DEFINITION EMBOSSED
PANEL DESIGNS: 1 & 2 PANEL

Full flush or seamless style.. Foamed-in-place polyurethane core fills entire door cavity. Core is chemically bonded to all interior surfaces. High impact resistance. Excellent insulation characteristics.

SUGGESTED USE:
- Interior or Exterior ...
- Condominiums
- Dormitories
- Motels/Hotels
- Office buildings
- Urban renewal
- Health care, institutional
- Data processing
- Mercantile
- Food processing

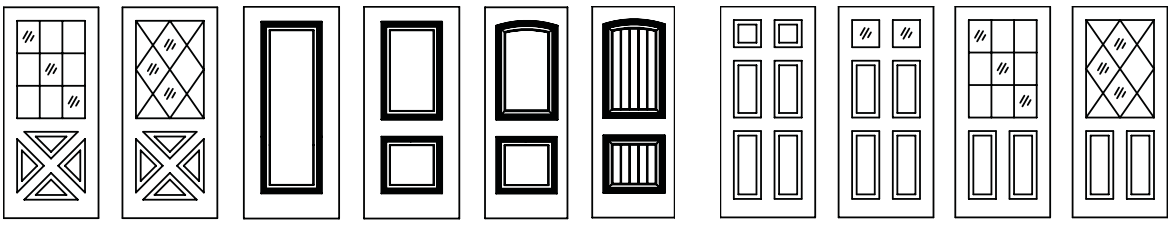
DOOR DESIGNS

FLUSH DESIGNS



F | DUTCH V, G, & N DESIGNS AVAILABLE | G | G2 | G3 | V | N___ | N___ | FG | LF

EMBOSSED PANEL DESIGNS



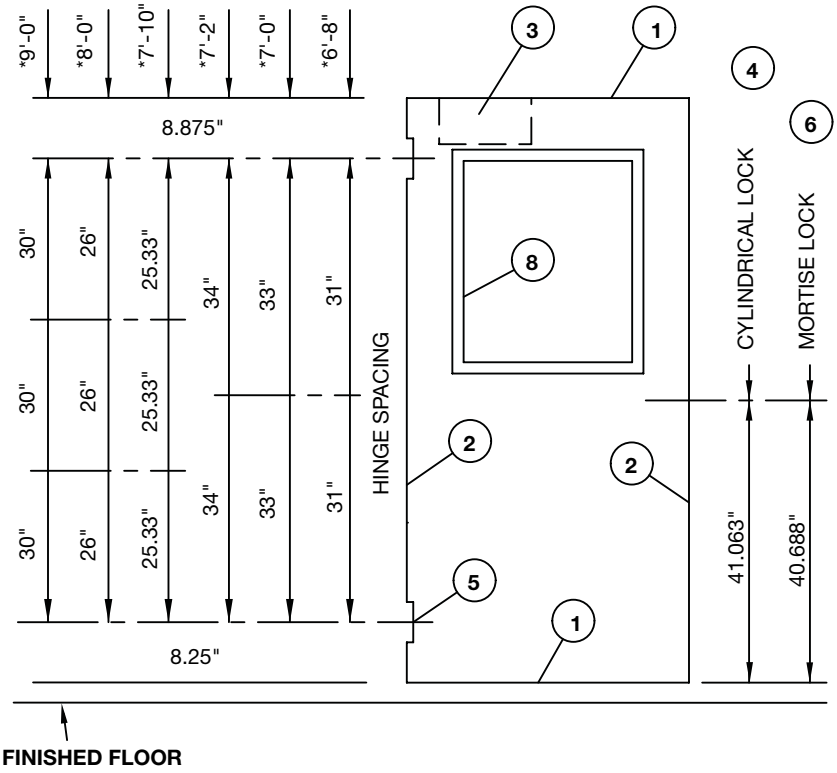
EC05 | EC04 | E101 | E201 | E202 | E203 | E601 | E609 | E605 | E604

	1 & 2 PANEL	6 PANEL	CROSS BUCK & LITES
MAX. SIZE	3'0X8'0"	3'0X7'0"	3'0X7'0"
MIN. SIZE	2'8X6'8"	2'8X6'8"	2'8X6'8"

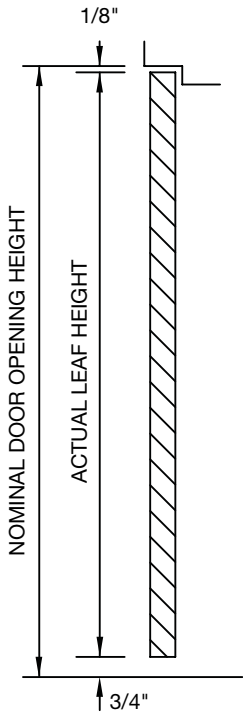
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

VERSADOOR DOORS

DOOR ELEVATION



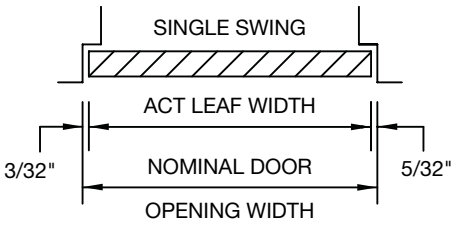
VERTICAL SECTION

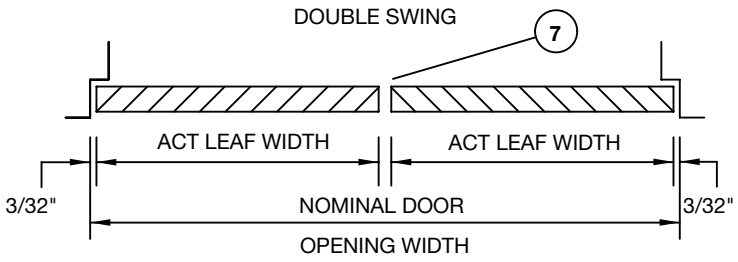


HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

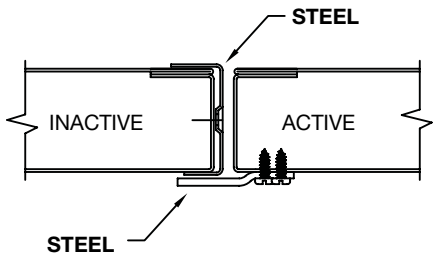
HORIZONTAL SECTIONS

SEE ALL EMBOSSED PANEL DESIGNS AND SIZE LIMITATIONS ON PAGE 140 OR PAGE 143.



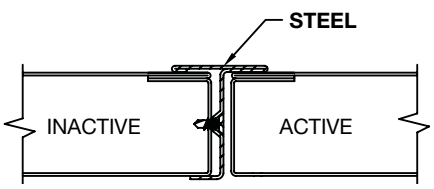


7 **OVERLAPPING ASTRAGAL** 4441
FOR 1-3/4" THICK DOORS



LISTED

7 **OVERLAPPING ASTRAGAL** 4471
FOR 1-3/4" THICK DOORS



LISTED

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

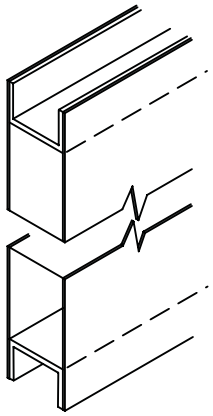
VERSADOOR DOORS

1 16 GAUGE STEEL END CHANNELS

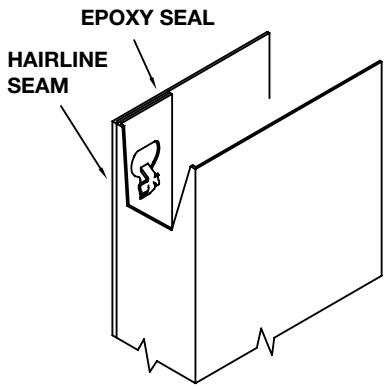
WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE



2 VERTICAL EDGES

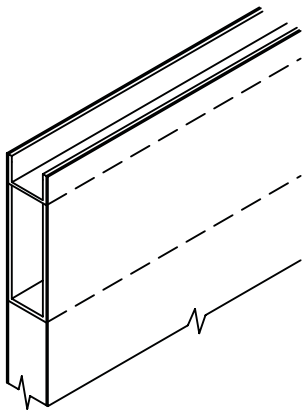


MECHANICALLY INTERLOCKED HEMMED EDGES

ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)

3 CLOSER REINFORCEMENT(OPTIONAL)

14 GAUGE STEEL CHANNEL 20" LONG

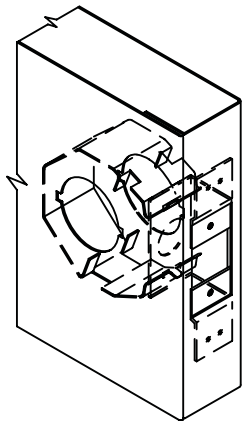


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4"BACKSET



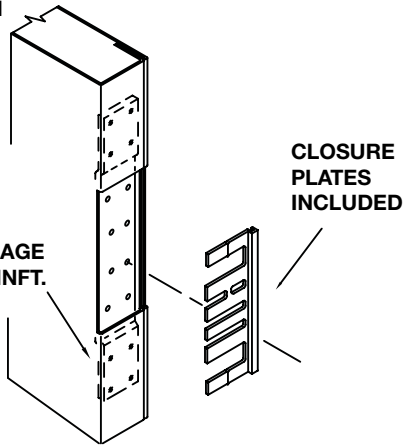
LOCK EDGE IS SQUARE

5 HINGE PREPARATION

4-1/2" X .134" HIGH, STANDARD OR HEAVY WT.

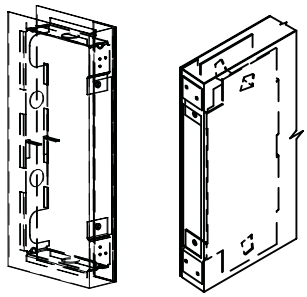
FULL MORTISE HINGE PREPS

NON-HANDED



6 LOCK PREPARATION

GOV. 86, ANSI/ BHMA A115.1 MORTISE TYPE



LOCK EDGE IS SQUARE

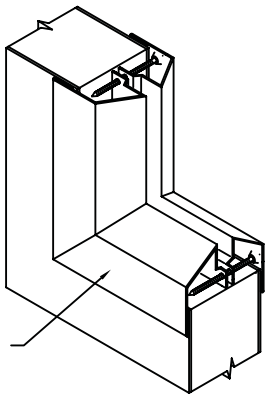
NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

8 GLAZING TRIM

SLIMTRIM

3/8" WIDE GLAZING POCKET

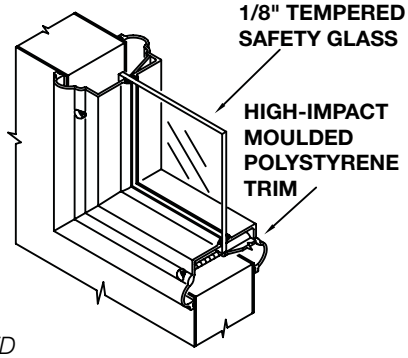
LISTED



9 GLAZING SYSTEM

FOR STANDARD 2'8" & 3'0" WIDE, 6'8" & 7'0" HIGH NON-LABELED EMBOSSED, 2, 6 & CROSSBUCK PANEL DOORS

OPTIONAL: 1/2" INSULATED GLASS



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

VERSADOOR DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY (WH)

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

DESIGNS: F, G, N, V, E1, E2, E6, EN6 & ECB

RATING: (18,16 & 14 GAUGE)
1/3 HR, 3/4 HR, 1 HR, 1-1/2 OR 3HR.

MAX. SIZE: 4'0" X 7'0" SINGLE
6'0" X 7'0" PAIR

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be as manufactured by Ceco Door Products, Milan, TN USA.
Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8-1998; see chart below for performance classifications.

VERSADOORS are made full-flush or (optional) seamless style. Faces sheets are commercial quality cold rolled steel conforming to ASTM A1008...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 -- see chart below.

Versadoor full-flush doors have mechanically interlocked, hemmed, hairline seams on vertical edges and have no visible seams on faces. Doors specified "seamless" have no visible seams on faces or vertical edges (S.D.I. Model 2). Face sheets are totally supported by a foamed-in-place polyurethane core. The core fills the entire door cavity and is chemically bonded to all interior surfaces. Density of foam exceeds 1.8 pcf and it has a crush strength of 3600 psf. The top and bottom door edges are closed with 16 gauge steel channels welded to both faces.

Hardware Provisions: Hinge preparations are non-handed. Hinge edges are mortised for 4-1/2" high, standard and heavy weight hinges. 7 gauge steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156. 7. Hinge closing plates are included. The lock edge is square and is prepared for Gov. series 86 or 160/161 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel channel.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel and shall conform to ANSI 250.3 . For accurate color selectors ask for a Ceco Colorstyle chart.

SIZE LIMITS - DESIGNS

	FLUSH DESIGNS	1 & 2 PANEL	6 PANEL	CROSS BUCK & LITES
MAX	4'0"x9'0"	3'0"x8'0"	3'0"x7'0"	3'0"x7'0"
MIN	2'0"x6'8"	2'8"x6'8"	2'6"x6'8"	2'8"x6'8"

E1, E2 & E6 DESIGNS: MORTISE LOCK PREPARATION LIMITED TO 3'0" WIDTH.
1 & 2 PANEL DOORS ARE AVAILABLE IN 18 GAUGE FACE SHEETS ONLY.
CROSSBUCK DOORS ARE AVAILABLE IN 20 & 18 GAUGE FACE SHEETS ONLY.
6 PANEL IS AVAILABLE IN 20, 18, & 16 GAUGE.
PANEL DESIGN DOOR FACE SHEETS ARE FORMED FROM A40 GALVANNEALED STEEL.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
20 GAUGE STEEL (4080 MAX.)	STANDARD DUTY	N/A	STD	N/A	16 GAUGE STEEL
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	OPT	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL

PERFORMANCE

THERMAL	CORE CALCULATED (ASTM C518)	R = 11.01	U = 0.091
CHARACTERISTIC VALUE	NFRC 102-2014 & ASTM FLUSH DOOR WITH MERCURY FRAME	R = 2.63	U = 0.38
	NFRC 102-2014 & ASTM FLUSH DOOR WITH WEATHERKERF FRAME	R = 2.63	U = 0.38
	NFRC 102-2014 & ASTM FLUSH DOOR WITH STANDARD FRAME	R = 2.50	U = 0.40
	NFRC 102-2014 & ASTM EMBOSSED DOOR WITH MERCURY FRAME	R = 2.56	U = 0.39
	NFRC 102-2014 & ASTM EMBOSSED DOOR WITH WEATHERKERF FRAME	R = 2.63	U = 0.38
	NFRC 102-2014 & ASTM EMBOSSED DOOR WITH STANDARD FRAME	R = 2.44	U = 0.41

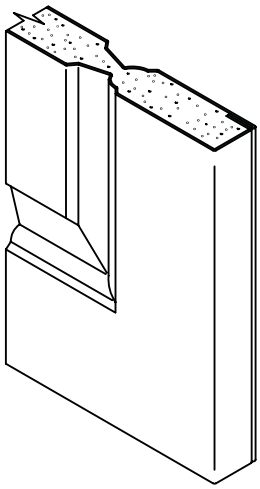
NFRC102-2014: THE GENERAL REQUIREMENTS OF TESTING SHALL BE AS DEFINED IN NFRC 102, ASTM C1199 AND ASTM C1363.

SOUND TRANSMISSION CLASS	STC 26 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE])
PHYSICAL ENDURANCE LEVEL	MEETS ANSI A250.4 PERFORMANCE TEST, 20 GAUGE: LEVEL B (500,000 CYCLES); 18 AND 16 GAUGE: LEVEL A (1,000,000 CYCLES)

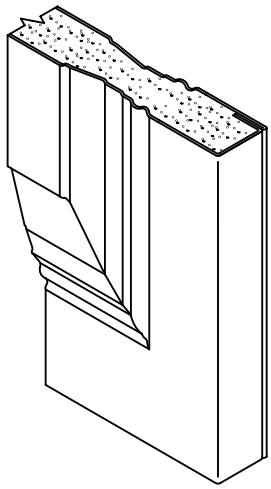
1-3/4" LEGION (LP) POLYSTYRENE CORE DOORS

FLUSH PANEL STEEL DOORS, BEVELED LOCK EDGE, HANDED

FLUSH DESIGNS SIMILAR LESS EMBOSSED PANEL



EMBOSSED PANEL DESIGNS: 6 PANEL CROSSBUCK

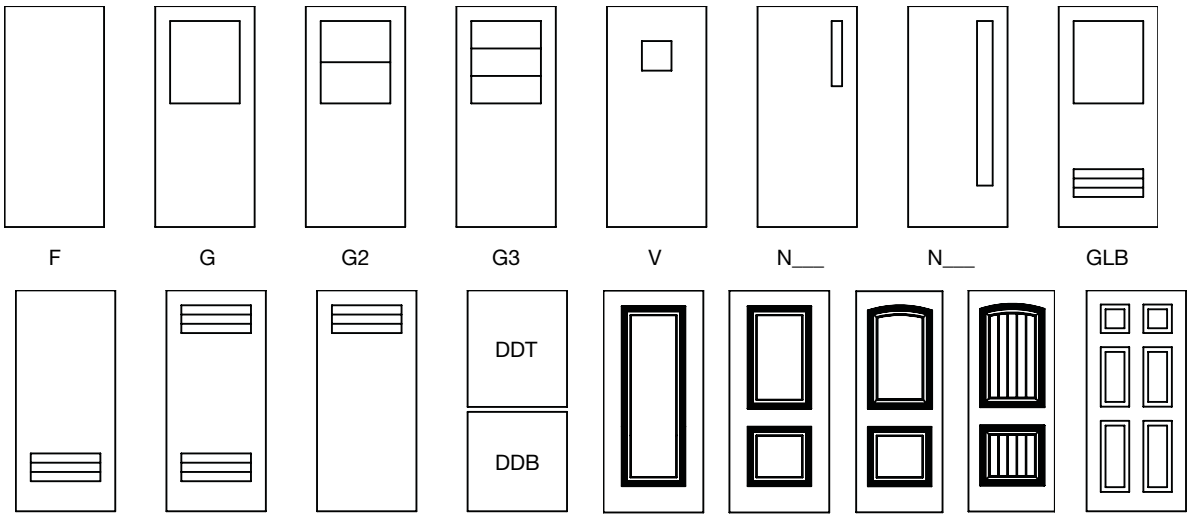


HIGH DEFINITION EMBOSSED PANEL DESIGNS: 1 & 2 PANEL

Polystyrene slab, bonded to the inside of both face sheets with a waterproof, contact adhesive.

SUGGESTED USE:
- Interior or Exterior...
- Office
- Motel/Hotel
- Apartment
- Condominiums
- Dormitories
- Urban renewal
- Health care
- Institutional
- Mercantile
- Public utility
- Factory
- Warehouse

DOOR DESIGNS



F G G2 G3 V N___ N___ GLB

LB LD LT DUTCH V, G, & N DESIGNS AVAILABLE E101 E201 E202 E203 E601, EN61

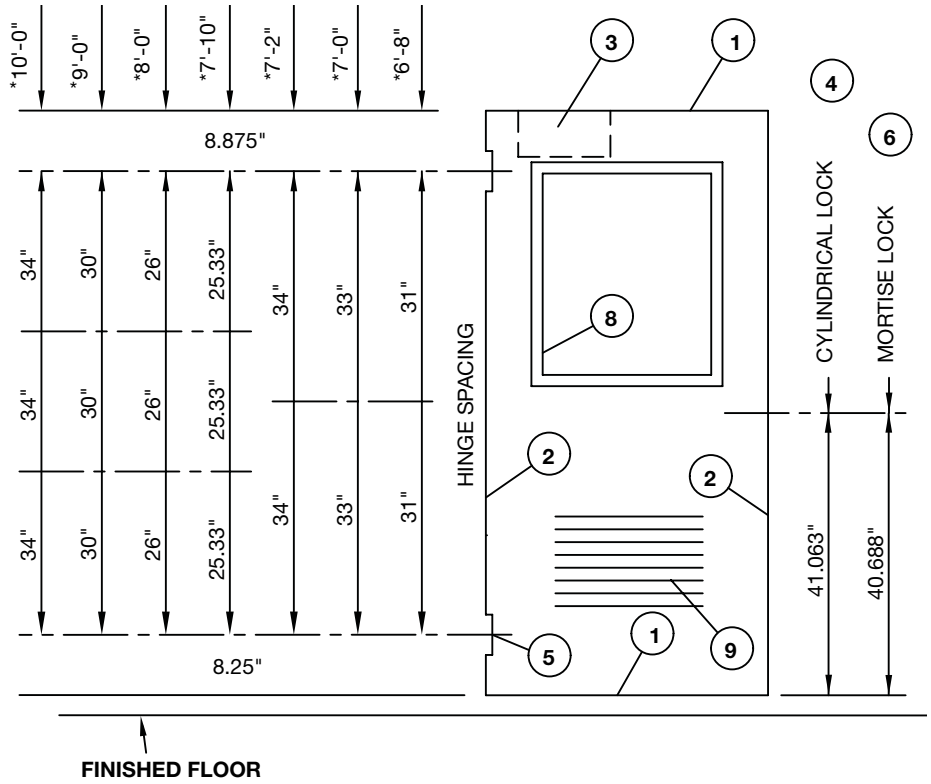
	1 PANEL	2 PANEL	6 PANEL
MAX. SIZE	3'0X8'0"	3'0X8'0"	3'0X7'0"
MIN. SIZE	2'8X6'8"	2'8X6'8"	2'6X6'8"

EMBOSSED NARROW 6 PANEL DESIGNS WILL BE CENTER EDGE SEAM CONSTRUCTION.

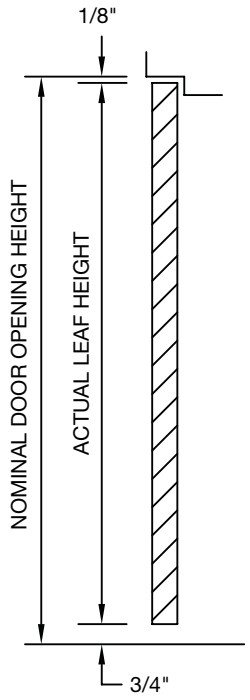
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LEGION DOORS

DOOR ELEVATION



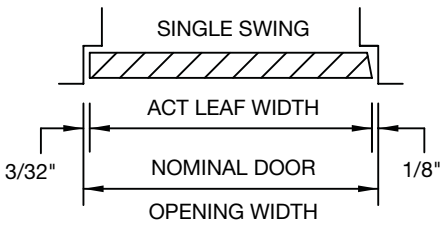
VERTICAL SECTION

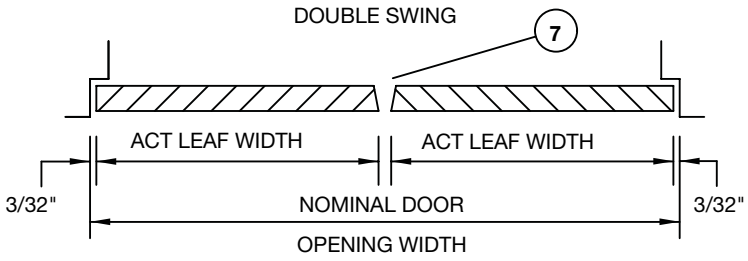


HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

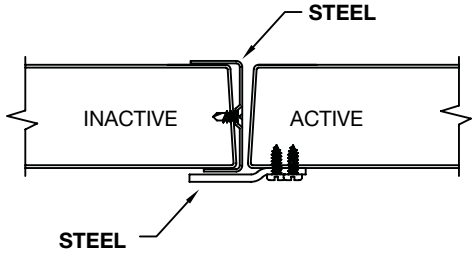
HORIZONTAL SECTIONS

SEE ALL EMBOSSED PANEL DESIGNS AND SIZE LIMITATIONS ON PAGE 140 OR PAGE 143.



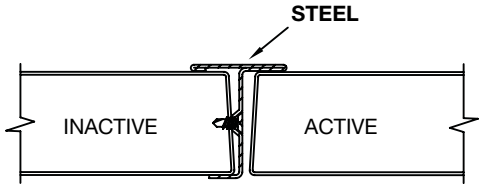


(7) *LISTED*



OVERLAPPING ASTRAGAL **4441**
FOR 1-3/4" THICK DOORS

(7) *LISTED*



OVERLAPPING ASTRAGAL **4471**
FOR 1-3/4" THICK DOORS

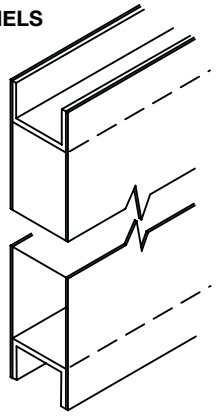
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LEGION DOORS

1 16 GAUGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM



OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

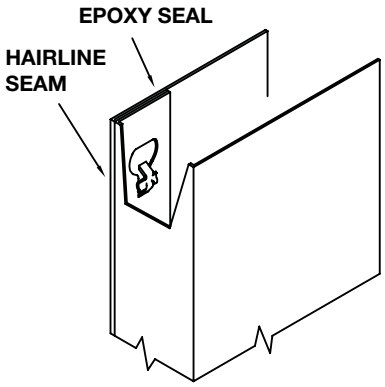
2 VERTICAL EDGES

MECHANICALLY INTERLOCKED HEMMED EDGES

ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)

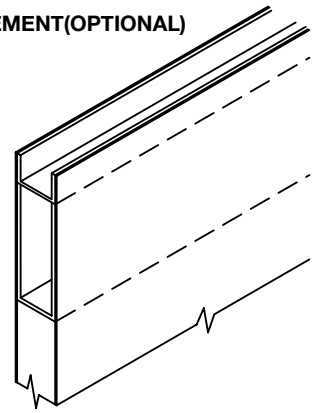
EMBOSSED NARROW 6 PANEL WILL BE CENTER EDGE SEAM CONSTRUCTION.

CENTER EDGE SEAM CONSTRUCTION PROVIDED WITH 14 GAUGE SKINS



3 CLOSER REINFORCEMENT(OPTIONAL)

14 GAUGE STEEL CHANNEL 20" LONG

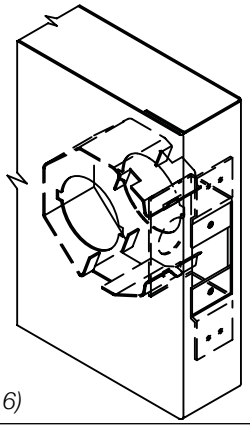


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4" BACKSET



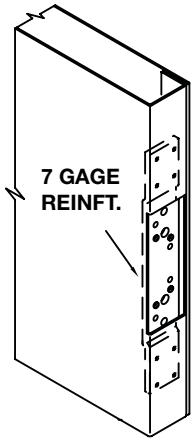
LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

5 HINGE PREPARATION

4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

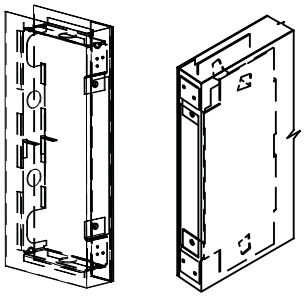
HINGE EDGE IS HANDED AND NOT BEVELED.

ANSI A156.7 TEMPLATE



6 LOCK PREPARATION

GOV. 86, ANSI/ BHMA A115.1 MORTISE TYPE



LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

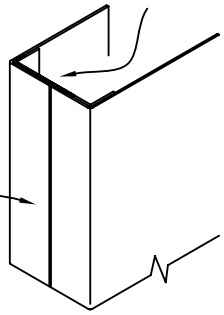
NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

2 VERTICAL EDGES

16 GAGE FULL HEIGHT CHANNEL

14 GAGE WILL BE CENTER EDGE SEAM CONSTRUCTION

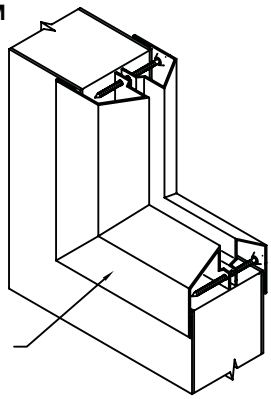
NARROW 6 PANEL DESIGNS ARE CENTER EDGE SEAM CONSTRUCTION



WELD SEAMLESS AND BODY FILLER SEAMLESS IS OPTIONAL

8 GLAZING TRIM SLIMTRIM

3/8" WIDE GLAZING POCKET

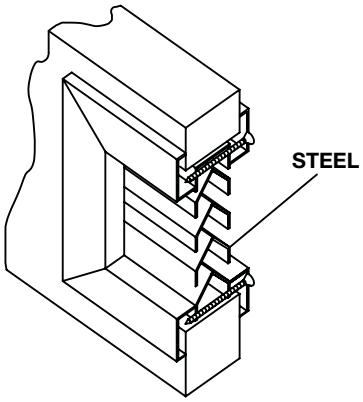


LISTED

9 FIXED SLAT TYPE LOUVER 4634

FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LEGION DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

DESIGNS: F, G, N, V, E1, E2, E6, EN6

RATING: 20 MIN, 3/4 HR, 1-1/2 HR OR 3 HR

MAX. SIZE: 4'0" X 8'0" SINGLE
8'0" X 8'0" PAIR*
¨8'0" X 9'0" WITH VERTICAL RODS

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be as manufactured by Ceco Door Products. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8; see chart below for performance classifications.

LEGION doors are made full-flush or (optional) seamless style. Face sheets are commercial quality cold rolled steel conforming to ASTM A1008...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 -- see chart below.

Legion full-flush doors have mechanically interlocked, hemmed, hairline seams on vertical edges and have no visible seams on faces. Embossed narrow 6 panel doors will have center edge seam construction. Doors specified "seamless" have no visible seams on faces or vertical edges (S.D.I. Model 2). A one piece, polystyrene slab, conforming to ASTM C578 TYPE 1, is bonded to the inside of both face sheets with a waterproof contact adhesive. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1: 16) and is prepared for Gov. series 86, 160/161, or 90 locks in accordance with ANSI A 115 (specify which). Optional closer reinforcement is a 14 gauge steel channel.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

SIZE LIMITS - DESIGNS

	FLUSH DESIGNS	1 PANEL	2 PANEL	6 PANEL
MAX	4'0"x10'0"	3'0"x8'0"	3'0"x8'0"	3'0"x7'0"
MIN	2'0"x6'8"	2'0"x6'8"	2'0"x6'8"	2'0"x6'8"

E1, E2 & E6 DESIGNS: MORTISE LOCK PREPARATION LIMITED TO 3'0" WIDTH.
1 & 2 PANEL DOORS ARE AVAILABLE IN 18 GAUGE FACE SHEETS ONLY.
CROSSBUCK DOORS ARE AVAILABLE IN 20 & 18 GAUGE FACE SHEETS ONLY.
6 PANEL IS AVAILABLE IN 20, 18, & 16 GAUGE.
PANEL DESIGN DOOR FACE SHEETS ARE FORMED FROM A40 GALVANNEALED STEEL.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
20 GAUGE STEEL (4080 MAX.)	STANDARD DUTY	N/A	STD	N/A	16 GAUGE STEEL
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	OPT	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT	14 OR 12 GAUGE STEEL

PERFORMANCE

THERMAL	CORE CALCULATED (ASTM C518)	R = 6.08	U = 0.16
CHARACTERISTIC VALUE	NFRC 102-2014 & ASTM FLUSH DOOR WITH MERCURY FRAME NFRC 102-2014 & ASTM FLUSH DOOR WITH WEATHERKERF FRAME NFRC 102-2014 & ASTM FLUSH DOOR WITH STANDARD FRAME	R = 2.33 R = 2.27 R = 2.22	U = 0.43 U = 0.44 U = 0.45

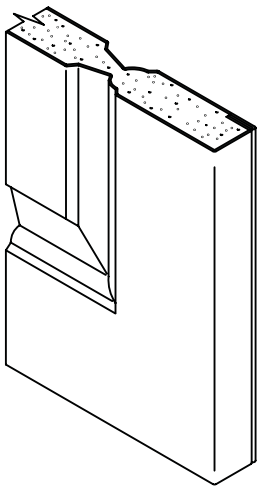
NFRC102-2014: THE GENERAL REQUIREMENTS OF TESTING SHALL BE AS DEFINED IN NFRC 102, ASTM C1199 AND ASTM C1363.

SOUND TRANSMISSION CLASS	STC 27 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE])
PHYSICAL ENDURANCE LEVEL	MEETS ANSI A250.4 PERFORMANCE TEST, 20 GAUGE: LEVEL B (500,000 CYCLES); 18 AND 16 GAUGE: LEVEL A (1,000,000 CYCLES)

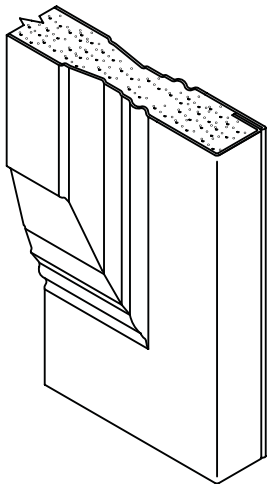
1-3/4" ULTRADOR (UP) POLYSTYRENE CORE DOORS

FLUSH PANEL STEEL DOORS UNIVERSAL, NON-HANDED

FLUSH DESIGNS SIMILAR LESS EMBOSSED PANEL



EMBOSSED PANEL DESIGNS:
6 PANEL
CROSSBUCK

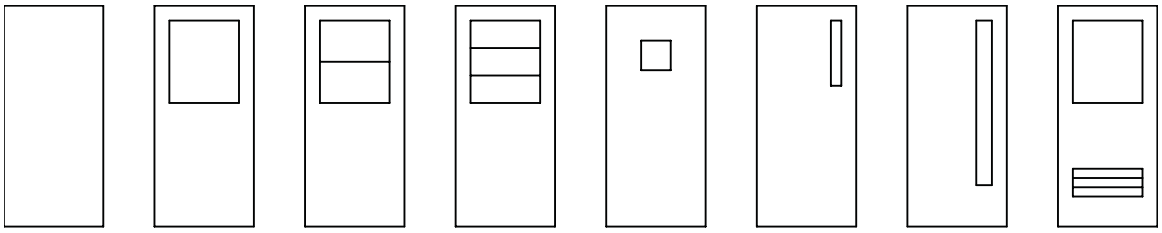


HIGH DEFINITION EMBOSSED
PANEL DESIGNS :
1 PANEL & 2 PANEL

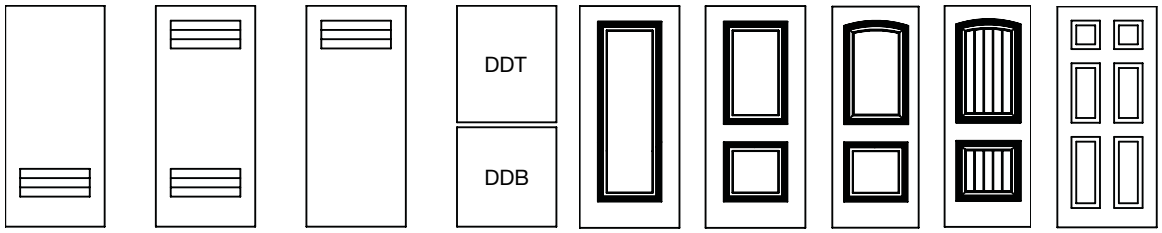
Polystyrene slab, bonded to the inside of both face sheets with a waterproof, contact adhesive.

SUGGESTED USE:
- Interior or Exterior ...
- Office
- Motel/Hotel
- Apartment
- Condominiums
- Dormitories
- Urban Renewal
- Health Care
- Institutional
- Mercantile
- Public Utility
- Factory
- Warehouse

DOOR DESIGNS



F G G2 G3 V N___ N___ GLB



LB LD LT DUTCH V, G, & N DESIGNS AVAILABLE E101 E201 E202 E203 E601, E6N1

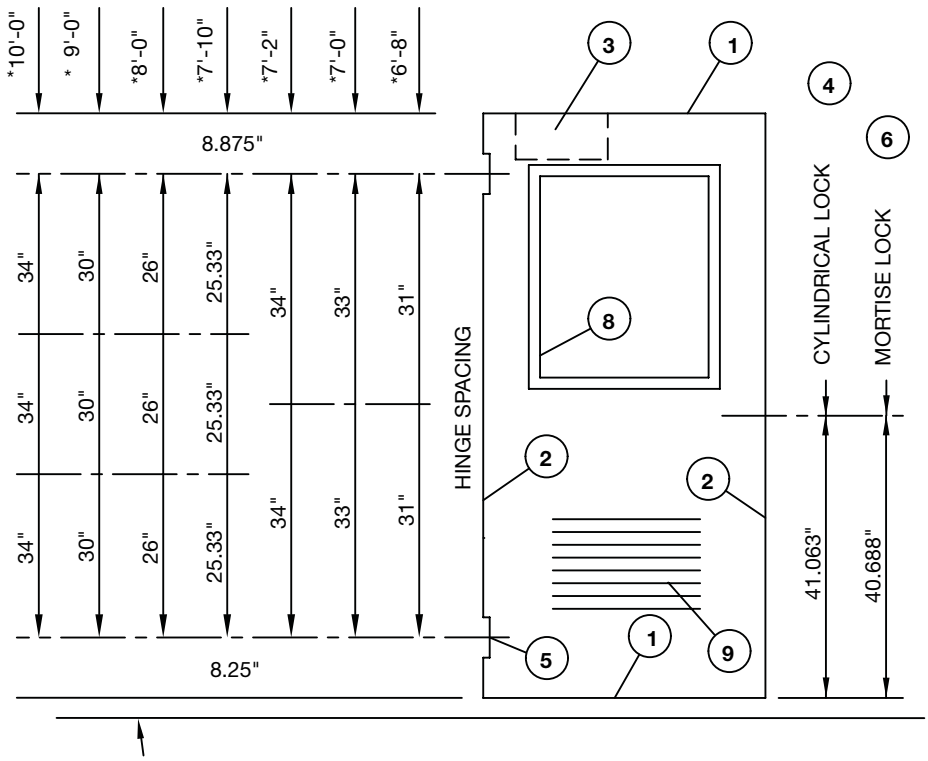
	1 PANEL	2 PANEL	6 PANEL
MAX. SIZE	3'0"X8'0"	3'0"X8'0"	3'0"X7'0"
MIN. SIZE	2'8"X6'8"	2'8"X6'8"	2'6"X6'8"

EMBOSSED NARROW 6 PANEL WILL BE CENTER EDGE SEAM CONSTRUCTION

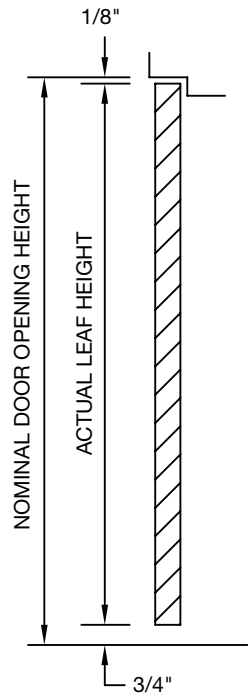
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ULTRADOR

DOOR ELEVATION



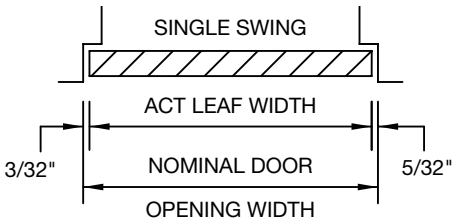
VERTICAL SECTION

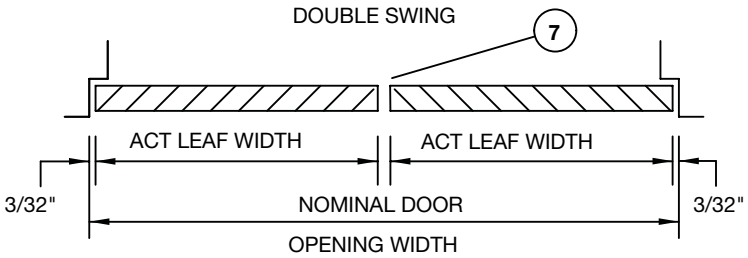


HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

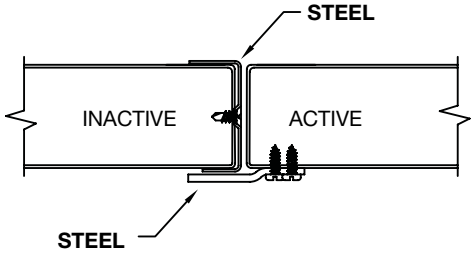
** SEE ALL EMBOSSED PANEL DESIGNS AND SIZE LIMITATIONS ON PAGE 148 AND PAGE 151*

HORIZONTAL SECTIONS



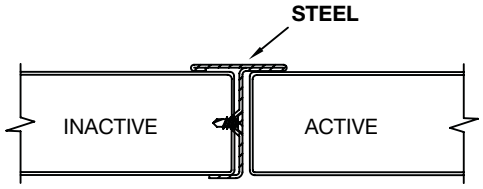


(7) *LISTED*



OVERLAPPING ASTRAGAL **4441**
FOR 1-3/4" THICK DOORS

(7) *LISTED*



OVERLAPPING ASTRAGAL **4471**
FOR 1-3/4" THICK DOORS

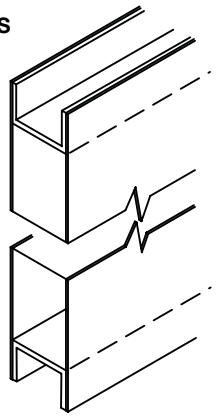
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ULTRADOR

1 16 GAUGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

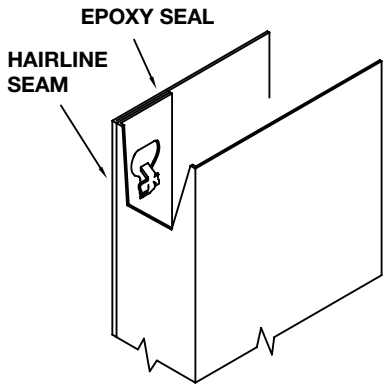


OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

MECHANICALLY INTERLOCKED HEMMED EDGES

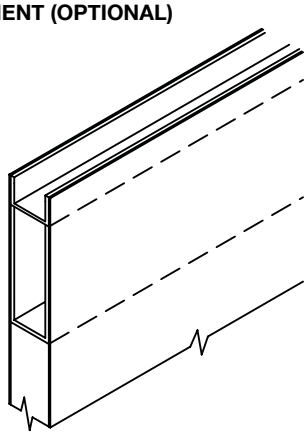
ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)



EMBOSSED NARROW 6 PANEL WILL BE CENTER EDGE SEAM CONSTRUCTION

3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAUGE STEEL CHANNEL 20" LONG

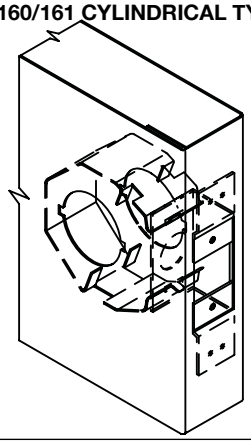


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4"BACKSET



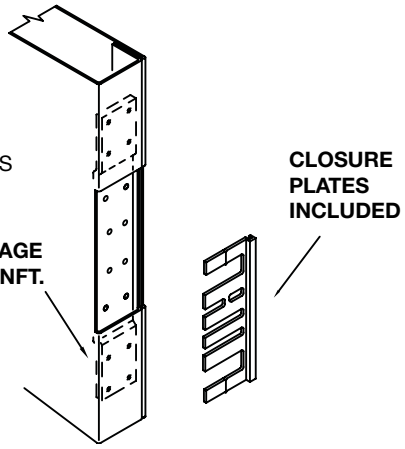
LOCK EDGE IS SQUARE

5 HINGE PREPARATION

4-1/2" X .134" HIGH, STANDARD OR HEAVY WT. FULL MORTISE HINGE PREPS

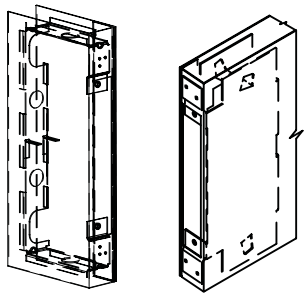
ANSI A156.7 TEMPLATE

NON-HANDED



6 LOCK PREPARATION

GOV. 86, ANSI/BHMA A115.1 MORTISE TYPE

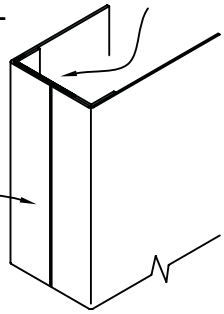


NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

2 VERTICAL EDGES

NARROW 6 PANEL DESIGNS ARE CENTER EDGE SEAM CONSTRUCTION

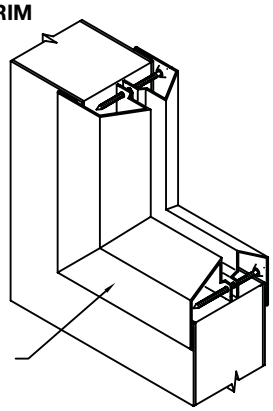
16 GAGE FULL HEIGHT CHANNEL



WELD SEAMLESS AND BODY FILLER SEAMLESS IS OPTIONAL

8 GLAZING TRIM SLIMTRIM

3/8" WIDE GLAZING POCKET

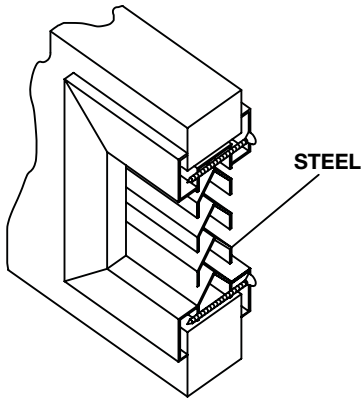


LISTED

9 FIXED SLAT TYPE LOUVER 4634

FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ULTRADOR

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS WARNOCK HERSEY
TEST: UL 10C, UL 10B, UL 1784, & NFPA 252
RATING: 20 MIN, 3/4 HR, 1-1/2 HR, OR 3 HR
MAX. SIZE: 4'0" X 8'0" SINGLE 8'0" X 8'0" PAIR* *8'0" X 9'0" W / VERTICAL RODS
DESIGNS: F, G, N, V, E1, E2, E6 & EN6
NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be as manufactured by Ceco Door. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8; see chart below for performance classifications.

ULTRADOR doors are made full-flush or (optional) seamless style. Face sheets are commercial quality cold rolled steel conforming to ASTM A1008...or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 -- see chart below.

UltraDor full-flush doors have mechanically interlocked, hemmed, hairline seams on vertical edges and have no visible seams on faces. Narrow 6 panel doors have center edge seam construction. Doors specified "seamless" have no visible seams on faces or vertical edges (S.D. I. Model 2). A one piece, polystyrene slab, conforming to ASTM C578 TYPE 1, is bonded to the inside of both face sheets with a waterproof contact adhesive. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1:16) and is prepared for Gov. series 86, 160/161, or 90 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel channel.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrosttically applied, oven-cured urethane enamel and shall conform to ANSI A250.3 . For accurate color selectors ask for a Ceco Colorstyle chart.

SIZE LIMITS - DESIGN

	FLUSH DESIGN	1 PANEL	2 PANEL	6 PANEL
MAX.	4'0"X10'0"	3'0"X8'0"	3'0"X8'0"	3'0"X7'0"
MIN.	2'0"X6'8"	2'8"X6'8"	2'8"X6'8"	2'6"X6'8"

EXCEPTION:
E1, E2, AND E6 DESIGNS: MORTISE LOCK PREPARATION LIMITED TO 3'0" WIDTH. 1 & 2 PANEL DOORS ARE AVAILABLE IN 18 GAUGE FACE SHEETS ONLY. 6 PANEL DOORS ARE AVAILABLE IN 20, 18 & 16 GAUGE FACE SHEETS ONLY. PANEL DESIGN DOOR FACE SHEETS ARE FORMED FROM A40 GALV. STEEL. NARROW 6 PANEL DOORS ARE CENTER EDGE SEAM DESIGN.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
20 GAUGE STEEL (4080 MAX.)	STANDARD DUTY	N/A	STD	N/A	16 GAUGE STEEL
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	OPT	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL

PERFORMANCE

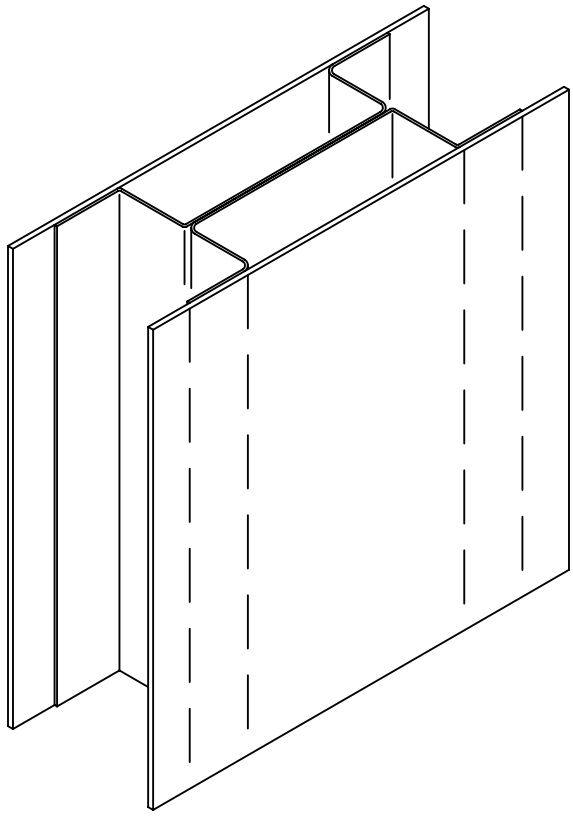
	CORE CALCULATED (ASTM C518)	R = 6.08	U = 0.16
THERMAL CHARACTERISTIC VALUE:	* NFRC 102-2014 & ASTM FLUSH DOOR WITH MERCURY FRAME	R = 2.33	U = 0.43
	* NFRC 102-2014 & ASTM FLUSH DOOR WITH WEATHERKERF FRAME	R = 2.27	U = 0.44
	* NFRC 102-2014 & ASTM FLUSH DOOR WITH STANDARD FRAME	R = 2.22	U = 0.45

**NFRC102-2014: THE GENERAL REQUIREMENTS OF TESTING SHALL BE AS DEFINED IN NFRC 102, ASTM C1199 AND ASTM C1363*

SOUND TRANSMISSION CLASS:	STC 27 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE])
PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, 20 GAUGE: LEVEL B (500,000 CYCLES); 18 AND 16 GAUGE: LEVEL A (1,000,000 CYCLES)

1-3/4”MEDALLION (MS)

VERTICALLY STEEL STIFFENED, CENTER SEAM, CUSTOM TYPE STEEL DOORS, BEVELED LOCK , HANDED

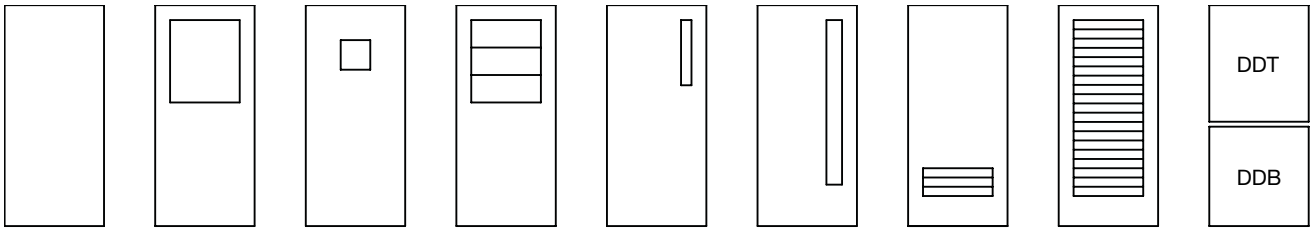


** 14 GA MEDALLION MAXIM DOOR HAS A FULL LIFETIME WARRANTY WHEN USED IN SCHOOLS*

Designed to take extreme people punishment./
Complies with NAAMM specifications 22 gauge steel stiffeners placed 6” apart and welded every 5” along their length. Center seam edges. Fiberglass, sound deadening insulation between stiffeners.

SUGGESTED USE:
- Interior or exterior...
- School/training centers
- Institutional facilities
- Public utility stations
- Government buildings
- Warehouses/factories
- Manufacturing plants
- Transportation terminals
- Vehicle service facilities

DOOR DESIGNS

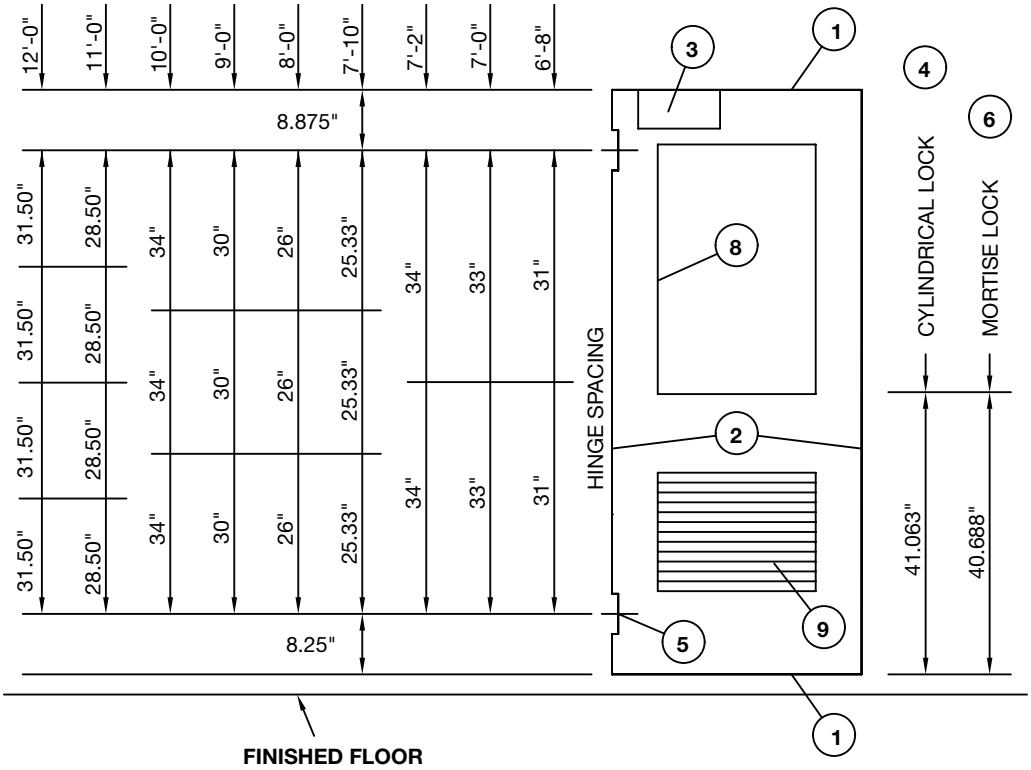


F G V G3 N___ N___ LB LF DUTCH V,G, & N DESIGNS AVAILABLE

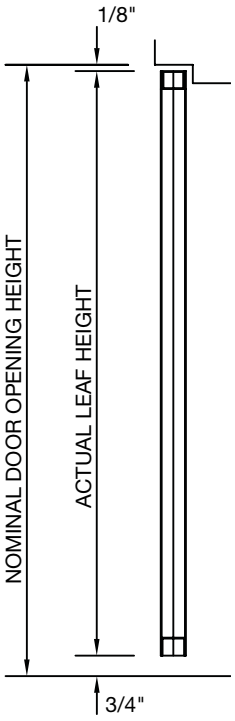
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

MEDALLION DOORS

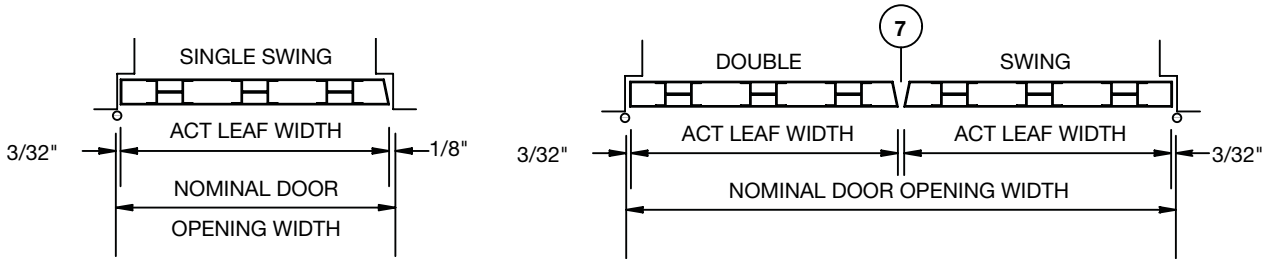
DOOR ELEVATION



VERTICAL SECTION

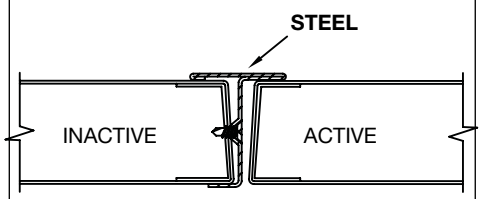


HORIZONTAL SECTIONS



OVERLAPING ASTRAGAL 4441

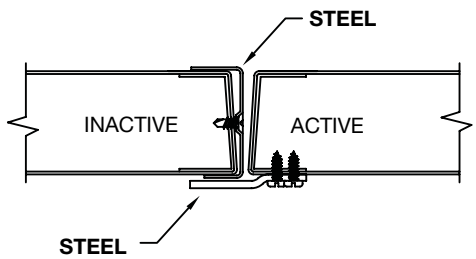
FOR 1-3/4" THICK DOORS



LISTED

OVERLAPING ASTRAGAL 4471

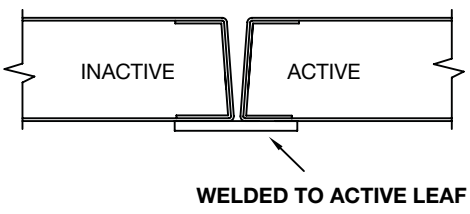
FOR 1-3/4" THICK DOORS



LISTED

OVERLAPING ASTRAGAL 4491 (OPTIONAL)

FOR 1-3/4" THICK DOORS

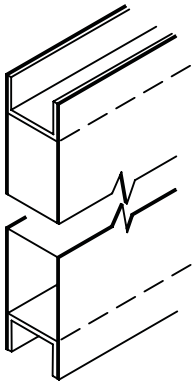


LISTED

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

MEDALLION DOORS

1 16 GAUGE STEEL END CHANNELS

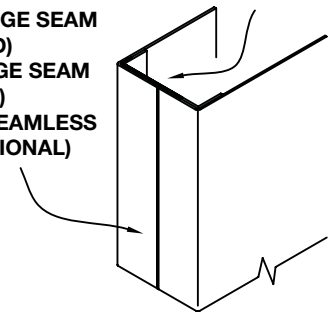


WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

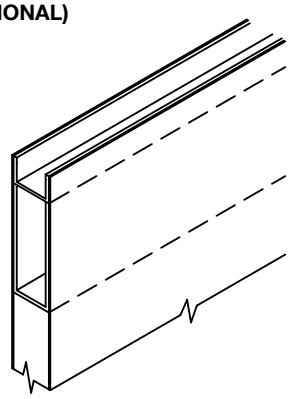
OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES



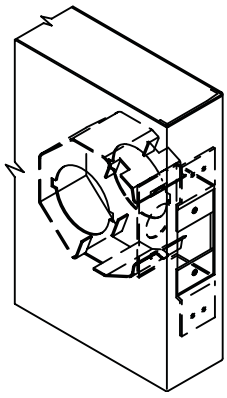
WELDED SEAMLESS EDGE FOR DOORS OVER 10" IN HEIGHT.

3 CLOSER REINFORCEMENT(OPTIONAL)



14 GAUGE STEEL CHANNEL 20" LONG

4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE



(LC1)

(ANSI A115.2)

2-3/4"BACKSET

LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

5 HINGE PREPARATION

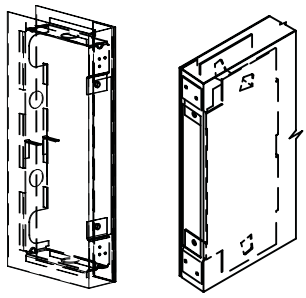
4-1/2" X .134" HIGH, STANDARD OR HEAVY WT. FULL MORTISE HINGE PREPS

ANSI A156.7 TEMPLATE

HINGE EDGE IS HANDED AND SQUARE

14 GA AND 12 GA DOORS REQUIRE HEAVY WEIGHT, FULL MORTISE HINGES

6 LOCK PREPARATION

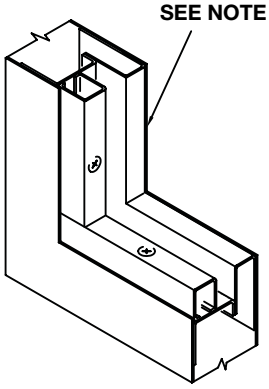


(LM0)

GOV. 86, ANSI/ BHMA A115.1 MORTISE TYPE

NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

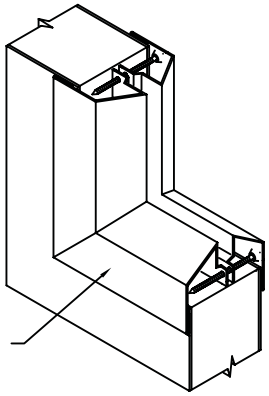
8 GLAZING TRIM 4884 (FLUSH)



3/8" WIDE GLAZING POCKET

NOTES:
1. *FIELD APPLIED CAULK IS RECOMMENDED ON THIS SEAM TO IMPROVE AESTHETICS AND RESIST WATER INTRUSION.*
2. *DRAWING NOT TO SCALE*

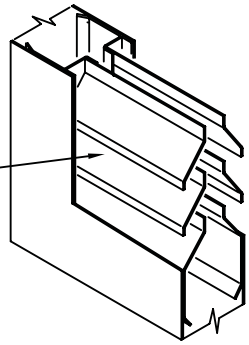
8 GLAZING TRIM



SLIMTRIM

UL LISTED

9 FLUSH MOUNTED FIXED SLAT TYPE LOUVER 4634 (FLUSH)



FREE AIR AREA APPROX. 43%

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

MEDALLION DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	11'-0"
4'-0"	8'-0"	12'-0"
5'-0"	10'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY
FACTORY MUTUAL

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252

RATING: 20 MIN. THRU 3 HRS.

MAX. SIZE: 4'0" X 9'0" SINGLE (FM)
8'0" X 9'0" PAIR (FM)
4'0" X 10'0" SINGLE (UL & WH)
8'0" X 10'0" PAIR (UL & WH)

RATING: 20 MIN. THRU 1-1/2 HR
5'0" X 12'0" SINGLE (UL & WH)
10'0" X 12'0" PAIR (UL & WH)

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be by Ceco Door Products. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8 and NAAMM specifications. See chart below for performance classifications.

MEDALLION doors are center edge seam design. Face sheets are commercial quality cold rolled steel (conforming to ASTM A1008 ...or (optional) hot-dipped Galvannealed or galvanized steel (conforming to ASTM A924 and A653) - see chart below.

Door face sheets are joined at their vertical edge with a center edge seam the full height of door (optional seamless design). Doors over 10'-0" in height will have welded seamless edge. Doors over 4'0" in width and/ or 1O'O" in height are only available in 16 or 14 gauge A60 galvannealed steel. 22 gauge steel vertical stiffeners (other gauges optional) are placed no more than 6" apart and welded to both face sheets no more than 5" on center along their length. Fiberglass batting insulates the area between stiffeners. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets.

HardwareProvisions: Hinge preparations are handed. The hinge edge is square. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock has a standard bevel (1: 16). Lock edge is prepared for Gov. series 86, 160/161, or 90 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel channel.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	N/A	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL
*14 GAUGE STEEL (MAXIM)	MAXIMUM DUTY	STD	OPT	OPT	14 OR 12 GAUGE STEEL
12 GAUGE STEEL	ANSI / NAAMM	STD	OPT		12 GAUGE STEEL

* MEDALLION MAXIM DOOR HAS A FULL LIFETIME WARRANTY WHEN USED IN SCHOOLS (4'0" X 10'0" MAX. SIZE)
DOORS OVER 4'0" WIDE AND/OR OVER 10'0" TALL ARE AVAILABLE ONLY IN 16 OR 14 GAUGE A60 STEEL.

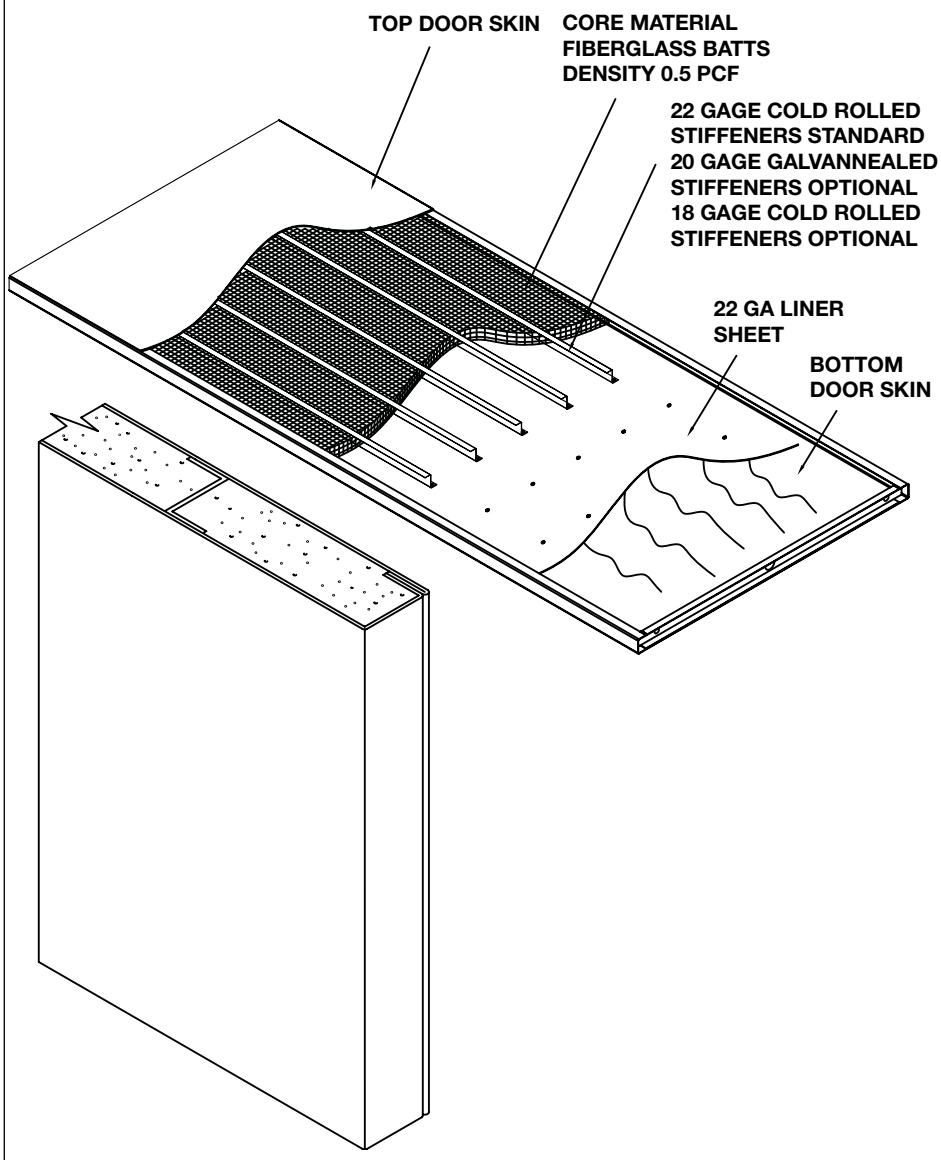
PERFORMANCE

SOUND TRANSMISSION CLASS:	STC 38 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE]) (4'0" X 8'0" MAX. SIZE)
PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, LEVEL A (1,000,000 CYCLES) (4'0" X 10'0" MAX. SIZE)

1-3/4” TRIO DOOR

VERTICALLY STEEL STIFFENED LAMINATED CORE, WITH FIBERGLASS BETWEEN STIFFENERS

BEVELED LOCK EDGE, HANDED (HF)
SQUARE LOCK EDGE, NON-HANDED (NF)



Full Flush or Seamless Style ...

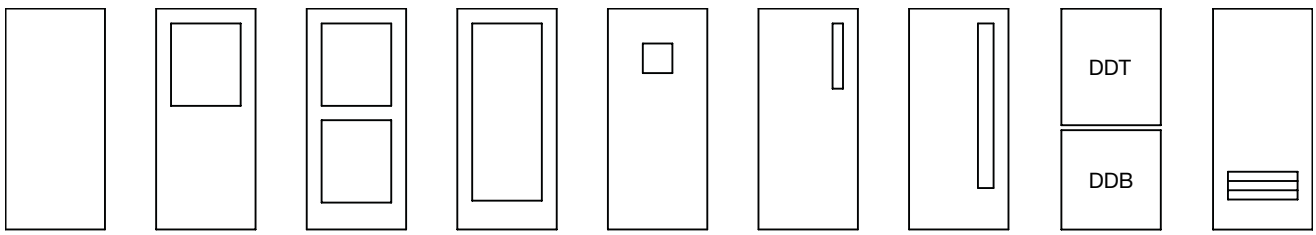
Vertically steel stiffened laminated core with fiberglass insulation filler between stiffeners. Fiberglass filler provides sound deadening and insulation characteristics. 22 gauge steel stiffeners are placed 6” apart and welded every 5” along their length.

SUGGESTED USE:

- Interior or Exterior ...
- Motels/Hotels
- Office Buildings
- Urban Renewal
- Health Care
- Institutional
- Data Processing
- Mercantile
- Food Processing
- Schools/Training Centers
- Institutional Facilities
- Transportation Terminals
- Government Buildings
- Public Utility Stations
- Manufacturing Plants
- Vehicle Service Facilities
- Warehouses/Factories

DESIGNS

PATENTED

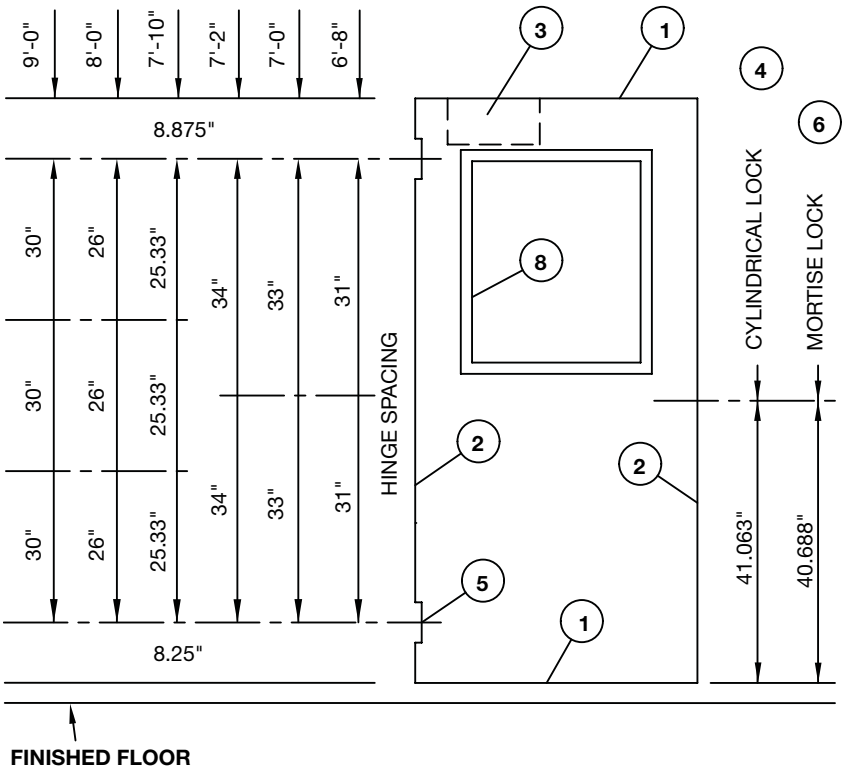


F G G2 FG V N___ N___ DUTCH V, G, & N DESIGNS AVAILABLE LB

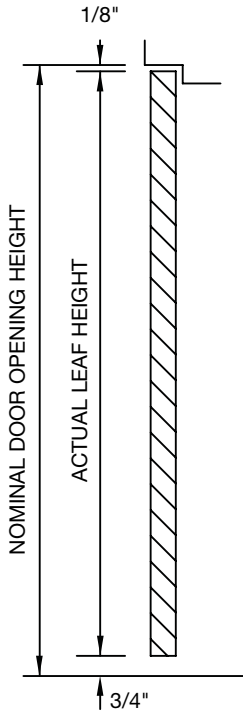
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

1-3/4" TRIO DOOR

DOOR ELEVATION

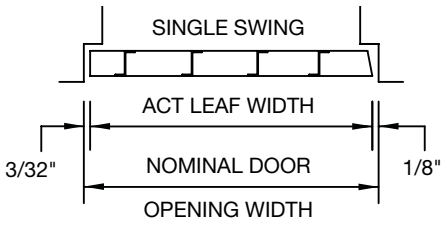


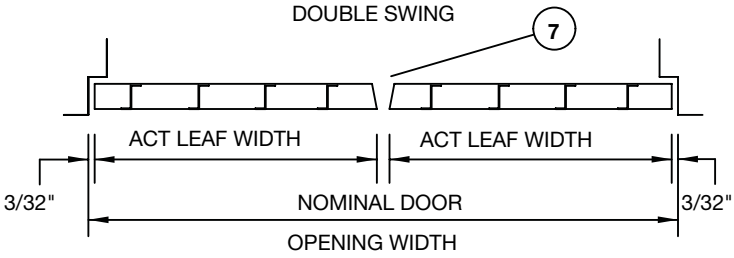
VERTICAL SECTION



HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

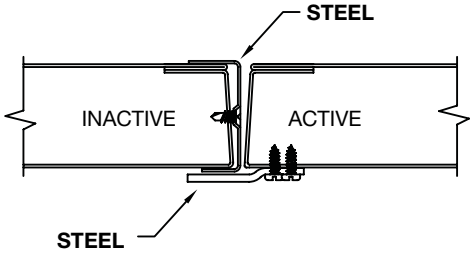
HORIZONTAL SECTIONS



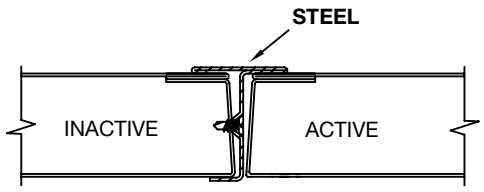


PATENTED

7 **OVERLAPPING ASTRAGAL** 4441
FOR 1-3/4" THICK DOORS



7 **OVERLAPPING ASTRAGAL** 4471
FOR 1-3/4" THICK DOORS



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

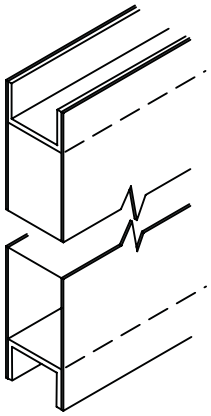
1-3/4" TRIO DOOR

1 16 GAUGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

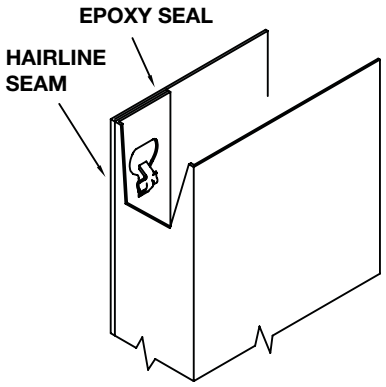
OPTIONAL STEEL TOP AND/OR BOTTOM CLOSING CAPS



2 VERTICAL EDGES

MECHANICALLY INTERLOCKED HEMMED EDGES

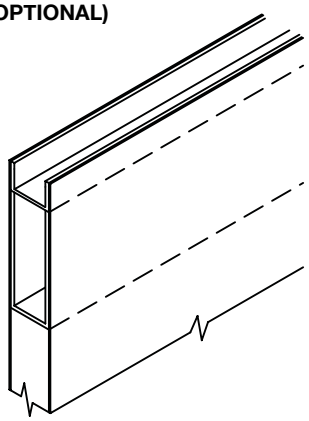
14 GAUGE STEEL WELDED SEAMLESS (ONLY)



ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)

3 CLOSER REINFORCEMENT(OPTIONAL)

14 GAUGE STEEL CHANNEL 20" LONG

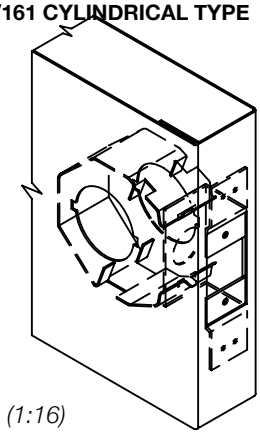


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4"BACKSET

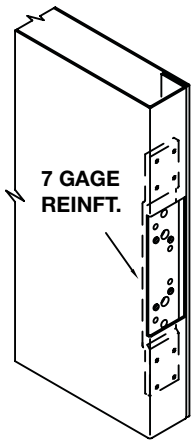


LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

5 HINGE PREPARATION

4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

HINGE EDGE IS HANDED AND NOT BEVELED.

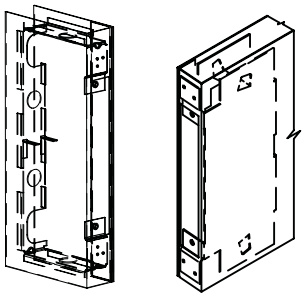


ANSI A156.7 TEMPLATE

6 LOCK PREPARATION

GOV. 86, ANSI/BHMA A115.1 MORTISE TYPE

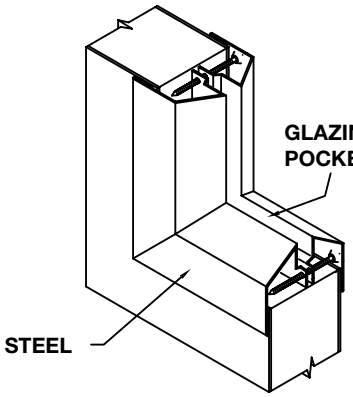
(LM0)



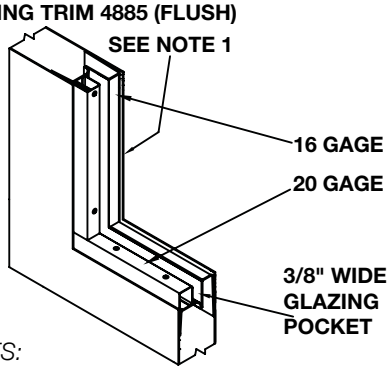
NOTE: EITHER OF THE LOCK REINFORCEMENTS/ GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

8 GLAZING TRIM SLIMTRIM



GLAZING TRIM 4885 (FLUSH)

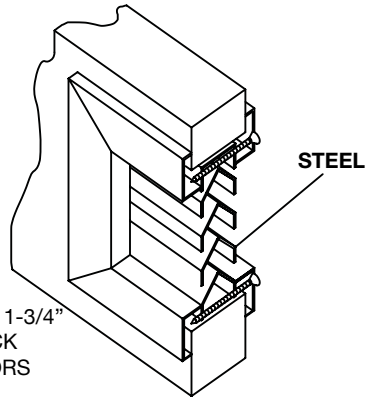


NOTES:

1. FIELD APPLIED CAULK IS RECOMMENDED ON THIS SEAM TO IMPROVE AESTHETICS AND RESIST WATER INTRUSION.

2. DRAWING NOT TO SCALE

FIXED SLAT TYPE LOUVER 4634



FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4" TRIO DOOR

PATENTED
STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252
DESIGNS: F, G, N, V
RATING:

UL SOLUTIONS 4'0" X 8'0" SINGLE
MAX. SIZES: 8'0" X 8'0" PAIR*
20 MIN. THRU 3 HOUR
*ADDITIONAL 12 GAUGE INTERNAL LOCK SIDE REINFORCEMENT REQ'D. (FOR PAIRS ONLY)
*NO ASTRAGAL REQUIRED
14 OR 16 GAUGE
8'0" X 9'0" MAX. SIZE PAIR
20 MIN. THRU 1-1 /2 HR
CONCEALED VERTICAL ROD ONLY
TOP ROD ONLY HARDWARE MUST BE APPROVED FOR THE APPLICATION.
ASTRAGALS NOT ALLOWED.

WH MAX. SIZE: 4'0" X 8'0" SINGLE*
20 MIN. THRU 3 HOUR
*ADDITIONAL 12 GAUGE INTERNAL LOCK SIDE REINFORCEMENT REQ'D. FOR DOORS EXCEEDING 1-1/2 HOUR

MAX. SIZE: 8'0" X 8'0" PAIRS*
20 MIN. THRU 3 HOUR
*ADDITIONAL 12 GAUGE INTERNAL LOCK SIDE REINFORCEMENT REQ'D.
*NO ASTRAGAL REQUIRED

14, 16 OR 18 GAUGE
8'0" X 9'0" MAX. SIZE PAIR
20 MIN. THRU 1-1 /2 HR
SURFACE OR CONCEALED VERTICAL RODS
TOP ROD ONLY HARDWARE MUST BE APPROVED FOR THE APPLICATION.
ASTRAGALS NOT ALLOWED.

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be as manufactured by Ceco Door, Milan, TN USA. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8 & HMMA 867; see chart below for performance classifications.

TRIO doors are made full-flush or (optional) seamless style. Face sheets are commercial quality cold rolled steel conforming to ASTM A1008 ...or (optional) hot-dipped galvannealed steel conforming to ASTM A924 and A653 -- see chart below.

TRIO full-flush doors have mechanically interlocked, hemmed, hairline seams on vertical edges and have no visible seams on faces (S.D.I. Model I). Doors specified "seamless" have no visible seams on faces or vertical edges (S.D.I. Model 2). Face sheets are totally supported by a steel stiffened laminated core with fiberglass filler. Standard 22 gauge cold rolled stiffeners are placed no more than 6" apart and welded no more than 5" O.C. along their length to a 22 gauge liner plate. 20 gauge galvannealed stiffeners and 18 gauge cold rolled stiffeners are optional. Fiberglass batting provides sound deadening and insulation between stiffeners. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1- 16) and is prepared for Gov. series 86 or 160/161 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel channel.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	OPT	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL

PERFORMANCE

PHYSICAL ENDURANCE LEVEL:	MEETS OR EXCEEDS ANSI A250.4 PERFORMANCE TEST 18, 16, AND 14 GAUGE: LEVEL A (1,000,000 CYCLES)		
FIBERGLASS THERMAL CHARACTERISTIC VALUE:	FULLY OPERABLE ASSEMBLIES (ASTM C1363)	R = 2.30	U = 0.43
SOUND TRANSMISSION CLASS:	STC 41 (F DESIGN, 18 GAUGE FACE SHEETS (4'0" X 8'0", MAX. SIZE) ASTM E90 & E413 [STC 43 INOPERABLE & EVALUATED TO STC 41 OPERABLE])		

1-3/4" TRIO-E DOOR

VERTICALLY STEEL STIFFENED LAMINATED CORE, WITH POLYURETHANE FOAMED IN PLACE

BEVELED LOCK EDGE, HANDED SQUARE
LOCK EDGE, NON-HANDED

Trio-E™
Strong • Beautiful • Green

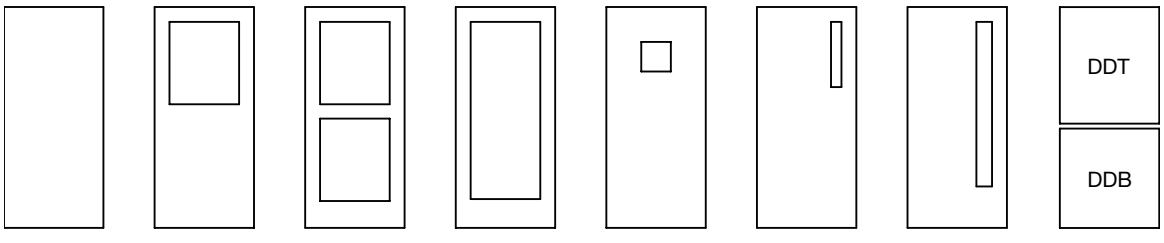
Full Flush or Seamless Style ...

Vertically steel stiffened core with foamed in place polyurethane fills entire door cavity. Core is chemically bonded to all interior surfaces. High impact resistance. Excellent insulation characteristics. Standard 22 gauge cold rolled steel stiffeners are placed 6" apart and welded every 5" along their length. Optional 20 gauge galvannealed and 18 gauge cold rolled stiffeners are available.

SUGGESTED USE:
- Interior or Exterior ...
- Motels/Hotels
- Office Buildings
- Urban Renewal
- Health Care
- Institutional
- Data Processing
- Mercantile
- Food Processing
- Schools/Training Centers
- Institutional Facilities
- Transportation Terminals
- Government Buildings
- Public Utility Stations
- Manufacturing Plants
- Vehicle Service Facilities
- Warehouses/Factories

DESIGNS

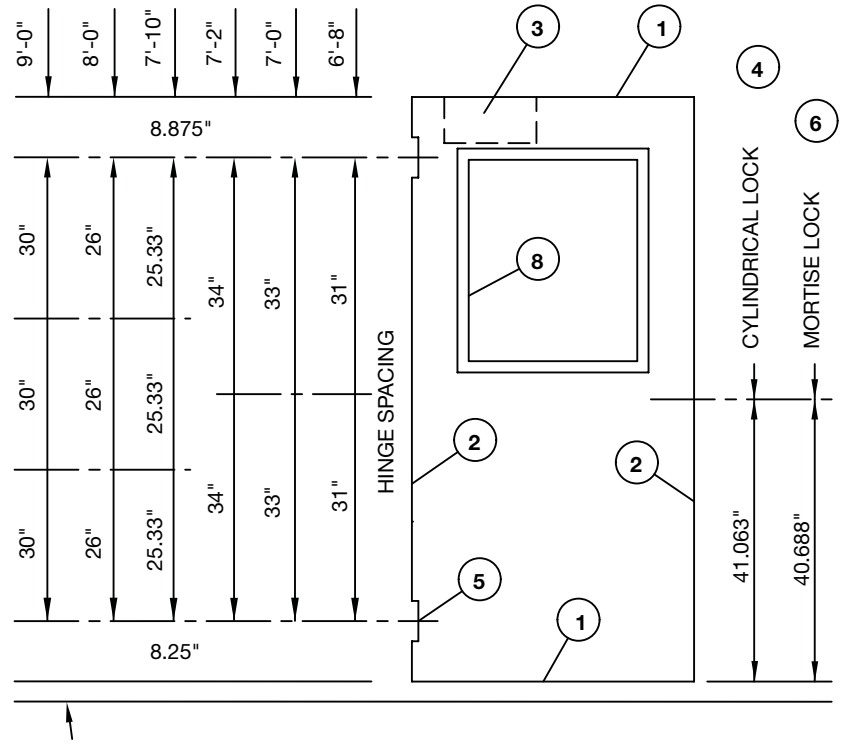
PATENTED



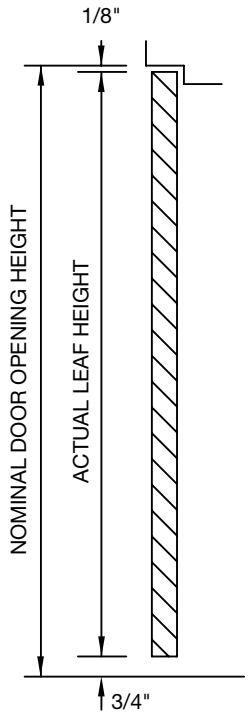
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4" TRIO-E DOOR

DOOR ELEVATION

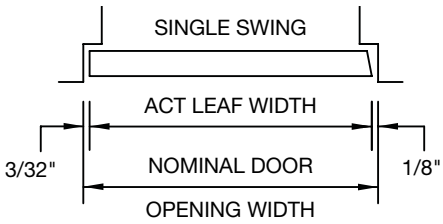


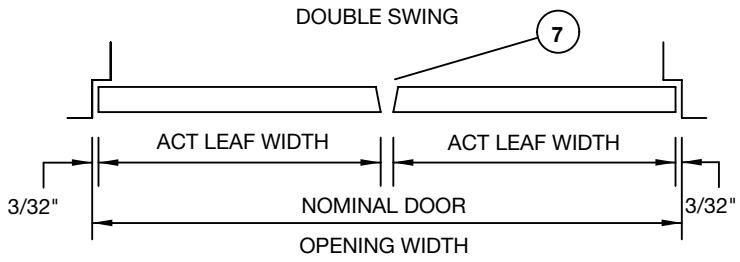
VERTICAL SECTION



HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

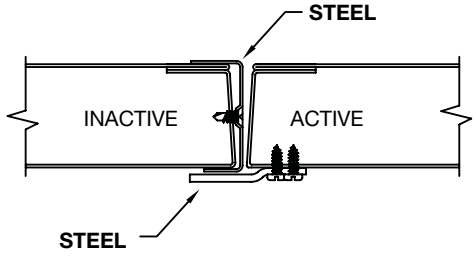
HORIZONTAL SECTIONS



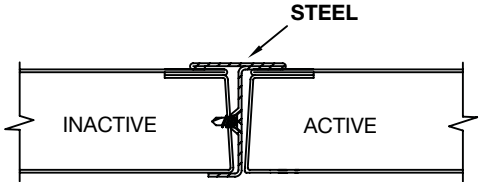


PATENTED

(7) **OVERLAPPING ASTRAGAL** 4441
FOR 1-3/4" THICK DOORS



(7) **OVERLAPPING ASTRAGAL** 4471
FOR 1-3/4" THICK DOORS



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

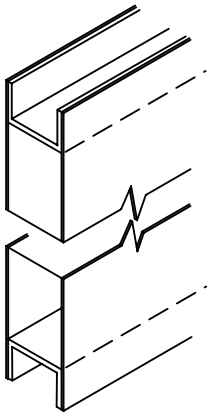
1-3/4" TRIO-E DOOR

1 16 GAUGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

OPTIONAL STEEL TOP AND BOTTOM CAPS

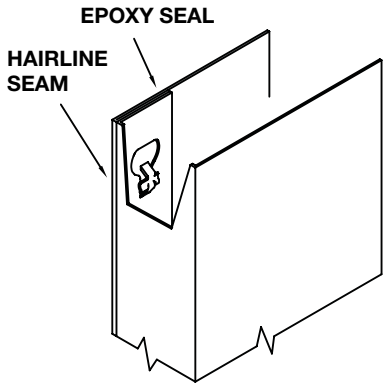


2 VERTICAL EDGES

MECHANICALLY INTERLOCKED HEMMED EDGES

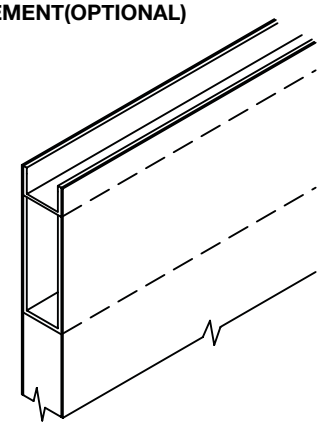
ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)

14 GAUGE STEEL WELDED SEAMLESS (ONLY)



3 CLOSER REINFORCEMENT(OPTIONAL)

14 GAUGE STEEL CHANNEL 20" LONG



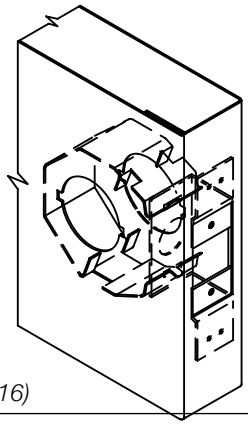
4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4"BACKSET

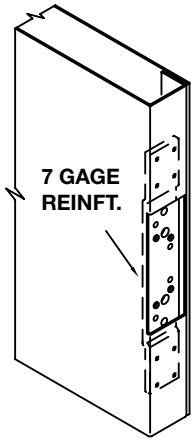
LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)



5 HINGE PREPARATION

4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

HINGE EDGE IS HANDED AND NOT BEVELED.



ANSI A156.7 TEMPLATE

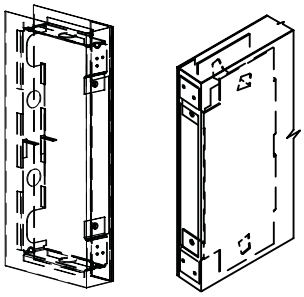
6 LOCK PREPARATION

GOV. 86, ANSI/BHMA A115.1 MORTISE TYPE

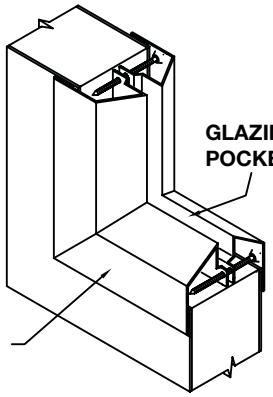
(LM0)

NOTE: EITHER OF THE LOCK REINFORCEMENTS/ GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)



8 GLAZING TRIM SLIMTRIM



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4" TRIO-E DOOR

PATENTED
STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252
DESIGNS: F, G, N, V
RATING:

UL
20 MIN. THRU 3 HOUR
MAX. SIZE: 4'0" X 8'0" SINGLE
MAX. SIZE: 8'0" X 8'0" PAIR
WH
20 MIN TO 1-1/2 HR
MAX. SIZE: 4'0" X 8'0" SINGLE
MAX. SIZE: 8'0" X 8'0" PAIR

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be as manufactured by Ceco Door, Milan, TN USA. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8 & HMMA 867; see chart below for performance classifications.

TRIO-E doors are made full-flush or (optional) seamless style. Face sheets are commercial quality cold rolled steel conforming to ASTM A 1008 ... or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 -- see chart below.

TRIO-E full-flush doors have mechanically interlocked, hemmed, hairline seams on vertical edges and have no visible seams on faces (S.D.I. Model I). Doors specified "seamless" have no visible seams on faces or vertical edges (S.D.I. Model 2). Face sheets are supported by a steel stiffened laminated core with polyurethane filler. Standard 22 gauge cold rolled stiffeners are placed no more than 6" apart and welded no more than 5" O.C. along their length to a 22 gauge liner plate. 20 gauge galvannealed and 18 gauge cold rolled stiffeners are optional. The core fills the entire door cavity and is chemically bonded to all interior surfaces. Density of foam exceeds 1.8 pct and it has a crush strength of 3600 psf. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1: 16) and is prepared for Gov. series 86 or 160/161 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel channel.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	OPT	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT	14 OR 12 GAUGE STEEL

PERFORMANCE

SOUND TRANSMISSION CLASS:	N/A		
PHYSICAL ENDURANCE LEVEL:	EXCEEDS ANSI A250.4 PERFORMANCE TEST, LEVEL A (PASSED 5,000,000 CYCLES) 18, 16 AND 14 GAUGE		
THERMAL CHARACTERISTIC VALUE:	CORE CALCULATED (ASTM C518)	R = 11.01	U = 0.091
	*NFRC 102-2014 & ASTM FLUSH DOOR WITH MERCURY FRAME *NFRC 102-2014 & ASTM FLUSH DOOR WITH WEATHERKERF FRAME *NFRC 102-2014 & ASTM FLUSH DOOR WITH STANDARD FRAME	R = 2.78 R = 2.63 R = 2.44	U = 0.36 U = 0.38 U = 0.41
AIR INFILTRATION	NFRC400 RESISTANCE TO AIR INFILTRATION & ASTM TEST METHODS: MERCURY TQB FRAME & TRIO-E DOOR NFRC 400 (0.1 CFM SQ.FT.)		

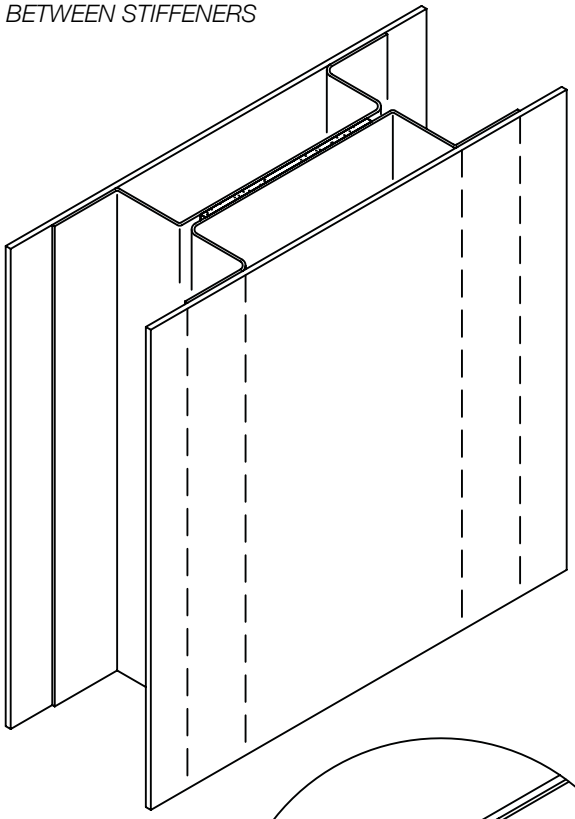
**NFRC102-2014: THE GENERAL REQUIREMENTS OF TESTING SHALL BE AS DEFINED IN NFRC 102, ASTM C1199 AND ASTM C1363.*

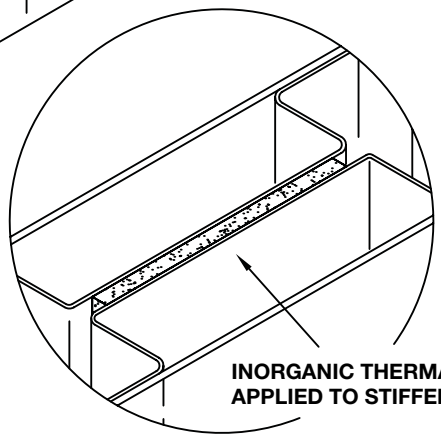
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4” 450° MEDALLION

TEMPERATURE RISE RATED DOORS, POSITIVE PRESSURE VERTICALLY STEEL STIFFENED, CENTER SEAM, BEVELED LOCK, HANDED

8 LB. DENSITY ROCK WOOL BETWEEN STIFFENERS



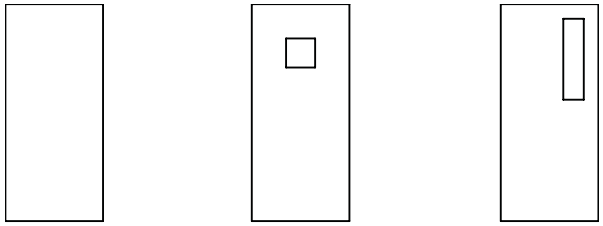


Designed to Take Extreme People punishment...

Complies with NAAMM Specifications. 22 gauge steel stiffeners placed 6” apart and welded every 5” along their length. Center seam edges. Rock wool insulated. An inorganic thermal barrier bonded to stiffeners.

SUGGESTED USE:
- Stairwells...
- Schools/Training Centers
- Institutional Facilities
- Public Utility Stations
- Government Buildings
- Warehouses/Factories
- Manufacturing Plants
- Transportation Terminals
- Vehicle Service Facilities

FLUSH DESIGNS

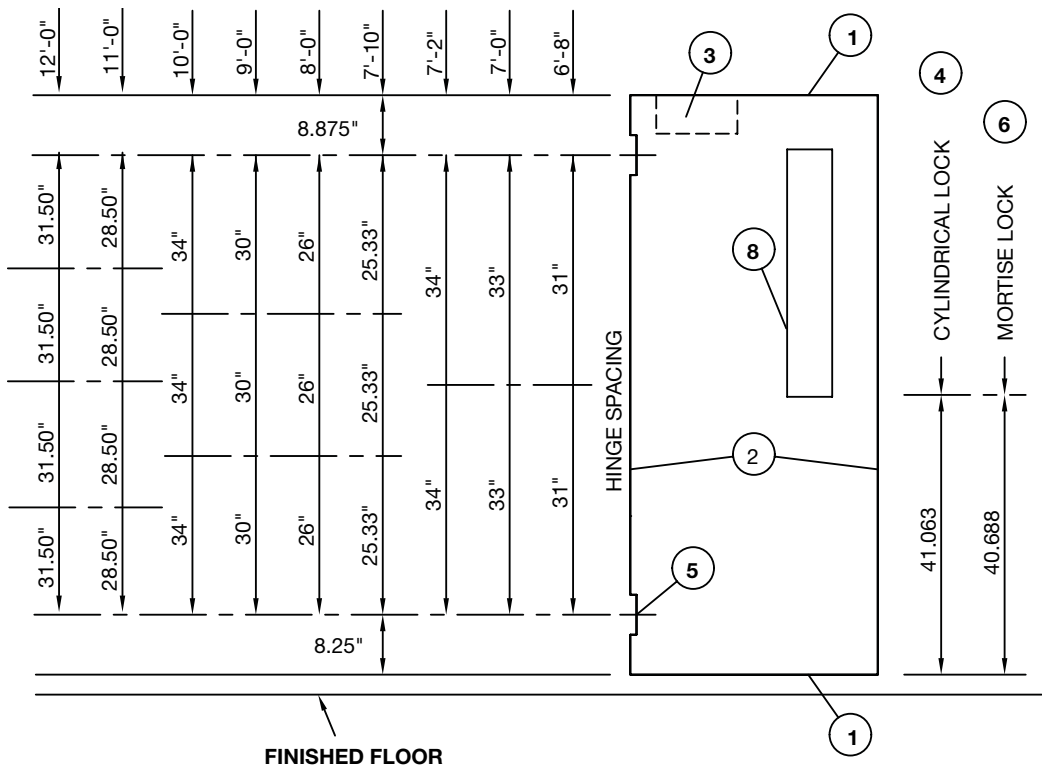


F V N ___

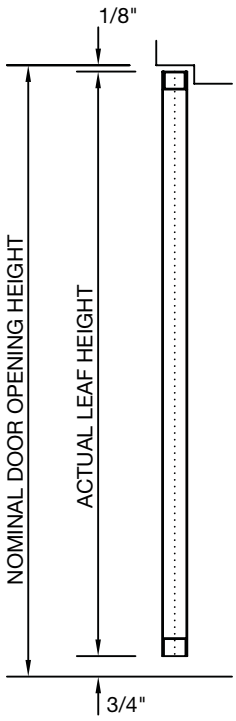
450° MEDALLION DOORS

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

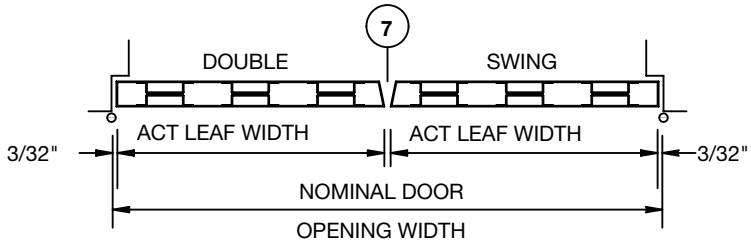
DOOR ELEVATION

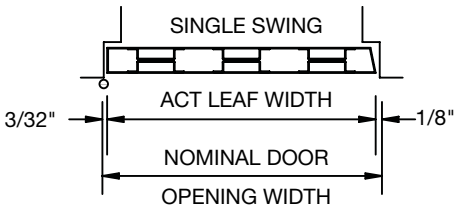


VERTICAL SECTION



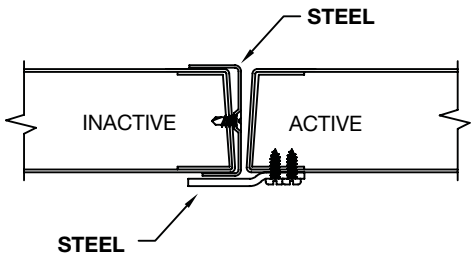
HORIZONTAL SECTIONS





7 OVERLAPPING ASTRAGAL 4441

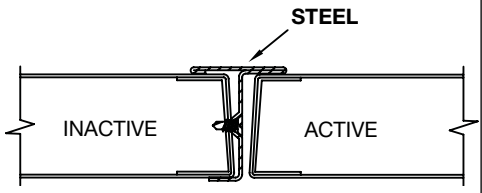
FOR 1-3/4" THICK DOORS



LISTED

7 OVERLAPPING ASTRAGAL 4471

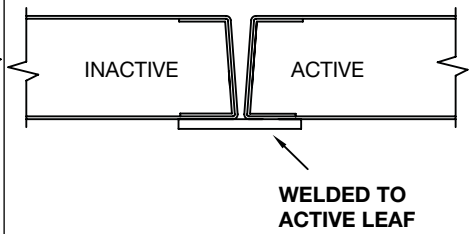
FOR 1-3/4" THICK DOORS



LISTED

7 OVERLAPPING ASTRAGAL 4491 (OPTIONAL)

FOR 1-3/4" THICK DOORS



1/8" STEEL PLATE

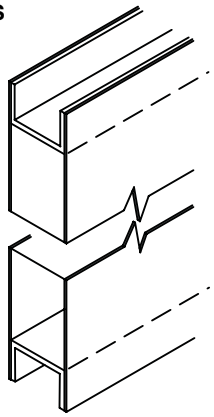
LISTED

450° MEDALLION DOORS

1 16 GAUGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

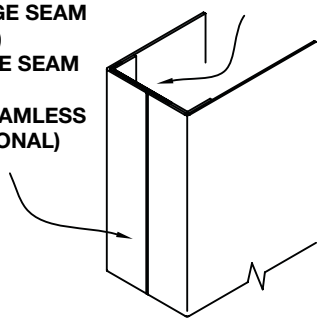


OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

16 GAGE FULL HEIGHT CHANNEL

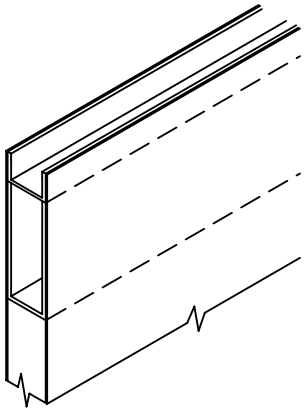
VISIBLE EDGE SEAM (STANDARD)
FILLED EDGE SEAM (OPTIONAL)
WELDED SEAMLESS EDGE (OPTIONAL)



WELDED SEAMLESS EDGE FOR DOORS OVER 10' IN HEIGHT.

3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAUGE STEEL CHANNEL 20" LONG

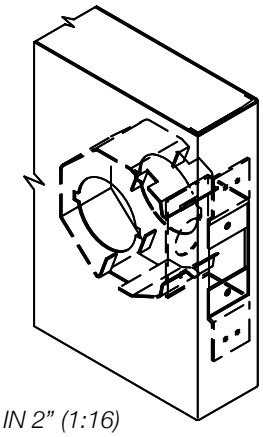


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4" BACKSET



LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

5 HINGE PREPARATION

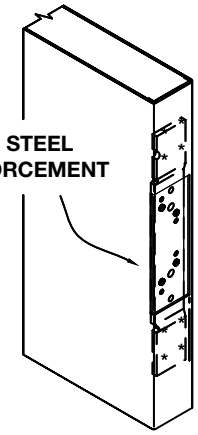
4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT FULL MORTISE HINGES

ANSI 156.7 TEMPLATE

HINGE EDGE IS HANDED AND SQUARE

14 GA. DOORS REQUIRE HEAVY WEIGHT FULL MORTISE HINGES

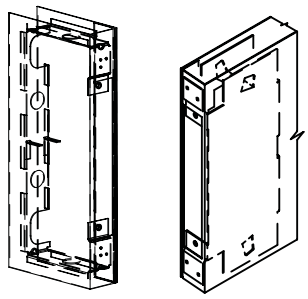
7 GAGE STEEL REINFORCEMENT



6 LOCK PREPARATION

GOV. 86, ANSI/ BHMA A115.1 MORTISE TYPE

(LM0)



LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

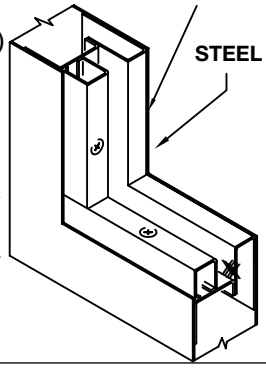
NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

8 STANDARD GLAZING TRIM 4884 (FLUSH)

SEE NOTE 1

STEEL

3/8" WIDE GLAZING POCKET



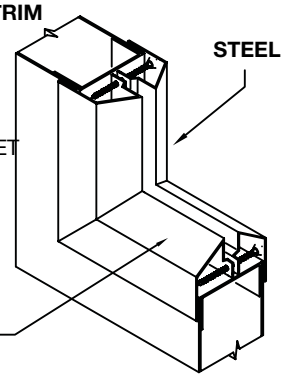
NOTES:
1. *FIELD APPLIED CAULK IS RECOMMENDED ON THIS SEAM TO IMPROVE AESTHETICS AND RESIST WATER INTRUSION.*
2. *DRAWING NOT TO SCALE*

8 GLAZING TRIM SLIMTRIM

STEEL

3/8" WIDE GLAZING POCKET

BEVELED GLAZING BEAD



NOTES:
GLAZING
ONLY LABELED, FIRE GLAZING MATERIAL SHOULD BE USED. GLASS AND GLAZING ARE BY GLAZING CONTRACTOR.

OTHER HARDWARE PREPARATIONS
450° MEDALLION DOORS CAN BE PREPARED FOR LISTED: LOCKS, LATCHES, FIRE EXIT HARDWARE, BOLTS (SURFACE, FLUSH, AUTO, ETC.), CONCEALED CLOSERS, AND ELECTRONIC HARDWARE IN ACCORDANCE WITH PROCEDURES OF SPECIFIC LABELING AGENCY.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

450° MEDALLION DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	11'-0"
4'-0"	8'-0"	12'-0"
5'-0"	10'-0"	

FIRE DOORS

LABELING AGENCIES : UL SOLUTIONS WARNOCK HERSEY
TEST: UL 10B, UL 10C, UL 1784, & NFPA 252 **RATING:** 20 MIN THRU 1-1/2 HR **MAX. SIZE:** 4'0" X 9'0" SINGLE (WH & FM) 8'0" X 9'0" PAIR (WH & FM) 4'0" X 10'0" SINGLE (UL) 8'0" X 10'0" PAIR (UL) 4'0" X 10'0" SINGLE (UL) 8'0" X 10'0" PAIR (UL) *NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS. SEE FIRE DOOR SHEET.*

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be by Ceco Door Products. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8 and NAAMM specifications. See chart below for performance classifications.

450° MEDALLION doors are center edge seam design. Face sheets are commercial quality cold rolled steel (conforming to ASTM A1008...or (optional) hot-dipped galvannealed or galvanized steel (conforming to ASTM A924 and A653) - see chart below.

Door face sheets are joined at their vertical edge with a center seam the full height of door (optional welded seamless design). Doors over 10'-0" in height will have welded seamless edge. 22 gauge steel vertical stiffeners (other gauges optional) are placed no more than 6" apart and welded to both face sheets no more than 5" on center along their length. An inorganic thermal barrier is bonded to the stiffeners. Rock wool insulates the area between stiffeners. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets.

Hardware Provisions: Hinge preparations are handed. The hinge edge is square. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock has a standard bevel (1:16). Lock edge is prepared for Gov. series 86, 160/161, or 90 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel plate.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	N/A	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL
14 GAUGE STEEL (MAXIM)	MAXIMUM DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL

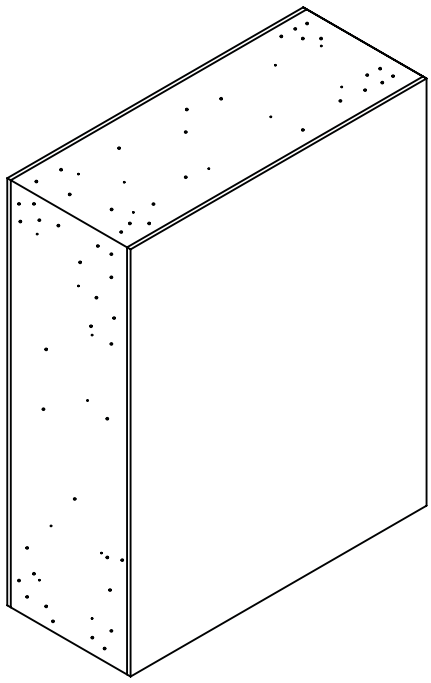
DOORS OVER 4'0" WIDE AND/OR OVER 10'0" TALL ARE AVAILABLE ONLY IN 16 OR 14 GAUGE A60 STEEL.

PERFORMANCE

SOUND TRANSMISSION	STC 41 (F DESIGN, 16 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE])
PHYSICAL ENDURANCE LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, LEVEL A (1,000,000 CYCLES)

1-3/4” FUEGO (FT) SOLID CORE

250 °F(121°C) MAXIMUM TEMPERATURE RISE*, POSITIVE PRESSURE FULL FLUSH STEEL, 3 HOUR FIRE DOORS BEVELED LOCK EDGE, HANDED



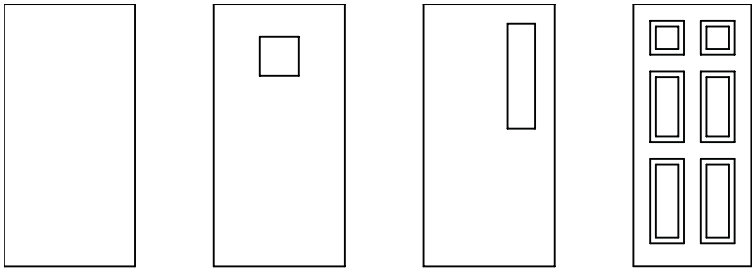
** 250°F (121°C) MAXIMUM TEMPERATURE RISE AT THE END OF THE FIRST 30 MINUTES OF FIRE TEST.*

UL Solutions Listed, solid mineral fiber, rigid slab bonded to both face sheets with waterproof contact adhesive. Tensile strength: 150 psi

SUGGESTED USE:

- Vertical means of egress
- Fire Code Compliance
- Interior or Exterior ...
- Office
- Motel/Hotel
- Apartment
- Condominiums
- Public Housing
- Health Care
- Educational
- Factory/Warehouse
- Institutional
- Mercantile
- Dormitories

DOOR DESIGNS



F V N___ ** E601 ** EN61

*** 6 PANEL EMBOSSED ONE SIDE - 250°F(121°C) TEMP. RISE EMBOSSED BOTH SIDES - 450°F(232°C) TEMP. RISE*

ALL FUEGO DOOR DESIGNS WILL HAVE CENTER EDGE SEAM CONSTRUCTION.

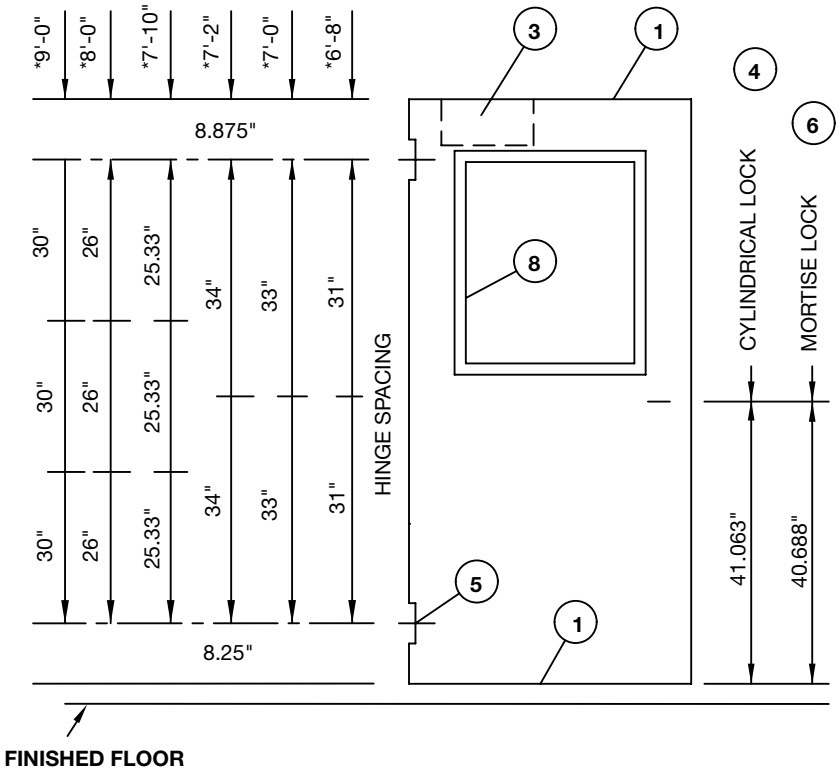
NOTES:
1. 100² IN. MAX. GLAZED AREA PER DOOR WITH FIRE PROTECTIVE GLASS.
2. OTHER DOOR DESIGNS AVAILABLE NON TEMPERATURE RISE RATED.

6 PANEL	
MAX. SIZE	3’0”X7’0”
MIN. SIZE	2’6”X6’8”

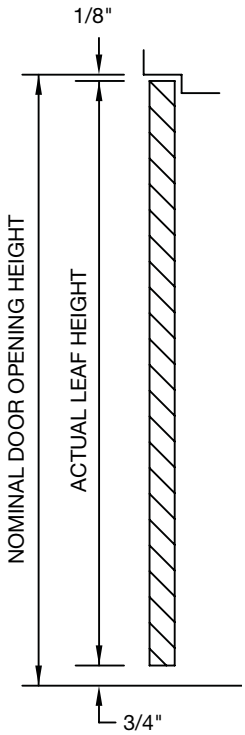
FUEGO 250°F(121°C) DOORS

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

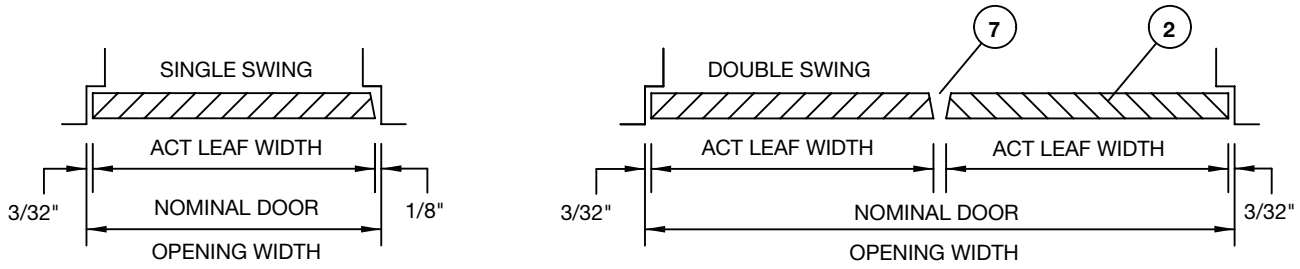
DOOR ELEVATION



VERTICAL SECTION

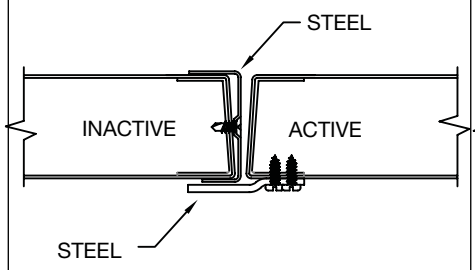


HORIZONTAL SECTIONS



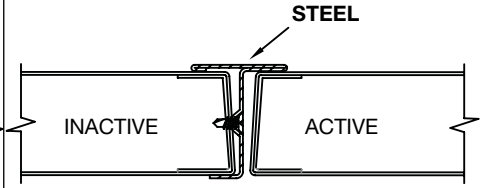
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.4 MM)
**SEE ALL EMBOSSED DESIGNS AND SIZE LIMITATIONS ON PAGE 168.*

(7) **OVERLAPPING ASTRAGAL** 4441
FOR 1-3/4" THICK DOORS



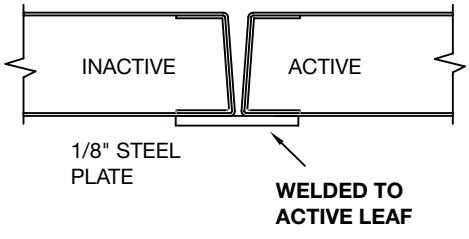
LISTED

(7) **OVERLAPPING ASTRAGAL** 4471
FOR 1-3/4" THICK DOORS



LISTED

(7) **OVERLAPPING ASTRAGAL**
4491 (OPTIONAL)
FOR 1-3/4" THICK DOORS



LISTED

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

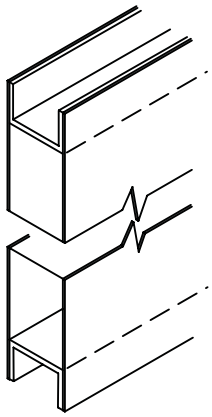
FUEGO 250°F(121°C) DOORS

1 16 GAUGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

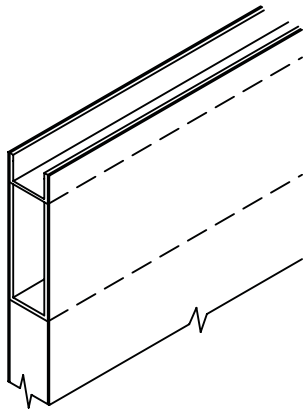
INVERTED TOP AND BOTTOM

OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE



2 CLOSER REINFORCEMENT (OPTIONAL)

14 GAUGE STEEL CHANNEL 20" LONG

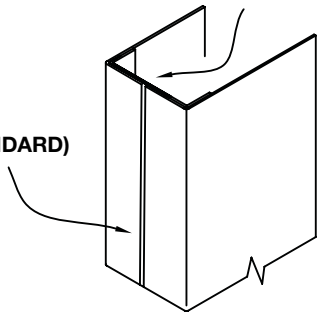


3 VERTICAL EDGES

16 GAGE FULL HEIGHT CHANNEL

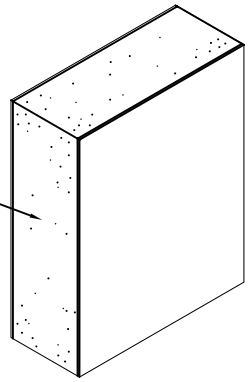
CENTER EDGE SEAM CONSTRUCTION (STANDARD)

OPTIONAL: WELDED SEAMLESS OR BONDO SEAMLESS



4 CORE

SOLID MINERAL FIBER CORE BONDED TO BOTH FACE SHEETS



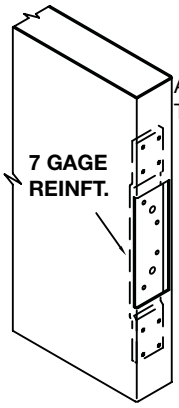
5 HINGE PREPARATION

4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

HINGE EDGE IS HANDED

ANSI A156.7 TEMPLATE

7 GAGE REINFT.

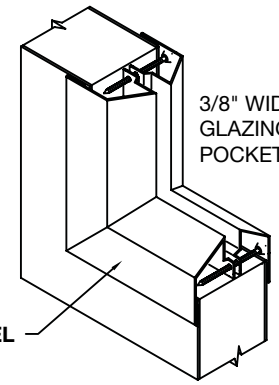


6 GLAZING TRIM

FOR ALL FIRE DOORS

3/8" WIDE GLAZING POCKET

LISTED **STEEL**

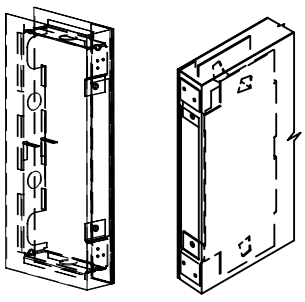


8 LOCK PREPARATIONS

GOV. 86, ANSI/BHMA A115.1 MORTISE TYPE

(LM0)

NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.



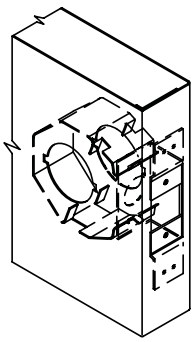
GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4" BACKSET

LOCK EDGE IS BEVELED



NOTE: GLAZING ONLY LABELED, FIRE GLAZING MATERIAL SHOULD BE USED. GLASS AND GLAZING ARE BY GLAZING CONTRACTOR UNLESS INCLUDED IN CONTRACT.

OTHER HARDWARE PREPARATIONS FUEGO DOORS CAN BE PREPARED FOR LISTED: LOCKS, LATCHES, FIRE EXIT HARDWARE, BOLTS (SURFACE, FLUSH, AUTO, ETC.), CONCEALED CLOSERS, AND ELECTRONIC, HARDWARE IN ACCORDANCE WITH PROCEDURES OF SPECIFIC, LABELING AGENCY.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

FUEGO 250°F(121°C) DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY
FACTORY MUTUAL

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR, OR 3 HR

MAX. SIZE: 4'0" X 9'0" SINGLE
7'4" X 9'0" PAIR (3 HR)
8'0" X 9'0" PAIR (1-1/2 HR)

DESIGNS: F, V, N, E6, & EN6

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS. SIZE GUIDELINES FOR A SPECIFIC RATING APPLY ALSO TO A LESSER RATING.

PRODUCT SPECIFICATIONS:

-3/4" Thick steel doors shall be as manufactured by Ceco Door Products. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8; see chart below for performance classifications.

FUEGO temperature rise, 3 hour or less rated, fire doors are made full flush center edge seam construction. A physical label shall be applied to the fire door at an authorized facility as evidence of compliance with procedures of labeling agency. Face sheets are commercial quality cold rolled steel (conforming to ASTM A1008 ...or (optional) hot-dipped galvannealed or galvanized steel (conforming to ASTM A924 and A653) - see chart below

Fuego full-flush doors have center edge seam construction. Weld seamless or body filler seamless is optional. The core is a one piece, UL listed, solid mineral fiber slab that is securely bonded to both face sheets under pressure with waterproof contact adhesive. The top and bottom door edges are closed with 16 gauge steel channels welded to both faces.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1:16) and is prepared for Gov. series 86, 160/161, or 90 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gauge steel channel.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
18 GAUGE STEEL	HEAVY DUTY	STD	OPT	N/A	16 GAUGE STEEL
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT	14 OR 12 GAUGE STEEL

PERFORMANCE

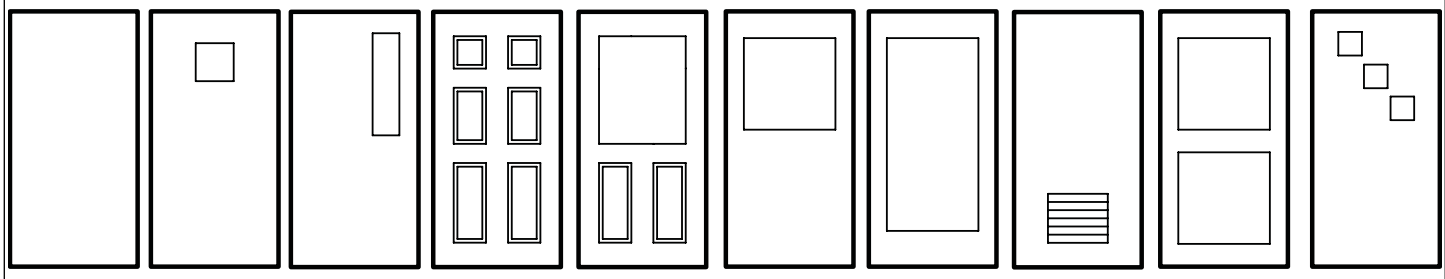
SOUND TRANSMISSION CLASS:	STC 33 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413, FULLY OPERABLE)
PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, 18,16 AND 14 GAUGE: LEVEL A (1,000,000 CYCLES)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LABELED FIRE DOORS

1-3/4" REGENT AND OMEGA FIRE DOORS HONEYCOMB CORE

FIRE DOORS DESIGNS



F V N E601 E603 G FG LB 2G VX

HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL SOLUTIONS LISTED FUSIBLE LINK ****LOUVER
3 HOURS		NONE
1-1/2 HOURS		24" X 24" MAX.
1 HOUR		24" X 24" MAX.
3/4 HOUR		24" X 24" MAX.
1/3 HOUR		NONE

*****DO NOT USE FUSIBLE LINK LOUVERS IN FIRE DOORS FOR A GLASS LITE, VISION PANEL, FIRE EXIT HARDWARE, WITH 1/3 OR 3 HOUR LABELS.*
1/3 HOUR DOORS ARE FOR USE WHERE SMOKE & DRAFT IS A PRIMARY CONSIDERATION.

REGENT DOORS ARE HANDED. OMEGA DOORS ARE NON-HANDED. HONEYCOMB CORE-STEEL GLAZING TRIM, UL SOLUTIONS, WH OR FM LABEL ...CLASSIFIED FOR OPENINGS RATED FROM 20 MINUTE UP TO AND INCLUDING 3 HOURS. 30 MINUTE TEMPERATURE RISE > 650° F. FOR ADDITIONAL DATA, ON REGENT AND OMEGA DOORS, SEE SECTIONS D1 AND D2. EMBOSSED 6 PANEL DESIGNS ARE ELIGIBLE TO BE FIRE RATED.

14 GAUGE REGENT DOORS ARE AVAILABLE ONLY AS A SEAMLESS DESIGN.
MIN. 6" STILES AND RAILS REQUIRED FOR GLASS LITE DESIGNS.
CLASSIFIED FOR USE WITH ALL TYPES OF LABELED FIRE EXIT HARDWARE, EXCEPT WHERE NOTED.
ASTRAGAL IS REQUIRED FOR 3 HOUR RATED AND 20 GAUGE PAIRS, AND IS OPTIONAL FOR OTHER PAIRS.

** MAXIMUM SIZE:*
(18, 16 OR 14 GA.) 4'-0" X 9'-0" SINGLE 3 HOUR)
(18, 16 OR 14 GA.) 8'-0" X 9'-0" PAIR 3 HOUR)
(20 GA.) 4'-0" X 8'0" SINGLE 3 HOUR)
(20 GA.) 8'-0" X 8'-0" PAIR 3 HOUR)

** NOTE: SOME HARDWARE AND/OR GLASS LITE COMBINATIONS MAY NOT BE AVAILABLE IN SIZES LISTED. CONSULT CUSTOMER SERVICE FOR DETAILED INFORMATION.*

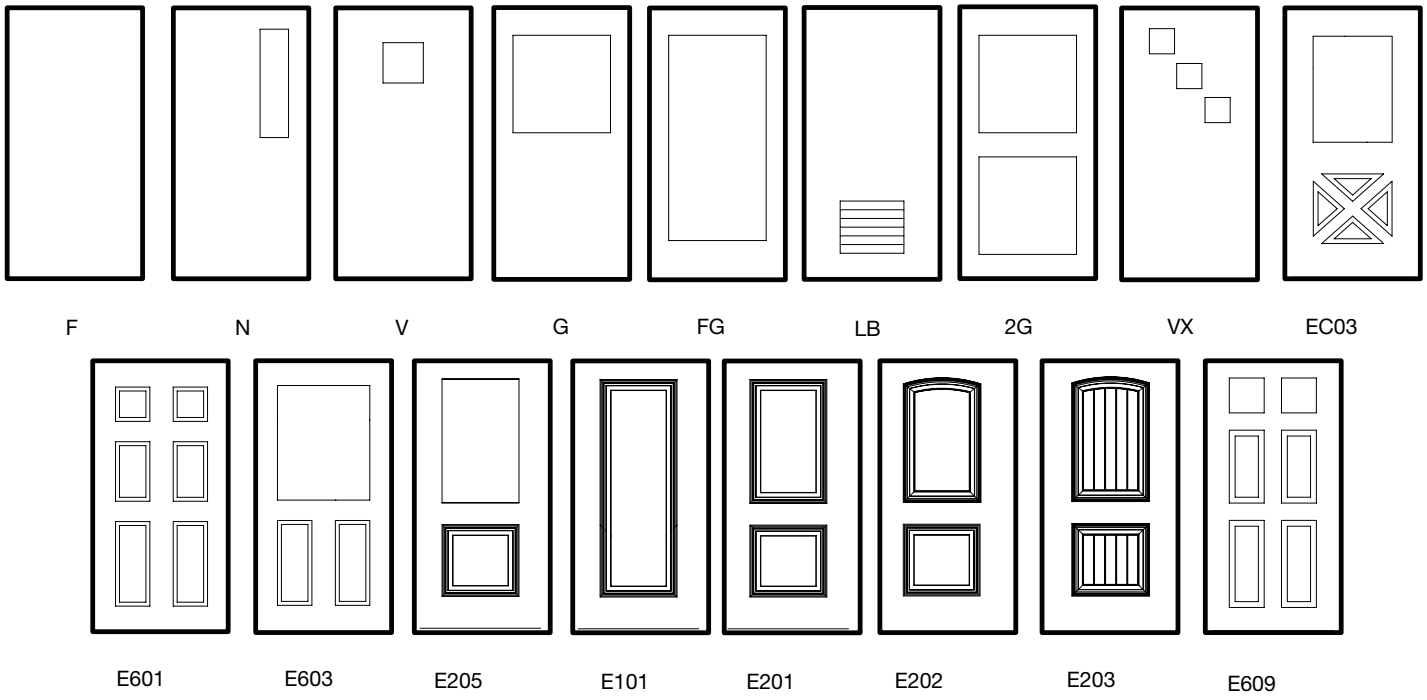
- LATCHSET: UL SOLUTIONS LISTED, 1/2" MINIMUM THROW.

- TEST: UL10B, UL10C, NFPA252 & UL1784

LABELED FIRE DOORS

1-3/4" IMPERIAL & VERSADOOR FIRE DOORS FOAMED IN PLACE POLYURETHANE CORE

FIRE DOORS DESIGNS



HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL SOLUTIONS LISTED FUSIBLE LINK *LOUVER
3 HOURS	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.	NONE
1-1/2 HOURS		24" X 24" MAX.
1 HOUR		24" X 24" MAX.
3/4 HOUR		24" X 24" MAX.
1/3 HOUR		NONE

** DO NOT USE FUSIBLE LINK LOUVERS IN FIRE DOORS FOR A GLASS LITE, VISION PANEL, FIRE EXIT HARDWARE, WITH 1/3 HOUR OR 3 HOUR LABELS.*
1/3 HOUR DOORS ARE FOR USE WHERE SMOKE & DRAFT ARE A PRIMARY CONCERN.

IMPERIAL DOORS ARE HANDED. VERSADOORS ARE NON-HANDED POLYURETHANE FOAM CORE-STEEL GLAZING TRIM, CLASSIFIED FOR OPENINGS RATED FROM
20 MINUTE UP TO AND INCLUDING 3 HOURS.
30 MINUTE TEMPERATURE RISE > 650°F. FOR ADDITIONAL DATA ON VERSADOOR OR IMPERIAL DOORS, SEE SECTIONS D3 & D4.

IMPERIAL & VERSADOOR MAXIMUM SIZE, UL SOLUTIONS & WH
(18, 16 OR 14 GA.) 4'-0" X 7'-0" SINGLE 3 HOUR
(18, 16 GA.) 6'-0" X 7'-0" PAIR 3 HOUR

IMPERIAL & VERSADOOR MAXIMUM SIZE, UL SOLUTIONS & WH
(20 GA.) 4'-0" X 7'-0" SINGLE 1-1/2 HOUR
(20 GA.) 6'-0" X 7'-0" PAIR 1-1/2 HOUR

- ASTRAGAL IS REQUIRED FOR 3 HOUR RATED PAIRS, AND IS OPTIONAL FOR OTHER PAIRS.
- LATCHSET: UL SOLUTIONS LISTED, 1/2" MINIMUM THROW.

NOTE: SOME HARDWARE AND/OR GLASS LITE COMBINATIONS
MAY NOT BE AVAILABLE IN SIZES LISTED.
CONSULT CUSTOMER SERVICE FOR DETAILED INFORMATION.

- CLASSIFIED FOR USE WITH ALL TYPES OF LABELED FIRE EXIT HARDWARE.

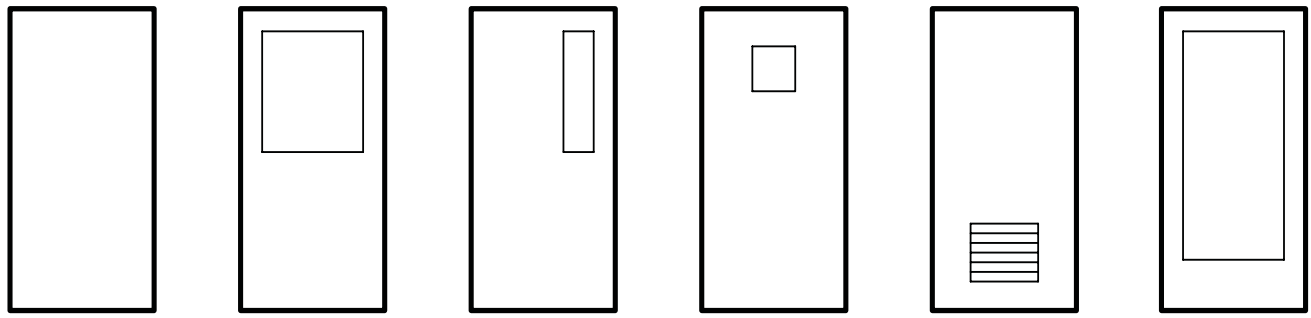
- TEST: UL10B, UL10C, NFPA252 & UL1784

- 14 GAUGE DOORS WILL BE WELD SEAMLESS.

LABELED FIRE DOORS

1-3/4" MEDALLION FIRE DOORS VERTICALLY STEEL STIFFENED

FIRE DOORS DESIGNS



F G N V LB FG

HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL SOLUTIONS LISTED FUSIBLE LINK *LOUVER
3 HOURS	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.	NONE
1-1/2 HOURS		24" X 24" MAX.
1 HOUR		24" X 24" MAX.
3/4 HOUR		24" X 24" MAX.
1/3 HOUR		NONE

**DO NOT USE FUSIBLE LINK LOUVERS IN FIRE DOORS PREPARED FOR TEMPERATURE RISE, GLASS LITE, VISION PANEL OR FIRE EXIT HARDWARE.*
**1/3 HOUR DOORS ARE FOR USE WHERE SMOKE CONTROL IS A PRIMARY CONSIDERATION.*

- MEDALLION DOORS ARE HANDED. VERTICALLY STEEL STIFFENED-STEEL GLAZING TRIM, UL SOLUTIONS, WH OR FM LABEL ... CLASSIFIED FOR OPENINGS RATED FROM 20 MINUTE UP TO AND INCLUDING 3 HOURS. (12 GAUGE DOORS ARE LIMITED TO 1-1/2 HOURS)
- 30 MINUTE TEMPERATURE RISE RATING OF 450° F MAY BE ACHIEVED WITH 20 MIN. THRU 1-1/2 HOUR FIRE RATINGS.
- ASTRAGAL IS REQUIRED FOR SOME 3 HOUR RATED PAIRS, AND IS OPTIONAL FOR OTHER PAIRS.
- LATCHSET: UL SOLUTIONS LISTED, 1/2" MINIMUM THROW (SINGLE) [12 GAUGE DOORS ARE LIMITED TO MORTISE LOCKS], AND (PAIRS) LABELED FIRE DOORS THRU 1-1/2 HOURS. 5/8" MINIMUM THROW 3 HOUR (PAIRS).
- SEE PAGE 164 FOR CONSTRUCTION FEATURES OF TEMPERATURE RISE DOOR.
- FOR ADDITIONAL DATA ON MEDALLION DOORS, SEE PAGE 152

MAXIMUM SIZE:
(12 GA.) 4'-0" X 8'-0" SINGLE 1-1/2 HOUR
(14 GA.) 4'-0" X 9'-0" SINGLE 3 HOUR
(18 OR 16 GA.) 4'-0" X 10'-0" SINGLE 3 HOUR
(16, 18 GA.) 8'-0" X 10'-0" PAIR 3 HOUR
(14 GA.) 8'-0" X 9'-0" PAIR 3 HOUR

CLASSIFIED FOR USE WITH ALL TYPES OF LABELED FIRE EXIT HARDWARE. (12 GAUGE DOORS ARE LIMITED TO MORTISE EXIT)

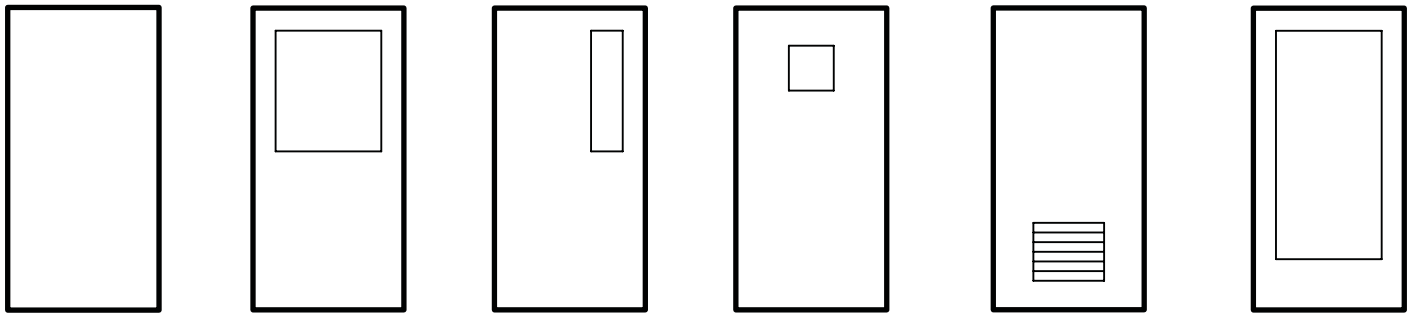
NOTE: SOME HARDWARE AND/OR GLASS LITE COMBINATIONS MAY NOT BE AVAILABLE IN SIZES LISTED. CONSULT CUSTOMER SERVICE FOR DETAILS.

- TEST: UL10B, UL10C, NFPA252 & UL1784

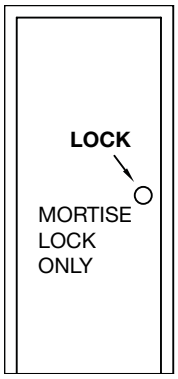
LABELED FIRE DOORS

1-3/4" MEDALLION FIRE DOORS VERTICALLY STEEL STIFFENED

FIRE DOORS DESIGNS

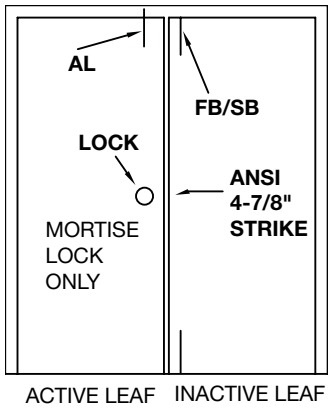


F G N V LB FG



HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL SOLUTIONS LISTED FUSIBLE LINK *LOUVER
3 HOURS	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.	NONE
1-1/2 HOURS		24" X 24" MAX.
1 HOUR		24" X 24" MAX.
3/4 HOUR		24" X 24" MAX.
1/3 HOUR		NONE

**DO NOT USE FUSIBLE LINK LOUVERS IN FIRE DOORS PREPARED FOR TEMPERATURE RISE, GLASS LITE, VISION PANEL OR FIRE EXIT HARDWARE.*
**1/3 HOUR DOORS ARE FOR USE WHERE SMOKE CONTROL IS A PRIMARY CONSIDERATION.*



- MEDALLION DOORS ARE HANDED. VERTICALLY STEEL STIFFENED-STEEL GLAZING TRIM, UL SOLUTIONS, WH OR FM LABEL ... CLASSIFIED FOR OPENINGS RATED FROM 20 MINUTE UP TO AND INCLUDING 3 HOURS. (12 GAUGE DOORS ARE LIMITED TO 1-1/2 HOURS)
- 30 MINUTE TEMPERATURE RISE RATING OF 450° F MAY BE ACHIEVED WITH 20 MIN. THRU 1-1/2 HOUR FIRE RATINGS.
- ASTRAGAL IS REQUIRED FOR SOME 3 HOUR RATED PAIRS, AND IS OPTIONAL FOR OTHER PAIRS.
- LATCHSET: UL SOLUTIONS LISTED, 1/2" MINIMUM THROW (SINGLE) [12 GAUGE DOORS ARE LIMITED TO MORTISE LOCKS], AND (PAIRS) LABELED FIRE DOORS THRU 1-1/2 HOURS. 5/8" MINIMUM THROW 3 HOUR (PAIRS).
- SEE PAGEPAGE 164 FOR CONSTRUCTION FEATURES OF TEMPERATURE RISE DOOR.
- FOR ADDITIONAL DATA ON MEDALLION DOORS, SEE PAGE 152.

MAXIMUM SIZE:
(12 GA.) 4'-0" X 8'-0" SINGLE 1-1/2 HOUR
(14 GA.) 4'-0" X 9'-0" SINGLE 3 HOUR
(18 OR 16 GA.) 4'-0" X 10'-0" SINGLE 3 HOUR
(16, 18 GA.) 8'-0" X 10'-0" PAIR 3 HOUR
(14 GA.) 8'-0" X 9'-0" PAIR 3 HOUR

CLASSIFIED FOR USE WITH ALL TYPES OF LABELED FIRE EXIT HARDWARE. (12 GAUGE DOORS ARE LIMITED TO MORTISE EXIT)

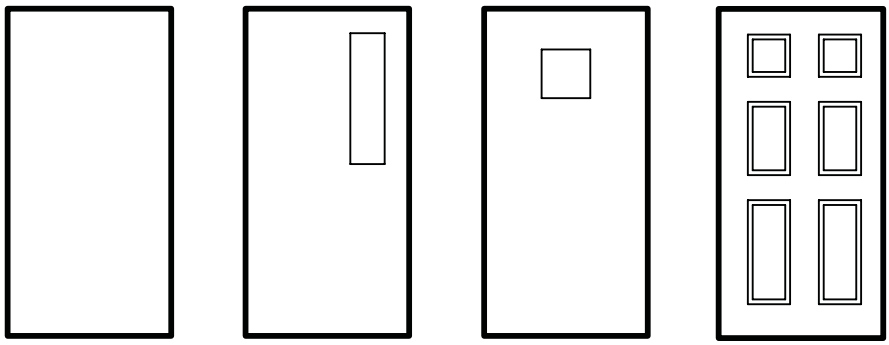
NOTE: SOME HARDWARE AND/OR GLASS LITE COMBINATIONS MAY NOT BE AVAILABLE IN SIZES LISTED. CONSULT CUSTOMER SERVICE FOR DETAILS.

- TEST: UL10B, UL10C, NFPA252 & UL1784

LABELED FIRE DOORS

1-3/4" FUEGO FIRE DOORS SOLID MINERAL FIBER CORE 250°F (121°C) MAX. TEMP. RISE

FIRE DOORS DESIGNS



F N V E601

HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA
3 HOURS	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.
1-1/2 HOURS	
1 HOUR	
3/4 HOUR	
1/3 HOUR	

- DO NOT USE FUSIBLE LINK LOUVERS IN FIRE DOORS PREPARED FOR TEMPERATURE RISE.

- 1/3 HOUR DOORS ARE FOR USE WHERE SMOKE CONTROL IS A PRIMARY CONSIDERATION.

- TEMPERATURE RISE LIMITATIONS:
30 MINUTE 250°F TEMPERATURE RISE RATING WITH A MAX. OF 100 SQUARE INCHES OF EXPOSED GLASS PER LEAF MUST BE MAINTAINED.

- SINGLE EMBOSSED FACE DOORS MAY BE 30 MINUTE 250°F TEMPERATURE RISE RATED.

- DOORS WITH EMBOSSED FACE BOTH SIDES MAY BE 30 MINUTE 450°F TEMPERATURE RISE RATED.

- FUEGO DOORS ARE HANDED. COMPLIES WITH NFPA-80 RECOMMENDATIONS FOR "VERTICAL EGRESS" (STAIRWELLS)
- 250° F (121 ° C) TEMPERATURE RISE RATED FIRE DOORS (SOLID MINERAL FIBER CORE-STEEL GLAZING TRIM) UL SOLUTIONS, WH OR FM LABEL: CLASSIFIED FOR OPENINGS RATED FROM 20 MINUTE UP TO & INCLUDING 3 HOURS. FOR ADDITIONAL DATA ON FUEGO DOORS, SEE PAGE 168.
- LATCHSET: UL SOLUTIONS LISTED, MINIMUM THROW 1/2" (SINGLE), AND THRU 3/4 HOUR (PAIRS). 5/8" MIN. THROW 1-1/2 HOUR THRU 3 HOURS(PAIRS)
- CLASSIFIED FOR USE WITH ALL TYPES OF LABELED FIRE EXIT HARDWARE.
- TEST: UL10B, UL10C, NFPA252 & UL1784
- ASTRAGAL IS REQUIRED FOR 3 HOUR RATED AND 20 GAUGE PAIRS, AND IS OPTIONAL FOR OTHER PAIRS.

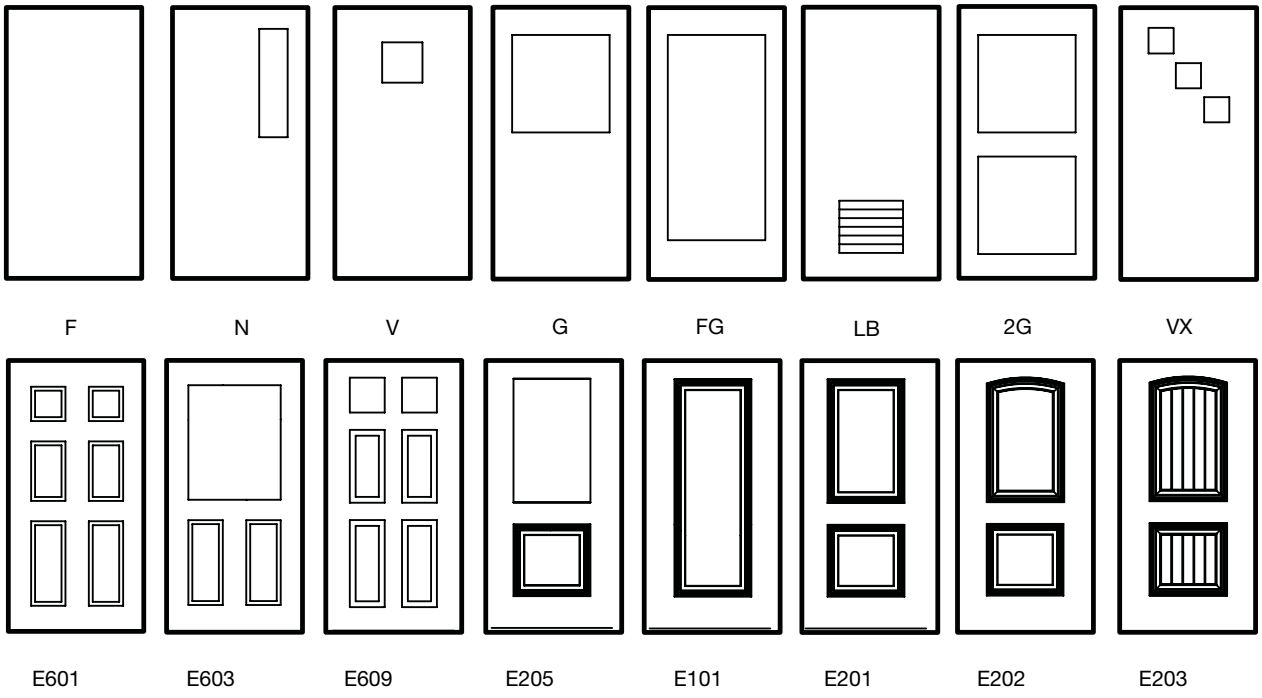
MAXIMUM SIZE:
(18, OR 16 GA.) (3 HOUR) 4'-0" X 9'-0" SINGLE
(14, OR 20 GA.) (3 HOUR) 4'-0" X 8'-0" SINGLE
(18, OR 16 GA.) (3 HOUR) 8'-0" X 9'-0" PAIR
(14, OR 20 GA.) (3 HOUR) 8'-0" X 8'-0" PAIR

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LABELED FIRE DOORS

1-3/4" LEGION AND ULTRADOR FIRE DOORS POLYSTYRENE CORE

FIRE DOORS DESIGNS



HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL SOLUTIONS LISTED FUSIBLE LINK *LOUVER
3 HOURS	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.	NONE
1-1/2 HOURS		24" X 24" MAX.
1 HOUR		24" X 24" MAX.
3/4 HOUR		24" X 24" MAX.
1/3 HOUR		NONE

- LEGION DOORS ARE HANDED. ULTRADOR DOORS ARE NON-HANDED.
  STYRENE CORE-STEEL GLAZING TRIM, UL SOLUTIONS, WH LABEL...CLASSIFIED FOR OPENINGS RATED FROM 20 MINUTE UP TO AND INCLUDING 3 HOURS. 30 MINUTE TEMPERATURE RISE >650°F.
- FOR ADDITIONAL DATA ON LEGION AND ULTRADOR DOORS, SEE PAGE 144 AND PAGE 148

**DO NOT USE FUSIBLE LINK LOUVERS IN FIRE DOORS FOR A GLASS LITE, VISION PANEL, FIRE EXIT HARDWARE, WITH 1/3 HOUR OR 3 HOUR LABELS.*

- 1/3 HOUR DOORS ARE FOR USE WHERE SMOKE AND DRAFT ARE A PRIMARY CONCERN.
- 14 GAUGE DOORS WILL BE WELD SEAMLESS.

***MAXIMUM SIZE:*
(20, 18, 16 & 14 GA.) 4'-0" X 8'-0" SINGLE (3 HOUR.)
(18, 16 & 14 GA.) 8'-0" X 8'-0" PAIR (3 HOUR.)
(18 OR 16 GA.) 8'-0" X 9'-0" PAIR (1-1/2 HOUR.)
(20, 18, 16 & 14 GA.) 8'0" X 8'0") PAIR (1-1/2 HOUR.)

***NOTE: SOME HARDWARE AND/OR GLASS LITE COMBINATIONS MAY NOT BE AVAILABLE IN SIZES LISTED. CONSULT CUSTOMER SERVICE FOR DETAILED INFORMATION.*

- ASTRAGAL IS REQUIRED FOR 3 HOUR RATED AND 20 GAUGE PAIRS, AND IS OPTIONAL FOR OTHER PAIRS

- CLASSIFIED FOR USE WITH ALL TYPES OF LABELED FIRE EXIT HARDWARE.

- LATCHSET: UL SOLUTIONS LISTED, 1/2" MINIMUM THROW.

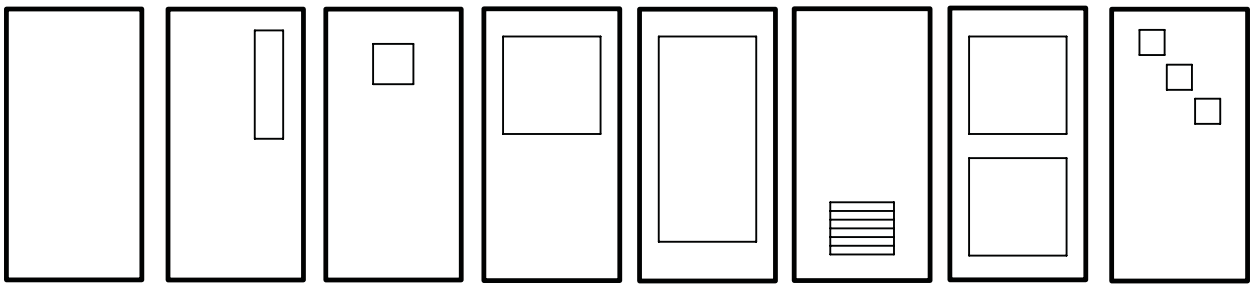
- TEST: UL10B, UL10C, NFPA 252 & UL 1784

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LABELED FIRE DOORS

1-3/4" TRIO FIRE DOORS VERTICALLY STEEL STIFFENED

FIRE DOORS DESIGNS



F N V G FG LB 2G VX

HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL SOLUTIONS LISTED FUSIBLE LINK *LOUVER
3 HOURS	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.	NONE
1-1/2 HOURS		24" X 24" MAX.
1 HOUR		24" X 24" MAX.
3/4 HOUR		24" X 24" MAX.
1/3 HOUR		NONE

TRIO HANDED DOORS ARE HE & HF.
TRIO NON-HANDED DOORS ARE NE & NF.
VERTICALLY STEEL STIFFENED-STEEL GLAZING TRIM,
UL SOLUTIONS AND WH LABEL ...CLASSIFIED FOR OPENINGS RATED 20 MINUTE UP TO AND INCLUDING 3 HOURS.
- 1/3 HOUR DOORS ARE FOR USE WHERE SMOKE AND DRAFT ARE A PRIMARY CONCERN.
  1/3 HOUR DOORS ARE FOR USE WHERE SMOKE AND DRAFT ARE A PRIMARY CONCERN.
  FOR ADDITIONAL DATA ON TRIO DOORS, SEE PAGE 156 & PAGE 160

**DO NOT USE FUSIBLE LINK LOUVERS IN FIRE DOORS FOR A GLASS LITE, VISION PANEL, FIRE EXIT HARDWARE, WITH 1/3 HOUR OR 3 HOUR LABELS.*

- TOP AND BOTTOM CAPS ARE REQUIRED TO BE FIRE RATED.

- MAXIMUM SIZE:
HF & NF (18 OR 16 GA.) 4'-0" X 8'-0" SINGLE, 3 HOUR
HF & NF (18 OR 16 GA.) 8'-0" X 8'-0" PAIR, 3 HOUR
HE & NE (18 OR 16 GA.) 4'-0" X 8'-0" SINGLE, 1-1/2 HOUR
HE & NE (18 OR 16 GA.) 8'-0" X 8'-0" PAIR, 1-1/2 HOUR
***HF (14, OR 16 GA.) 8'-0" X 9'-0" PAIR, 1-1/2 HOUR*
****HF (14, 16 OR 18 GA.) 8'-0" X 9'-0" PAIR, 1-1/2 HOUR*

- ASTRAGAL REQUIRED ON HE STANDARD PAIRS FOR HOURLY RATING OVER 1-1/2 HOUR.

- LATCHSET: UL SOLUTIONS LISTED, 1/2" MINIMUM THROW

- LATCHSET: UL SOLUTIONS LISTED, 5/8" MINIMUM THROW ON PAIRS, FOR USE WITH 3 HOUR RATING.

- CLASSIFIED FOR USE WITH ALL TYPES OF LABELED FIRE EXIT HARDWARE.

NOTE: SOME HARDWARE AND/OR GLASS LITE COMBINATIONS MAY NOT BE AVAILABLE IN SIZES LISTED. CONSULT CUSTOMER SERVICE FOR DETAILED INFORMATION.

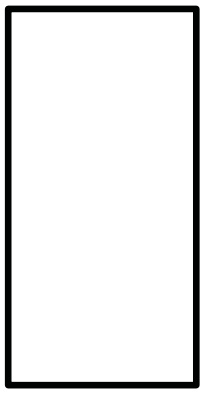
- TEST: UL10B, UL10C, NFPA252 & UL1784

***CONCEALED VERTICAL RODS, UL SOLUTIONS ONLY, ASTRAGAL NOT ALLOWED. TOP ROD ONLY HARDWARE MUST BE APPROVED FOR THE APPLICATION.*
**** CONCEALED OR SURFACE VERTICAL RODS, WH ONLY, ASTRAGAL NOT ALLOWED. TOP ROD ONLY HARDWARE MUST BE APPROVED FOR THE APPLICATION.*

LABELED FIRE DOORS

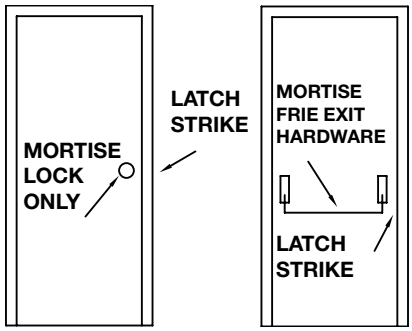
1-3/4" ARMORSHIELD FIRE DOORS STEEL STIFFENED CORE (UL 752 LEVELS 1, 2, 3)

FIRE DOORS DESIGNS



F

BALLISTIC LEVEL	WEAPON TYPE	BULLET TYPE	BULLET VELOCITY	MUZZLE ENERGY
I	9MM	FULL METAL JACKET 124GR	1234 FT/S	380-460 FT/LBS
II	.357MAG.	JACKETED LEAD POINT 158GR	1312 FT/S	743-889 FT/LBS
III	.44MAG.	LEAD SOFT POINT 240GR	1417FT/S	1370-1593 FT/ LBS



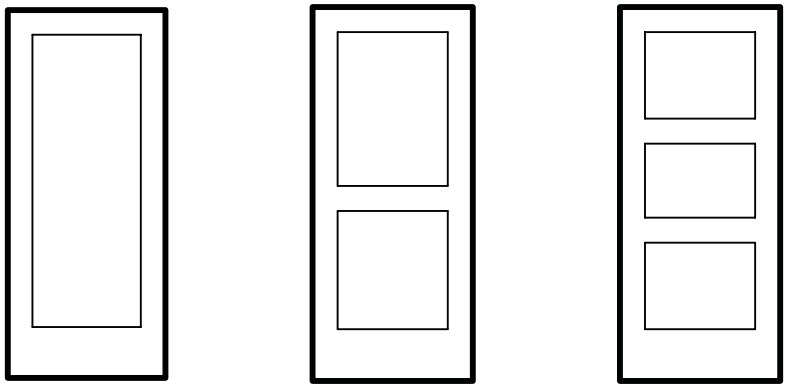
HOURLY RATING	FACE GAUGE	UL10B UL10C	
		MAX WIDTH	MAX HEIGHT
1/3, 3/4, 1, 1-1/2	12	4'-0"	8'-0"

- ARMORSHIELD DOORS ARE HANDED WITH 12 GAUGE FACE SHEETS.
- DOORS ARE CENTER SEAM CONSTRUCTION WITH WELDED EDGE SEAMS.
- VERTICAL STIFFENERS ARE 22 GAUGE.
- VERTICAL STIFFENERS ARE PLACED NO MORE THAN 6" APART AND WELDED NO MORE THAN 5" ON CENTER ALONG THEIR LENGTH.
- 4-1/2" HEAVY WEIGHT HINGES ARE USED UP TO AND INCLUDING 3'0" X 7'0".
- DOORS OVER 3'0" X 7'0" REQUIRE 5" HINGES, MINIMUM.
  CONTINUOUS HINGES ARE AN OPTION.
- TEST: UL10B, UL10C, NFPA 252 , UL752 AND UL1784
- LATCH SET: UL LISTED 1/2" MINIMUM THROW.
- FOR ADDITIONAL DATA ON ARMORSHIELD DOORS, SEE SECTION D7.
- GLASS IS NOT ALLOWED IN FIRE RATED ARMORSHIELD DOORS.

LABELED FIRE DOORS

1-3/4" THRULITE STILE AND RAIL FIRE DOORS

DOOR DESIGNS



FG 2G 3G

HOURLY RATING	*MAX. EXPOSED WIDTH, HEIGHT AND AREA
3/4 HOUR	**SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.
1/3HOUR	

	HOURLY RATING	FACE GAUGE	UL10B UL10C	
			MAX WIDTH	MAX HEIGHT
SINGLE	1/3, 3/4	16	4'-0"	8'-0"
PAIRS	1/3, 3/4	16	8'-0"	8'-0"

- THRULITE DOORS ARE HANDED.

- LATCH SET: UL LISTED 1/2" MINIMUM THROW.

- ASTRAGALS ARE OPTIONAL.

- HINGE AND LOCK STILES ARE 1/8" IN 2" BEVELED EDGE.

- 1/3 HOUR DOORS ARE FOR USE WHERE SMOKE CONTROL IS A PRIMARY CONSIDERATION.

- THRULITE TUBULAR CONSTRUCTION-STEEL INTEGRAL GLAZING TRIM, UL, WH LABEL ...CLASSIFIED FOR OPENINGS RATED FROM 20 MINUTE UP TO AND INCLUDING 3/4 HOURS. 30 MINUTE TEMPERATURE RISE >650°F.

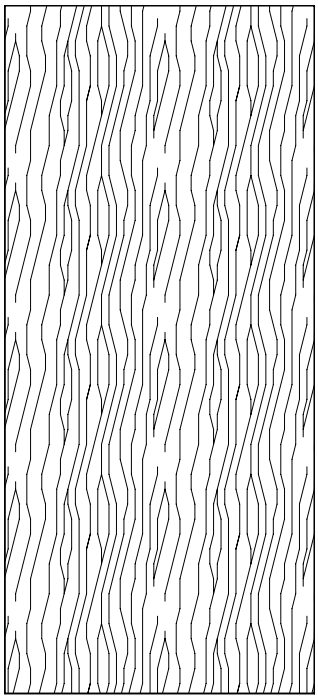
**NOTE: SOME HARDWARE AND/OR GLASS LITE COMBINATIONS MAY NOT BE AVAILABLE IN SIZES LISTED. CONSULT CUSTOMER SERVICE FOR DETAILED INFORMATION.*

***NOTE: FIRELITE OR FIRELITE PLUS GLAZING MAY BE USED IN G2 OR G3 DESIGNS ONLY.*

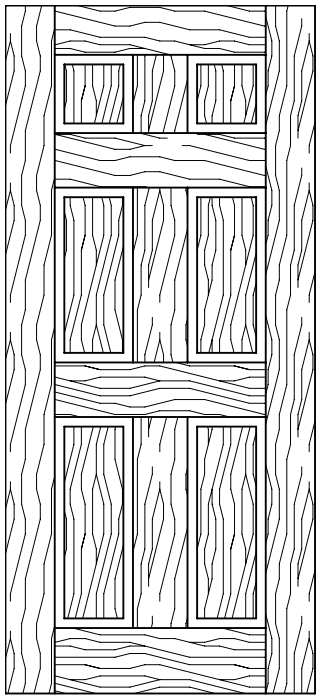
- FOR ADDITIONAL DATA ON THRULITE DOORS, SEE PAGE 172.

1-3/4” MADERA® & MADERA® SMOOTH GRAIN (SG) WOOD GRAIN STEEL DOORS

FULL FLUSH OR 6 PANEL DESIGNS



MAXIMUM SIZE
4'0" X 9'0"



MAXIMUM SIZE
3'0" X 7'0"
3'6" X 7'0" - SG

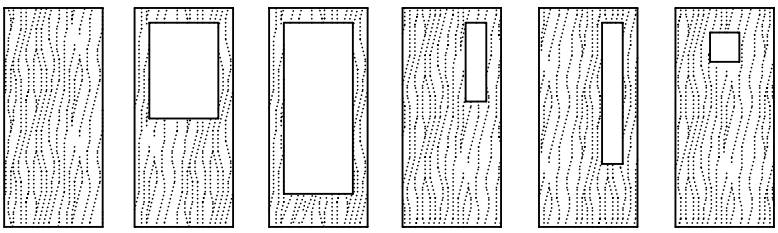
Madera® (M40) oak stain embossed grain design

Madera® SG (M60) cherry, maple stain design

The Madera® stainable steel door has a stained oak grain look textured into the steel. The Madera® Smooth Grain (SG) has a stained cherry or maple wood grain design on smooth steel. Both styles provide an attractive flush or 6 panel embossed pattern. The 6 panel embossed door’s stiles and rails graining direction duplicates a typical standard wood grain pattern. The stain is factory applied. See stain color information shown bellow. The stained product is protected with an ultra-violet (UV) resistant clear coating.

DOOR DESIGNS

FLUSH OR GLAZED (DROP-IN POLYSTYRENE, DROP-IN POLYURETHANE, HONEYCOMB OR MINERAL CORE



F G FG N N V

STANDARD STAIN COLORS: GOLDEN, AUTUMN, BOURBON SALEM, PROVINCIAL OR NUTMEG

FOR STANDARD STAIN FINISH SAMPLES CONTACT YOUR DOOR SECURITY SOLUTIONS SALES OFFICE, OR CONTACT YOUR CECO CUSTOMER SERVICE PROFESSIONAL.

6 PANEL EMBOSSED (DROP-IN POLYSTYRENE ONLY)

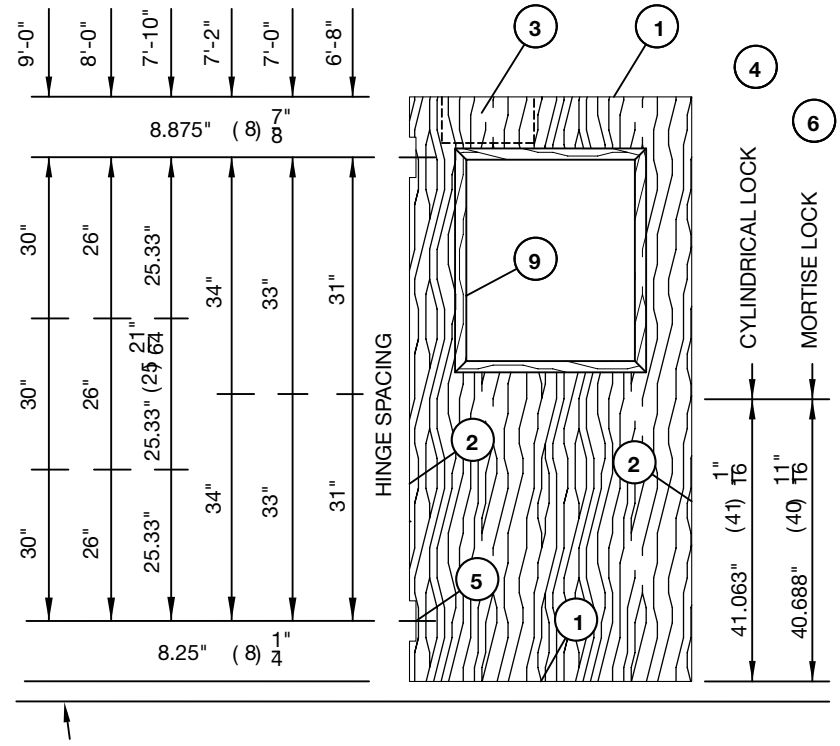
E601 E603

CUSTOM STAIN COLORS: CUSTOM STAIN COLOR MATCHING IS AVAILABLE. PHYSICAL CUSTOM STAIN SAMPLE MUST BE SUBMITTED TO FACTORY FOR COLOR MATCHING, THEN MATCHED SAMPLES WILL BE RETURNED FOR APPROVAL BEFORE ORDER CAN BE PROCESSED. ADDITIONAL LEAD-TIMES MAY APPLY.

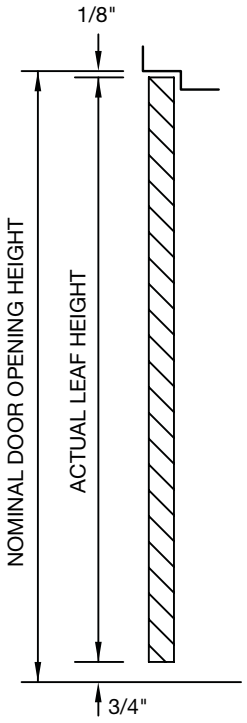
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

1-3/4" MADERA® & MADERA® SMOOTH GRAIN (SG) WOOD GRAIN STEEL DOORS

DOOR ELEVATION

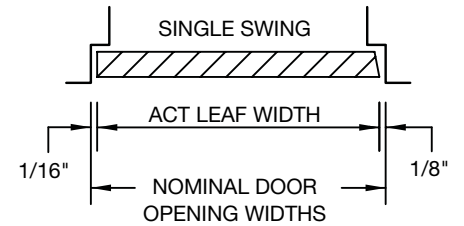


VERTICAL SECTION

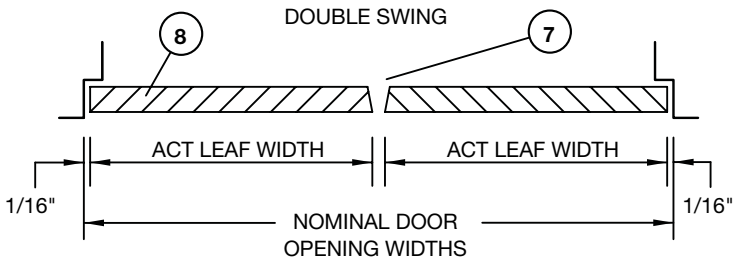


HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

HORIZONTAL SECTIONS



(2'0", 2'4", 2'6", 2'8", 3'0", 3'4", 3'6", 3'8", 4'0")



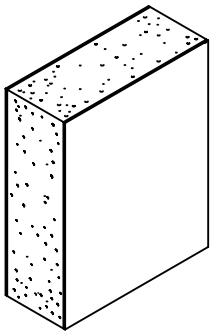
(4'0", 4'8", 5'0", 5'4", 6'0", 6'8", 7'0", 7'4", 8'0")

NOTE: ALL VISIBLE SURFACES ARE WOOD GRAINED. GRAIN IS NOT SHOWN ON ALL DETAILS FOR CLARITY.

(8) POLYSTYRENE FOAM CORE

(STANDARD) FOR EMBOSSED OR FLUSH DOORS

SOLID SLAB OF EXPANDED *POLYSTYRENE FOAM PERMANENTLY BONDED TO THE INSIDE OF EACH FACE SKIN.

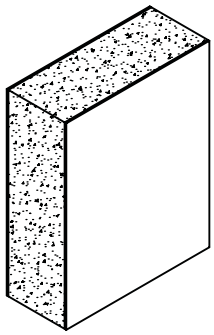


**OPTIONAL - POLYURETHANE DROP-IN SLAB CORE (FLUSH ONLY)*

(8) MINERAL CORE (OPTIONAL)

FLUSH DOORS ONLY

PERMANENTLY BONDED TO THE INSIDE OF BOTH FACE SHEETS.



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

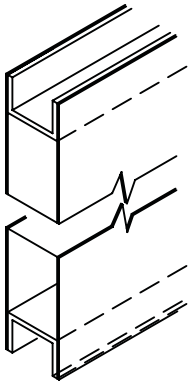
1-3/4" MADERA® & MADERA® SMOOTH GRAIN (SG) WOOD GRAIN STEEL DOORS

16 GAUGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM CHANNELS

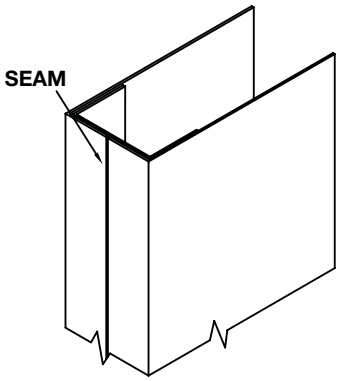
OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE



VERTICAL EDGES

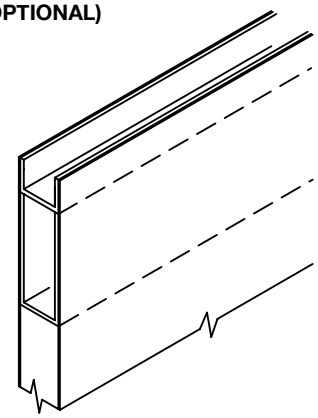
CENTER EDGE SEAM WITH INTERMITTENT SPOT WELDS.

SPOT WELDS ARE FILLED AND GROUND SMOOTH.



CLOSER REINFORCEMENT (OPTIONAL)

14 GAUGE STEEL CHANNEL WELDED TO END CHANNEL



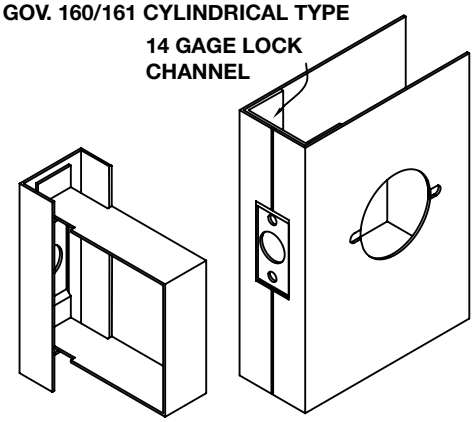
LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4"BACKSET

LOCK EDGE IS BEVELED 1:8" IN 2" (1:16)

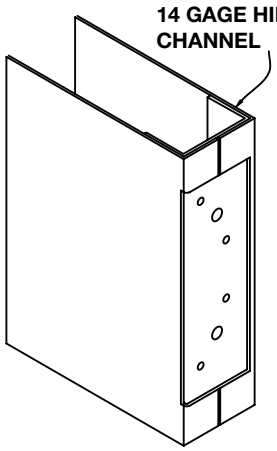


HINGE PREPARATION

4-1/2" OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGE

ANSI A156.7 TEMPLATE

HINGE EDGE IS HANDED AND NOT BEVELED.



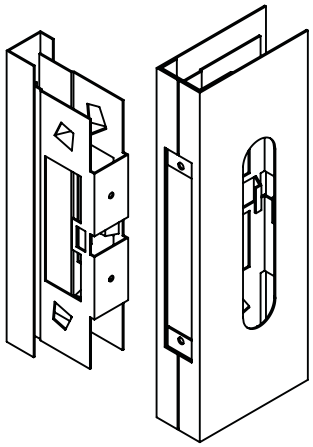
LOCK PREPARATION MORTISE TYPE

(LM1)
(ANSI A115.1)
2-3/4" BACKSET

(LM0)
SIMILAR TO DETAIL LESS FACE CUTOUT

(LP0)
SIMILAR TO DETAIL LESS ALL CUTOUTS AND REINFORCEMENT

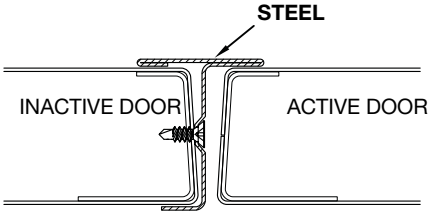
LOCK EDGE IS BEVELED 1:8" IN 2" (1:16)



OVERLAPING ASTRAGAL 4471M

FOR 1-3/4" THICK DOORS

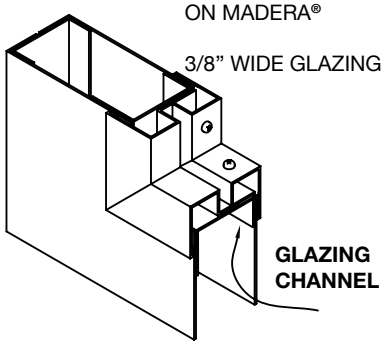
SMOOTH GRAIN SHOWN. TEXTURED GRAIN USED ON MADERA®



GLAZING TRIM

SMOOTH GRAIN SHOWN. TEXTURED GRAIN USED ON MADERA®

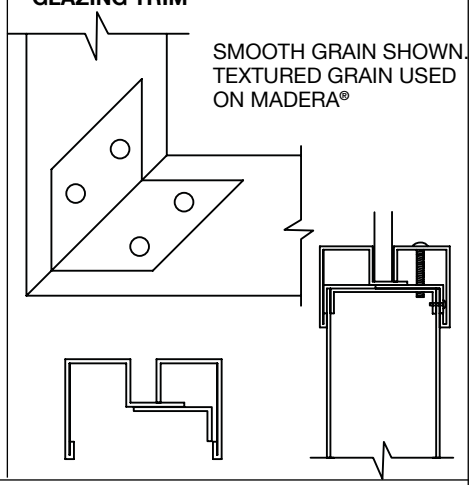
3/8" WIDE GLAZING POCKET



OPTIONAL GLASS POCKET WIDTH : 5/8", 7/8", 1-1/8"

GLAZING TRIM

SMOOTH GRAIN SHOWN. TEXTURED GRAIN USED ON MADERA®



1-3/4" MADERA® & MADERA® SMOOTH GRAIN (SG) WOOD GRAIN STEEL DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	6'-8"
2'-4"	4'-8"	
2'-6"	5'-0"	7'-0"
2'-8"	5'-4"	
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	
3'-6"	7'-0"	8'-0"
3'-8"	7'-4"	
4'-0"	8'-0"	9'-0"

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1 HR, 1-1/2 OR 3HR.

MAX. SIZE: 4'0" X 8'0" SINGLE
8'0" X 8'0" PAIR

DESIGNS: F, G, N, V
E6 & E603

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be as supplied by Ceco Door Products. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8; see chart below for performance classifications.

Doors are made full-flush or 6-panel embossed. Face sheets are commercial quality, hot-dipped, zinc-iron alloy coated A40 galvannealed steel or A60 galvannealed steel for Smooth Grain conforming to ASTM A653 and ASTM A924.

Doors have center edge seams with intermittent spot welds. Spot welds are filled & ground smooth. Doors have polystyrene core that is securely bonded to both face sheets. Doors have 16 gauge inverted top and bottom end channels welded to both face sheets. Optional closed flush by steel caps screwed in place.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 14 gauge steel hinge channels are drilled and tapped for fasteners in accordance with ANSI A 156. 7. The lock edge has a standard bevel (1 :16) and is prepared for locks in accordance with ANSI A115. Optional closer reinforcement is a 14 gauge steel channel.

Stain: Comes standard with factory stain finish with a UV protective top coat. For standard stain finish samples contact a ASSA ABLOY Door Security Solutions Sales office, or contact a Ceco Door Customer Service Professional.

MATERIAL

DOOR FACE SHEETS	LEVEL				RECOMMENDED DOOR FRAME MATERIAL
		A60	A40	—	
18 GAUGE STEEL (4090 MAX.)	HEAVY DUTY	—	STD	—	16 GAUGE STEEL
16 GAUGE STEEL (4090 MAX.)	EXTRA HEAVY DUTY	—	STD	—	16 GAUGE STEEL
18 GAUGE SG STEEL (4090 MAX.)	HEAVY DUTY	STD	—	—	16 GAUGE STEEL
16 GAUGE SG STEEL (4090 MAX.)	EXTRA HEAVY DUTY	STD	—	—	16 GAUGE STEEL

PERFORMANCE

	POLYSTYRENE
CORE THERMAL INSULATION	CALCULATED R FACTOR = 6.35 (ASTM C518)
DOOR SOUND TRANSMISSION	STC 24 (F DESIGN, 18 GAUGE FACE SHEETS, ASTM E90 & E413 [FULLY OPERABLE])
PHYSICAL ENDURANCE LEVEL: ANSI A250.4	18 GAUGE: LEVEL A (1,000,000 CYCLES) 16 GAUGE: LEVEL A (1,000,000 CYCLES)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4” MADERA® & MADERA® SMOOTH GRAIN (SG) WOOD GRAIN STEEL DOORS

MADERA® DOOR MAINTENANCE

All Madera® Doors are factory finished with a very durable multi-step process. However, routine and periodic maintenance is required to prolong the life and durability of the doors.

The following procedures are recommended for surface care:

Cleaning
Use a household or commercial cleaning product approved for finished wood surfaces. The best cleaning solution for finished surfaces is white vinegar. Dilute 2 cups of vinegar to 1 gallon of warm water. Clean and dry immediately.

Recoating Finished Madera® Doors
Due to wear and soiling over a period of time, doors may require a topcoat to be reapplied.

When over coating finished Madere® Doors, please use the following recommendations:

The ONLY acceptable overcoats for Madera® doors are premium quality exterior varnishes that contain Ultra Violet Inhibitors/Absorbers.
These products will usually contain the following verbiage in the label: “superior UV protection resists UV Rays ..... “ These products will help maintain the UV resistance of the original Madera® finish. Marine grade Varnishes are the best.
Do not use any water base varnishes.

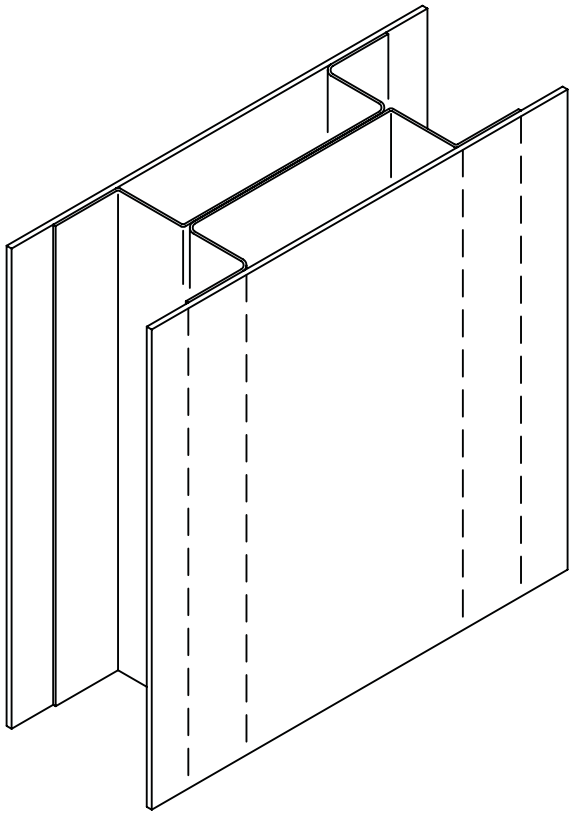
Before finishing, sand the surface lightly, but thoroughly, with 320 grit sand paper or fine steel wool (0000). Remove dust or debris with a tack cloth. **Please read the manufacturer’s recommendations on the label. TEST A SMALL AREA BEFORE APPLYING TO THE COMPLETE DOOR.**

The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which Ceco Door assumes legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein.

2” RESTRICTDOR DETENTION SECURITY SYSTEM

VERTICALLY STEEL STIFFENED, SEAMLESS STEEL DOORS BEVELED LOCK AND HINGE EDGE, HANDED WELDED FRAMES WITH INVISIBLE CORNERS

MINERAL WOOL INSULATION BETWEEN STIFFENERS

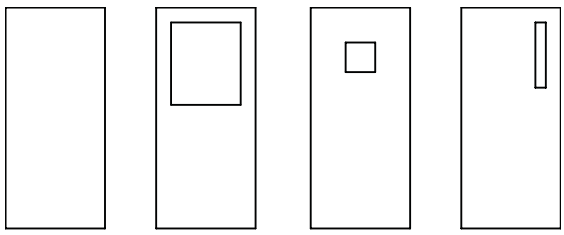


The RestrictDor Detention Security System is designed for smaller projects where detention and security issues must be addressed.

Complies with ANSI/NAAMM HMMA 863-98, Guide Specifications For Detention Security Hollow Metal Doors & Frames. (Grade 4 or Grade 3) 18 gauge steel stiffeners placed 4” apart and welded every 3” max. along their length. Doors and frames are 14 gauge steel. Optional 12 gauge doors: Level 3 Bullet Resistant per UL Standard For Safety Bullet Resistant Equipment Test: UL 752. Doors & Frames prepared for detention/ security hardware.

SUGGESTED USE:
- Interior or Exterior...
- Holding or Security Areas for
- Police Stations
- Court Houses
- Other Municipal Buildings
- Hospitals
- Entertainment Venues, Stadiums

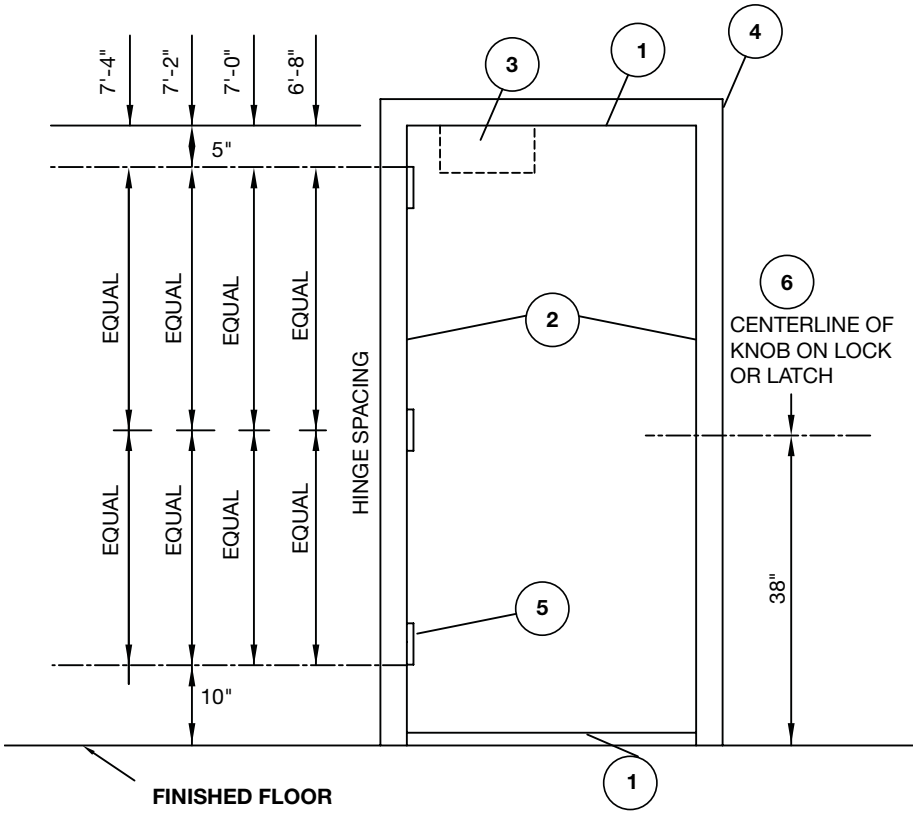
DOOR DESIGNS



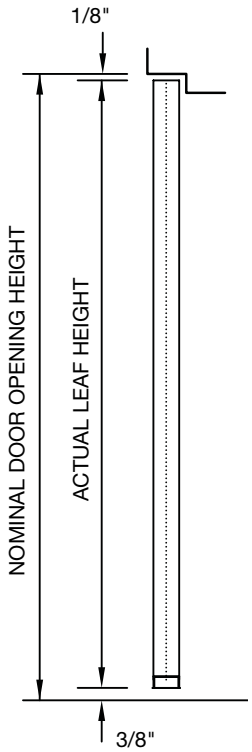
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

RESTRICTDOR DETENTION SECURITY SYSTEM

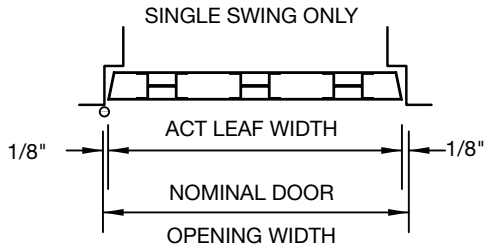
DOOR ELEVATION



VERTICAL SECTION

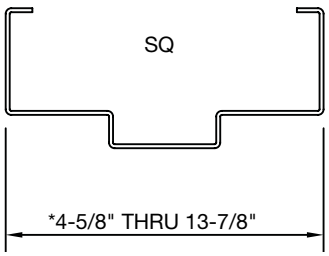


HORIZONTAL SECTION



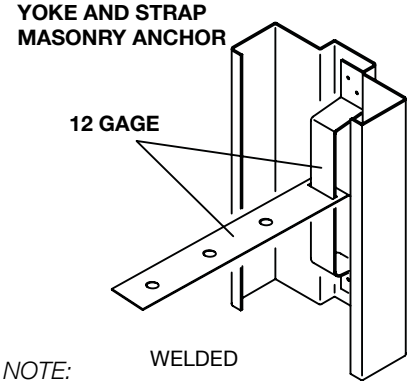
3'6" MAX WIDTH

TYPICAL PROFILE



**5-1/4" MIN. DEPTH IN 12 GAUGE*

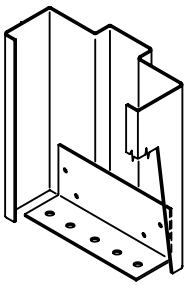
YOKE AND STRAP MASONRY ANCHOR



NOTE:
EXISTING WALL BOLT ANCHORING IS NOT AVAILABLE

FLOOR ANCHOR

ONE PIECE



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

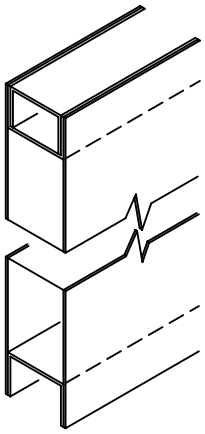
RESTRICTDOR DETENTION SECURITY DOORS

1 10 GAUGE STEEL END CHANNELS

WELDED TO DOOR

INVERTED TOP CHANNEL
W/STEEL CLOSURE CAP

INVERTED BOTTOM CHANNEL

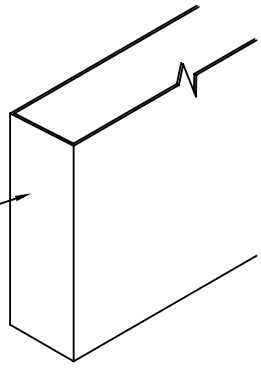


2 VERTICAL EDGES

SEAMLESS
VERTICAL
EDGES

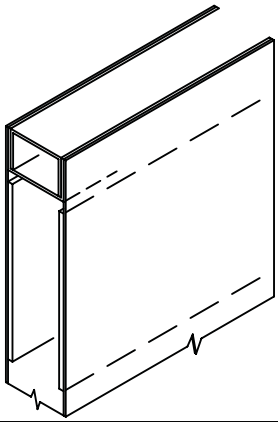
EXTRA HEAVY PERIMETER
REINFORCEMENT

**SEAMS WELDED
FULL HEIGHT
GROUND,
DRESSED AND
FILLED SMOOTH**



3 CLOSER REINFORCEMENT

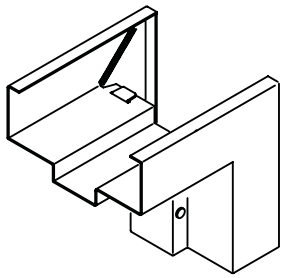
**12 GA. GALV. STEEL
19" X 4-1/2" PLATE
SPOT WELDED**



4 FRAME CORNER CONSTRUCTION

V3 WELD

INSIDE FACE WELD
AND FULL WEB WELD



LOCK EDGE IS SQUARE

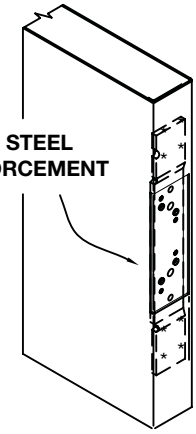
5 HINGE PREPARATION

4-1/2" HEAVY WEIGHT
FULL MORTISE HINGES

SOUTHERN STEEL 204FM
OR EQUIVALENT

HINGE EDGE IS HANDED AND
BEVELED

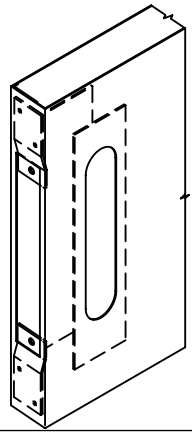
**7 GAGE STEEL
REINFORCEMENT**



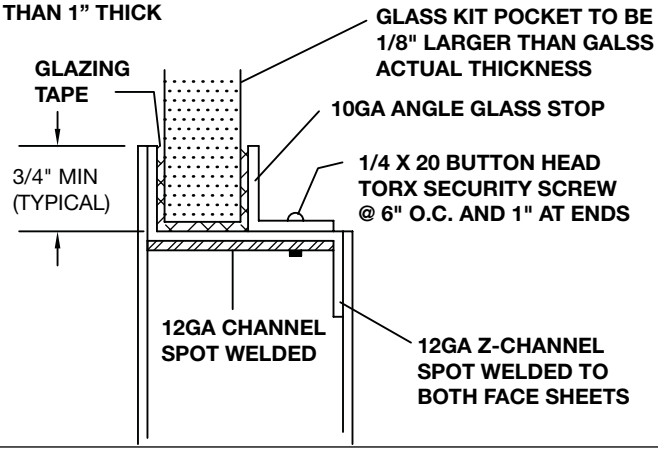
6 LOCK PREPARATION

FOR SOUTHERN STEEL
70 SERIES OR
EQUIVALENT

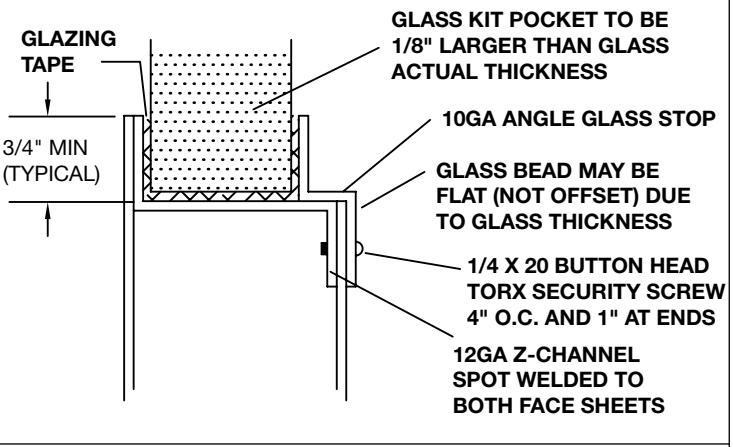
*LOCK EDGE IS
BEVELED
1/8" IN 2" (1:16)*



**SECURITY GLAZING TRIM FOR GLASS
LESS
THAN 1" THICK**



**SECURITY GLAZING TRIM FOR GLASS
1" THICK & GREATER**



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

RESTRICTDOR DETENTION SECURITY DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE		
2'-0" 2'-4" 2'-6" 2'-8" 2'-10" 3'-0" 3'-4" 3'-6"		6'-8" 7'-0" 7'-2" 7'-4"

FIRE DOORS

LABELING AGENCIES : UL SOLUTIONS
TEST: UL 10B, UL 10C, UL 1784, & NFPA 252 RATING: 20 MIN THRU 90 MIN MAX. SIZE: 3'6" X 7'4" SINGLE (UL SOLUTIONS) *NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.*

PRODUCT SPECIFICATIONS:

2" thick steel doors shall be by Ceco Door Products.

The RestrictDor Detention Security Door and Frame System complies with ANSI/NAAMM, HMMA 863-98, Guide Specifications For Detention Security Hollow Metal Doors & Frames (Grade 4 or Grade 3)

RestrictDor doors are seamless design. Face sheets are commercial quality cold rolled steel (conforming to ASTM A1008...or (optional) hot-dipped galvanized or galvannealed steel (conforming to ASTM A924 and A653) - see chart below.

Door face sheets are joined at their vertical edge with a center seam that is welded the full height of door. Such welds are ground, filled, and dressed smooth. Seams are invisible and surface is smooth. 18 gauge steel vertical stiffeners are placed no more than 4" apart and welded no more than 3" along their length. Mineral wool batting insulates the area between stiffeners. Inverted top channel with closure cap and inverted bottom channel are 10 gauge steel and are welded to both face sheets.

RestrictDor frames are all welded, 14 gauge steel, double rabbet profiles in depths from 4-5/8" to 13-7/8". Frames include closer reinforcement, heavy duty security hinge reinforcements and welded-in detention 12 gauge masonry anchors.

Hardware Provisions: Hinge preparations are handed on a beveled hinge edge. Hinge edges are mortised for 4-1/2", heavy weight hinges. 7 gauge steel reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock & hinge edge has a standard bevel (1: 16). Lock edge is prepared for a Southern Folger 70 series
or equivalent. Door closer reinforcement is a 12 gauge steel plate.

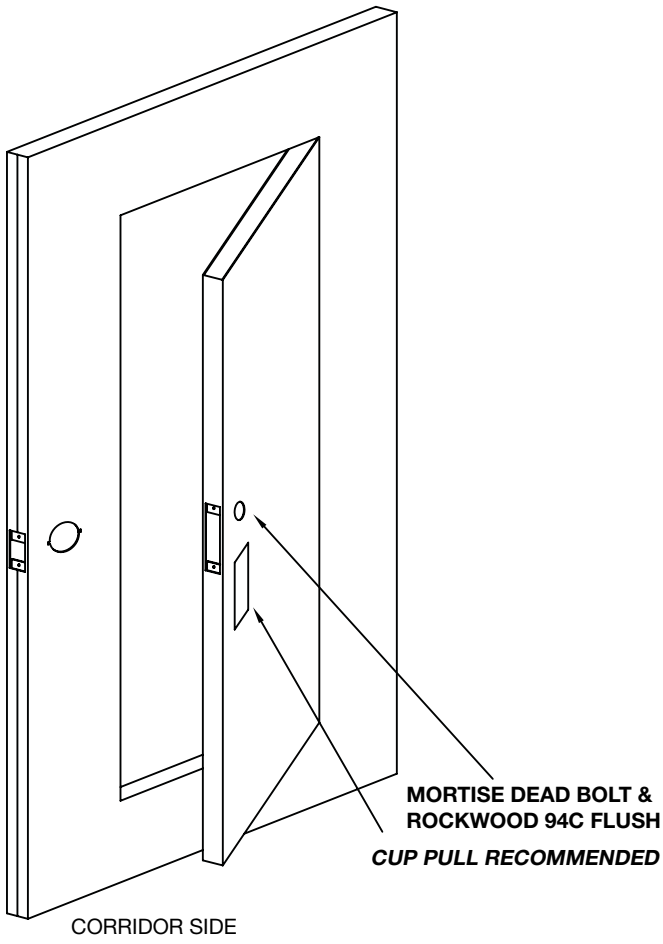
Paint: 2" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT	14 GAUGE STEEL
12 GAUGE STEEL	ANSI/NAAMM	STD	OPT		12 GAUGE STEEL

BEHAVIORAL HEALTHCARE PATIENT ROOM ACCESS

FULL FLUSH DESIGN BEVELED LOCK EDGE, HANDED



The Patient Room Access Door has the security and dependability required for healthcare facilities, yet is beautiful enough for healing environments. Intended to give caretakers or an authorized person access to patient's room in case of an emergency and maintain the security needed for the facility.

The main door has the functionality of a standard in-swing patient room door. The inner access door can open to the corridor giving authorized personnel quick access to the patient's room. The anti-ligature design of the door is a key feature of the construction.

Maximum 45 minute (Warnock Hersey) fire rating is available with steel stiffened core only.

FRAME REQUIREMENTS:
Minimum 16 gauge, KD or welded, masonry or drywall. Slip on drywall frame with adjustable plumb anchor is not allowed.

PATIENT ROOM ACCESS DOOR (BH-S) WITH POLYSTYRENE CORE (OPTIONAL HONEYCOMB OR STEEL STIFFENED CORE)

PATIENT ROOM ACCESS DOOR (BH-SC) WITH CUSTOM SIZE ACCESS DOOR AND POLYSTYRENE CORE (OPTIONAL HONEYCOMB OR STEEL STIFFENED CORE)

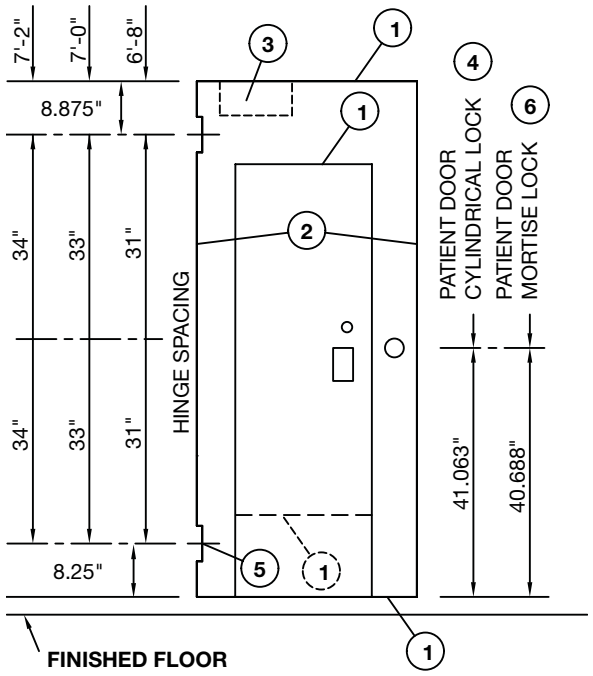
SUGGESTED USE:
- Behavioral Health Units
- Patient Room Doors
- Psychiatric Facilities
- De-Escalation Rooms
- Assisted Living Facilities
- Nursing Homes
- Correctional Facilities

BEHAVIORAL HEALTHCARE PATIENT ROOM ACCESS OPENING

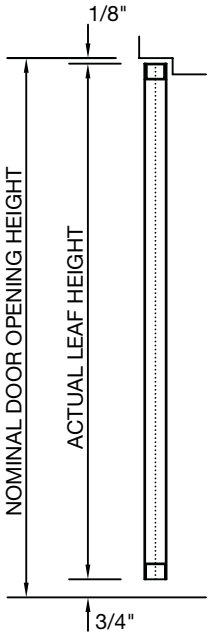
FIRE RATED & NON-FIRE RATED

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

DOOR ELEVATION

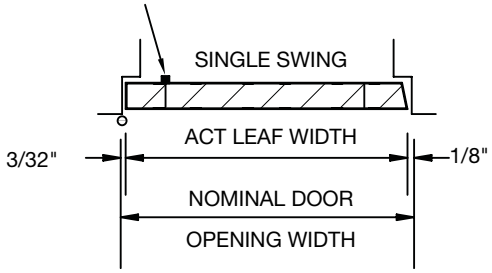


VERTICAL SECTION

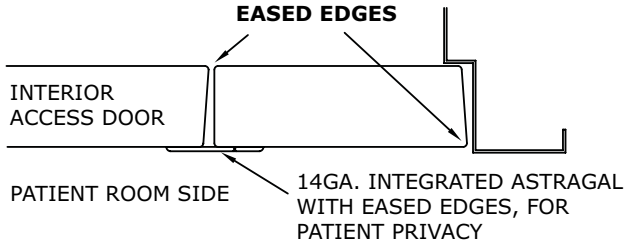


HORIZONTAL SECTION

PEMKO CFMSLF-HD1 ATTACHED CONTINUOUS HINGE



DOOR CONDITION SHOWN

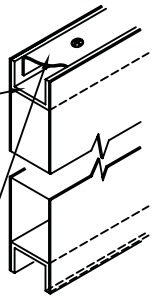


1 16 GAUGE STEEL END CHANNELS

INVERTED TOP AND BOTTOM CHANNELS

TOP CAP IS STANDARD ON PATIENT DOOR

OPTIONAL - TOP CAP AVAILABLE ON ACCESS DOOR
OPTIONAL - BOTTOM CAP IS AVAILABLE



2 VERTICAL EDGES

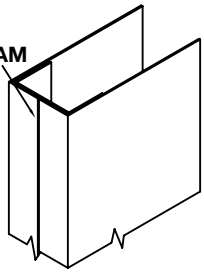
PATIENT & ACCESS DOOR

SEAM

WELDED EDGE SEAM (STANDARD FOR PATIENT DOOR)

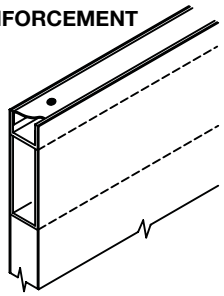
VISIBLE EDGE SEAM (STANDARD FOR PATIENT DOOR)

VISIBLE FILLED OR WELDED (OPTIONAL FOR BOTH)



3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAUGE STEEL CHANNEL WELDED TO END CHANNEL



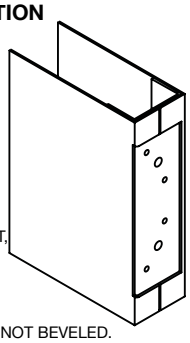
5 HINGE PREPARATION (PATIENT DOOR)

STANDARD 14 GAUGE HINGE CHANNEL
OPTIONAL 12 GAUGE HINGE CHANNEL
FIRE RATED 12 GAUGE HINGE CHANNEL

4-1/2" OR 5" HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGE

ANSI A156.7 TEMPLATE

HINGE EDGE IS HANDED AND NOT BEVELED.



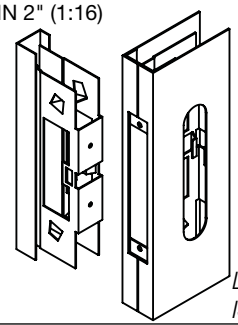
6 LOCK PREPARATION MORTISE TYPE

1/8" IN 2" (1:16)

14 GAUGE LOCK CHANNEL

(LM1)
(ANSI A115.1)
2-3/4" BACKSET

(LM0)
SIMILAR TO DETAIL
LESS FACE CUTOUT



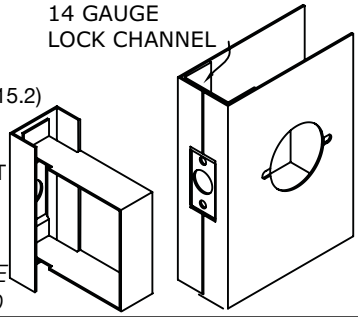
LOCK EDGE IS BEVELED

4 LOCK PREPARATION CYLINDRICAL TYPE

14 GAUGE LOCK CHANNEL

(LC1)
(ANSI A115.2)

2-3/4" BACKSET



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

BEHAVIORAL HEALTHCARE PATIENT ROOM ACCESS OPENING

STANDARD SIZES NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
3'-0"	6'-8"
3'-4"	7'-0"
3'-6"	7'-2"
3'-8"	
3'-10"	
4'-0"	

FIRE DOORS

LABELING AGENCIES : WARNOCK HERSEY

TEST: UL10C, NFPA252
CAN4-S104
RATING: 20 MIN. & 3/4 HR.

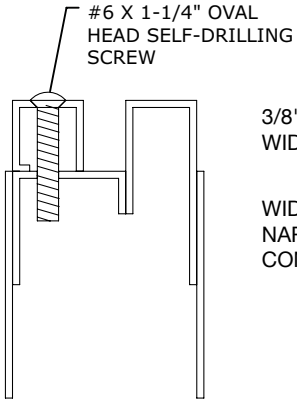
MAX. SIZE: 4'0" X 7'2"

FRAME REQUIREMENTS: MIN. 16 GA. KD OR WELDED IN MASONRY OR DRYWALL (COMPRESSION ANCHORS NOT ALLOWED)

GLASS LITE KITS ARE AVAILABLE
FIRE RATED & NON-FIRE RATED
TYPE 11 (STANDARD) TYPE 7 AND 4 (OPTIONAL)

OPTIONAL 20 OR 45 MINUTE (WARNOCK HERSEY) FIRE RATED VISION LITE, UP TO 216 SQ. INCHES OF VISIBLE GLASS, WITH A MAX. HEIGHT OF 36" AND MAX. WIDTH OF 10".

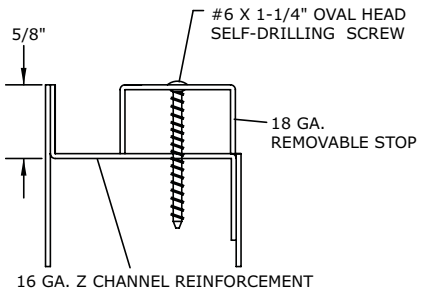
NOTE: SPECIFY IF REMOVABLE STOP ON EXTERIOR (CORRIDOR)



3/8", 1/2" , & 5/8" POCKET WIDTH AVAILABLE

WIDER POCKETS HAVE NARROWER FIXED BEAD COMPONENTS.

TYPE 4 KIT
FOR GLASS OVER 1/2" THRU 1"



3/8" THRU 1-1/8" POCKET WIDTH AVAILABLE

PRODUCT SPECIFICATIONS:

PATIENT ROOM ACCESS doors are center seam design. Face sheets are commercial quality cold rolled steel (conforming to ASTM A1008... or (optional) hot-dipped galvannealed or galvanized steel (conforming to ASTM A924 and A653) - see chart below.

Face sheets are joined at their vertical edge with a welded and filled edge seam (standard). 14 gauge hinge and lock vertical edge channels are standard, with an option for 12 gauge. Door is polystyrene core, with honeycomb core or steel stiffened as options. Top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets. A 14 gauge integrated astragal surrounds the access door opening on patient room side of door. A maximum 45 minute (Warnock Hersey) fire rating is available with steel stiffened core and 12 gauge hinge channel.

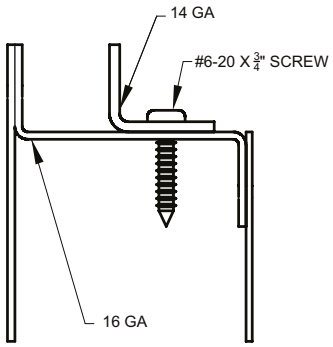
Standard size of access door is 1'8" x 5'0" with custom sizes available.

Frame Requirements: Minimum 16 gauge, KD or welded, Masonry or drywall. Slip on drywall frame with adjustable plumb anchor not allowed.

Hardware Provisions: Hinge preparations of the patient outer door are handed. The hinge edge is square. Hinge edges of the patient outer door are mortised for 4-1/2" or 5" high, standard or heavy weight hinges. 12 or 14 gauge steel channels are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1: 16). Lock edge is prepared for mortise or cylindrical locks in accordance with ANSI standards. Optional closer reinforcement is a 14 gauge steel channel. The smaller "access door" is attached with a PEMKO CFMSLF-HD1 (standard) or a stainless steel Markar FM300 (optional) continuous hinge. Lock edge of the smaller "access" door is prepared for locks as specified. Flush cup and mortise deadbolt are recommended hardware for access door. Patient room door hardware is as specified.

Paint: 1-3/4" steel doors shall be provided with one coat of ovencured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional) and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

TYPE 7 KIT



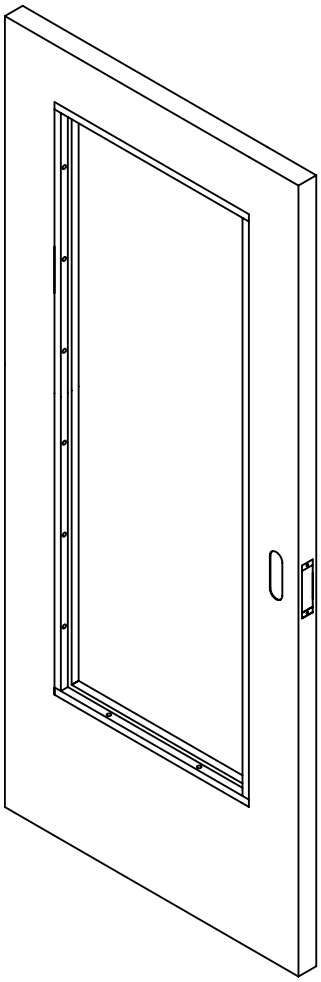
3/8" THRU 7/8" POCKET WIDTH AVAILABLE

MATERIAL

DOOR SERIES	DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
				A60	G90	
BH-S, BH-SC	ENTRY: 14 GAUGE REQURED ACCESS: 18 GAUGE REQUIRED	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL

1-3/4" THRULITE (TX) STILE AND RAIL DOOR

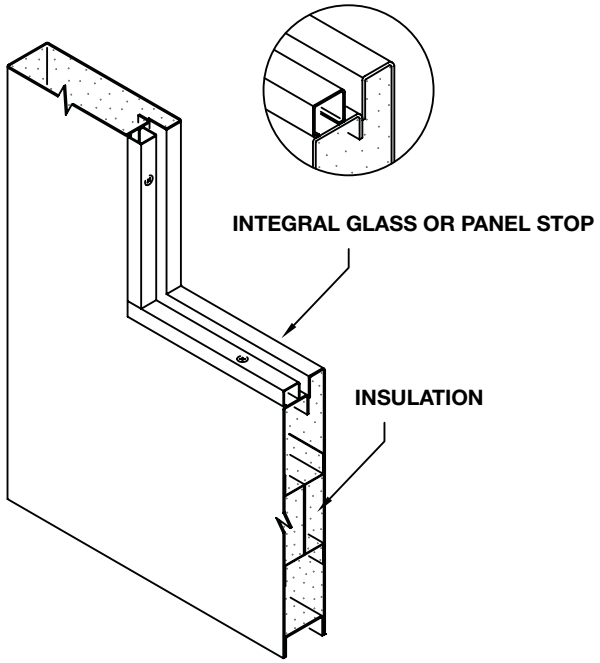
BEVELED LOCK AND HINGE EDGE, HANDED



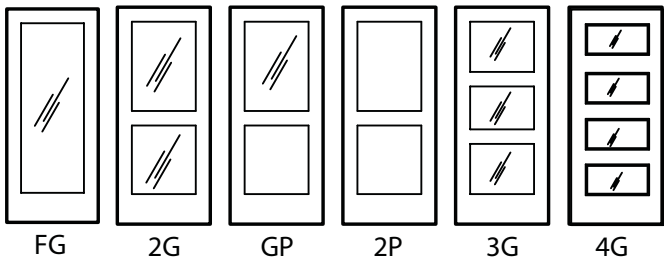
Exceptionally strong tubular stile and rail construction with an aesthetically attractive design for entrance/exit with full vision. 16 gauge steel seamless design. Flush glazing, corners continuously welded and ground smooth.

SUGGESTED USE:

- Entrances, Vestibules, Cross-Corridors...
- Schools
- Office Buildings
- Hotels/Motels
- Shopping Malls
- Theaters
- Sports Stadiums
- Hospitals
- Apartments



DOOR DESIGNS



3/8" THICK METAL PANEL(S) CAN BE SUBSTITUTED FOR GLAZING WHERE SHOWN.

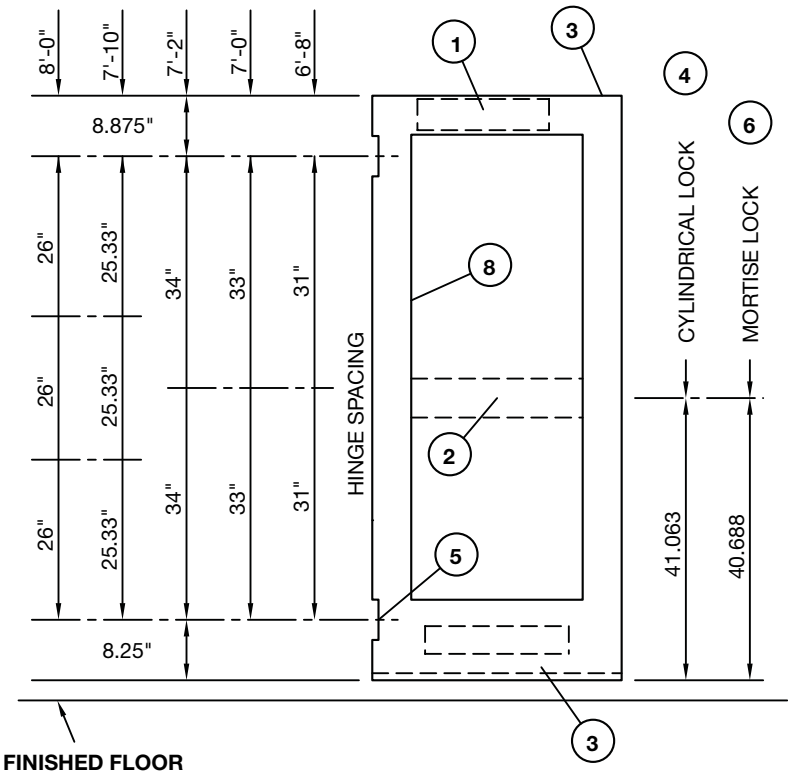
3/8" THICK METAL PANEL MADE WITH 16 GAUGE GALVANNEALED FACE SHEETS

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

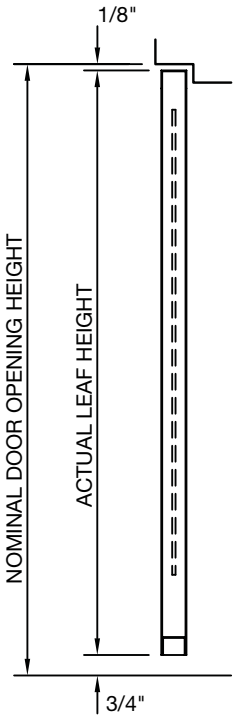
THRULITE DOORS

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

DOOR ELEVATION

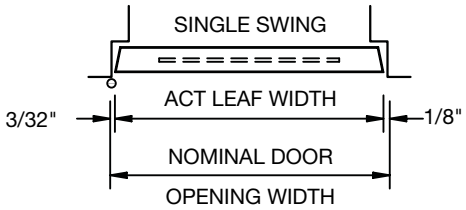


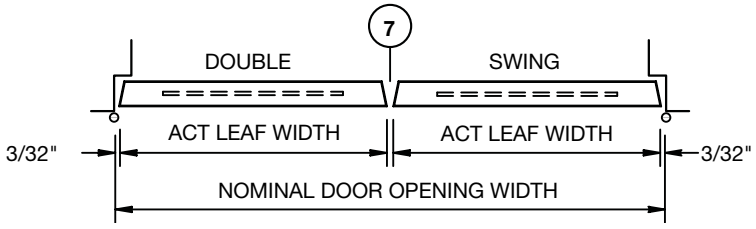
VERTICAL SECTION



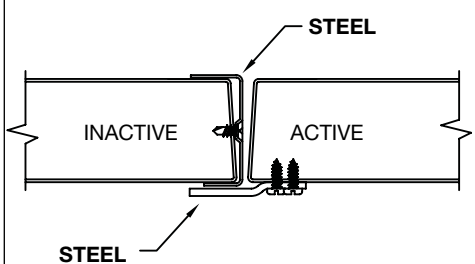
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.4 MM)

HORIZONTAL SECTIONS



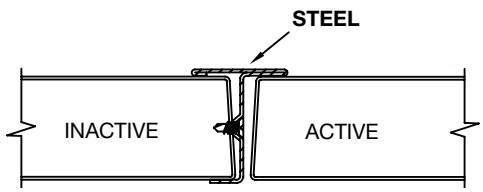


7 OVERLAPPING ASTRAGAL 4441
FOR 1-3/4" THICK DOORS



LISTED

7 OVERLAPPING ASTRAGAL 4471
FOR 1-3/4" THICK DOORS



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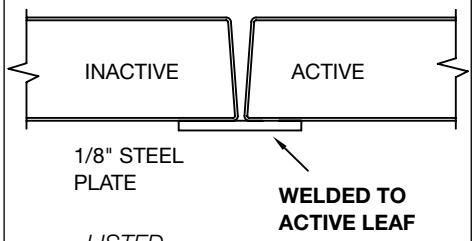
7 OVERLAPPING ASTRAGAL 4491 (OPTIONAL)
FOR 1-3/4" THICK DOORS

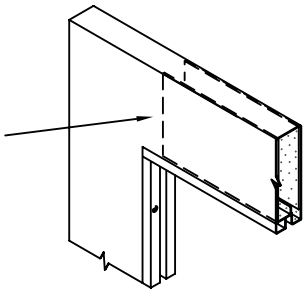


LISTED

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

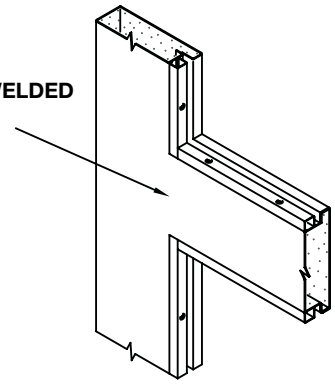
THRULITE DOORS

1 CLOSER REINFORCEMENT OPTIONAL



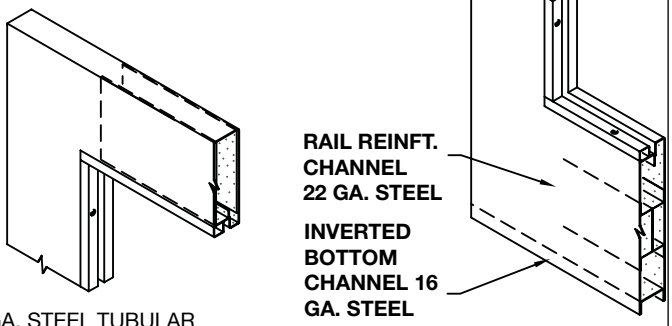
STILE AND RAIL SIZES:
5-5/8" STD.
3-5/8" OPT.
7-5/8" OPT.

2 OPTIONAL CENTER RAIL



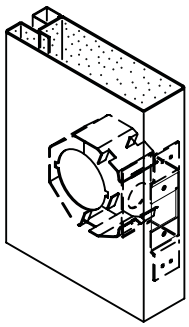
CENTER RAIL SIZES:
5-5/8" STD.
3-5/8" OPT.
7-5/8" OPT.

3 TOP AND BOTTOM CORNERS



16 GA. STEEL TUBULAR
CONSTRUCTION

4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE



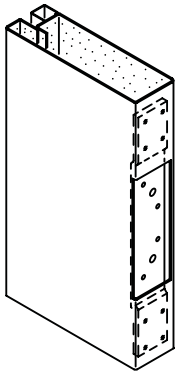
5-5/8" MIN. STILE
FOR 2-3/4" BACKSET

7-5/8" MIN. STILE FOR
BACKSETS OVER 2-3/4"

(LC1)
(ANSI A115.1)
2-3/4" BACKSET

NOTE: 3-5/8" STILES REQUIRE NARROW STILE HARDWARE. CONSIDER ROSE SIZE WITH STILE SPECIFIED.

5 HINGE PREPARATION

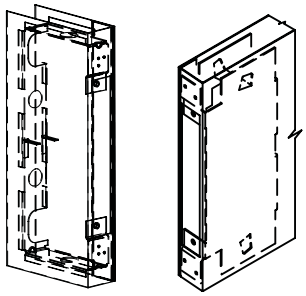


4-1/2" OR 5" HIGH
HIGH, STANDARD
OR HEAVY WEIGHT,
FULL MORTISE HINGES

ANSI A.156.7
TEMPLATE

HINGE EDGE IS
HANDED AND
BEVELED

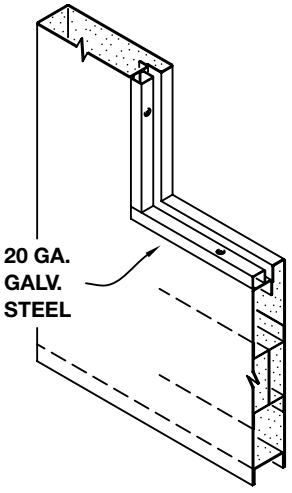
6 LOCK PREPARATION GOV. 86, ANSI/BHMA A115.1 MORTISE TYPE



(LM0)

NOTE: EITHER OF THE LOCK REINFORCEMENTS/ GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

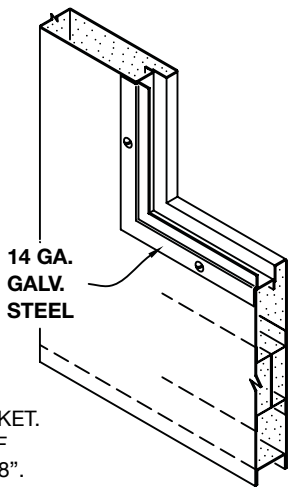
8 STANDARD GLAZING TRIM



3/8" WIDE
GLASS OR PANEL
POCKET

BOTTOM RAIL NOMINAL SIZES:
12-5/8" STD.
10-5/8", 14-5/8", AND 16-5/8" OPT.

8 OPTIONAL GLAZING TRIM THICK GLASS



FOR 13/16" GLASS
15/16" WIDE
GLAZING POCKET

FOR 1" GLASS
14 GA. GALV. 1/16" OFFSET
PLATE IS USED INSTEAD OF
REMOVABLE BEAD SHOWN, THUS
ALLOWING FOR A 1-1/8" WIDE POCKET.
REMOVABLE BEAD WILL STAND OFF
OF DOOR FACE APPROXIMATELY 1/8".

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

THRULITE DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES : UL SOLUTIONS WARNOCK HERSEY
TEST: UL 10B, UL 10C, UL 1784, & NFPA 252 **RATING:** 20 MIN, 3/4 HR **MAX. SIZE:** 4'0" X 8'0" SINGLE 8'0" X 8'0" PAIR 8'0" X 8'0" DOUBLE EGRESS - 3 5/8" MINIMUM STILES - - & TOP RAIL -

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be by Ceco Door Products. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8 specifications. See chart below for performance classification.

THRULITE doors are tubular construction, seamless design. Door material is commercial quality cold-rolled steel conforming to ASTM A1008. Also, optional hot-dipped galvannealed or galvanized steel conforming to ASTM A653 and A924.

THRULITE stiles and rails are made from 16 gauge steel sheets formed into rectangular tubes with an integral glazing bead. Stiles and top rails are 5 5/8" wide, (3 5/8" & 7 5/8" optional). Bottom rails are 12 5/8"high (10 5/8", 14 5/8", and 16 5/8" optional). Tubular construction provides closed top. Bottom of door closed with a 16 gauge inverted bottom channel welded to both door faces. Fiberglass batting (0.5 lbs/cfj insulates the tubular core.

Hardware Provisions: Hinge preparations are handed. Hinge edge is beveled (1:16) and mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1:16). 5 5/8" stiles are prepared for Gov. series 86, 160/161, or 90 locks in accordance with ANSI A115 (specify which). 3 5/8" stiles require narrow stile hardware. Closer reinforcement is an optional 12 gauge steel plate. Concealed hardware preparations not available.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting.

MATERIAL

DOOR FACE SHEETS	LEVEL 3	C.R.	GALV A60	RECOMMENDED DOOR FRAME MATERIAL
16 GAUGE STEEL	MODEL 3, EXTRA HEAVY-DUTY	STD	OPT	16 OR 14 GAUGE STEEL

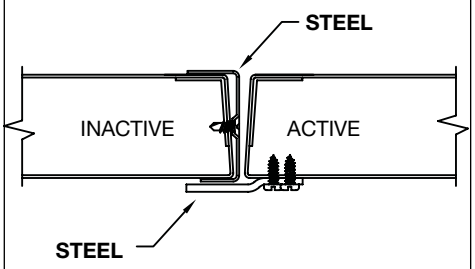
PERFORMANCE

FG DESIGN, 1/4" TEMPERED GLASS, TESTS ASTM E90 AND E413		
SOUND TRANSMISSION CLASS:	SEALED	OPERABLE
	STC 30	STC 29

DOOR ACCESSORIES ASTRAGALS AND LOUVERS

OVERLAPPING ASTRAGAL
4441

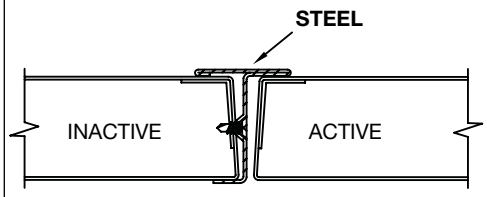
FOR 1-3/4" THICK
DOORS



LISTED

OVERLAPPING ASTRAGAL
4471

FOR 1-3/4" THICK
DOORS

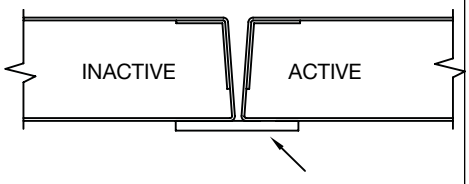


LISTED

OVERLAPPING ASTRAGAL
OPTIONAL: (4491)

1/8" X 1-1/2" STEEL

OPTIONAL: (4481)
(STAINLESS STEEL)
14 GAUGE X 1-3/4" WIDE



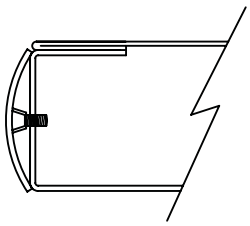
FOR 1-3/4" THICK
DOORS

STAINLESS STEEL ASTRAGAL
SCREW APPLIED IN FIELD

BULLNOSE
4783

FOR DOUBLE ACTING DOORS
FOR 1-3/4" THICK
DOORS ONLY

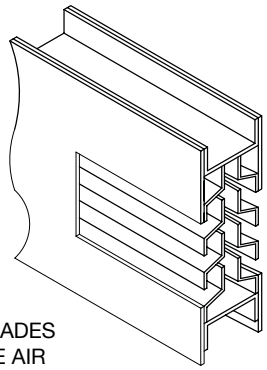
DIMPLED FOR A
#8 OVALHEAD
SHEET METAL
SCREW



SCREW PART NUMBER 7001567
BULLNOSE STOCK PART
NUMBERS:
6111106 - 8'
6111147 - 10'

FIXED TYPE FLUSH WELDED
LOUVER 4634 (STAINLESS STEEL)

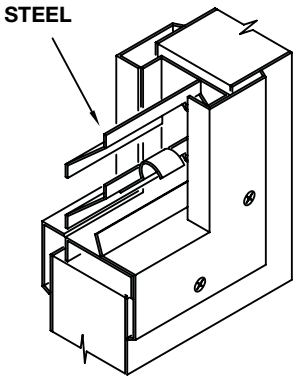
FOR 1-3/4" THICK DOORS



18 GA. BLADES
50% FREE AIR
OPTIONAL :
INSECT SCREEN

(FOR STAINLESS STEEL DOORS ONLY)

ADJUSTABLE LOUVER FLDL

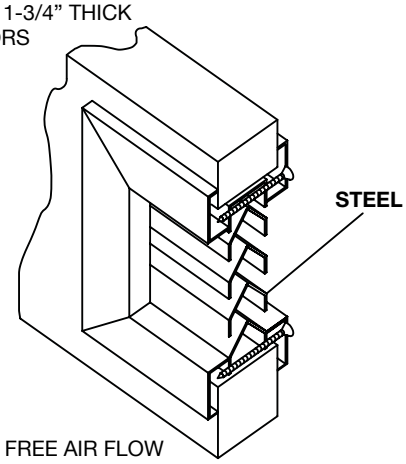


FOR 1-3/4" THICK
DOORS

FLDL IS UL LISTED 130' FUSINLE
LINK TYPE

FIXED SLAT TYPE LOUVER
4634

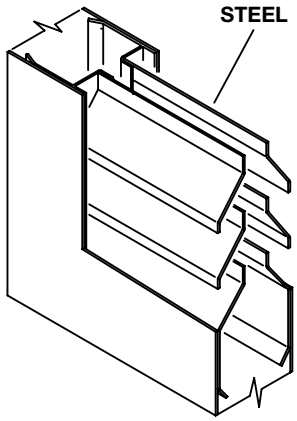
FOR 1-3/4" THICK
DOORS



50% FREE AIR FLOW

FLUSH TYPE WELDED LOUVER
4684

FOR 1-3/4" THICK
DOORS



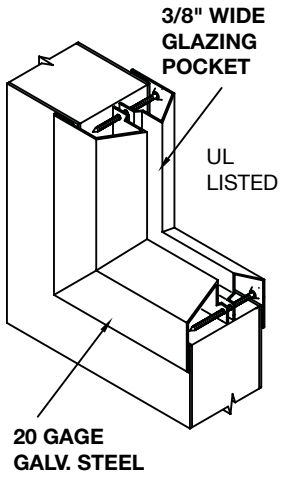
FLUSH
TYPE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

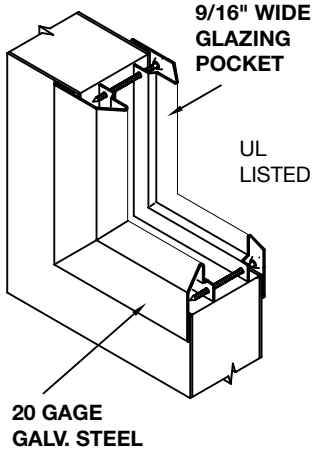
DOOR ACCESSORIES GLASS LITE AND VISION LITE TRIM KITS

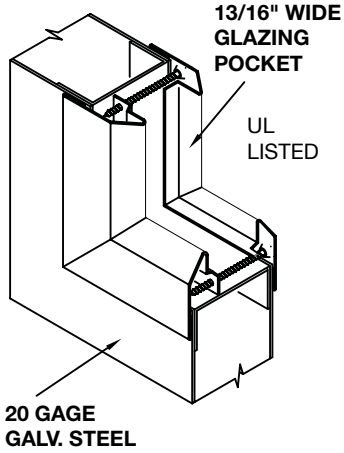
(UNLESS OTHERWISE INDICATED, GLASS AND GLAZING ARE NOT INCLUDED)

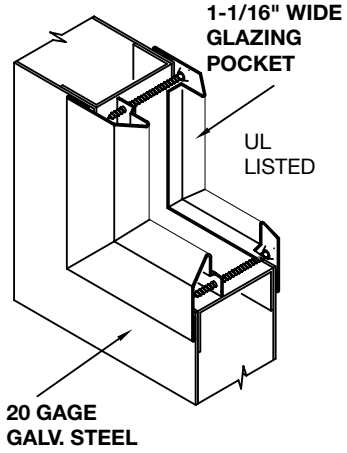
GLAZING TRIM SLIMTRIM



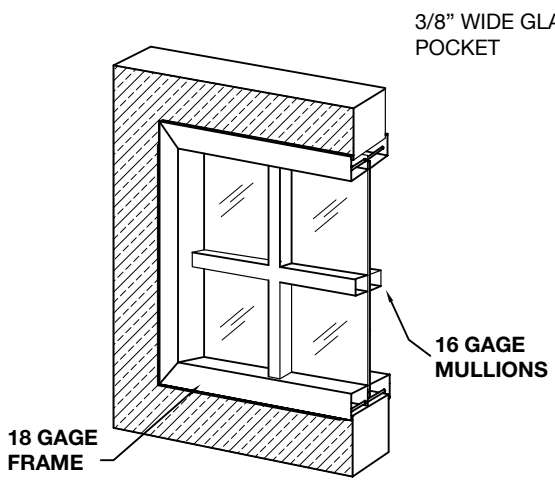
GLAZING TRIM (THICK GLASS) SLIMTRIM





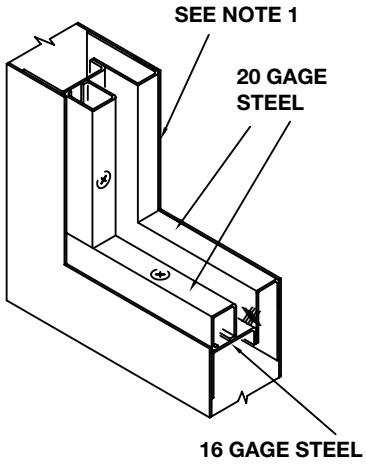


GLAZING TRIM
STEEL MULTI-LITE



GLAZING TRIM
4884
FOR MEDALLION AND OTHER CENTER SEAM DOORS

3/8" WIDE GLAZING POCKET

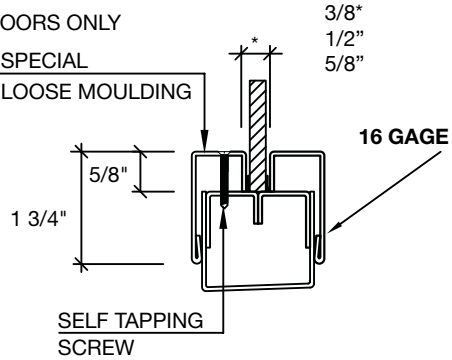


NOTES:
1. *FIELD APPLIED CAULK IS RECOMMENDED ON THIS SEAM TO IMPROVE AESTHETICS AND RESIST WATER INTRUSION*
2. *DRAWING NOT TO SCALE*

GLAZING TRIM
STAINLESS STEEL

FOR STAINLESS STEEL DOORS ONLY

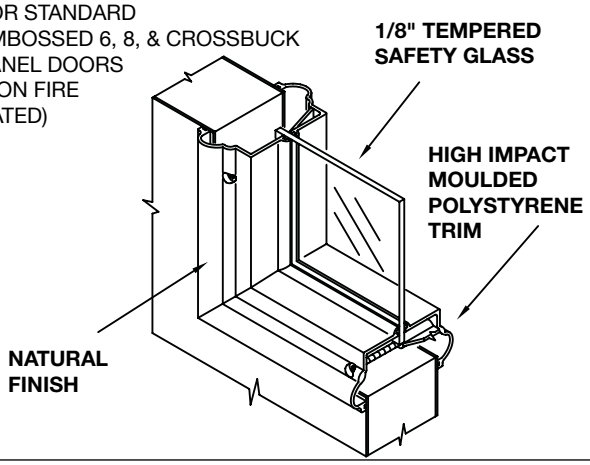
304 OR 316 STAINLESS STEEL
#4 FINISH



NOTE: GLASS POCKETS AVAILABLE UP TO 1-1/8" WITH ALTERNATE GLASS KIT DESIGN.

GLAZING SYSTEM

FOR STANDARD EMBOSSED 6, 8, & CROSSBUCK PANEL DOORS (NON FIRE RATED)



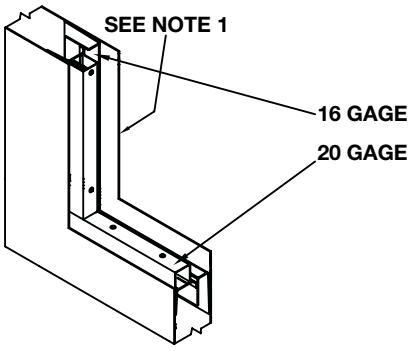
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

DOOR ACCESSORIES GLASS LITE TRIM KITS

(UNLESS OTHERWISE INDICATED, GLASS AND GLAZING ARE NOT INCLUDED)

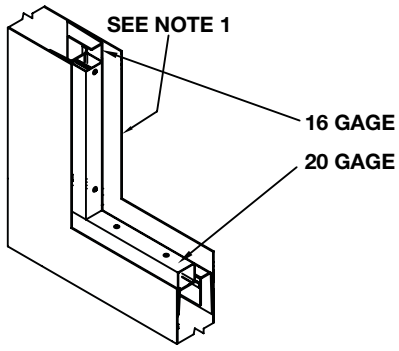
GLAZING TRIM
4881 (FLUSH)

5/8" WIDE GLAZING POCKET

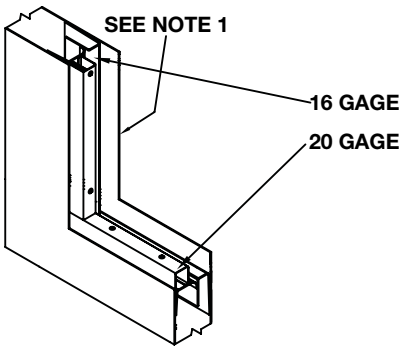


GLAZING TRIM
4883 (FLUSH)

3/4" WIDE GLAZING POCKET

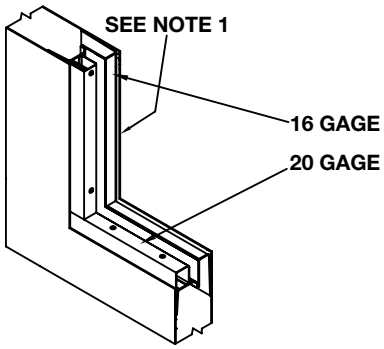


GLAZING TRIM
4885 (FLUSH)



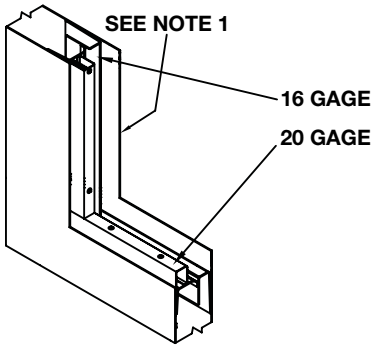
3/8" WIDE GLAZING POCKET

GLAZING TRIM
4887 (FLUSH)



7/8" WIDE GLAZING POCKET

GLAZING TRIM
4889 (FLUSH)



1/8" WIDE GLAZING POCKET

NOTES:

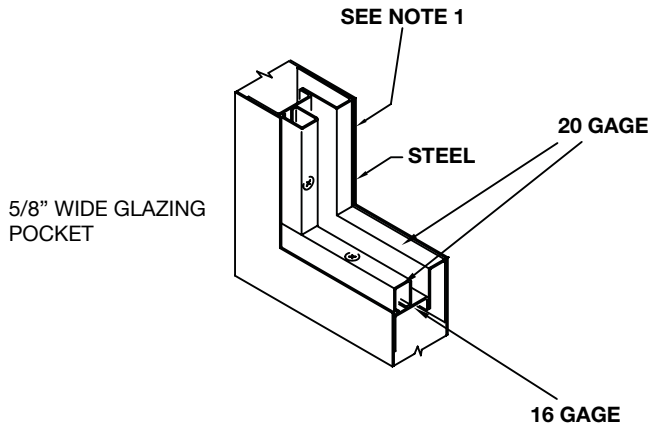
1. *FIELD APPLIED CAULK IS RECOMMENDED ON THIS SEAM TO IMPROVE AESTHETICS AND RESIST WATER INTRUSION.*
2. *DRAWING NOT TO SCALE*
3. *NOT FOR USE ON MEDALLION OR THRULITE DOORS*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

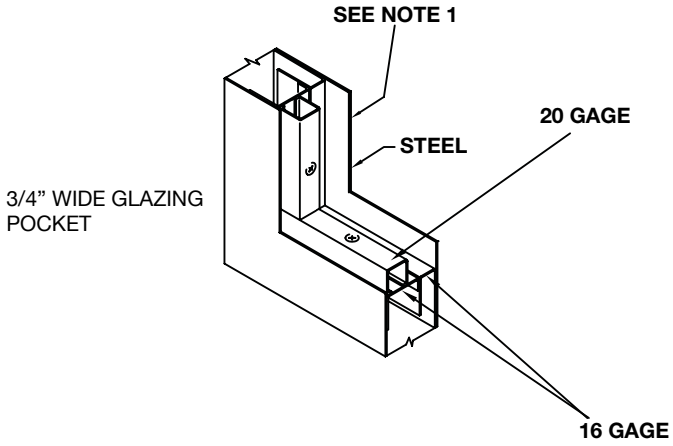
DOOR ACCESSORIES GLASS LITE TRIM KITS

(UNLESS OTHERWISE INDICATED, GLASS AND GLAZING ARE NOT INCLUDED)

GLAZING TRIM
4880 (FLUSH)

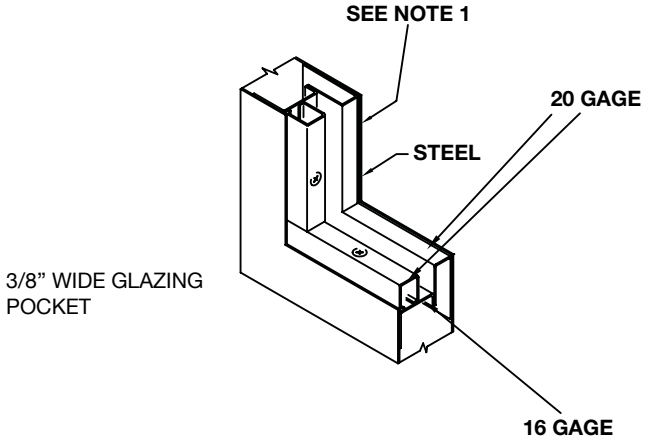


GLAZING TRIM
4882 (FLUSH)



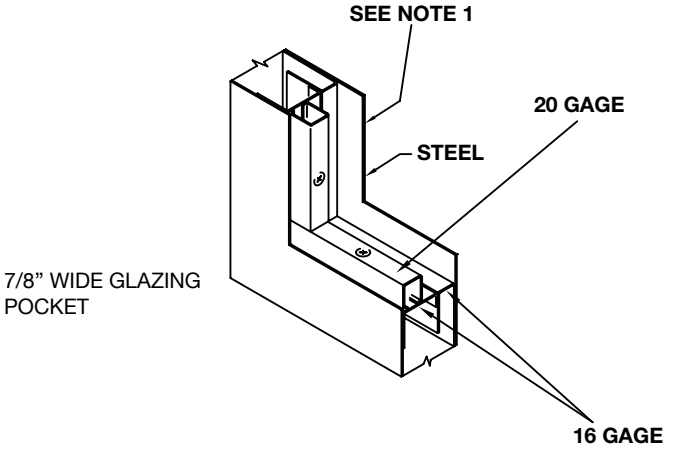
GLAZING TRIM
4884 (FLUSH)

FOR MEDALLION AND OTHER CENTER SEAM DOORS



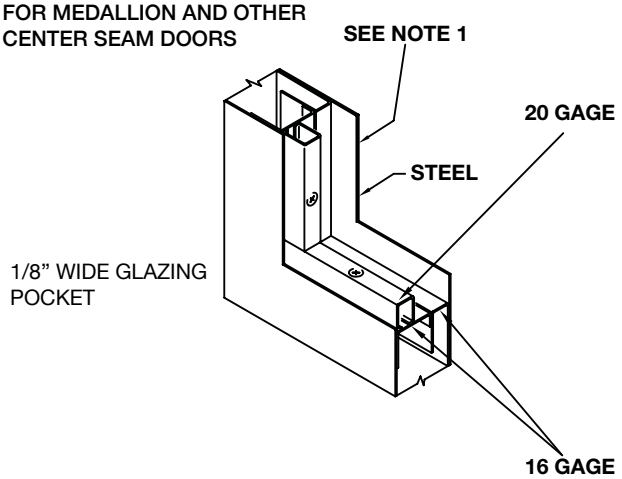
GLAZING TRIM
4886 (FLUSH)

FOR MEDALLION AND OTHER CENTER SEAM DOORS



GLAZING TRIM
4888 (FLUSH)

FOR MEDALLION AND OTHER CENTER SEAM DOORS



NOTES:
1. *FIELD APPLIED CAULK IS RECOMMENDED ON THIS SEAM TO IMPROVE AESTHETICS AND RESIST WATER INTRUSION.*
2. *DRAWING NOT TO SCALE*

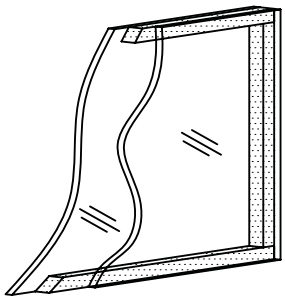
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

FACTORY INSTALLED GLASS-DOORS

INSULATED GLASS (NON-FIRE RATED)

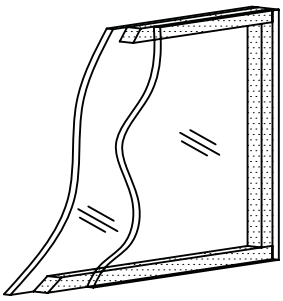
DESCRIPTION: 5/8" THICKNESS (NOMINAL)
LOE2 TEMPERED, GAS FILLED
WARRANTY:10 YEARS
CLOSED CELL FOAM GLAZING TAPE OR OTHER APPROVED MATERIAL
IMPACT SAFETY RATING: CAT II, CPSC 16CFR1201
CANNOT BE USED IN FIRE RATED DOORS
(GLASS ONLY)

INSULATING PERFORMANCE:
CENTER OF GLASS U FACTOR: .25 BTU/HR*FT F 2°
SHADING COEFFICIENT (SC): .42
SOLAR HEAT GAIN (SHGC): .37
UV TRANSMITTANCE: 14%



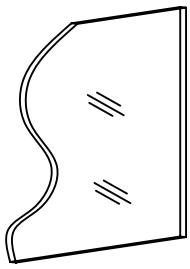
DESCRIPTION: 1" THICKNESS (NOMINAL)
LOE2 TEMPERED, GAS FILLED
WARRANTY:10 YEARS
CLOSED CELL FOAM GLAZING TAPE OR OTHER APPROVED MATERIAL
IMPACT SAFETY RATING: CAT II, CPSC 16CFR1201
CANNOT BE USED IN FIRE RATED DOORS
(GLASS ONLY)

INSULATING PERFORMANCE:
CENTER OF GLASS U FACTOR: .25 BTU/HR*FT F 2"
SHADING COEFFICIENT (SC): .41
SOLAR HEAT GAIN (SHGC): .36
UV TRANSMITTANCE: 13%



1/4" TEMPERED GLASS (NON-FIRE RATED)

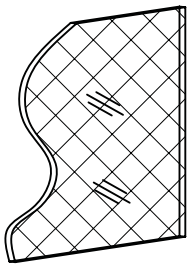
DESCRIPTION: CLEAR
QUALITY RATING: Q3, ASTM C1036-06
WARRANTY:NO WARRANTY
CLOSED CELL FOAM GLAZING TAPE OR OTHER APPROVED MATERIAL
IMPACT SAFETY RATING: CAT 1, CAT II, CPSC 16CFR1201
CANNOT BE USED IN FIRE RATED DOORS



1/4" FILMED WIRED GLASS (FIRE RATED)

DESCRIPTION:
FILMED WIRED, FIRE AND IMPACT SAFETY RATED GLASS
WARRANTY:NO WARRANTY
FIRE RATED GLAZING TAPE OR OTHER APPROVED MATERIAL

IMPACT SAFETY RATING:
CAT 1, CAT II, CPSC 16CFR1201
UL APPROVED, POSITIVE PRESSURE.



RATING	MAXIMUM EXPOSED AREA	MAXIMUM WIDTH	MAXIMUM HEIGHT
PEMKO FG300045			
20 AND 45	1296SQ.IN	34"	84"
PEMKO FG300090			
60	552SQ.IN	12"	46"
90	552SQ.IN	12"	46"

NOT APPROVED FOR TEMPERATURE RISE
NOTE: SIZE LIMITATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

FACTORY INSTALLED GLASS-DOORS

KERALITE FILMED GLASS (FIRE RATED)

DESCRIPTION: 3/16" THICK (NOMINAL)
CERAMIC, FILMED FIRE AND IMPACT
LIMITED WARRANTY:3 YEARS
FIRE RATED GLAZING TAPE ONLY
IMPACT SAFETY RATING:
SAFETY RATED GLASS
CAT 1, CAT II, CPSC 16CFR1201, ANSI Z97.1
UL APPROVED, POSITIVE PRESSURE.
GLASS IS MARKED IN ACCORDANCE
WITH INTERNATIONAL BUILDING CODE

RATING	MAXIMUM EXPOSED AREA	MAXIMUM WIDTH	MAXIMUM HEIGHT
FOAM TAPE			
20, 45, 60	3627SQ.IN	46-1/2"	78"
90	3627SQ.IN	46-1/2"	76"
60 & 90 TR*	100SQ.IN	10"	33"
180 TR*	100SQ.IN	10"	33"

**TEMPERATURE RISE*
NOTE: SIZE LIMITATIONS SUBJECT TO CHANGE WITHOUT NOTICE. FOR CURRENT SIZE LIMITATIONS, SEE MANUFACTURER'S WEBSITE - WWW.VETROTECH.COM/EN/USA/FIRE-PROTECTIVE

1/4" TEMPERED GLASS (NON-FIRE RATED)

DESCRIPTION: 5/16" THICK (NOMINAL)
CERAMIC, LAMINATED FIRE AND IMPACT
LIMITED WARRANTY:5 YEARS
FIRE RATED GLAZING TAPE ONLY
IMPACT SAFETY RATING:
SAFETY RATED GLASS
CAT 1, CAT II, CPSC 16CFR1201, ANSI Z97.1
UL APPROVED, POSITIVE PRESSURE.
GLASS IS MARKED IN ACCORDANCE
WITH INTERNATIONAL BUILDING CODE

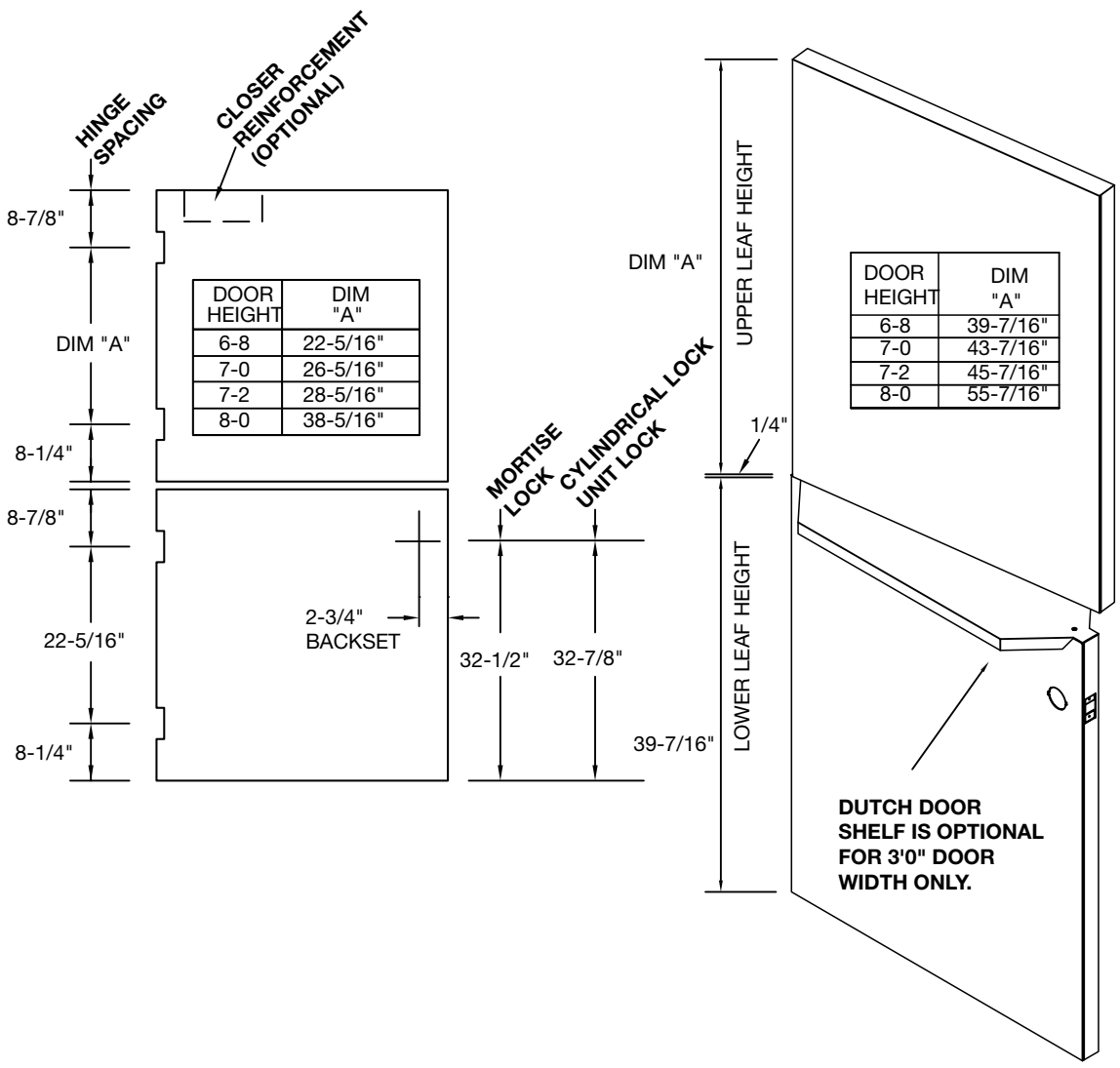
RATING	MAXIMUM EXPOSED AREA	MAXIMUM WIDTH	MAXIMUM HEIGHT
FOAM TAPE			
20, 45, 60	3627SQ.IN	46-1/2"	78"
90	3627SQ.IN	46-1/2"	76"
60 & 90 TR*	100SQ.IN	10"	33"
180 TR*	100SQ.IN	10"	33"

**TEMPERATURE RISE*
NOTE: SIZE LIMITATIONS SUBJECT TO CHANGE WITHOUT NOTICE. FOR CURRENT SIZE LIMITATIONS, SEE MANUFACTURER'S WEBSITE - WWW.VETROTECH.COM/EN/USA/FIRE-PROTECTIVE

NOT APPROVED FOR TEMPERATURE RISE
NOTE: SIZE LIMITATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

DOOR ACCESSORIES & PREPS: DUTCH DOORS & ACCESSORIES

AVAILABLE DOOR SERIES :
- REGENT
- OMEGA
- IMPERIAL
- VERSADOOR
- LEGION
- ULTRADOOR
- MEDALLION
- FUEGO
- TRIO

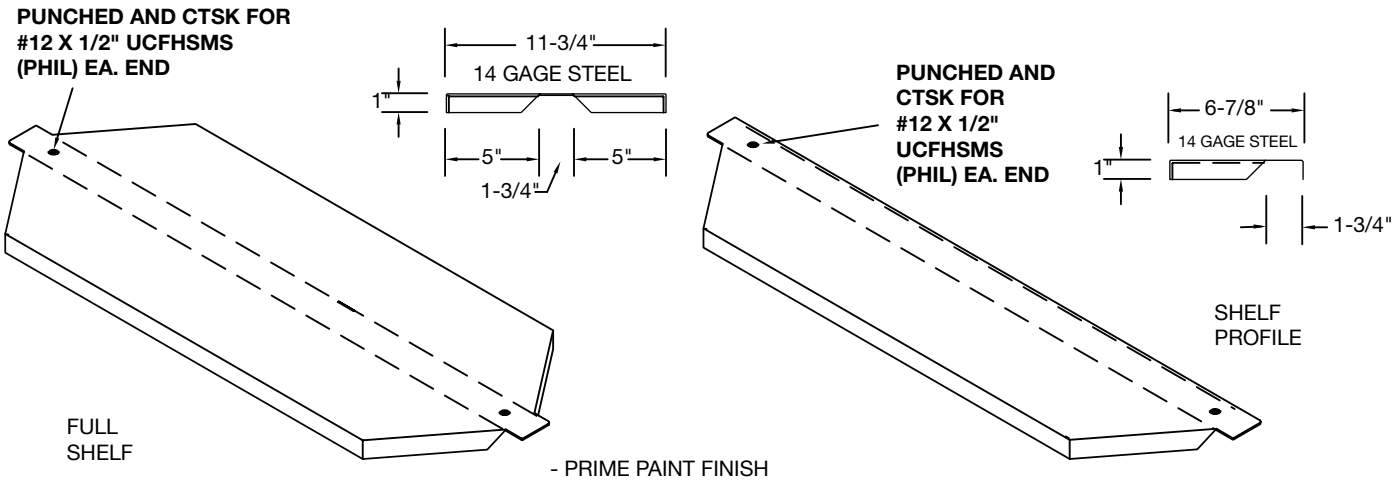


DOOR HEIGHT	DIM "A"
6-8	22-5/16"
7-0	26-5/16"
7-2	28-5/16"
8-0	38-5/16"

DOOR HEIGHT	DIM "A"
6-8	39-7/16"
7-0	43-7/16"
7-2	45-7/16"
8-0	55-7/16"

DUTCH SHELF OPTIONS

AVAILABLE FOR DOOR WIDTH :
3'0"



- PRIME PAINT FINISH
- SHELF, GUSSET, AND FASTENERS SHIPPED LOOSE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

Ceco Door

ASSA ABLOY

Windstorm

Experience a safer
and more open world

TECH MANUAL

WINDSTORM TABLE OF CONTENTS

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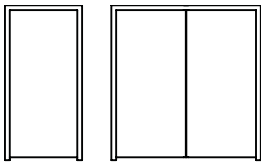
1-3/4” STORMPRO™361

TORNADO RESISTANT DOOR & FRAME WITH SARGENT FM8700, FM-PE8700 OR CORBIN RUSSWIN PED5400 FE SERIES SURFACE VERTICAL ROD EXIT DEVICE

DOOR DESIGN



SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL “SAFE” ROOMS

DOOR:
MIN. 2’-8” X 6’-8”, MAX. 4’-0” X 8’-0” SINGLES OR MIN. 5’-4” X 6’-8”, MAX. 8’-0” X 8’-0” PAIRS, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WITH 14 GA TOP & BOTTOM CHANNELS, WELDED TOP CAP AND STEEL STIFFENED CORE. POLYSTYRENE & HONEYCOMB CORES ARE OPTIONAL.

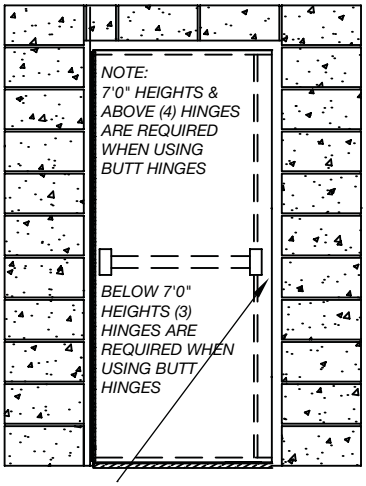
EXIT DEVICE:
SARGENT FM8700 OR FM-PE8700 SERIES SURFACE VERTICAL ROD. CORBIN RUSSWIN PED5400 FE SERIES SURFACE VERTICAL ROD DEVICE

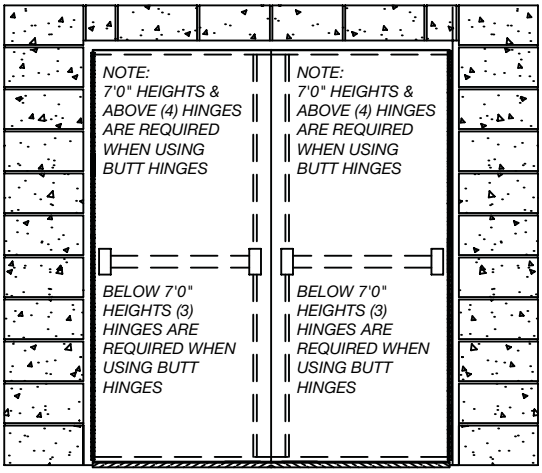
CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATE, ROD GUARD, LATCH GUARD, COORDINATORS, MULLION, AND FLOOR STRIKE. APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED OR HONEYCOMB CORE DOORS ONLY.

UL SOLUTIONS CERTIFIED TO:
- ICC 500(2020 & 2014) “ICC/NSSA Standard for the Design and Construction of “Storm Shelters”
- FEMA P-361 (2021) “Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms”





(4) THERMAL PINS REQUIRED IN LOCK EDGE OF DOOR AND JAMB ON SINGLE FIRE RATED OPENINGS ONLY. (PINS SUPPLIED BY OTHERS) FOR FIELD PREP INSTRUCTIONS SEE HARDWARE MANUFACTURER'S INSTALLATION DOCUMENTS.

- 3/8” DOOR UNDERCUT WHEN SARGENT 655 STRIKE IS USED.
- 5/8” DOOR UNDERCUT WHEN SARGENT 653 STRIKE IS USED.
- 1/8” MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY

DESIGN PRESSURES, ASSEMBLY CONSTRUCTION AND MANUFACTURING LOCATION MAY VARY TO COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES. DESIGN PRESSURE MAY BE LIMITED TO +246/-225 PSF AND TEST PRESSURE MAY BE LIMITED TO +296/-270 PSF. DOOR CONSTRUCTION MAY BE LIMITED TO 14 GAUGE.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

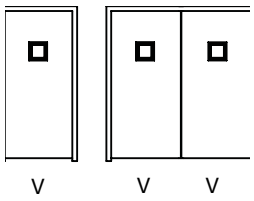
FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

1-3/4”STORMPRO™361

TORNADO RESISTANT 10” X 10” GLAZED DOOR & FRAME WITH SARGENT FM8700, FM-PE8700 OR CORBIN RUSSWIN PED5400 FE SERIES SURFACE VERTICAL ROD EXIT DEVICE

DOOR DESIGN



SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL “SAFE” ROOMS

DOOR:
MIN. 2’-8” X 6’-8”, MAX. 4’-0” X 8’-0” SINGLES OR MIN. 5’-4” X 6’-8”, MAX. 8’-0” X 8’-0” PAIRS, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WITH 14 GA TOP & BOTTOM CHANNELS, WELDED TOP CAP AND STEEL STIFFENED CORE. POLYSTYRENE & HONEYCOMB CORES ARE OPTIONAL.

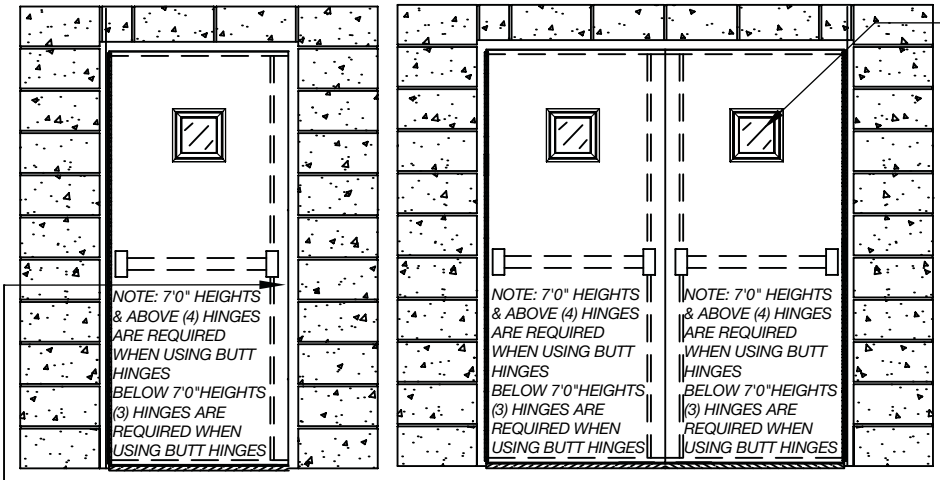
EXIT DEVICE:
SARGENT FM8700 OR FM-PE8700 SERIES SURFACE VERTICAL ROD. CORBIN RUSSWIN PED5400 FE SERIES SURFACE VERTICAL ROD.

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATE, ROD GUARD, LATCH GUARD, COORDINATORS, MULLION, AND FLOOR STRIKE. APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE FOR GLAZED OPENINGS. IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORES ONLY.

UL SOLUTIONS CERTIFIED TO:
- ICC 500(2020 & 2014) “ICC/NSSA Standard for the Design and Construction of “Storm Shelters”
- FEMA P-361 (2021) “Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms”



(4) THERMAL PINS REQUIRED IN LOCK EDGE OF DOOR AND JAMB ON SINGLE FIRE RATED OPENINGS ONLY. (PINS SUPPLIED BY OTHERS) FOR FIELD PREP INSTRUCTIONS SEE HARDWARE MANUFACTURER'S INSTALLATION DOCUMENTS.

10"X10" VISIBLE GLASS ONLY

FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT
FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16” NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.

GLASS NOMINALLY CENTERED IN WIDTH AND LOCATED 60-3/4” ABOVE FINISHED FLOOR TO CENTERLINE OF GLASS. MULTIPLE LITES NOT ALLOWED.

- 3/8” DOOR UNDERCUT WHEN SARGENT 655 STRIKE IS USED.
- 5/8” DOOR UNDERCUT WHEN SARGENT 653 STRIKE IS USED.
- 1/8” MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

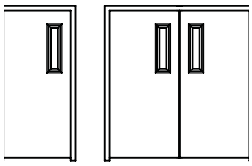
FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT 4" X 25" GLAZED DOOR & FRAME WITH SARGENT FM8700, FM-PE8700 OR CORBIN RUSSWIN PED5400 FE SERIES SURFACE VERTICAL ROD EXIT DEVICE

DOOR DESIGN



N N N

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

DOOR:
MIN. 2'-8" X 6'-8", MAX. 4'-0" X 8'-0" SINGLES OR MIN. 5'-4" X 6'-8", MAX. 8'-0" X 8'-0" PAIRS, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WITH 14 GA TOP & BOTTOM CHANNELS, WELDED TOP CAP AND STEEL STIFFENED CORE. POLYSTYRENE & HONEYCOMB CORES ARE OPTIONAL.

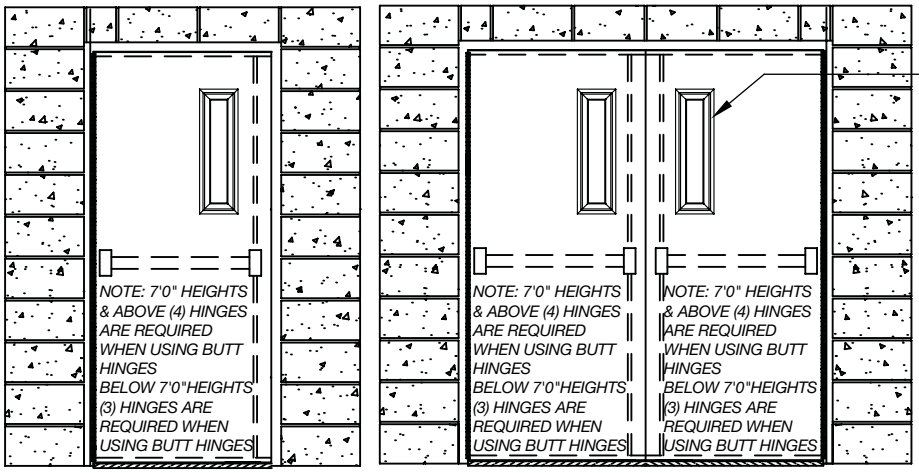
EXIT DEVICE:
SARGENT FM8700 OR FM-PE8700 SERIES SURFACE VERTICAL ROD. CORBIN RUSSWIN PED5400 FE SERIES SURFACE VERTICAL ROD.

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATE, ROD GUARD, LATCH GUARD, COORDINATORS, MULLION, AND FLOOR STRIKE. APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE FOR GLAZED OPENINGS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED OR HONEYCOMB CORE DOORS ONLY.

UL SOLUTIONS CERTIFIED TO:
- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"



- 3/8" DOOR UNDERCUT WHEN SARGENT 655 STRIKE IS USED.
- 5/8" DOOR UNDERCUT WHEN SARGENT 653 STRIKE IS USED.
- 1/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY

FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16" NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.

GLASS LOCATED APPROXIMATELY 8-5/8" FROM CENTER OF BEVELED LOCK EDGE TO VISIBLE GLASS. GLASS WILL BE PLACED 60-3/4" FROM CENTERLINE OF GLASS ABOVE FINISHED FLOOR STANDARD. BOTTOM OF VISIBLE GLASS LOCATED 43" ABOVE FINISHED FLOOR WHEN ADA COMPLIANCE IS REQUIRED.

~~MULTIPLE LITES NOT ALLOWED.~~

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

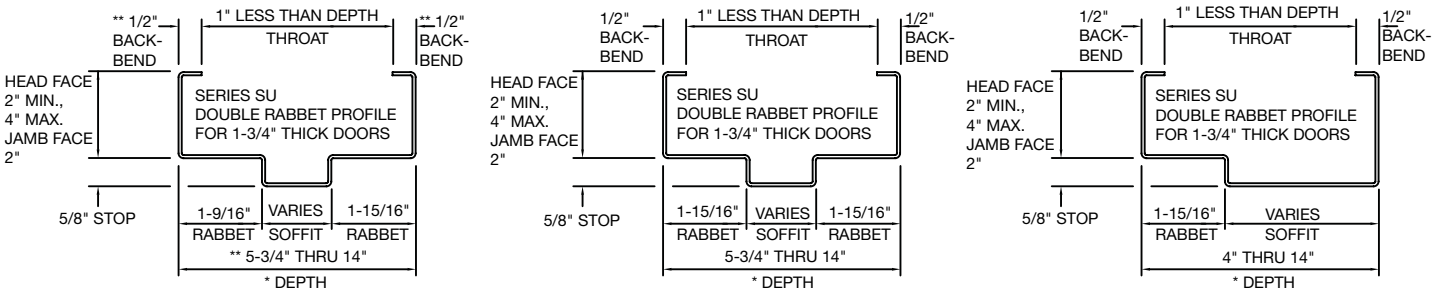
FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT DOOR & FRAME WITH SARGENT FM8700, FM-PE8700 OR CORBIN RUSSWIN PED5400 FE SERIES SURFACE VERTICAL ROD EXIT DEVICE UL SOLUTIONS CERTIFIED TO ICC 500(2020 & 2014) & FEMA P-361 (2021)

FRAME PROFILE OPTIONS AND PARAMETERS



NOTES :
** FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS*
*** BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".*

SMALLER DEPTHS MAY REQUIRE EXISTING OPENING ANCHORS TO BE LOCATED ON THE DOOR RABBET. FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE. SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

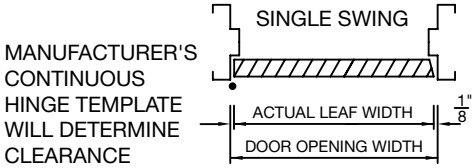
FRAMES ARE 14 GAUGE (OPTIONAL 12 GA.) HOT-DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.

FRAMES MAY BE KNOCK DOWN OR WELDED CORNERS.

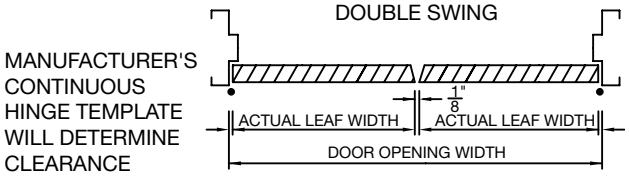
OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241 AND PAGE 242

HORIZONTAL SECTIONS

FRAME HEAD ANCHOR LOCATIONS:
PAGE 239 AND/OR PAGE 240



FRAME HEAD ANCHOR LOCATIONS:
PAGE 239 AND/OR PAGE 240

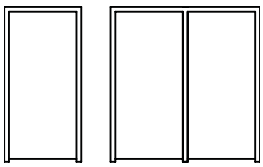


FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

1-3/4"STORMPRO™361

TORNADO RESISTANT DOOR & FRAME WITH CORBIN RUSSWIN FE5400S SERIES SURFACE MULTI POINT EXIT DEVICE

DOOR DESIGN



F F

MULLION: CORBIN RUSSWIN FE707A OR FE708A

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

DOOR:
MIN. 2'-8" X 6'-8", MAX. 4'-0" X 8'-0" SINGLES OR MIN. 5'-4" X 6'-8", MAX. 8'-0" X 8'-0" PAIRS, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WITH 14 GA. TOP & BOTTOM CHANNELS, WELDED TOP CAP AND STEEL STIFFENED CORE. POLYSTYRENE & HONEYCOMB CORES ARE OPTIONAL.

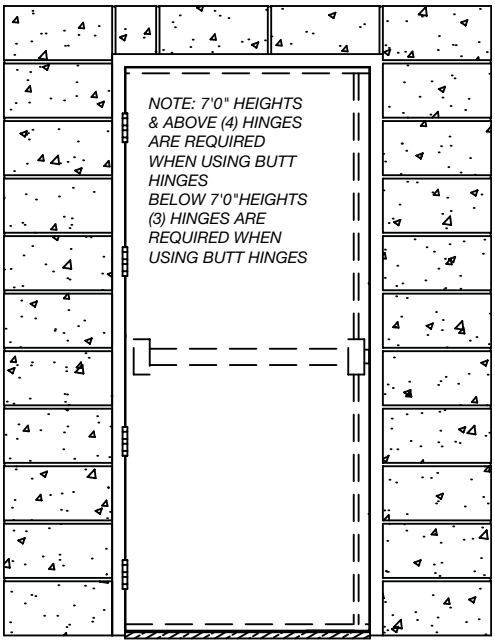
EXIT DEVICE:
CORBIN RUSSWIN FE5400S SERIES

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATE, ROD GUARD, LATCH GUARD AND COORDINATORS
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED OR HONEYCOMB CORE DOORS ONLY.

UL SOLUTIONS CERTIFIED TO:
- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"



- 5/8" DOOR UNDERCUT
- 1/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE
  BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL
  AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE
  AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY

ASSEMBLY CONSTRUCTION AND MANUFACTURING LOCATION MAY VARY TO COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES. DOOR CONSTRUCTION MAY BE LIMITED TO 14 GAUGE.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500	OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

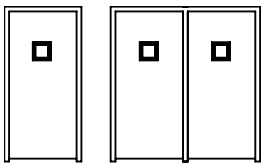
FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT 10" X 10" GLAZED DOOR AND FRAME WITH CORBIN RUSSWIN FE5400S SERIES SURFACE MULTI POINT EXIT DEVICE

DOOR DESIGN



V V V

MULLION: CORBIN RUSSWIN FE707A OR FE708A

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

DOOR:
MIN. 2'-8" X 6'-8", MAX. 4'-0" X 8'-0" SINGLES OR MIN. 5'-4" X 6'-8", MAX. 8'-0" X 8'-0" PAIRS, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WITH 14 GA. TOP & BOTTOM CHANNELS, WELDED TOP CAP AND STEEL STIFFENED CORE. POLYSTYRENE & HONEYCOMB CORES ARE OPTIONAL.

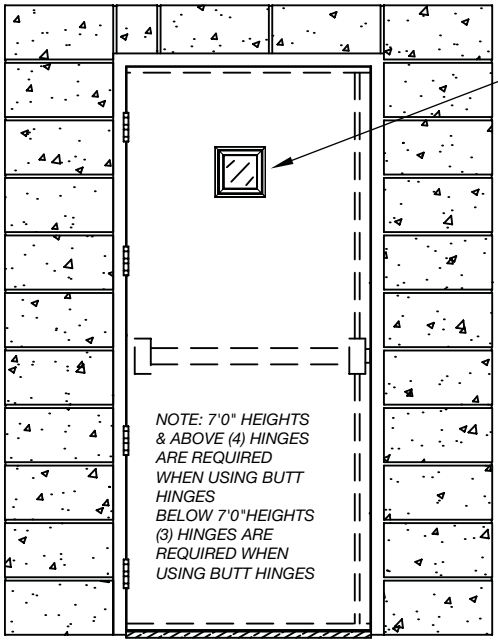
EXIT DEVICE:
CORBIN RUSSWIN FE5400S SERIES

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATE, ROD GUARD, LATCH GUARD AND COORDINATORS
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE FOR GLAZED OPENINGS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

UL SOLUTIONS CERTIFIED TO:
- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"



FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16" NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.

GLASS NOMINALLY CENTERED IN WIDTH AND LOCATED 60-3/4" ABOVE FINISHED FLOOR.

MULTIPLE LITES NOT ALLOWED.

- 5/8" DOOR UNDERCUT
- 1/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE
  BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500	OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

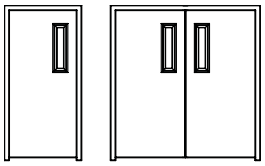
FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT 4" X 25" GLAZED DOOR AND FRAME WITH CORBIN RUSSWIN FE5400S SERIES SURFACE MULTI POINT EXIT DEVICE

DOOR DESIGN



N N N

MULLION: CORBIN RUSSWIN FE707A OR FE708A

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

DOOR:
MIN. 2'-8" X 6'-8", MAX. 4'-0" X 8'-0" SINGLES OR MIN. 5'-4" X 6'-8", MAX. 8'-0" X 8'-0" PAIRS, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WITH 14 GA. TOP & BOTTOM CHANNELS, WELDED TOP CAP AND STEEL STIFFENED CORE. POLYSTYRENE & HONEYCOMB CORES ARE OPTIONAL.

EXIT DEVICE:
CORBIN RUSSWIN FE5400S SERIES

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATE, ROD GUARD, LATCH GUARD AND COORDINATORS
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE FOR GLAZED OPENINGS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

UL SOLUTIONS CERTIFIED TO:
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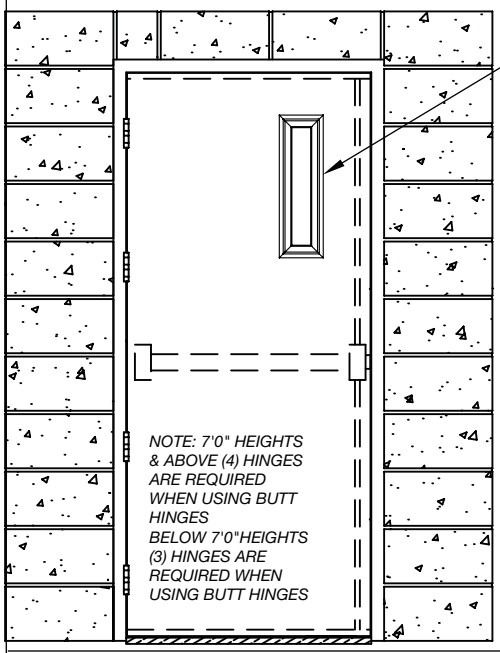
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"



FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

4"X25" VISIBLE GLASS ONLY

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16" NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.

GLASS LOCATED APPROXIMATELY 8-5/8" FROM CENTER OF BEVELED LOCK EDGE TO VISIBLE GLASS. GLASS WILL BE PLACED 60-3/4" FROM CENTERLINE OF VISIBLE GLASS ABOVE FINISHED FLOOR STANDARD. BOTTOM OF VISIBLE GLASS LOCATED 43" ABOVE FINISHED FLOOR WHEN ADA COMPLIANCE IS REQUIRED.

MULTIPLE LITES NOT ALLOWED.

- 5/8" DOOR UNDERCUT
- 1/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500	OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

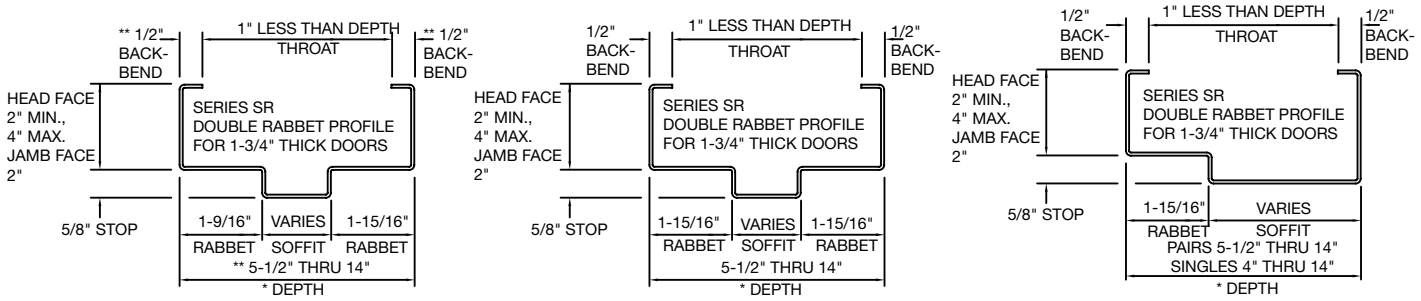
FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT DOOR & FRAME WITH CORBIN RUSSWIN FE5400S SERIES SURFACE MULTI POINT EXIT DEVICE UL SOLUTIONS CERTIFIED TO ICC 500(2020 & 2014) & FEMA P-361 (2021)

FRAME PROFILE OPTIONS AND PARAMETERS



NOTES :
** FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS*
*** BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".*

SMALLER DEPTHS MAY REQUIRE EXISTING OPENING ANCHORS TO BE LOCATED ON THE DOOR RABBET. FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE. SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

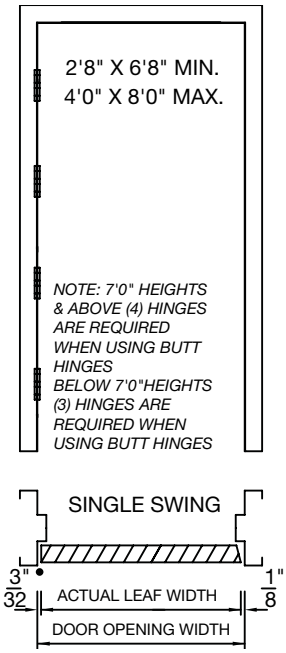
FRAMES ARE 14 GAUGE (OPTIONAL 12 GA.) HOT-DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.

FRAMES MAY BE KNOCK DOWN OR WELDED CORNERS.

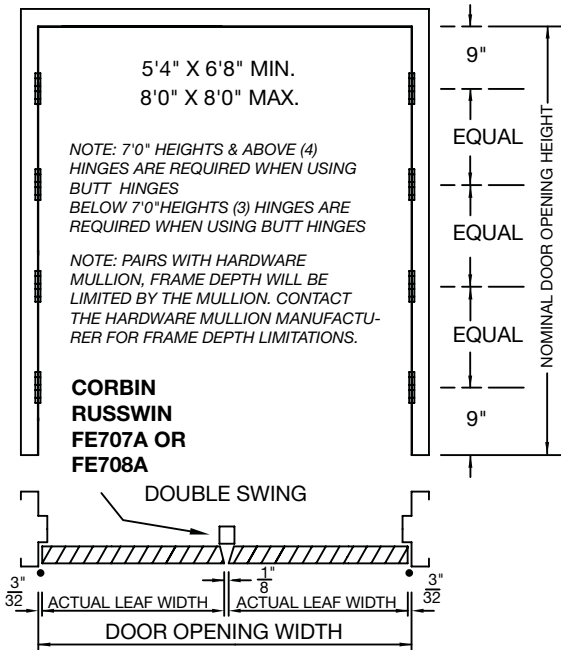
OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241 AND PAGE 242.

HORIZONTAL SECTIONS

FRAME HEAD ANCHOR LOCATIONS:
PAGE 239 AND/OR PAGE 240



FRAME HEAD ANCHOR LOCATIONS:
PAGE 239 AND/OR PAGE 240



FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4”STORMPRO™361

TORNADO RESISTANT DOOR & FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL “SAFE” ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) “ICC/NSSA Standard for the Design and Construction of “Storm Shelters”
- FEMA P-361 (2021) “Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms”

DOOR:
MIN. 2’-8” X 6’-8”, MAX. 4’-0” X 8’-0” LEAF SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAP AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

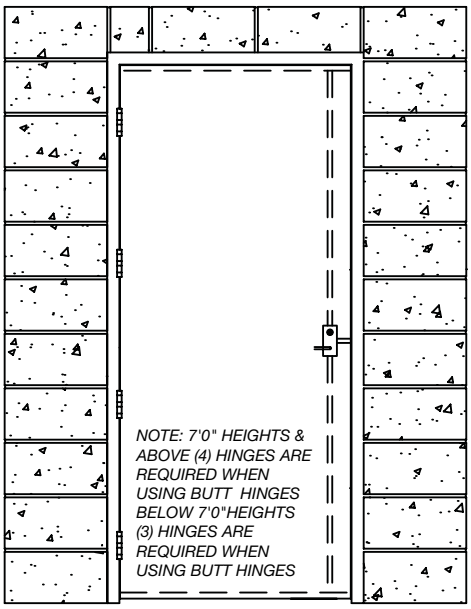
LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATES.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED OR HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.



Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.

- 3/8” DOOR UNDERCUT
- 3/8” MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACED MOUNTED. FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- 4-SIDED FRAMES ARE OPTIONAL
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

DESIGN PRESSURES, ASSEMBLY CONSTRUCTION AND MANUFACTURING LOCATION MAY VARY TO COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES. DESIGN PRESSURE MAY BE LIMITED TO +/-252 PSF AND TEST PRESSURE MAY BE LIMITED TO +/-302 PSF. ASSEMBLIES MAY BE LIMITED TO 3’0”X7’0” MINIMUM SIZE. DOOR CONSTRUCTION MAY BE LIMITED TO 14 GAUGE.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

1-3/4”STORMPRO™361

TORNADO RESISTANT 10” X 10” GLAZED DOOR & FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL “SAFE” ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) “ICC/NSSA Standard for the Design and Construction of “Storm Shelters”
- FEMA P-361 (2021) “Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms”

DOOR:
MIN. 2’-8” X 6’-8”, MAX. 4’-0” X 8’-0” LEAF SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAP AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

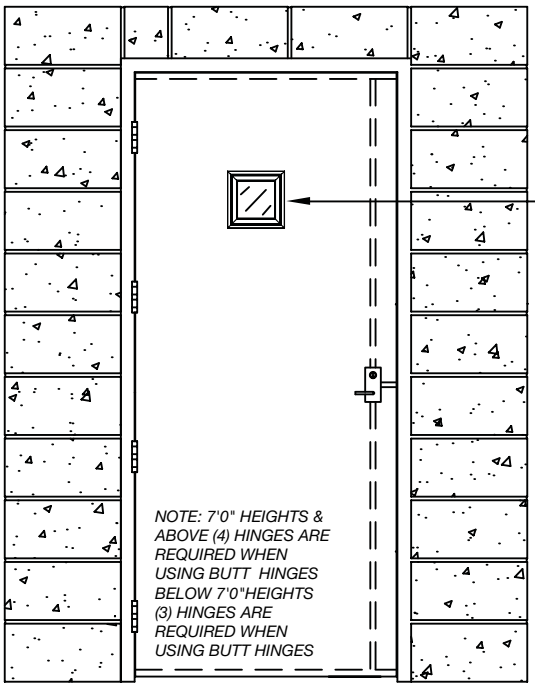
LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATES.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE FOR GLAZED OPENINGS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.



Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.

FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16” NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE. GLASS NOMINALLY CENTERED IN WIDTH AND LOCATED 60-3/8” ABOVE DOOR BOTTOM TO CENTERLINE OF GLASS ONLY. MULTIPLE LITES NOT ALLOWED.

- 3/8” DOOR UNDERCUT
- 3/8” MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACED MOUNTED. FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- 4-SIDED FRAMES ARE OPTIONAL
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

1-3/4"STORMPRO™361

FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

DOOR:
MIN. 2'-8" X 6'-8", MAX. 4'-0" X 8'-0" LEAF SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAP AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATES.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

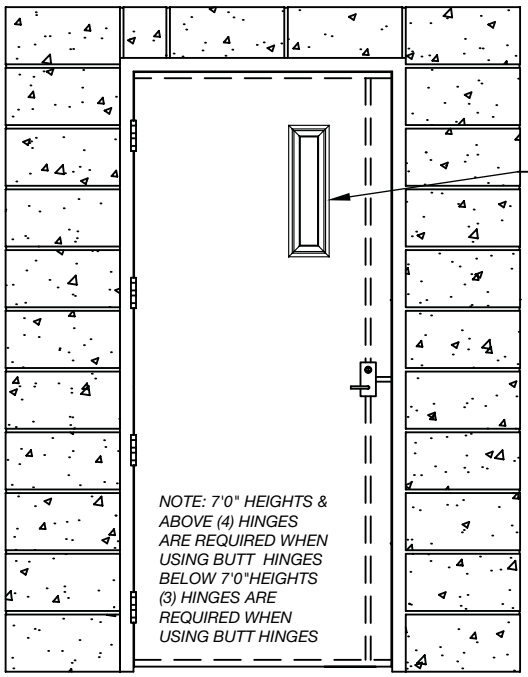
HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE FOR GLAZED OPENINGS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.

Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.



FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16" NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE. GLASS NOMINALLY CENTERED IN WIDTH AND LOCATED 60-3/8" ABOVE DOOR BOTTOM TO CENTERLINE OF GLASS ONLY. MULTIPLE LITES NOT ALLOWED.

- 3/8" DOOR UNDERCUT
- 3/8" MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACED MOUNTED. FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- 4-SIDED FRAMES ARE OPTIONAL
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

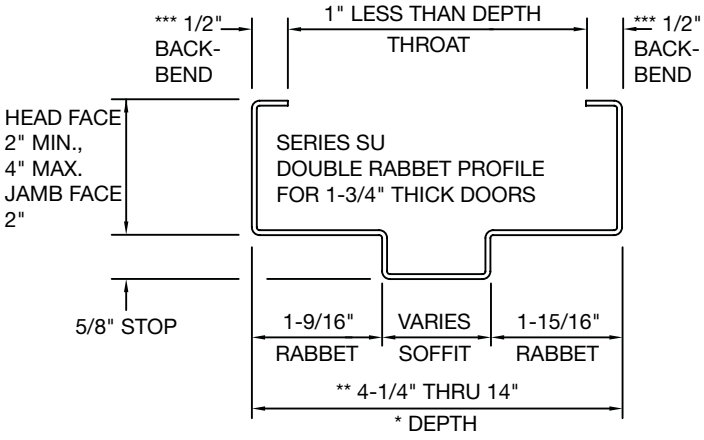
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

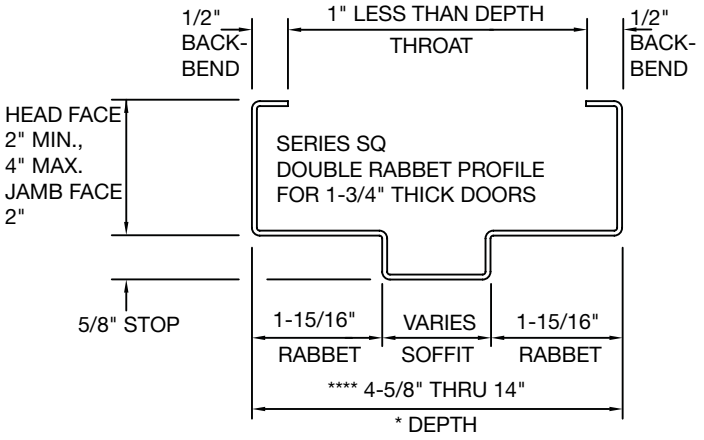
1-3/4"STORMPRO™361

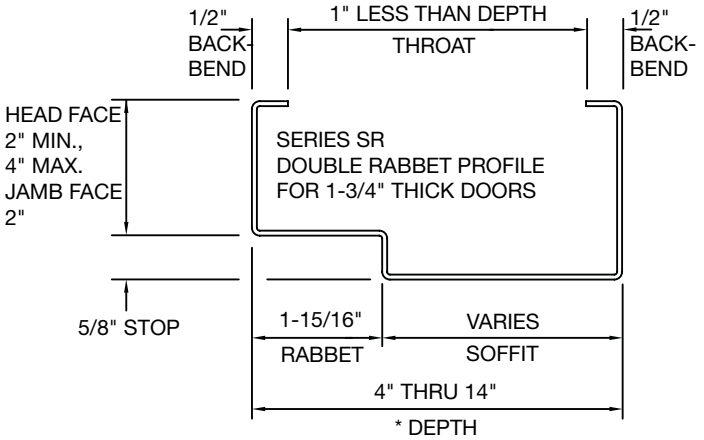
TORNADO RESISTANT DOOR & FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

UL SOLUTIONS CERTIFIED TO
ICC 500 (2020 & 2014) & FEMA P-361 (2021)

FRAME PROFILE OPTIONS AND PARAMETERS







NOTES :
** FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS*

***MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 4-5/8".*

**** BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".*

***** MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 5". SMALLER DEPTHS MAY REQUIRE EXISTING OPENING ANCHORS TO BE LOCATED ON THE DOOR RABBET.*

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE. SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAUGE (OPTIONAL 12 GA.) HOT-DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.

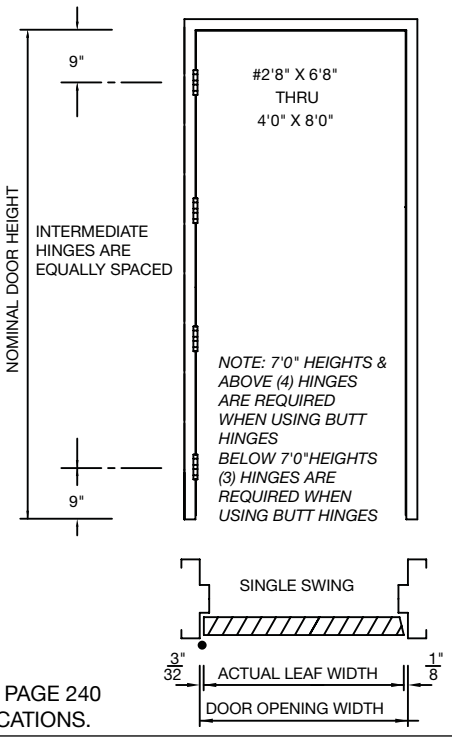
FRAMES MAY BE KNOCK DOWN OR WELDED CORNERS.

SEE FRAME ELEVATION BELOW FOR HINGE QUANTITIES, LOCATIONS AND OPENING SIZES. APPROVED HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241 AND PAGE 242.

4-SIDED FRAMES ARE OPTIONAL.

ASSEMBLIES MAY BE LIMITED TO 3'0"X7'0" MINIMUM SIZE FOR COMPLIANCE WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

HORIZONTAL SECTIONS



SEE PAGE 239 AND/OR PAGE 240 FOR ALL ANCHOR LOCATIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4”STORMPRO™361

TORNADO RESISTANT COMMUNICATING SINGLE DOOR & FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL “SAFE” ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) “ICC/NSSA Standard for the Design and Construction of “Storm Shelters”
- FEMA P-361 (2021) “Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms”

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOOR:
MIN. 2’-8” X 6’-8”, MAX. 4’-0” X 8’-0” LEAF SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAP AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

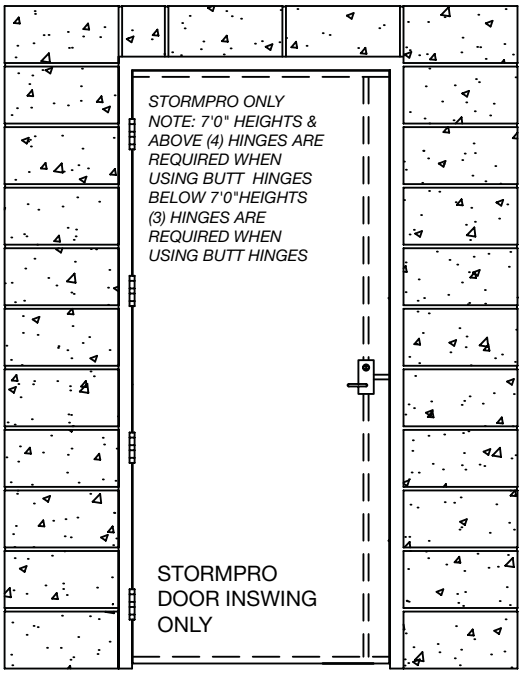
LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATES.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.



Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.

FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16” NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE. GLASS NOMINALLY CENTERED IN WIDTH AND LOCATED 60-3/8” ABOVE DOOR BOTTOM TO CENTERLINE OF GLASS ONLY. MULTIPLE LITES NOT ALLOWED.

- 3/8” DOOR UNDERCUT
- 3/8” MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

DESIGN PRESSURES, ASSEMBLY CONSTRUCTION AND MANUFACTURING LOCATION MAY VARY TO COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES. DESIGN PRESSURE MAY BE LIMITED TO +/-252 PSF AND TEST PRESSURE MAY BE LIMITED TO +/-302 PSF. ASSEMBLIES MAY BE LIMITED TO 3’0”X7’0” MINIMUM SIZE. DOOR CONSTRUCTION MAY BE LIMITED TO 14 GAUGE.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING ONLY	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT 10" X 10" GLAZED COMMUNICATING SINGLE DOOR & FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOOR:
MIN. 2'-8" X 6'-8", MAX. 4'-0" X 8'-0" LEAF SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAP AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

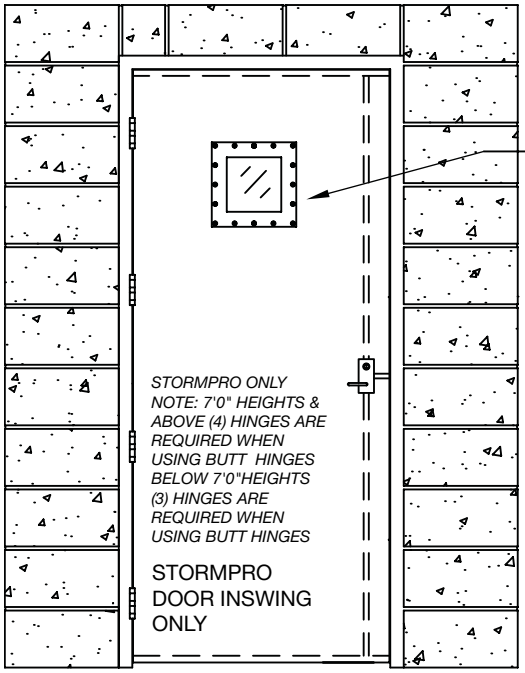
LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATES.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.



Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.

10"X10" VISIBLE GLASS ONLY

FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16" NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE. GLASS NOMINALLY CENTERED IN WIDTH AND LOCATED 60-3/8" ABOVE DOOR BOTTOM TO CENTERLINE OF GLASS ONLY. MULTIPLE LITES NOT ALLOWED.

- 3/8" DOOR UNDERCUT
- 3/8" MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- BOTTOM STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACE MOUNTED
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING ONLY	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT 4" X 25" GLAZED COMMUNICATING SINGLE DOOR & FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOOR:
MIN. 2'-8" X 6'-8", MAX. 4'-0" X 8'-0" LEAF SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAP AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

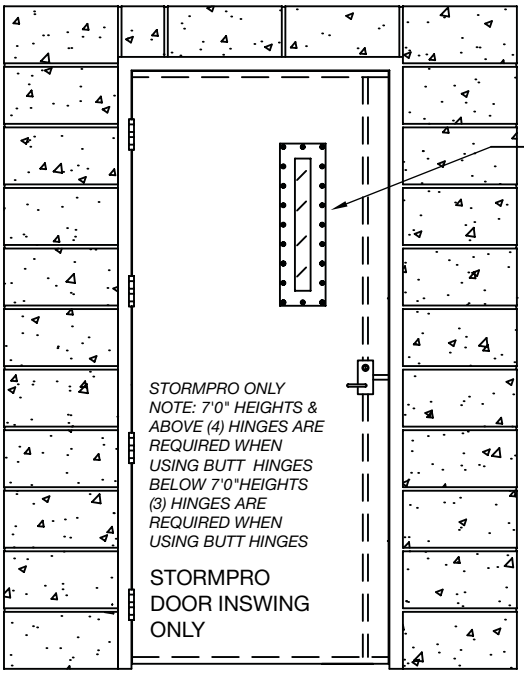
LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATES.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.



Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.

4" X 25" VISIBLE GLASS ONLY

FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16" NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.

GLASS LOCATED APPROXIMATELY 11-11/16" FROM CENTER OF BEVELED LOCK EDGE TO VISIBLE GLASS. BOTTOM OF VISIBLE GLASS LOCATED 48-1/4" ABOVE FINISHED FLOOR STANDARD. BOTTOM OF VISIBLE GLASS LOCATED 43" ABOVE FINISHED FLOOR WHEN ADA COMPLIANCE IS REQUIRED.

MULTIPLE LITES NOT ALLOWED.

- 3/8" DOOR UNDERCUT
- 3/8" MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- BOTTOM STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACE MOUNTED
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING	DESIGN (PSF)	TEST (PSF)
		IMPACT	+/-284	+/-341
ICC 500/NSSA	INSWING ONLY	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH		

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

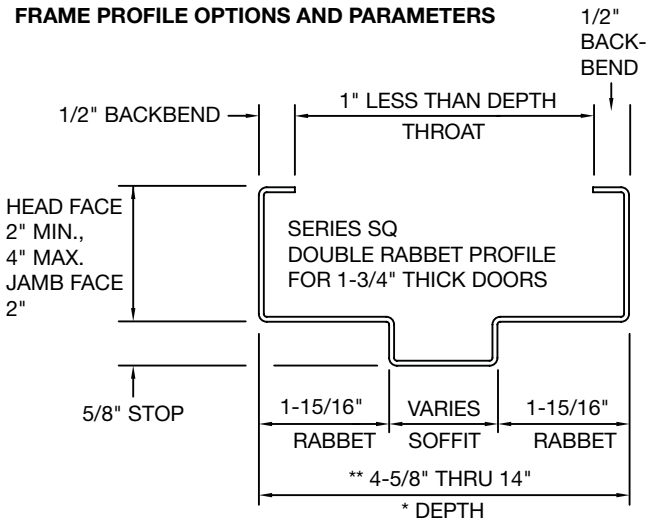
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT COMMUNICATING SINGLE STORMPRO DOOR & FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES MULTI POINT LOCK

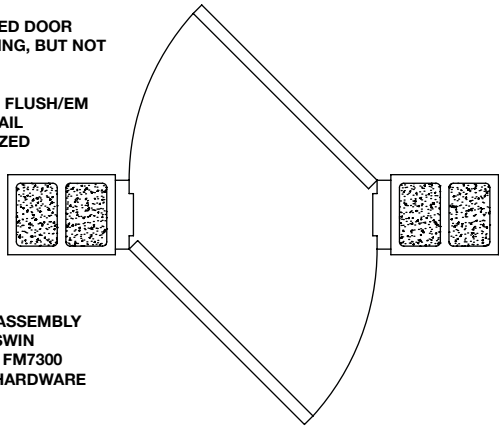
UL SOLUTIONS CERTIFIED TO
ICC 500 (2020 & 2014) & FEMA P-361 (2021)

FRAME PROFILE OPTIONS AND PARAMETERS



OPPOSITE JAMB SWING
EXTERIOR (THREAT) SIDE

ANY NON-CLASSIFIED DOOR ASSEMBLY INCLUDING, BUT NOT LIMITED TO:
-HOLLOW
-METAL/WOOD/FRP FLUSH/EM BOSSED/STILE & RAIL
-GLAZED/NON-GLAZED

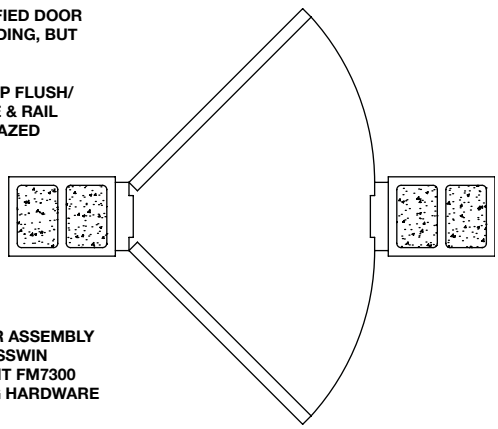


STORMPRO DOOR ASSEMBLY WITH CORBIN RUSSWIN FE6600 OR SAGENT FM7300 SERIES LATCHING HARDWARE

INTERIOR (SAFE) SIDE

SAME JAMB SWING
EXTERIOR (THREAT) SIDE

ANY NON-CLASSIFIED DOOR ASSEMBLY INCLUDING, BUT NOT LIMITED TO:
-HOLLOW
-METAL/WOOD/FRP FLUSH/ EMBOSSED/STILE & RAIL
-GLAZED/NON-GLAZED



STORMPRO DOOR ASSEMBLY WITH CORBIN RUSSWIN FE6600 OR SAGENT FM7300 SERIES LATCHING HARDWARE

INTERIOR (SAFE) SIDE

NOTES :
** FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS*

***MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 5". DEPTHS MAY ALSO BE LIMITED BY STORMPRO DOOR AND NON STORMPRO DOOR HARDWARE.*
SMALLER DEPTHS MAY REQUIRE EXISTING OPENING ANCHORS TO BE LOCATED ON THE DOOR RABBET.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE. SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAUGE (OPTIONAL 12 GA.) HOT-DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.

FRAMES MAY BE KNOCK DOWN OR WELDED CORNERS.

SEE FRAME ELEVATION BELOW FOR HINGE QUANTITIES, LOCATIONS AND OPENING SIZES. NON-STORMPRO FRAMES DO NOT REQUIRE THE SAME HARDWARE, QUANTITIES OR LOCATIONS AS THE STORMPRO FRAMES.

HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241 AND PAGE 242.

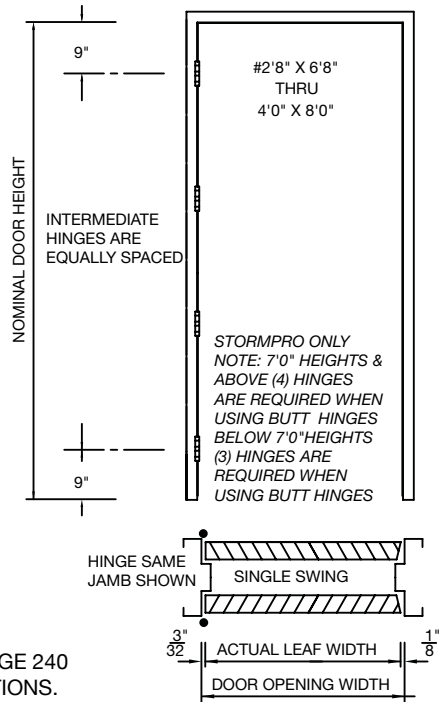
4-SIDED FRAMES ARE OPTIONAL.

WHEN DETERMINING FRAME DEPTH, CONSIDERATION SHOULD BE GIVEN REGARDING IF THE DEPTH WILL ACCOMMODATE HARDWARE INSTALLED ON BOTH THE PASSAGE DOOR AND STORMPRO DOOR.

MINIMUM FRAME DEPTHS SHOWN ON THIS PAGE ARE FOR STORMPRO LIMITS BUT MAY NOT ACCOMMODATE HARDWARE INSTALLED ON BOTH THE STORMPRO AND PASSAGE DOOR.

ASSEMBLIES MAY BE LIMITED TO 3'0"X7'0" MINIMUM SIZE FOR COMPLIANCE WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

HORIZONTAL SECTIONS



SEE PAGE 239 AND/OR PAGE 240 FOR ALL ANCHOR LOCATIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT PAIRS WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

DOOR:
MIN. 2'-8" X 6'-8", MAX. 4'-0" X 8'-0" LEAF SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAP AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR ASSA ABLOY ACCENTRA 988Y**CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION**

SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATES.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

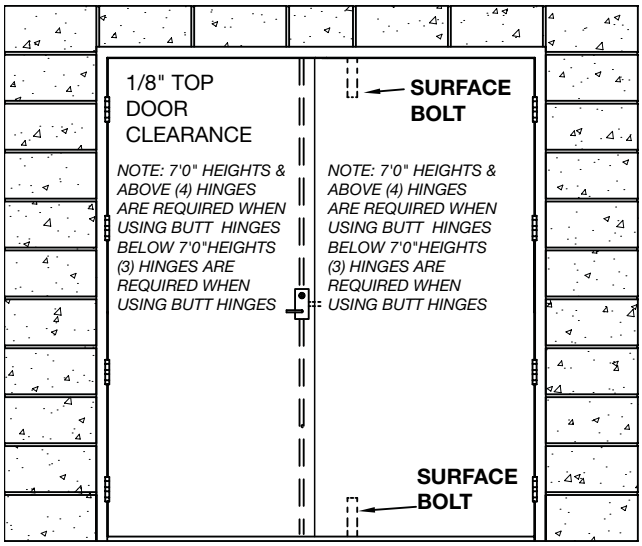
HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.

Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.



- 3/8" DOOR UNDERCUT
- 3/8" MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKES MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE. WHEN USING 3-SIDED FRAMES, BOTTOM LOCK STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACE MOUNTED
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- 4-SIDED FRAMES ARE OPTIONAL
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

10 GAUGE FLAT PLATE ASTRAGAL STRIP IS OPTIONAL AND WOULD BE FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE ACTIVE OR INACTIVE DOOR, DEPENDING ON IN SWING OR OUT SWING APPLICATION.

DESIGN PRESSURES, ASSEMBLY CONSTRUCTION AND MANUFACTURING LOCATION MAY VARY TO COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES. DESIGN PRESSURE MAY BE LIMITED TO +/-252 PSF AND TEST PRESSURE MAY BE LIMITED TO +/-302 PSF. ASSEMBLIES MAY BE LIMITED TO 6'0"X7'0" MINIMUM SIZE. DOOR CONSTRUCTION MAY BE LIMITED TO 14 GAUGE.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4”STORMPRO™361

TORNADO RESISTANT 10” X 10” GLAZED PAIRS WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL “SAFE” ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) “ICC/NSSA Standard for the Design and Construction of “Storm Shelters”
- FEMA P-361 (2021) “Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms”

DOOR:
MIN. 5’-4” X 6’-8”, MAX. 8’-0” X 8’-0” OPENING SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAP AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR ASSA ABLOY ACCENTRA 988Y **CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION**

SWITCHES, HOLDERS, STOPS/ HOLDERS, VIEWERS, KICK PLATES, AND COORDINATOR.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

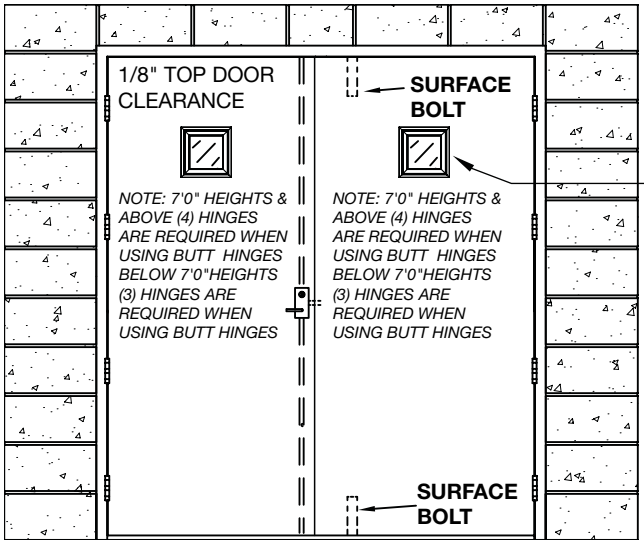
OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.

10 GAUGE FLAT PLATE ASTRAGAL STRIP IS OPTIONAL AND WOULD BE FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE ACTIVE OR INACTIVE DOOR, DEPENDING ON IN SWING OR OUT SWING APPLICATION.

Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.



FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16” NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.

10"X10" VISIBLE GLASS ONLY

GLASS NOMINALLY CENTERED IN WIDTH AND LOCATED 60-3/8” ABOVE DOOR BOTTOM TO CENTERLINE OF GLASS ONLY.

MULTIPLE LITES NOT ALLOWED.

- 3/8” DOOR UNDERCUT
- 3/8” MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKES MUST BE ATTACHED TO CON CRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
  WHEN USING 3-SIDED FRAMES, BOTTOM LOCK STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACE MOUNTED
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- 4-SIDED FRAMES ARE OPTIONAL
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT 4" X 25" GLAZED PAIRS WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

DOOR:
MIN. 5'-4" X 6'-8", MAX. 8'-0" X 8'-0" OPENING SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAP AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR ASSA ABLOY ACCENTRA 988Y **CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION**

SWITCHES, HOLDERS, STOPS/ HOLDERS, VIEWERS, KICK PLATES, AND COORDINATOR.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

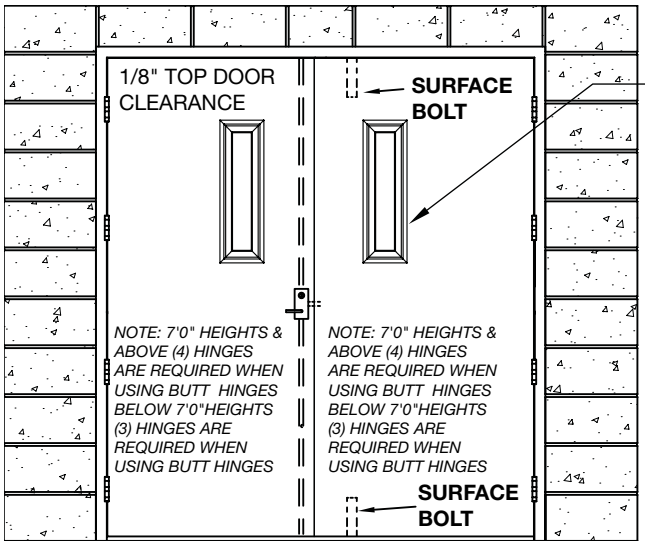
OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.

10 GAUGE FLAT PLATE ASTRAGAL STRIP IS OPTIONAL AND WOULD BE FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE ACTIVE OR INACTIVE DOOR, DEPENDING ON IN SWING OR OUT SWING APPLICATION.

Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.



FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

4"X25" VISIBLE GLASS ONLY

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16" NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.

GLASS LOCATED APPROXIMATELY 11-11/16" FROM CENTER OF BEVELED LOCK EDGE TO VISIBLE GLASS. BOTTOM OF VISIBLE GLASS LOCATED 48-1/4" ABOVE FINISHED FLOOR STANDARD.

BOTTOM OF VISIBLE GLASS LOCATED 43" ABOVE FINISHED FLOOR WHEN ADA COMPLIANCE IS REQUIRED.

MULTIPLE LITES NOT ALLOWED.

- 3/8" DOOR UNDERCUT
- 3/8" MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKES MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE. WHEN USING 3-SIDED FRAMES, BOTTOM LOCK STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACE MOUNTED
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
-4-SIDED FRAMES ARE OPTIONAL
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

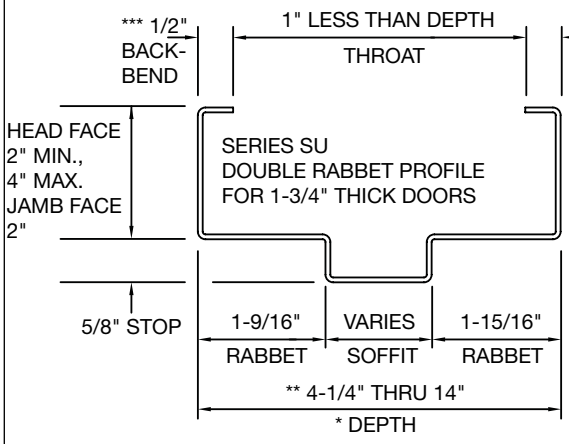
1-3/4"STORMPRO™361

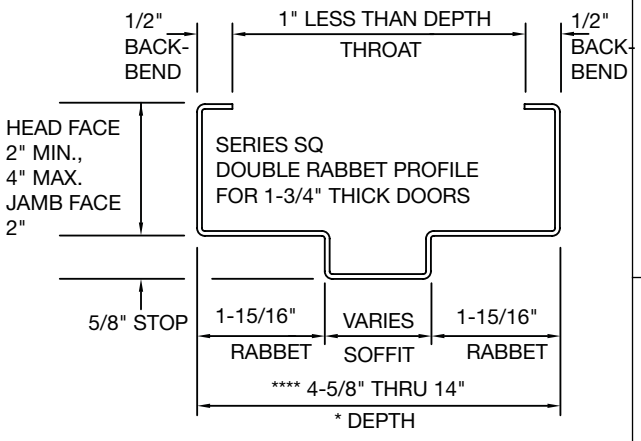
TORNADO RESISTANT PAIRS WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

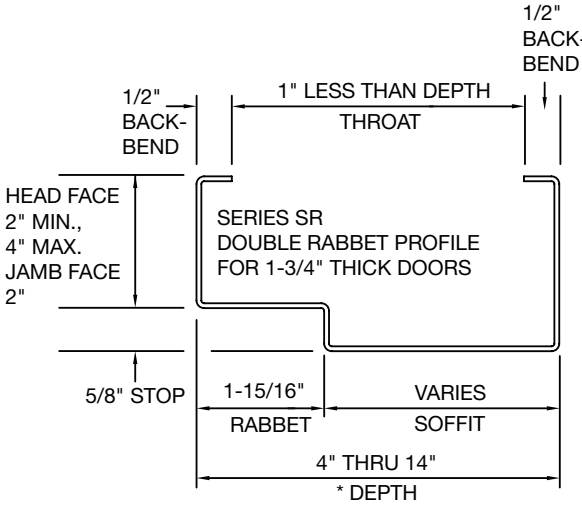
D17A-

UL SOLUTIONS CERTIFIED TO
ICC 500 (2020 & 2014) & FEMA P-361 (2021)

FRAME PROFILE OPTIONS AND PARAMETERS







NOTES :
** FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS*

***MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 4-5/8".*

**** BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".*

***** MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 5".*

SMALLER DEPTHS MAY REQUIRE EXISTING OPENING ANCHORS TO BE LOCATED ON THE DOOR RABBET.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE. SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAUGE (OPTIONAL 12 GA.) HOT-DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.

FRAMES MAY BE KNOCK DOWN OR WELDED CORNERS.

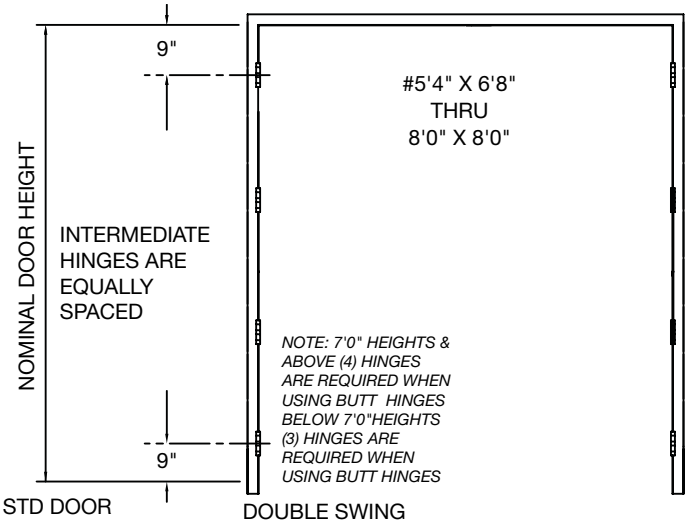
SEE FRAME ELEVATION BELOW FOR HINGE QUANTITIES, LOCATIONS AND OPENING SIZES.

HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241 AND PAGE 242.

4-SIDED FRAMES ARE OPTIONAL.

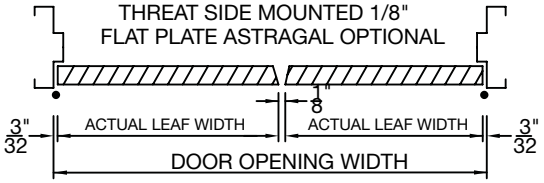
ASSEMBLIES MAY BE LIMITED TO 3'0"X7'0" MINIMUM SIZE FOR COMPLIANCE WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

HORIZONTAL SECTIONS



3/8" STD DOOR UNDERCUT
3/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE.

SEE PAGE 239 AND/OR PAGE 240 FOR ALL ANCHOR LOCATIONS



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT COMMUNICATING PAIRS WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOOR:
MIN. 5'-4" X 6'-8", MAX. 8'-0" X 8'-0" OPENING SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAPS AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR ASSA ABLOY ACCENTRA 988Y **CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/ HOLDERS, VIEWERS, KICK PLATES, AND COORDINATORS.**
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

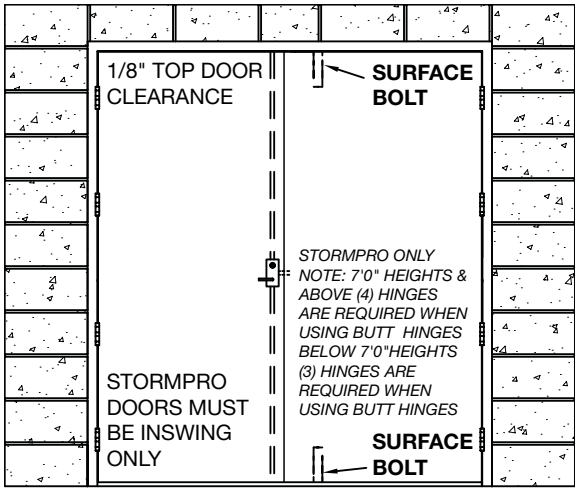
HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.



- 3/8" DOOR UNDERCUT
- 3/8" MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- BOTTOM STRIKES MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE. WHEN USING 3-SIDED FRAMES, BOTTOM LOCK STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACE MOUNTED
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

10 GAUGE FLAT PLATE ASTRAGAL STRIP IS OPTIONAL AND WOULD BE FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE ACTIVE OR INACTIVE DOOR.

DESIGN PRESSURES, ASSEMBLY CONSTRUCTION AND MANUFACTURING LOCATION MAY VARY TO COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES. DESIGN PRESSURE MAY BE LIMITED TO +/-252 PSF AND TEST PRESSURE MAY BE LIMITED TO +/-302 PSF. ASSEMBLIES MAY BE LIMITED TO 6'0"X7'0" MINIMUM SIZE. DOOR CONSTRUCTION MAY BE LIMITED TO 14 GAUGE.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING ONLY	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT 10" X 10" GLAZED COMMUNICATING PAIRS WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI-POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOOR:
MIN. 5'-4" X 6'-8", MAX. 8'-0" X 8'-0" OPENING SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAPS AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE CORES ARE OPTIONAL.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR ASSA ABLOY ACCENTRA 988Y **CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/ HOLDERS, VIEWERS, KICK PLATES, AND COORDINATORS.**
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

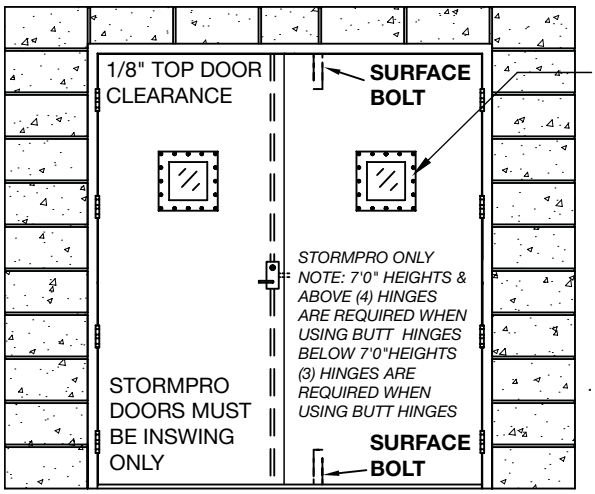
OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.

10 GAUGE FLAT PLATE ASTRAGAL STRIP IS OPTIONAL AND WOULD BE FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE ACTIVE OR INACTIVE DOOR.

Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.



FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16" NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.

GLASS NOMINALLY CENTERED IN WIDTH AND LOCATED 60-3/8" ABOVE DOOR BOTTOM TO CENTERLINE OF GLASS ONLY.

MULTIPLE LITES NOT ALLOWED.

- 3/8" DOOR UNDERCUT
- 3/8" MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- BOTTOM STRIKES MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE. WHEN USING 3-SIDED FRAMES, BOTTOM LOCK STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACE MOUNTED
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING ONLY	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361

TORNADO RESISTANT 4" X 25" GLAZED COMMUNICATING PAIRS WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI-POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOOR:
MIN. 5'-4" X 6'-8", MAX. 8'-0" X 8'-0" OPENING SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, WELDED TOP CAPS AND WITH STEEL STIFFENED CORE. HONEYCOMB AND POLYSTYRENE ARE OPTIONAL CORES.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR ASSA ABLOY ACCENTRA 988Y **CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/ HOLDERS, VIEWERS, KICK PLATES, AND COORDINATORS.**
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

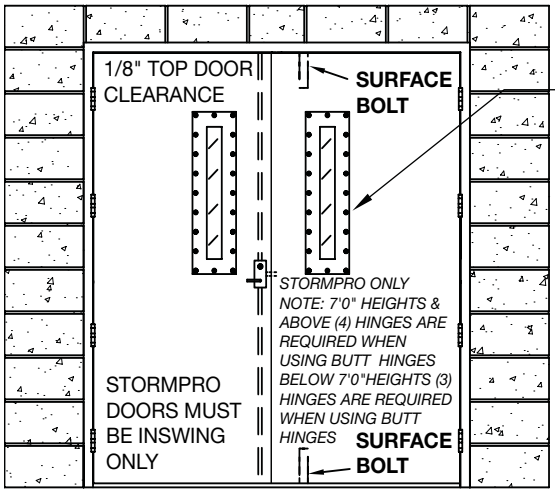
OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.

10 GAUGE FLAT PLATE ASTRAGAL STRIP IS OPTIONAL AND WOULD BE FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE ACTIVE OR INACTIVE DOOR.

Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components are shipped directly from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.



FIELD REPLACEABLE GLASS KIT MODULE PATENT ASSAABLOYDSS.COM/PATENT

FIELD REPLACEABLE KIT AND GLASS SHOWN WILL BE APPLIED TO DOORS WITH ORDERS RECEIVED ON OR AFTER JUNE 7, 2023.

4"X25 VISIBLE GLASS ONLY

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2-3/16" NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.

GLASS LOCATED APPROXIMATELY 11-11/16" FROM CENTER OF BEVELED LOCK EDGE TO VISIBLE GLASS. BOTTOM OF VISIBLE GLASS LOCATED 48-1/4" ABOVE FINISHED FLOOR STANDARD. BOTTOM OF VISIBLE GLASS LOCATED 43" ABOVE FINISHED FLOOR WHEN ADA COMPLIANCE IS REQUIRED.

MULTIPLE LITES NOT ALLOWED.

- 3/8" DOOR UNDERCUT
- 3/8" MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- BOTTOM STRIKES MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLTS TO PROPERLY ENGAUGE STRIKES. BOTTOM LOCK STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACE MOUNTED
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING ONLY	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

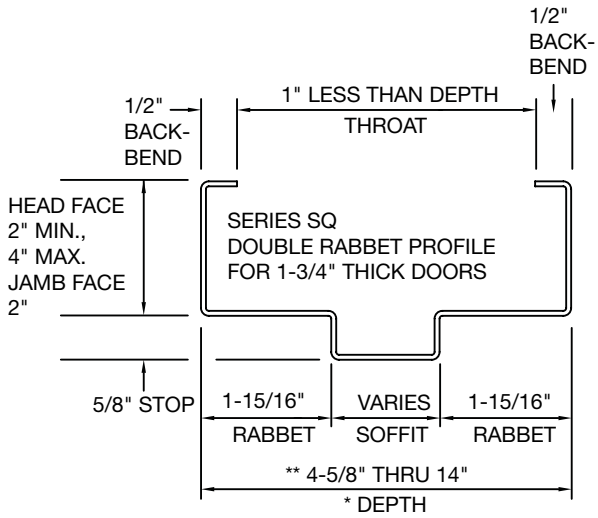
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™361 & 320

TORNADO RESISTANT COMMUNICATING PAIRS WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

UL SOLUTIONS CERTIFIED TO
ICC 500 (2020 & 2014) & FEMA P-361 (2021)

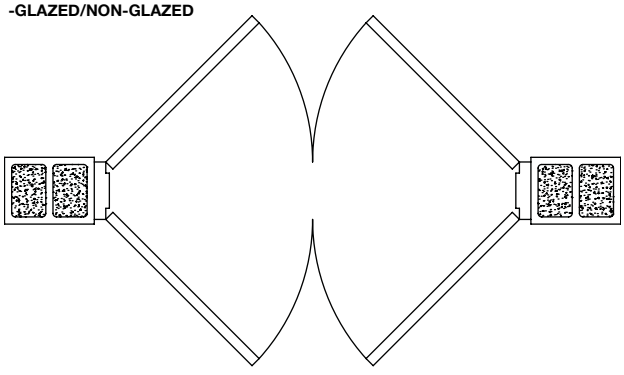
FRAME PROFILE OPTIONS AND PARAMETERS



PAIRS

EXTERIOR (THREAT) SIDE

ANY NON-CERTIFIED DOOR ASSEMBLY INCLUDING, BUT NOT LIMITED TO:
-HOLLOW
-METAL/WOOD/FRP FLUSH/ EMBOSSED/STILE & RAIL
-GLAZED/NON-GLAZED



STORMPRO DOOR ASSEMBLY WITH CORBIN RUSSWIN FE6600 OR SAGENT FM7300 SERIES LATCHING HARDWARE

INTERIOR (SAFE) SIDE

#ASSEMBLIES MAY BE LIMITED TO 6'0"X7'0" MINIMUM SIZE FOR COMPLIANCE WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

NOTES :
** FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS*

***MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 5". DEPTH MAY ALSO BE LIMITED BY STORMPRO DOORS AND NON STORMPRO DOOR'S HARDWARE.*

SMALLER DEPTHS MAY REQUIRE EXISTING OPENING ANCHORS TO BE LOCATED ON THE DOOR RABBET.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE. SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAUGE (OPTIONAL 12 GA.) HOT-DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.

FRAMES MAY BE KNOCK DOWN OR WELDED CORNERS.

HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241 AND PAGE 242.

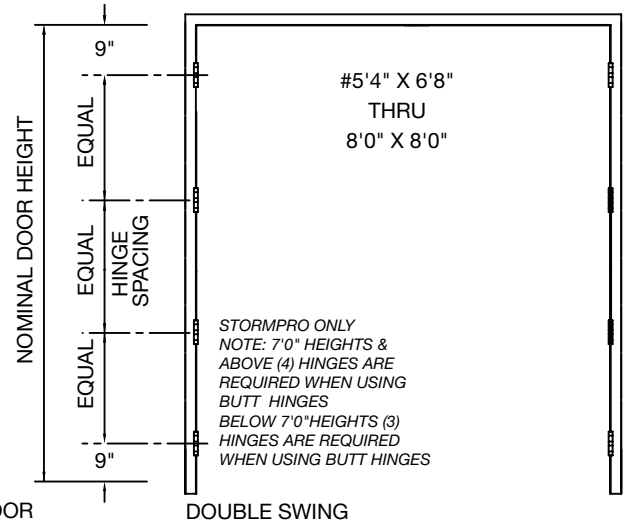
SEE FRAME ELEVATION BELOW FOR HINGE QUANTITIES, LOCATIONS AND OPENING SIZES. NON-STORMPRO FRAMES DO NOT REQUIRE THE SAME HARDWARE, QUANTITIES OR LOCATIONS AS THE STORMPRO FRAMES.

4-SIDED FRAMES ARE NOT ALLOWED.

WHEN DETERMINING FRAME DEPTH, CONSIDERATION SHOULD BE GIVEN REGARDING IF THE FRAME DEPTH WILL ACCOMMODATE HARDWARE INSTALLED ON BOTH THE PASSAGE PAIR OF DOORS AND THE STORMPRO PAIR.

MINIMUM FRAME DEPTHS SHOWN ON THIS PAGE ARE STORMPRO LIMITS, BUT MAY NOT ACCOMMODATE HARDWARE INSTALLED ON BOTH PAIRS.

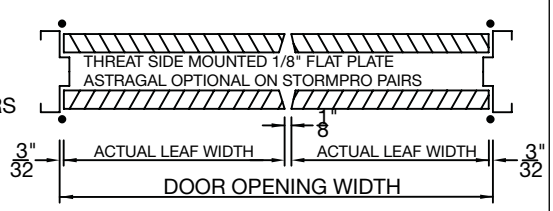
HORIZONTAL SECTIONS



DOUBLE SWING

3/8" STD DOOR UNDERCUT 3/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE.

STORMPRO PAIRS INSWING ONLY



SEE PAGE 239 AND/ OR PAGE 240 FOR ALL ANCHOR LOCATIONS

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4”STORMPRO™SHUTTER

TORNADO RESISTANT SINGLES WITH CORBIN RUSSWIN FE6700 OR SARGENT FM6100 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL “SAFE” ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) “ICC/NSSA Standard for the Design and Construction of “Storm Shelters”
- FEMA P-361 (2021) “Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms”

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR LOCATIONS.

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOOR:
2’-6” X 3’-0” MIN. & 4’-0” X 6’-8” MAX. LEAF SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS WITH 10 GA. LINER. STEEL STIFFENED CORE IS STANDARD. POLYSTYRENE CORE IS OPTIONAL.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

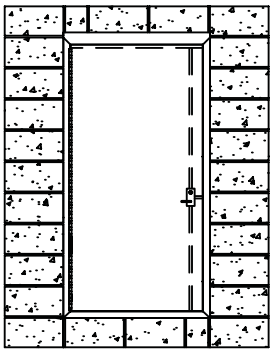
HINGE NOTES:
HEIGHTS FROM 3’0” THRU 5’0” WILL HAVE (3) MORTISE BUTT HINGE PREPS. HEIGHTS GREATER THAN 5’0” THRU 6’8” WILL HAVE (4) MORTISE BUTT HINGE PREPS.

CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/ HOLDERS, VIEWERS, KICK PLATES, AND COORDINATORS.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR STEEL STIFFENED AND HONEYCOMB CORE DOORS ONLY.

REFERENCE STORMPRO 361 TORNADO RESISTANT DOOR AND FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI-POINT LOCK CONSTRUCTION (page 214 & page 216 FOR SIZES GREATER THAN 6’8” IN HEIGHT).

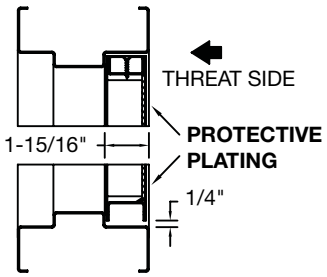


- **1/4” UNDERCUT ONLY**
- **SILL MUST BE LEVEL & FRAME MUST BE INSTALLED SQUARE & PLUMB TO ALLOW SHUTTER TO FUNCTION PROPERLY.**
- **SHUTTER AND FRAME MUST BE ORDERED AT THE SAME TIME.**

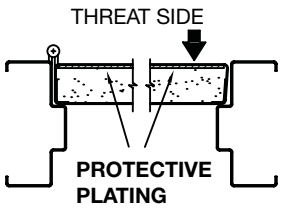
SHUTTER & WINDOW ASSEMBLY OPTION

- **INSWING SHOWN ON EXTERIOR WALL**
- **BEAD SET TO STOP-POCKET TO BE SET IN THE FIELD**
- **GLASS BY OTHERS, AND IS NOT REQUIRED TO BE IMPACT RESISTANT.**

VERTICAL SECTION

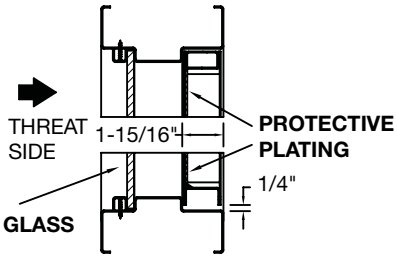


HORIZONTAL SECTION

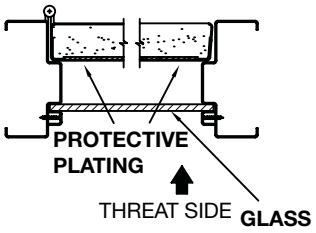


INSWING OR OUTSWING

VERTICAL SECTION



HORIZONTAL SECTION



ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

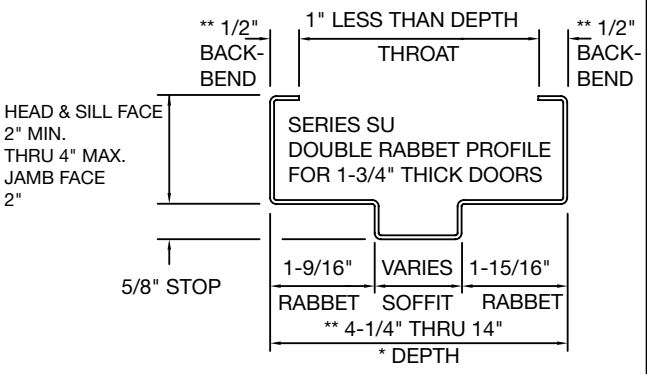
FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

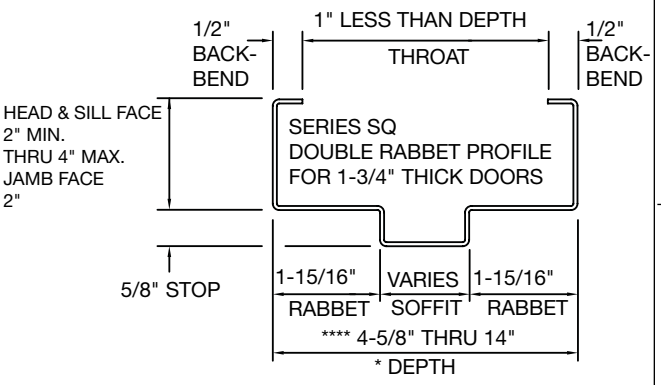
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

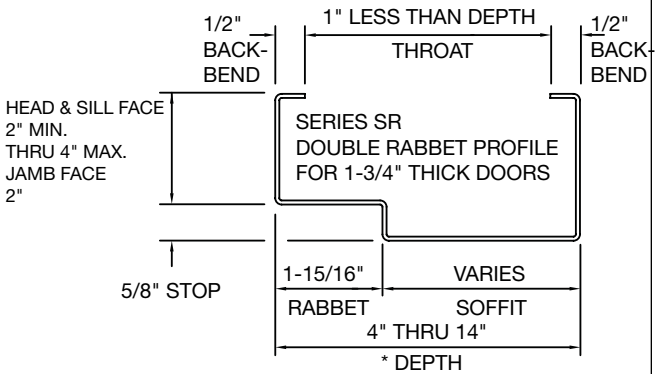
1-3/4"STORMPRO™SHUTTER

TORNADO RESISTANT COMMUNICATING PAIRS WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI POINT LOCK

FRAME PROFILE OPTIONS AND PARAMETERS







NOTES :
** FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS*

***MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 4-5/8".*

***** BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".*

******MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 5".*

SMALLER DEPTHS MAY REQUIRE EXISTING OPENING ANCHORS TO BE LOCATED ON THE DOOR RABBET.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE. SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

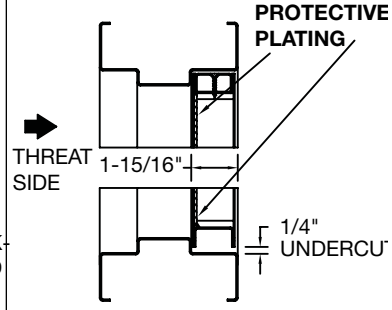
FRAMES ARE 14 GAUGE (OPTIONAL 12 GA.) HOT-DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.

FRAMES WILL HAVE WELDED CORNERS.

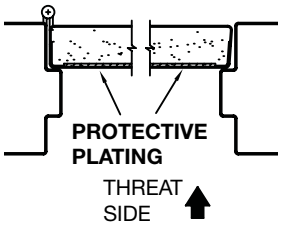
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE SHOWN ON PAGE 241 AND PAGE 242.

REFERENCE STORMPRO 361 TORNADO RESISTANT DOOR AND FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 CONCEALED MULTI-POINT LOCK CONSTRUCTION (PAGE 214 & PAGE 216 FOR SIZES GREATER THAN 6'8" IN HEIGHT).

VERTICAL SECTION

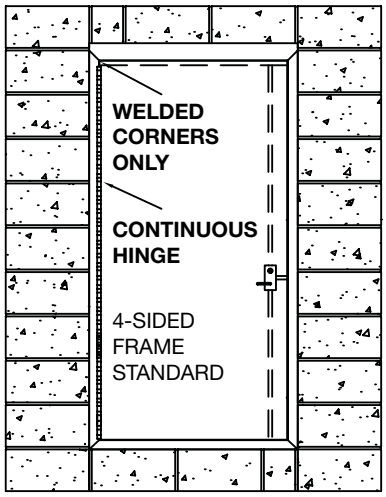


HORIZONTAL SECTION



INSWING OR OUTSWING

SEE PAGE 239 AND/OR PAGE 240 FOR ALL ANCHOR LOCATIONS

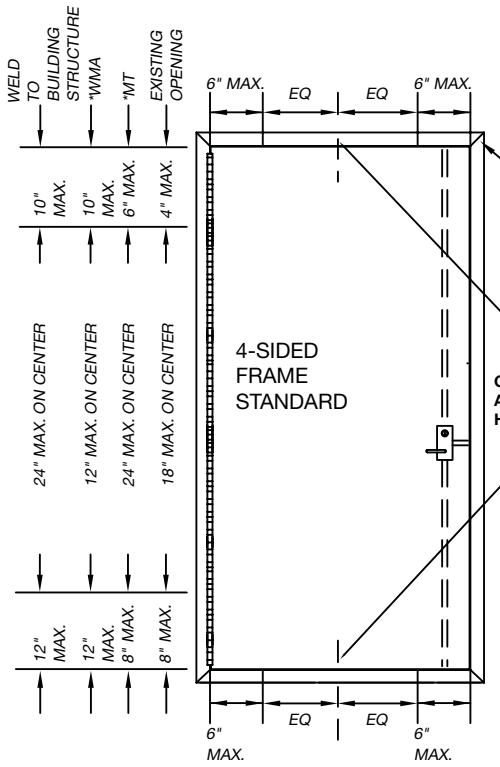


1-3/4"STORMPRO™SHUTTER

TORNADO RESISTANT SINGLES WITH CORBIN RUSSWIN FE6700 OR SARGENT FM6100 CONCEALED MULTI POINT LOCK

UL SOLUTIONS CERTIFIED TO ICC 500 (2020 & 2014) & FEMA P-361 (2021)

FRAME ANCHORING



WELDED CORNERS ONLY

THE CENTER LOCK BOLT & CENTERLINE OF LOCK JAMB STRIKE WILL BE LOCATED AT THE VERTICAL CENTER OF THE OPENING AS A STANDARD.

CENTER 3RD ANCHOR IN FRAME HEAD AND SILL.

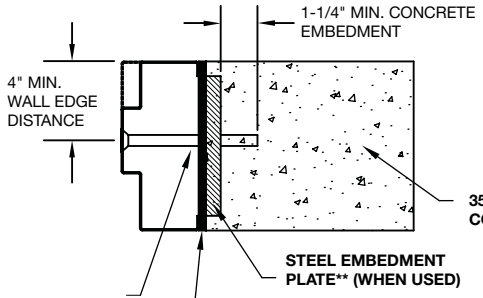
SEE PAGE 239 FOR WIRE & MASONRY "T" ANCHORS, ANCHOR BOLTS & CAP PLUGS.

FRAME HEADS & SILL ANCHORS
EXISTING OPENING DIMPLES W/ BOLTS, SCREWS OR WELD TO BUILDING STRUCTURE

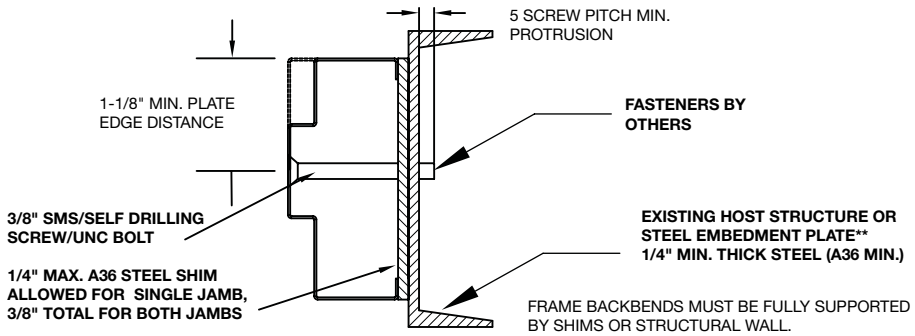
3 ANCHORS PER HEAD & SILL 2'6" THRU 4'0".

** THE THROAT OF FRAME JAMBS MUST BE FULLY GROUTED WITH MIN. 1800 PSI GROUT WHEN INSTALLING WITH WIRE OR MASONRY T ANCHORS.*

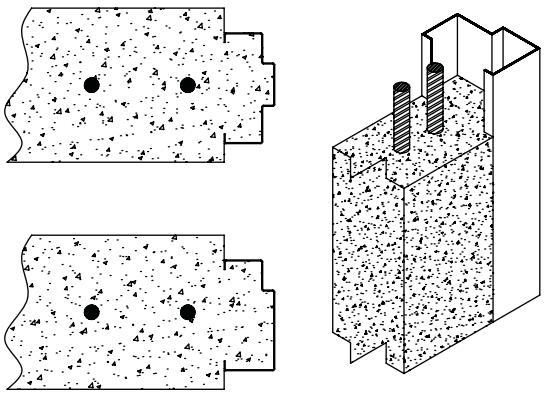
"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WELDED TO BUILDING STRUCTURE"



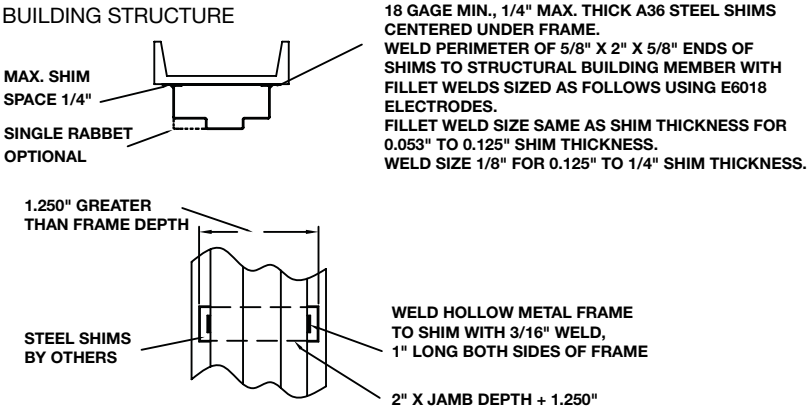
***ANCHORS MAY BE INSTALLED THROUGH EXISTING EMBEDMENT PLATES, PROVIDED THAT DRILLING THROUGH EXISTING EMBEDMENT PLATES IS PERMISSABLE AS VERIFIED BY OTHERS. ANY EXISTING EMBEDMENT PLATES SHALL BE DESIGNED AND VERIFIED BY OTHERS.*



FRAME POURED IN PLACE WITH THE WALL DOES NOT REQUIRE ANCHORS



ANCHORING BY WELDING TO BUILDING STRUCTURE



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™SHUTTER

TORNADO RESISTANT PAIRS WITH CORBIN RUSSWIN FE6700 OR SARGENT FM6100 SERIES CONCEALED MULTI POINT LOCK

SUGGESTED USE:

- DISASTER AND TORNADO SHELTERS
- STORM SHELTERS
- COMMUNITY SHELTERS
- SCHOOL SHELTERS
- SCHOOL SAFE ROOMS
- RESIDENTIAL "SAFE" ROOMS

UL SOLUTIONS CERTIFIED TO:

- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOOR:
MIN. 5'-2" X 3'-0", MAX. 8'-2" X 6'-8" OPENING SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS WITH 10 GAUGE LINER, STIFFENER & STEEL STIFFENED CORE. PAIRS CAN BE INSWING OR OUTSWING.

LOCK FOR EACH SHUTTER DOOR:
CORBIN RUSSWIN FE6700 SERIES OR SARGENT FM6100 SERIES

HINGE NOTES:
HEIGHTS FROM 4'0" THRU 5'0" WILL HAVE (3) MORTISE BUTT HINGE PREPS. HEIGHTS GREATER THAN 5'0" THRU 6'8" WILL HAVE (4) MORTISE BUTT HINGE PREPS.

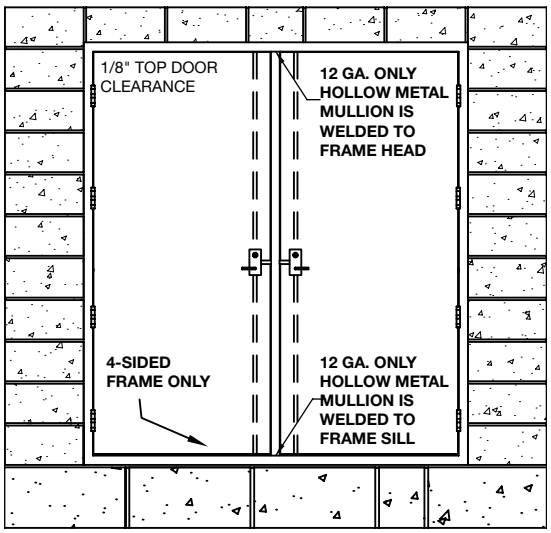
CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, KICK PLATE:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241

HINGES, WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED HINGES AND OPTIONAL HARDWARE ARE LISTED ON PAGE 242

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HOURS IN ACCORDANCE, WITH UL 10B, UL 10C, & NFPA 252.

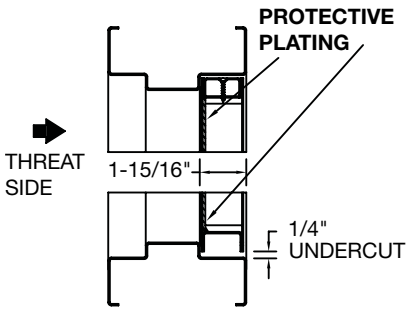
REFERENCE STORMPRO 361 TORNADO RESISTANT DOOR AND FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 SERIES CONCEALED MULTI-POINT LOCK CONSTRUCTION (PAGE 222 FOR SIZES GREATER THAN 6'8" IN HEIGHT).

SEE PAGE 235 & PAGE 239 FOR ALL ANCHOR LOCATIONS & DETAILS.

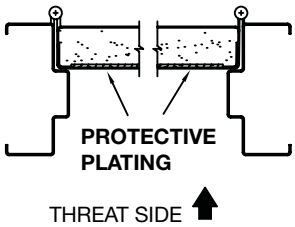


- 1/4" DOOR UNDERCUT. 1/4" MAX. FROM BOTTOM OF SHUTTER TO TOP OF LOCK STRIKE.
- FRAMES MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW SHUTTERS TO FUNCTION PROPERLY.
- BOTTOM STRIKES MUST BE ATTACHED TO FRAME SILL AND ALLOW BOTTOM BOLTS TO PROPERLY ENGAUGE STRIKES.
- SHUTTERS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

VERTICAL SECTION



HORIZONTAL SECTION



GLASS MAY BE INSTALLED IN OPPOSITE FRAME RABBET AS AN OPTION. GLASS BY OTHERS, AND IS NOT REQUIRED TO BE IMPACT RESISTANT.

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

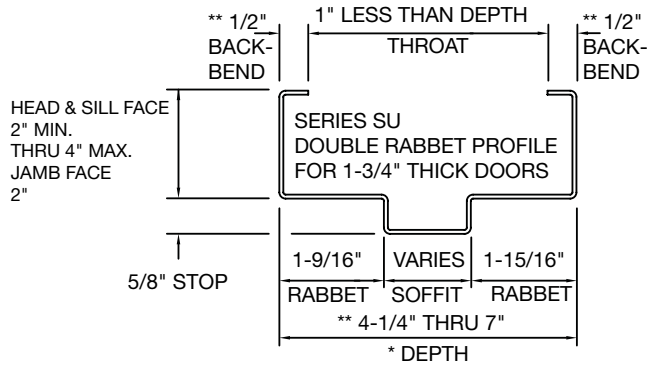
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

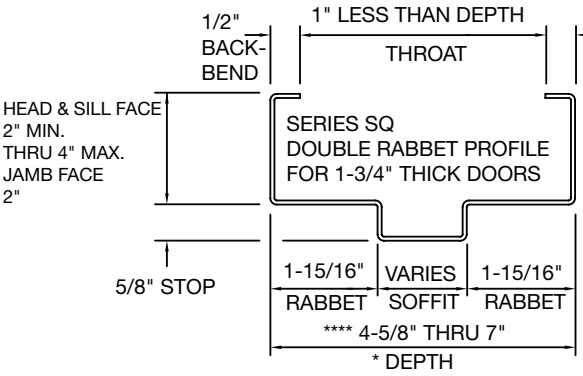
1-3/4"STORMPRO™SHUTTER

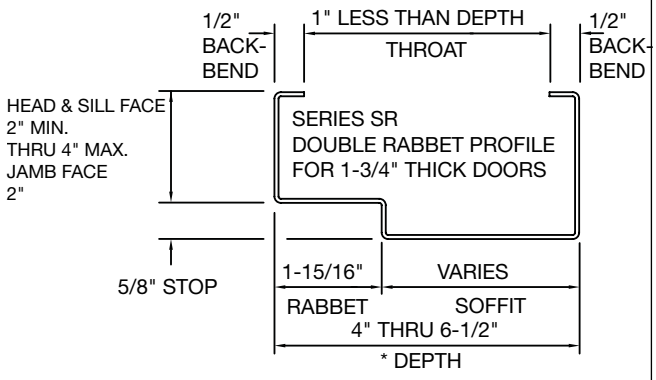
TORNADO RESISTANT PAIRS WITH CORBIN RUSSWIN FE6700 OR SARGENT FM6100 SERIES CONCEALED MULTI POINT LOCK

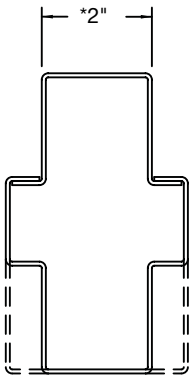
UL SOLUTIONS CERTIFIED TO
ICC 500 (2020 & 2014) & FEMA P-361 (2021)

FRAME PROFILE OPTIONS AND PARAMETERS









**ALL OTHER MULLION PROFILE DIMENSIONS TO SUIT PERIMETER FRAME PROFILE*

NOTES :
** FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS*

***MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 4-5/8".*

***** BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".*

******MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 5".*

SMALLER DEPTHS MAY REQUIRE EXISTING OPENING ANCHORS TO BE LOCATED ON THE DOOR RABBET.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE.
SEE PAGE 235 FOR ALL ANCHOR LOCATIONS & DETAILS.

PERIMETER FRAME COMPONENTS ARE 14 GAUGE (OPTIONAL 12 GA.) HOT-DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.

MULLIONS ARE 12 GAUGE ONLY HOT-DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.

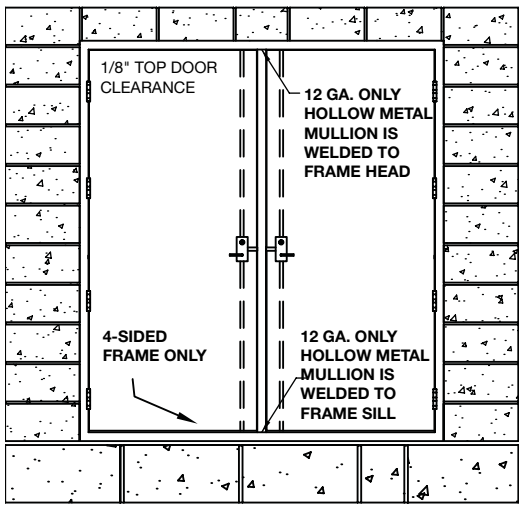
FRAMES WILL HAVE WELDED CORNERS.

HEIGHTS FROM 3'0" THRU 5'0 WILL HAVE (3) HINGE PREPS. HEIGHTS OVER 5'0 THRU 6'8" WILL HAVE (4) HINGE PREPS.

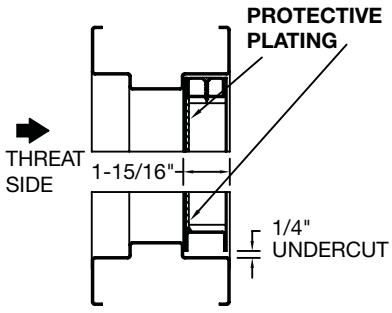
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241 AND PAGE 242.

REFERENCE STORMPRO 361 TORNADO RESISTANT DOOR AND FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 CONCEALED MULTI-POINT LOCK CONSTRUCTION (PAGE 222 FOR SIZES GREATER THAN 6'8" IN HEIGHT).

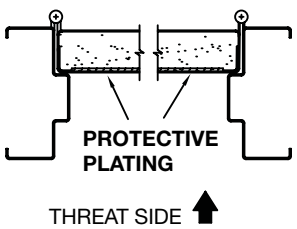
SEE & D17A-8 FOR ALL ANCHOR LOCATIONS & DETAILS.



VERTICAL SECTION



HORIZONTAL SECTION

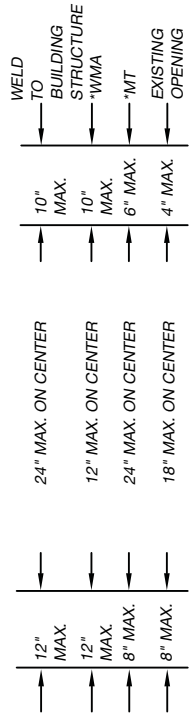


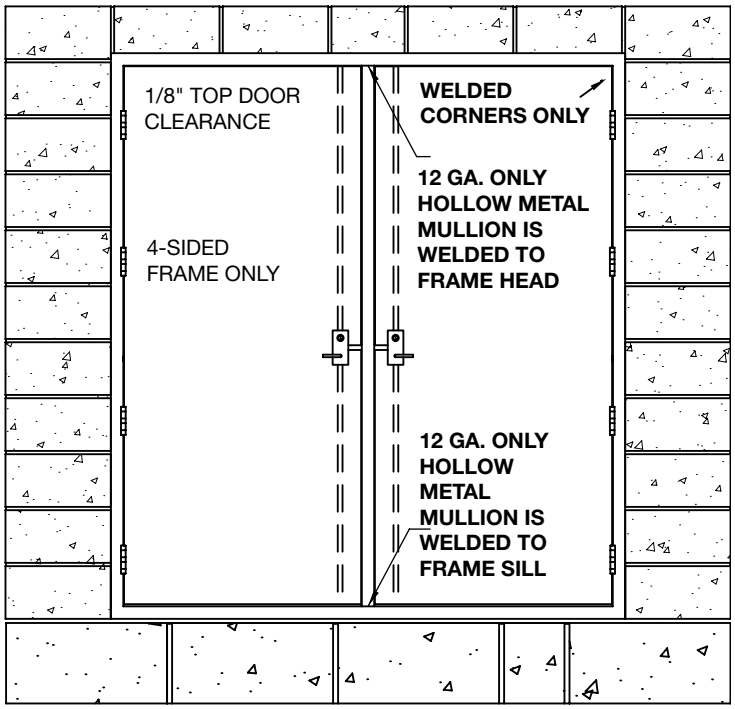
1-3/4"STORMPRO™SHUTTER

TORNADO RESISTANT PAIRS WITH CORBIN RUSSWIN FE6700 OR SARGENT FM6100 SERIES CONCEALED MULTI POINT LOCK

UL SOLUTIONS CERTIFIED TO ICC 500 (2020 & 2014) & FEMA P-361 (2021)

FRAME ANCHORING : SEE PAGE 239 FOR OTHER ANCHOR DETAILS





FRAME HEADS & SILL ANCHORS LOCATIONS:

EXISTING OPENING DIMPLES W/ BOLTS, SCREWS OR WELD TO BUILDING STRUCTURE UP TO & INCLUDING 6'0" WIDE: MIN. OF (6) ANCHORS LOCATED FROM CENTER LINE OF THE DOOR MEETING EDGES BOTH SIDES 8", 15" AND 6" FROM DOOR JAMB RABBET.

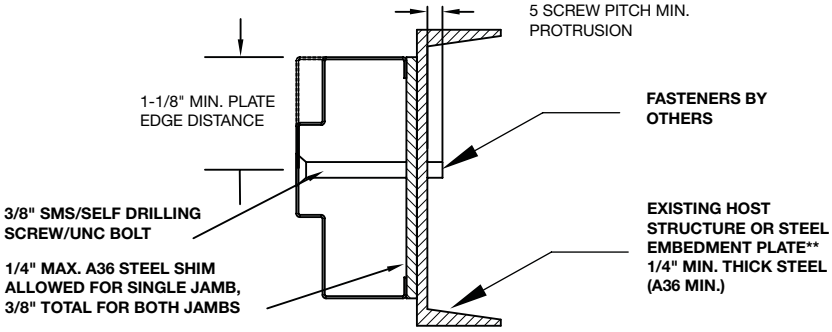
GREATER THAN 6'0" THRU 7'0" WIDE: MIN. OF (8) ANCHORS LOCATED FROM CENTER LINE OF THE DOOR MEETING EDGES BOTH SIDES 8", 15", 22" & 6" FROM DOOR JAMB RABBET.

GREATER THAN 7'0" THRU 8'0" WIDE: MIN. OF (8) ANCHORS LOCATED FROM CENTER LINE OF THE DOOR MEETING EDGES BOTH SIDES 8", 15", 24" & 6" FROM DOOR JAMB RABBET.

NOTE: FOR UNEQUAL WIDTH PAIRS, HEAD & SILL ANCHOR QUANTITY/ SPACING FOR EACH SIDE OF THE CENTERLINE OF THE DOOR

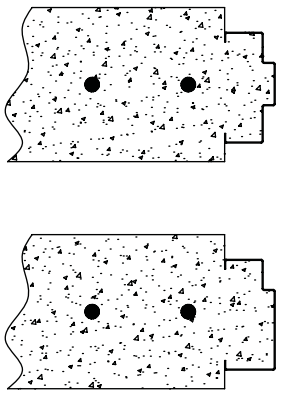
***ANCHORS MAY BE INSTALLED THROUGH EXISTING EMBEDMENT PLATES, PROVIDED THAT DRILLING THROUGH EXISTING EMBEDMENT PLATES IS PERMISSABLE AS VERIFIED BY OTHERS. ANY EXISTING EMBEDMENT PLATES SHALL BE DESIGNED AND VERIFIED BY OTHERS.*

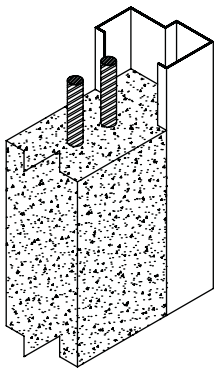
1/4" MAX. A36 STEEL SHIM ALLOWED FOR SINGLE JAMB, 3/8" TOTAL FOR BOTH JAMBS. FRAME BACKBENDS MUST BE FULLY SUPPORTED BY SHIMS OR STRUCTURAL WALL.



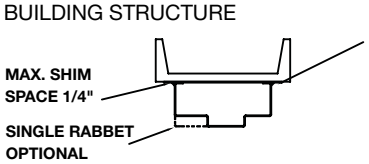
FRAME BACKBENDS MUST BE FULLY SUPPORTED BY SHIMS OR STRUCTURAL WALL.

FRAME POURED IN PLACE WITH THE WALL DOES NOT REQUIRE ANCHORS

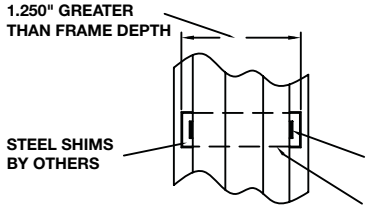




ANCHORING BY WELDING TO BUILDING STRUCTURE



18 GAGE MIN., 1/4" MAX. THICK A-36 STEEL SHIMS CENTERED UNDER FRAME.
WELD PERIMETER OF 5/8" X 2" X 5/8" ENDS OF SHIMS TO STRUCTURAL BUILDING MEMBER WITH FILLET WELDS SIZED AS FOLLOWS USING E6018 ELECTRODES.
FILLET WELD SIZE SAME AS SHIM THICKNESS FOR 0.053" TO 0.125" SHIM THICKNESS.
WELD SIZE 1/8" FOR 0.125" TO 1/4" SHIM THICKNESS.



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4”STORMPRO™320 & 361

TORNADO RESISTANT FLUSH DOOR & FRAME UL SOLUTIONS CERTIFIED TO ICC 500 (2020 & 2014), FEMA P-361 (2021) & FEMA P-320 (2021)

SUGGESTED USE:
RESIDENTIAL AND SMALL BUSINESS“SAFE” ROOMS

UL SOLUTIONS CERTIFIED TO:
- ICC 500(2020 & 2014) “ICC/NSSA STANDARD FOR THE DESIGN AND CONSTRUCTION OF “STORM SHELTERS”
- FEMA P-361 (2021) “SAFE ROOMS FOR TORNADOES & HURRICANES: GUIDANCE FOR COMMUNITY AND RESIDENTIAL SAFE ROOMS”
- FEMA P-320 (2021) “TAKING SHELTER FROM THE STORM: BUILDING & SAFE ROOM FOR YOUR HOME OR SMALL BUSINESS”

DOOR:
MIN. 2’-8” X 6’-8”, MAX. 3’-0” X 7’-0” LEAF SIZE, 14 GA. A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, 12 GA. TOP & BOTTOM CHANNELS WITH 14 GA. TOP & BOTTOM CAPS. EDGE SEAMS ARE FULLY WELDED WITH A 12 GA. FULL LENGTH STIFFENER ALONG THE LOCK EDGE.
16 GAUGE INTERMEDIATE STIFFENERS ARE SPACED A MAX. OF 6” APART. POLYSTYRENE FILLER IS USED BETWEEN THE STIFFENERS. DOORS HAVE SQUARE LOCK AND HINGE EDGES.

HARDWARE PROVIDED (SHIPPED LOOSE):
PASSAGE SET LOCK & DEADBOLTS
(1) SARGENT 10 LINE GRADE 1 PASSAGE SET. 28-1OU15XLLX26DLHR
(3) MEDECO MAXUM COMMERCIAL HIGH SECURITY DEADBOLTS. 11C602T-26-DL-T-N A, KA3

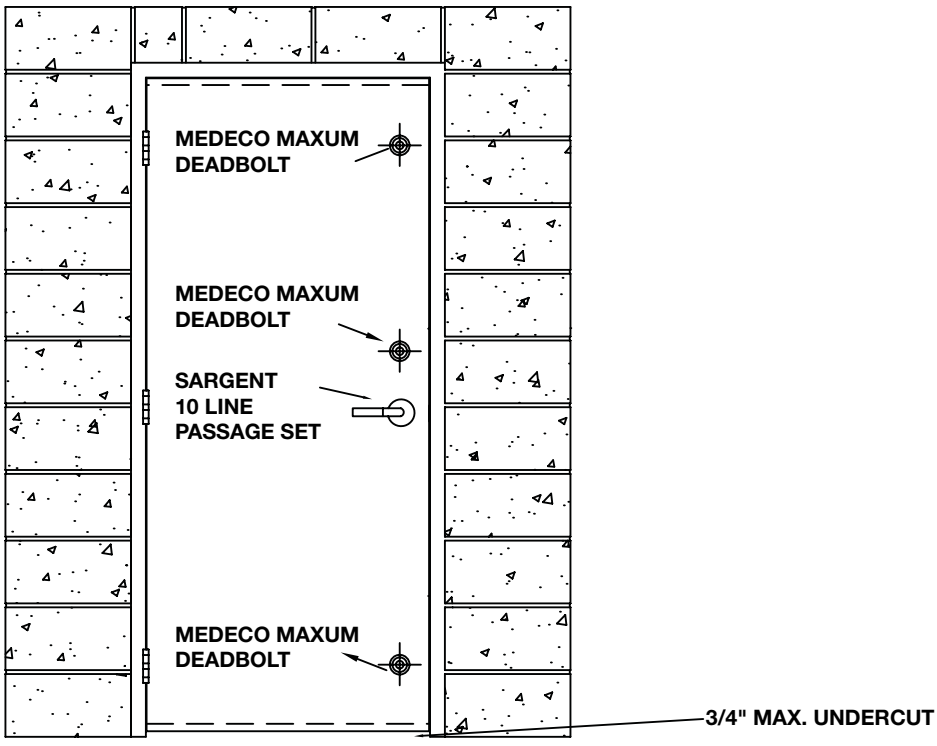
HINGES:
(3) MCKINNEY SP3786 26D (4-1/2” X 4-1/2” X .180”) WITHOUT QC OPTION

OPTIONAL HARDWARE AND ACCESSORIES NOT PROVIDED:
CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, AND KICK PLATE.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE PAGE 241.

WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED OPTIONAL HARDWARE IS LISTED ON PAGE 242.

DOOR SWING :
INSWING
OR OUTSWING

FIRE RATING :
NOT AVAILABLE



ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

1-3/4" STORMPRO™320 & 361 WITH GLASS

TORNADO RESISTANT FLUSH DOOR & FRAME UL SOLUTIONS CERTIFIED TO ICC 500 (2020 & 2014), FEMA P-361 (2021) & FEMA P-320 (2021)

SUGGESTED USE:
RESIDENTIAL AND SMALL BUSINESS"SAFE" ROOMS

UL SOLUTIONS CERTIFIED TO:
- ICC 500(2020 & 2014) "ICC/NSSA STANDARD FOR THE DESIGN AND CONSTRUCTION OF "STORM SHELTERS"
- FEMA P-361 (2021) "SAFE ROOMS FOR TORNADOES & HURRICANES: GUIDANCE FOR COMMUNITY AND RESIDENTIAL SAFE ROOMS"
- FEMA P-320 (2021) "TAKING SHELTER FROM THE STORM: BUILDING & SAFE ROOM FOR YOUR HOME OR SMALL BUSINESS"

DOOR:
MIN. 2'-8" X 6'-8", MAX. 3'-0" X 7'-0" LEAF SIZE, 14 GA. A60 GALVANNEALED OR COLD ROLLED FACE SHEETS, 12 GA. TOP & BOTTOM CHANNELS WITH 14 GA. TOP & BOTTOM CAPS. EDGE SEAMS ARE FULLY WELDED WITH A 12 GA. FULL LENGTH STIFFENER ALONG THE LOCK EDGE. 16 GAUGE INTERMEDIATE STIFFENERS ARE SPACED A MAX. OF 6" APART. POLYSTYRENE FILLER IS USED BETWEEN THE STIFFENERS. DOORS HAVE SQUARE LOCK AND HINGE EDGES.

HARDWARE PROVIDED (SHIPPED LOOSE):
PASSAGE SET LOCK & DEADBOLTS
(1) SARGENT 10 LINE GRADE 1 PASSAGE SET. 28-1OU15XLLX26DLHR
(3) MEDECO MAXUM COMMERCIAL HIGH SECURITY DEADBOLTS. 11C602T-26-DL-T-N A, KA3

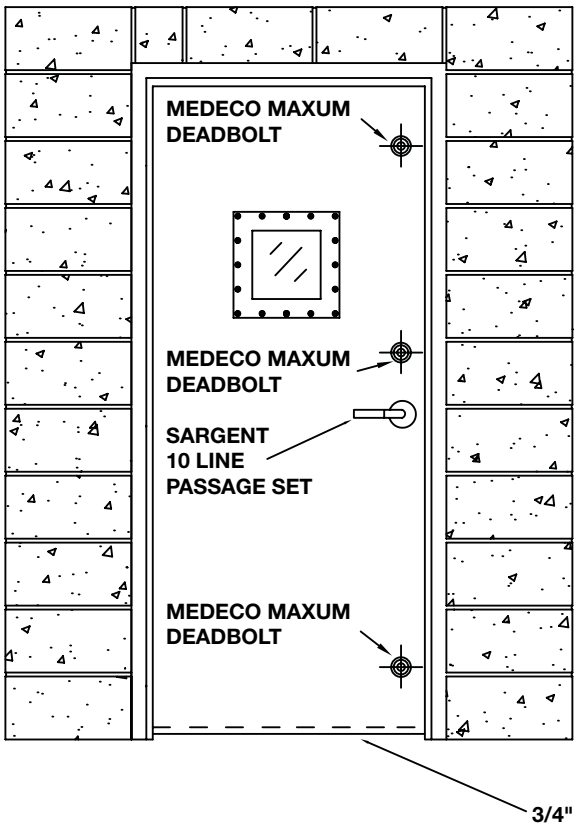
HINGES:
(3) MCKINNEY SP3786 26D (4-1/2" X 4-1/2" X .180")

OPTIONAL HARDWARE AND ACCESSORIES NOT PROVIDED:
CLOSERS, OPERATORS, SEALS, THRESHOLDS, DOOR POSITION SWITCHES, HOLDERS, STOPS/HOLDERS, VIEWERS, AND KICK PLATE.
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241.

WIRE HARNESS, AND ELECTRONIC POWER TRANSFER:
APPROVED OPTIONAL HARDWARE IS LISTED ON PAGE 242.

FIRE RATING :
NOT AVAILABLE

DOOR SWING :
INSWING
ONLY



*10"X10" VISIBLE GLASS ONLY
*GLASS & KIT FACTORY INSTALLED ONLY
*MULTIPLE LITES NOT ALLOWED
*LOCATED 60" ABOVE DOOR BOTTOM TO CENTERLINE OF GLASS WITH 3/4" UNDERCUT & CENTERED
IN DOOR WIDTH ONLY
* PATENT ASSAABLOYDSS.COM/PATENT
* INSWING ONLY

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

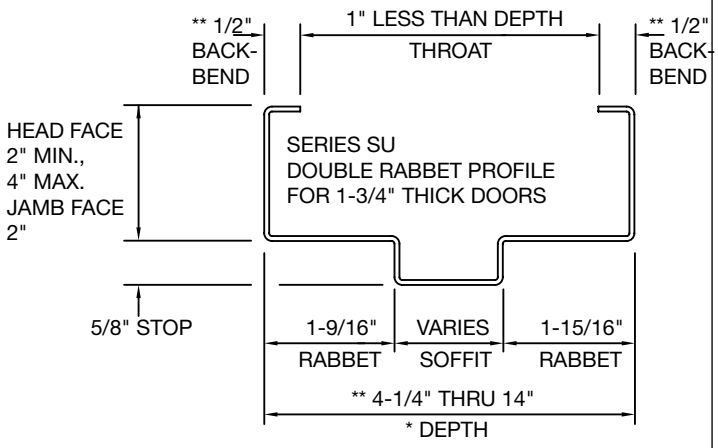
FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE

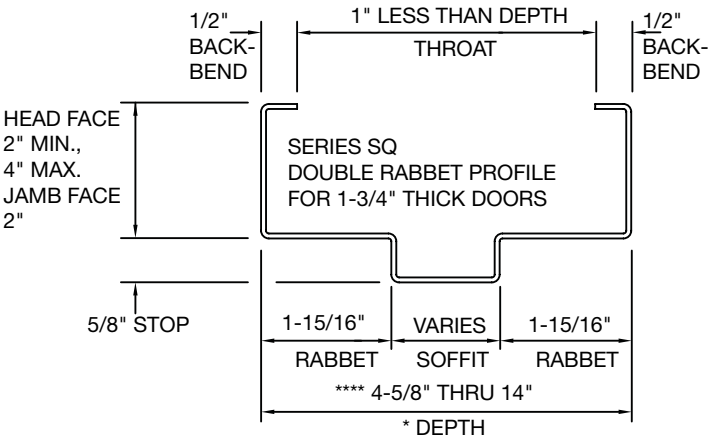
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

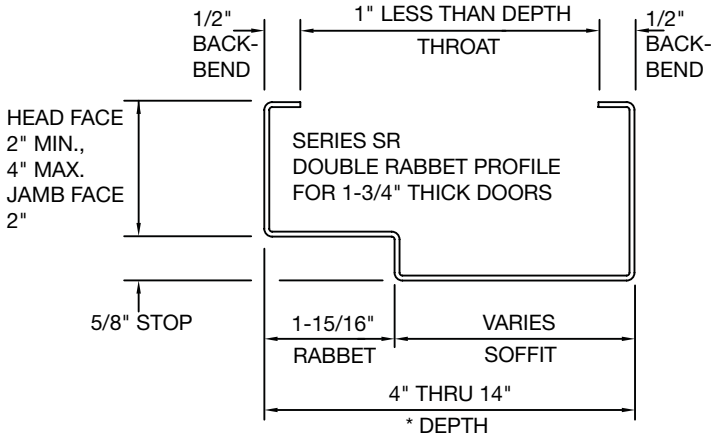
1-3/4"STORMPRO™320 & 361

TORNADO RESISTANT DOOR & FRAME UL SOLUTIONS CERTIFIED TO ICC 500(2020 & 2014), FEMA P-361 (2021) & FEMA P-320 (2021)

FRAME PROFILE OPTIONS AND PARAMETERS







NOTES :
** FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS*

***MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 4-5/8".*

***** BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".*

******MINIMUM DEPTH APPLIES TO ALL ANCHOR CONDITIONS EXCEPT EXISTING OPENING ANCHORS. MINIMUM DEPTH FOR EXISTING OPENING ANCHORS IS 5".*

SMALLER DEPTHS MAY REQUIRE EXISTING OPENING ANCHORS TO BE LOCATED ON THE DOOR RABBET.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE.

FRAMES WILL HAVE 10" MORTAR GUARD/JUNCTION BOXES COVERING EACH DEADBOLT STRIKE PREPARATION. DEADBOLT STRIKE PREPS ARE A 1" ROUND HOLE WITH REINFORCING WELDED TO THE THROAT OF THE FRAME. DEADBOLT STRIKE PREPS DO NOT REQUIRE STRIKES TO BE INSTALLED.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 16 GAUGE HOT-DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.

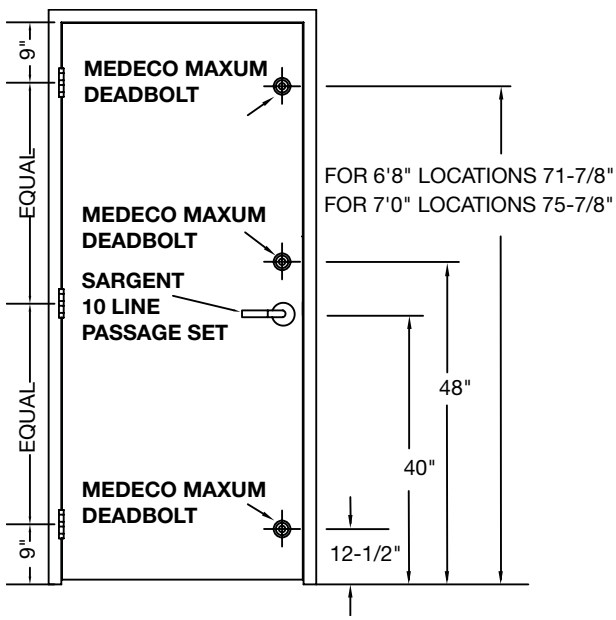
FRAMES MAY BE KNOCK DOWN OR WELDED CORNERS. (2) 12 GA. HIGH FREQUENCY HINGE STRAPS PER HINGE REINFORCEMENT.

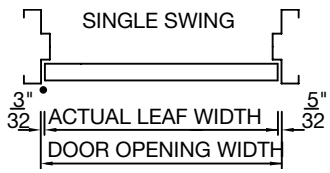
OPTIONAL (1) 10"X10" VISIBLE GLASS LOCATED 60" ABOVE DOOR BOTTOM WITH 3/4 " UNDERCUT TO CENTER OF GLASS, CENTERED IN DOOR WIDTH AVAILABLE. OPTIONAL DOOR WITH GLASS AVAILABLE AS INSWING ONLY.

APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGE 241 AND PAGE 242.

SEE PAGE 239 & PAGE 240 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

HORIZONTAL SECTIONS





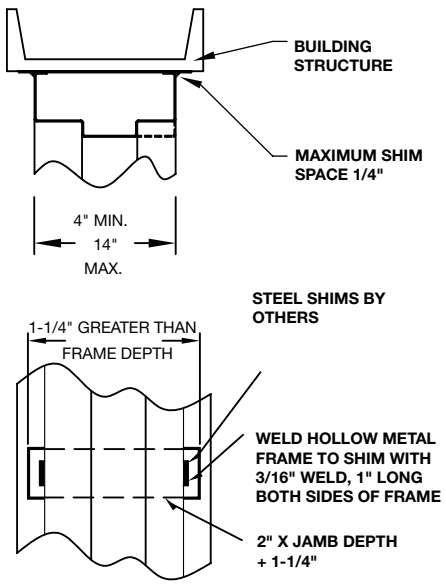
STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341
FEMA 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-284	+/-341

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™ 320 & 361

TORNADO RESISTANT DOOR & FRAME ANCHOR LOCATIONS

SEE INDIVIDUAL LATCHING HARDWARE PAGES FOR ICC 500 EDITION COMPLIANCE DATES. ANCHORING BY WELDING TO BUILDING STRUCTURE



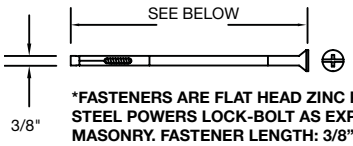
18 GA. MIN. -1/4" MAX. THICK A36 STEEL SHIMS UNDER FRAME. WELD PERIMETER OF 5/8" X 2" X 5/8" ENDS OF SHIMS TO STRUCTURAL BUILDING MEMBER WITH FILLET WELDS SIZED AS FOLLOWS USING E6018 ELECTRODES. FILLET WELD SIZE SAME AS SHIM THICKNESS FOR 0.053" TO 0.125" SHIM THICKNESS. WELD SIZE 1/8" FOR 0.125" TO 1/4" SHIM THICKNESS.

FRAME HEAD (AND OPTIONAL FRAME SILL) ANCHOR LOCATIONS

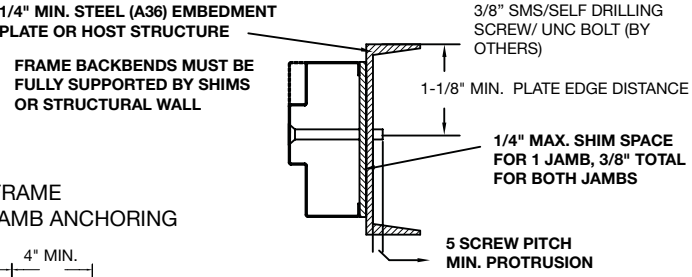
	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
PAIRS	**APPROVED MIN. OPENING SIZE UP TO AND INCLUDING MAX. OPENING SIZE**	WELDED TO THE BUILDING STRUCTURE	MINIMUM OF 5 WELD LOCATIONS & MUST WELD ON BOTH FACES OF THE FRAME HEAD & SILL AT EACH LOCATION; ONE LOCATION AT THE CENTERLINE OF THE DOOR MEETING EDGES. 2 ARE LOCATED 6" FROM THE CENTERLINE OF THE DOOR MEETING EDGES & 2 WELDS ARE LOCATED 6" FROM EACH DOOR JAMB RABBET.
SINGLES	**APPROVED MIN. OPENING SIZE UP TO AND INCLUDING MAX. OPENING SIZE**	WELDED TO THE BUILDING STRUCTURE	MINIMUM OF 2 WELD LOCATIONS REQUIRED. LOCATIONS ARE 6" FROM EACH DOOR JAMB RABBET. MUST WELD ON BOTH FACES OF THE FRAME HEAD & SILL AT EACH LOCATION.

	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
SINGLES & PAIRS	**APPROVED MIN. OPENING SIZE UP TO AND INCLUDING MAX. OPENING SIZE**	WELDED TO THE BUILDING STRUCTURE	WELD LOCATIONS, MAXIMUM OF 12" FROM THE SILL, MAX. 10" FROM THE HEAD RABBET AND 24" MAX. ON CENTER. MUST WELD ON BOTH FACES OF THE FRAME AT EACH LOCATION.

SEE APPROPRIATE PAGES TO MATCH HARDWARE AND SIZE INFORMATION. FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN WELDED TO BUILDING STRUCTURE.

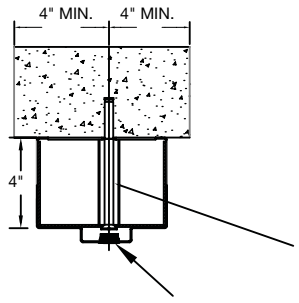


***FASTENERS ARE FLAT HEAD ZINC PLATED CARBON STEEL POWERS LOCK-BOLT AS EXPANSION BOLTS FOR MASONRY. FASTENER LENGTH: 3/8" X 6" STEEL BOLT**



SCREW ATTACHMENT THROUGH EXISTING EMBEDMENT PLATE PROVIDED THAT DRILLING THROUGH PLATE IS PERMISSIBLE AS VERIFIED BY OTHERS.

4" FACE FRAME HEAD ANCHORING



NOTE: MINIMUM PRECAST OR CMU WALL EDGE DISTANCE 4" TO CENTER OF BOLT HOLE @ HEAD OR HEAD & JAMBS.

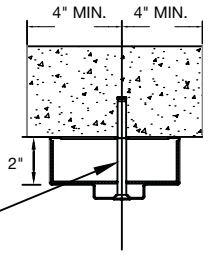
NOTE: 1-1/4" MINIMUM BOLT EMBEDMENT

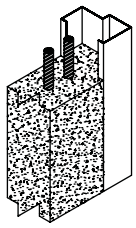
3/8" X 6" POWERS LOK-BOLT AS EXPANSION BOLT (SHIPS LOOSE FOR FIELD INSTALLATION)

VINYL CAP PLUG

VINYL CAP PLUG (BAG OF 10) PART # 6111049
VINYL CAP PLUG (BAG OF 100) PART # 6111050
(SHIPS LOOSE FOR FIELD INSTALLATION)

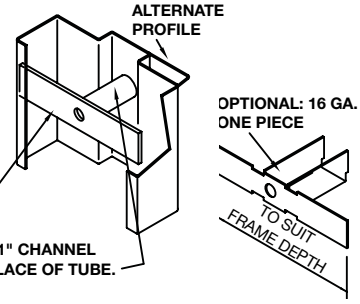
2" FACE FRAME HEAD & JAMB ANCHORING



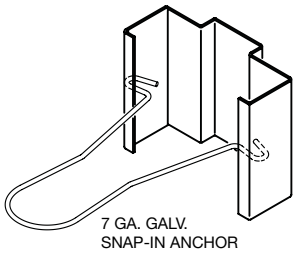


POURED IN PLACE WALL

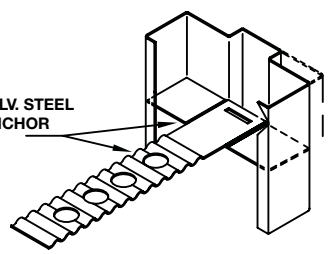
EXISTING OPENING -PIPE & PLATE FRAME NOT REQUIRED TO BE GROUTED



MASONRY - WIRE ANCHORS



MASONRY T ANCHORS



THE THROAT OF THE FRAME JAMBS MUST BE FULLY GROUTED WITH MIN. 1800 PSI GROUT.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4"STORMPRO™320 & 361

TORNADO RESISTANT DOOR & FRAME ANCHOR LOCATIONS.

SEE INDIVIDUAL LATCHING HARDWARE PAGES FOR ICC 500 EDITION COMPLIANCE DATES.

HEAD (AND OPTIONAL SILL WHERE AVAILABLE) ANCHOR LOCATIONS FOR FM7300/FE6600, FM8700, FE5400S, FM-PE8700, PED5400 FE & (3) MEDECO DEADBOLTS ASSEMBLIES

NOTE: FOR UNEQUAL WIDTH PAIRS; ANCHOR QUANTITY/SPACING FOR EACH SIDE OF THE CENTERLINE OF THE DOOR MEETING EDGES SHALL BE DETERMINED AS THOUGH THE LEAF SIZE WAS PART OF AN EQUAL

	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
PAIRED OPENING	Approved min. opening size up to & including 6'0" X 7'0"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/ UNC Bolt	Minimum of 6 anchors. On both sides of the centerline of the door meeting edges: One each located at 8" and 15" from the centerline of the door meeting edges. 2 anchors required 6" from each door jamb rabbet.
	Greater than 6'0" x 7'0" and up to and including 7'0" X 7'0"	Existing Wall Anchors Powers 3/8"x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/ UNC Bolt	Minimum of 8 anchors. On both sides of the centerline of the door meeting edges: One each located at 8", 15", and 22" from the centerline of the door meeting edges. 2 anchors required 6" from each door jamb rabbet.
	Greater than 7'0" x 7'0" and up to and including 8'0" X 8'Qn or 3/8" SMS/ Self	Existing Wall Anchors Powers 3/8"x 6" Lok-Bolt AS Sleeve Anchor Drilling Screw/UNC Bolt	Minimum of 8 anchors. On both sides of the centerline of the door meeting edges: One each located at 8", 15" and 24" from the centerline of the door meeting edges. 2 anchors required 6" from each door iamb rabbet.
SINGLE OPENING	Approved min. opening size up to & including x 6" 4'0" X 8'0" or 3/8" SMS/ Self UNC Bolt	Existing Wall Anchors Powers 3/8"Lok-Bolt AS Sleeve Anchor Drilling Screw/ UNC Bolt	Minimum of 2 anchors required. Locations are 6" from each door jamb rabbet. When anchors are located in the door rabbet and latching hardware is FM7300/FE6600, the anchor at the lock jamb side will be located at 9".

ANCHORS MAY BE INSTALLED THROUGH EXISTING EMBEDMENT PLATES, PROVIDED THAT DRILLING THROUGH EXISTING EMBEDMENT PLATES IS PERMISSIBLE AS VERIFIED BY OTHERS. ANY EXISTING EMBEDMENT PLATES SHALL BE DESIGNED AND VERIFIED BY OTHERS. FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS. JAMB ANCHOR LOCATIONS FOR FM7300/ FE6600, FM8700, FE5400S, FM-PE8700, PED5400 FE OR (3) MEDECO DEADBOLT ASSEMBLIES.

EXISTING OPENING & SCREW FASTENED JAMB ANCHOR LOCATIONS

	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
PAIRED OPENING	Approved min. opening size up to and including 6'0" X 7'0"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/UNC Bolt	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 24" maximum on center.
	Greater than 6'0" x 7'0" up to and including 7'0" X 7'Q"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/UNC Bolt	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 21" maximum on center.
	Greater than 7'0" x 7'0" up to and including 8'0" x 8'0"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/UNC Bolt	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 18" maximum on center.
SINGLE OPENING	Approved min. opening size up to and including 3'0" X 7'0"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/UNC Bolt	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 21" maximum on center.
	Greater than 3'0" x 7'0" and up to and including 4'0" X 8'0"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/UNC Bolt	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 18" maximum on center.

12 GAUGE MASONRY "T" ANCHORS & WIRE MASONRY ANCHORS

	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
PAIRED OPENING	Approved min. opening size up to and including 6'0" X 7'0"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/UNC Bolt	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 24" maximum on center.
	Greater than 6'0" x 7'0" up to and including 7'0" X 7'Q"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/UNC Bolt	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 21" maximum on center.
	Greater than 7'0" x 7'0" up to and including 8'0" x 8'0"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/UNC Bolt	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 18" maximum on center.
SINGLE OPENING	Approved min. opening size up to and including 3'0" X 7'0"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/UNC Bolt	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 21" maximum on center.
	Greater than 3'0" x 7'0" and up to and including 4'0" X 8'0"	Existing Wall Anchors Powers 3/8" x 6" Lok-Bolt AS Sleeve Anchor or 3/8" SMS/ Self Drilling Screw/UNC Bolt	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 18" maximum on center.

1-3/4" STORMPRO™320 & 361 OPTIONAL ACCESSORIES

Product Type	Manufacturer	Model/Series	FM7300, FE6600 CONCEALED MULTI POINT LOCK ZHLA 45 & 61	FE6700 & FM6100 SHUTTER ZHLA 46	FM8700, FM-PE8700 FED5400 SURF. VERT. ROD ZHLA 47 & 64	FE5400S SURFACE MULTIPOINT EXIT ZHLA 51 & 65	MEDECO DEADBOLTS ZHLA 53 & 54
Deadbolt Sargent Strike		(3) Sargent 78-0034-5333 Strike					X
Door Closers	Sargent	281 Series, 351 EHT Closer/Holder, or 2409 Series Closer/Holder - Thru-bolt mounting of body to door only	X	X	X	X	X
		2900 Series Closer/Holder - Threat side mounting only	X	X	X	X	X
		2900 Series Closer/Holder - Threat side mounting only	X	X	X	X	X
	Corbin Russwin	DC8000 Series - Thru-bolt mounting of body to door only	X	X	X	X	X
	Norton	7500 Series or 7700PT Series Closer/Holder - Thru-bolt mounting of body to door only	X	X	X	X	X
		7100SZ Series Closer/Holder or 7200 Series Closer/Holder - Threat side mounting only	X	X	X	X	X
	ASSA ABLOY ACCENTRA	4400 Series - Thru-bolt mounting of body to door only	X	X	X	X	X
Door Coordinator	Rockwood	576 - Outswing only	X	X	X	X	
		1700 or 2600 Series (with or without 2601 Brackets or 1100 Carry Open Bar option) - Inswing only	X	X	X	X	
Door Holder	Rixson	980M, 990M, 991M, 996M, 997M, 998/998M, or 999M Electromechanical - Thru-bolt mounting only	X	X	X	X	X
	Sargent	1560, 1561, or 1562 Electromechanical - Thru-bolt mounting only	X	X	X	X	X
	Rockwood	491S or 494S Mechanical (Not bearing the UL Mark)	X	X	X	X	X
Door Operators	Norton	5600 Series, 5700 Series, 6000 Series, or 6300 Series - Threat side mounting only	X	X	X	X	X
		5800 Series - Thru-bolt mounting of body to door only (Not bearing the UL Mark)	X	X	X	X	X
Door Position Switch	Securitron	DPS-M - 3/4" or 1" diameter hole in edge or top of door and frame (Not bearing the UL Mark)	X	X	X	X	X
Door Stop/Holder	Rixson	9 Series Mechanical	X	X	X	X	X
Door Viewer	Rockwood	620 or 622	X	X	X	X	X
Electronic power transfer	Securitron	CEPT (Edge or top of door and frame)	X	X	X	X	X
		ICPT (Edge or top of door and frame)	X	X	X	X	X
Floor Strike	Sargent	655			X		
Mullion	Sargent	HC980 or 12-HC980			X		
	Corbin Russwin Inc	FE707A or FE708A			X		
Perimeter Seals	Pemko	S77, S771, S771x6, S772, S773, S776, S776x6, HS2000, HS2000xS44, HS2000xS88, 5110, P240, P241, P242, P243, P244, P260, P261, P262, P263, P264, P265, P266, P380, P381, P382, P384, P385, P386, P387, P388,P390, P391, P392, P393, P394, P396, P397, P398, P484, P490, P491, P493, or P497 (with _NB, _S, _PK, _V, _R, _Q, SSE, SSR, SSS, SSN, _SPK, _P, CN, or _N Suffixes) Adhesive Applied Perimeter Seals	X	X	X	X	X
		29045 29344, 29346,45041,45061,45100,45137,45175,45250,45400,46062,90041,90062,90100,90137, 285, 290,294, 296,297,303,305,306, 309,312,315,316,319,321,322, 330,332,345,350,351,375,379, 2815, 2891, 2892, 2893, 2902, 2903, 3151, 3452, 18041, 18050, 18061, 18062, 18100, 18137, 18175, 18250, 18400, 28945, 29310, 29313, 29324, 29326, 293100, 335,336,368,307, 308, 56, or 57 (with _NB, _S, _PK, _V, _R, _Q, SSE, SSR, SSS, SSN, _SPK, _P, CN, _N or _M Suffixes) Screw Applied Perimeter Seals - Threat side mounting only	X	X	X	X	X
		346 Rain Drip - Threat side mounting only	X	X	X	X	X
Protection	Rockwood	K1050 Kick Plate (For fire-rated assemblies, must be screw applied)	X	X	X	X	X
		BFLG1050 Series Rod Guard (For fire-rated assemblies, must be screw applied)			X	X	
	Von Duprin	LGO-3 or LGO-4 Latch Guard (must be screw applied)			X	X	
Thresholds	Pemko	173, 151,270, 271,272,276, 573, 2715, 2716, 2748, 2749, 2750, 273x3, 273x4, 2746x6, or 274x4 (with or without _FG, _SS, or _SSFG Suffixes) Saddle Thresholds - Floor Strike must be mounted directly to structural floor	X		X	X	X
		166, 154, 169, 170, 171, 172, 175, 176, 1547, 1710, 1715, 1716, 1717, 1718, 1719, 2548, 2549, 2550, 252x2, 252x3, 253x3, 253x4, 253x6, 254x4, 254x5,2 55x5, 256x6 (with or without _FG, _SS, or _SSFG Suffixes) Saddle Thresholds - Floor Strike must be mounted directly to structural floor			X	X	X
		157, 158, 2727, or 766x5 (with or without _FG or _SS Suffixes)	X		X	X	X
		Offset Saddle Thresholds - Floor Strike must be mounted directly to structural floor			X	X	X
		182 or 566x3 (with or without _FG or _SS Suffixes) Offset Saddle Thresholds - Floor Strike must be mounted directly to structural floor			X	X	X
		273, 274, 278, 279, 2746, or 2755 (with or without _SS Suffix) Half Saddle Thresholds - Floor Strike must be mounted directly to structural floor	X		X	X	X
		252, 253, 254, 255, 256, 2555, or 2565 (with or without _SS Suffix) Half Saddle Thresholds - Floor Strike must be mounted directly to structural floor			X	X	X
		766 Offset Half Saddle Threshold - Floor Strike must be mounted directly to structural floor	X		X	X	X
		566 Offset Half Saddle Threshold - Floor Strike must be mounted directly to structural floor			X	X	X
		2001, 2005, 2006, 2007, 2008, 2009, 2010, 2705, 273x224, 273x292, 2746x292, 274x224, 274x292, 278x224, 278x292, 279x224, or 279x292 (with or without _FG, _FGT, _FGP, _FGPK,_FGV, _P, _PK, _R, _SSFG, _STC, _T, or _V Suffixes) Latching Panic Exit Saddle Thresholds - Floor Strike must be mounted directly to structural floor	X		X	X	X
		159, 177, 179, 277, 1855, 252x226, 253x226, 254x226, or 255x226 (with or without _FG, _FGT, _FGP, _FGPK,_FGV, _P, _PK, _R, _SSFG, _STC, _T, or _V Suffixes) Latching Panic Exit Saddle Thresholds - Floor Strike must be mounted directly to structural floor			X	X	X
		18/1 or 14/1 Plate Thresholds - Floor Strike must be mounted directly to structural floor	X		X	X	X

1-3/4” STORMPRO™320 & 361 APPROVED HINGES, OPTIONAL WIRE HARNESS AND EPT FOR ALL ASSEMBLIES

CONTINUOUS HINGES
- MARKAR HG305 CONTINUOUS HINGE
- MARKAR FM300 CONTINUOUS HINGE (OUTSWING ONLY)
- MARKAR CONTINUOUS HINGES WITH OR WITHOUT EL 6PTION

NOTE : A CONTINUOUS HINGE REQUIRES A CONTINUOUS HINGE REINFORCEMENT IN DOOR AND FRAME.

WIDE THROW CONTINUOUS HINGES
- MARKAR HG305WT10 WIDE THROW HINGE WITH OR WITHOUT EL OPTION
- MARKAR FM300WT WIDE THROW HINGE (WT10 THRU WT50) OUTSWING ONLY WITH OR WITHOUT EL OPTION

NOTE : A CONTINUOUS HINGE REQUIRES A CONTINUOUS HINGE REINFORCEMENT IN DOOR AND FRAME.

HEAVY WEIGHT STANDARD AND WIDE THROW FULL MORTISE BUTT HINGES
- McKINNEY SP3786 (4-1/2” x 4-1/2” x .180 OR 5” x 4-1/2” x .190)
- McKINNEY SP3386 (4-1/2” x 4-1/2” x .180 OR 5” x 4-1/2” x .190)
- McKINNEY SP3386 & SP3786 f4-1/2” x 5”, 4-1/2” x 6”, 4-1/2” x 7”, 4-1/2” x 8”, 5” x 4-1/2”, 5’-- x 5”, 5” x 5”, 5” x 7” & 5” x 8”)
- McKINNEY SP3386 & SP3786 WITH OR WITHOUT QC OPTION.
- McKINNEY SP3386 & SP3786 WITH OR WITHOUT NRP

NOTE: WHEN BUTT HINGES ARE APPLIED TO SHUTTER DOORS, A QUANTITY OF (3) HINGES ARE REQUIRED ON HEIGHTS FROM 3’0” TO 5’0” AND (4) HINGES OVER 5’0” THRU 6’8”.
NOTE: WHEN BUTT HINGES ARE APPLIED TO ASSEMBLIES WITH FM8700, FM-PE8700, PED5400 FE, FE5400S, FE6600 AND FM7300 SERIES LATCHING HARDWARE, ON HEIGHTS 7’0” & ABOVE (4) HINGES ARE REQUIRED. BELOW 7’0” HEIGHT (3) HINGES ARE REQUIRED.

WIRE HARNESS
- QC-C1500P ELECTROLYNX WIRE HARNESS

NOTE: WIRE HARNESS MUST BE FACTORY INSTALLED.

ELECTRONIC POWER TRANSFER
- CEPT, HANCHETT ENTRY SYSTEMS, DBA SECURITRON MAGNALOCK CORP.

NOTE: ELECTRONIC POWER TRANSFER MUST BE FACTORY PREPARED.

STORMPRO HURRICANE AND TORNADO SHELTER IMPACT PROTECTIVE SYSTEM

UL SOLUTIONS LISTED TO ICC 500 AND FBC APPROVED

SARGENT FM8700 SERIES SURFACE VERTICAL ROD EXIT DEVICE: (OUTSWING)
- MIN. 3'-0" X 6'-8", MAX. 4'-0" X 8'-0" FLUSH SINGLES OR MIN. 6'-0" X 6'-8", MAX. 8'-0" X 8'-0" FLUSH PAIRS
- 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS
- 14 GAUGE TOP AND BOTTOM CHANNELS, WELDED TOP CAP AND STEEL STIFFENED CORE.
- 3/8" DOOR UNDERCUT REQUIRED WHEN SARGENT 655 STRIKE IS USED.
- 5/8" UNDERCUT REQUIRED WHEN SARGENT 653 STRIKE IS USED.
- 1/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE. BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.
- (4) THERMAL PINS REQUIRED IN LOCK EDGE OF DOOR AND JAMB ON SINGLE FIRE RATED OPENINGS ONLY.

SEE HARDWARE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR THERMAL PIN PREPARATION. (PINS SUPPLIED BY OTHERS).

CORBIN RUSSWIN FE5400S SERIES MULTI-POINT EXIT DEVICE: (OUTSWING)
- MIN. 3'-0" X 6'-8", MAX. 4'-0" X 8'-0" FLUSH SINGLES OR MIN. 6'-0" X 6'-8", MAX. 8'-0" X 8'-0" FLUSH PAIRS
- 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS
- 14 GA TOP & BOTTOM CHANNELS, WELDED TOP CAP AND STEEL STIFFENED CORE.
- 5/8" UNDERCUT REQUIRED.
- 1/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE REQUIRED. BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.
- PAIRED ASSEMBLIES REQUIRE CORBIN RUSSWIN FE707A OR FE708A MULLION.

CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES MULTI-POINT LOCK ASSEMBLY: (INSWING OR OUTSWING)
- MIN. 2'-8" X 6'-8", MAX. 4'-0" X 8'-0" FLUSH SINGLES OR MIN. 5'-4" X 6'-8", MAX. 8'-0" X 8'-0" FLUSH PAIRS
- 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS
- 14 GAUGE TOP AND BOTTOM CHANNELS, WELDED TOP CAP AND STEEL STIFFENED CORE.
- INACTIVE DOOR TO HAVE SARGENT 988 OR CORBIN RUSSWIN 988CR SURFACE BOLTS.
- 3/8" DOOR UNDERCUT REQUIRED.
- 3/8" MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE.
- WHEN USING 3-SIDED FRAMES, BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE STRIKE. BOTTOM STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACE MOUNTED.
- FLOORS MUST BE POURED LEVEL AND FRAMES MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.
- 10 GAUGE FLAT PLATE ASTRAGAL STRIP IS OPTIONAL AND WOULD BE FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE ACTIVE OR INACTIVE DOOR, DEPENDING ON IN SWING OR OUT SWING APPLICATION
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.
- COMMUNICATING OPENINGS ARE OPTIONAL. REFERENCE STORMPRO SECTION PAGE 218 & PAGE 221 FOR SINGLE COMMUNICATING OPENINGS. REFERENCE STORMPRO SECTION PAGE 226 & PAGE 229 FOR PAIRS OF COMMUNICATING OPENINGS.
  THE STORMPRO DOOR(S) ON COMMUNICATING OPENINGS ARE REQUIRED TO BE INSWING.

"THE BELOW INFORMATION APPLIES TO ALL OF THE ABOVE ASSEMBLIES"
CLOSER:
APPROVED CLOSERS ARE LISTED ON STORMPRO SECTION PAGE 242.

HINGES :
APPROVED HINGES ARE LISTED ON STORMPRO SECTION PAGE 242.. 7'0" HEIGHTS & ABOVE (4) HINGES ARE REQUIRED WHEN USING BUTT HINGES, BELOW 7'0" HEIGHTS (3) HINGES ARE REQUIRED WHEN USING BUTT HINGES.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON STORMPRO SECTION PAGE 241 AND PAGE 242.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252.

Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.

UL SOLUTIONS CERTIFIED TO:
- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

EXCLUDED FROM USE AS AN EXTERIOR ACCESS IN HVHZ WHEN STORM SHELTER IS CONSTRUCTED WITHIN A HOST BUILDING.

APPROVAL	IMPACT	DESIGN (PSF)
ICC 500	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-227
FLORIDA BUILDING CODE FL 40296	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-227

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

STORMPRO HURRICANE AND TORNADO SHELTER IMPACT PROTECTIVE SYSTEM

UL SOLUTIONS LISTED TO ICC 500 AND FBC APPROVED

SARGENT FM8700 SERIES SURFACE VERTICAL ROD EXIT DEVICE: (OUTSWING)
- SINGLE OPENINGS MIN. 3'-0" X 6'-8" THRU 4'-0 X 8'-0"
- PAIRED OPENINGS MIN. 6'-0" X 6'-8" THRU 8'-0" X 8'-0"
- SQ SERIES 5-3/4" MIN. - 14" MAX. DEPTH
- SU SERIES 5-3/4" MIN. - 14" MAX. DEPTH
- SR SERIES 4" MIN. - 14" MAX. DEPTH

CORBIN RUSSWIN FE5400S SERIES MULTI-POINT EXIT DEVICE: (OUTSWING)
- SINGLE OPENINGS MIN. 3'-0" X 6'-8" THRU 4'-0" X 8'-0"
- PAIRED OPENINGS MIN. 6'-0" X 6'-8" THRU 8'-0" X 8'-0"
- SQ SERIES 5-1/2" MIN. - 14" MAX. DEPTH
- SU SERIES 5-1/2" MIN. - 14" MAX. DEPTH
- SR SERIES 4" MIN. - 14" MAX. DEPTH SINGLES
- PAIRS WITH HARDWARE MULLION, FRAME DEPTH WILL BE LIMITED BY THE MULLION.
- CONTACT THE HARDWARE MULLION MANUFACTURER FOR FRAME DEPTH LIMITATIONS.

CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES MULTI-POINT LOCK ASSEMBLY: (INSWING OR OUTSWING)
- SINGLE OPENINGS MIN. 2'-8" X 6'-8" THRU 4'-0" X 8'-0"
- PAIRED OPENINGS MIN. 5'-4" X 6'-8" THRU 8'-0" X 8'-0"
- SQ SERIES 4-5/8" MIN. - 14" MAX. DEPTH
- SU SERIES 4-1/4" MIN. - 14" MAX. DEPTH
- SR SERIES 4" MIN. - 14" MAX. DEPTH
- SU SERIES FRAMES WITH EXISTING OPENING ANCHORS THE MIN. DEPTH IS 4-5/8".
- SQ SERIES FRAMES WITH EXISTING OPENING ANCHORS THE MIN. DEPTH IS 5".
- 4-SIDED FRAMES ARE OPTIONAL.

COMMUNICATING FRAMES FOR CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES MULTI-POINT LOCK ASSEMBLY (STORMPRO DOOR HANDING, INSWING ONLY)
- SINGLE OPENINGS MIN. 2'-8" X 6'-8" THRU 4'-0" X 8'-0"
- PAIRED OPENINGS MIN. 5'-4" X 6'-8" THRU 8'-0" X 8'-0"
- SQ SERIES 4-5/8" MIN. - 14" MAX. DEPTH
- SQ SERIES FRAMES WITH EXISTING OPENING ANCHORS THE MIN. DEPTH IS 5".
- 4-SIDED FRAMES ARE NOT ALLOWED.
- WHEN DETERMINING FRAME DEPTH, CONSIDERATION SHOULD BE GIVEN REGARDING IF THE DEPTH WILL ACCOMMODATE HARDWARE INSTALLED ON BOTH
- THE PASSAGE DOOR AND STORMPRO DOOR.
- MINIMUM FRAME DEPTHS SHOWN ON THIS PAGE ARE FOR STORMPRO LIMITS, BUT MAY NOT ACCOMMODATE HARDWARE INSTALLED ON BOTH THE STORMPRO AND PASSAGE DOOR.

"THE BELOW INFORMATION APPLIES TO ALL OF THE ABOVE ASSEMBLIES" CLOSER:
- VERTICAL JAMBS ARE 2" FACE, FRAME HEADS ARE 2" FACE STANDARD THRU 4" FACE OPTIONAL.
- FRAMES ARE 14 GAUGE (OPTIONAL 12 GAUGE) HOT DIPPED A60 GALVANNEALED OR COLD ROLLED STEEL.
- FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS.
- BACKBENDS FOR SU SERIES 5-3/4" DEPTH MAY BE 7/16", WITH 4-7/8" THROAT.
- SMALLER DEPTHS MAY REQUIRE EXISTING OPENING ANCHORS TO BE LOCATED ON THE DOOR RABBET.
- FRAMES MAY BE KNOCK DOWN OR WELDED CORNERS. (12 GAUGE IS WELDED)
- APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON STORMPRO SECTION PAGE 241 AND PAGE 242.
- SEE STORMPRO SECTION PAGE 239 AND PAGE 240 FOR ALL ANCHOR TYPES, QUANTITIES AND LOCATIONS.
- EXISTING OPENING ANCHORS ARE REQUIRED IN THE FRAME HEAD, UNLESS ANCHORING IS WELD TO BUILDING STRUCTURE.
- FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE.
- 7'0" HEIGHTS AND ABOVE (4) HINGES ARE REQUIRED WHEN USING BUTT HINGES. BELOW 7'-0" HEIGHTS (3) HINGES ARE REQUIRED WHEN USING BUTT HINGES.
- FRAME STOP HEIGHT IS 5/8".

UL SOLUTIONS CERTIFIED TO:
- ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"
- FEMA P-361 (2021) "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"

Corbin Russwin FE6600 & Sargent FM7300 concealed vertical rods, top & bottom bolts, & mortise lock body casette must be factory installed in a CECO StormPro door. All other hardware components (including levers, escutcheons & mortise lock) must be ordered separately from Sargent or Corbin Russwin & must be installed by a factory trained installer.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.

EXCLUDED FROM USE AS AN EXTERIOR ACCESS IN HVHZ WHEN STORM SHELTER IS CONSTRUCTED WITHIN A HOST BUILDING.

APPROVAL	IMPACT	DESIGN (PSF)
ICC 500	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-227
FLORIDA BUILDING CODE FL 40296	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-227

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

Ceco Door

ASSA ABLOY

Specialty

Experience a safer
and more open world

TECH MANUAL

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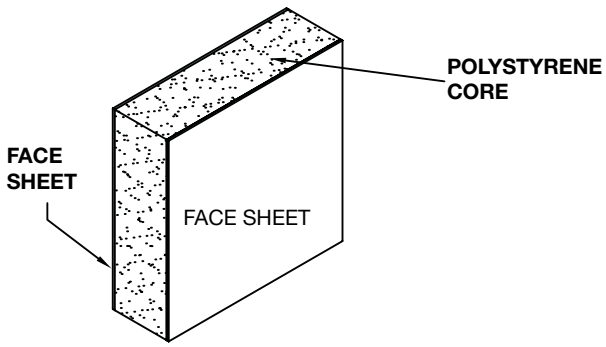
1-3/4" ARMORSHIELD (AP) POLYSTYRENE FOAM CORE

(OPTIONAL - (AI) HONEYCOMB CORE) OR (OPTIONAL - (AS) STEEL STIFFENED CORE) UL LISTED BULLET RESISTANT DOOR AND FRAME SYSTEM

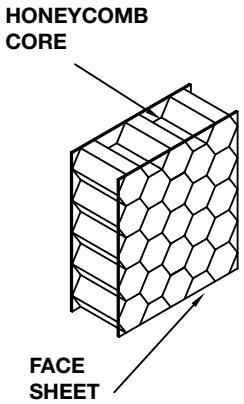


TESTED IN ACCORDANCE WITH UL STANDARD FOR SAFETY BULLET RESISTANT EQUIPMENT TEST: UL752

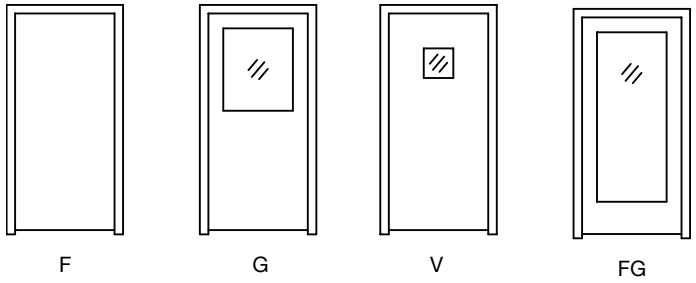
The ArmorShield system is rated for super power small arms (SPSA) and is intended for architectural environments with equivalent bullet resistance. The system has not been tested for resistance to forced entry. Field assembly is required as is preparation for surface applied hardware. System must be installed securely by contractor in a manner to achieve the intended functional operation and appearance. The polystyrene core provides excellent insulation characteristics making the system a good choice for exterior use.

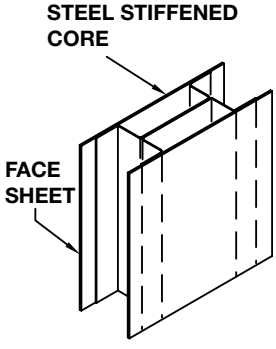
SUGGESTED USE:

- Interior or Exterior ...
- Public Utility Field Buildings
- Box Offices
- Cashier Islands
- Currency Exchanges
- Ticket Booths



DOOR DESIGNS





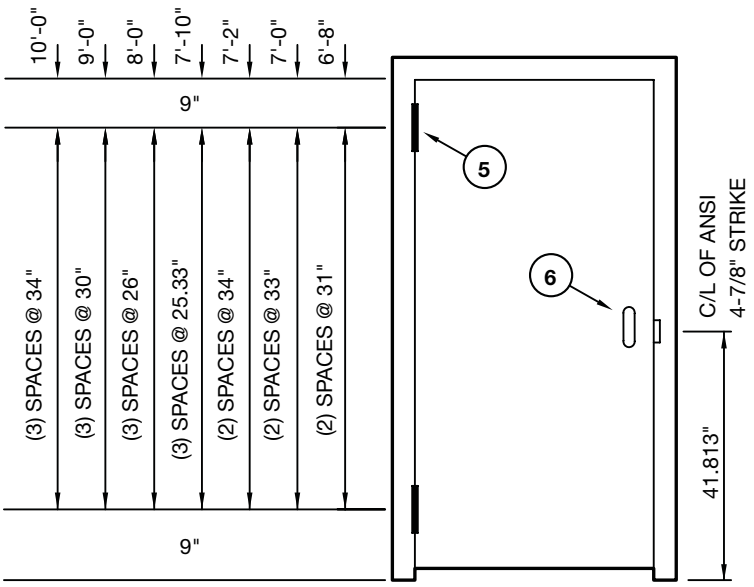
BALLISTIC LEVEL	WEAPON TYPE	BULLET TYPE	BULLET VELOCITY	MUZZLE ENERGY
I	9MM	FULL METAL JACKET 124GR.	1234FT/S	380-460FT/ LBS
II	.357 MAG.	JACKET LEAD POINT 158GR.	1312FT/S	743-889FT/ LBS
III	.44 MAG.	LEAD SOFT POINT 158GR.	1417FT/S	1370-1593FT/ LBS

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

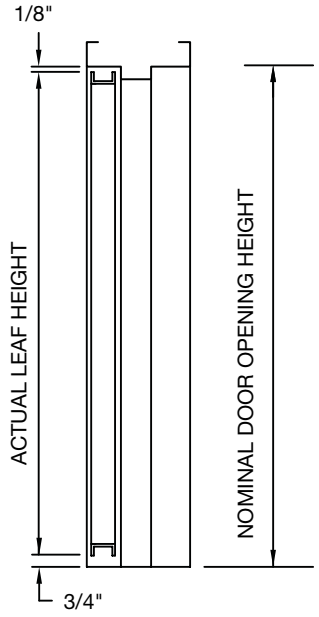
ARMORSHIELD LEVEL 1-3 DOOR SYSTEM

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

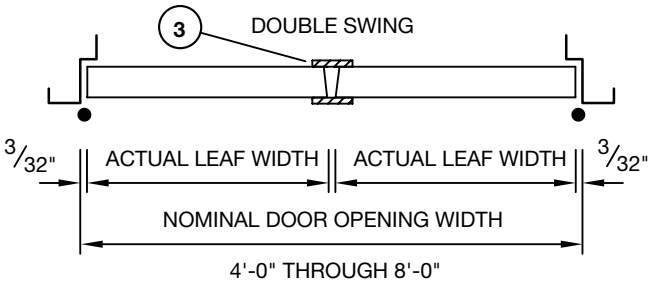
ELEVATION

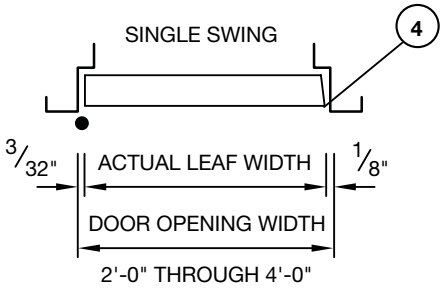


VERTICAL SECTION

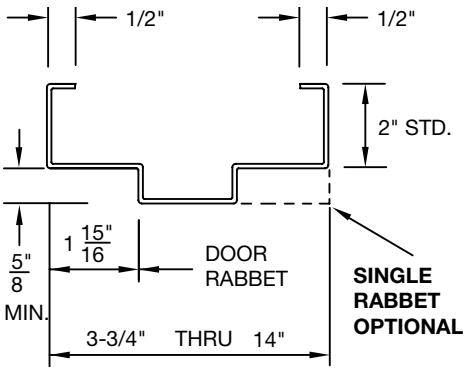


HORIZONTAL SECTIONS





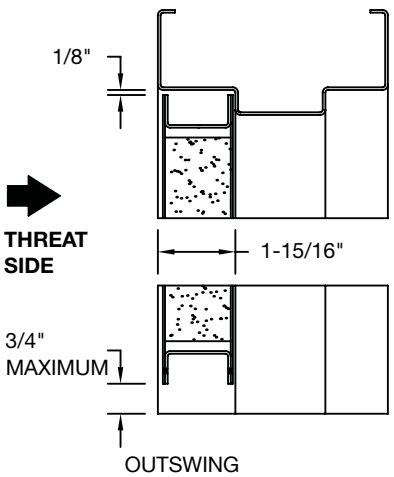
TYPICAL PROFILE



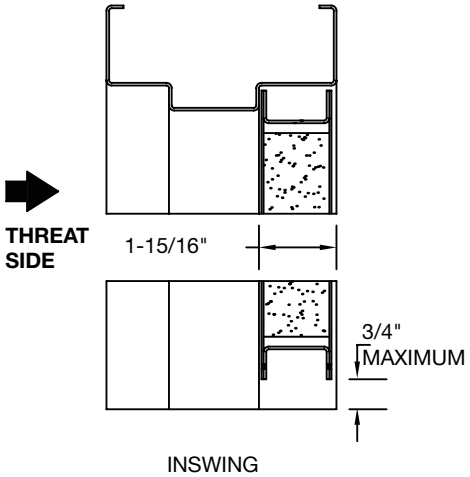
DOUBLE RABBET SHOWN,
SINGLE AVAILABLE
(FRAME CORNERS ARE WELDED)

4" FACE FRAME HEAD OPTIONAL

VERTICAL SECTION



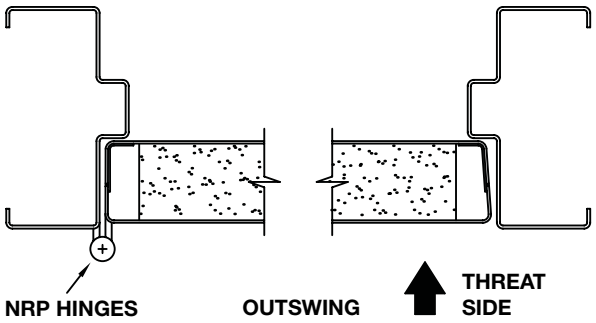
VERTICAL SECTION



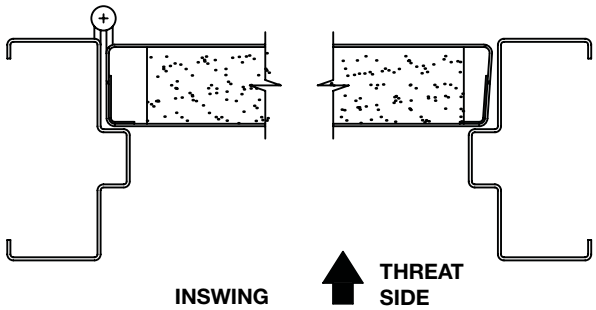
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ARMORSHIELD LEVEL 1-3 DOOR SYSTEM

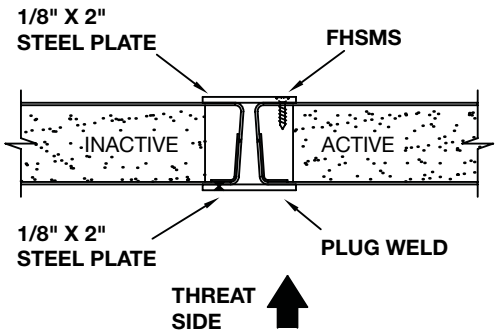
1 HORIZONTAL SECTION



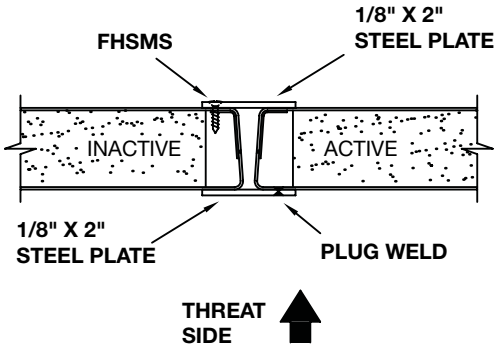
2 HORIZONTAL SECTION



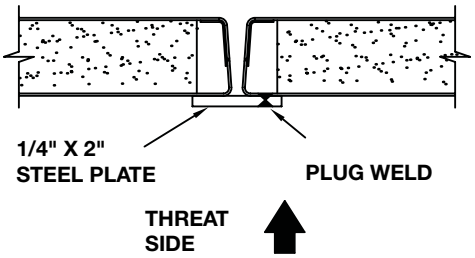
3 ASTRAGAL FOR MEETING STILES-INSWING (STANDARD)



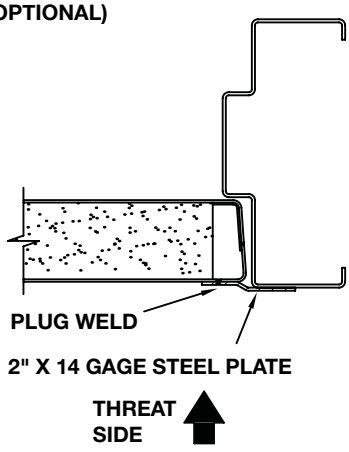
3 ASTRAGAL FOR MEETING STILES-OUTSWING (STANDARD)



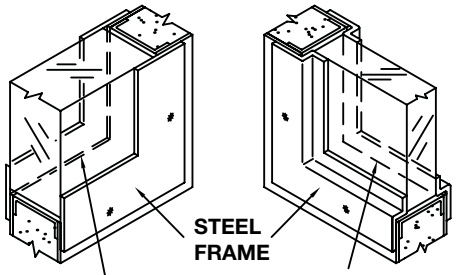
3 HINGE PREPARATION



4 LOCK JAMB PROTECTION PLATE (OPTIONAL)



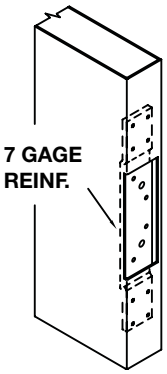
4 GLAZING TRIM



5 HINGE PREPARATION

TEMPLATE
ANSI A156.7

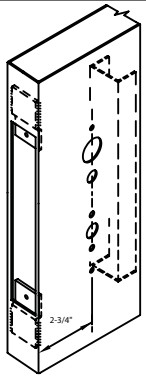
DOORS OVER 3070
REQUIRE 5" X .190
HINGES.



LOCK EDGE IS BEVELED 1/8" IN 2"(1:16) HINGE EDGE IS SQUARE

6 LOCK PREPARATION GOV. 86-4 MORTISE TYPE

OPTIONAL LOCK:
CYLINDRICAL
RIM EXIT
MORTISE EXIT

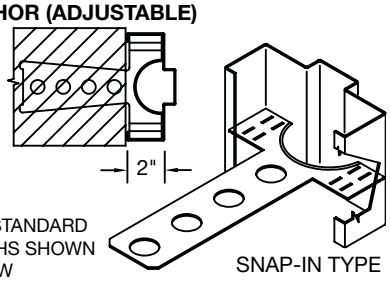


LOCK EDGE IS BEVELED 1/8" IN 2"(1:16) HINGE EDGE IS SQUARE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ARMORSHIELD LEVEL 1-3 DOOR SYSTEM

MASONRY "T" ANCHOR (ADJUSTABLE) MT

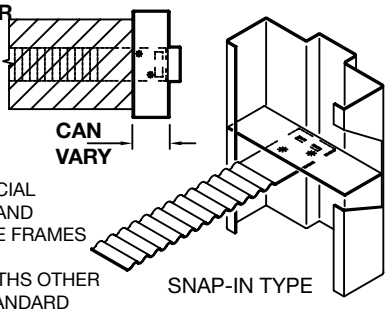


FOR STANDARD DEPTHS SHOWN BELOW

SNAP-IN TYPE

3-3/4", 4-1/4", 4-3/4", 5-1/4" AND 5-3/4" DEPTHS

MASONRY "T" ANCHOR MT

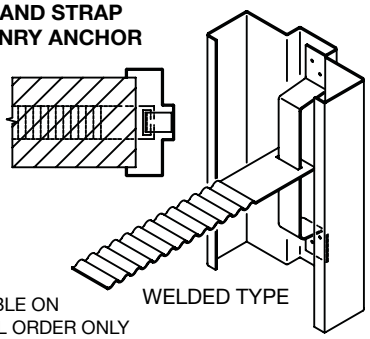


FOR SPECIAL DEPTHS AND OVERSIZE FRAMES

FOR DEPTHS OTHER THAN STANDARD

SNAP-IN TYPE

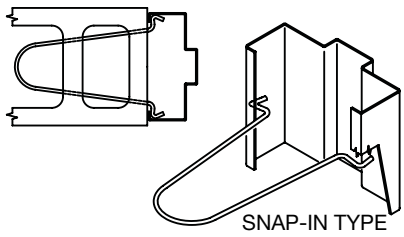
YOKE AND STRAP MASONRY ANCHOR YS



AVAILABLE ON SPECIAL ORDER ONLY

WELDED TYPE

WIRE MASONRY ANCHOR WMA



SNAP-IN TYPE

FOR STANDARD AND SPECIAL DEPTH FRAMES

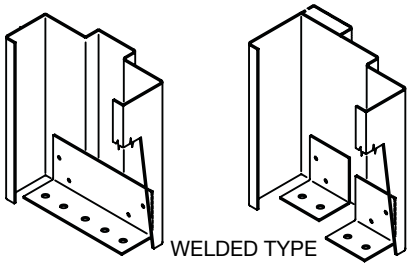
(FOR 3" THRU 8-3/4" DEPTHS)

FLOOR ANCHOR SA

STANDARD ANCHOR

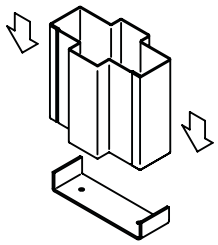
STANDARD DOUBLE RABBET ONE PIECE ANCHOR

SINGLE RABBET DOUBLE EGRESS



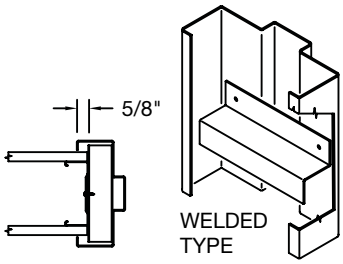
WELDED TYPE

SLFA (OPTIONAL)
SIDELITE FLOOR ANCHOR



IN-FIELD: FASTEN ANCHOR TO FLOOR SLIP-FIT FRAME OVER ANCHOR

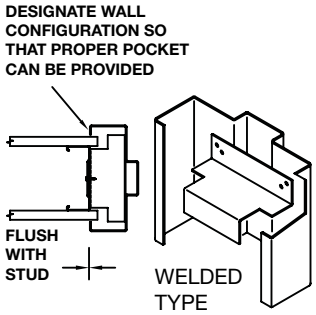
METAL STUD "Z" ANCHOR MSZ1



WELDED TYPE

FOR STANDARD AND SPECIAL DEPTH FRAMES

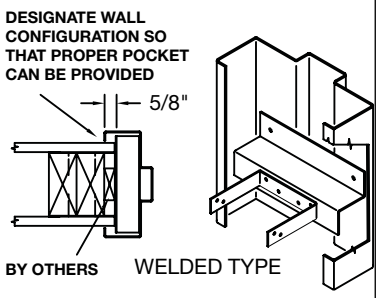
METAL STUD "Z" ANCHOR MSZ2



WELDED TYPE

FOR STANDARD AND SPECIAL DEPTH FRAMES

WOOD STUD "Z" STRAP ANCHOR WSZS

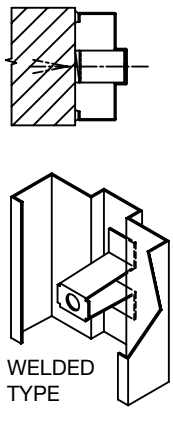


WELDED TYPE

FOR STANDARD AND SPECIAL DEPTH FRAMES

USED ALSO FOR METAL STUD WALLS

EXISTING OPENING ANCHOR EO/N

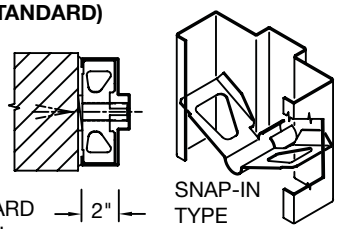


FOR STANDARD AND SPECIAL DEPTH FRAMES

DEPTHS OVER 14" REQUIRE TWO EO/N ANCHORS PLACED ACROSS SOFFIT

WELDED TYPE

EXISTING OPENING ANCHOR (STANDARD) EO

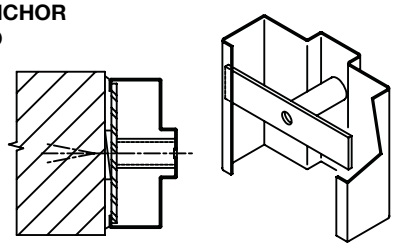


SNAP-IN TYPE

FOR STANDARD AND SPECIAL DEPTH FRAMES

SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

EXISTING OPENING ANCHOR EO



FOR STANDARD AND SPECIAL DEPTH FRAMES

AVAILABLE ON SPECIAL ORDER ONLY

ARMORSHIELD LEVEL 1- 3 DOOR SYSTEM

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

FOR OPENINGS GREATER THAN 4'0" IN WIDTH OR 10'0" IN HEIGHT, CONSULT FACTORY.

FIRE DOORS

LABELING AGENCIES : UL SOLUTIONS
TEST: UL 10B, UL 10C, UL 1784, & NFPA 252
STEEL STIFFENED CORE: 20 MIN., 3/4 HOUR, 1 HOUR & 1-1/2 HOUR
SINGLE SWING: MAX. SIZE 4'0" X 8'0" MORTISE LOCK OR MORTISE EXIT
PAIRS NOT AVAILABLE
DESIGNS: F, G, FG, N, V E6 & EN6
GLASS LITES & LOUVERS NOT AVAILABLE

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be by Ceco Door Products. Door shall conform to the Steel Door Institute guide specification, ANSI A250.8 and NAAMM 867 specifications. See chart below for performance classifications.

The Armorshield system is listed in the UL Burglary Protection Directory and complies with Standard for Safety Bullet Resisting Test, UL752. Doors and frames must be supplied together and are commercial quality cold rolled steel conforming to ASTM A1008 ... or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A653 and A924.

Armorshield doors are seamless design. Door face sheets are joined at their vertical edge with a center seam that is welded the full height of door. Welds are ground, filled, and dressed smooth. Seams are invisible and surface is smooth. Face sheets are totally supported by a 0.7 LB/CF density styrene core chemically bonded to interior surface. As an option, Kraft honeycomb core or steel stiffened core is available as well. The top and bottom of the door is closed with welded-in inverted channels welded to both face sheets. Top and bottom caps are optional.

Armorshield frame profiles are double and single rabbet in depths from 3" through 14" of all welded corner construction. Jamb anchors for masonry and stud walls are available.

Armorshield glass lites are SPSA rated with steel framing.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" (up to 3'0 x 7'0) or 5" high (over 3'0 x 7'0), heavy weight hinges. 7 gauge steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1:16). Hinge edge is square. Lock edge is prepared for Gov. Series 86 or 160/161 locks in accordance with ANSI A115 (specify which). Architect note: Doors over 3070 require 5" x .190" hinges. Hardware is not required to be by Ceco Door.

Paint: 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer

MATERIAL

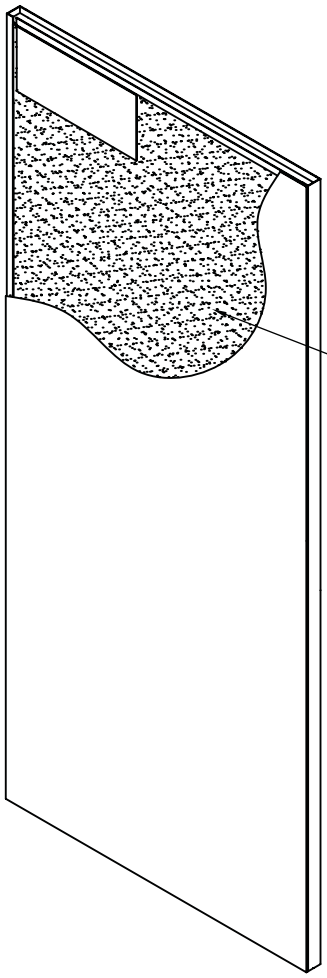
ITEM	THICKNESS	COLD ROLLED STEEL	A60 GALV. STEEL
DOOR FACE SHEETS	12 GAUGE	STD	OPT.
FRAME	12 GAUGE	STD	OPT.

PERFORMANCE

POLYSTYRENE CORE THERMAL INSULATION:	CALCULATED R FACTOR = 6.35 (ASTM C518)
PHYSICAL ENDURANCE / LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, LEVEL A (1,000,000 CYCLES)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4” ARMORSHIELD LEVEL 4 THRU 8 BULLET RESISTANT DOOR AND FRAME SYSTEM



Tested in accordance with ul standard for safety Bullet resistant equipment test: ul752

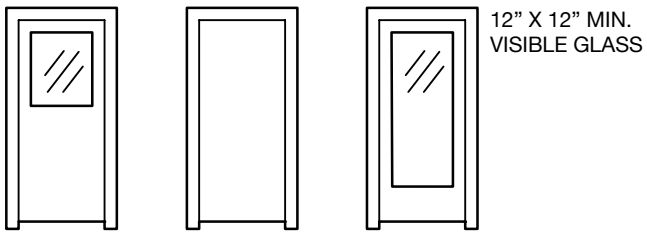
Vertical stiffeners placed to support the bullet resistant armor.

Conforms to UL 752

SUGGESTED USE:
- Interior or Exterior ...

OPENINGS FOR THE PROTECTION OF:
- Personnel Or Equipment,
- Telephone Repeater Stations,
- Unmanned Utilities Stations,
- ATM Buildings, Shooting range

DOOR DESIGNS



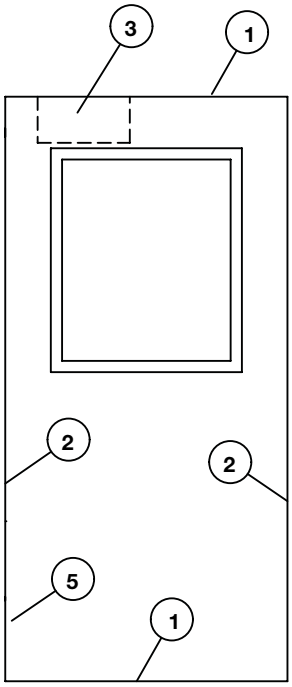
UL 752 RATINGS OF BULLET RESISTANT MATERIALS

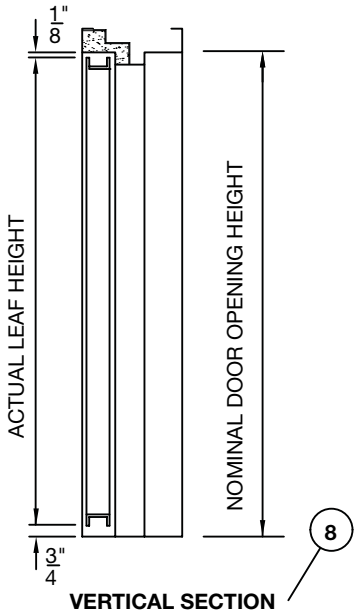
RRATINGS	AMMUNITION	GRAINS	HEIGHT	VELOCITY MIN. (FPS)	VELOCITY MAX. (FPS)	NUMBER OF SHOTS
LEVEL 4	.30 CALIBER RIFLE LEAD CORE SOFT POINT	180	11.7	2540	2794	1
LEVEL 5	7.62MM RI E LEAD CORE FULL METAL COPPER JACKET, MILITARY BALL	150	9.7	2750	3025	1
LEVEL 6	9MM FULL METAL COPPER JACKET WITH LEAD CORE	124	8.0	1400	1540	5
LEVEL 7	5.56MM RI E FULL METAL COPPER JACKET WITH LEAD CORE	55	3.56	3080	3380	5
LEVEL 8	7.62MM RI E LEAD CORE FULL METAL COPPER JACKET, MILITARY BALL	150	9.7	2750	3025	5

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

ARMORSHIELD LEVEL 4 THRU 8 DOOR SYSTEM

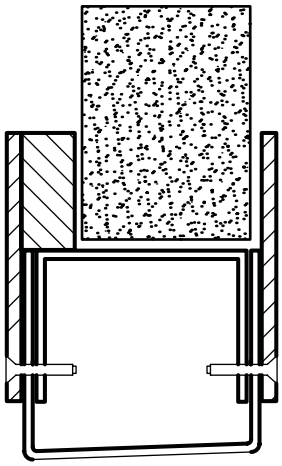
ELEVATION

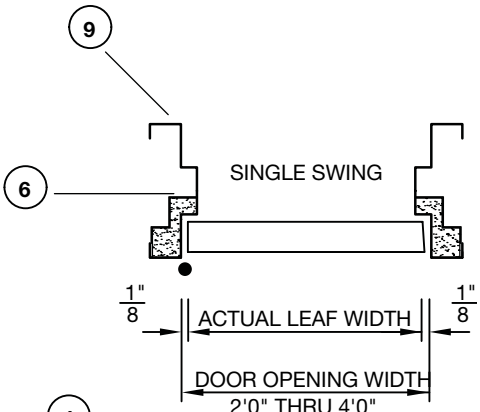




VERTICAL SECTION

OPTIONAL:
LEVEL 4 THRU 8
GLASS KIT



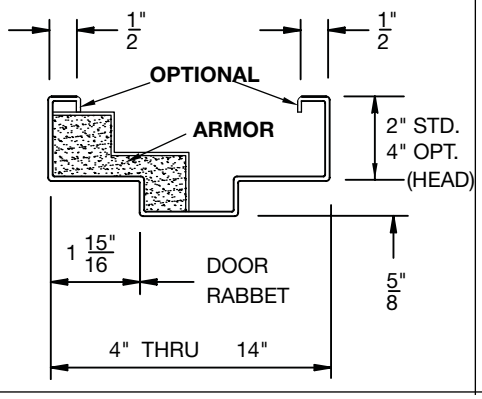


HORIZONTAL SECTION

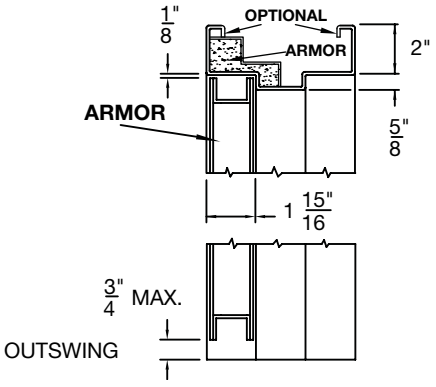
GLASS KIT DESIGN MAY VARY WITH GLASS THICKNESS.
GLASS KIT AND GLASS ARE FACTORY INSTALLED.

HORIZONTAL AND VERTICAL SECTIONS SHOWN ABOVE DEPICT OUTSWING ARMOR CONDITIONS

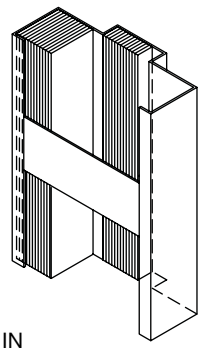
9 TYPICAL PROFILE
RABBET PROFILE



8 TYPICAL PROFILE
RABBET PROFILE



6 TYPICAL PROFILE
RABBET PROFILE



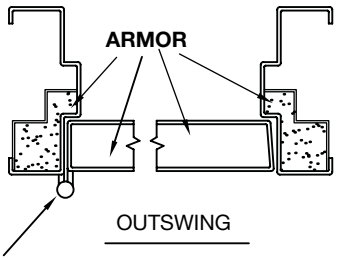
2" WIDE, 14 GA.
WELDED STRAP

MAY BE USED NEAR SILL IN
LIEU OF A FLOOR ANCHOR

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

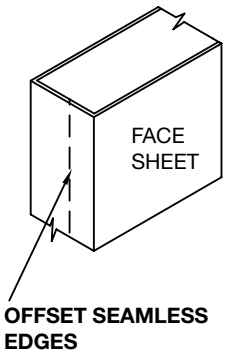
ARMORSHIELD LEVEL 4 THRU 8 DOOR SYSTEM

4 HORIZONTAL SECTION

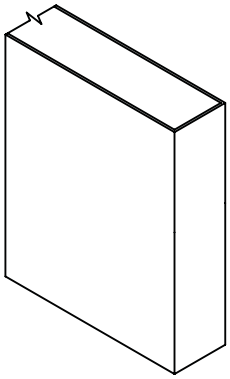


MUTE HOLES NOT PROVIDED

2 DOOR CONSTRUCTION



2 HARDWARE PREPARATION STANDARD

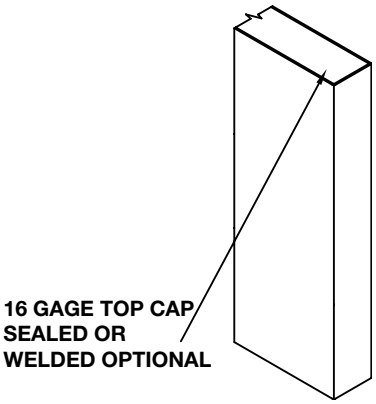


SURFACE MOUNTED ONLY

RIM EXIT
VERTICAL ROD EXIT

HARDWARE MANUFACTURER RESPONSIBLE FOR VALIDATING BULLET RESISTANCE

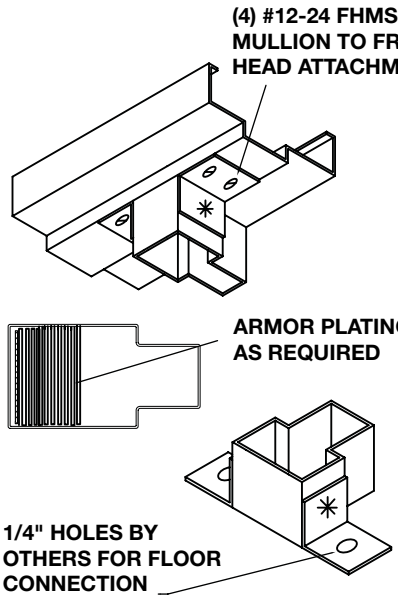
5 STANDARD HINGE PREPARATION



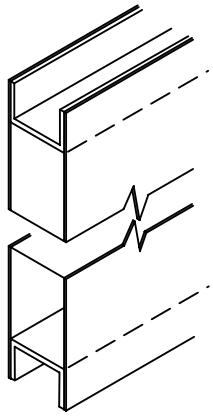
CONTINUOUS HINGE

SQUARE HINGE EDGE STANDARD

REMOVABLE MULLION



1 16 GAUGE STEEL END CHANNELS

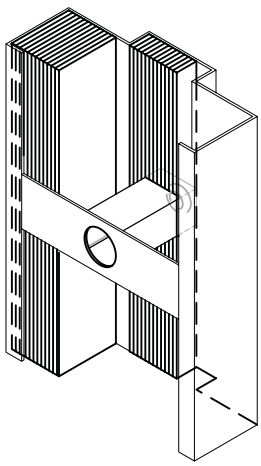


WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

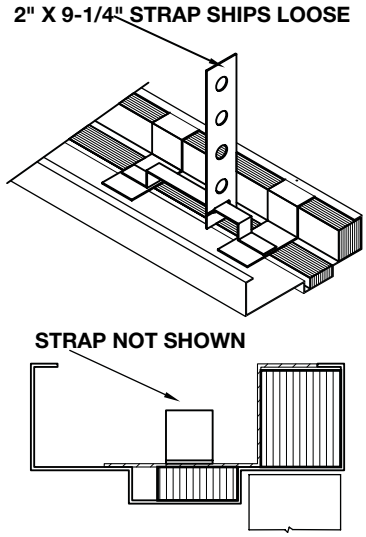
OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

6 EXISTING OPENING ANCHOR

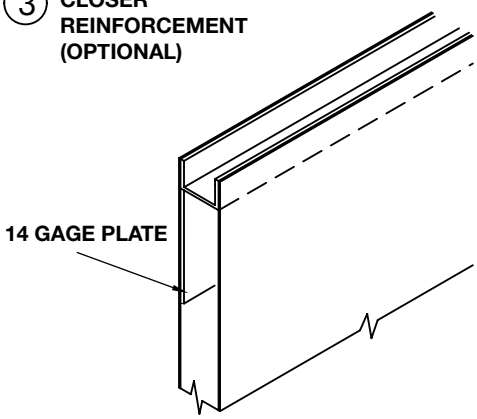


PUNCHED AND DIMPLED FOR 3/8" BOLT. BOLTS BY OTHERS.

6 WELDED YOKE & STRAP ANCHOR



3 CLOSER REINFORCEMENT (OPTIONAL)



NOTE: ANCHORS MAY VARY IN APPEARANCE BASED ON THE PLACEMENT OF ARMOR.
WIRE MASONRY AND STUD ANCHORS ARE AVAILABLE (NOT SHOWN).

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ARMORSHIELD LEVEL 4 THRU 8 DOOR SYSTEM

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2’-0”	6’-8”
2’-4”	7’-0”
2’-6”	7’-2”
2’-8”	7’-10”
2’-10”	8’-0”
3’-0”	9’-0”
3’-4”	
3’-6”	
3’-8”	
3’-10”	
4’-0”	

FOR FIRE RATED PRODUCTS
CONTACT THE FACTORY
PHONE: 218-828-6256

CLASSIFIED BULLET
RESISTANT LABELS
NOT AVAILABLE

PRODUCT SPECIFICATIONS:

1-3/4” thick ArmorShield Level 4 thru 8 bullet resistant doors shall be provided by Ceco Door Products. Doors & frames shall provide bullet resistance in accordance with UL 752. Assembly is equipped with hollow metal door, frame and crated for shipment. Door weight is 24 pounds per square foot.

ArmorShield Level 4 thru 8 doors are seamless design. Door edges are continuously welded seams and ground smooth. No seams are visible on faces or vertical edges. Face sheets are commercial quality 14 gauge steel conforming to hot-dipped galvannealed or galvanized steel (conforming to ASTM A924 and A653) - see chart below.

ArmorShield Level 4 thru 8 frames are double rabbet profile 14 gauge steel. Frames depths vary from 4” through 14” of all welded construction. Mute holes are not provided. Adhesive silencers should be applied.

ArmorShield Level 4 thru 8 glass lites are optional. Minimum visible glass size is 12” x 12”. Glass is factory installed.

Hardware Provisions: Continuous hinges are recommended. Continuous hinge edge reinforcements are optional. The door lock edge has a standard bevel (1/8” in 2”) and is prepared for surface mounted hardware. Concealed hardware is not available. Surface mounted closer reinforcement is available for door and frame. Hardware manufacturer is responsible for validating bullet resistance.

Paint: All exposed surfaces of door and frame shall be provided with one coat of oven-cured neutral color, rust inhibitive prime paint. The primer coat is a preparatory base for necessary finish painting. Factory finish paint is not available.

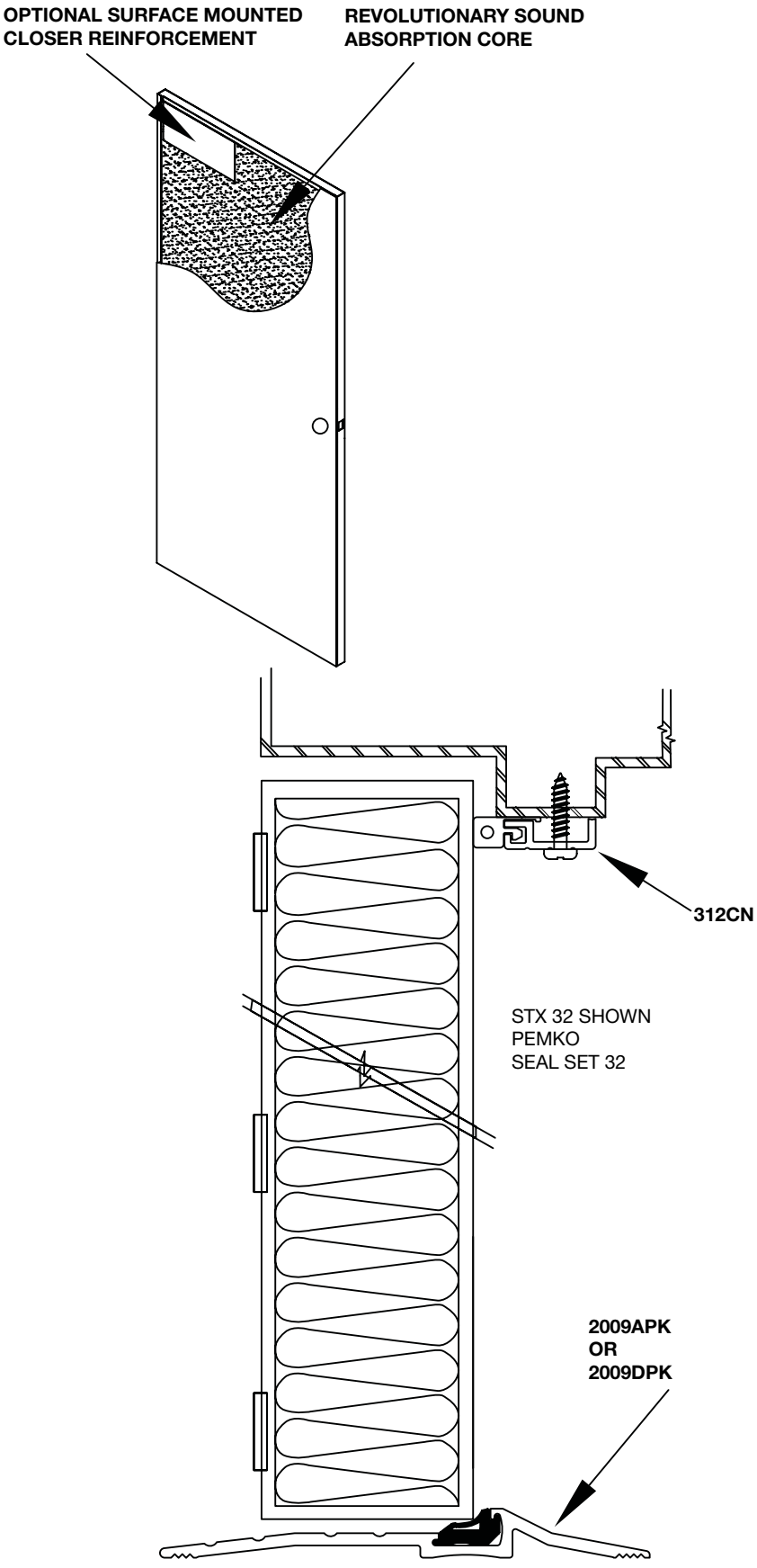
MATERIAL

DOOR FACE SHEETS	BULLET RESISTANCE LEVEL	DOOR & FRAME A60 GALVANIZED	DOOR & FRAME G90 GALVANIZED	FRAME MATERIAL
14 GAUGE STEEL	4 TRHU 8	STD	OPT.	14 GAUGE

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

STC 32 (FLUSH SINGLES)

1-3/4" SOUND-TECH XPRESS



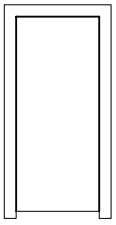
REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS

Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235.
Door systems are in compliance with HMMA 865 & SDI-128 specifications.
Complete with perimeter sound seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rates assembly.

SUGGESTED USE:
- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms
- Performing Arts studios
- Hotel/Motel
- Military barracks

DOOR DESIGN

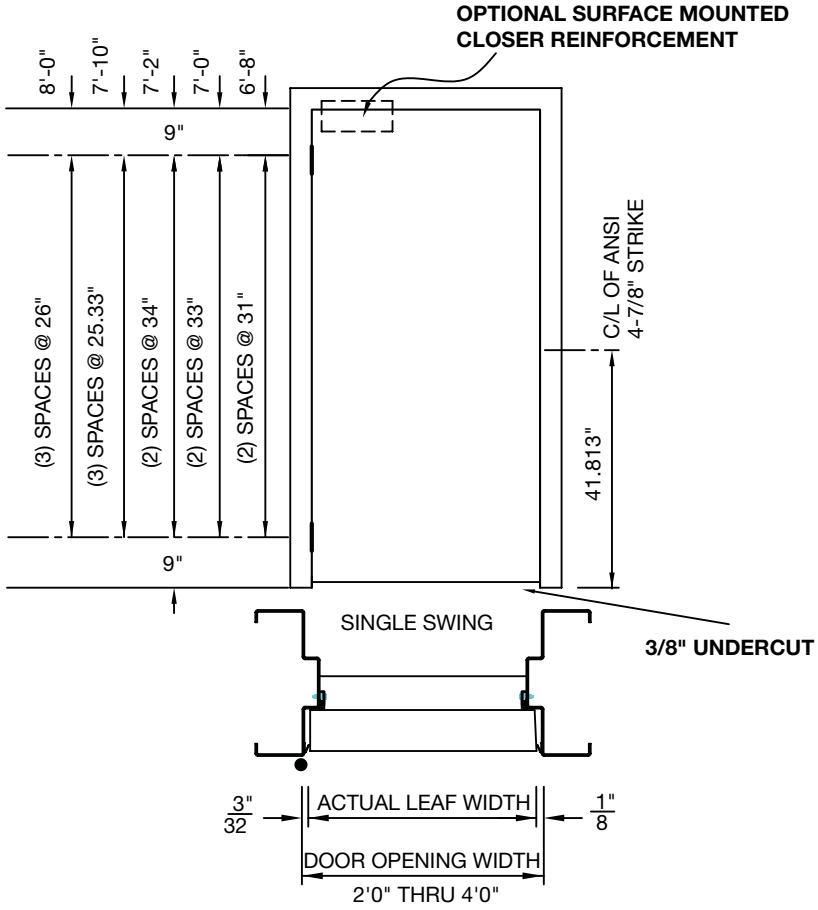


F
(ELEVATION)

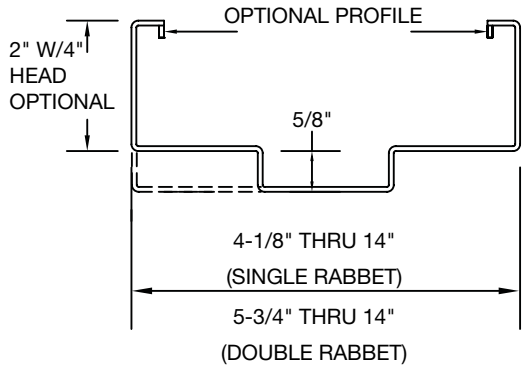
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SOUND-TECH XPRESS DOOR SYSTEM

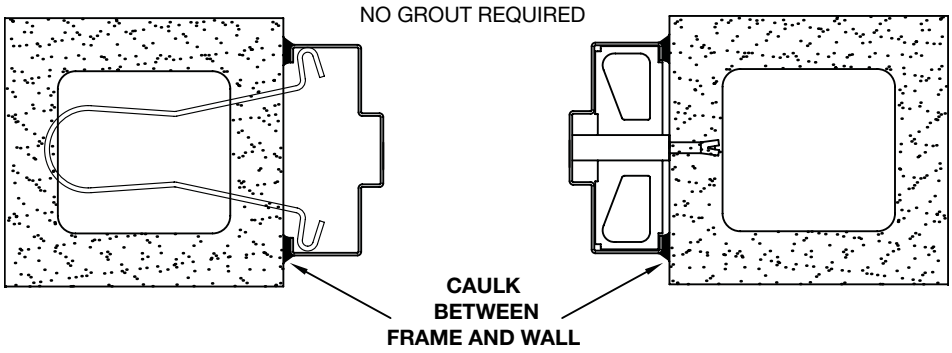
HORIZONTAL SECTION



TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW



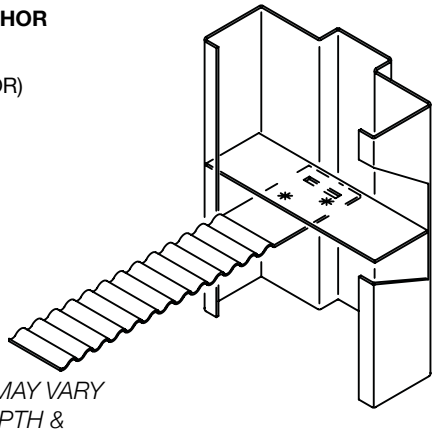
IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH SPECIFIC DETAILED SOUND SEAL INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SOUND-TECH XPRESS DOOR SYSTEM

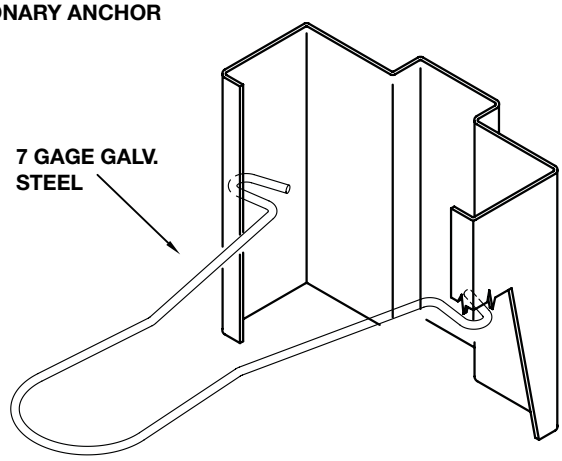
MASONARY "T" ANCHOR

SNAP-IN TYPE
(WITH FLOOR ANCHOR)



(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

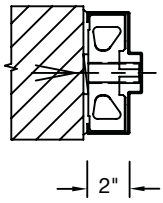
WIRE MASONARY ANCHOR

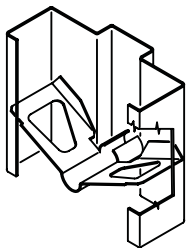


EXISTING OPENING ANCHOR EO

ANCHOR FITS VARIOUS DEPTH
FRAMES (SEE BELOW)

SNAP-IN TYPE

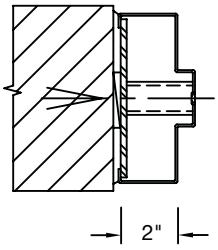


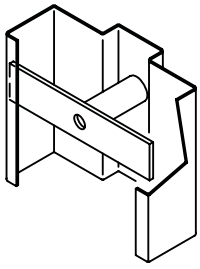


SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S8: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

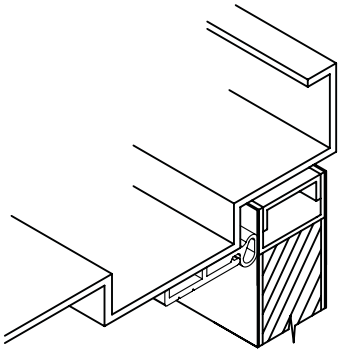
EXISTING OPENING ANCHOR EO/P&S

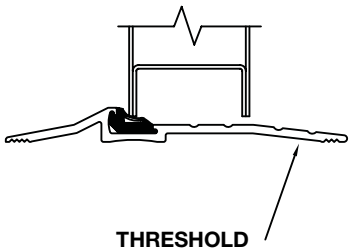
ANCHOR FITS VARIOUS
DEPTHS





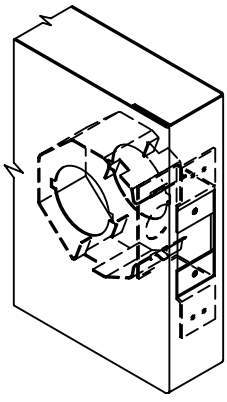
DOOR CONSTRUCTION TOP AND BOTTOM





LOCK PREPARATIONS

CYLINDRICAL ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

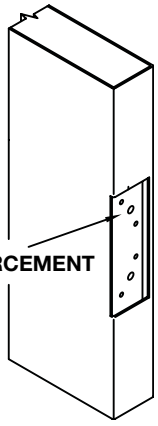


LOCK EDGE IS BEVELED 1/8" IN 2"

HINGE PREPARATION

HINGE PREP IS
HANDED

4-1/2" OR 5" REGULAR
OR HEAVY WEIGHT
HINGES ANSI A156.7

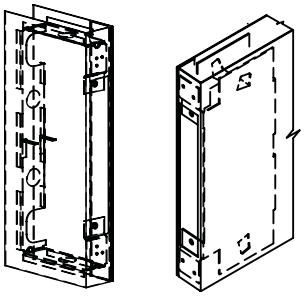


LOCK PREPARATION

GOV.86, ANSI/BHMA
A115.1 MORTISE TYPE
(LM0)

NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION

LOCK EDGE IS BEVELED 1/8" IN 2"



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SOUND-TECH XPRESS DOOR SYSTEM

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

ACOUSTICAL FIRE DOORS

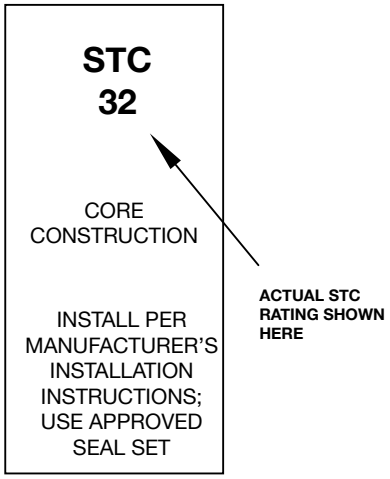
LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252

RATING: THRU 3 HRS. (STX 32) FLUSH SINGLES 4'0" X 8'0" MAX.

DESIGNS: FLUSH ONLY

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A1008 or optional zinc coated A60 steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

FRAMES are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. The frames do not require grout to achieve the STC32 rating.

HARDWARE PROVISIONS: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A115.2 cylindrical or ANSI A115.1 mortise lock. Lock jamb preparation is for 4-7/8" high strike (ANSI A115.1 or 2). Electric Power Transfer (EPT), mag switch and cylindrical deadbolt's are not allowed.

PAINT: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

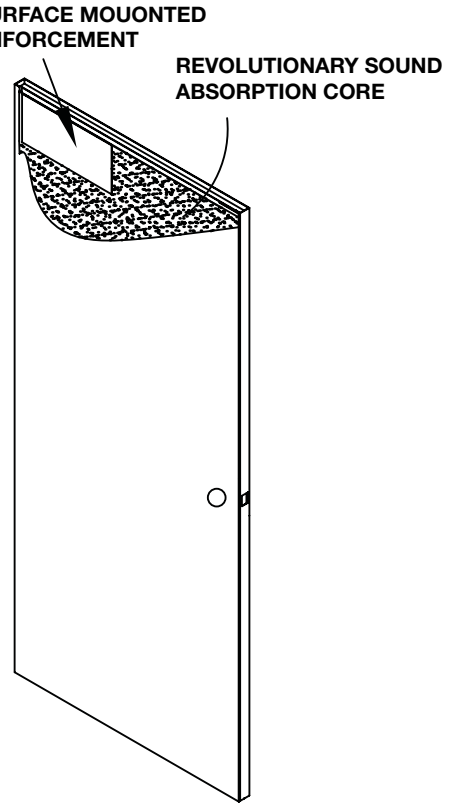
NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

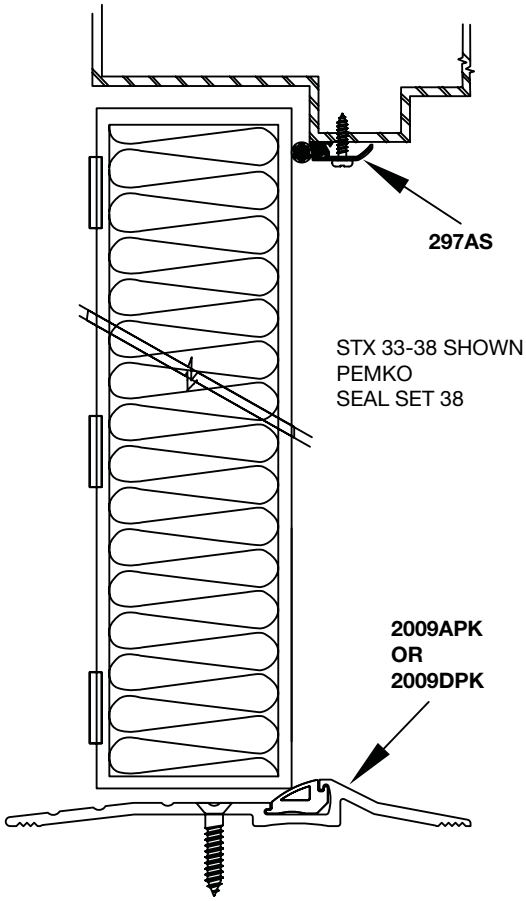
SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
SINGLE DOORS	32	SEE BELOW	3/8"	3 HR.	PEMKO SEALS: 312CN & 2009_PK THRESHOLD-SET 32

STC 32 WITH CYLINDRICAL LOCK OR MORTISE LOCK. OPTIONAL PREPS NOT ALLOWED.
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC33 THRU STC38 (FLUSH SINGLES)

1-3/4" SOUND-TECH XPRESS





REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

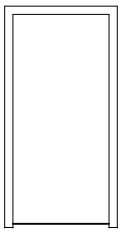
Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rated assembly.

SUGGESTED USE:

- Conference rooms
- Clinical offices
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & Performing arts studios
- Hotel/Motel
- Military barracks

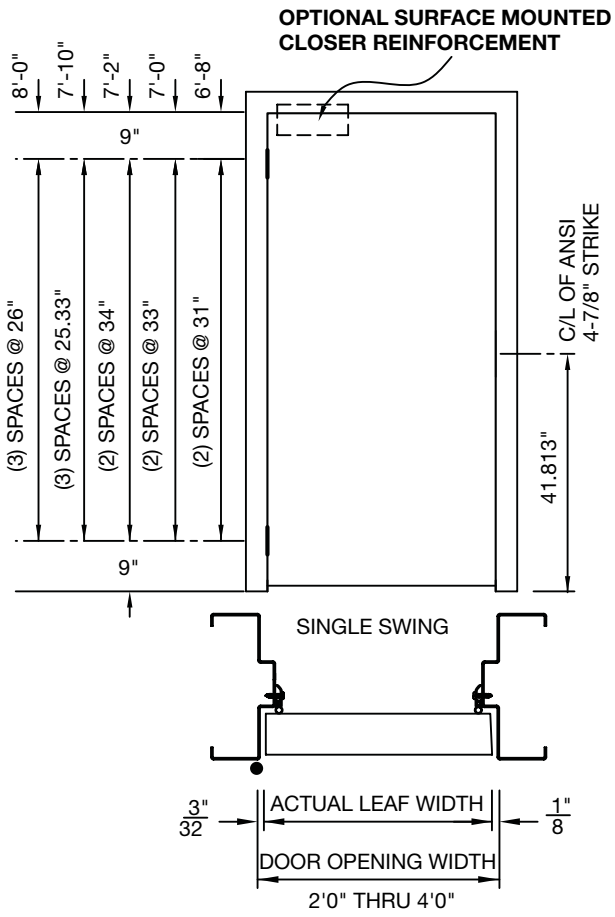
DOOR DESIGN



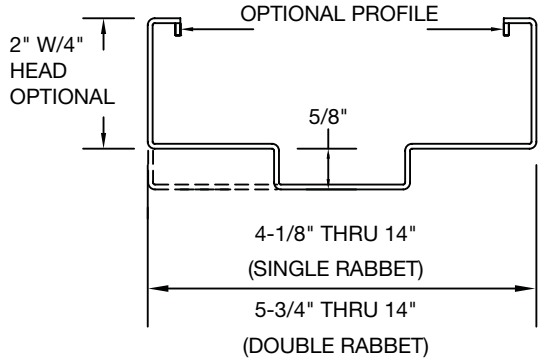
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

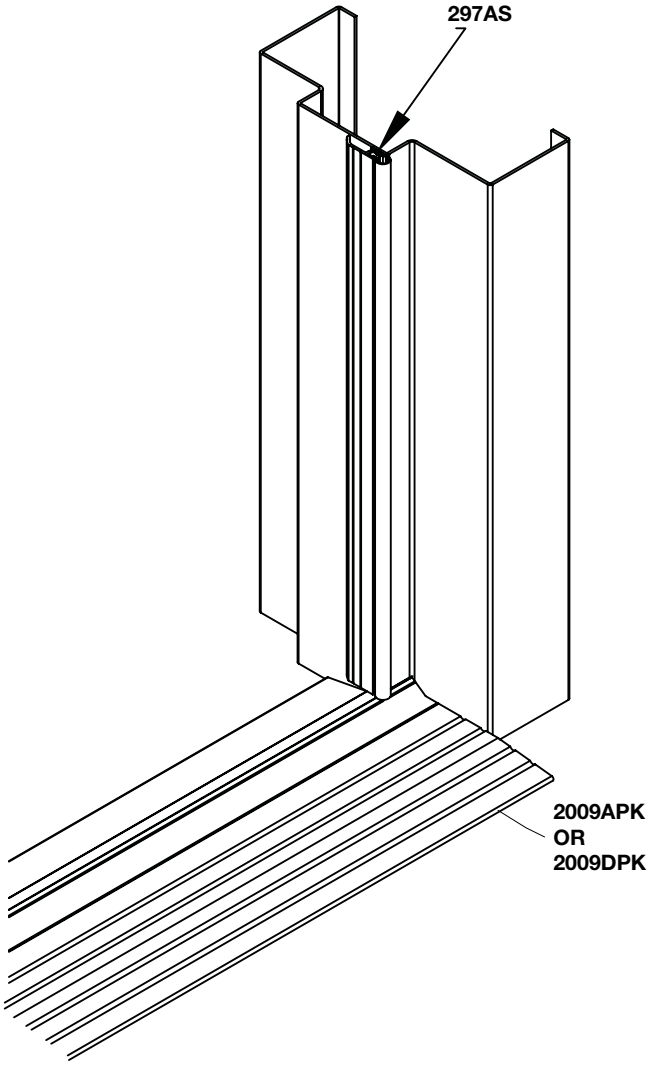
STC33 THRU STC38 (FLUSH SINGLES)

HORIZONTAL SECTIONS

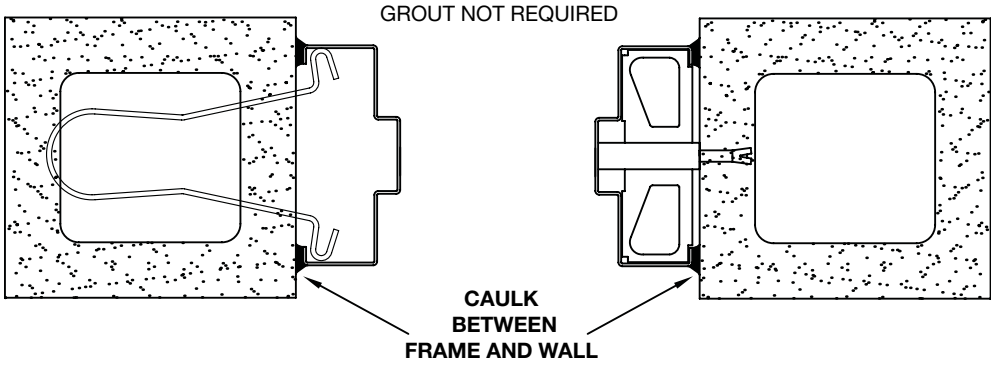


TYPICAL PROFILE





SOME COMMON MASONARY APPLICATIONS SHOWN BELOW

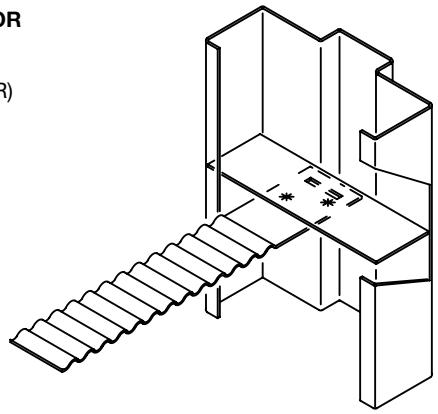


IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED INSTALLATION INSTRUCTIONS.

STC33 THRU STC38 (FLUSH SINGLES)

MASONRY "T" ANCHOR

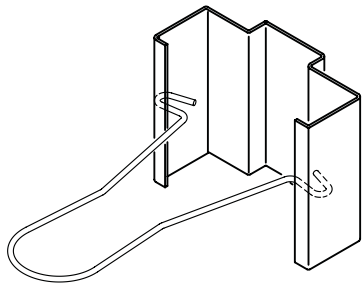
SNAP-IN TYPE
(WITH FLOOR ANCHOR)



(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR

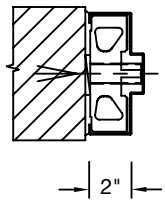
7 GA. GALV. STEEL
SNAP-IN TYPE

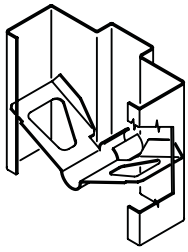


EXISTING OPENING ANCHOR EO

ANCHOR FITS VARIOUS DEPTH
FRAMES (SEE BELOW)

SNAP-IN STYLE

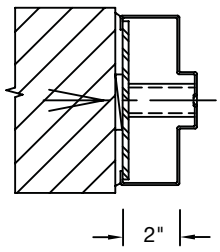


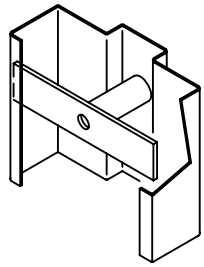


SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

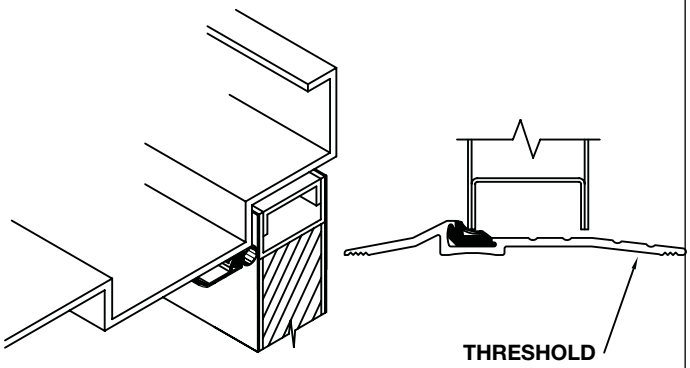
EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTH



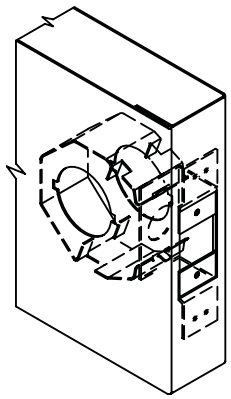


DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATION

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

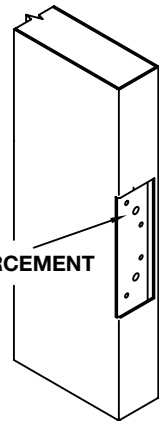


LOCK EDGE IS BEVELED 1/8" IN 2"

HINGE PREPARATION

HINGE PREP IS HANDED

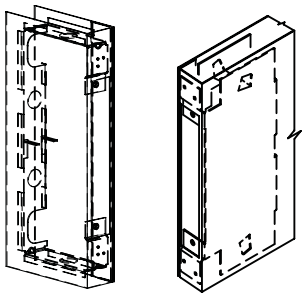
4-1/2" OR 5" REGULAR
OR HEAVY WEIGHT
HINGES
ANSI A156.7



LOCK PREPARATION

GOV. 86, ANSI/BHMA
A115.1 MORTISE TYPE

(LM0)



NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

LOCK EDGE IS BEVELED 1/8" IN 2"

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC33 THRU STC38 (FLUSH SINGLES)

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

FIRE DOORS

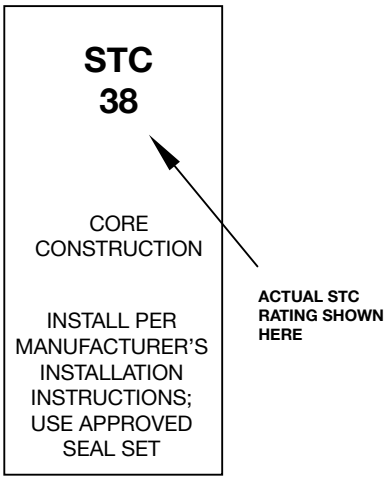
LABELING AGENCIES:
UL SOLUTIONS
WH

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252

FIRE RATING : 20 MIN. THRU 3 HRS.
STX 33-38
4'0" X 8'0" MAX.

DESIGN: FLUSH

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A1008 or optional zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. Assemblies STC rated 39 and below are not required to be grout filled to achieve the STC rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A 115.2 cylindrical, ANSI A 115.1 mortise lock. Electric power transfer, mag switch and dead bolt hardware preparations are not allowed.

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a Pantone color selection chart. Optional colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

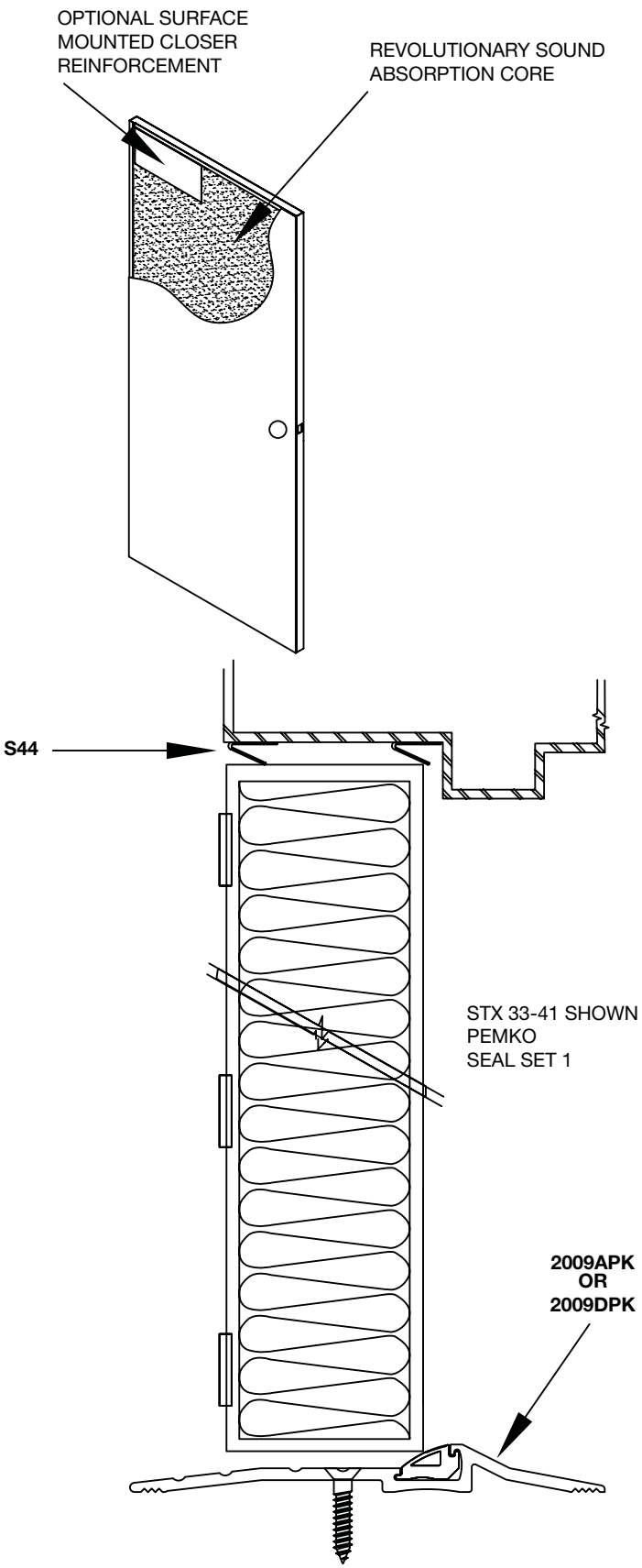
NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

SOUND-TECH XPRESS DOOR SYSTEMS						
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	MAX.LITE VISIBLE AREA	SEAL SET DESCRIPTION
SINGLE	33-38	CYL OR MORTISE	3/8"	3 HR.	N/A	PEMKO SEALS: 297AS & 2009_ PK THRESHOLD-SET 38

STC 33-38 WITH CYLINDRICAL LOCK OR MORTISE LOCK, OPTIONAL PREPARATIONS NOT ALLOWED.
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC 33-41 (FLUSH SINGLES)

1-3/4" SOUND-TECH XPRESS



REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS

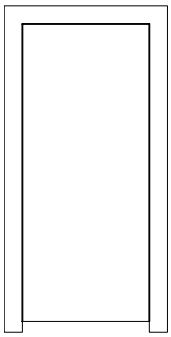
Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E225. Door systems are in compliance with HMMA 865 & SDI-123 specifications. Complete with perimeter sound seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rated assembly.

SUGGESTED USE:

- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing art studios
- Hotel/Motel
- Military barracks

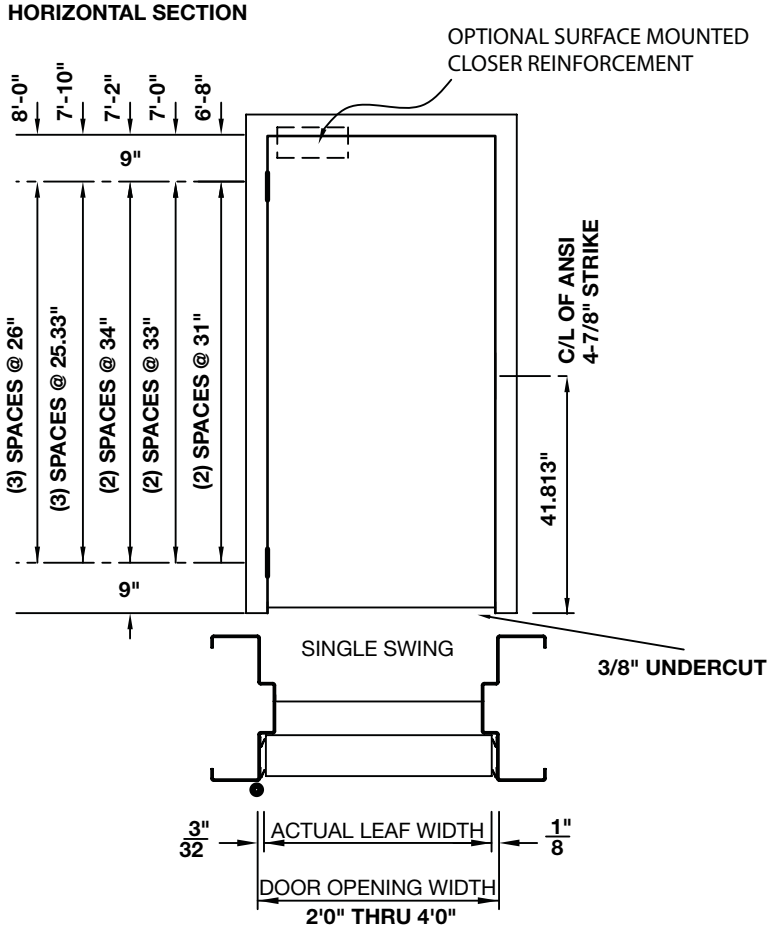
DOOR DESIGN

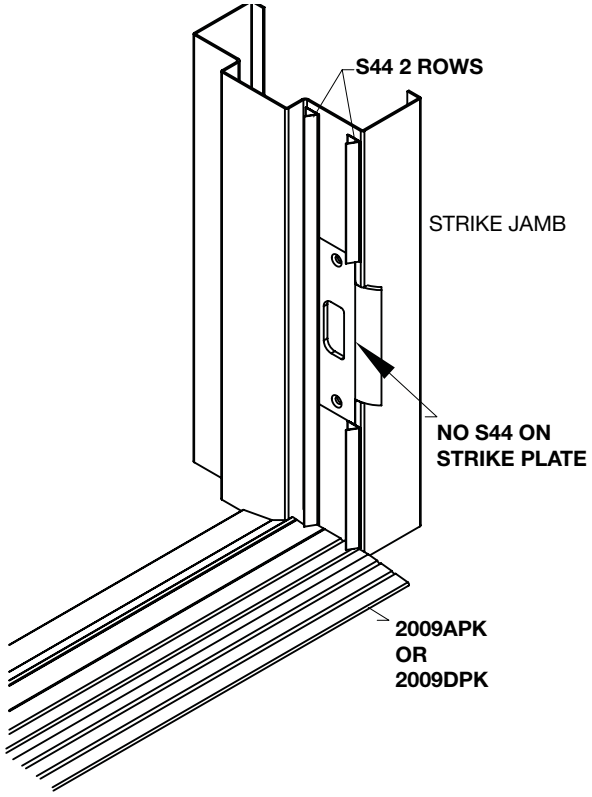


F
(ELEVATION)

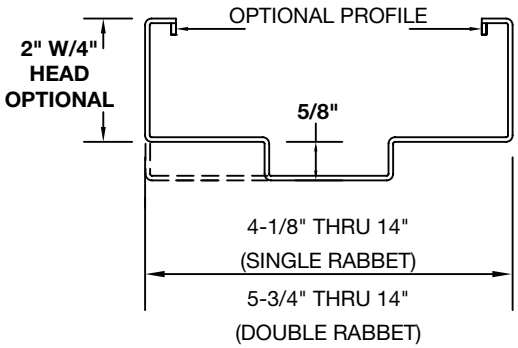
STC 33-41 (FLUSH SINGLES)

HORIZONTAL SECTION

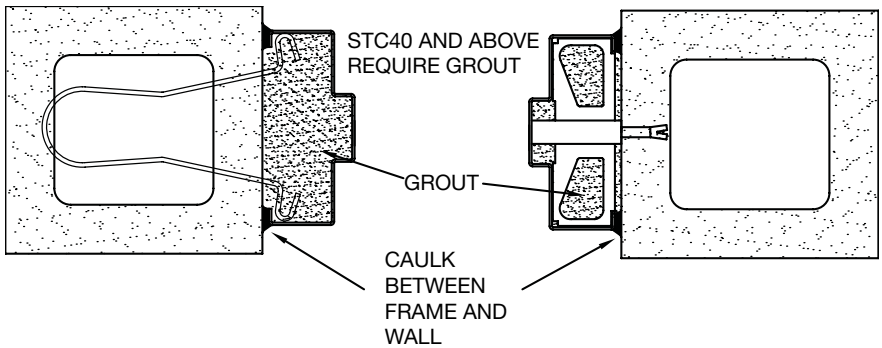




TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW

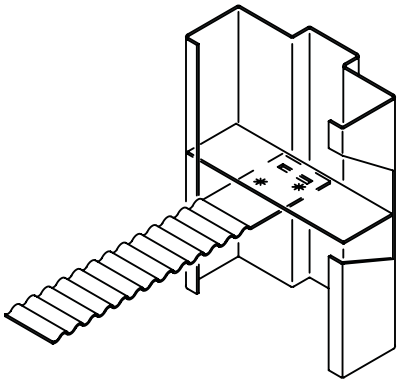


IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

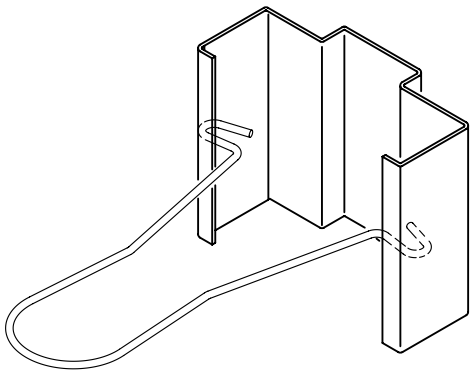
STC 33-41 (FLUSH SINGLES)

MASONRY "T" ANCHOR



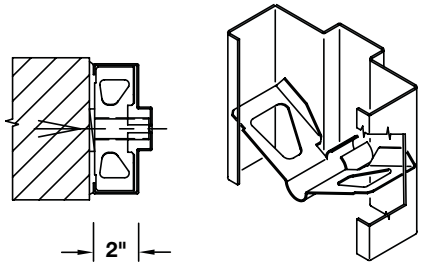
SNAP-IN TYPE
(WITH FLOOR ANCHOR)
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



7 GA. GALV. STEEL
SNAP-IN TYPE

EXISTING OPENING ANCHOR EO

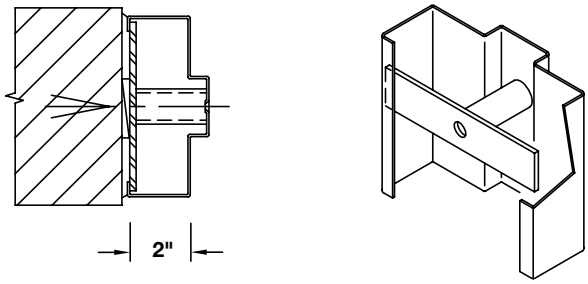


ANCHOR FITS
VARIOUS DEPTH
FRAMES (SEE
BELOW)

SNAP-IN STYLE

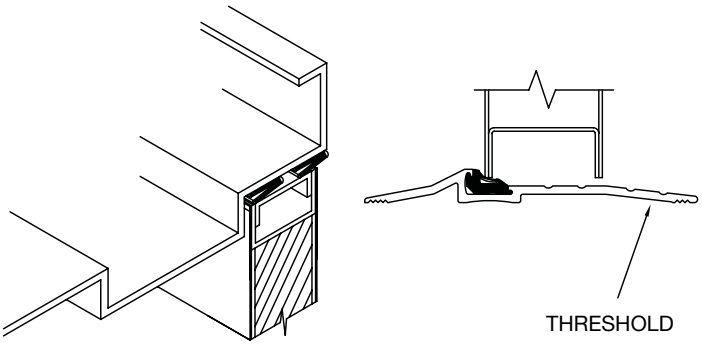
SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

EXISTING OPENING ANCHOR EO/P&S



ANCHOR FITS VARIOUS DEPTHS

DOOR CONSTRUCTION TOP AND BOTTOM

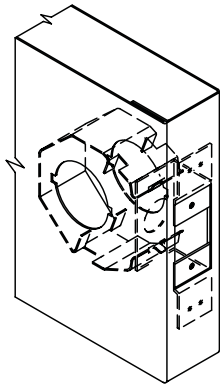


LOCK PREPARATION

CYLINDRICAL
ANSI A115.2

BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

CYLINDRICAL &
MORTISE DEADLOCK
(OPTIONAL)
LOCK EDGE IS BEVELED 1/8" IN 2"

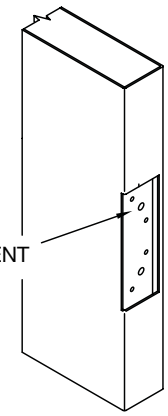


HINGE PREPARATION

HINGE PREP IS HANDED

4-1/2" OR 5" REGULAR
OR HEAVY WEIGHT
HINGES

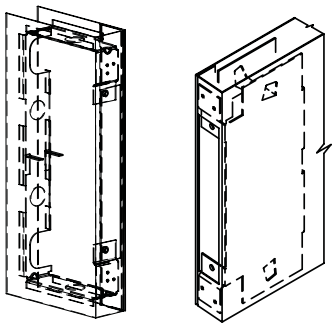
ANSI A156.7



LOCK PREPARATION

GOV.86, ANSI/BHMA
A115.1 MORTISE TYPE

(LM0)



NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 33-41 (FLUSH SINGLES)

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

ACOUSTICAL FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252

RATING: 20 MIN. THRU 3 HRS. (STX 33-41) FLUSH SINGLES 4'0" X 8'0" MAX.

DESIGNS: FLUSH ONLY

STC 41

CORE CONSTRUCTION

INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS; USE APPROVED SEAL SET

ACOUSTIC DOOR SYSTEM LABELS

ACTUAL STC RATING SHOWN HERE

PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A 1008 or optional zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332. & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. Assemblies STC rated 39 and below are not required to be grout filled to achieve the STC rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A 115.2 cylindrical, ANSI A 115.1 mortise lock. Electric power transfer, mag switch and dead bolt hardware preparations are not allowed.

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a Pantone color selection chart. Optional colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

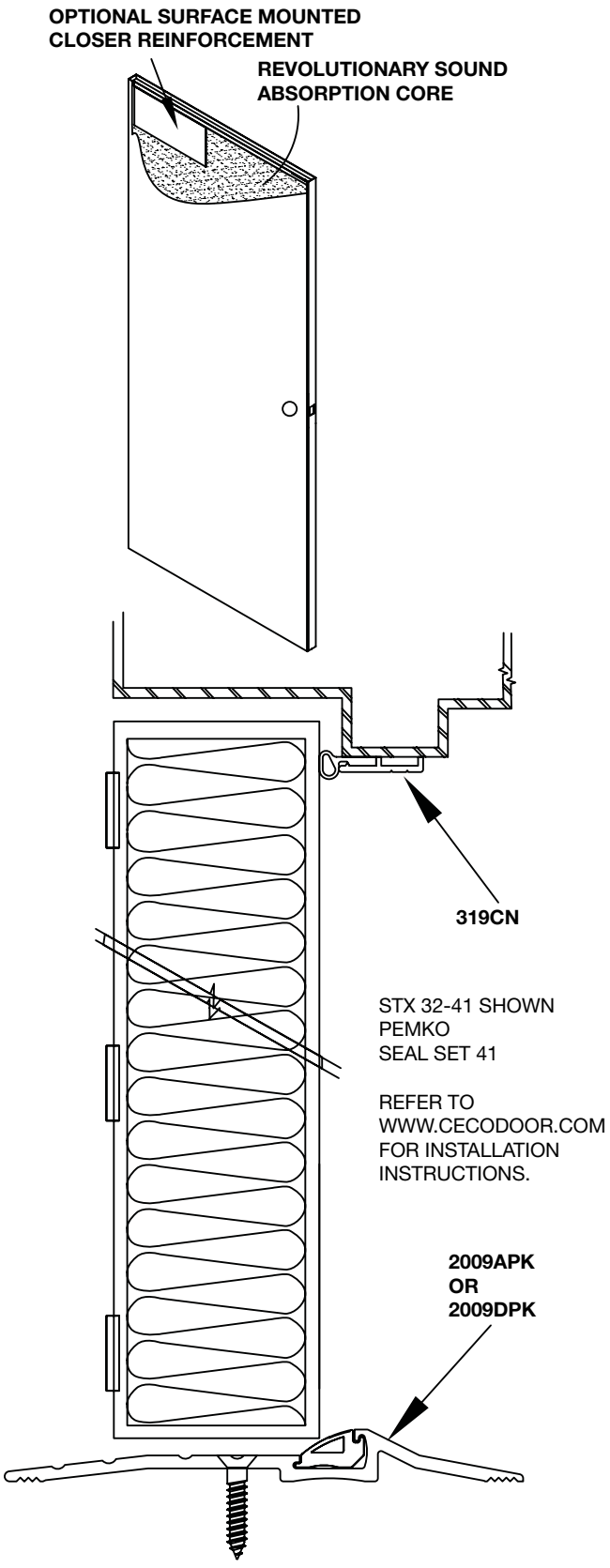
SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
SINGLE	SEE BELLOW	SEE BELLOW	3/8"	3 HR.	PEMKO SEALS: S44 & 2009_PK THRESHOLD-SET 1

OPTIONAL HARDWARE PREPARATIONS ARE: ELECTRIC POWER TRANSFER (EPT), MAG SWITCH AND DEADLOCK
STC 41 WITH CYLINDRICAL LOCK. OPTIONAL PREPS NOT ALLOWED.
STC 40 WITH CYLINDRICAL LOCK. ONE OPTIONAL PREP ALLOWED.
STC 40 WITH MORTISE LOCK. OPTIONAL PREPS NOT ALLOWED.
STC 39 WITH CYLINDRICAL LOCK. ANY COMBINATION OF TWO OPTIONAL PREPS ALLOWED.
STC 39 WITH MORTISE LOCK. ONE OPTIONAL PREP ALLOWED.
STC 39 WITH RIM EXIT. OPTIONAL PREPS NOT ALLOWED.
STC 33-38 WITH CYLINDRICAL LOCK. ANY COMBINATION OF (3) OPTIONAL PREPS ARE ALLOWED.
STC 38 WITH MORTISE LOCK. ANY COMBINATION OF TWO OPTIONAL PREPS ARE ALLOWED.
STC 38 WITH RIM EXIT. ONE OPTIONAL PREP ALLOWED.
STC 33-37 WITH MORTISE LOCK. ANY COMBINATION OF THREE OPTIONAL PREPS ALLOWED.
STC 37 WITH RIM PANIC. ANY COMBINATION OF TWO OPTIONAL PREPS ARE ALLOWED.
STC 33-36 WITH RIM EXIT. ANY COMBINATION OF THREE OPTIONAL PREPS ALLOWED.
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC32 THRU STC41 (FLUSH SINGLE 450° TEMPERATURE RISE)

1-3/4" SOUND-TECH XPRESS



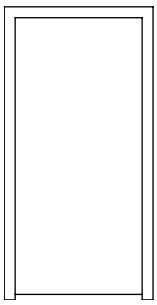
REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E225. Door systems are in compliance with HMMA 865 & SDI-123 specifications. Complete with perimeter sound seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rated assembly.

SUGGESTED USE:
- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing art studios
- Hotel/Motel
- Military barracks

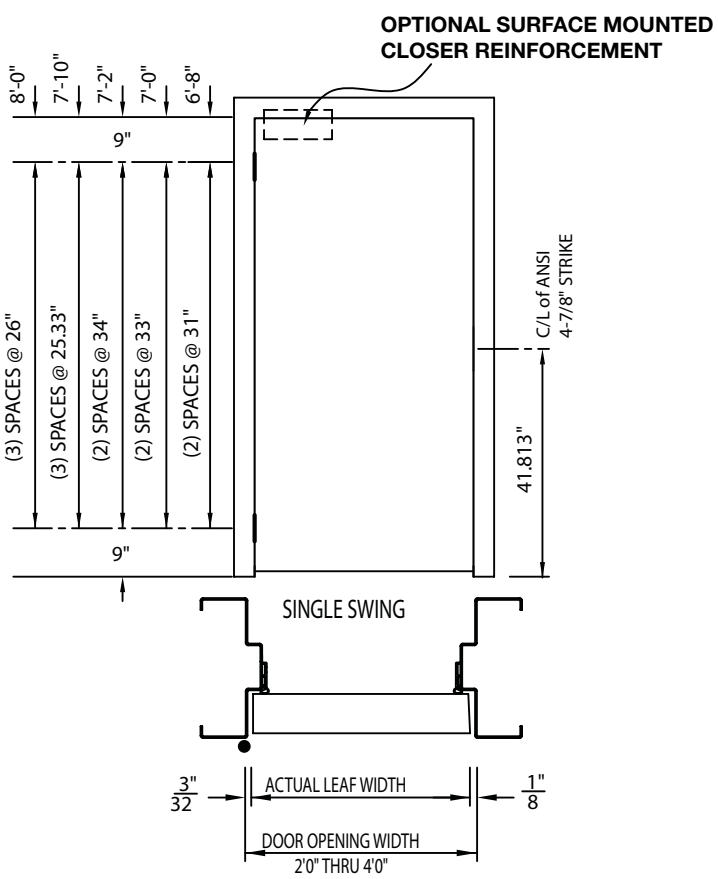
DOOR DESIGN

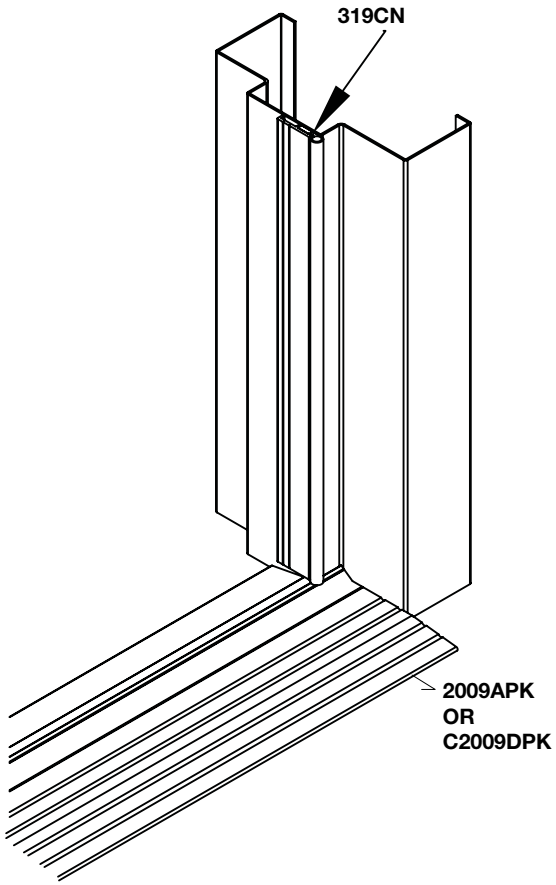


(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

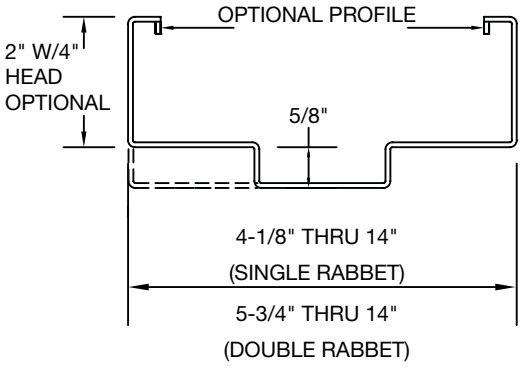
STC32 THRU STC41

HORIZONTAL SECTION

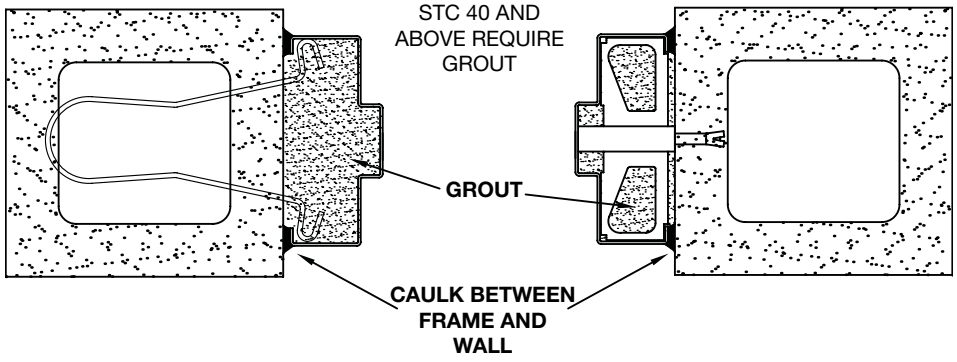




TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW

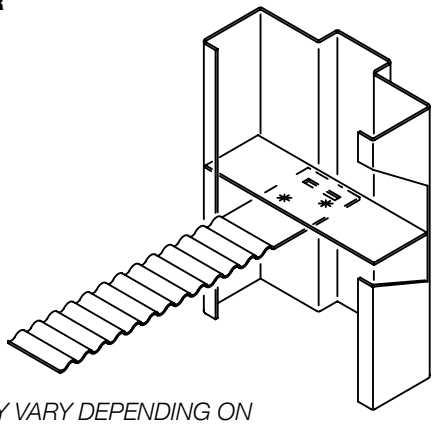


IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

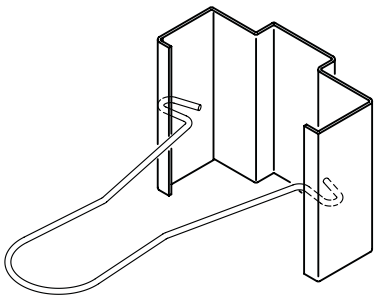
STC32 THRU STC41

MASONRY "T" ANCHOR



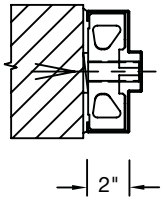
SNAP-IN TYPE
(WITH FLOOR ANCHOR)
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

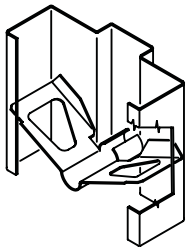
WIRE MASONRY ANCHOR



7 GA. GALV. STEEL
SNAP-IN TYPE

EXISTING OPENING ANCHOR EO



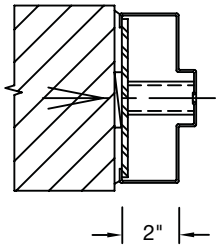


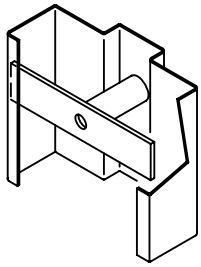
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

SNAP-IN TYPE

SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

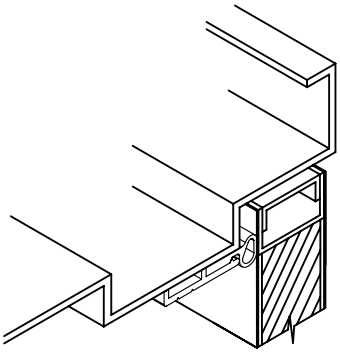
EXISTING OPENING ANCHOR EO/P&S

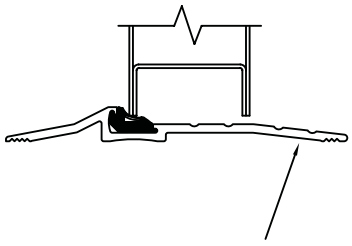




ANCHOR FITS VARIOUS DEPTHS

DOOR CONSTRUCTION TOP AND BOTTOM





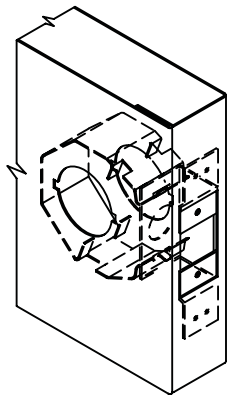
THRESHOLD

LOCK PREPARATION

CYLINDRICAL
ANSI A115.2

BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

LOCK EDGE IS BEVELED 1/8" IN 2"

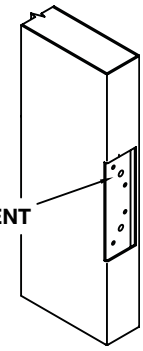


HINGE PREPARATION

HINGE PREP IS HANDED

4-1/2" OR 5" REGULAR
OR HEAVY WEIGHT
HINGES
ANSI A156.7

7 GAGE REINFORCEMENT

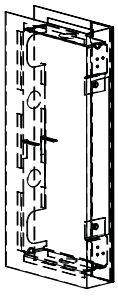


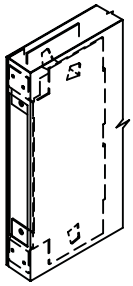
LOCK PREPARATION

GOV.86, ANSI/BHMA
A115.1 MORTISE TYPE

(LM0)

LOCK EDGE IS BEVELED 1/8" IN 2"





NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC32 THRU STC41

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

ACOUSTICAL FIRE DOORS

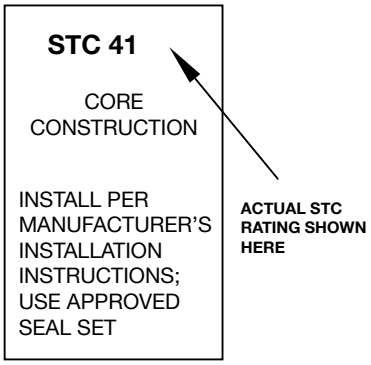
LABELING AGENCIES :
UL SOLUTIONS
WH

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252

FIRE RATING: 20 MIN. THRU 3 1-1/2 HRS
(STX 33-41) 4'0" X 8'0" MAX.

DESIGNS: FLUSH

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A 1008 or optional zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332. & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Doors may be 450° temperature rise rated with STC 32-41 rating and fire rated up to and including 1-1/2 hours. A physical STC door label is applied to certify the product and identify the specific rating. The STC label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. Assemblies STC rated 39 and below are not required to be grout filled to achieve the STC rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A 115.2 cylindrical, ANSI A 115.1 mortise lock. Electric power transfer, mag switch and dead bolt hardware preparations are not allowed.

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a Pantone color selection chart. Optional colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

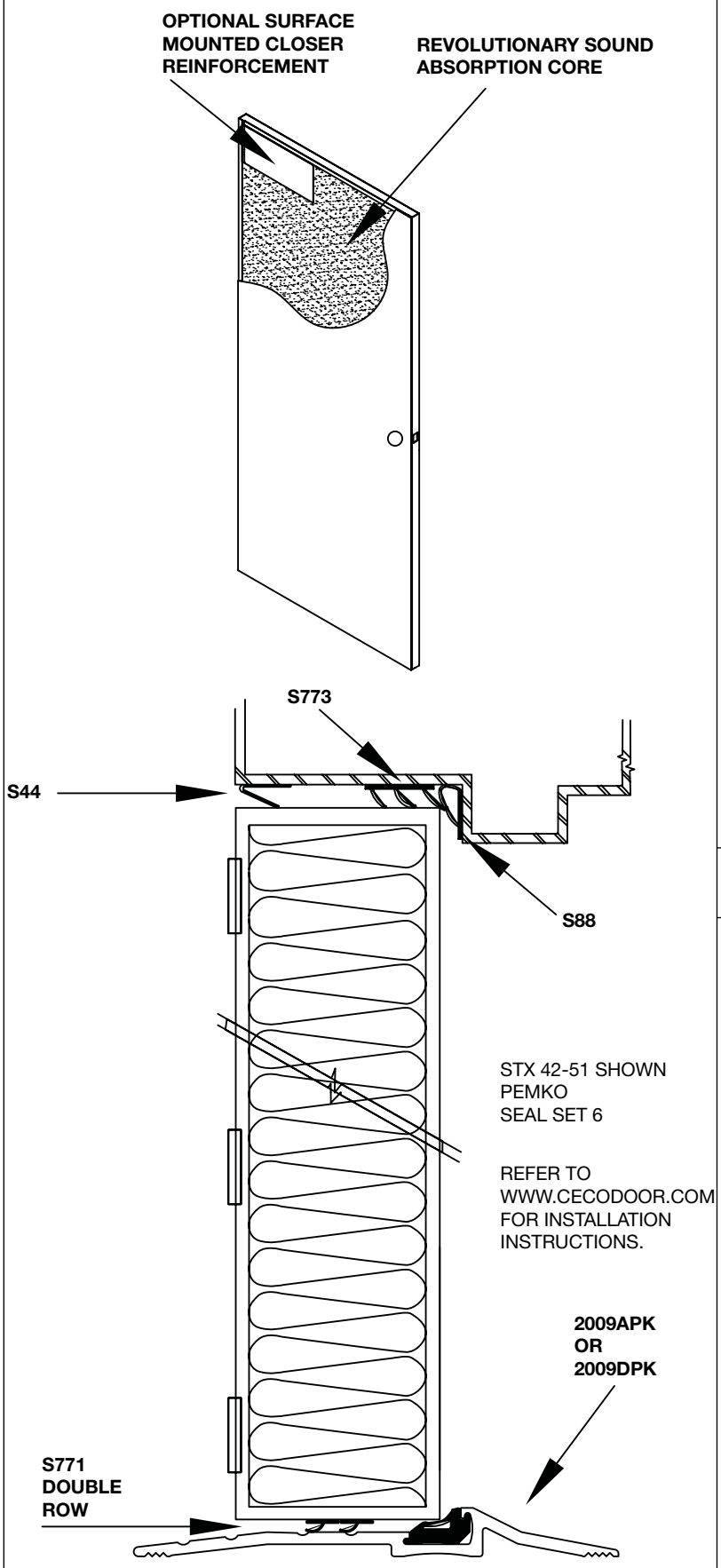
NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

SOUND-TECH XPRESS DOOR SYSTEMS						
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	MAX. LITE VISIBLE AREA	SEAL SET DESCRIPTION
SINGLE	32-41	CYL OR MORTISE	3/8"	1-1/2 HR.	N/A	PEMKO SEALS: 319CN & 2009_ PK THRESHOLD-SET 1

STC 32-41 WITH CYLINDRICAL LOCK OR MORTISE LOCK, OPTIONAL PREPARATIONS NOT ALLOWED.
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC 42-51 (FLUSH SINGLES)

1-3/4" SOUND-TECH XPRESS



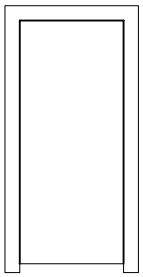
Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals, bottom seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rates assembly.

SUGGESTED USE:

- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & Performing arts studios
- Hotel / Motel
- Military barracks

DOOR DESIGN



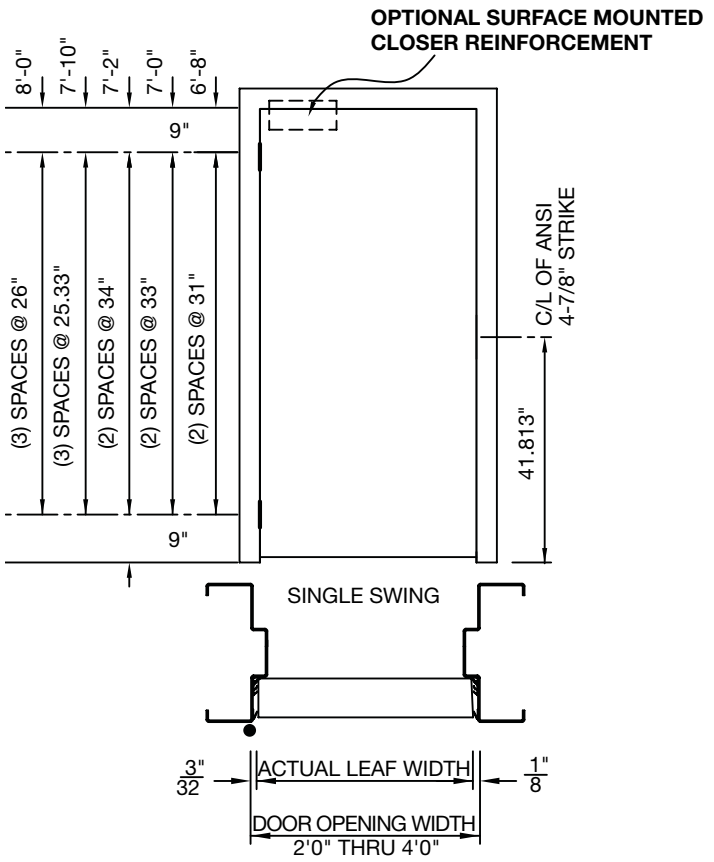
F

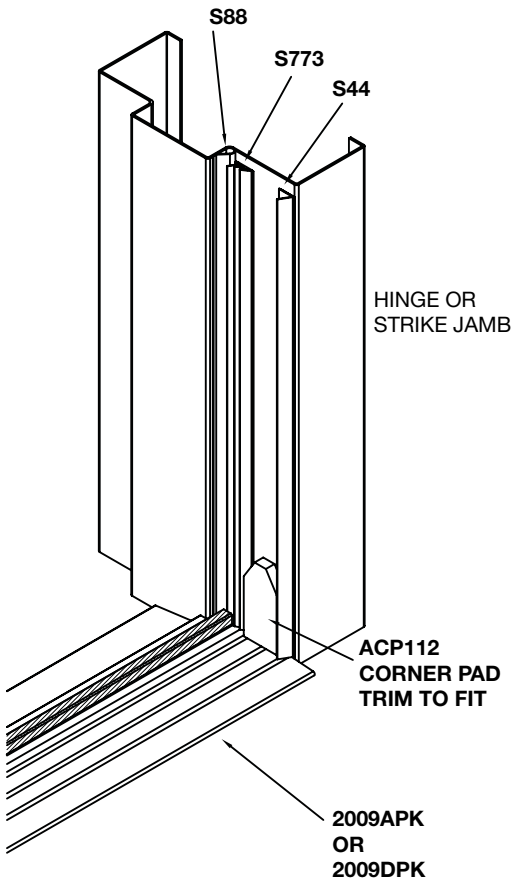
(ELEVATION)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

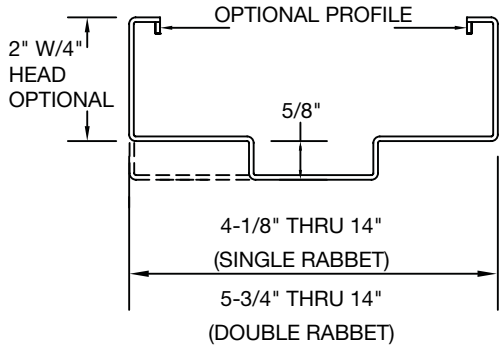
STC 42-51 (FLUSH SINGLES)

HORIZONTAL SECTION

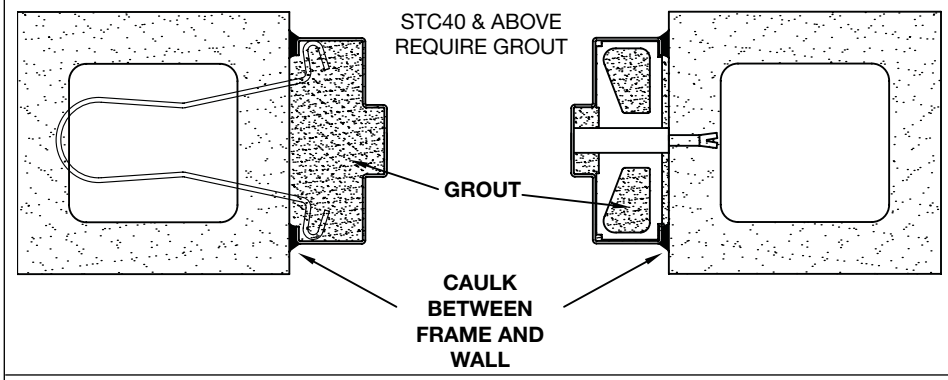




TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW

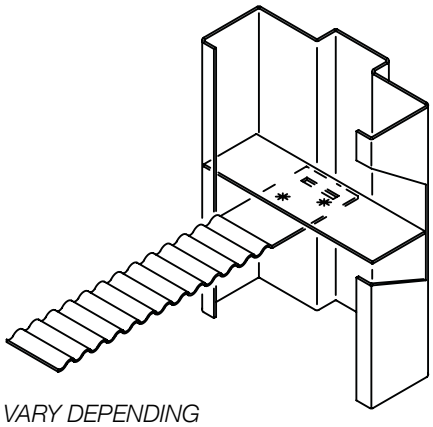


IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH SPECIFIC DETAILED SOUND SEAL INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 42-51 (FLUSH SINGLES)

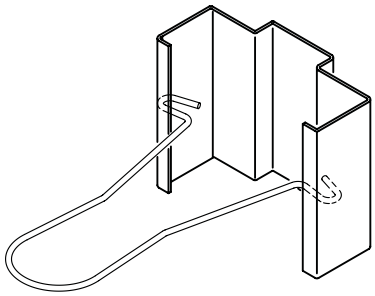
MASONRY "T" ANCHOR



SNAP-IN TYPE
(WITH FLOOR ANCHOR)

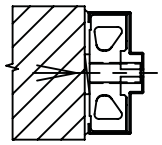
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

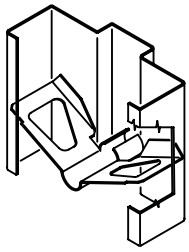
WIRE MASONRY ANCHOR



7 GA. GALV. STEEL
SNAP-IN TYPE

EXISTING OPENING ANCHOR EO





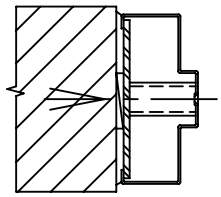
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

2"

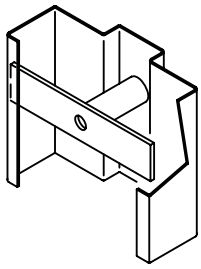
SNAP-IN TYPE

SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

EXISTING OPENING ANCHOR EO/P&S

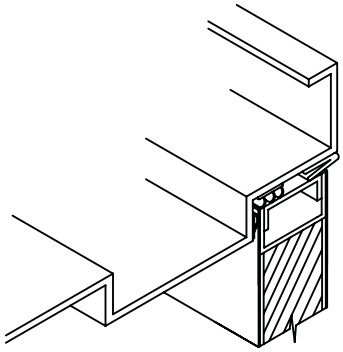


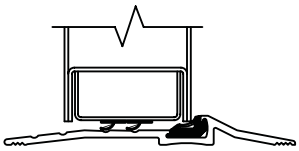
2"



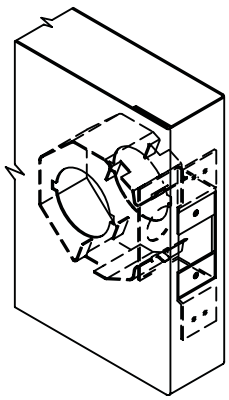
ANCHOR FITS VARIOUS DEPTHS

DOOR CONSTRUCTION TOP AND BOTTOM





LOCK PREPARATIONS



CYLINDRICAL
ANSI A115.2

BACKSET 2-3/4" (STD)*
3-3/4" (OPT)

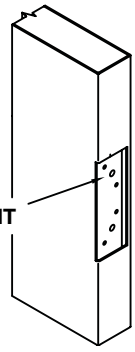
LOCK EDGE IS BEVELED 1/8" IN 2"

HINGE PREPARATION

HINGE PREP IS HANDED

4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7

7 GAGE REINFORCEMENT



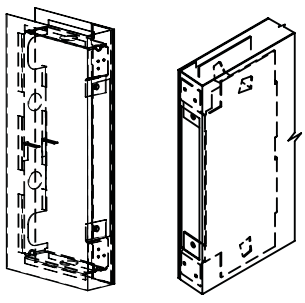
LOCK PREPARATION

GOV.86, ANSI/BHMA A115.1

MORTISE TYPE

NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION

LOCK EDGE IS BEVELED 1/8" IN 2"



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 42-51 (FLUSH SINGLES)

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

ACOUSTICAL FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252

RATING: 20 MIN. THRU 3 HRS. (STX 42-51) FLUSH SINGLES 4'0" X 8'0" MAX.

DESIGNS: FLUSH ONLY

ACOUSTIC DOOR SYSTEM LABELS

STC 51
CORE CONSTRUCTION
INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS; USE APPROVED SEAL SET

ACTUAL STC RATING SHOWN HERE

PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250 8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A 1008 or optional zinc coated A60 steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. The frames must also be grout filled to achieve the STC rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A115.2 cylindrical, ANSI A 115.1 mortise lock, ANSI 156.3 rim exit device or lockmaster lock for government or military projects. Lock jamb preparation is for 4-7/8" high strike (ANSI A 115.1 or 2) or rim exit reinforcement. Electric Power Transfer (EPT), mag switch and cylindrical deadbolt's are additional optional hardware

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

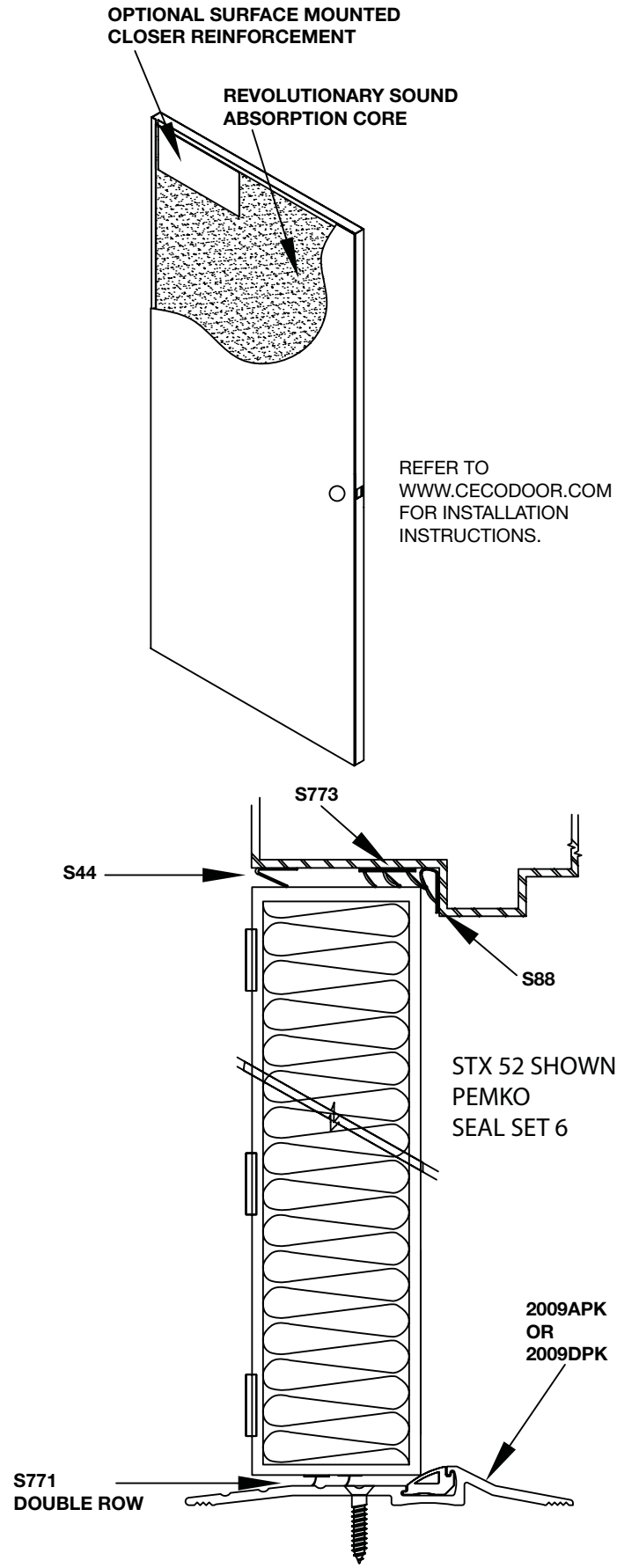
SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
SINGLE DOORS	42-51	CYL/MORT./ RIM	3/8"	3 HR.	PEMKO SEALS: S88, S44, S773, S771, ACP112, 2009_ PK THRESHOLD-SET 6
	42-50	LOCKMASTER	3/8"	3 HR.	PEMKO SEALS: S88, S44, S773, S771, ACP112, 2009_ PK THRESHOLD-SET 6

OPTIONAL HARDWARE PREPARATIONS ARE: ELECTRIC POWER TRANSFER (EPT), MAG SWITCH AND DEADLOCK
STC 42-50 WITH CYLINDRICAL LOCK MAY HAVE ANY COMBINATION OF (3) OPTIONAL PREPS.
STC 42-49 WITH MORTISE LOCK MAY HAVE ANY COMBINATION OF (3) OPTIONAL PREPS.
STC 42-48 WITH RIM PANIC MAY HAVE ANY COMBINATION OF (3) OPTIONAL PREPS.
STC 42-47 WITH LOCKMASTER/MILITARY LOCK MAY HAVE ANY COMBINATION OF (3) OPTIONAL PREPS.
STC 48 WITH LOCKMASTER/MILITARY LOCK MAY HAVE ANY COMBINATION OF (2) OPTIONAL PREPS.
STC 49 WITH LOCKMASTER/MILITARY LOCK MAY HAVE (1) OPTIONAL PREP.
STC 49 WITH RIM PANIC MAY HAVE ANY COMBINATION OF (2) OPTIONAL PREPS.
STC 50 WITH LOCKMASTER/MILITARY LOCK OPTIONAL PREPS ARE NOT AVAILABLE.
STC 50 WITH RIM PANIC MAY HAVE (1) OPTIONAL PREP.
STC 50 WITH MORTISE LOCK MAY HAVE ANY COMBINATION OF (2) OPTIONAL PREPS.
STC 51 WITH RIM PANIC OPTIONAL PREPS ARE NOT AVAILABLE.
STC 51 WITH MORTISE LOCK MAY HAVE (1) OPTIONAL PREP
STC 51 WITH CYLINDRICAL LOCK MAY HAVE ANY COMBINATION OF (2) OPTIONAL PREPS.

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC52 (FLUSH SINGLES)

1-3/4" SOUND-TECH XPRESS

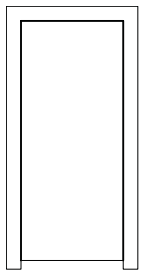


Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals, bottom seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rates assembly.

SUGGESTED USE:
- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing arts studios
- Hotel / motel
- Military barracks

DOOR DESIGN



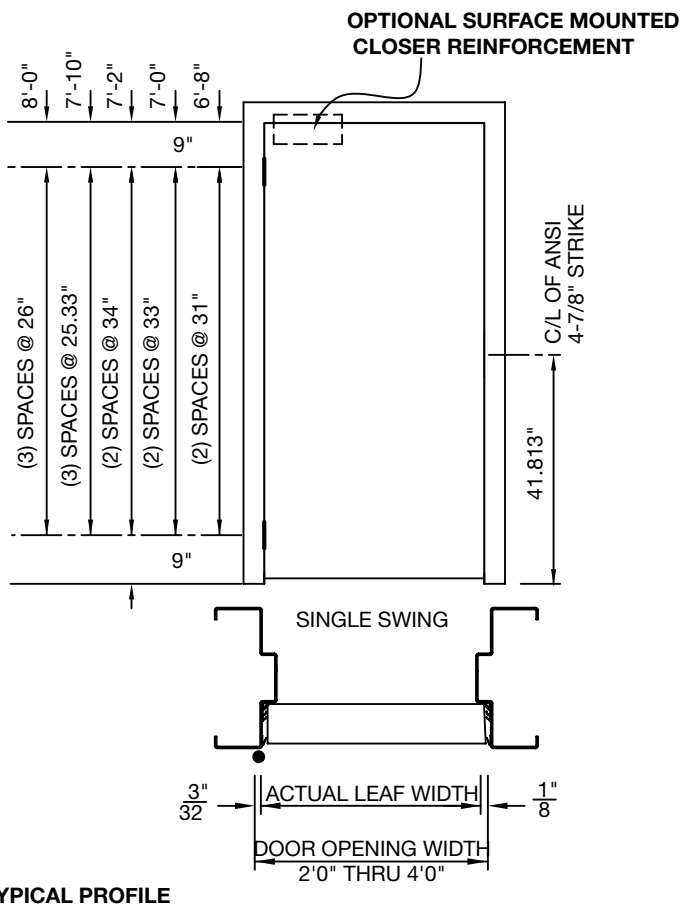
F

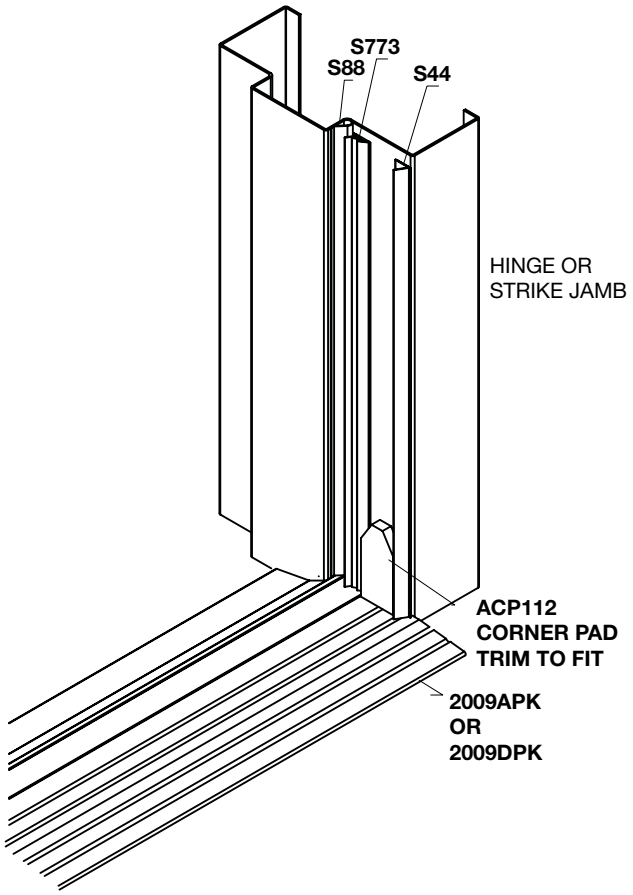
(ELEVATION)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

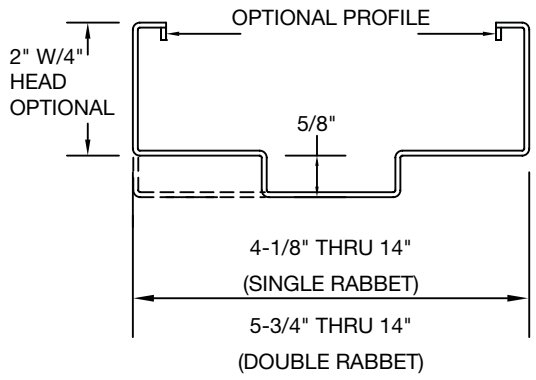
STC52 (FLUSH SINGLES)

HORIZONTAL SECTION

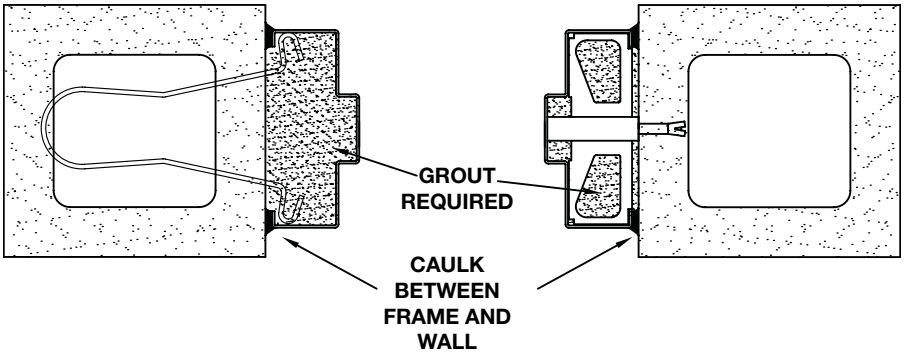




TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW

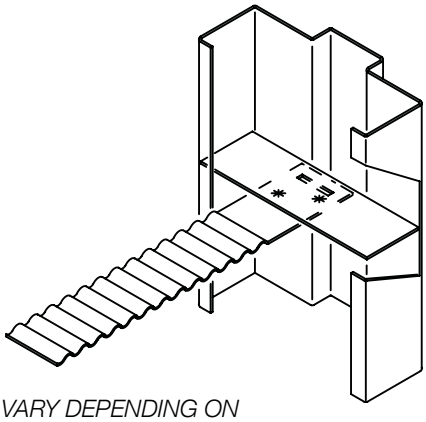


IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC52 (FLUSH SINGLES)

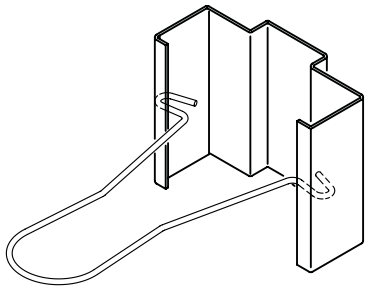
MASONRY "T" ANCHOR



SNAP-IN TYPE
(WITH FLOOR ANCHOR)

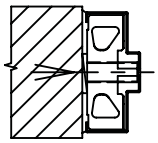
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

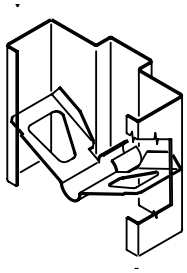
WIRE MASONRY ANCHOR



7 GA. GALV. STEEL
SNAP-IN TYPE

EXISTING OPENING ANCHOR EO





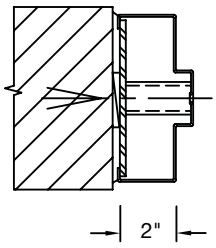
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

2"

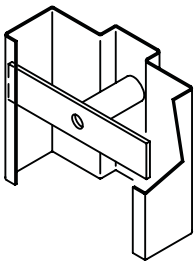
SNAP-IN TYPE

SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

EXISTING OPENING ANCHOR EO/P&S

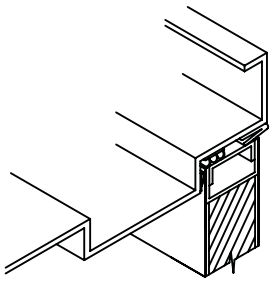


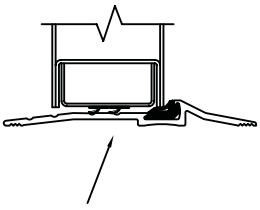
2"



ANCHOR FITS VARIOUS DEPTHS

DOOR CONSTRUCTION TOP AND BOTTOM





THRESHOLD

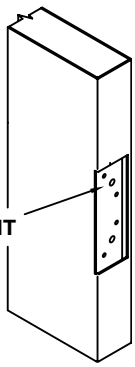
LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2 BACKSET
2-3/4" (STD)* 3-3/4" (OPT)

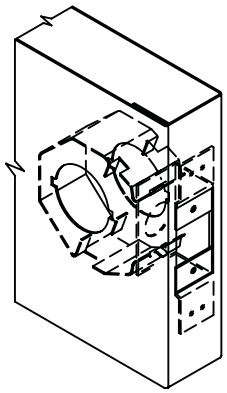
CYLINDRICAL &
MORTISE DEADLOCK
(OPTIONAL)

LOCK EDGE IS BEVELED 1/8" IN 2"

7 GAGE REINFORCEMENT



HINGE PREPARATION



HINGE PREP IS
HANDED

4-1/2" OR 5" REGULAR
OR HEAVY WEIGHT
HINGES ANSI A156.7

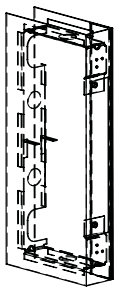
LOCK PREPARATION

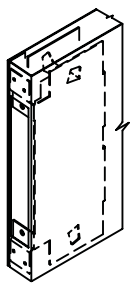
GOV.86, ANSI/BHMA A115.1
MORTISE TYPE

(LM0)

NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION

LOCK EDGE IS BEVELED 1/8" IN 2"





(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC52 (FLUSH SINGLES)

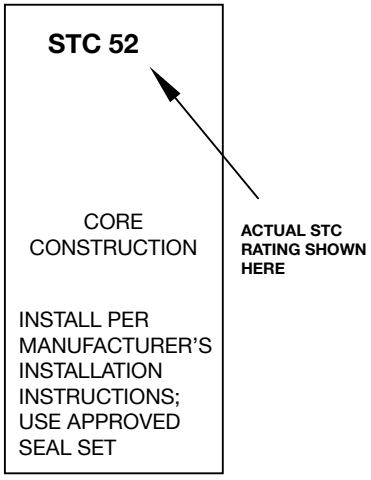
STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

ACOUSTICAL FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS WARNOCK HERSEY
TEST: UL 10B, UL 10C, UL 1784, & NFPA 252 **RATING:** THRU 3 HRS. (STX 32) FLUSH SINGLES 4'0" X 8'0" MAX. **DESIGNS:** FLUSH ONLY

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI JI.250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTh1 A 1008 or optional zinc coated steel conforming to ASTh1 A653 &ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA865 & SDI-128 specifications. Flush mounted top and bottom caps are applied. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. The frames must also be grout filled to achieve the STC rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A115.2 cylindrical, or ANSI A115.1 mortise lock. Lock jamb preparation is for 4-7 /8" high strike (ANSI A 115.1 or 2). Optional surface mounted closer reinforcements are available. Mag locks, Electric Power Transfer (EPT) and deadlocks are options for STC52.

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform with ANSI JI.250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI JI.250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

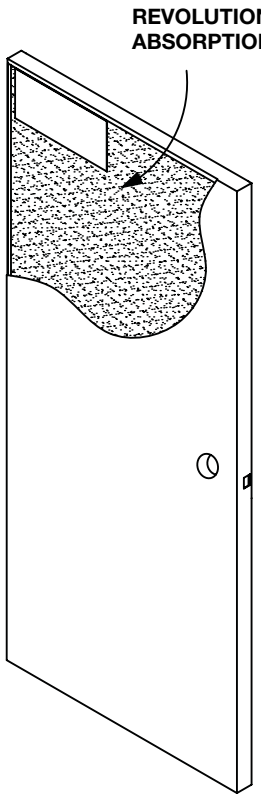
SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
SINGLE DOORS	52	CYL/ MORT.	3/8"	3 HR.	PEMKO SEALS: S88, S44, S771, ACP112, 2009_PK THRESHOLD-SET6

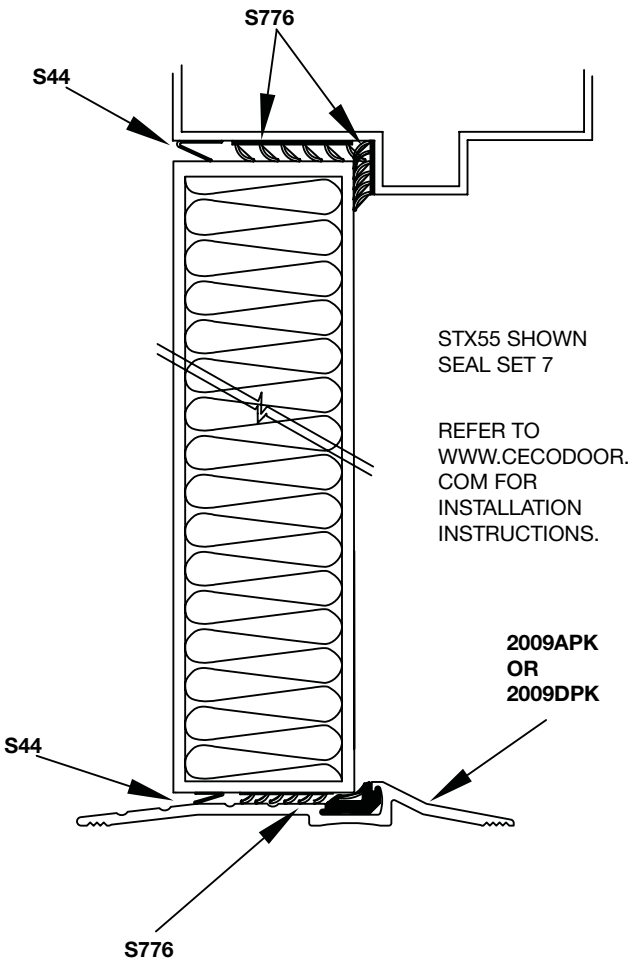
OPTIONAL HARDWARE PREPARATIONS ARE: ELECTRIC POWER TRANSFER (EPT), MAG LOCK OR DEADLOCK.

STC52 WITH CYLINDRICAL LOCK MAY HAVE COMBINATION OF (2) OPTIONAL PREPS.
STC 52 WITH MORTISE LOCK MAY HAVE (1) OPTIONAL PREP.

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC 55 2-1/2" (FLUSH SINGLE)



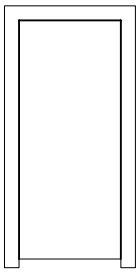


Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rated assembly.

SUGGESTED USE:
- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing art studios
- Hotel/Motel
- Military/ government facilities

DOOR DESIGNS



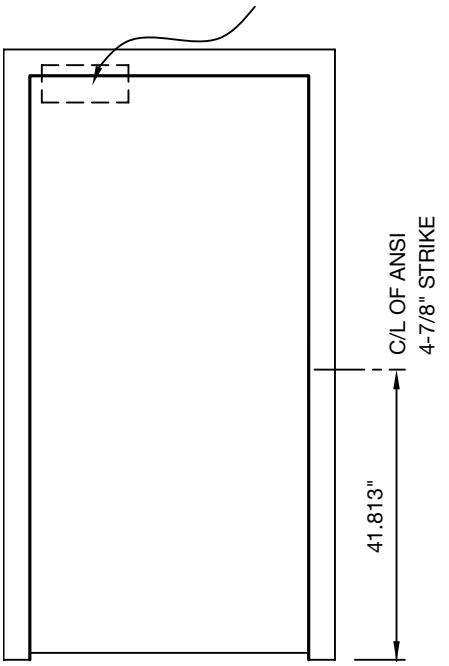
F

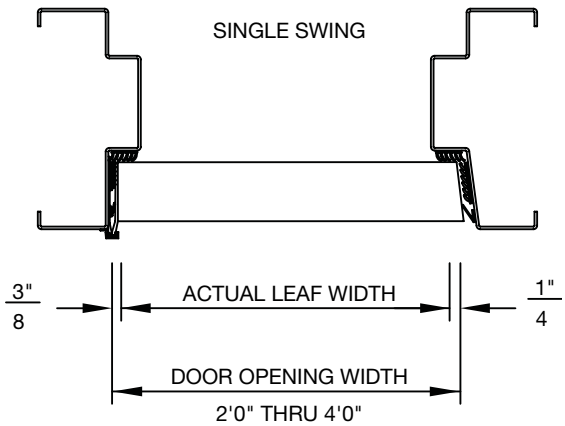
(ELEVATION)

2-1/2" STC 55 SOUND-TECH XPRESS

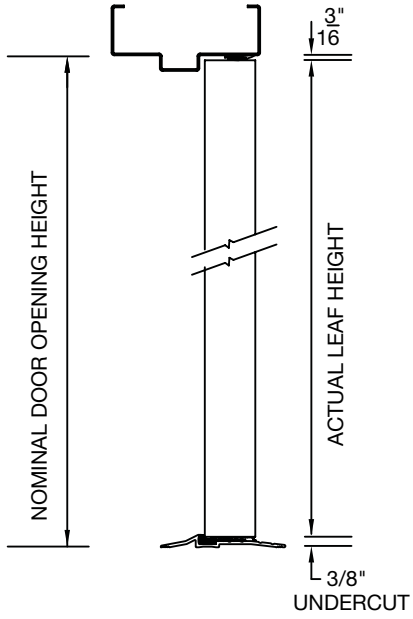
HORIZONTAL SECTIONS

OPTIONAL SURFACE MOUNTED CLOSER REINFORCEMENT

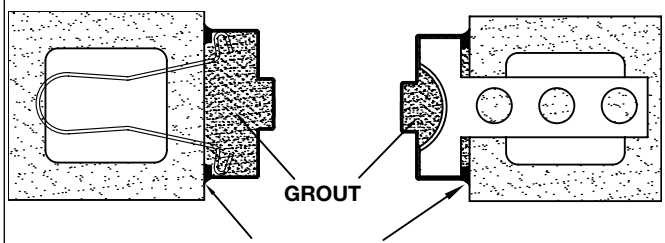




VERTICAL SECTION

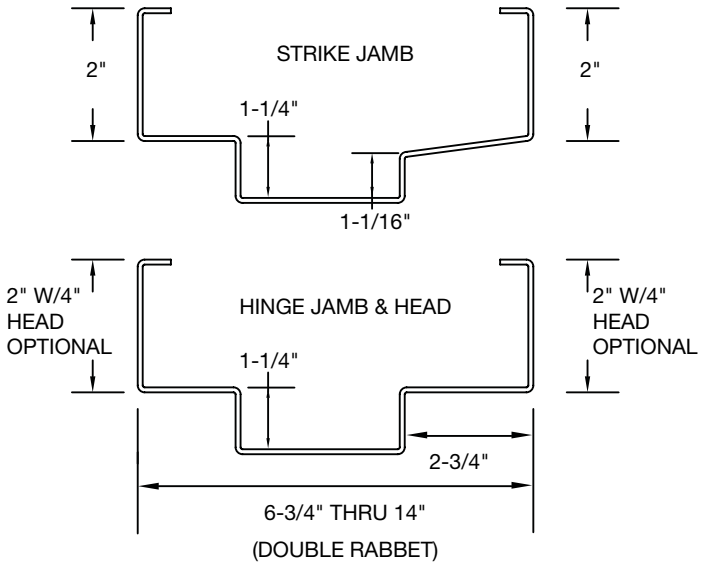


SOME COMMON MASONARY APPLICATIONS SHOWN BELOW



IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED INSTALLATION INSTRUCTIONS.

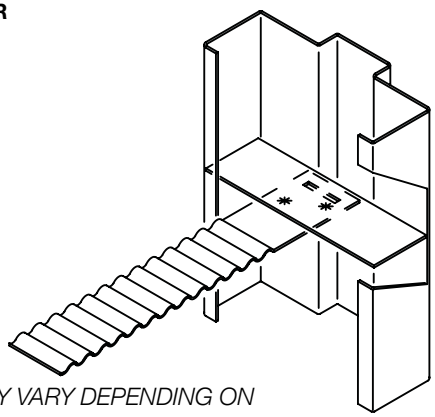
TYPICAL PROFILE



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

2-1/2” STC 55 SOUND-TECH XPRESS

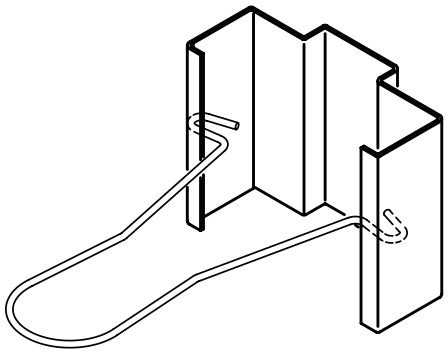
MASONRY “T” ANCHOR



SNAP-IN TYPE
(WITH FLOOR ANCHOR)

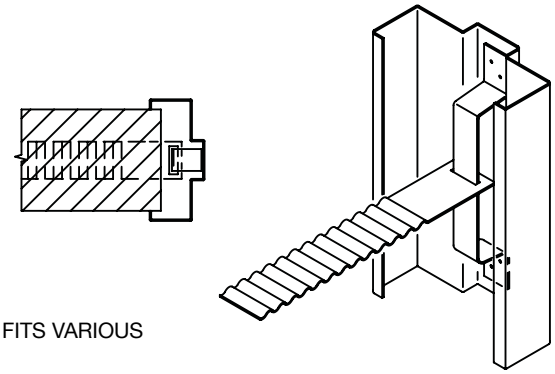
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



7 GA. GALV. STEEL
SNAP-IN TYPE

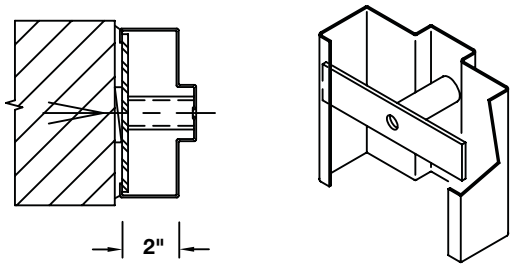
YOKE AND STRAP MASONRY ANCHOR YS



ANCHOR FITS VARIOUS DEPTHS

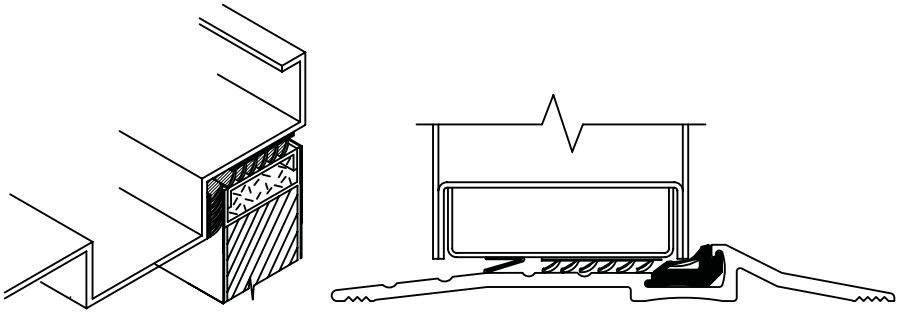
WELDED TYPE

EXISTING OPENING ANCHOR EO/P&S

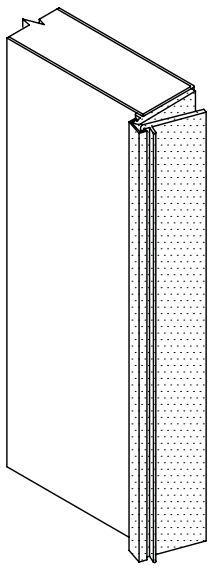


ANCHOR FITS VARIOUS DEPTHS

DOOR CONSTRUCTION TOP AND BOTTOM



HINGE PREPARATION



REINFORCED FOR CONTINUOUS HINGE

PEMKO X25MC OR XM25D (SPECIFY FINISH)

EXTRA-HEAVY DUTY CONTINUOUS HINGE SUPPLIED BY CECO

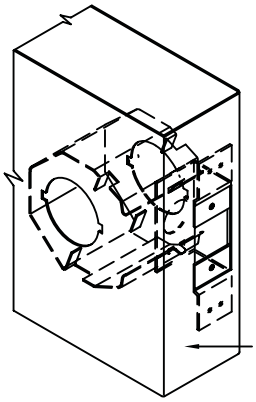
LOCK PREPARATION

SARGENT 11 LINE CYLINDRICAL
(“B” OR “O” ROSE) OR

CORBIN-RUSSWIN CL3100
CYLINDRICAL (“C” OR “K” ROSE)
ANSI A 115.2 (BY OTHERS)

BACKSET = 2-3/4”
OPTIONAL BACKSET = 3-3/4”
LOCK EDGE IS BEVELED

CHECK WITH THE MOCK MANUFACTURERS FOR THE STC 55 LOCK ORDER CODES



LOCKS ARE HANDED AND CAN’T BE RE-HANDED IN THE FIELD. LOCKS SHOULD BE ORDERED THE SAME HAND AS THE DOOR AND FRAME.

WIDE EDGE OF LOCK PREPARATION IS AGAINST FRAME STOP, WHEN DOOR IS CLOSED.

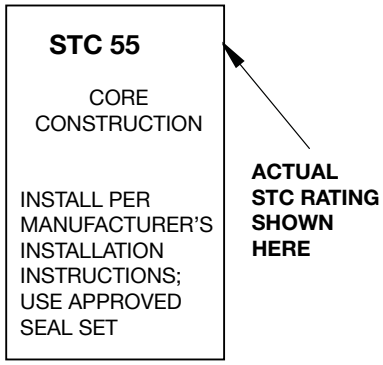
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

2-1/2” STC 55 SOUND-TECH XPRESS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2’-0”	6’-8”
2’-4”	7’-0”
2’-6”	7’-2”
2’-8”	7’-10”
3’-0”	8’-0”
3’-4”	
3’-6”	
3’-8”	
4’-0”	

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

2-1 /2” thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A 1008 or optional zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer’s proprietary standard as tested in
accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Optional surface mounted closer reinforcements are available. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.
Frames are double rabbet profile of continuously welded construction and are available for any masonry acoustic wall system applications. They are constructed of 16 gauge to provide the STC performance specified. Mutes are not allowed in these frames. The frames must also be grout filled to achieve the STC rating.

Hardware Provisions: Doors and frames will be reinforced for a Pemko X25MC or X25MD (specify finish) extra heavy duty continuous hinge (supplied by Ceco). The door lock edge has a standard bevel and is prepared for a Sargent 11 Line or Corbin Russwin CL3100 (ANSI A 115.2) cylindrical lock. Check with Sargent for the STC 55 11 Line leek order code. Check with Corbin Russwin for the STC 55 CL3100 lock order code. When a 2-3/4” back set is used, Sargent “8” or ‘U’ rose, Corbin Russwin “G’ or “K” rose should be specified. 3-3/4” is an optional back set with other rose trims. A 3/4” latch throw is required. The lock jamb preparation is for 4- 7 /8” high strike (ANSI A 115.1 or 2).

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. “Colorstyle” factory finish coat is not available.

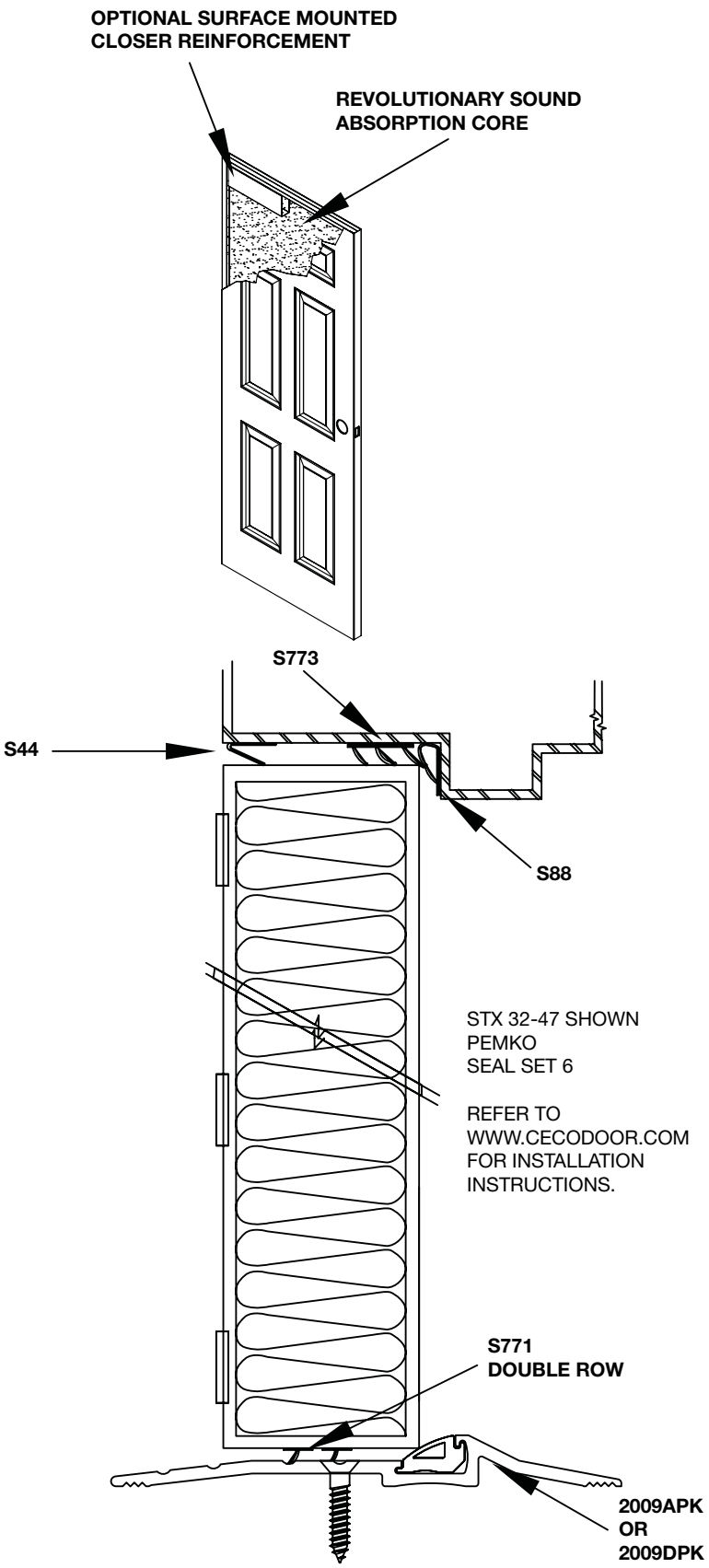
NOTE: INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN AFIELD TEST VERSUS LAB TEST.

SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
SINGLE	55	CYLINDRICAL	3/8”	N/A	PEMKO SEALS:S776, S44, 2009_PK THRESHOLD-SET 7

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC 32-47 (SINGLE EMBOSSED 2 AND 6 PANEL DOORS)

1-3/4" SOUND-TECH XPRESS

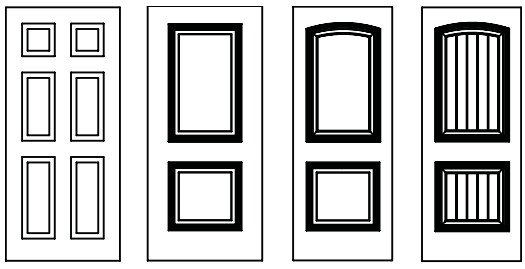


Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals, bottom seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rates assembly.

SUGGESTED USE:
- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing arts studios
- Hotel / motel
- Military barracks

DOOR DESIGNS



E601 E201 E202 E203

**2-3/8" LOCK BACKSET ONLY, IN 2'8" WIDTH.*

**CYLINDRICAL LOCKS ONLY IN 2'8" WIDTH.*

6 PANEL	
WIDTH	*2'8", 3'0"
HEIGHT	6'8", 7'0"
GAUGE	18 STD., 16 OPT.

**CONFIRM ROSE SIZE IS COMPATIBLE WITH SEAL SET AND LOCK BACKSET.*

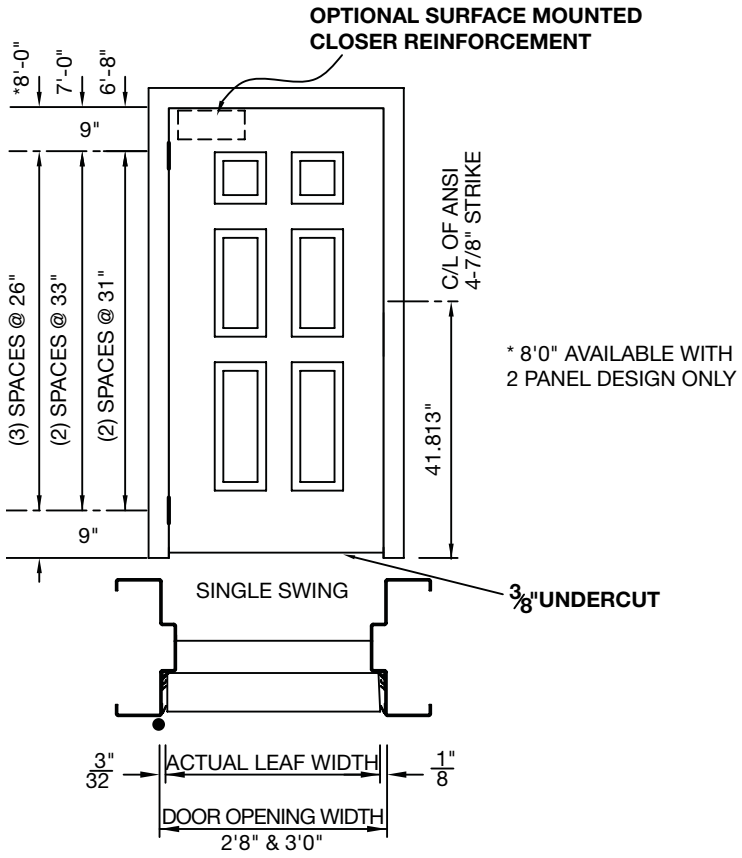
2 PANEL	
WIDTH	*2'8", 3'0"
HEIGHT	6'8", 7'0", 8'0"
GAUGE	18

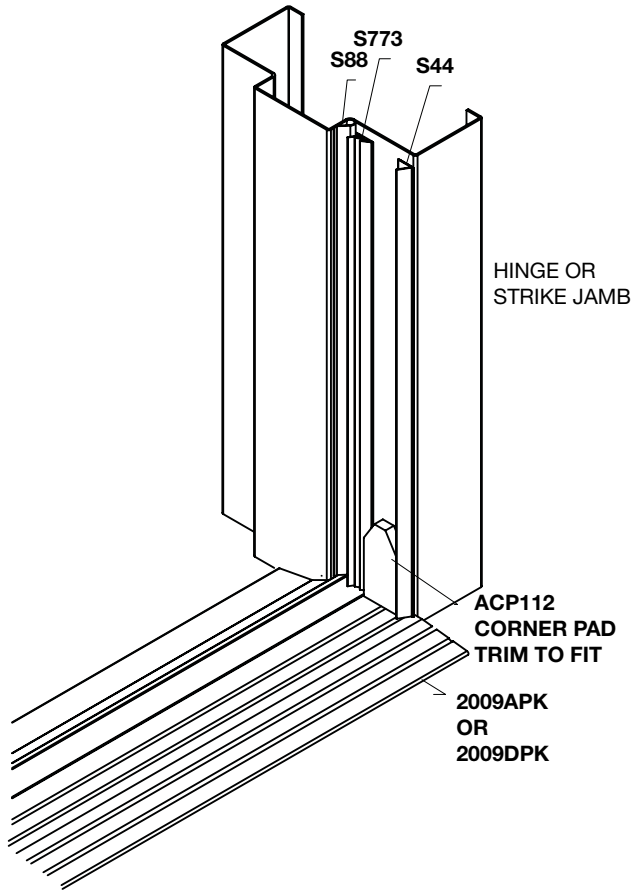
NARROW 6 PANEL DESIGN IS NOT AVAILABLE GLASS CUTOUTS ARE NOT ALLOWED.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

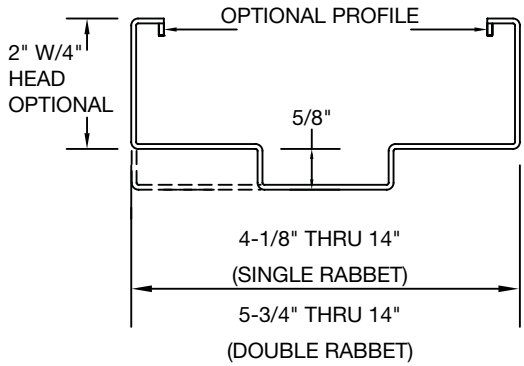
STC 32-47

HORIZONTAL SECTION

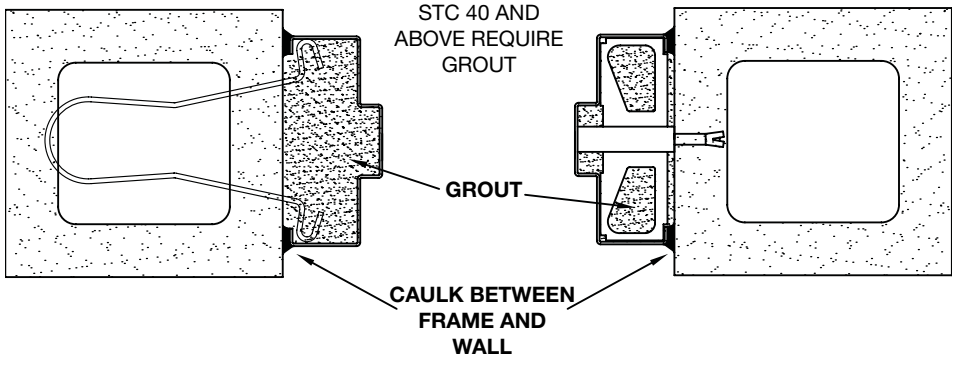




TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW



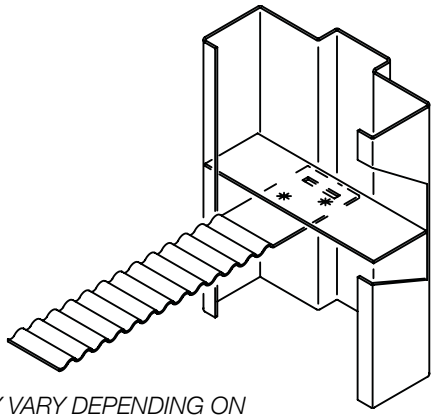
IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 32-47

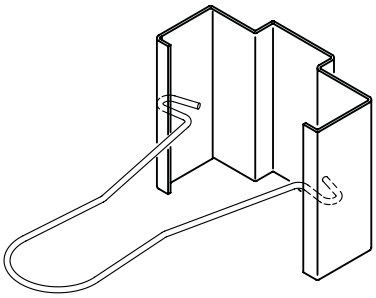
MASONRY "T" ANCHOR

SNAP-IN TYPE
(WITH FLOOR ANCHOR)



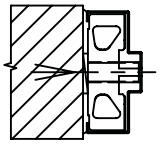
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

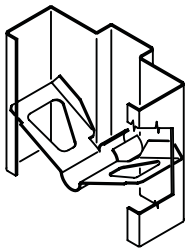
WIRE MASONRY ANCHOR



7 GA. GALV. STEEL
SNAP-IN TYPE

EXISTING OPENING ANCHOR EO





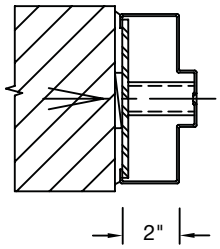
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

2"

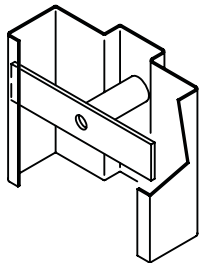
SNAP-IN TYPE

SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

EXISTING OPENING ANCHOR EO/P&S

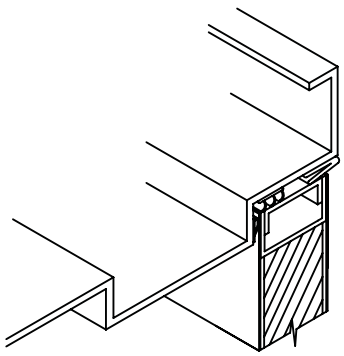


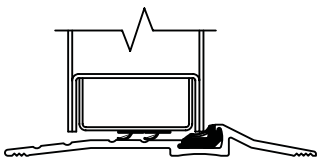
2"



ANCHOR FITS VARIOUS DEPTHS

DOOR CONSTRUCTION TOP AND BOTTOM





LOCK PREPARATIONS

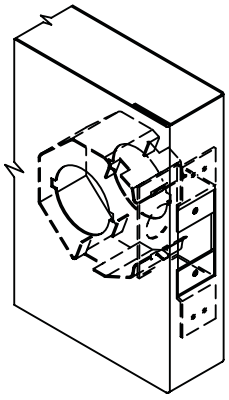
CYLINDRICAL
ANSI A115.2
BACKSET 2-3/4" (STD)

3-3/4" BACKSET (OPT)
3'0" WIDTH ONLY

2'8" WIDTH
2-3/8" BACKSET ONLY

VERIFY ROSE SIZE IS COMPATIBLE WITH LOCK STILE AND PANEL LOCATION

LOCK EDGE IS BEVELED 1/8" IN 2"

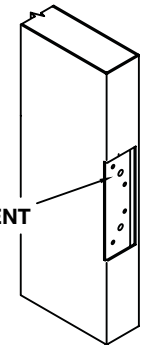


HINGE PREPARATION

HINGE PREP IS HANDED

4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7

7 GAGE REINFORCEMENT



LOCK PREPARATION

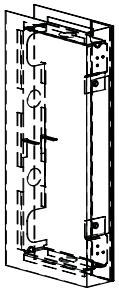
GOV.86, ANSI/BHMA A115.1
MORTISE TYPE

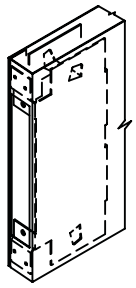
(LM0)

MORTISE LOCKS AVAILABLE IN 3'0" WIDTH ONLY

LOCK EDGE IS BEVELED 1/8" IN 2"

NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION





(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 32-47

STANDARD SIZES
NOMINAL DOOR OPENING

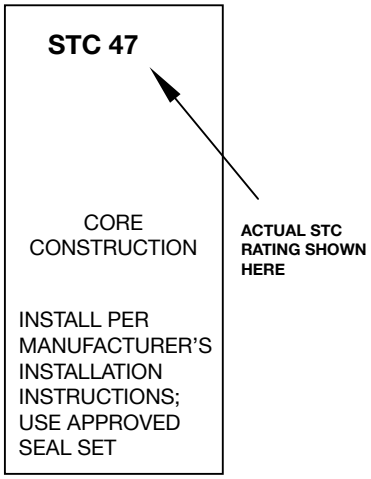
WIDTH	HEIGHT
SINGLE	
2'-8"	6'-8"
3'-0"	7'-0"
	**8'-0"

**2 PANEL ONLY

ACOUSTICAL FIRE DOORS

LABELING AGENCIES : UL SOLUTIONS WARNOCK HERSEY
TEST: UL 10B, UL 10C, UL 1784, & NFPA 252 **RATING:** 20 MIN. THRU 45 MIN. **DESIGNS:** EMBOSSED 2 OR 6 PANEL

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable. 8'0" height available in 2 panel design only.

The frames are commercial quality cold-rolled steel conforming to ASTM A 1008 or optional zinc coated steel conforming to ASTM A653 & ASTM A924. Embossed panel doors are A40 galv. conforming to A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified Door systems are in compliance with HMMA 865 & SDI-128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified Mutes are not allowed in these frames. Frames must also be grout filled to achieve an STC40 and above rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavyweight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A115.2 cylindrical, ANSI A115.1 mortise lock or ANSI 156.3 rim exit device. See below for
locking hardware availability. Lock Jamb preparation is for 4-7/8' high strike (ANSI A 115.
1 or 2) or rim exit reinforcement. Optional preparations are electric power transfer (EPT), mag switch and dead bolt hardware. See below for availability.

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10 . The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door and 3 sided frame, from a selection of standard colors
(optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A2503. For accurate color selectors ask for a Ceco Colorstyle chart.

NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT. MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
SINGLE DOORS	52	CYL/ MORT.	3/8"	3 HR.	PEMKO SEALS: S88, S44, S771, ACP112, 2009_PK THRESHOLD-SET6

OPTIONAL HARDWARE PREPARATIONS ARE: ELECTRIC POWER TRANSFER (EPT), MAG LOCK OR DEADLOCK.

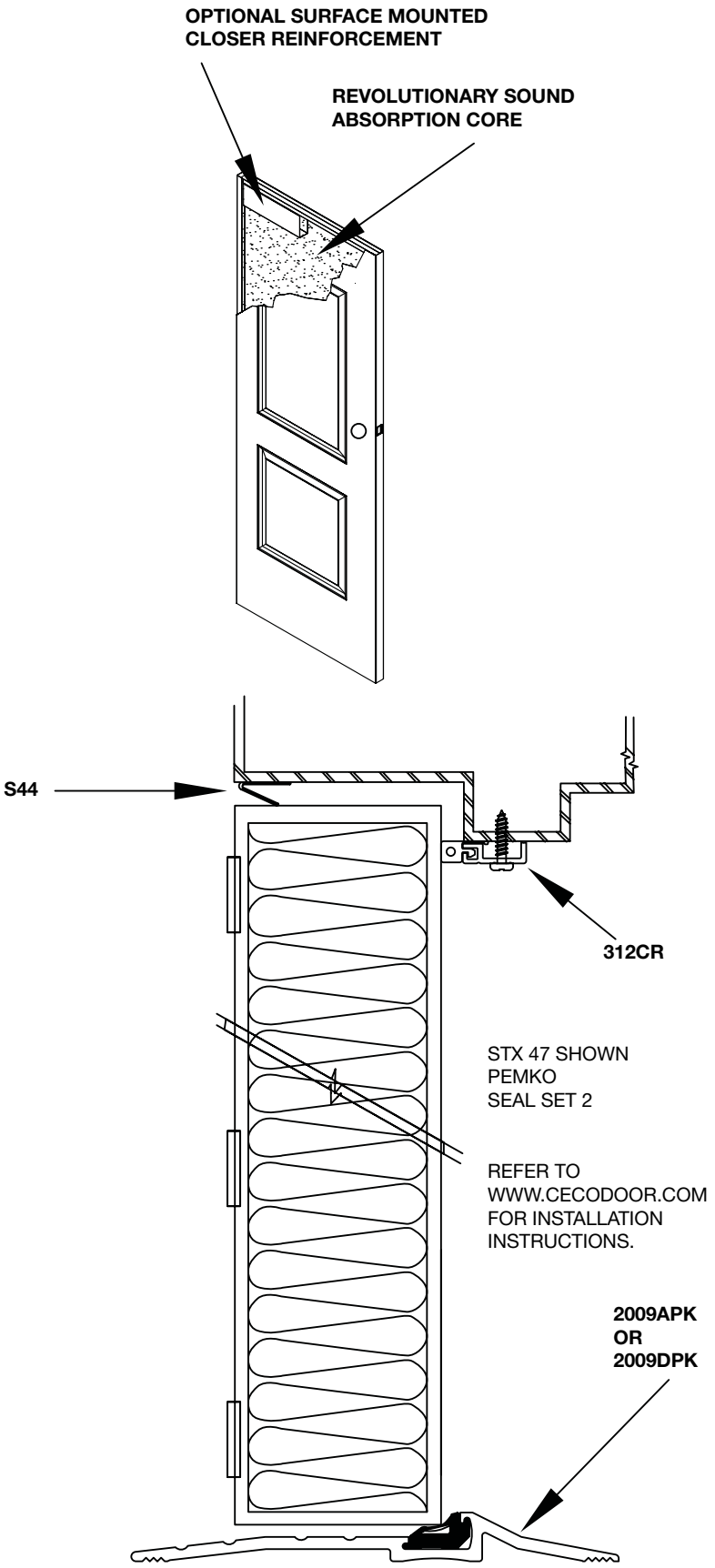
STC 47 (6) PANEL WITH CYLINDRICAL LOCK. ADDITIONAL OPTIONS NOT ALLOWED.
STC 46 (6) PANEL WITH CYLINDRICAL LOCK. ONE OPTIONAL PREPARATION ALLOWED.
STC 46 (6) PANEL WITH MORTISE LOCK. ADDITIONAL OPTIONS NOT ALLOWED.
STC 45 (6) PANEL WITH CYLINDRICAL LOCK. ANY COMBINATION OF TWO OPTIONAL PREPARATIONS ALLOWED.
STC 45 (6) PANEL WITH MORTISE LOCK. ONE OPTIONAL PREPARATION ALLOWED.
STC 45 (6) PANEL WITH RIM EXIT. ADDITIONAL OPTIONS NOT ALLOWED.
STC 32-44 (6) PANEL WITH CYLINDRICAL LOCK. ANY COMBINATION OF THREE OPTIONAL PREPARATIONS ALLOWED.
STC 44 (6) PANEL WITH MORTISE LOCK. TWO OPTIONAL PREPARATIONS ALLOWED.
STC 44 (6) PANEL WITH RIM EXIT. ONE OPTIONAL PREPARATION ALLOWED.
STC 32-43 (6) PANEL WITH MORTISE LOCK. ANY COMBINATION OF THREE OPTIONAL PREPARATIONS ALLOWED.
STC 43 (6) PANEL WITH RIM EXIT. TWO OPTIONAL PREPARATIONS ALLOWED.
STC 32-42 (6) PANEL WITH RIM EXIT. ANY COMBINATION OF THREE OPTIONAL PREPARATIONS ALLOWED.
STC 46 (2) PANEL WITH CYLINDRICAL LOCK. ADDITIONAL OPTIONS NOT ALLOWED.
STC 45 (2) PANEL WITH CYLINDRICAL LOCK. ONE OPTIONAL PREPARATION ALLOWED.
STC 45 (2) PANEL WITH MORTISE LOCK. ADDITIONAL OPTIONS NOT ALLOWED.
STC 44 (2) PANEL WITH CYLINDRICAL LOCK. ANY COMBINATION OF TWO OPTIONAL PREPARATIONS ALLOWED.
STC 44 (2) PANEL WITH MORTISE LOCK. ONE OPTIONAL PREPARATION ALLOWED.
STC 44 (2) PANEL WITH RIM EXIT. ADDITIONAL OPTIONS NOT ALLOWED.
STC 32-43 (2) PANEL WITH CYLINDRICAL LOCK. ANY COMBINATION OF THREE OPTIONAL PREPARATIONS ALLOWED.
STC 43 (2) PANEL WITH MORTISE LOCK. ANY COMBINATION OF TWO OPTIONAL PREPARATIONS ALLOWED.
STC 43 (2) PANEL WITH RIM EXIT. ONE OPTIONAL PREPARATION ALLOWED.
STC 32-42 (2) PANEL WITH MORTISE LOCK. ANY COMBINATION OF THREE OPTIONAL PREPARATIONS ALLOWED.
STC 42 (2) PANEL WITH RIM EXIT. ANY COMBINATION OF TWO OPTIONAL PREPARATIONS ALLOWED.
STC 32-41 (2) PANEL WITH RIM EXIT. ANY COMBINATION OF THREE OPTIONAL PREPARATIONS ALLOWED.

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 47 (EMBOSSED 2 PANEL SINGLE DOORS)

1-3/4" SOUND-TECH XPRESS



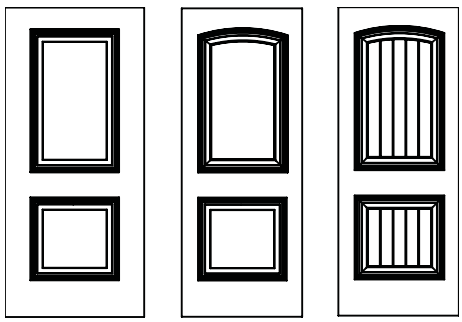
Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rated assembly.

SUGGESTED USE:

- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing art studios
- Hotel/Motel
- Military barracks

DOOR DESIGNS



E201 E202 E203

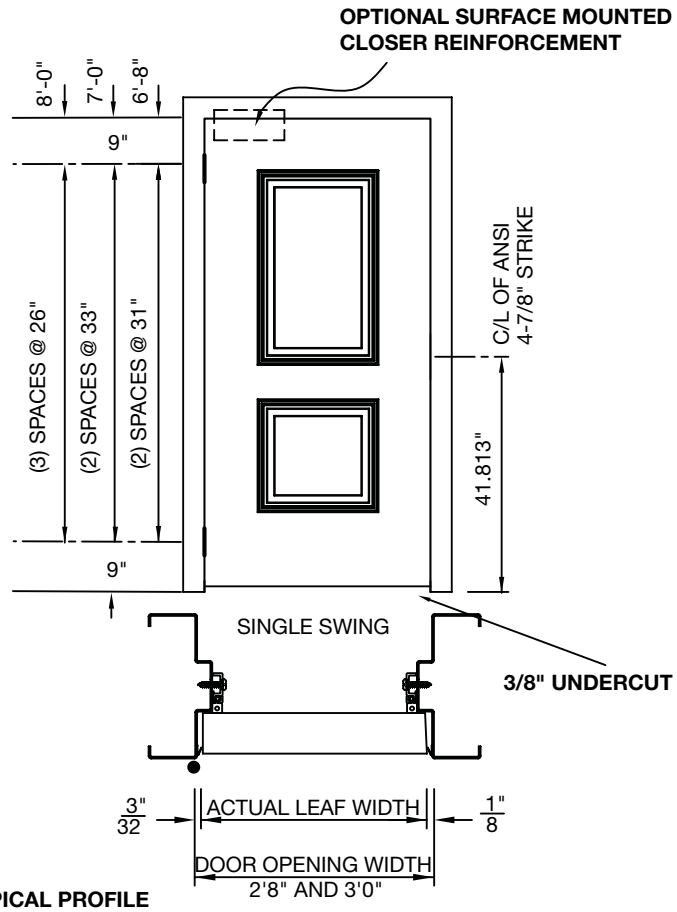
2 PANEL	
WIDTH	* 2'8", 3'0"
HEIGHT	6'8", 7'0", 8'0"
GAUGE	18

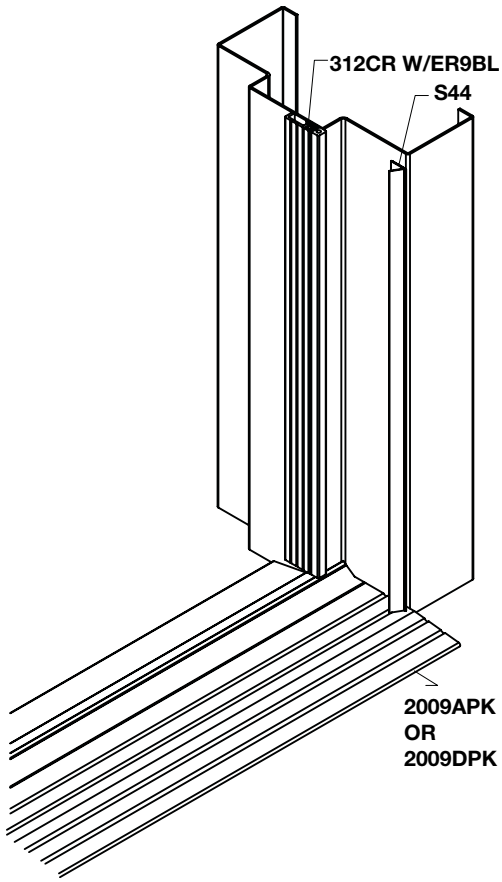
GLASS CUTOUTS ARE NOT ALLOWED.
** 2-3/8" LOCK BACKSET ONLY IN 2'8" WIDTH*
** CONFIRM ROSE SIZE IS COMPATIBLE WITH SEAL SET AND LOCK BACKSET.*

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

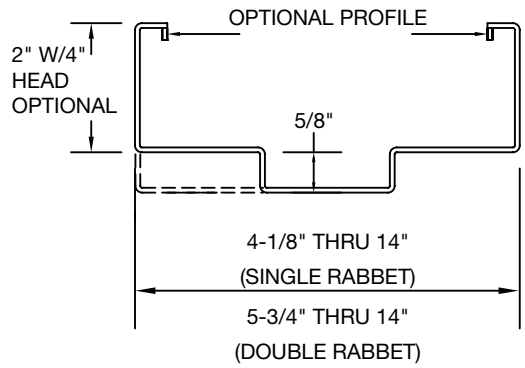
STC 47 (EMBOSSED 2 PANEL SINGLE DOORS)

HORIZONTAL SECTION

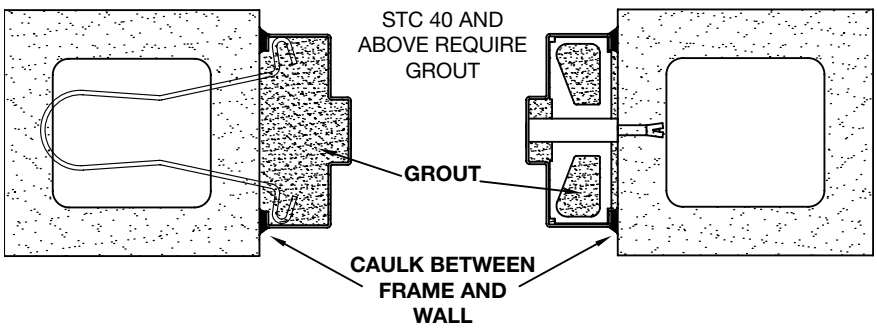




TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW

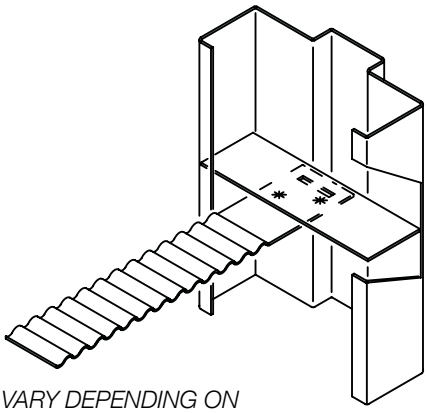


IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED SOUND SEAL INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 47 (EMBOSSED 2 PANEL SINGLE DOORS)

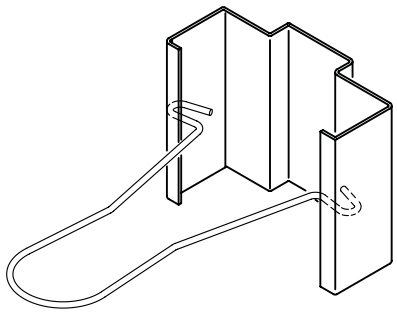
MASONRY "T" ANCHOR



SNAP-IN TYPE
(WITH FLOOR ANCHOR)

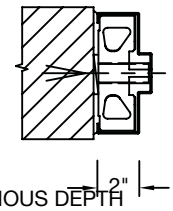
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

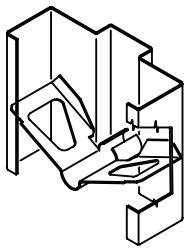
WIRE MASONRY ANCHOR



7 GA. GALV. STEEL
SNAP-IN TYPE

EXISTING OPENING ANCHOR EO



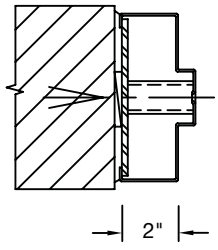


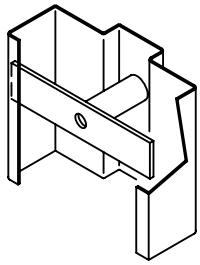
ANCHOR FITS VARIOUS DEPTH
FRAMES (SEE BELLOW)

SNAP-IN TYPE

SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

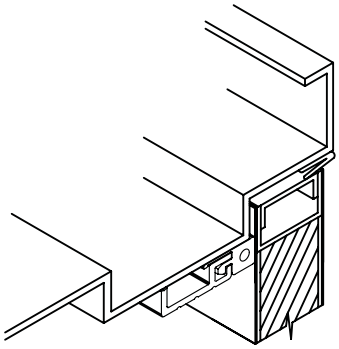
EXISTING OPENING ANCHOR EO/P&S

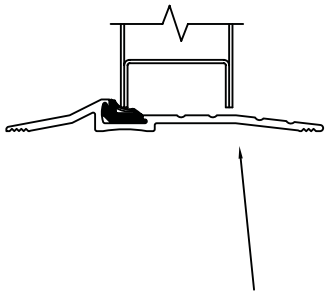




ANCHOR FITS VARIOUS DEPTHS

DOOR CONSTRUCTION TOP AND BOTTOM





THRESHOLD

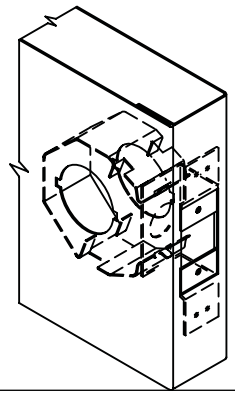
LOCK PREPARATION

CYLINDRICAL ANSI A115.2
BACKSET 2-3/4" (STD)

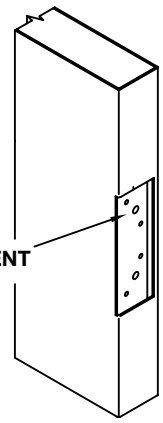
3-3/4" BACKSET (OPT)
3'0" WIDTH ONLY

2-3/8" BACKSET
2'8" WIDTH ONLY

VERIFY ROSE SIZE IS COMPATIBLE WITH SEAL SET AND LOCK BACKSET.
LOCK EDGE IS BEVELED 1/8" IN 2"



HINGE PREPARATION



7 GAGE REINFORCEMENT

HINGE PREP IS HANDED

4-1/2" OR 5" REGULAR OR
HEAVY WEIGHT HINGES

ANSI A156.7

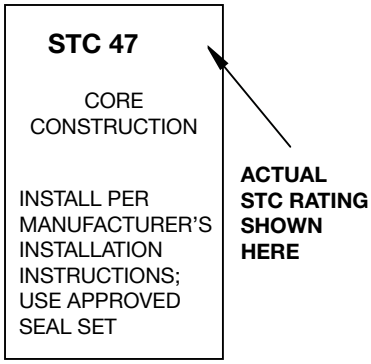
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 47 (EMBOSSED 2 PANEL SINGLE DOORS)

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-8" 3'-0"	6'-8" 7'-0" 8'-0"

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors are commercial quality zinc coated A40 galv. steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 and SDI-128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Frames are cold roll steel standard. Galv. A60 is optional. Mutes are not allowed in these frames. Frames must also be grout filled to achieve the STC47 rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or5" high. standard or heavy weight hinges (specify which). Cam lift or offset pivots are not allowed. The door lock edge has a standard bevel and is prepared for ANSI A 115.2 cylindrical lock only. Lock jamb preparation is for 4-7/8" high strike (ANSI A115.1 or 2).

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door and 3 sided frame, from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

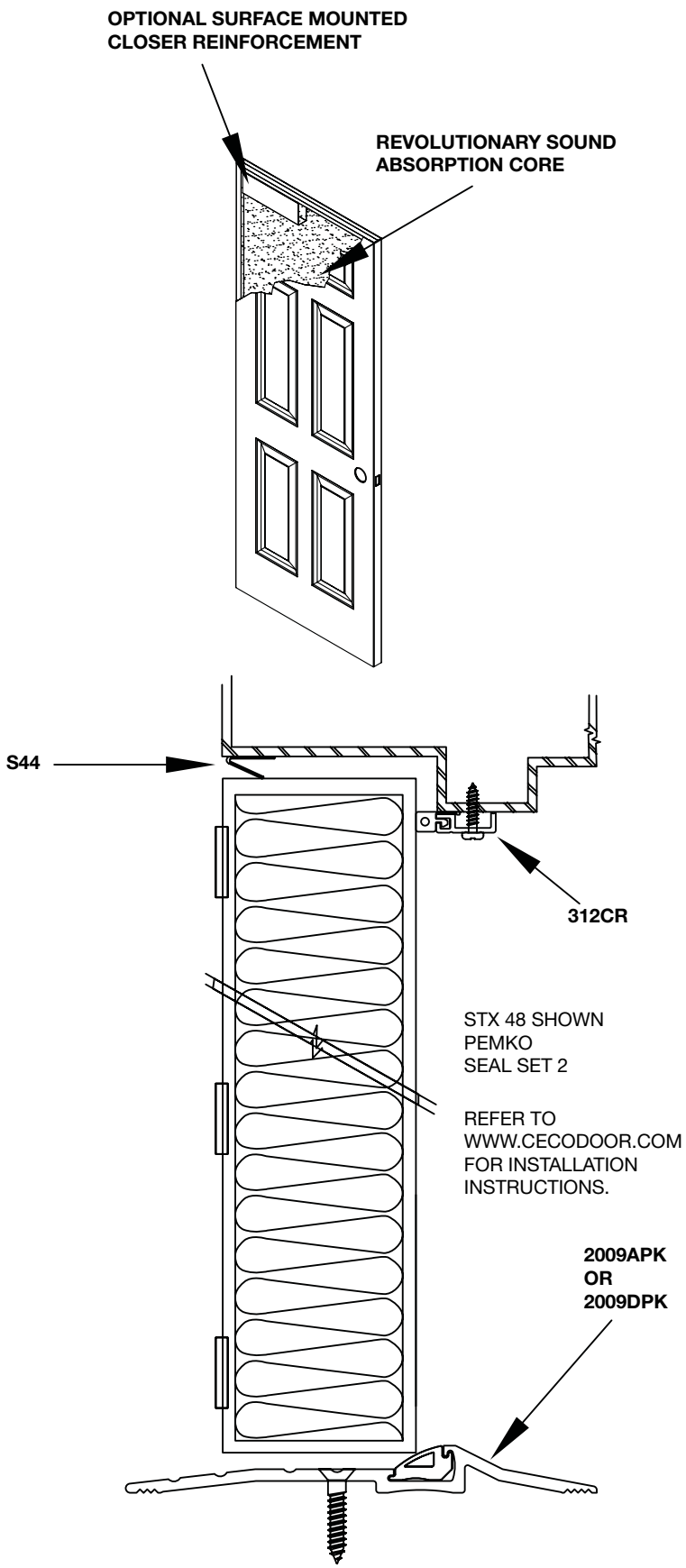
NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
SINGLE	47	SEE BELLOW	3/8"	3/4 HOUR (3'0"X7'0" MAX.)	PEMKO SEALS: S44, 312CR & 2009_PK THRESHOLD-SET 2

STC 47 WITH CYLINDRICAL LOCK, NO OPTIONAL HARDWARE PREPARATIONS ALLOWED.
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC 48 (EMBOSSED 6 PANEL SINGLE DOORS)

1-3/4" SOUND-TECH XPRESS



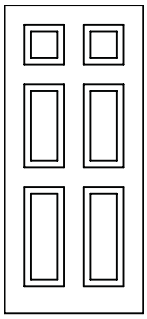
Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals, bottom seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rates assembly.

SUGGESTED USE:

- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing arts studios
- Hotel / motel
- Military barracks

DOOR DESIGN



E601

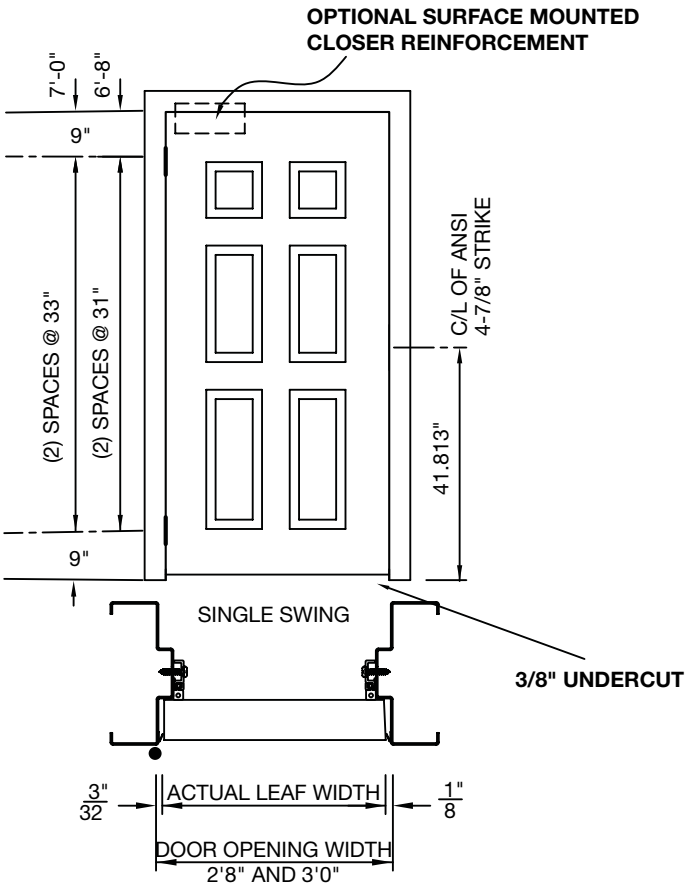
6 PANEL	
WIDTH	*2'8", 3'0"
HEIGHT	6'8", 7'0"
GAUGE	18 STD., 16 OPT.

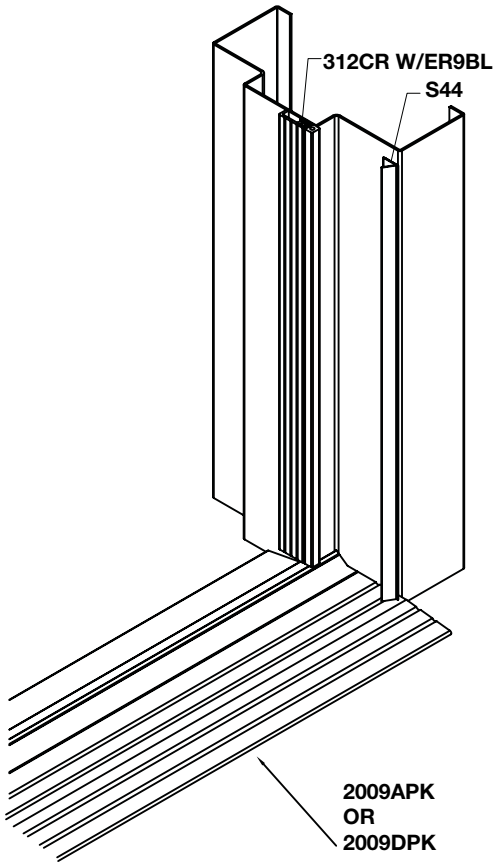
**2-3/8" LOCK BACKSET ONLY, IN 2'8" WIDTH.*
**CONFIRM ROSE SIZE IS COMPATIBLE WITH SEAL SET AND LOCK BACKSET.*
NARROW 6 PANEL DESIGN NOT ALLOWED.
GLASS CUTOUTS ARE NOT ALLOWED.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

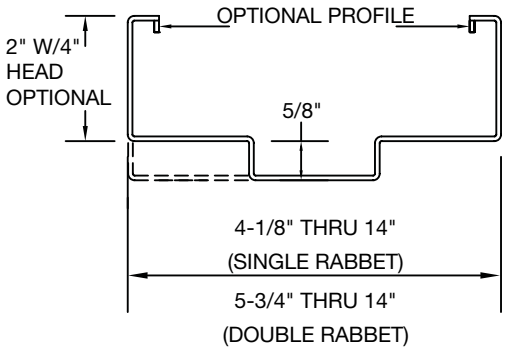
STC 48 (EMBOSSED 6 PANEL SINGLE DOORS)

HORIZONTAL SECTION



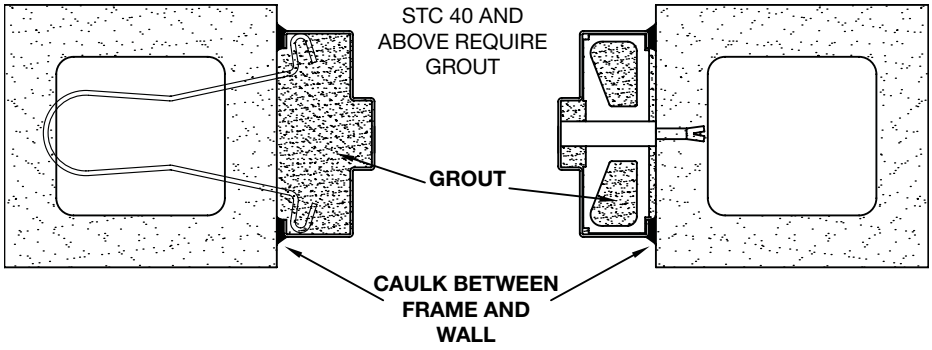


TYPICAL PROFILE



NOTE: 6'8" & 7'0" ARE ONLY HEIGHTS WITH 6 PANEL DESIGN.

SOME COMMON MASONARY APPLICATIONS SHOWN BELOW

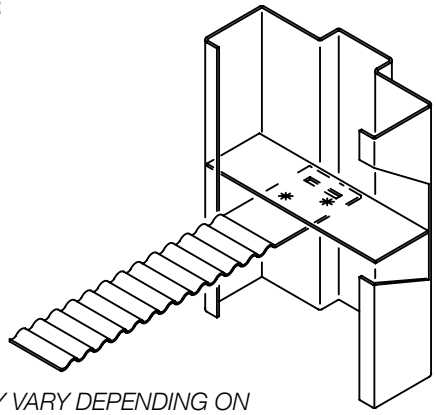


IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH SPECIFIC DETAILED SOUND SEAL INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 48 (EMBOSSED 6 PANEL SINGLE DOORS)

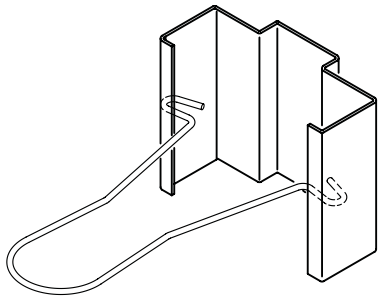
MASONRY "T" ANCHOR



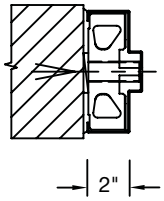
SNAP-IN TYPE
(WITH FLOOR ANCHOR)

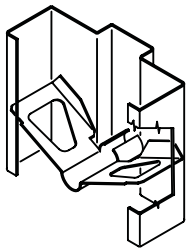
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO



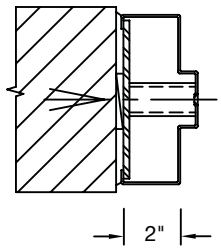


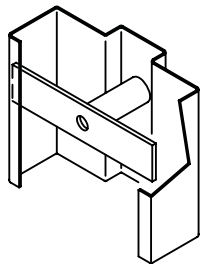
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

SNAP-IN TYPE

SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

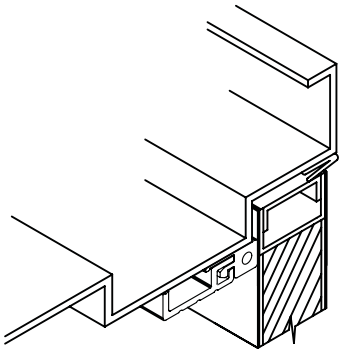
EXISTING OPENING ANCHOR EO/P&S

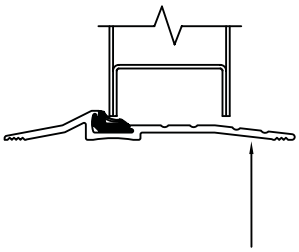




ANCHOR FITS VARIOUS DEPTHS

DOOR CONSTRUCTION TOP AND BOTTOM





THRESHOLD

LOCK PREPARATIONS

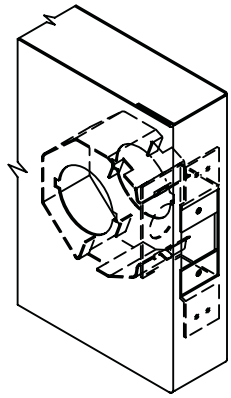
CYLINDRICAL ANSI A115.2
BACKSET 2-3/4" (STD)

3-3/4" BACKSET (OPT)
3'0" WIDTH ONLY

2'8" WIDTH
2-3/8" BACKSET ONLY

VERIFY ROSE SIZE IS COMPATIBLE WITH SEAL SET AND LOCK BACKSET.

LOCK EDGE IS BEVELED 1/8" IN 2"

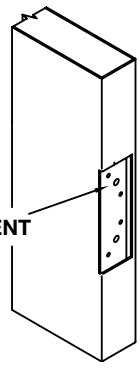


HINGE PREPARATION

HINGE PREP IS HANDED

4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES

ANSI A156.7



7 GAGE REINFORCEMENT

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 48 (EMBOSSED 6 PANEL SINGLE DOORS)

STANDARD SIZES
NOMINAL DOOR OPENING

	WIDTH	HEIGHT
SINGLE	*2'-8"	6'-8"
	3'-0"	7'-0"

* 2-3/8" LOCK BACKSET ONLY
NARROW 6 PANEL NOT AVAILABLE

ACOUSTICAL FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252

RATING: 20 MIN. OR 3/4 HRS. UP TO AND INCLUDING 3'0"X7'0"

DESIGNS: EMBOSSED 6 PANEL TYPE

ACOUSTIC DOOR SYSTEM LABELS

STC 48

CORE CONSTRUCTION

ACTUAL STC RATING SHOWN HERE

INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS; USE APPROVED SEAL SET

PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors are commercial quality zinc coated A40 steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI- 128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Frames are cold roll steel standard and galv. A60 is optional. Mutes are not allowed in these frames. Frames must also be grout filled to achieve the STC48 rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). Cam lift or offset pivots are not allowed. The door lock edge has a standard bevel and is prepared for ANSI A 115.2 cylindrical leek only. Lock jamb preparation is for4-7/8" high strike (ANSI A115.1 or 2).

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

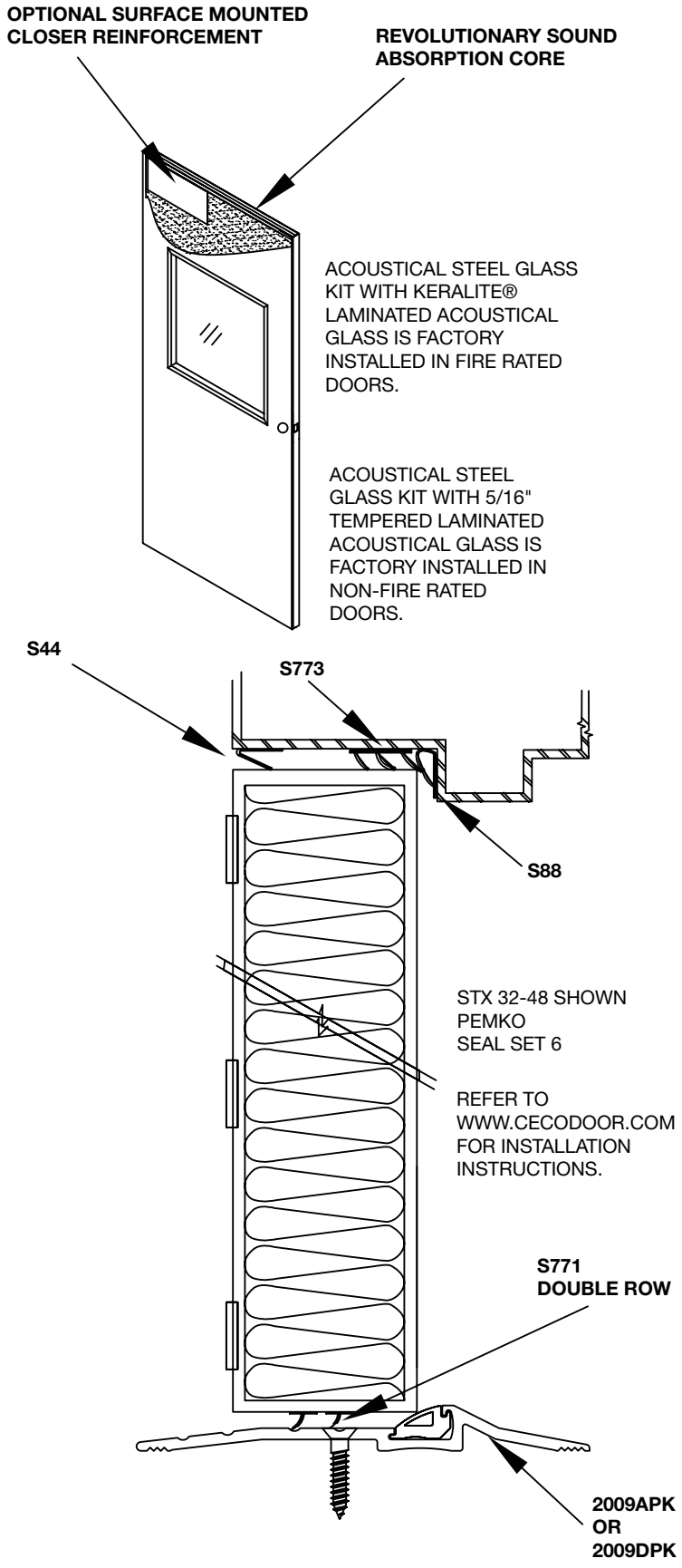
SOUND-TECH XPRESS DOOR SYSTEMS

	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
SINGLE DOORS	48	SEE BELOW	3/8"	3/4 HR. (3'0"X7'0" MAX.)	PEMKO SEALS: S44, 312CR & 2009_PK2009_PK THRESHOLD-SET2

STC 48 WITH CYLINDRICAL LOCK, NO OPTIONAL HARDWARE PREPARATIONS ALLOWED.
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC 32-48 (FIRE RATED SINGLE DOORS WITH GLASS)

1-3/4" SOUND-TECH XPRESS



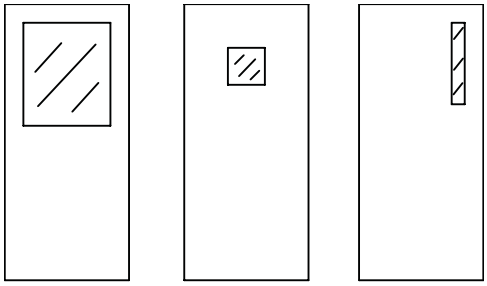
Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rated assembly.

SUGGESTED USE:

- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing art studios
- Hotel/Motel
- Military barracks

DOOR DESIGNS



G **V** **N**

(ELEVATIONS)

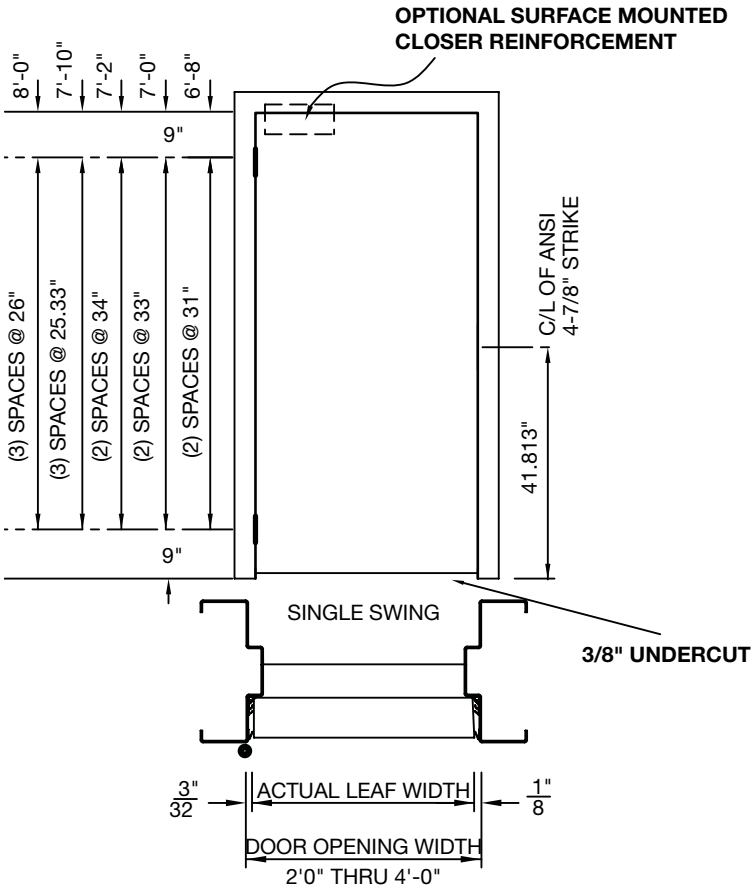
5/16" TEMPERED LAMINATED NON-FIRE RATED GLASS REDUCES STC RATING BY 1 POINT.

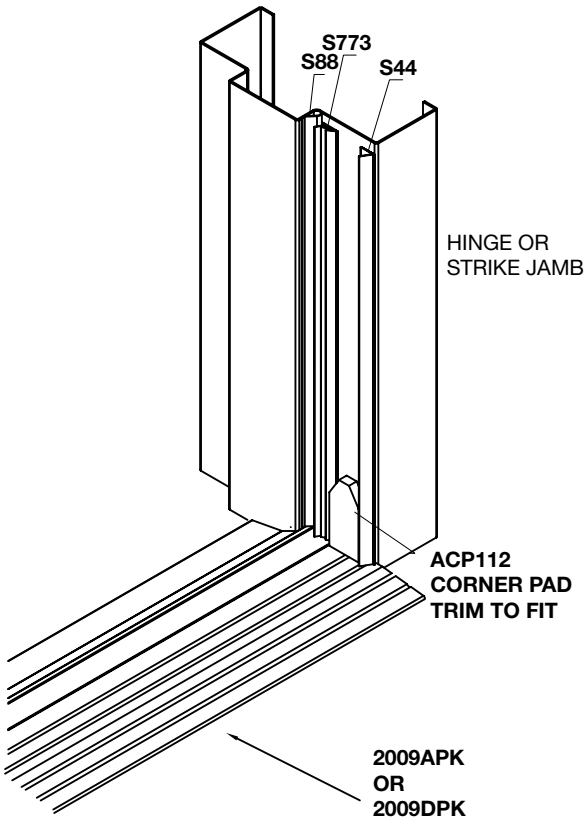
NOTE:
ONE GLASS LITE PER DOOR ALLOWED.

REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

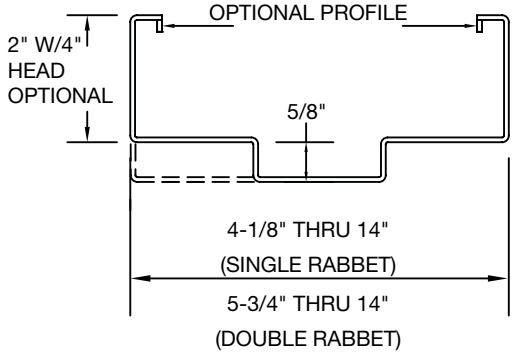
STC 32-48

HORIZONTAL SECTION

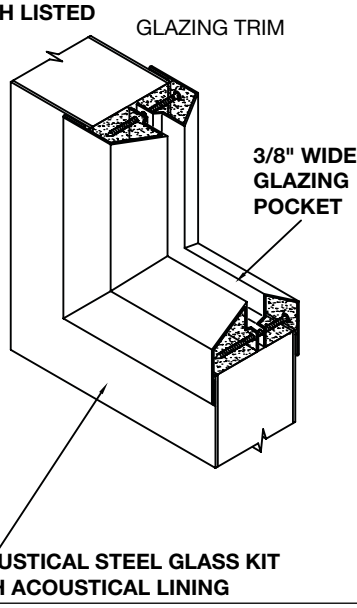




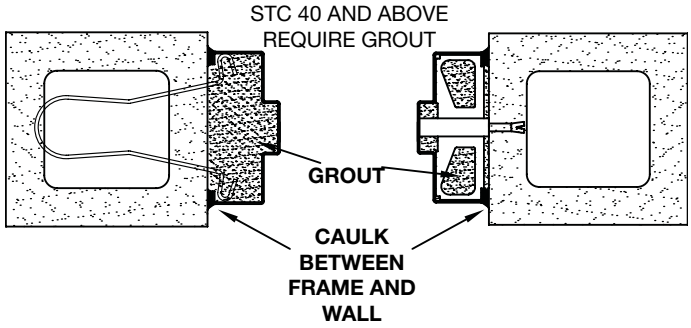
TYPICAL PROFILE



UL SOLUTIONS/ WH LISTED



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW

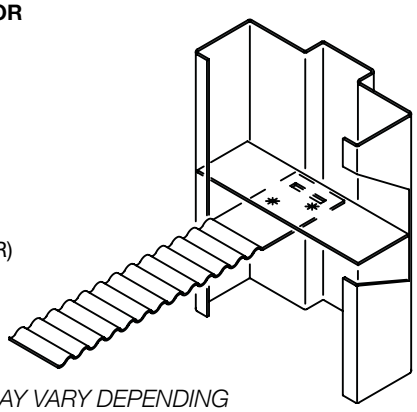


IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED SOUND SEAL INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 32-48

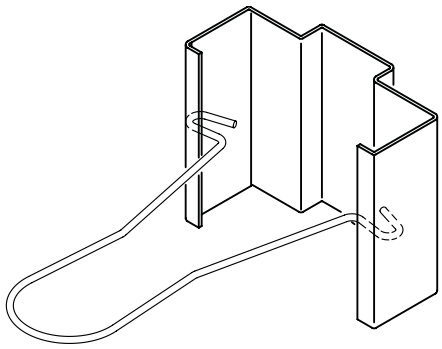
MASONRY "T" ANCHOR



SNAP-IN TYPE
(WITH FLOOR ANCHOR)

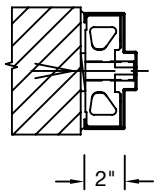
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

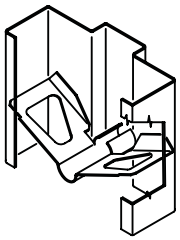
WIRE MASONRY ANCHOR



7 GA. GALV. STEEL
SNAP-IN TYPE

EXISTING OPENING ANCHOR EO



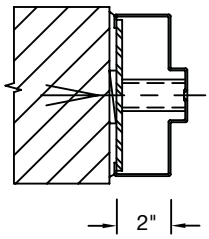


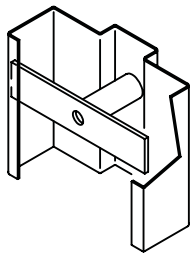
ANCHOR FITS VARIOUS DEPTH
FRAMES (SEE BELLOW)

SNAP-IN TYPE

SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

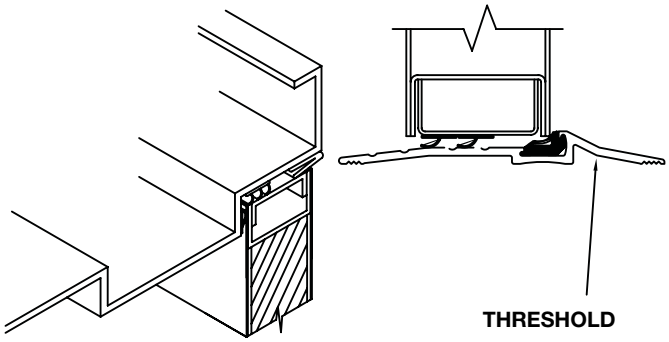
EXISTING OPENING ANCHOR EO/P&S



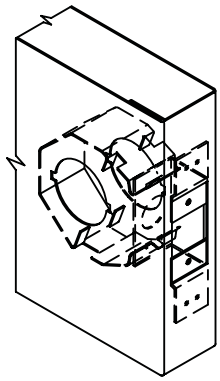


ANCHOR FITS VARIOUS DEPTHS

DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS

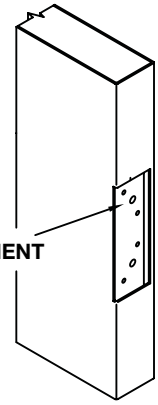


CYLINDRICAL ANSI A115.2

BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

LOCK EDGE IS BEVELED 1/8" IN 2"

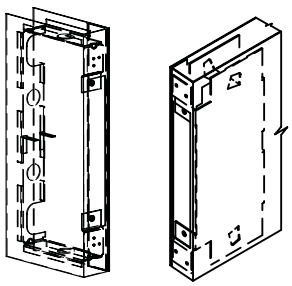
HINGE PREPARATION



HINGE PREP IS HANDED
4-1/2" OR 5" REGULAR OR
HEAVY WEIGHT HINGES

ANSI A156.7

LOCK PREPARATION



GOV.86, ANSI/BHMA A115.1
MORTISE TYPE

(LM0)

NOTE: EITHER OF THE LOCK REINFORCEMENTS/ GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

LOCK EDGE IS BEVELED 1/8" IN 2"

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 32-48

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

ACOUSTICAL FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252

RATING: 20 MIN. THRU 3 HRS. SEE CHART BELLOW

DESIGNS: FLUSH TYPE WITH GLASS

ACOUSTIC DOOR SYSTEM LABELS

STC 48

CORE CONSTRUCTION

INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS; USE APPROVED SEAL SET

ACOUSTIC DOOR SYSTEM LABELS

ACTUAL STC RATING SHOWN HERE

PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA Doors and frames shall conform to the Steel Door Institute guide specification, ANSI /12.50.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A 1008 or optional zinc coated steel conforming to ASTM A653 &ASTM A924. Acoustic core and internal construction is manufacturers proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. KERALITE ® LAMINATED glass is factory installed in fire rated doors. 5/16" tempered laminated glass is installed in nm-tire rated doors. A physical STC door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.
Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. Frames must also be grout filled to achieve an STC40 and above rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A 115.2 cylindrical, ANSI A 115.1 mortise lock or ANSI 156.3 rim exit device. See below for locking hardware availability. Lock jamb preparation is for 4-7 /8" high strike (ANSI A 115.1 or 2) or rim exit reinforcement. Electrical power transfer, mag switch and dead bolt hardware preparations are not allowed.

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI /12.50.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI /12.50.3. For accurate color selectors ask for a Ceco Colorstyle chart.

NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB- 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

SOUND-TECH XPRESS DOOR SYSTEMS

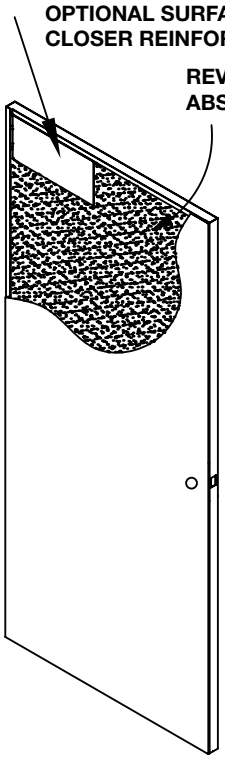
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
SINGLE	32-48	SEE BELLOW	3/8"	SEE BELLOW	PEMKO SEALS: S88, S44, S773, S771, ACP112, 2009_PK THRESHOLD-SET 6

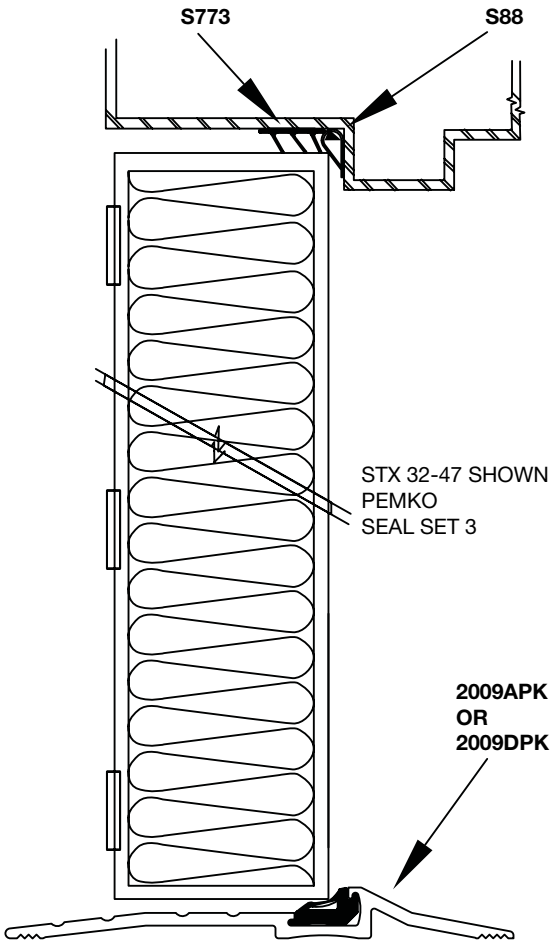
OPTIONAL LOCK PREPARATIONS WITH: UP TO AND INCLUDING 100 2" OF ACOUSTICAL GLASS
STC 32-46 WITH CYLINDRICAL, MORTISE OR RIM PANIC AND MAY INCLUDE UP TO AND INCLUDING A 3 HOUR FIRE RATING.
STC 32-47 WITH CYLINDRICAL OR MORTISE LOCK AND MAY INCLUDE UP TO AND INCLUDING A 3 HOUR FIRE RATING.
STC 32-48 WITH CYLINDRICAL ONLY AND MAY INCLUDE UP TO AND INCLUDING A 3 HOUR FIRE RATING.
OPTIONAL LOCK PREPARATIONS WITH: UP TO AND INCLUDING 288 2" OF ACOUSTICAL GLASS
STC 32-43 WITH CYLINDRICAL, MORTISE OR RIM PANIC AND MAY INCLUDE UP TO AND INCLUDING A 1-1/2 HOUR FIRE RATING.
STC 32-44 WITH CYLINDRICAL OR MORTISE LOCK AND MAY INCLUDE UP TO AND INCLUDING A 1-1/2 HOUR FIRE RATING.
STC 32-45 WITH CYLINDRICAL LOCK ONLY MAY INCLUDE UP TO AND INCLUDING A 1-1/2 HOUR FIRE RATING.
OPTIONAL LOCK PREPARATIONS WITH: UP TO AND INCLUDING 720 2" OF ACOUSTICAL GLASS
STC 32-39 WITH CYLINDRICAL, MORTISE OR RIM PANIC AND MAY INCLUDE UP TO AND INCLUDING A 1-1/2 HOUR FIRE RATING.
STC 32-40 WITH CYLINDRICAL OR MORTISE AND MAY INCLUDE UP TO AND INCLUDING A 1-1/2 HOUR FIRE RATING.
STC 32-41 WITH CYLINDRICAL LOCK AND MAY INCLUDE UP TO AND INCLUDING A 1-1/2 HOUR FIRE RATING.
5/16" TEMPERED LAMINATED NON-FIRE RATED GLASS - REDUCE ALL ABOVE STC RATINGS BY 1 POINT.

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC32 THRU STC47 (FIRE RATED FLUSH PAIRS)

1-3/4" SOUND-TECH XPRESS





REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS

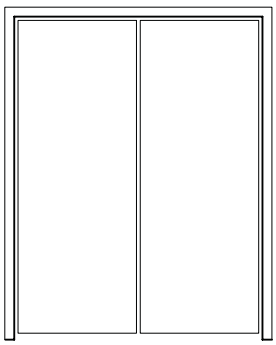
TESTED AND IN COMPLIANCE WITH ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. DOOR SYSTEMS ARE IN COMPLIANCE WITH HMMA 865 & SDI-128 SPECIFICATIONS. COMPLETE WITH PERIMETER SOUND SEALS AND THRESHOLD AS REQUIRED FOR RATING.

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated Assembly.

SUGGESTED USES:

- Conference Rooms
- Clinical Offices
- Courtrooms
- Legal Offices
- Broadcast Studios
- Boardrooms
- Libraries
- Music Rooms, and Performing Arts Studios
- Hotel/Motel
- Military Barracks

DOOR DESIGNS

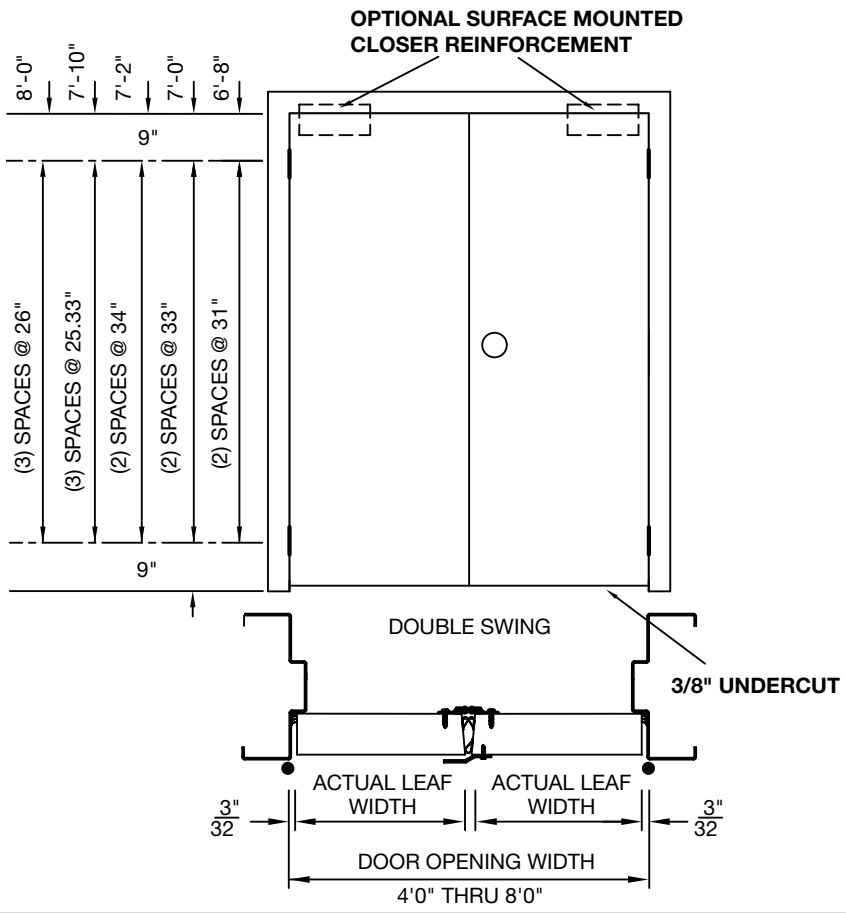


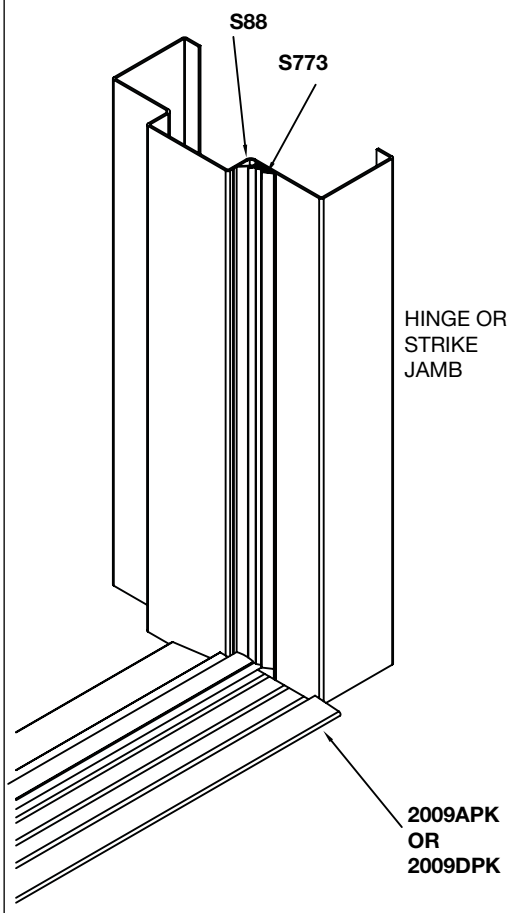
DOUBLE SWING DOORS
F
(ELEVATION)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

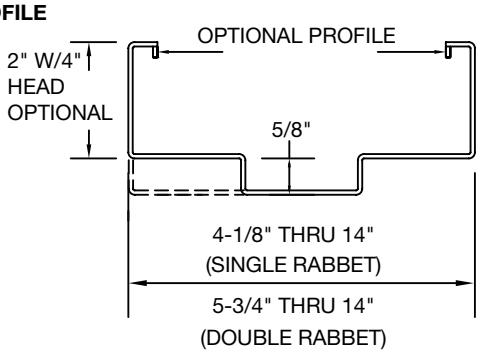
STC32 THRU STC47

HORIZONTAL SECTION

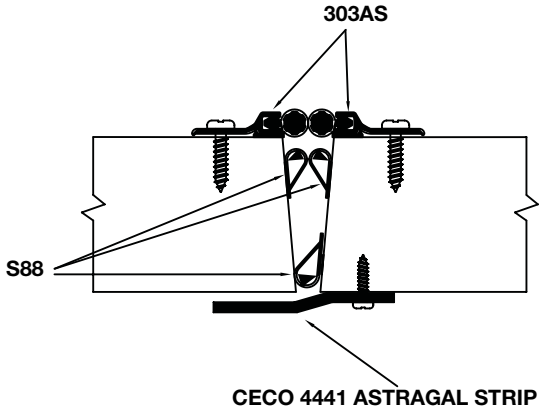


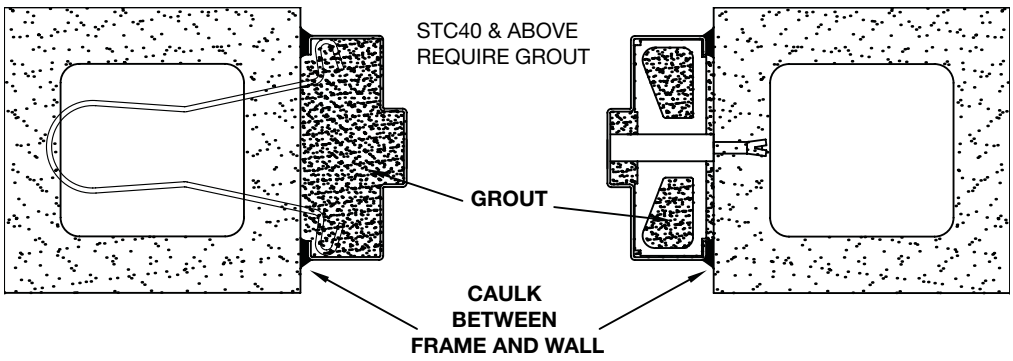


TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW





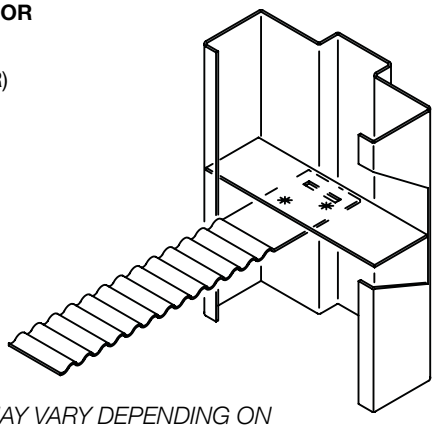
IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH SPECIFIC DETAILED SOUND SEAL INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC32 THRU STC47

MASONARY "T" ANCHOR

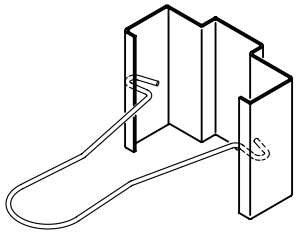
SNAP-IN TYPE
(WITH FLOOR ANCHOR)



(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONARY ANCHOR

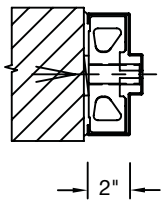
SNAP-IN TYPE
7 GA. GALV. STEEL

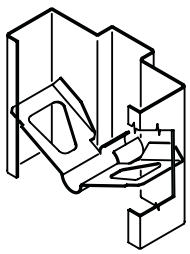


EXISTING OPENING ANCHOR EO

ANCHOR FITS VARIOUS DEPTH
FRAMES (SEE BELOW)

SNAP-IN TYPE

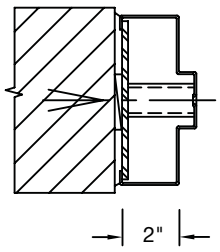


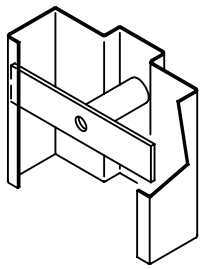


SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

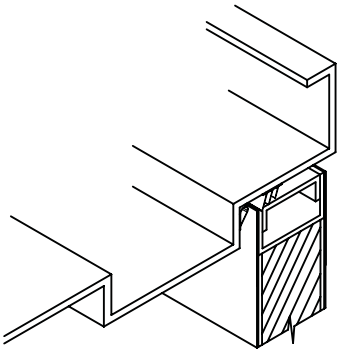
EXISTING OPENING ANCHOR EO/P&S

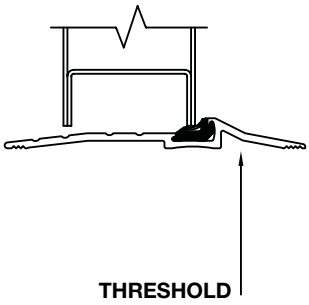
ANCHOR FITS VARIOUS
DEPTHS





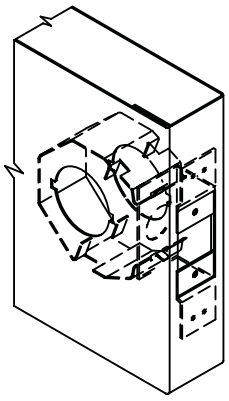
DOOR CONSTRUCTION TOP AND BOTTOM





LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

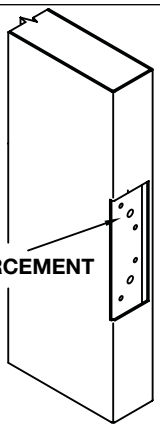


LOCK EDGE IS BEVELED 1/8" IN 2"

HINGE PREPARATION

HINGE PREP IS
HANDED

4-1/2" OR 5" REGULAR
OR HEAVY WEIGHT
HINGES
ANSI A156.7

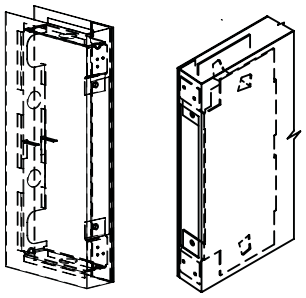


LOCK PREPARATION

GOV. 86, ANSI/BHMA
A115.1 MORTISE TYPE
(LM0)

NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION

LOCK EDGE IS BEVELED 1/8" IN 2"



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC32 THRU STC47

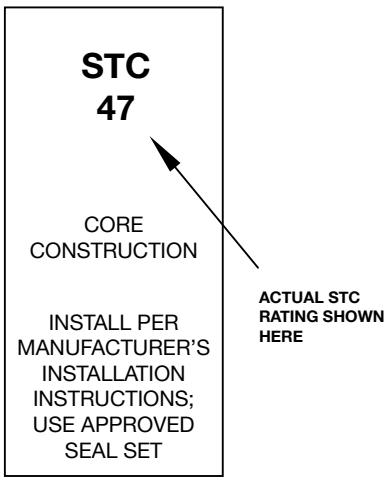
STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH DOUBLE	HEIGHT
4’-0”	6’-8”
5’-0”	7’-0”
5’-4”	7’-2”
6’-0”	7’-10”
7’-0”	8’-0”
8’-0”	

ACOUSTICAL FIRE DOORS

LABELING AGENCIES : UL SOLUTIONS WARNOCK HERSEY
TEST: UL 10B, UL 10C, UL 1784, & NFPA 252 **RATING:** THRU 3 HRS. (STX 32-47) FLUSH SINGLES 8’0” X 8’0” MAX. **DESIGNS:** FLUSH ONLY

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4” thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A1008 or optional zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer’s proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. Assemblies STC rated 40 and above must also be grout filled to achieve the STC rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2” or 5” high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A115.2 cylindrical x surface or flush bolts, ANSI A115.1 mortise lock x surface or flush bolts or ANSI A156.3 mortise exit device x surface vertical rod or surface or flush bolts. Electric power transfer, mag switch and dead bolt hardware preparations are not allowed.

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. “Colorstyle” finish coat is also available, for the door & 3 sided frame, from a Pantone color selection chart. Optional colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

NOTES:

* *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
* *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
PAIRS	32-47	*CYL OR MORTISE	3/8”	3 HR.	PEMKO SEALS: S88, S773, 303AS & 2009_PK THRESHOLD-SET 3
PAIRS	32-47	**MORTISE PANIC	3/8”	3 HR.	PEMKO SEALS: S88, S773, 303AS & 2009_PK THRESHOLD-SET 3

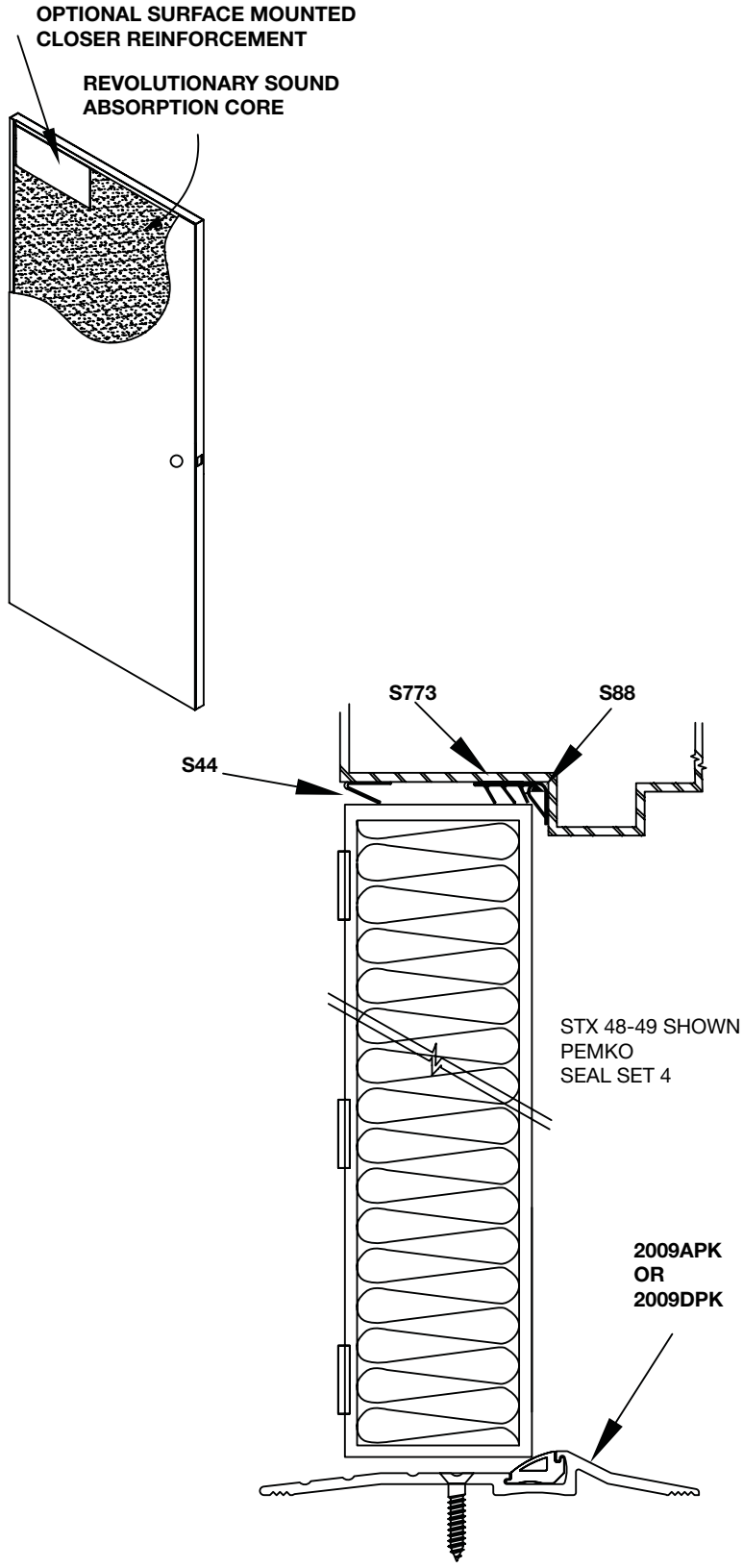
**CYLINDRICAL OR MORTISE LOCK REQUIRES SURFACE OR FLUSHBOLTS WITH ASTRAGAL STRIP.*
***MORTISE PANIC REQUIRES SURFACE VERTICAL ROD OR SURFACE OR FLUSHBOLTS WITH ASTRAGAL STRIP.*

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

STC48 THRU STC49 (FIRE RATED FLUSH PAIRS)

1-3/4" SOUND-TECH XPRESS



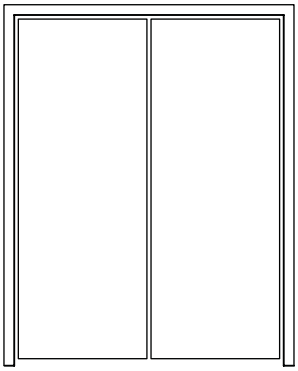
TESTED AND IN COMPLIANCE WITH ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. DOOR SYSTEMS ARE IN COMPLIANCE WITH HMMA 865 & SDI-128 SPECIFICATIONS. COMPLETE WITH PERIMETER SOUND SEALS AND THRESHOLD AS REQUIRED FOR RATING.

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated assembly.

SUGGESTED USE:

- Conference rooms, clinical
- Offices, Courtrooms, Legal Offices, Broadcast, studios, Boardrooms
- Libraries, Music rooms and performing Arts Studios, Hotel/ Motel and Military Barracks.

DOOR DESIGNS



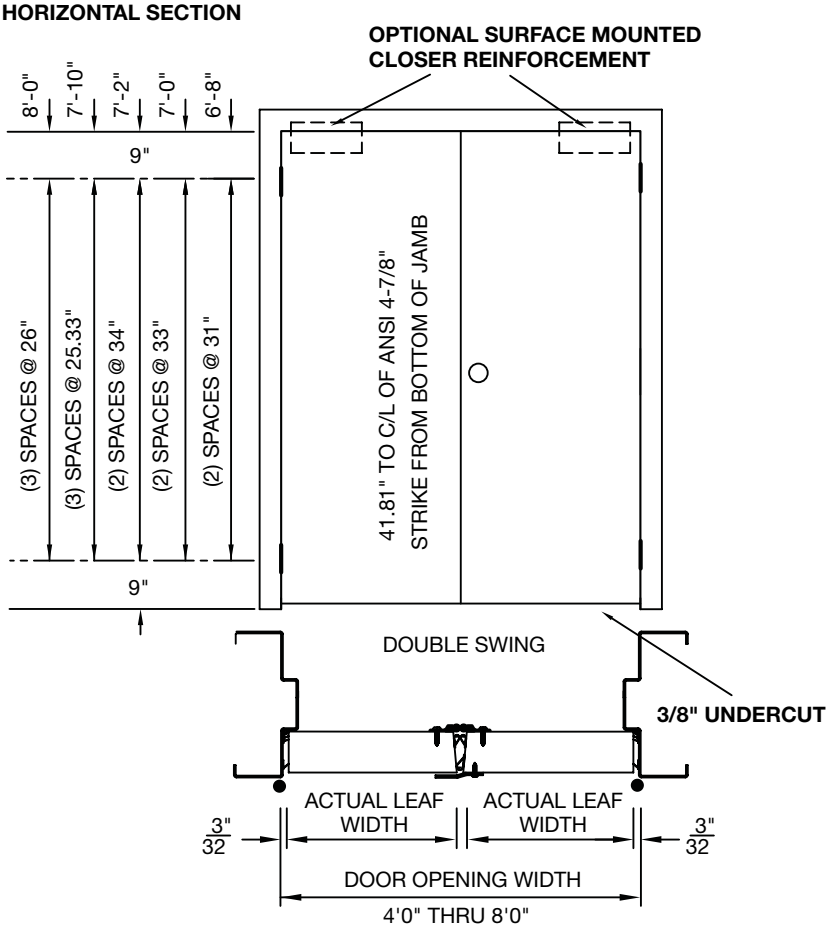
DOUBLE SWING DOORS
F
(ELEVATION)

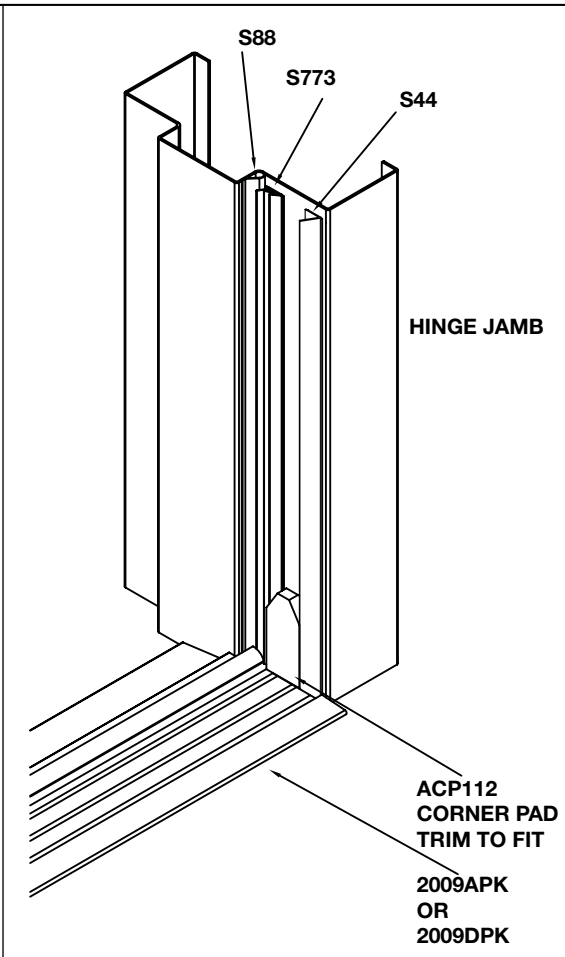
REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

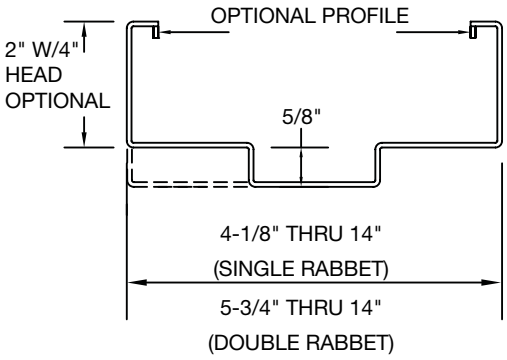
STC48 THRU STC49

HORIZONTAL SECTION

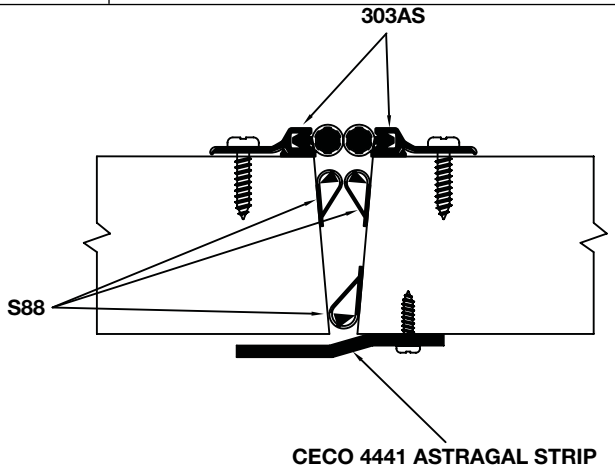


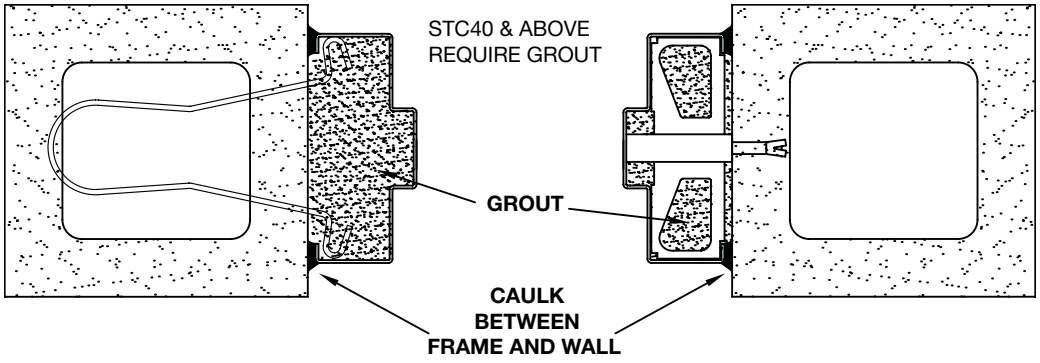


TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW





IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT " ANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED INSTALLATION INSTRUCTIONS.

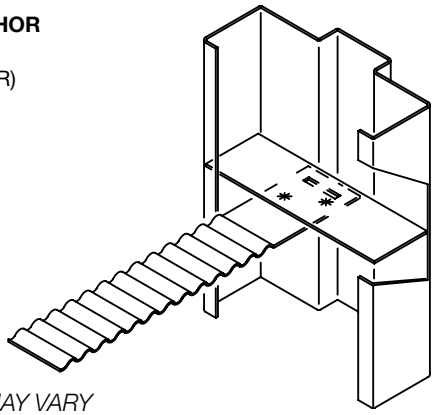
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC48 THRU STC49

MASONARY "T" ANCHOR

(WITH FLOOR ANCHOR)

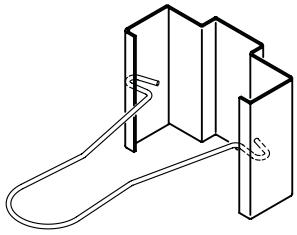
SNAP-IN TYPE



(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONARY ANCHOR

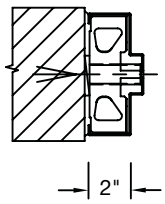
7 GA. GALV. STEEL
SNAP-IN TYPE

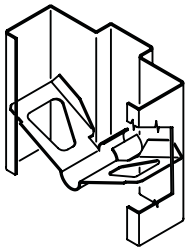


EXISTING OPENING ANCHOR EO

ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

SNAP-IN TYPE

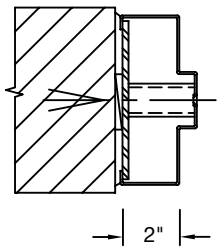


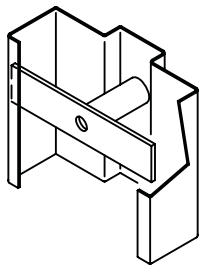


SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

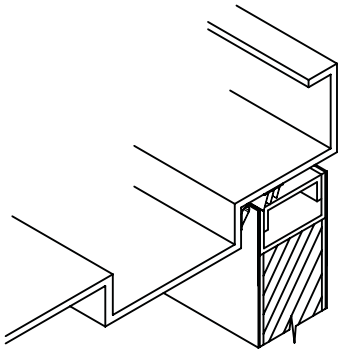
EXISTING OPENING ANCHOR EO/P&S

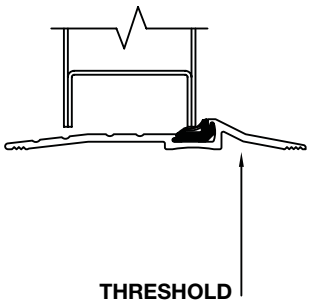
ANCHOR FITS VARIOUS DEPTHS





DOOR CONSTRUCTION TOP AND BOTTOM

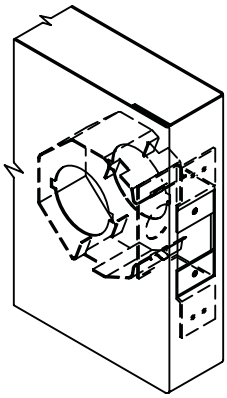




LOCK PREPARATIONS

CYLINDRICAL ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

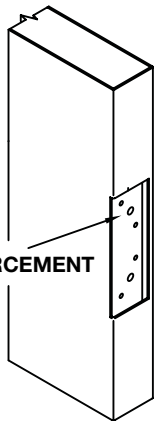
LOCK EDGE IS BEVELED 1/8" IN 2"



HINGE PREPARATION

HINGE PREP IS HANDED

4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7

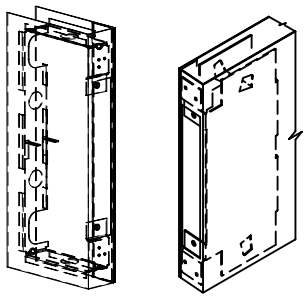


LOCK PREPARATION

GOV.86, ANSI/BHMA A115.1 MORTISE TYPE (LM0)

NOTE: EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION

LOCK EDGE IS BEVELED 1/8" IN 2"



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC48 THRU STC49

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH DOUBLE	HEIGHT
4’-0”	6’-8”
5’-0”	7’-0”
5’-4”	7’-2”
6’-0”	7’-10”
7’-0”	8’-0”
8’-0”	

ACOUSTICAL FIRE DOORS

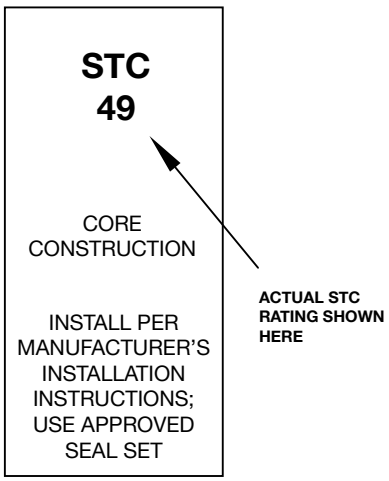
LABELING AGENCIES :
UL SOLUTIONS
WH

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252

FIRE RATING: THRU 3 HRS. (STX 48-49) FLUSH SINGLES 8’0” X 8’0” MAX.

DESIGNS: FLUSH ONLY
- SEAL SET 4

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4” thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A1008 or optional zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer’s proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. Assemblies STC rated 40 and above must also be grout filled to achieve the STC rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2” or 5” high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A115.2 cylindrical x surface or flush bolts with astragal or ANSI 115.1 mortise lock x surface or flush bolts with astragal. Electric power transfer, mag switch and dead bolt hardware preparations are not allowed.

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. “Colorstyle” finish coat is also available, for the door & 3 sided frame, from a Pantone color selection chart. Optional colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

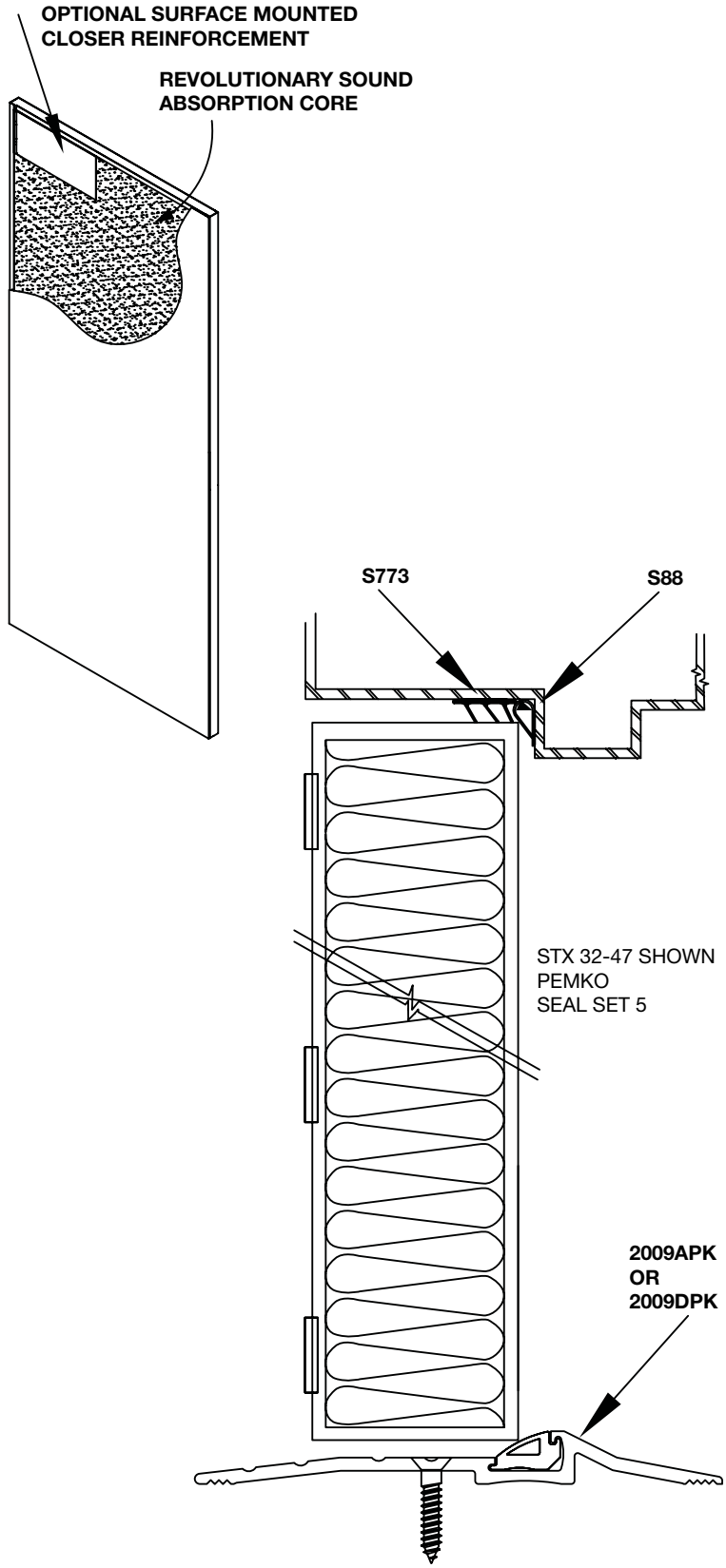
NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
PAIRS	48	*CYL OR MORTISE	3/8”	3 HR.	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4
PAIRS	49	*CYL.	3/8”	3 HR.	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4

**CYLINDRICAL / REQUIRES SURFACE OR FLUSHBOLTS WITH ASTRAGAL.*
**MORTISE / REQUIRES SURFACE OR FLUSHBOLTS WITH ASTRAGAL.*
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC32 THRU STC47 (NON-FIRE RATED FLUSH PAIRS)

1-3/4" SOUND-TECH XPRESS



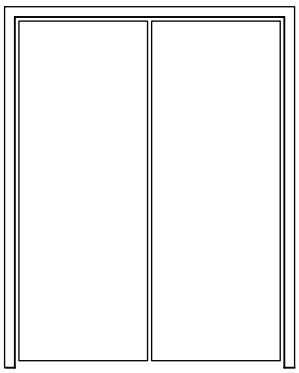
TESTED AND IN COMPLIANCE WITH ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. DOOR SYSTEMS ARE IN COMPLIANCE WITH HMMA 865 & SDI-128 SPECIFICATIONS. COMPLETE WITH PERIMETER SOUND SEALS AND THRESHOLD AS REQUIRED FOR RATING.

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated assembly.

SUGGESTED USE:

- Conference rooms, clinical
- Offices, Courtrooms, Legal Offices, Broadcast, studios, Boardrooms
- Libraries, Music rooms and performing Arts Studios, Hotel/ Motel and Military Barracks.

DOOR DESIGNS

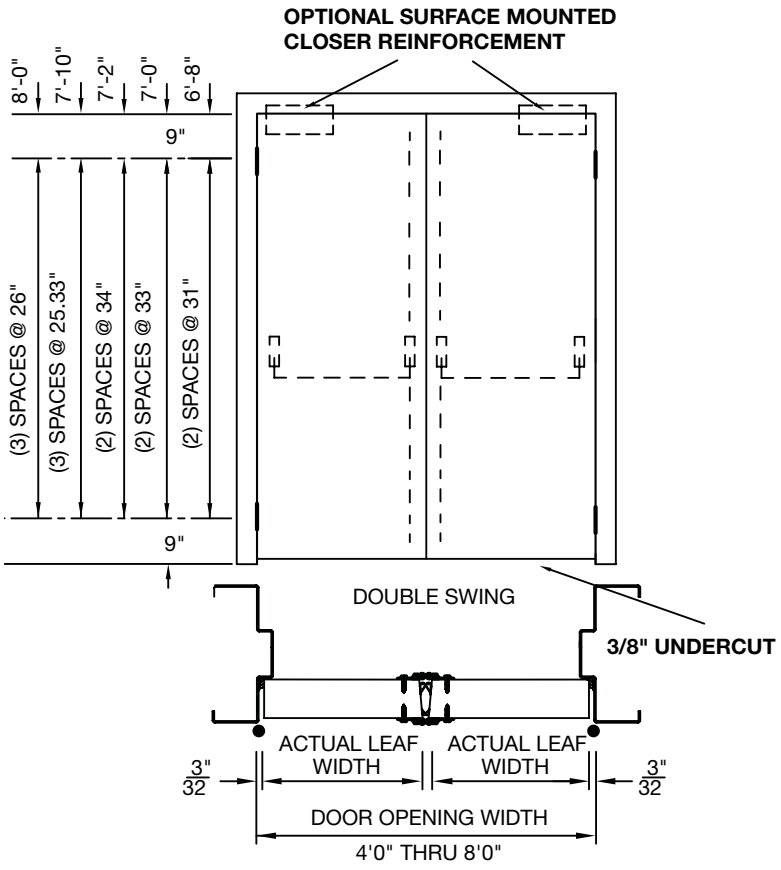


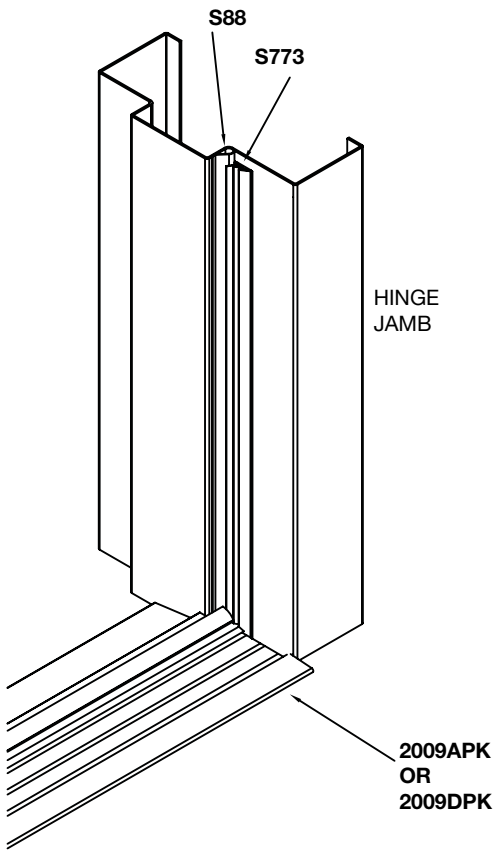
DOUBLE SWING DOORS
F
(ELEVATION)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

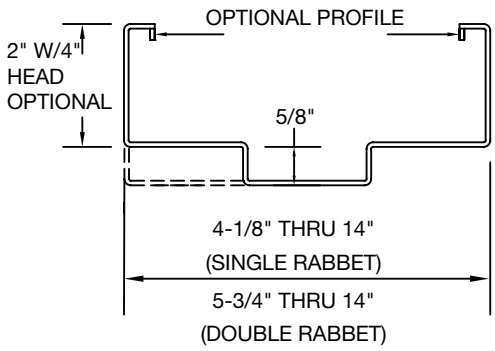
STC32 THRU STC47 (NON-FIRE RATED FLUSH PAIRS)

HORIZONTAL SECTION

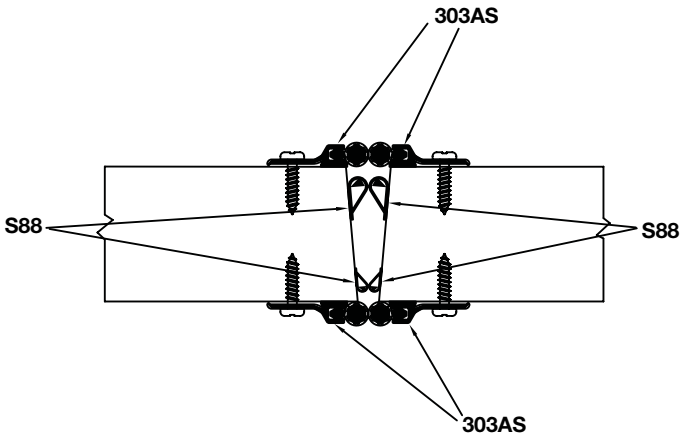


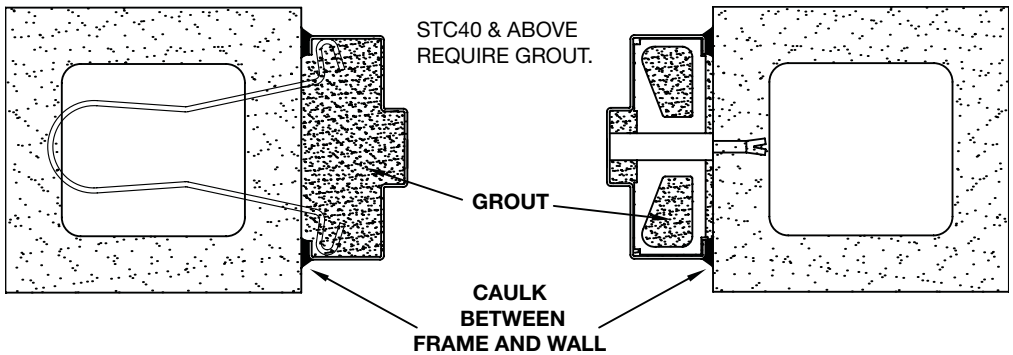


TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW





IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED INSTALLATION INSTRUCTIONS.

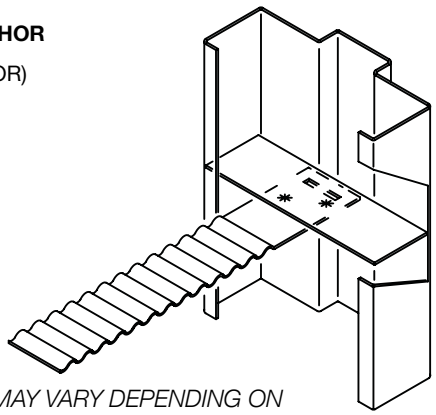
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC32 THRU STC47 (NON-FIRE RATED FLUSH PAIRS)

MASONARY "T" ANCHOR

(WITH FLOOR ANCHOR)

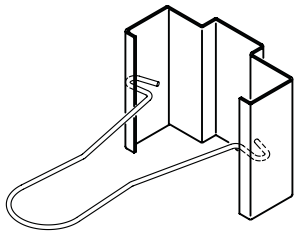
SNAP-IN TYPE



(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONARY ANCHOR

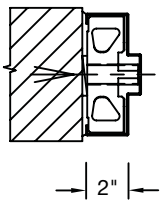
7 GA. GALV. STEEL
SNAP-IN TYPE

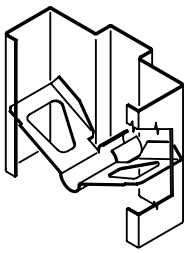


EXISTING OPENING ANCHOR EO

ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

SNAP-IN TYPE

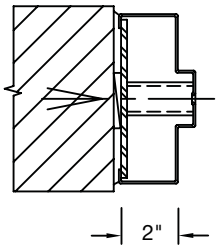


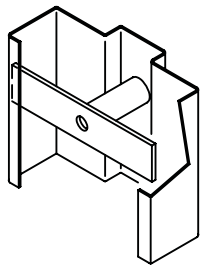


SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S8: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

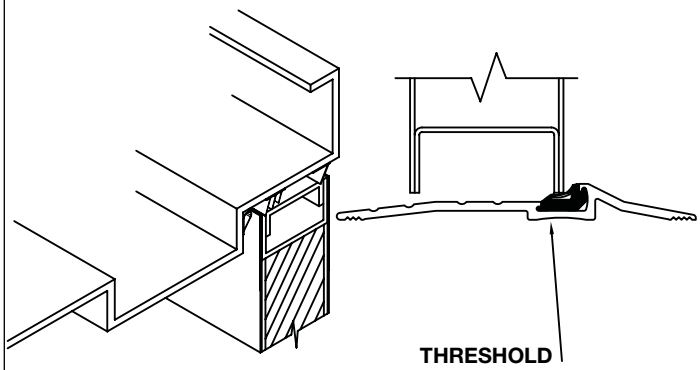
EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS

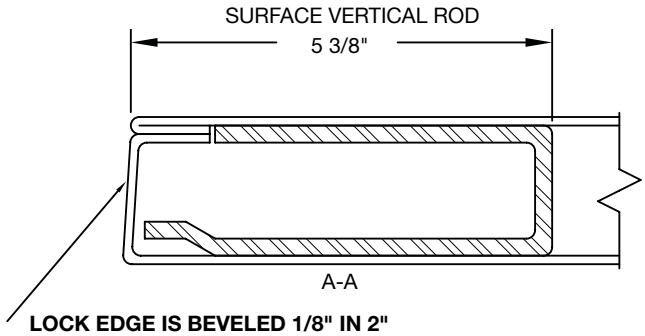




DOOR CONSTRUCTION TOP AND BOTTOM



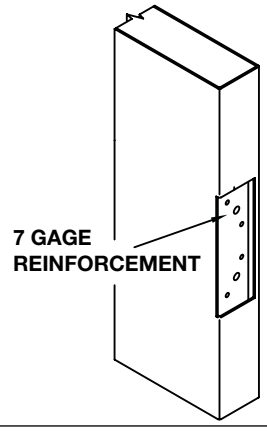
HARDWARE PREPARATIONS

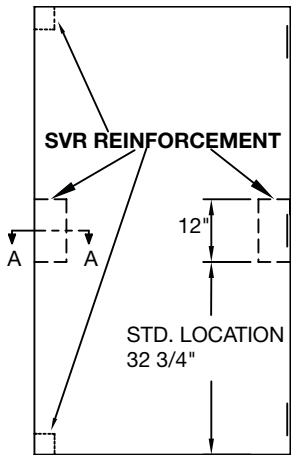


LOCK EDGE IS BEVELED 1/8" IN 2"

HINGE PREPARATION
HINGE PREP IS HANDED

4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7





(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC32 THRU STC47 (NON-FIRE RATED FLUSH PAIRS)

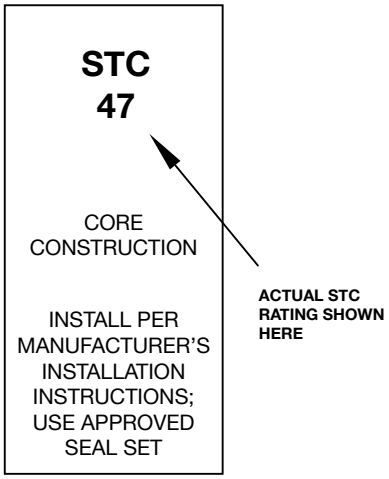
STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH DOUBLE	HEIGHT
4'-0"	6'-8"
5'-0"	7'-0"
5'-4"	7'-2"
6'-0"	7'-10"
7'-0"	8'-0"
8'-0"	

ACOUSTICAL DOORS

FIRE RATING: NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A1008 or optional zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. Assemblies STC rated 40 and above must also be grout filled to achieve the STC rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A115.2 cylindrical x surface or flush bolts with astragal or ANSI 115.1 mortise lock x surface or flush bolts with astragal. Electric power transfer, mag switch and dead bolt hardware preparations are not allowed.

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a Pantone color selection chart. Optional colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED THOSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTHER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT.*

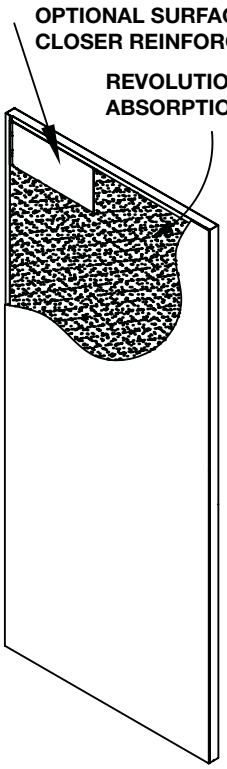
SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
PAIRS	32-47	*SVR X SVR	3/8"	N/A	PEMKO SEALS: S88, S773, 303AS & 2009_PK THRESHOLD-SET 5

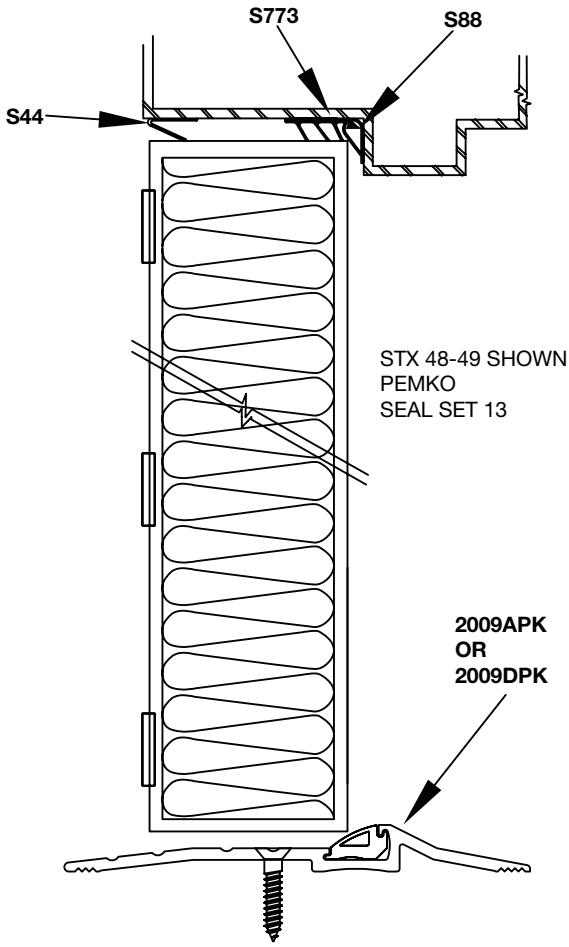
**SURFACE VERTICAL ROD X SURFACE VERTICAL ROD*
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC48 THRU STC49 (NON-FIRE RATED FLUSH PAIRS)

1-3/4" SOUND-TECH XPRESS



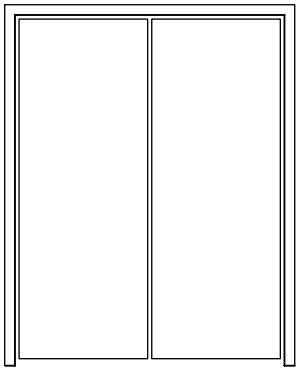


TESTED AND IN COMPLIANCE WITH ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. DOOR SYSTEMS ARE IN COMPLIANCE WITH HMMA 865 & SDI-128 SPECIFICATIONS. COMPLETE WITH PERIMETER SOUND SEALS AND THRESHOLD AS REQUIRED FOR RATING.

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated assembly.

SUGGESTED USE:
- Conference rooms, clinical
- Offices, Courtrooms, Legal Offices, Broadcast, studios, Boardrooms
- Libraries, Music rooms and performing Arts Studios, Hotel/Motel and Military Barracks.

DOOR DESIGNS

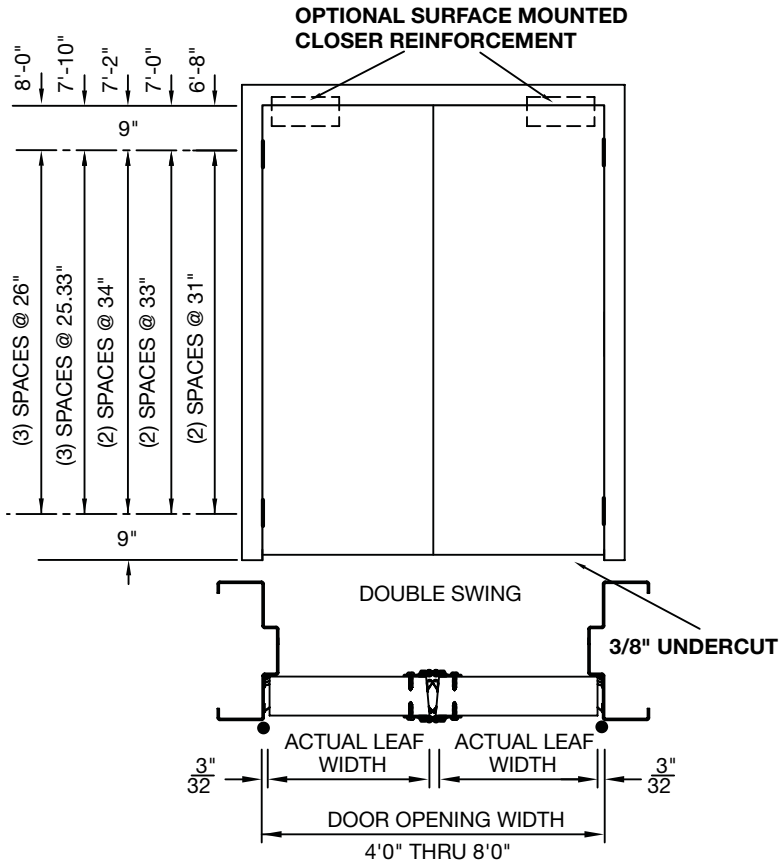


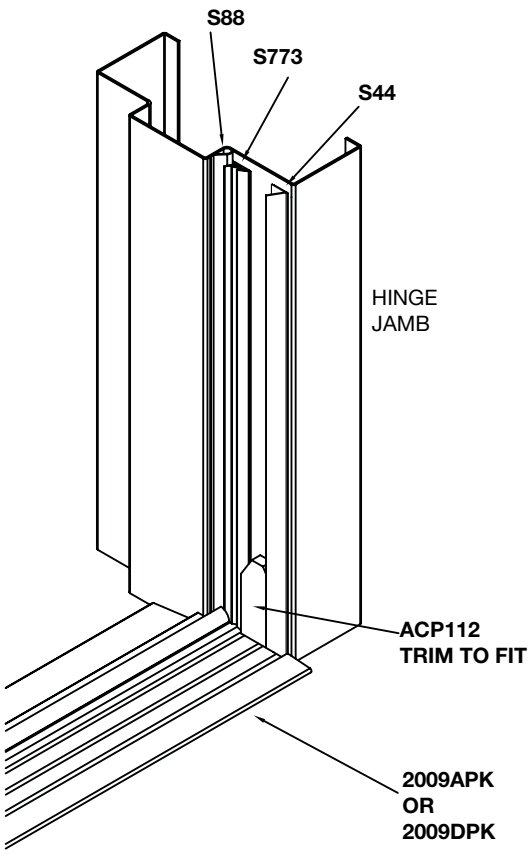
DOUBLE SWING DOORS
F
(ELEVATION)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

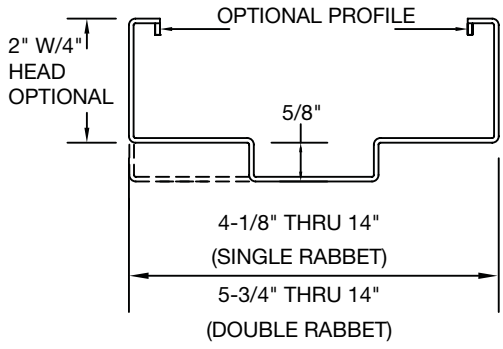
STC48 THRU STC49 (NON-FIRE RATED FLUSH PAIRS)

HORIZONTAL SECTION

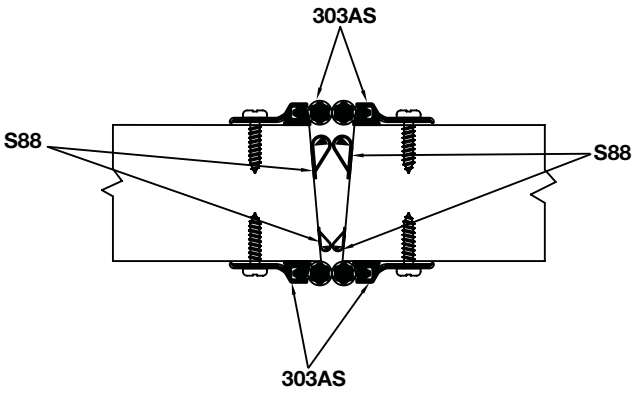


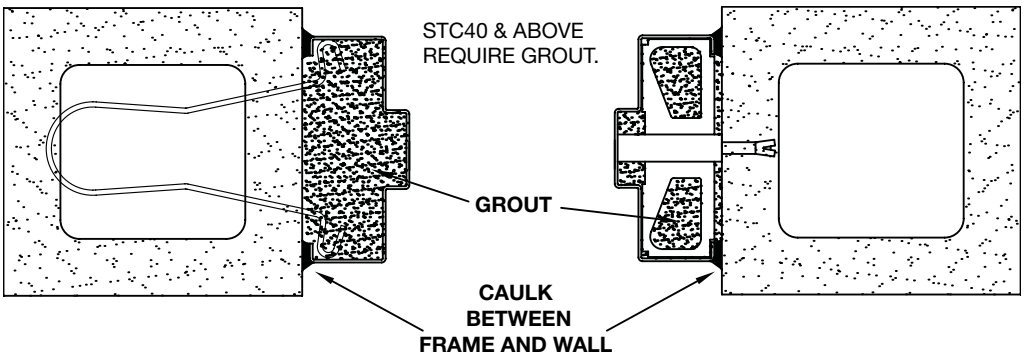


TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW





IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED INSTALLATION INSTRUCTIONS.

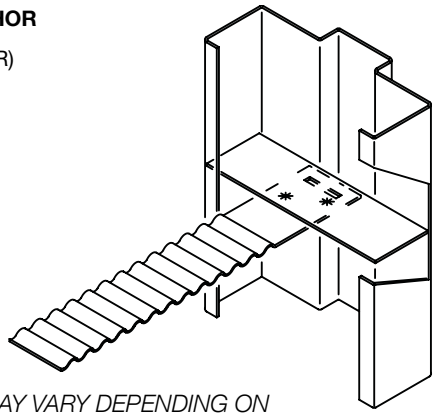
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC48 THRU STC49 (NON-FIRE RATED FLUSH PAIRS)

MASONARY "T" ANCHOR

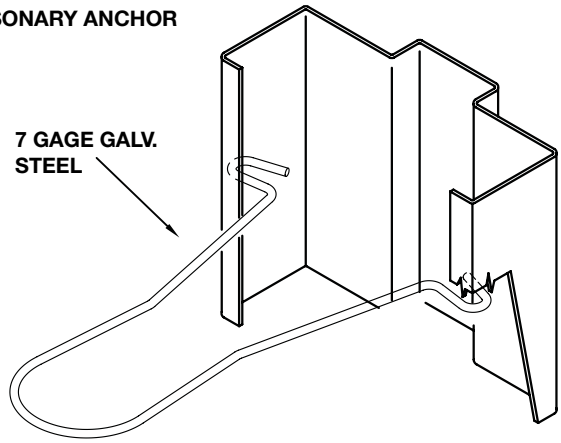
(WITH FLOOR ANCHOR)

SNAP-IN TYPE



(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

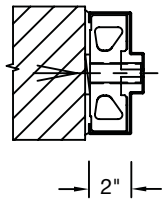
WIRE MASONARY ANCHOR

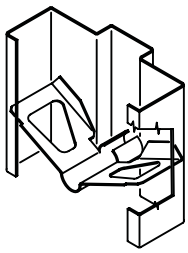


EXISTING OPENING ANCHOR EO

ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

SNAP-IN TYPE

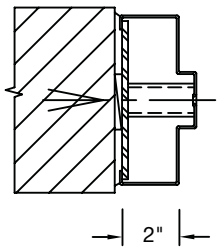


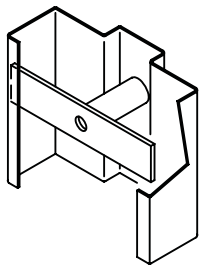


SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

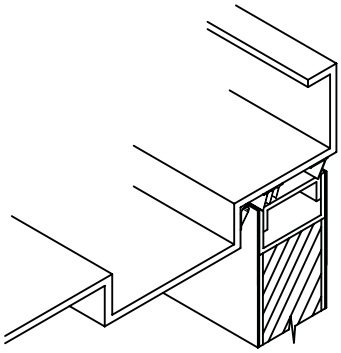
EXISTING OPENING ANCHOR EO/P&S

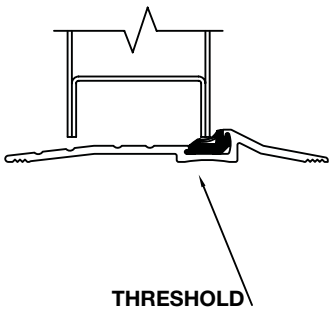
ANCHOR FITS VARIOUS DEPTHS





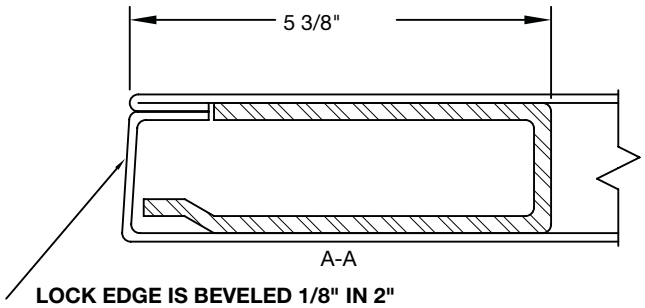
DOOR CONSTRUCTION TOP AND BOTTOM





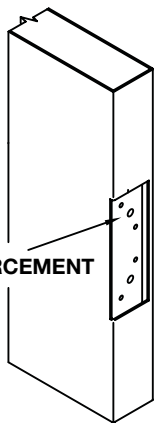
HARDWARE PREPARATIONS

SURFACE VERTICAL ROD



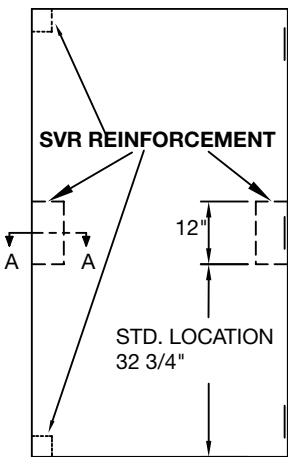
LOCK EDGE IS BEVELED 1/8" IN 2"

HINGE PREPARATION



HINGE PREP IS HANDED

4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC48 THRU STC49 (NON-FIRE RATED FLUSH PAIRS)

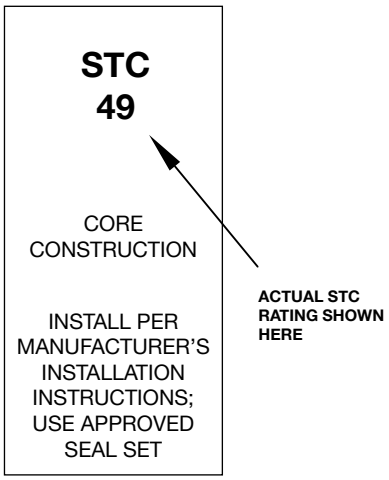
STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
DOUBLE	
4'-0"	6'-8"
5'-0"	7'-0"
5'-4"	7'-2"
6'-0"	7'-10"
7'-0"	8'-0"
8'-0"	

ACOUSTICAL DOORS

FIRE RATING: NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A1008 or optional zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. A physical door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. Assemblies STC rated 40 and above must also be grout filled to achieve the STC rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A156.3 surface vertical rods. Electric power transfer, mag switch and dead bolt hardware preparations are not allowed

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a Pantone color selection chart. Optional colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

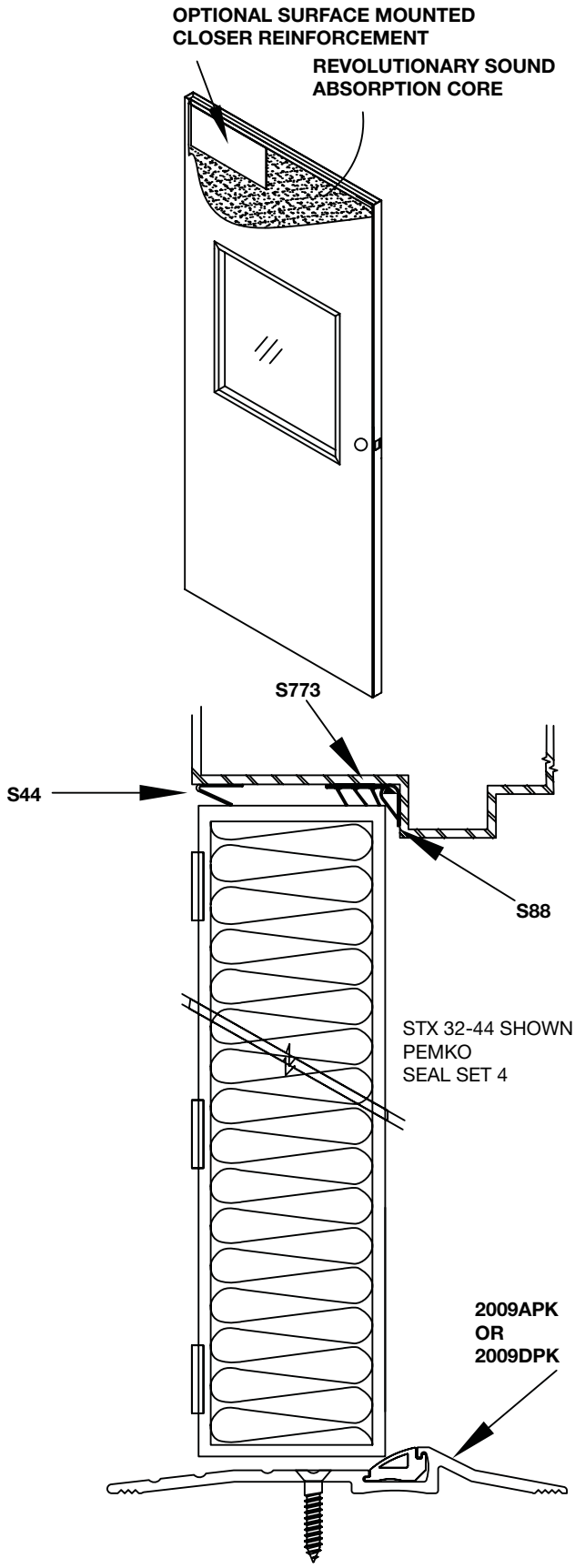
NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*

SOUND-TECH XPRESS DOOR SYSTEMS					
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	SEAL SET DESCRIPTION
PAIRS	48-49	*SVR X SVR	3/8"	N/A	PEMKO SEALS: S88, S44, S773, 303AS & 2009_PK THRESHOLD-SET 13

**SURFACE VERTICAL ROD X SURFACE VERTICAL ROD*
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

STC32 THRU STC44 (FIRE RATED PAIRS WITH GLASS)

1-3/4" SOUND-TECH XPRESS



TESTED AND IN COMPLIANCE WITH ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. DOOR SYSTEMS ARE IN COMPLIANCE WITH HMMA 865 & SDI-128 SPECIFICATIONS. COMPLETE WITH PERIMETER SOUND SEALS AND THRESHOLD AS REQUIRED FOR RATING.

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SUGGESTED USE:

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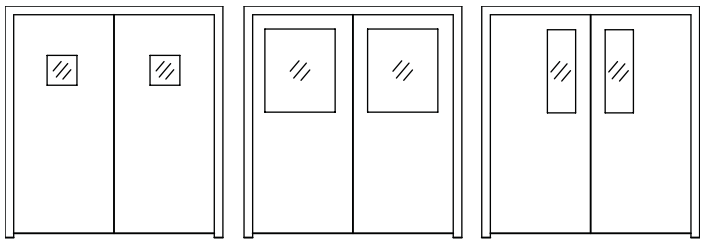
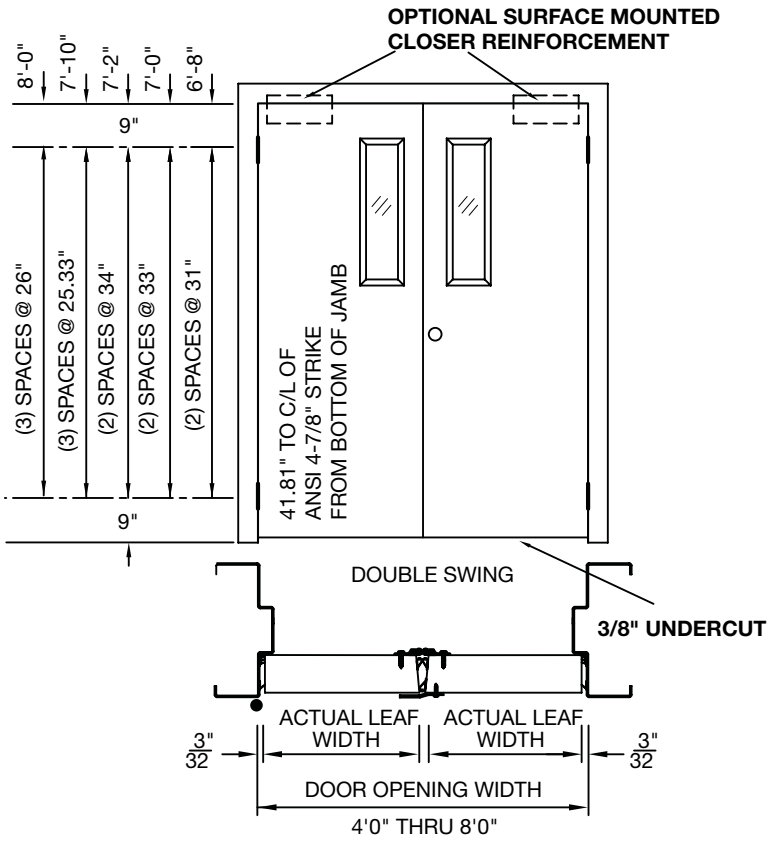
DOOR DESIGNS

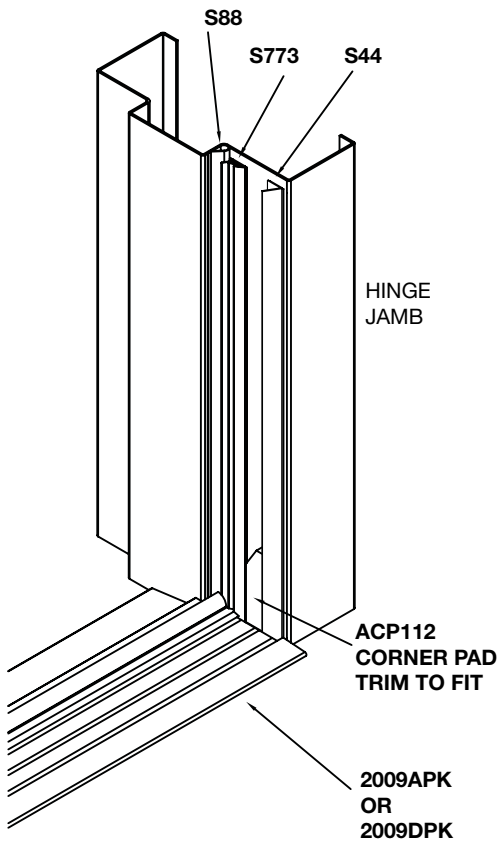


(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

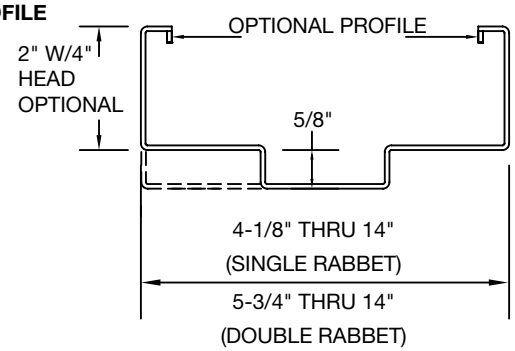
STC32 THRU STC44

HORIZONTAL SECTION

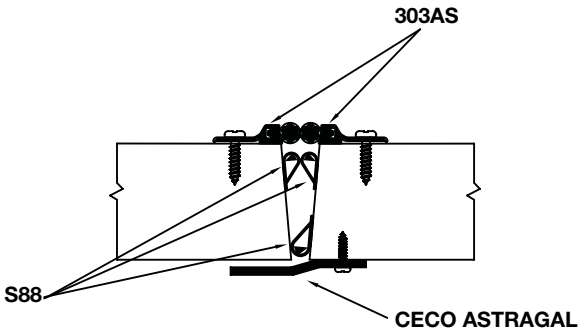


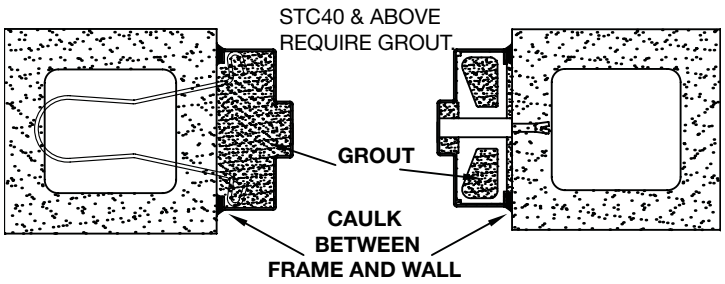


TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW





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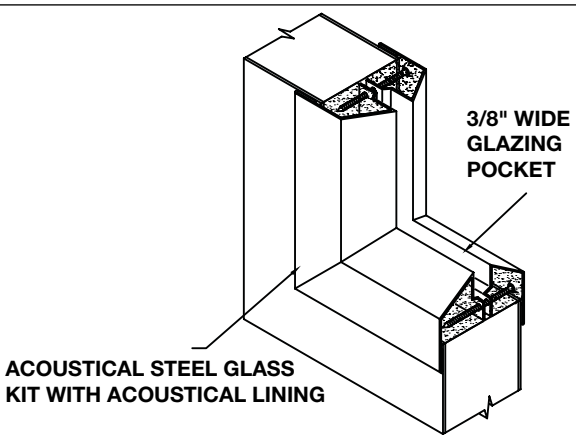

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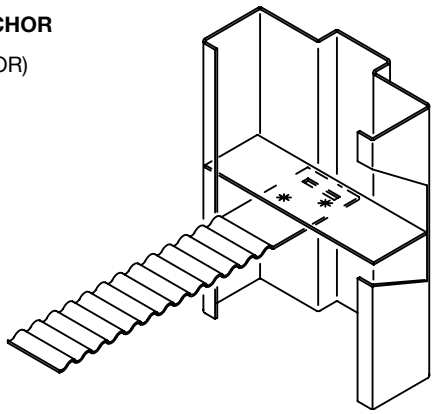
STC32 THRU STC44

MASONARY "T" ANCHOR

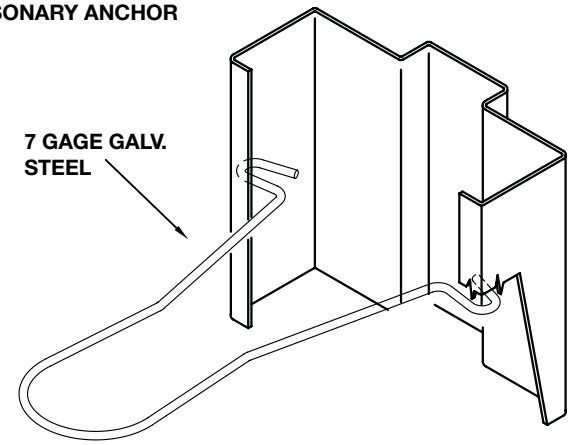
(WITH FLOOR ANCHOR)

SNAP-IN TYPE



(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

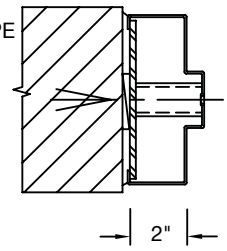
WIRE MASONARY ANCHOR

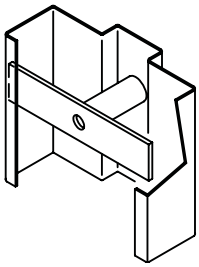


EXISTING OPENING ANCHOR EO

ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

SNAP-IN TYPE

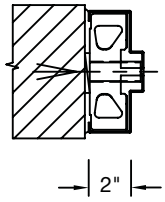


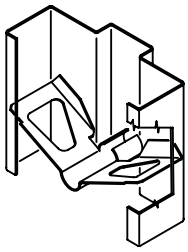


SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
SQ PROFILE	EO/S6: 5-1/8" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH

EXISTING OPENING ANCHOR EO/P&S

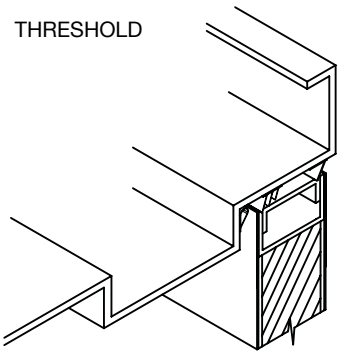
ANCHOR FITS VARIOUS DEPTHS

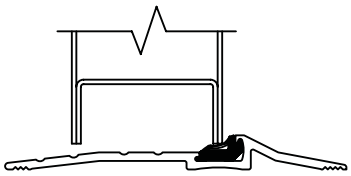




DOOR CONSTRUCTION TOP AND BOTTOM

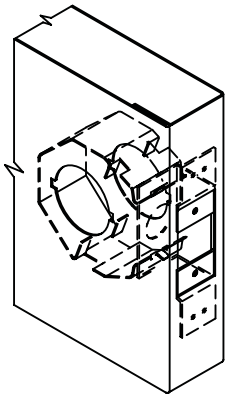
THRESHOLD





LOCK PREPARATIONS

CYLINDRICAL ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

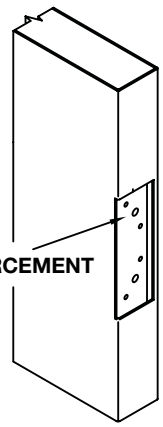


LOCK EDGE IS BEVELED 1/8" IN 2"

HINGE PREPARATION

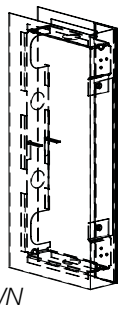
HINGE PREP IS HANDED

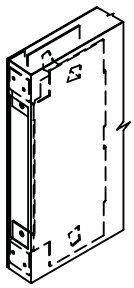
4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7



LOCK PREPARATIONS

GOV.86, ANSI/BHMA A115.1
MORTISE TYPE





NOTE:
EITHER OF THE LOCK REINFORCEMENTS/GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION

LOCK EDGE IS BEVELED 1/8" IN 2"

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC32 THRU STC44

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
DOUBLE	
4'-0"	6'-8"
5'-0"	7'-0"
5'-4"	7'-2"
6'-0"	7'-10"
7'-0"	8'-0"
8'-0"	

ACOUSTICAL FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS
WH

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252

FIRE RATING: THRU 3 HRS. (STX 32-44 GLAZED PAIRS) 8'0" X 8'0" MAX.

DESIGNS: GLAZED PAIRS

ACOUSTIC DOOR SYSTEM LABELS

STC 44

CORE CONSTRUCTION

INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS; USE APPROVED SEAL SET

ACTUAL STC RATING SHOWN HERE

PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA. Doors and frarres shall conform to the Steel Door Institute guide specification, ANSI 1\250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A1008 or optional zinc coated steel conforming to ASTM A653 &ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. KERALITE® LAMINATED glass is factory installed in fire rated doors. 5/16" tempered laminated glass is installed in non-fire rated doors. A physical STC door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

FRAMES are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. Assemblies STC rated 40 and above must also be grout filled to achieve the STC rating.

HARDWARE PROVISIONS: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavyweight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A115.2 cylindrical x surface or flush bolts, ANSI A115.1 mortise lock x surface or flush bolts or ANSI 156.3 mortise panic x surface vertical rod or surface or flush bolts. Electric power transfer, mag switch and dead belt hardware preparations are not allowed.

PAINT: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat sl1all conform to ANSI 1\250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a Pantone color selection chart. Optional colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*
- *PLEASE NOTE THAT TOLERANCES FOR FLATNESS OF ACOUSTICAL DOORS TEND TO EXCEED TL1OSE OF CONVENTIONAL HOLLOW METAL. INSTALLATION OF EXIT DEVICES AND OTL1ER WIDE HARDWARE CAN EXAGGERATE THE SLIGHT BOW IN THE DOOR CREATED BY SOUND DAMPENING MATERIAL USED TO MEET THE REQUIRED STC RATING. THIS IS NOT CONSIDERED A MANUFACTURING DEFECT*

SOUND-TECH XPRESS DOOR SYSTEMS

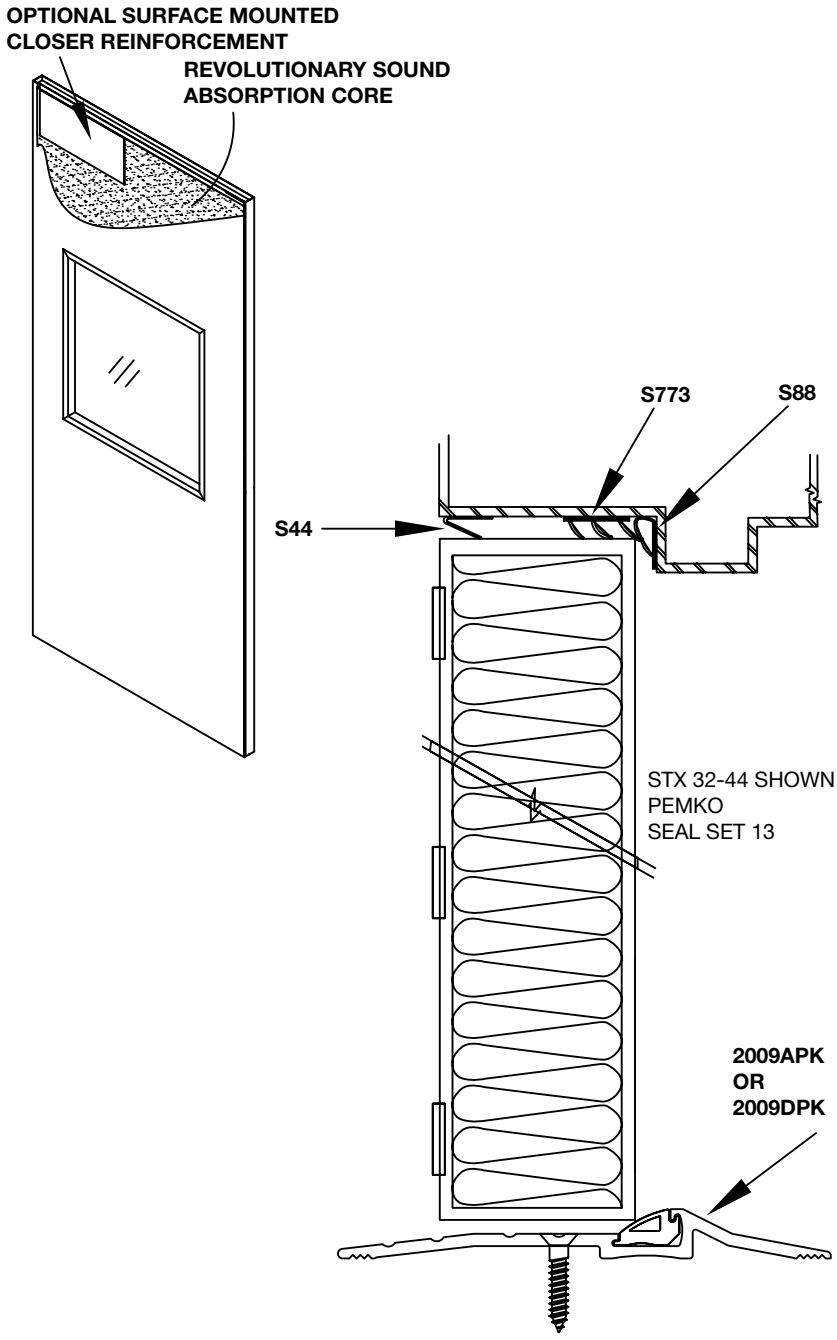
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	MAX.LITE VISIBLE AREA	SEAL SET DESCRIPTION
PAIRS	32-44	*CYL	3/8"	3HR.	100²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4
PAIRS	32-43	*CYL OR MORTISE	3/8"	3HR.	100²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4
PAIRS	32-42	**MORTISE PANIC	3/8"	3HR.	100²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4
PAIRS	32-41	*CYL	3/8"	1-1/2 HR.	288²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4
PAIRS	32-40	*CYL OR MORTISE	3/8"	1-1/2 HR.	288²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4
PAIRS	32-39	*MORTISE PANIC	3/8"	1-1/2 HR.	288²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4
PAIRS	32-37	*CYL	3/8"	1-1/2 HR.	720²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4
PAIRS	32-36	*CYL OR MORTISE	3/8"	1-1/2 HR.	720²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4
PAIRS	32-35	**MORTISE PANIC	3/8"	1-1/2 HR.	720²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 4

OPTIONAL HARDWARE PREPARATIONS ARE NOT ALLOWED.
**CYLINDRICAL OR MORTISE LOCK REQUIRES SURFACE OR FLUSHBOLTS WITH ASTRAGAL.*
***MORTISE PANIC REQUIRES SURFACE VERTICAL ROD OR SURFACE OR FLUSHBOLTS WITH ASTRAGAL.*
NOTE: KERALITE ® LAMINATED GLASS IS FACTORY INSTALLED IN FIRE RATED DOORS.
NOTE: 5/16" TEMPERED LAMINATED NON-FIRERATED GLASS - REDUCE ALL ABOVE STC RATINGS BY 1 POINT.
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC32 THRU STC44 (NON-FIRE RATED PAIRS WITH GLASS)

1-3/4" SOUND-TECH XPRESS



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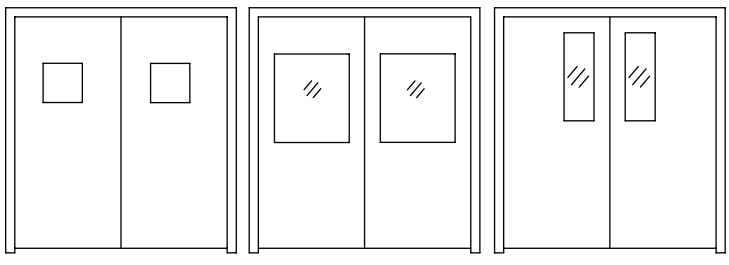

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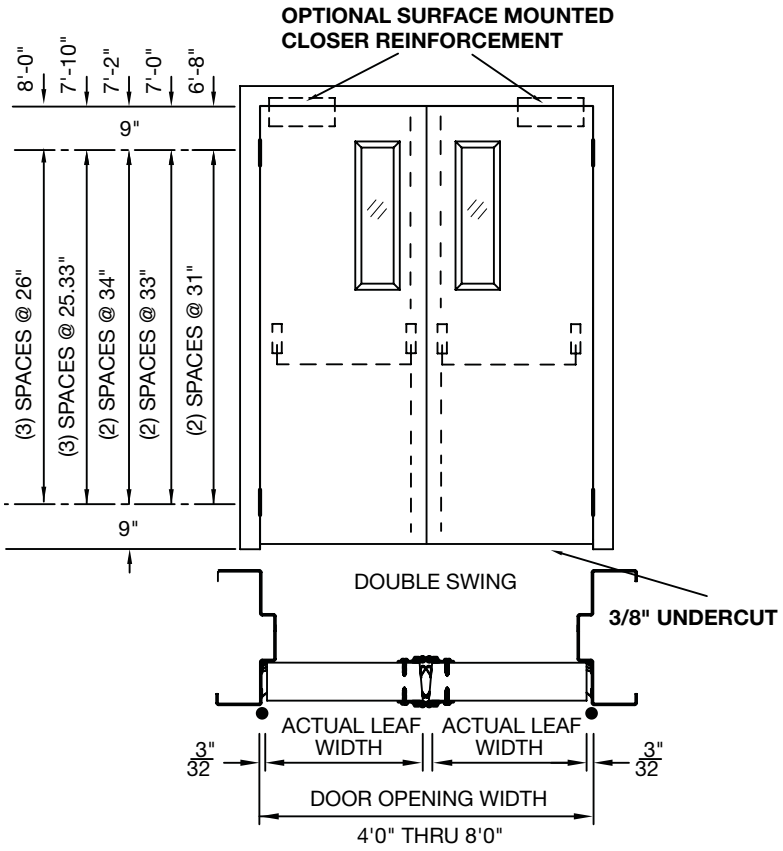

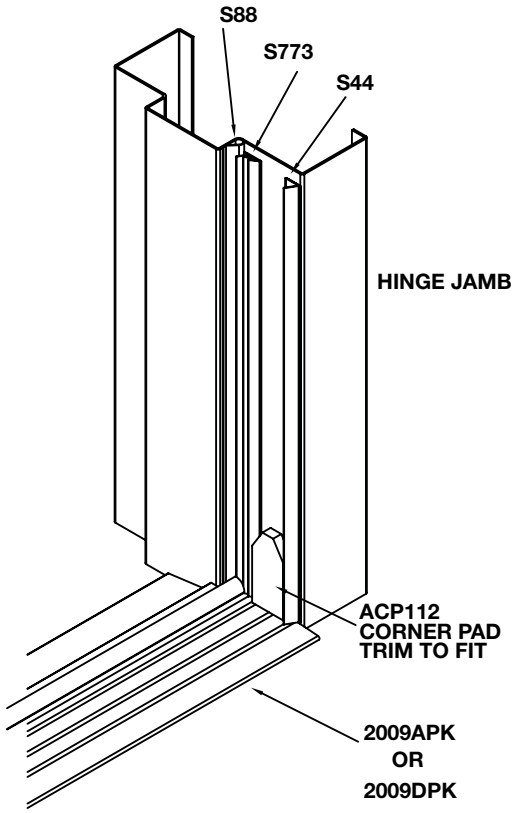

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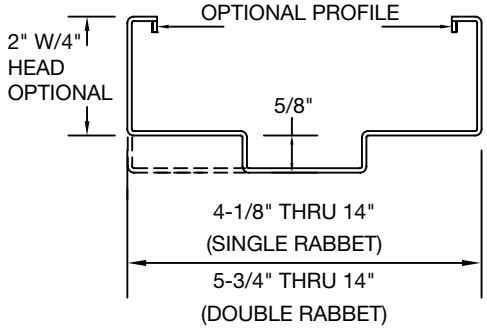

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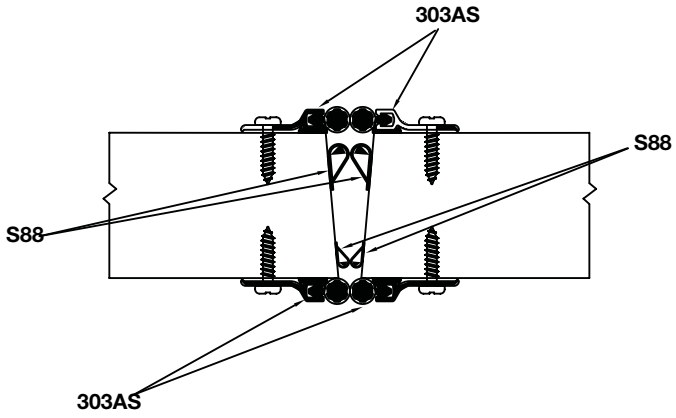

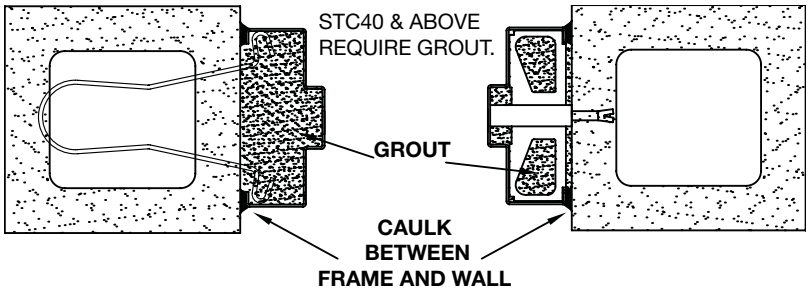

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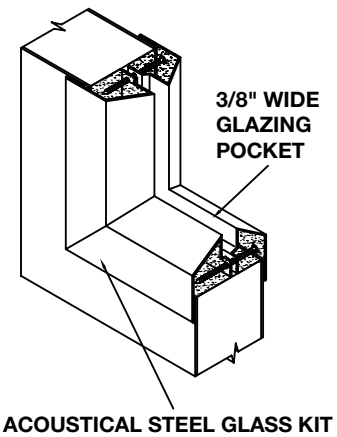

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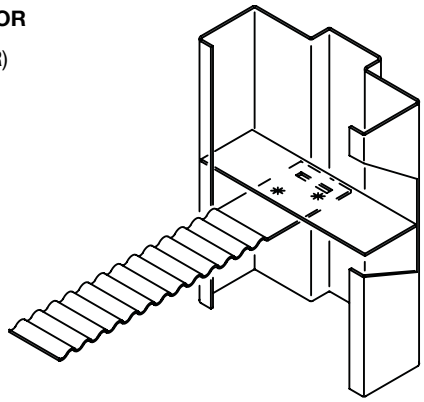
STC32 THRU STC44

MASONARY "T" ANCHOR

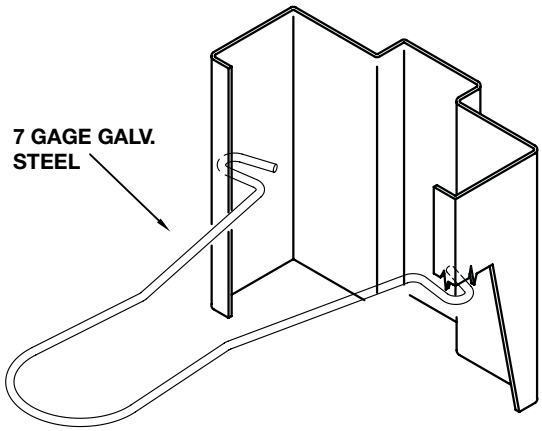
(WITH FLOOR ANCHOR)

SNAP-IN TYPE



(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

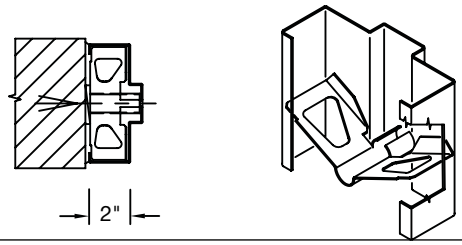
WIRE MASONARY ANCHOR



EXISTING OPENING ANCHOR EO

ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

SNAP-IN TYPE



SU PROFILE	EO/S6: 4-3/4" THRU 6-3/4" DEPTH EO/S8: 6-7/8" THRU 8-3/4" DEPTH
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EXISTING OPENING ANCHOR EO/P&S

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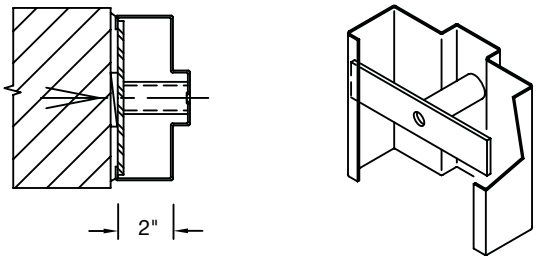
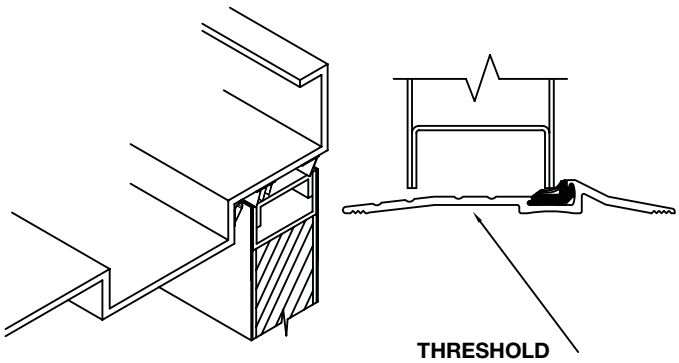


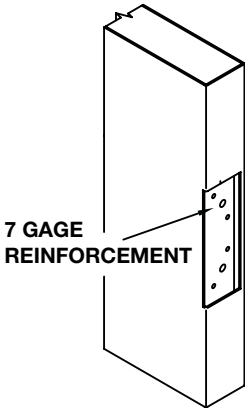
DOOR CONSTRUCTION TOP AND BOTTOM



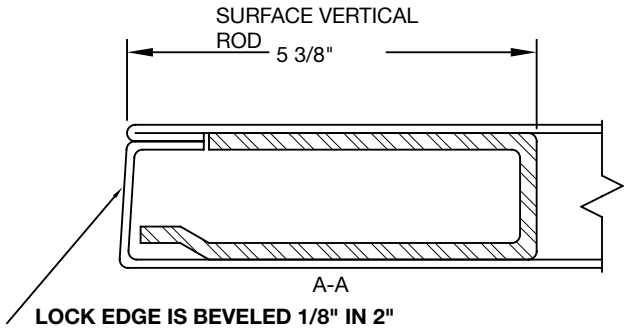
HINGE PREPARATION

HINGE PREP IS HANDED

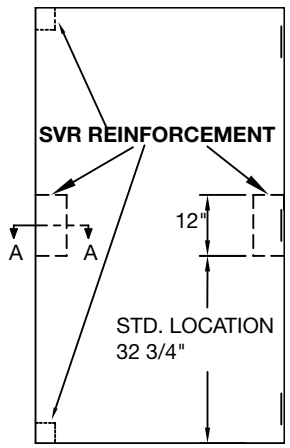
4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7



HARDWARE PREPARATIONS



LOCK EDGE IS BEVELED 1/8" IN 2"



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC32 THRU STC44

STANDARD SIZES
NOMINAL DOOR OPENING

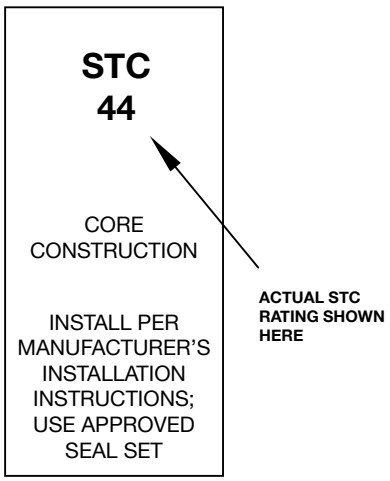
WIDTH DOUBLE	HEIGHT
4'-0"	6'-8"
5'-0"	7'-0"
5'-4"	7'-2"
6'-0"	7'-10"
7'-0"	8'-0"
8'-0"	

ACOUSTICAL DOORS

NO FIRE RATINGS AVAILABLE
(STX 32-44 GLAZED PAIRS
8'0" X 8'0" MAX.)

DESIGNS: GLAZED PAIRS

ACOUSTIC DOOR SYSTEM LABELS



PRODUCT SPECIFICATIONS:

1-3/4" thick acoustical steel door system shall be as provided by Ceco Door Products, USA Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8 as applicable.

The doors and frames are commercial quality cold-rolled steel conforming to ASTM A1008 or optional zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standard as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified. Door systems are in compliance with HMMA 865 & SDI-128 specifications. 5/16" tempered laminated glass is factory installed. A physical STC door label is applied to certify the product and identify the specific rating. The label will be applied to the door only and there will not be a label applied to the frames.

Frames are single or double rabbet profile of continuously welded construction and are available for any masonry and acoustic wall system applications. They are constructed of 16 gauge min. or 14 gauge max. to provide the STC performance specified. Mutes are not allowed in these frames. Assemblies STC rated 40 and above must also be grout filled to achieve the STC rating.

Hardware Provisions: Hinge preparations are handed. The square hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). The door lock edge has a standard bevel and is prepared for ANSI A156.3 surface vertical rod x surface vertical rod. Electric power transfer, mag switch and dead bolt hardware preparations are not allowed.

Paint: Doors and frames shall be provided with one coat of oven-cured neutral color prime paint. Primer coat shall conform to ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available, for the door & 3 sided frame, from a Pantone color selection chart. Optional colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall confirm to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

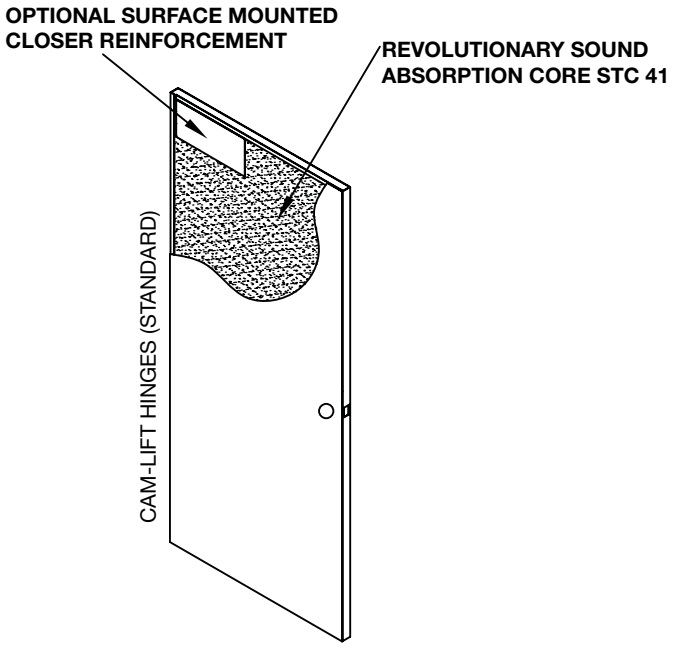
NOTES:
- *INDUSTRY STANDARD CONSTRUCTION TOLERANCES FOR SQUARENESS OF FRAME INSTALLATION, PLUMBNESS OF WALLS, FLATNESS OF FLOORS, FLANKING, ETC. MAY RESULT IN A DIFFERENCE OF 3DB - 5DB SOUND LOSS IN A FIELD TEST VERSUS LAB TEST.*

SOUND-TECH XPRESS DOOR SYSTEMS						
	STC RATING	LOCK TYPE	UNDERCUT	MAX.FIRE RATING	MAX.LITE VISIBLE AREA	SEAL SET DESCRIPTION
PAIRS	32-44	*SVR X SVR	3/8"	N/A	100²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 13
PAIRS	32-41	*SVR X SVR	3/8"	N/A	288²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 13
PAIRS	32-37	*SVR X SVR	3/8"	N/A	720²"	PEMKO SEALS: S88, S44, S773, 303AS, ACP112 & 2009_PK THRESHOLD-SET 13

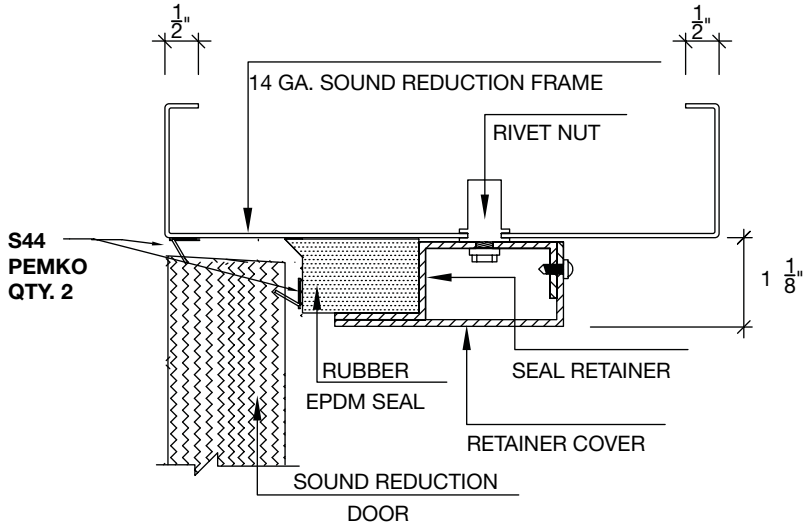
**SURFACE VERTICAL ROD X SURFACE VERTICAL ROD*
NOTE: 5/16" TEMPERED LAMINATED GLASS IS FACTORY INSTALLED.
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

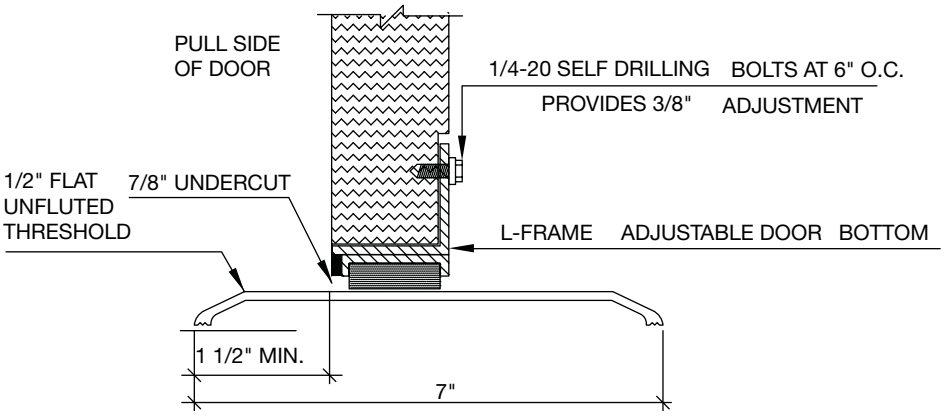
UP TO STC 41

1-3/4" SOUND-TECH XPRESS



MODEL AS41C UTILIZES "ADJ" PROFILE FRAME
(SEAL SET RCG FOR SINGLES, RCGP FOR PAIRS)





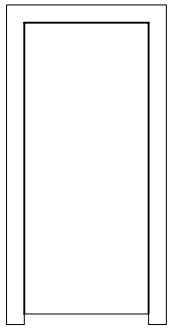
PLEASE REFERENCE WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals, bottom seals and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rates assembly.

SUGGESTED USE:
- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing arts studios
- Hotel / motel
- Military barracks

DOOR DESIGN

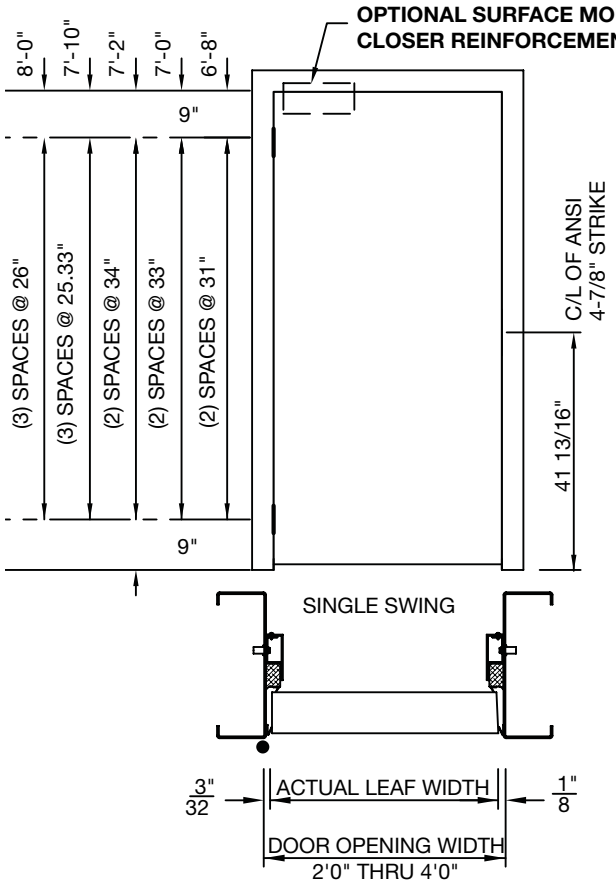


F
(ELEVATION)

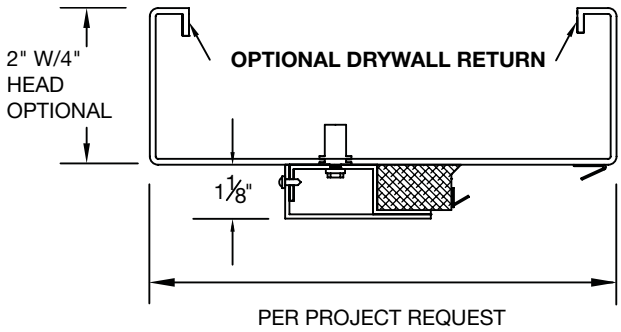
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

UP TO STC 41 (FLUSH SINGLES)

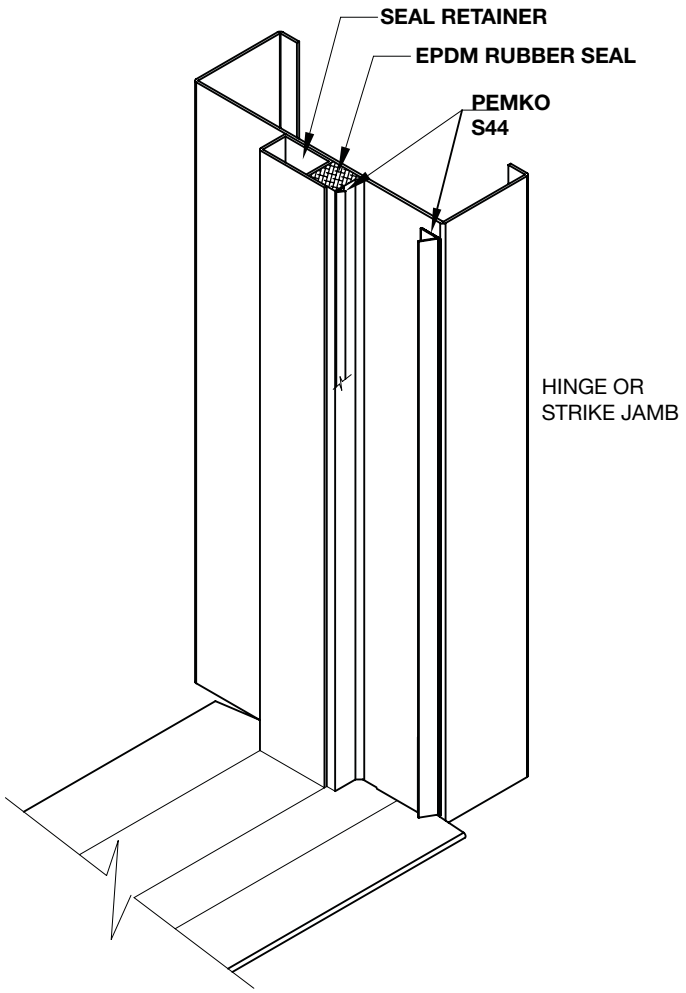
HORIZONTAL SECTION



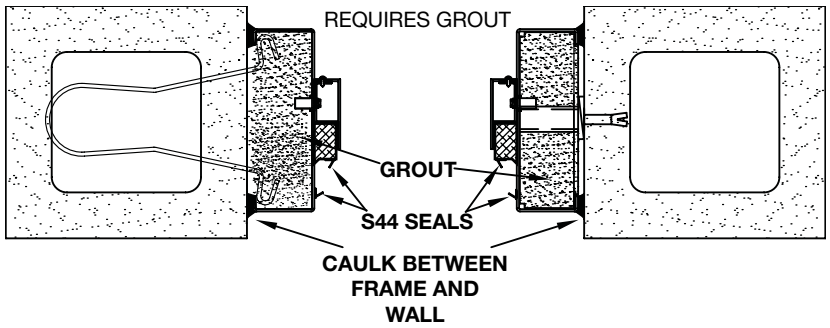
PROFILE AS41C



ADJ PROFILE AND SEALS FOR MODEL AS41C
(SEAL SET RCG)



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW



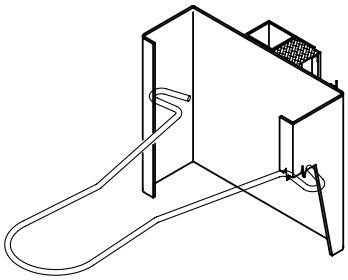
IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH SPECIFIC DETAILED SOUND SEAL INSTALLATION INSTRUCTIONS.

DRAWING DEPICTS INSTALLATION. PROFILES, SEALS AND ANCHORS MAY VARY.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

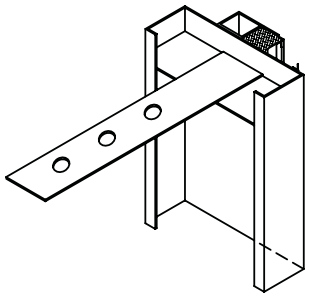
UP TO STC 41 (FLUSH SINGLES)

MASONRY WIRE ANCHOR 100

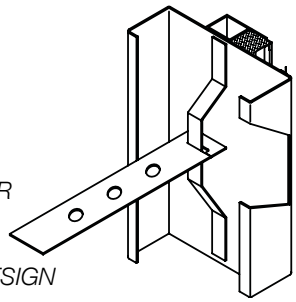


(WITH FLOOR ANCHOR)

MASONRY "T" ANCHOR 101



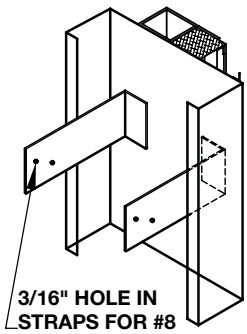
MASONRY STRAP ANCHOR 102

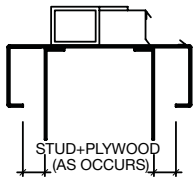


(WITH FLOOR ANCHOR)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

WOOD STUD ANCHOR 400





3/16" HOLE IN STRAPS FOR #8 SCREW OR 8D NAIL @ 24" O.C. MAX AT STRAPS

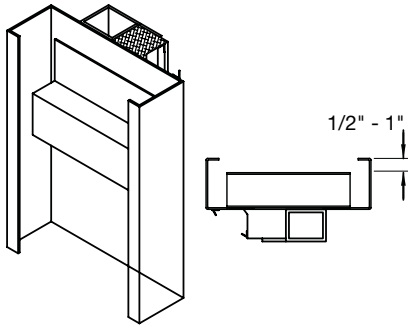
SAMPLE
5 - 5

5/8" GAP NEAR SIDE OR OPP. DOOR SIDE

5/8"GAP FAR SIDE OR DOOR SIDE

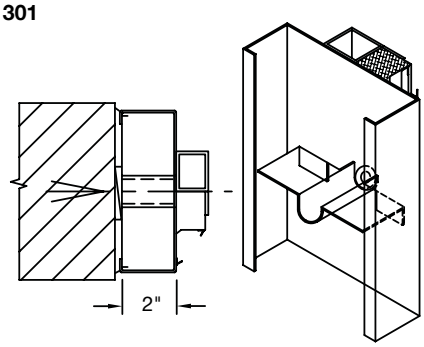
(WITH FLOOR ANCHOR)

STEEL STUD ANCHOR 204

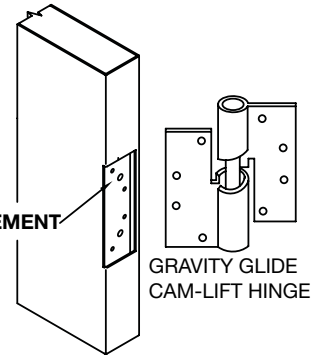


(WITH FLOOR ANCHOR)

EXISTING WALL ANCHOR 301

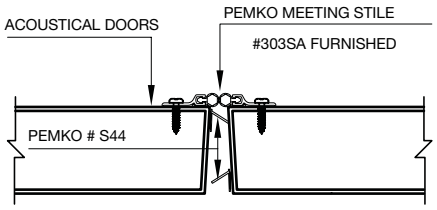


HINGE PREPARATION



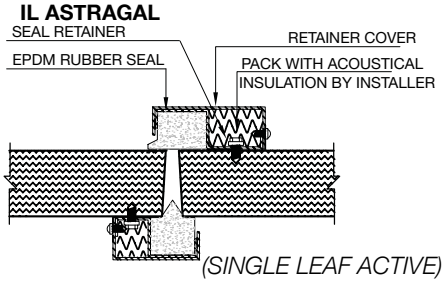
(HINGE PREP IS HANDED)

BL ASTRAGAL



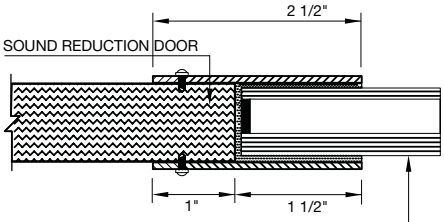
(BOTH LEAF ACTIVE)

IL ASTRAGAL



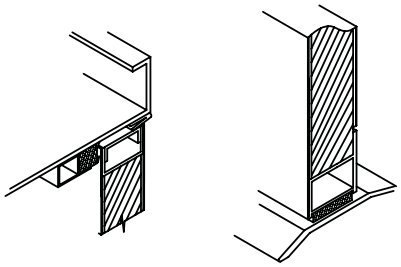
(SINGLE LEAF ACTIVE)

IGU 20 DOOR VISION



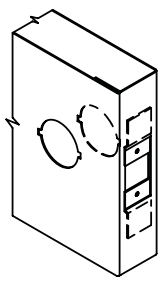
1 1/2" INSULATED GLASS UNIT
(1/4" LAM X 3/4" AIR SPACE X 1/2" ANNEALED)
SET IN SILICONE CHANNEL (FACTORY INSTALLED)

DOOR CONSTRUCTION (TOP AND BOTTOM)



THRESHOLD

LOCK PREPARATIONS



CYLINDRICAL ANSI A115.2
BACKSET 3-3/4" REQUIRED

CYLINDRICAL & MORTISE DEADLOCK (OPTIONAL)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

UP TO STC 41 (FLUSH SINGLES)

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

(CUSTOM SIZES AVAILABLE UPON REQUEST)

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS

SOUND REDUCTION DOOR AND FRAME ASSEMBLY

____ **STC** CORE CONSTRUCTION

SPECIFIED LAB STC RATING SHOWN HERE

PRODUCT SPECIFICATIONS:

1) All exposed surfaces of door and frame to receive one coat of rust inhibitive prime paint complying with ASTM A250.10
2) An aluminum threshold is included. Threshold must protrude 1-1 /2" inches past the face of the frame on the pull side of the door to allow the EPDM rubber section of the door bottom to seat properly during normal operation of the Gravity-Glide cam-lift hinges.
3) Door bottom requires a flush level sealing surface. The threshold must be level and may require shimming to compensate for an uneven floor. This will prevent any sound leaks at this location. Threshold to be grouted solid.
4) Assembly is equipped with metal sound door, frame, seals, door bottom, threshold, Gravity Glide cam - lift hinges and crated for shipment.
5) Door Thickness is 1 3/4". Door weight is 8.4 pounds per square foot. Be aware that the frame must be securely tied to the framing from the sub floor to the structure above. Doubled wood studs or 16 Ga. steel studs are strongly recommended to support the weight of the assembly.
6) Doors are to be formed of no less than 16 Gauge steel face sheets continuously welded at the vertical edges and finished smooth.
7) Frames are to be formed of no less than 14 Gauge sheet steel with corners mitered, continuously welded and ground smooth.
8) Doors and frame are commercial quality zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standards as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified.
9) Frames must be fully grouted.
10) Please be aware industry standard construction tolerances for squareness of frame installation, plumbness of walls, flatness of floors, etc. may result in a difference of 3db-Sdb sound loss in a field test vs. lab results.
11) Please note that tolerances for flatness of acoustical doors tend to exceed those of conventional hollow metal. Installation of exit devices and other wide hardware can exaggerate the slight bow in the door created by sound dampening material used to meet the required STC rating. This is not considered a manufacturing defect.
12) Please reference www.cecodoor.com for installation instructions.

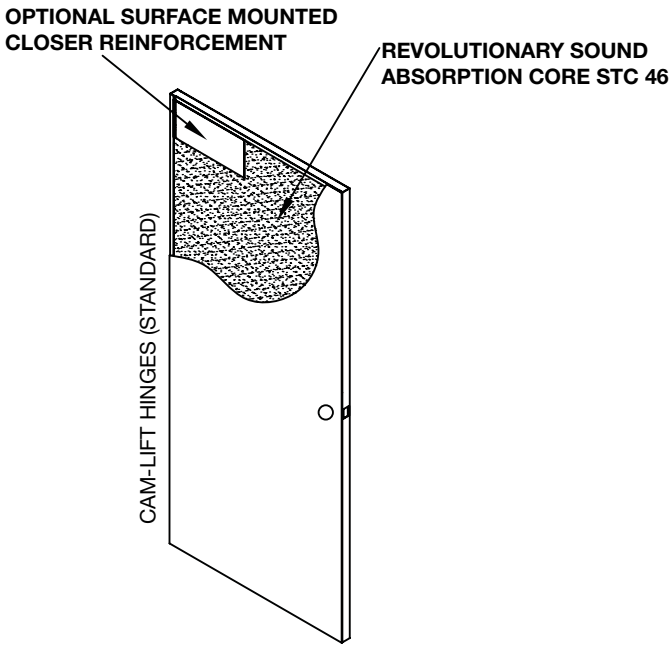
SOUND-TECH XPRESS DOOR SYSTEM OPTIONS
DOORS TESTED = 3'0"X7'0",16 GAUGE, FLUSH, SINGLE
FRAMES TESTED = 3'0"X7'0",14 GAUGE, WELDED, GROUTED
TESTED ASSEMBLY INCLUDES THE FOLLOWING: SOUND TIGHT DOOR AND FRAME ASSEMBLIES, PERIMETER SEALS, RETAINER, CAM LIFT HINGES, DOOR BOTTOM, THRESHOLD AND ACOUSTICAL ASTRAGAL (AT PAIRS).
ADDITIONAL NOTES: *1) PAIRS AVAILABLE - POTENTIAL SOUND LOSS = 5 STC POINTS* *2) VISIONS AVAILABLE - POTENTIAL SOUND LOSS = 2 STC POINTS FOR NARROW VISIONS. UP TO 300 SQUARE INCHES. LARGER VISIONS MAY RESULT IN ADDITIONAL SOUND LOSS.* *3) INCREASED OPENING SIZES AVAILABLE. POTENTIAL SOUND LOSS MAY OR MAY NOT OCCUR AS SIZE INCREASES.* *4) ASSEMBLY WAS FITTED WITH CYLINDRICAL LOCK. PREPARATIONS FOR ALTERNATE HARDWARE IS ALLOWED, HOWEVER, SOUND LOSS MAY OR MAY NOT OCCUR.* *5) SOUND ASSEMBLIES ARE TESTED AS COMPLETE ASSEMBLIES. SOUND DEGRADATION MAY OCCUR WITH THE USE OF AN EXISTING DOOR OR FRAME.*

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

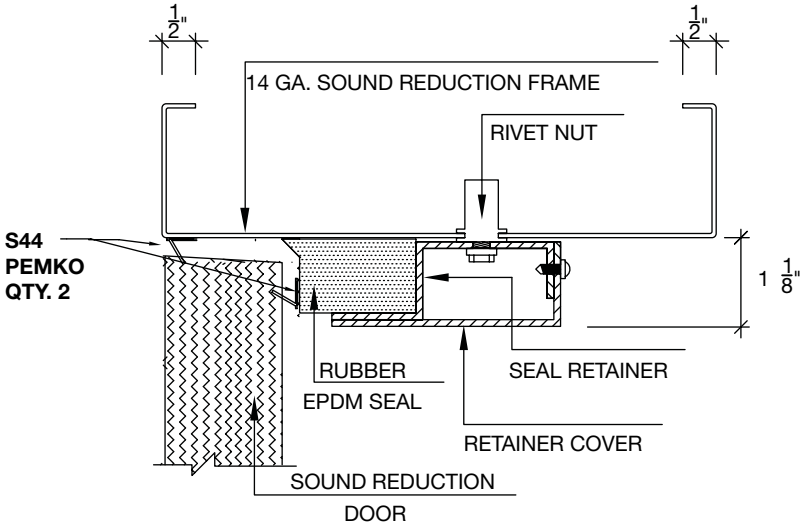
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

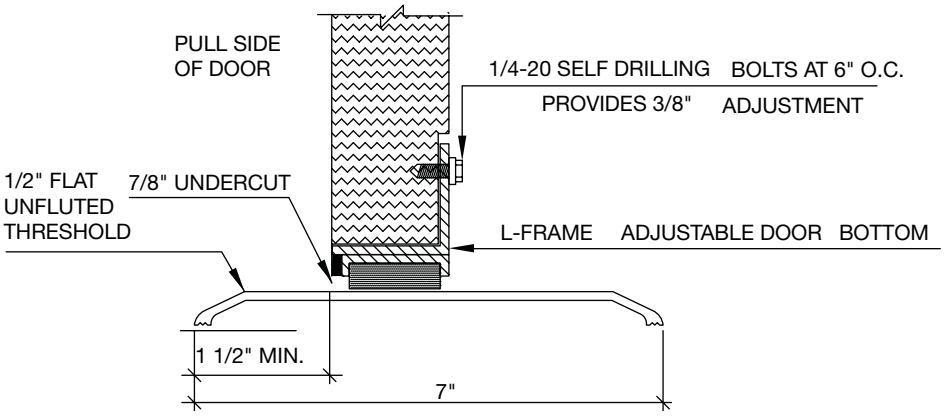
STC 42-46

1-3/4" SOUND-TECH XPRESS



MODEL AS46C UTILIZES "ADJ" PROFILE FRAME
(SEAL SET RCG FOR SINGLES, RCGP FOR PAIRS)





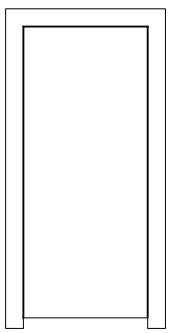
PLEASE REFERENCE TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals, bottom seals, gravity glide cam-lift hinges and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rated assembly.

SUGGESTED USE:
- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music room
- Performing art studios
- Hotel/motel
- Military barracks

DOOR DESIGN

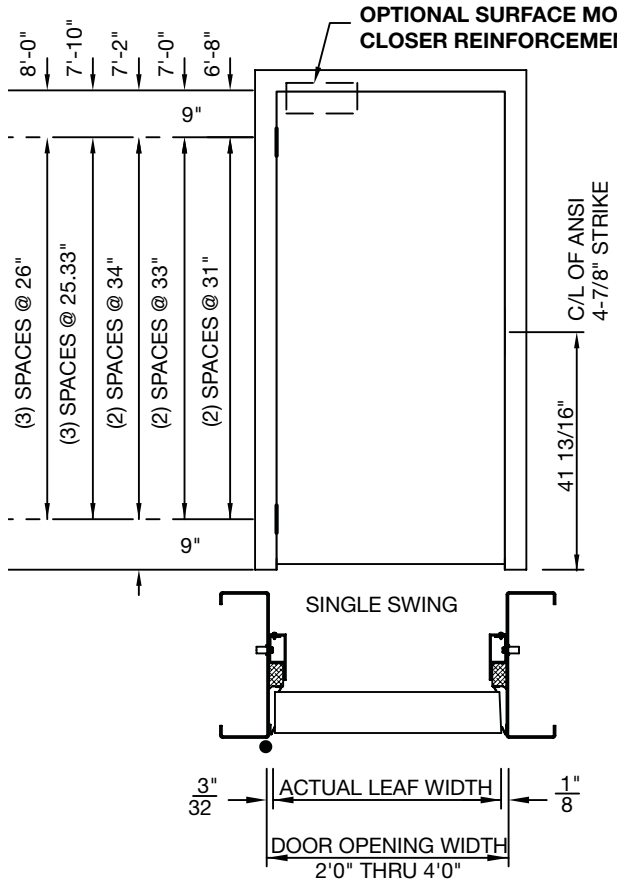


F
(ELEVATION)

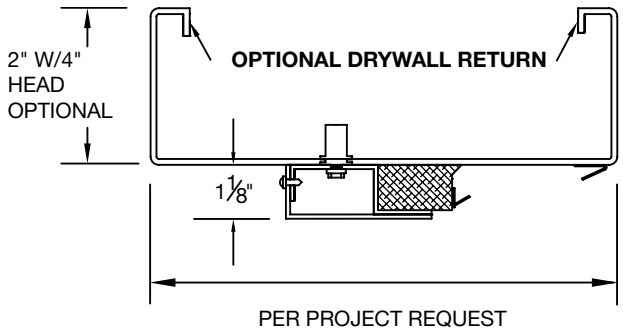
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 42-46 (FLUSH SINGLES)

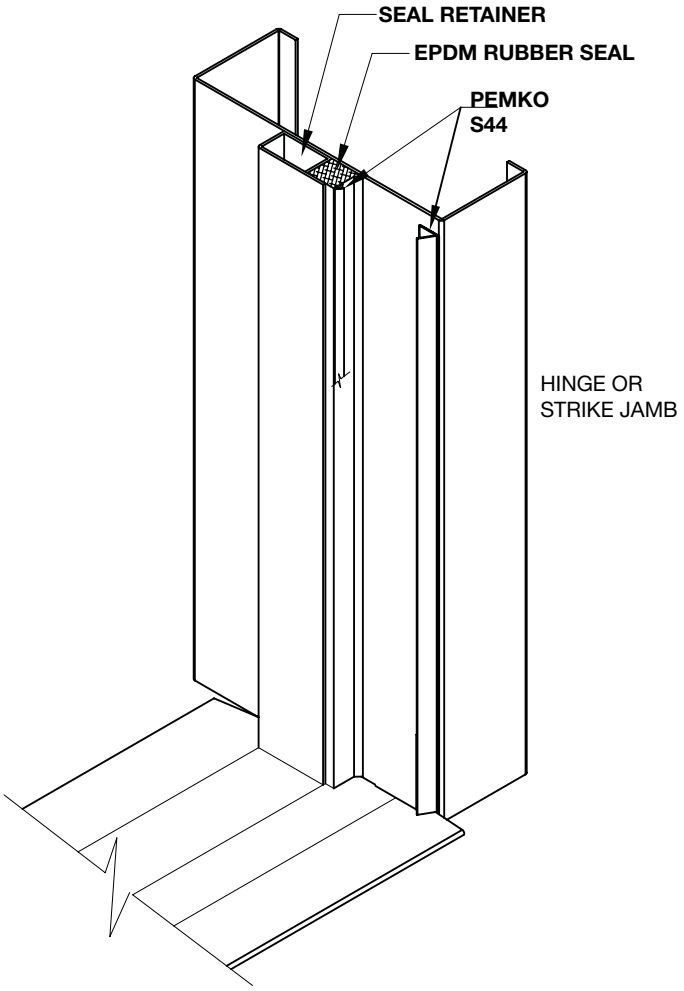
HORIZONTAL SECTION



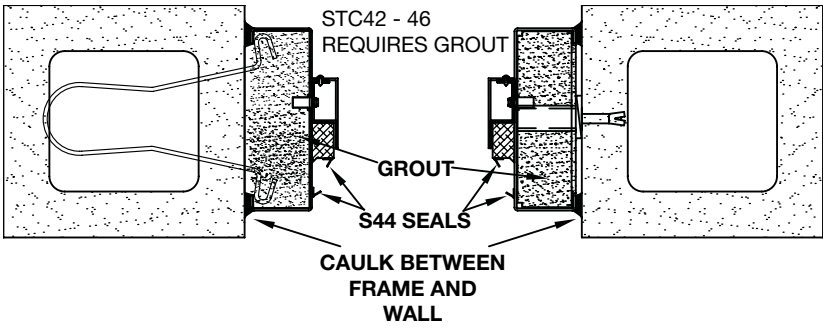
PROFILE AS46C



ADJ PROFILE FOR MODEL AS46C
(SEAL SET RCG)



SOME COMMON MASONRY APPLICATIONS SHOWN BELOW



IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH SPECIFIC DETAILED SOUND SEAL INSTALLATION INSTRUCTIONS.

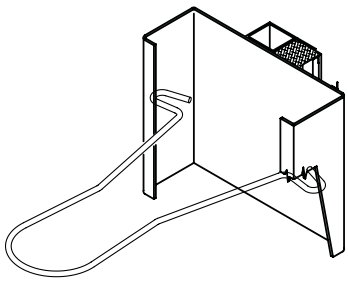
STC42-45 REQUIRES GROUT

DRAWING DEPICTS INSTALLATION.
PROFILES, SEALS AND ANCHORS MAY VARY.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

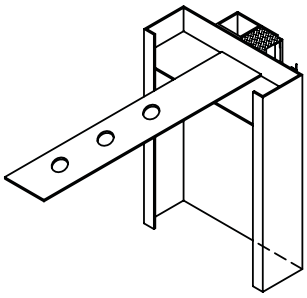
STC 42-46 (FLUSH SINGLES)

MASONRY WIRE ANCHOR 100

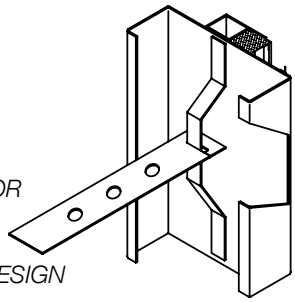


(WITH FLOOR ANCHOR)

MASONRY "T" ANCHOR 101



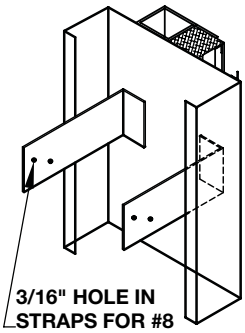
MASONRY STRAP ANCHOR 102



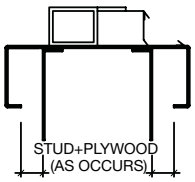
(WITH FLOOR ANCHOR)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

WOOD STUD ANCHOR 400



3/16" HOLE IN STRAPS FOR #8 SCREW OR 8D NAIL @ 24" O.C. MAX AT STRAPS



GAP NEAR SIDE OR OPP. DOOR SIDE

GAP FAR SIDE OR DOOR SIDE

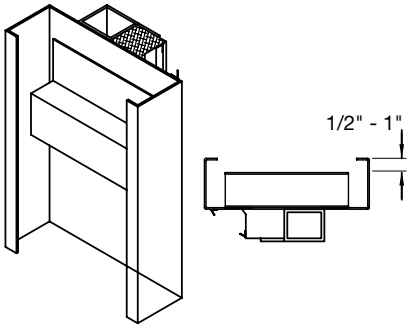
SAMPLE
5 - 5

5/8" GAP NEAR SIDE OR OPP. DOOR SIDE

5/8"GAP FAR SIDE OR DOOR SIDE

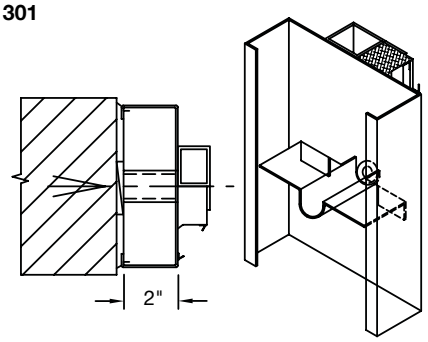
(WITH FLOOR ANCHOR)

STEEL STUD ANCHOR 204

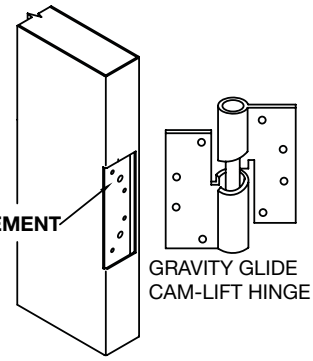


(WITH FLOOR ANCHOR)

EXISTING WALL ANCHOR 301



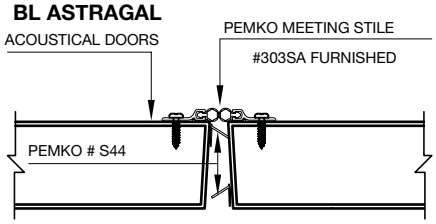
HINGE PREPARATION



GRAVITY GLIDE CAM-LIFT HINGE

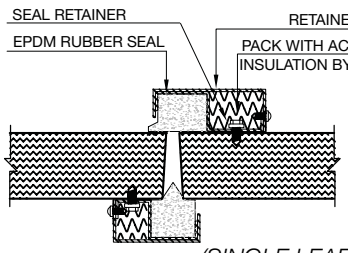
(HINGE PREP IS HANDED)

BL ASTRAGAL



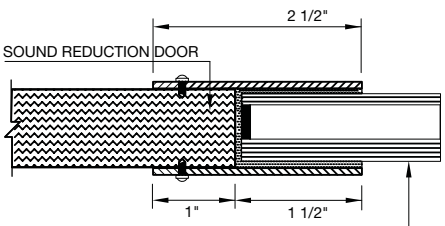
(BOTH LEAF ACTIVE)

IL ASTRAGAL



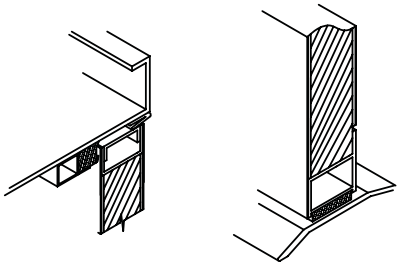
(SINGLE LEAF ACTIVE)

IGU 20 DOOR VISION



1 1/2" INSULATED GLASS UNIT
(1/4" LAM X 3/4" AIR SPACE X 1/2" ANNEALED)
SET IN SILICONE CHANNEL (FACTORY INSTALLED)

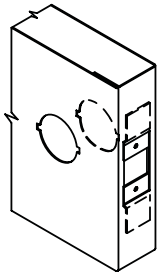
DOOR CONSTRUCTION (TOP AND BOTTOM)



LOCK PREPARATIONS

CYLINDRICAL ANSI A115.2
BACKSET 3-3/4" REQUIRED

CYLINDRICAL & MORTISE DEADLOCK (OPTIONAL)



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 42-46 (FLUSH SINGLES)

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS

SOUND REDUCTION DOOR AND FRAME ASSEMBLY

__STC CORE CONSTRUCTION

SPECIFIED LAB STC RATING SHOWN HERE

PRODUCT SPECIFICATIONS:

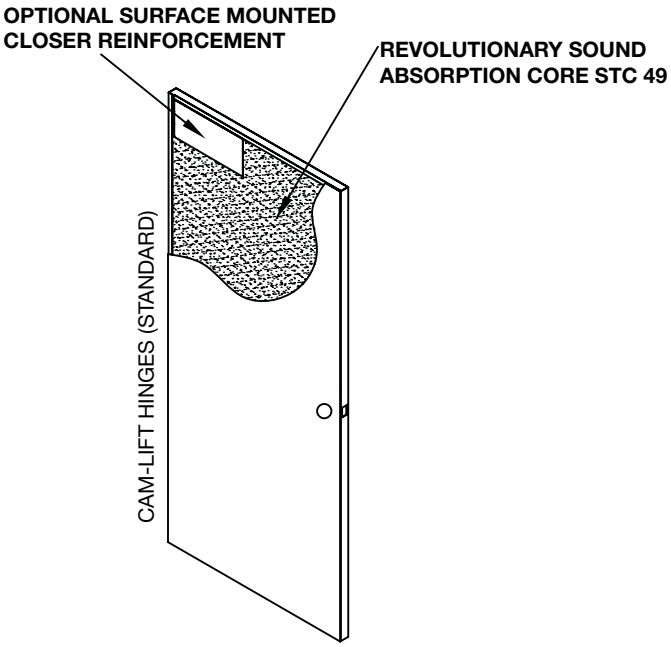
1) All exposed surfaces of door and frame to receive one coat of rust inhibitive prime paint complying with ASTM A250.10.
2) An aluminum threshold is included. Threshold must protrude 11/2" inches past the face of the frame on the pull side of the door to allow the EPDM rubber section of the door bottom to seat properly during normal operation of the Gravity-Glide cam-lift hinges.
3) Door bottom requires a flush level sealing surface. The threshold must be level and may require shimming to compensate for an uneven floor. This will prevent any sound leaks at this location. Threshold to be grouted solid.
4) Assembly is equipped with metal sound door, frame, seals, door bottom, threshold, Gravity Glide cam - lift hinges and crated for shipment.
5) Door Thickness is 1 3/4". Door weight is 11.9 pounds per square foot. Be aware that the frame must be securely tied to the framing from the sub floor to the structure above. Doubled wood studs or 16 Ga. steel studs are strongly recommended to support the weight of the assembly.
6) Doors are to be formed of no less than 16 Gauge steel face sheets continuously welded at the vertical edges and finished smooth.
7) Frames are to be formed of no less than 14 Gauge sheet steel with corners mitered, continuously welded and ground smooth.
8) Doors and frames are formed from commercial quality zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustical core and internal construction are manufacturer's proprietary standards as tested in accordance with ASTM E90, E413, E1332,& E2235.
9) Frames must be fully grouted.
10) Please be aware industry standard construction tolerances for squareness of frame installation, plumbness of walls, flatness of floors, etc. may result in a difference of 3db-Sdb sound loss in a field test vs. lab results.
11) Please note that tolerances for flatness of acoustical doors tend to exceed those of conventional hollow metal. Installation of exit devices and other wide hardware can exaggerate the slight bow in the door created by sound dampening material used to meet the required STC rating. This is not considered a manufacturing defect.
12) Please reference www.cecodoor.com for installation instructions.

SOUND-TECH XPRESS DOOR SYSTEMS
DOORS TESTED = 3'0"X7'0", 16 GAUGE, FLUSH, SINGLE
FRAMES TESTED = 3'0"X7'0", 14 GAUGE, WELDED, GROUTED
TESTED ASSEMBLY INCLUDES THE FOLLOWING SOUND TIGHT DOOR AND FRAME ASSEMBLIES, PERIMETER SEALS, RETAINER, CAM LIFT HINGES, DOOR BOTTOM, THRESHOLD AND ACOUSTICAL ASTRAGAL (AT PAIRS)
ADDITIONAL NOTES: *1) PAIRS AVAILABLE - POTENTIAL SOUND LOSS = 5 STC POINTS* *2) VISIONS AVAILABLE - POTENTIAL SOUND LOSS = 2 STC POINTS FOR NARROW VISIONS. UP TO 300 SQUARE INCHES. LARGER VISIONS MAY RESULT IN ADDITIONAL SOUND LOSS.* *3) INCREASED OPENING SIZES AVAILABLE. POTENTIAL SOUND LOSS MAY OR MAY NOT OCCUR AS SIZE INCREASES.* *4) ASSEMBLY WAS FITTED WITH CYLINDRICAL LOCK. PREPARATIONS FOR ALTERNATE HARDWARE IS ALLOWED, HOWEVER, SOUND LOSS MAY OR MAY NOT OCCUR.* *5) SOUND ASSEMBLIES ARE TESTED AS COMPLETE ASSEMBLIES. SOUND DEGRADATION MAY OCCUR WITH THE USE OF AN EXISTING DOOR OR FRAME.*

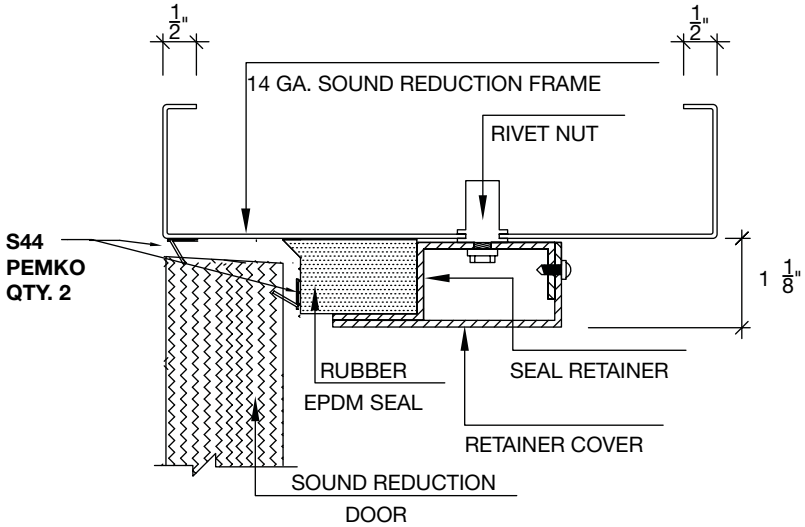
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

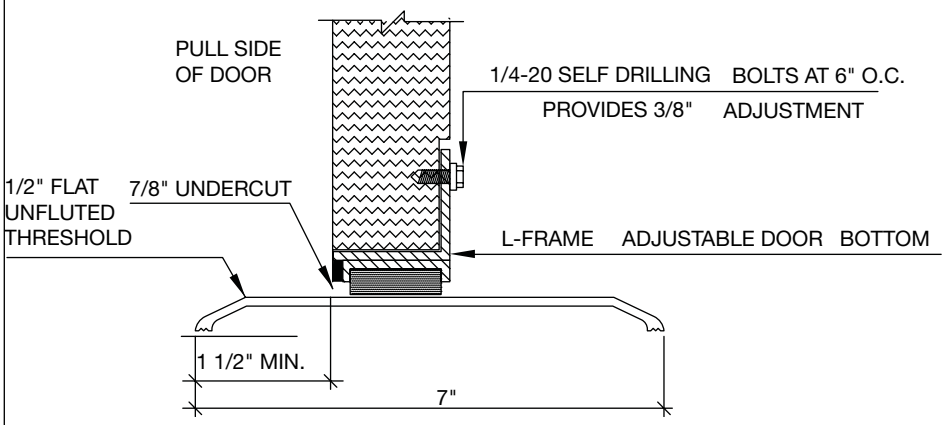
STC 47-49

1-3/4" SOUND-TECH XPRESS



MODEL AS49C UTILIZES "ADJ" PROFILE FRAME
(SEAL SET RCG FOR SINGLES AND RCGP FOR PAIRS)





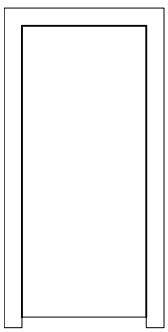
PLEASE REFERENCE WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals, bottom seals, gravity glide cam-lift hinges and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rates assembly.

SUGGESTED USE:
- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing arts studios
- Hotel / motel
- Military barracks

DOOR DESIGN

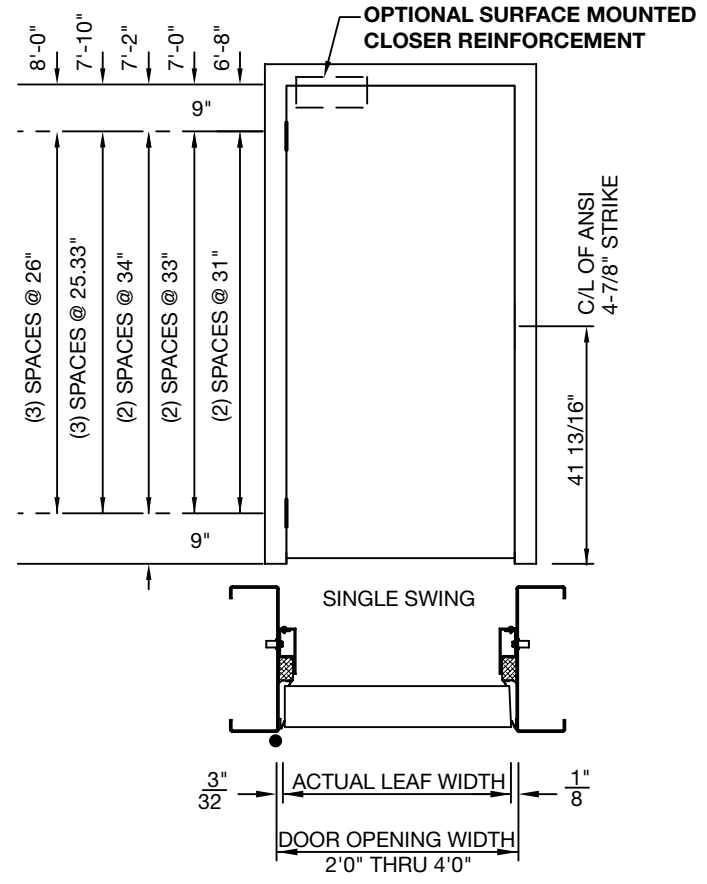


F
(ELEVATION)

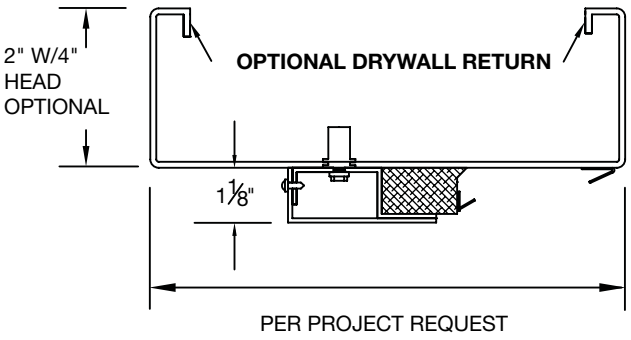
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 47-49 (FLUSH SINGLES)

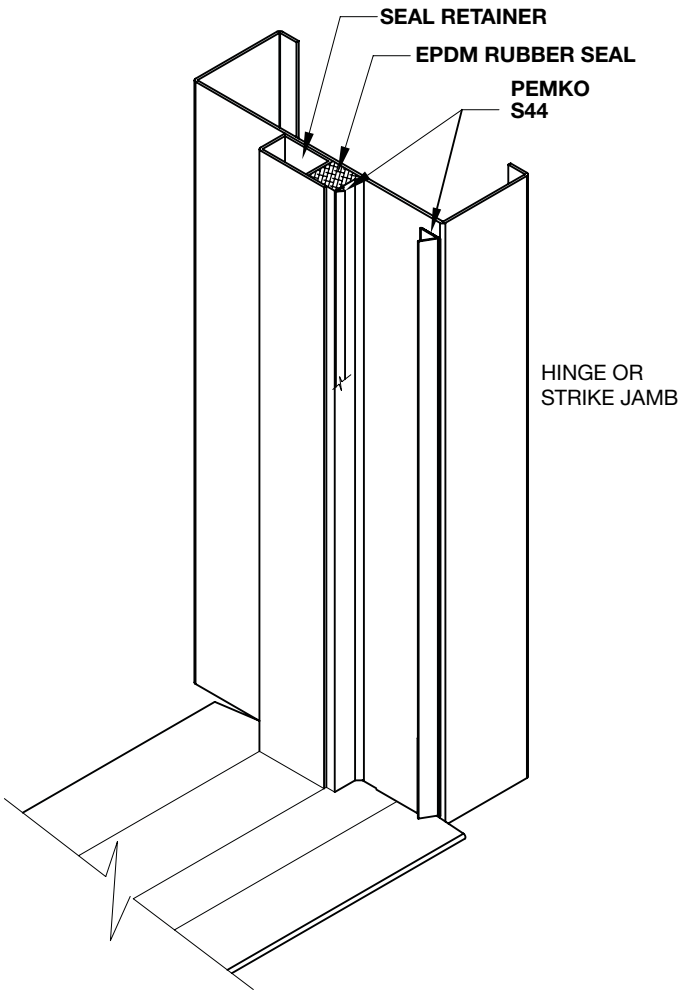
HORIZONTAL SECTION



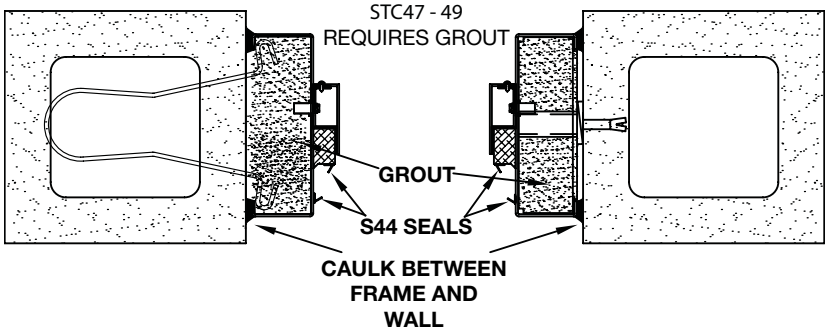
PROFILE AS49C



ADJ PROFILE AND SEALS FOR MODEL AS49C
(SEAL SET RCG)



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW

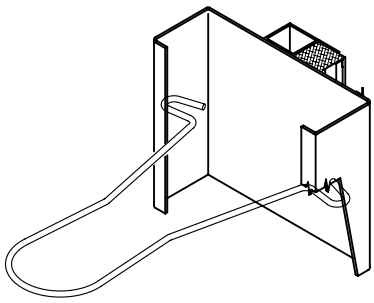


DRAWING DEPICTS INSTALLATION. PROFILES, SEALS AND ANCHORS MAY VARY.

IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH SPECIFIC DETAILED SOUND SEAL INSTALLATION INSTRUCTIONS.

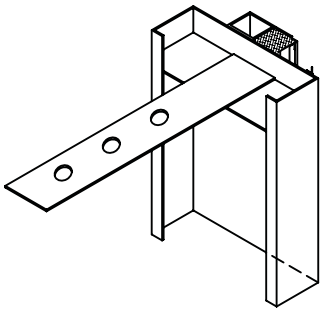
STC 47-49 (FLUSH SINGLES)

MASONRY WIRE ANCHOR 100

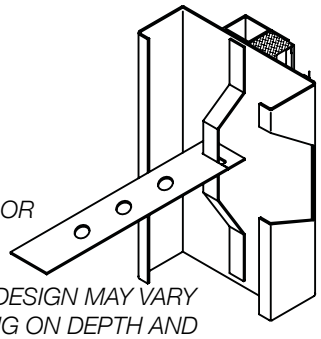


(WITH FLOOR ANCHOR)

MASONRY "T" ANCHOR 101



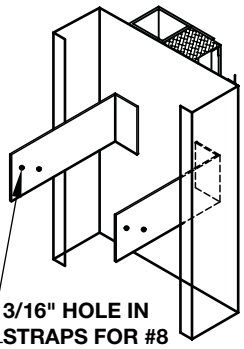
MASONRY STRAP ANCHOR 102



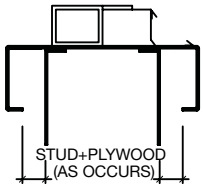
(WITH FLOOR ANCHOR)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

WOOD STUD ANCHOR 400



3/16" HOLE IN STRAPS FOR #8 SCREW OR 8D NAIL @ 24" O.C. MAX AT STRAPS



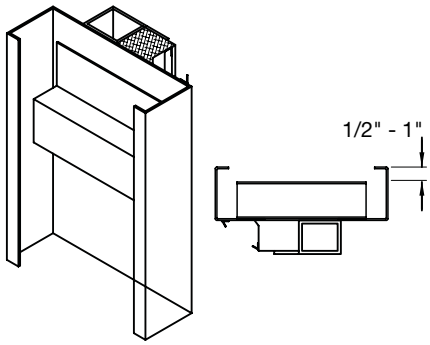
SAMPLE
5 - 5

5/8" GAP NEAR SIDE OR OPP. DOOR SIDE

5/8"GAP FAR SIDE OR DOOR SIDE

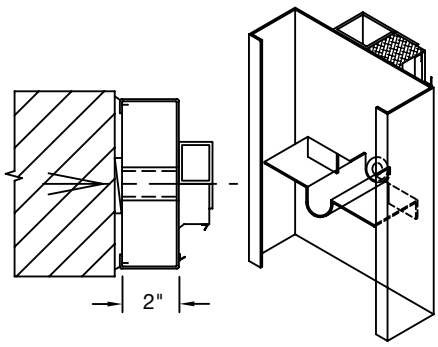
(WITH FLOOR ANCHOR)

STEEL STUD ANCHOR 204

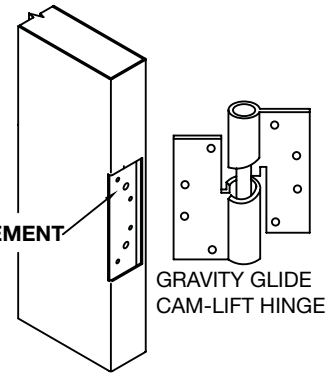


(WITH FLOOR ANCHOR)

EXISTING WALL ANCHOR 301

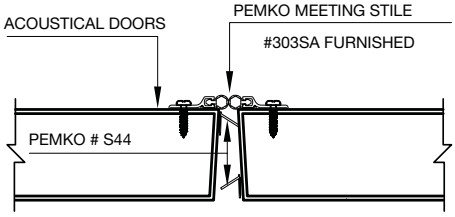


HINGE PREPARATION



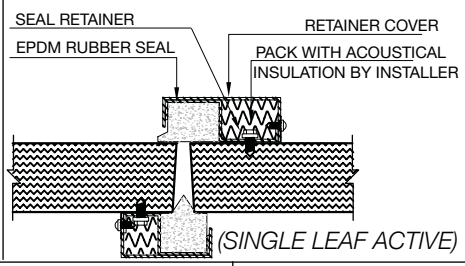
(HINGE PREP IS HANDED)

BL ASTRAGAL



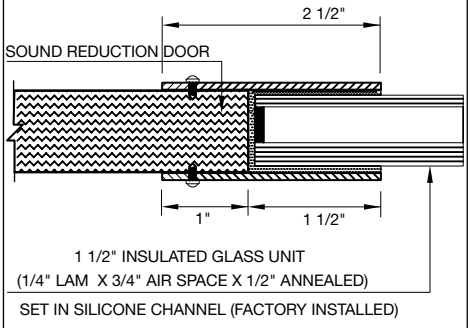
(BOTH LEAF ACTIVE)

IL ASTRAGAL

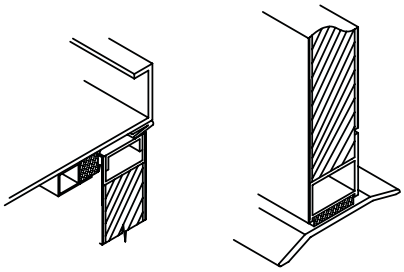


(SINGLE LEAF ACTIVE)

IGU 20 DOOR VISION



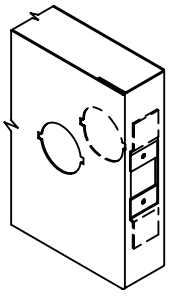
DOOR CONSTRUCTION (TOP AND BOTTOM)



LOCK PREPARATIONS

CYLINDRICAL ANSI A115.2
BACKSET 3-3/4" REQUIRED

CYLINDRICAL & MORTISE DEADLOCK (OPTIONAL)



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 47-49 (FLUSH SINGLES)

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

(CUSTOM SIZES AVAILABLE UPON REQUEST)

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS

SOUND REDUCTION DOOR AND FRAME ASSEMBLY

____ **STC** CORE CONSTRUCTION

SPECIFIED LAB STC RATING SHOWN HERE

PRODUCT SPECIFICATIONS:

1) All exposed surfaces of door and frame to receive one coat of rust inhibitive prime paint complying with ASTM A250.10
2) An aluminum threshold is included. Threshold must protrude 1 1/2" inches past the face of the frame on the pull side of the door to allow the EPDM rubber section of the door bottom to seat properly during normal operation of the Gravity-Glide cam-lift hinges.
3) Door bottom requires a flush level sealing surface. The threshold must be level and may require shimming to compensate for an uneven floor. This will prevent any sound leaks at this location. Threshold to be grouted solid.
4) Assembly is equipped with metal sound door, frame, seals, door bottom, threshold, Gravity Glide cam - lift hinges and crated for shipment.
5) Door Thickness is 1 3/4". Door weight is 11.9 pounds per square foot. Be aware that the frame must be securely tied to the framing from the sub floor to the structure above. Doubled wood studs or 16 Ga. steel studs are strongly recommended to support the weight of the assembly.
6) Doors are to be formed of no less than 16 Gauge steel face sheets continuously welded at the vertical edges and finished smooth.
7) Frames are to be formed of no less than 14 Gauge sheet steel with corners mitered, continuously welded and ground smooth.
8) Doors and frame are commercial quality zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standards as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified.
9) Frames must be fully grouted.
10) Please be aware industry standard construction tolerances for squareness of frame installation, plumbness of walls, flatness of floors, etc. may result in a difference of 3db-5db sound loss in a field test vs. lab results.
11) Please note that tolerances for flatness of acoustical doors tend to exceed those of conventional hollow metal. Installation of exit devices and other wide hardware can exaggerate the slight bow in the door created by sound dampening material used to meet the required STC rating. This is not considered a manufacturing defect.
12) Please reference www.cecodoor.com for installation instructions.

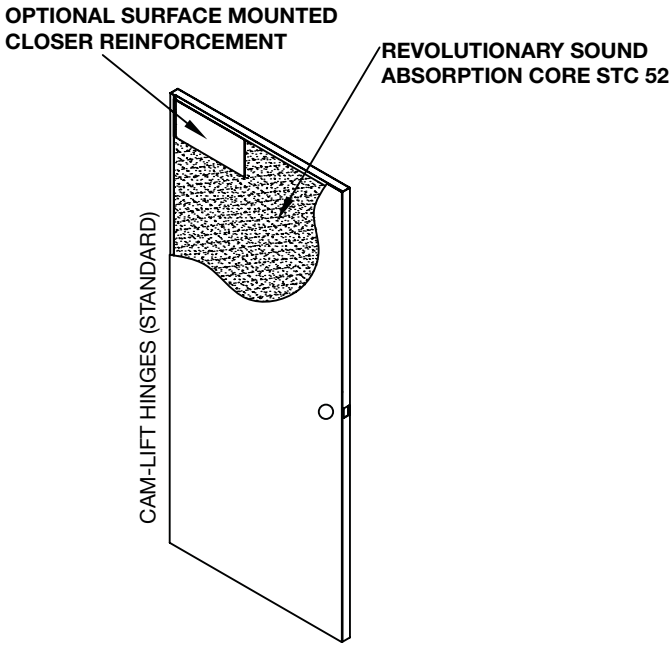
SOUND-TECH XPRESS DOOR SYSTEM OPTIONS
DOORS TESTED = 3'0"X7'0",16 GAUGE, FLUSH, SINGLE
FRAMES TESTED = 3'0"X7'0",14 GAUGE, WELDED, GROUTED
TESTED ASSEMBLY INCLUDES THE FOLLOWING: SOUND TIGHT DOOR AND FRAME ASSEMBLIES, PERIMETER SEALS, RETAINER, CAM LIFT HINGES, DOOR BOTTOM, THRESHOLD AND ACOUSTICAL ASTRAGAL (AT PAIRS).
ADDITIONAL NOTES: *1) PAIRS AVAILABLE - POTENTIAL SOUND LOSS = 5 STC POINTS* *2) VISIONS AVAILABLE - POTENTIAL SOUND LOSS = 2 STC POINTS FOR NARROW VISIONS. UP TO 300 SQUARE INCHES. LARGER VISIONS MAY RESULT IN ADDITIONAL SOUND LOSS.* *3) INCREASED OPENING SIZES AVAILABLE. POTENTIAL SOUND LOSS MAY OR MAY NOT OCCUR AS SIZE INCREASES.* *4) ASSEMBLY WAS FITTED WITH CYLINDRICAL LOCK. PREPARATIONS FOR ALTERNATE HARDWARE IS ALLOWED, HOWEVER, SOUND LOSS MAY OR MAY NOT OCCUR.* *5) SOUND ASSEMBLIES ARE TESTED AS COMPLETE ASSEMBLIES. SOUND DEGRADATION MAY OCCUR WITH THE USE OF AN EXISTING DOOR OR FRAME.*

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

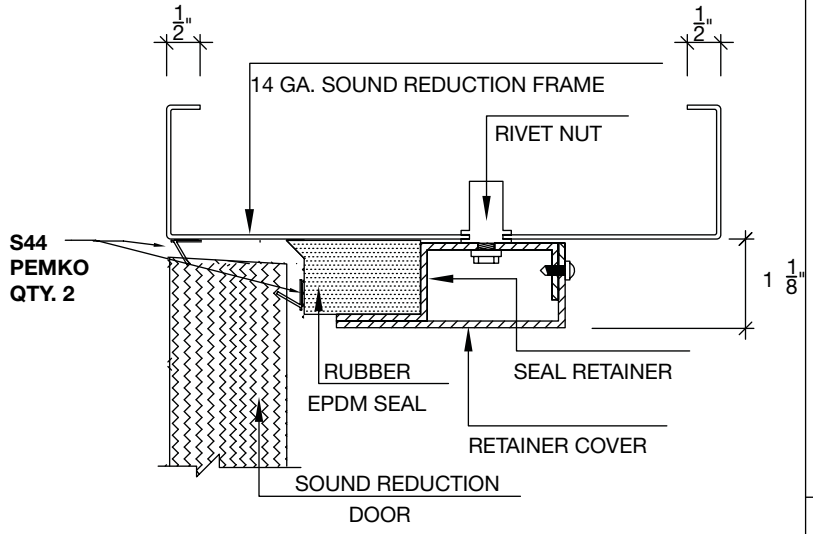
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

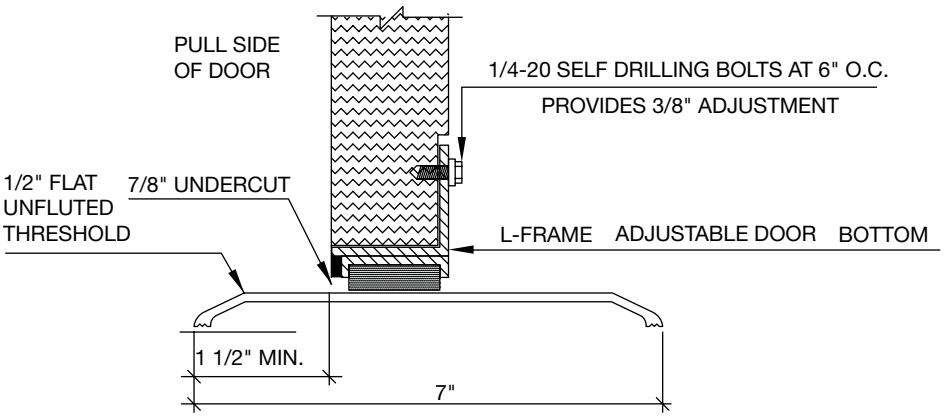
STC 50-52

1-3/4" SOUND-TECH XPRESS



MODEL AS52C UTILIZES "ADJ" PROFILE FRAME
(SEAL SET RCG FOR SINGLES, RCGP FOR PAIRS)





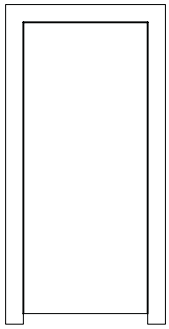
PLEASE REFERENCE WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals, bottom seals, gravity glide cam-lift hinges and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rates assembly.

SUGGESTED USE:
- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing arts studios
- Hotel / motel
- Military barracks

DOOR DESIGN

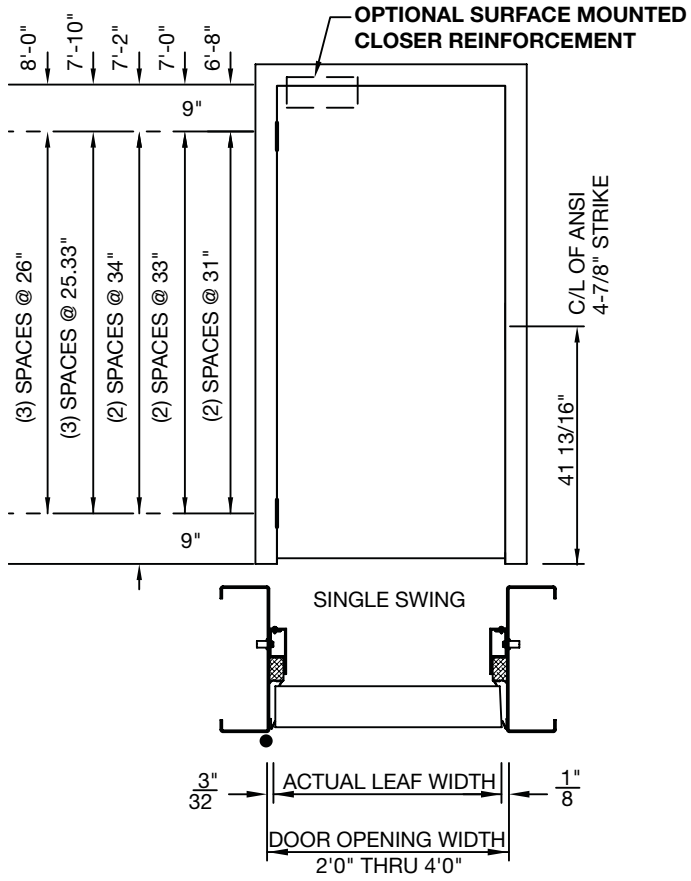


F
(ELEVATION)

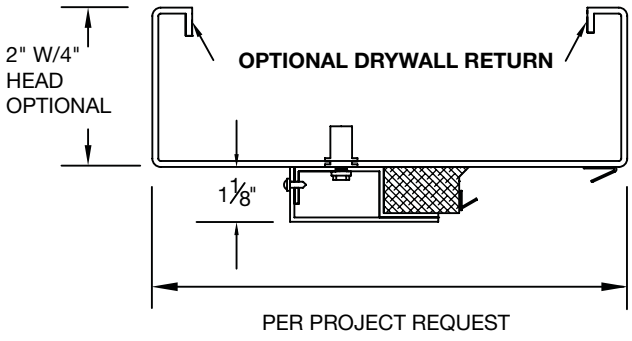
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 50-52 (FLUSH SINGLES)

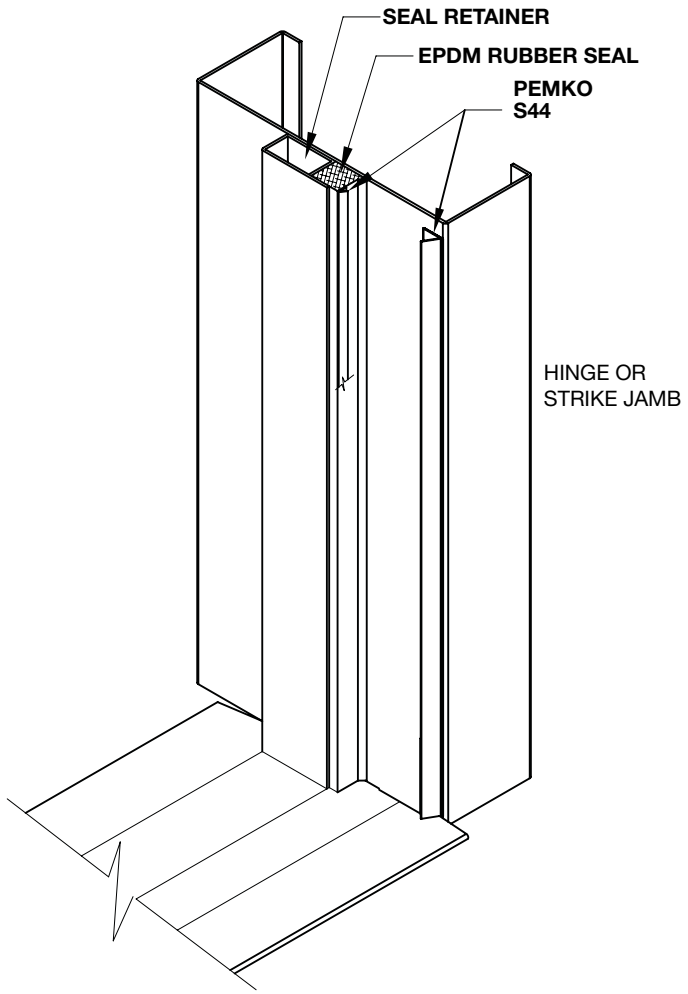
HORIZONTAL SECTION



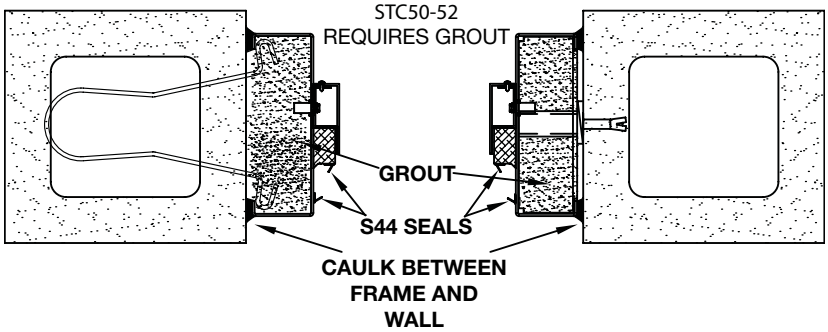
PROFILE AS52C



ADJ PROFILE AND SEALS FOR MODEL AS52C (SEAL SET RCG)



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW



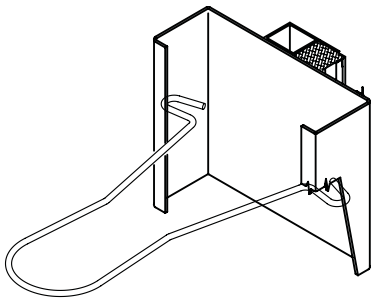
DRAWING DEPICTS INSTALLATION. PROFILES, SEALS AND ANCHORS MAY VARY.

IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH SPECIFIC DETAILED SOUND SEAL INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

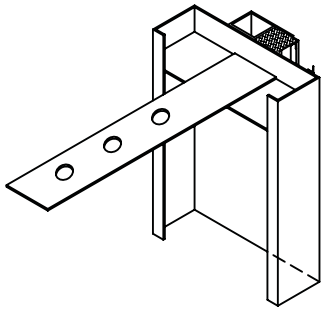
STC 50-52 (FLUSH SINGLES)

MASONRY WIRE ANCHOR 100

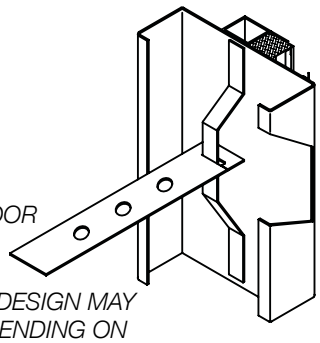


(WITH FLOOR ANCHOR)

MASONRY "T" ANCHOR 101



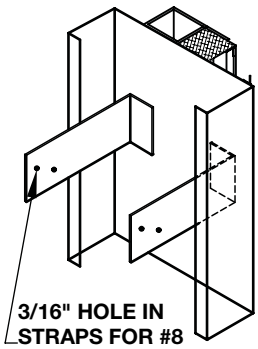
MASONRY STRAP ANCHOR 102

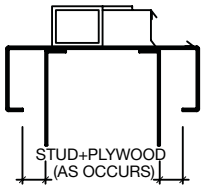


(WITH FLOOR ANCHOR)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

WOOD STUD ANCHOR 400



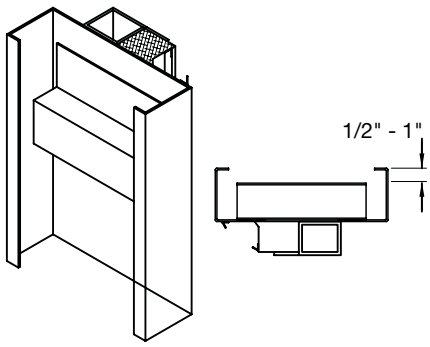


3/16" HOLE IN STRAPS FOR #8 SCREW OR 8D NAIL @ 24" O.C. MAX AT STRAPS

SAMPLE
5 - 5
5/8" GAP NEAR SIDE OR OPP. DOOR SIDE
5/8"GAP FAR SIDE OR DOOR SIDE

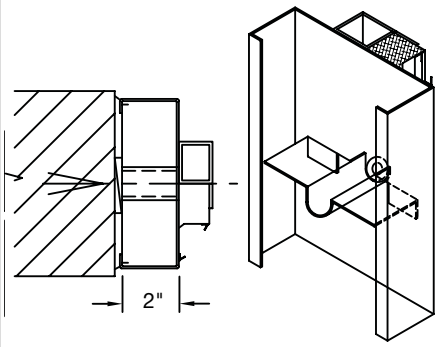
(WITH FLOOR ANCHOR)

STEEL STUD ANCHOR 204

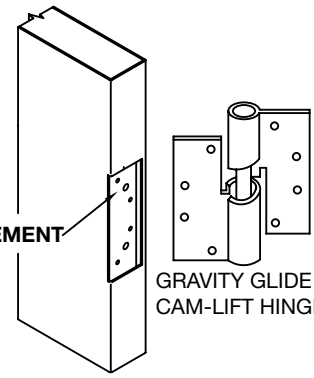


(WITH FLOOR ANCHOR)

EXISTING WALL ANCHOR 301

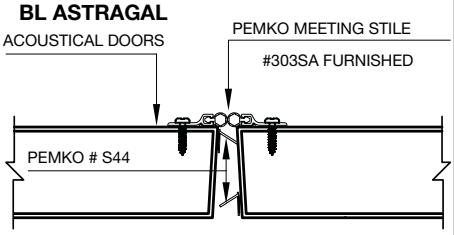


HINGE PREPARATION



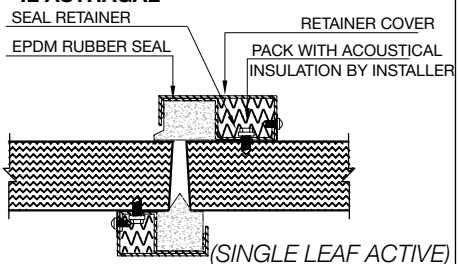
(HINGE PREP IS HANDED)

BL ASTRAGAL



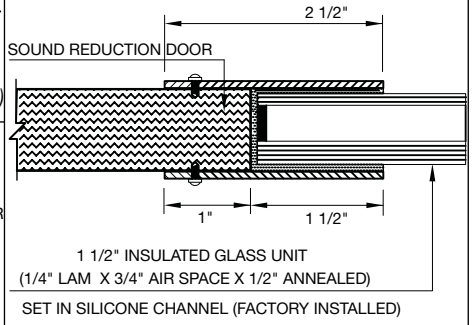
(BOTH LEAF ACTIVE)

IL ASTRAGAL

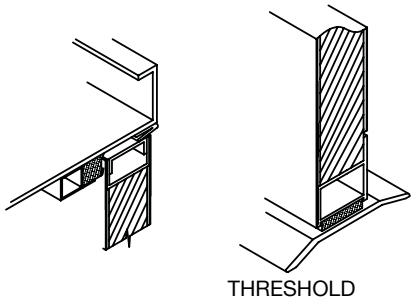


(SINGLE LEAF ACTIVE)

IGU 20 DOOR VISION



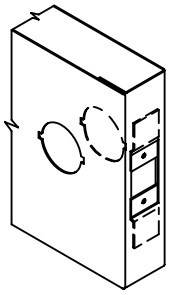
DOOR CONSTRUCTION (TOP AND BOTTOM)



LOCK PREPARATIONS

CYLINDRICAL ANSI A115.2
BACKSET 3-3/4" REQUIRED

CYLINDRICAL & MORTISE
DEADLOCK (OPTIONAL)



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 50-52 (FLUSH SINGLES)

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

(CUSTOM SIZES AVAILABLE UPON REQUEST)

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS

SOUND REDUCTION DOOR AND FRAME ASSEMBLY

____ **STC** CORE CONSTRUCTION

SPECIFIED LAB STC RATING SHOWN HERE

PRODUCT SPECIFICATIONS:

1) All exposed surfaces of door and frame to receive one coat of rust inhibitive prime paint complying with ASTM A250.10
2) An aluminum threshold is included. Threshold must protrude 1 1/2" inches past the face of the frame on the pull side of the door to allow the EPDM rubber section of the door bottom to seat properly during normal operation of the Gravity-Glide cam-lift hinges.
3) Door bottom requires a flush level sealing surface. The threshold must be level and may require shimming to compensate for an uneven floor. This will prevent any sound leaks at this location. Threshold to be grouted solid.
4) Assembly is equipped with metal sound door, frame, seals, door bottom, threshold, Gravity Glide cam - lift hinges and crated for shipment.
5) Door Thickness is 1 3/4". Door weight is 11.9 pounds per square foot. Be aware that the frame must be securely tied to the framing from the sub floor to the structure above. Doubled wood studs or 16 Ga. steel studs are strongly recommended to support the weight of the assembly.
6) Doors are to be formed of no less than 16 Gauge steel face sheets continuously welded at the vertical edges and finished smooth.
7) Frames are to be formed of no less than 14 Gauge sheet steel with corners mitered, continuously welded and ground smooth.
8) Doors and frame are commercial quality zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustic core and internal construction is manufacturer's proprietary standards as tested in accordance with ASTM E90, E413, E1332, & E2235 to furnish the STC rating specified.
9) Frames must be fully grouted.
10) Please be aware industry standard construction tolerances for squareness of frame installation, plumbness of walls, flatness of floors, etc. may result in a difference of 3db-5db sound loss in a field test vs. lab results.
11) Please note that tolerances for flatness of acoustical doors tend to exceed those of conventional hollow metal. Installation of exit devices and other wide hardware can exaggerate the slight bow in the door created by sound dampening material used to meet the required STC rating. This is not considered a manufacturing defect.
12) Please reference www.cecodoor.com for installation instructions.

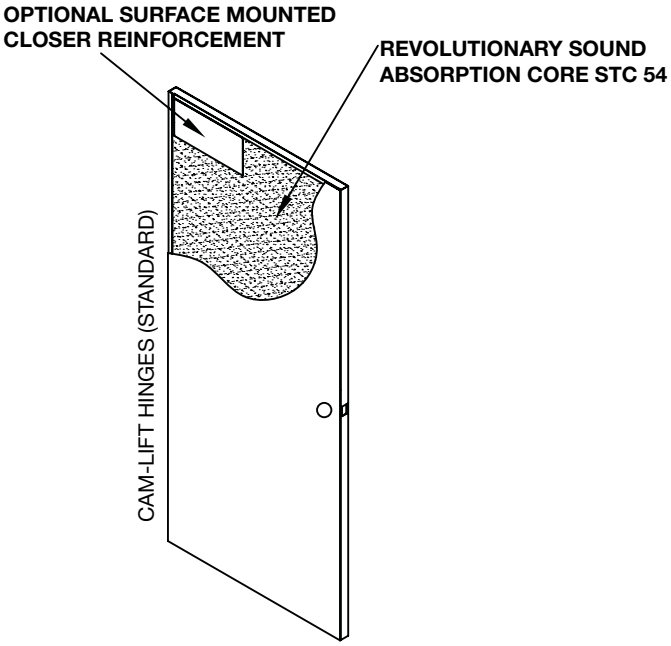
SOUND-TECH XPRESS DOOR SYSTEM OPTIONS
DOORS TESTED = 3'0"X7'0",16 GAUGE, FLUSH, SINGLE
FRAMES TESTED = 3'0"X7'0",14 GAUGE, WELDED, GROUTED
TESTED ASSEMBLY INCLUDES THE FOLLOWING: SOUND TIGHT DOOR AND FRAME ASSEMBLIES, PERIMETER SEALS, RETAINER, CAM LIFT HINGES, DOOR BOTTOM, THRESHOLD AND ACOUSTICAL ASTRAGAL (AT PAIRS).
ADDITIONAL NOTES: *1) PAIRS AVAILABLE - POTENTIAL SOUND LOSS = 5 STC POINTS* *2) VISIONS AVAILABLE - POTENTIAL SOUND LOSS = 2 STC POINTS FOR NARROW VISIONS. UP TO 300 SQUARE INCHES. LARGER VISIONS MAY RESULT IN ADDITIONAL SOUND LOSS.* *3) INCREASED OPENING SIZES AVAILABLE. POTENTIAL SOUND LOSS MAY OR MAY NOT OCCUR AS SIZE INCREASES.* *4) ASSEMBLY WAS FITTED WITH CYLINDRICAL LOCK. PREPARATIONS FOR ALTERNATE HARDWARE IS ALLOWED, HOWEVER, SOUND LOSS MAY OR MAY NOT OCCUR.* *5) SOUND ASSEMBLIES ARE TESTED AS COMPLETE ASSEMBLIES. SOUND DEGRADATION MAY OCCUR WITH THE USE OF AN EXISTING DOOR OR FRAME.*

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

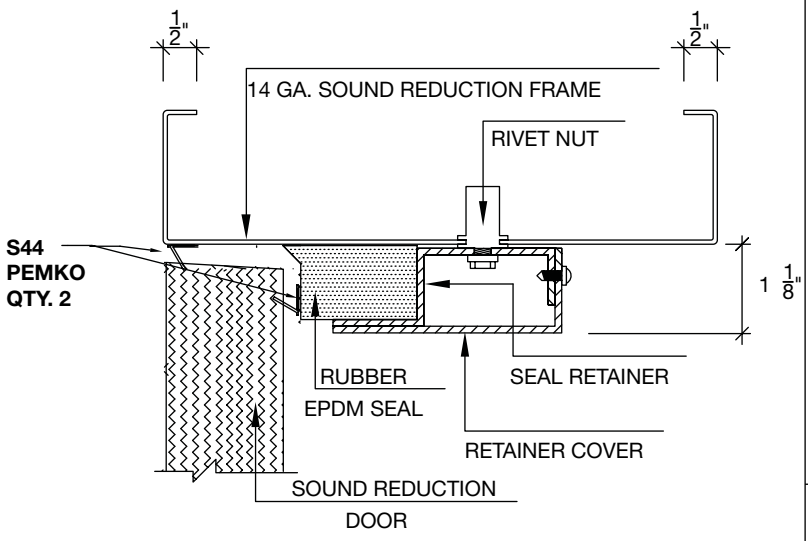
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

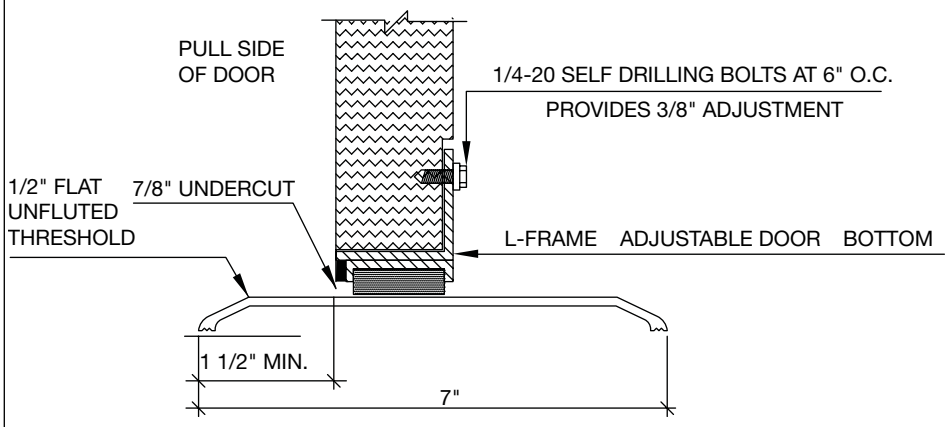
STC 53-54

1-3/4" SOUND-TECH XPRESS



MODEL AS54C UTILIZES "ADJ" PROFILE FRAME
(SEAL SET RCG FOR SINGLES, (STANDARD FRAME NOT AVAILABLE), SEAL SET RCGP FOR PAIRS)





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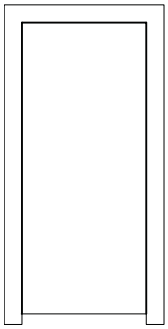
Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 & SDI-128 specifications. Complete with perimeter sound seals, bottom seals, gravity glide cam-lift hinges and threshold as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rates assembly.

SUGGESTED USE:
- Conference rooms
- Clinical offices
- Courtrooms
- Legal offices
- Broadcast studios
- Boardrooms
- Libraries
- Music rooms & performing arts studios
- Hotel / motel
- Military barracks

DOOR DESIGN

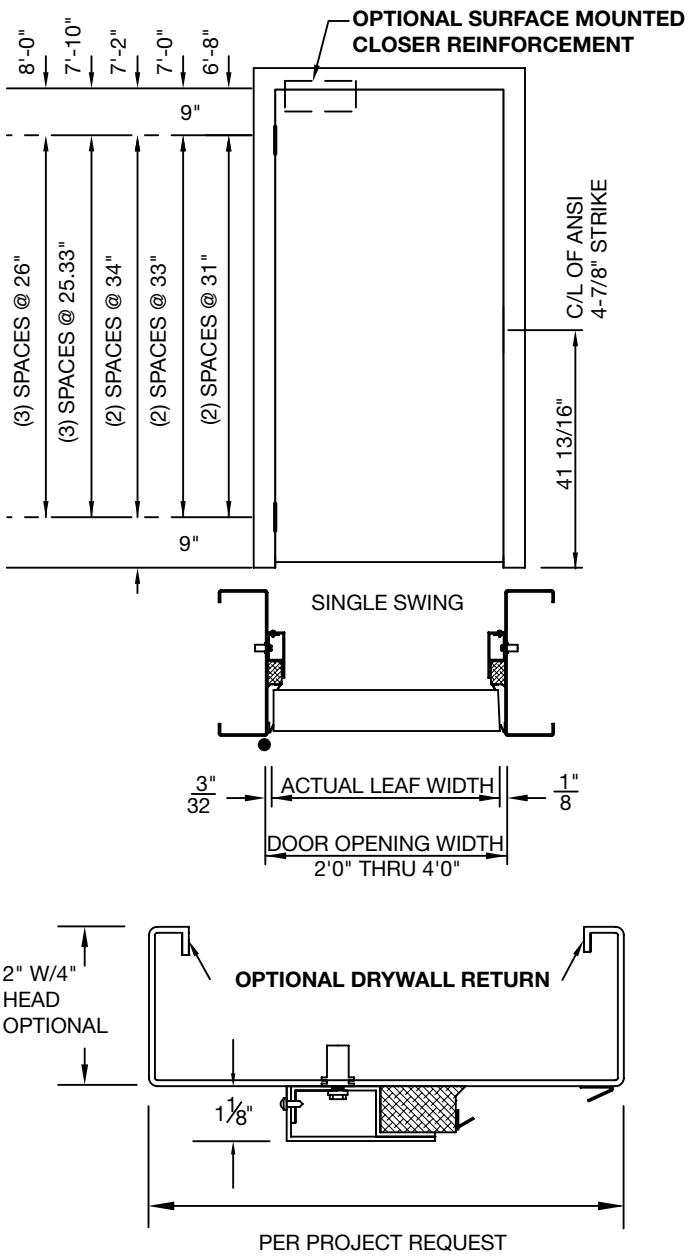


F
(ELEVATION)

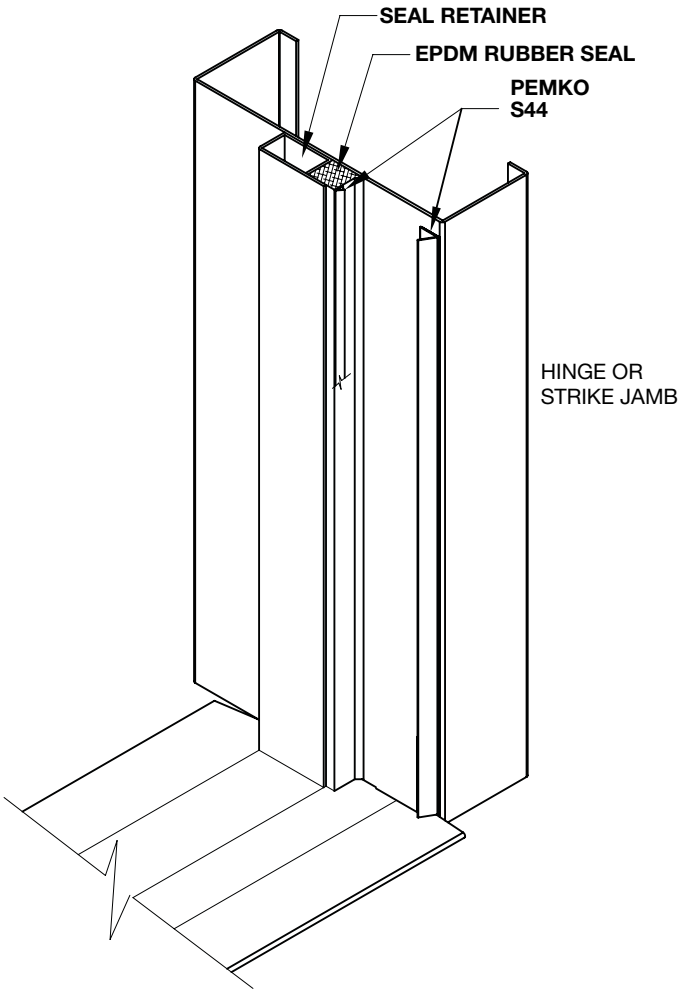
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 53-54 (FLUSH SINGLES)

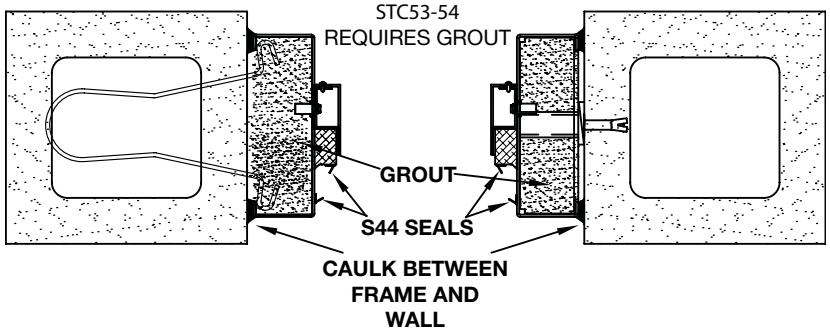
HORIZONTAL SECTION



ADJ PROFILE FOR MODEL AS54C ADJ PROFILE (SEAL SET RCG)



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW



DRAWING DEPICTS INSTALLATION. PROFILES, SEALS AND ANCHORS MAY VARY.

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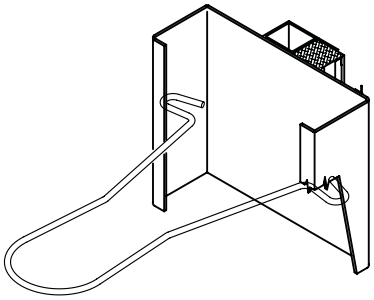
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

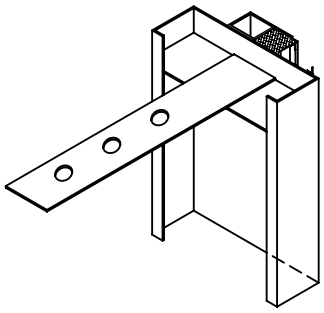
STC 53-54 (FLUSH SINGLES)

MASONRY WIRE ANCHOR 100

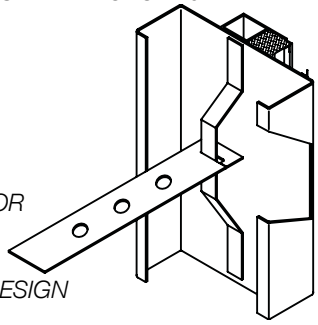


(WITH FLOOR ANCHOR)

MASONRY "T" ANCHOR 101



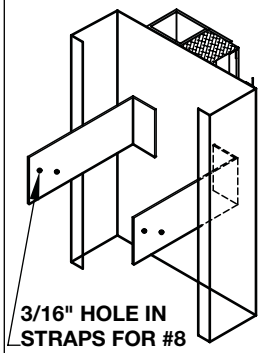
MASONRY STRAP ANCHOR 102



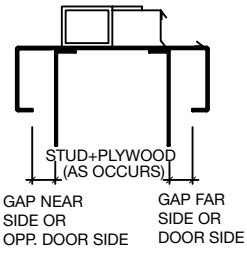
(WITH FLOOR ANCHOR)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

WOOD STUD ANCHOR 400



3/16" HOLE IN STRAPS FOR #8 SCREW OR 8D NAIL @ 24" O.C. MAX AT STRAPS



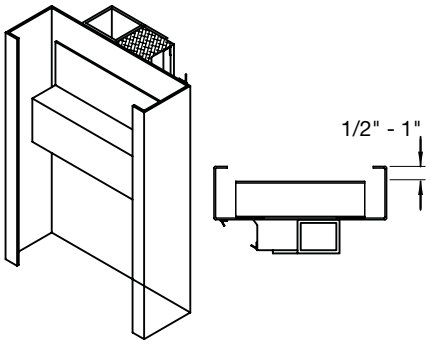
SAMPLE
5 - 5

5/8" GAP NEAR SIDE OR OPP. DOOR SIDE

5/8"GAP FAR SIDE OR DOOR SIDE

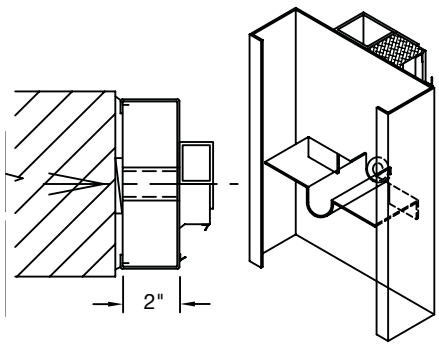
(WITH FLOOR ANCHOR)

STEEL STUD ANCHOR 204

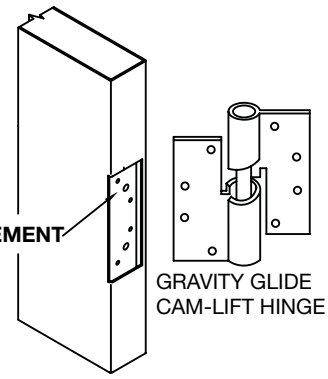


(WITH FLOOR ANCHOR)

EXISTING WALL ANCHOR 301

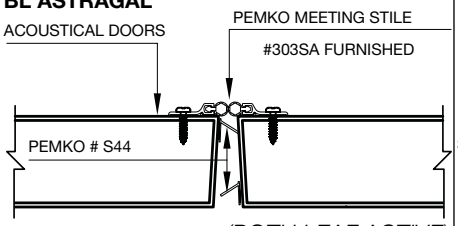


HINGE PREPARATION



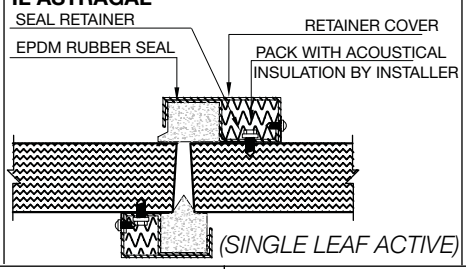
(HINGE PREP IS HANDED)

BL ASTRAGAL



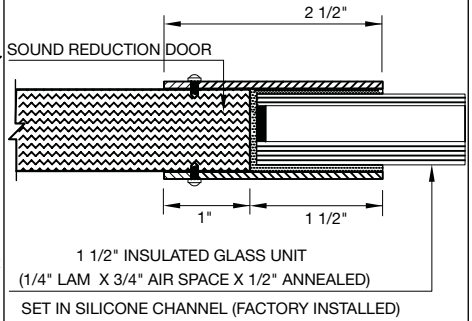
(BOTH LEAF ACTIVE)

IL ASTRAGAL

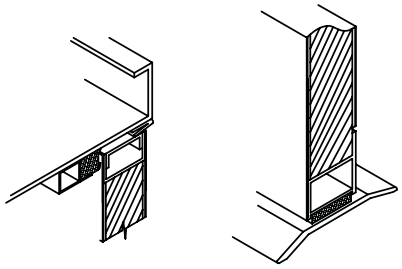


(SINGLE LEAF ACTIVE)

IGU 20 DOOR VISION



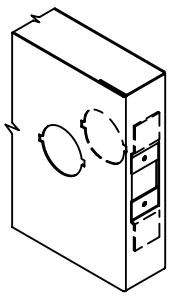
DOOR CONSTRUCTION (TOP AND BOTTOM)



LOCK PREPARATIONS

CYLINDRICAL ANSI A115.2
BACKSET 3-3/4" REQUIRED

CYLINDRICAL & MORTISE DEADLOCK (OPTIONAL)



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STC 53-54 (FLUSH SINGLES)

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

(CUSTOM SIZES AVAILABLE UPON REQUEST)

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS

SOUND REDUCTION DOOR AND FRAME ASSEMBLY

____ **STC** CORE CONSTRUCTION

SPECIFIED LAB STC RATING SHOWN HERE

PRODUCT SPECIFICATIONS:

1) All exposed surfaces of door and frame to receive one coat of rust inhibitive prime paint complying with ASTM A250.10
2) An aluminum threshold is included. Threshold must protrude 1 1/2" inches past the face of the frame on the pull side of the door to allow the EPDM rubber section of the door bottom to seat properly during normal operation of the Gravity-Glide cam-lift hinges.
3) Door bottom requires a flush level sealing surface. The threshold must be level and may require shimming to compensate for an uneven floor. This will prevent any sound leaks at this location. Threshold to be grouted solid.
4) Assembly is equipped with metal sound door, frame, seals, door bottom, threshold, Gravity Glide cam - lift hinges and crated for shipment.
5) Door Thickness is 1 3/4". Door weight is 11.9 pounds per square foot. Be aware that the frame must be securely tied to the framing from the sub floor to the structure above. Doubled wood studs or 16 Ga. steel studs are strongly recommended to support the weight of the assembly.
6) Doors are to be formed of no less than 16 Gauge steel face sheets continuously welded at the vertical edges and finished smooth.
7) Frames are to be formed of no less than 14 Gauge sheet steel with corners mitered, continuously welded and ground smooth.
8) Doors and frame are commercial quality zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustical core and internal construction is manufacturer's proprietary standards as tested in accordance with ASTM E90, E413, E1332, & E2235.
9) Frames must be fully grouted.
10) Please be aware industry standard construction tolerances for squareness of frame installation, plumbness of walls, flatness of floors, etc. may result in a difference of 3db-5db sound loss in a field test vs. lab results.
11) Please note that tolerances for flatness of acoustical doors tend to exceed those of conventional hollow metal. Installation of exit devices and other wide hardware can exaggerate the slight bow in the door created by sound dampening material used to meet the required STC rating. This is not considered a manufacturing defect.
12) Please reference www.cecodoor.com for installation instructions.

SOUND-TECH XPRESS DOOR SYSTEM OPTIONS
DOORS TESTED = 3'0"X7'0",16 GAUGE, FLUSH, SINGLE
FRAMES TESTED = 3'0"X7'0",14 GAUGE, WELDED, GROUTED
TESTED ASSEMBLY INCLUDES THE FOLLOWING: SOUND TIGHT DOOR AND FRAME ASSEMBLIES, PERIMETER SEALS, RETAINER, CAM LIFT HINGES, DOOR BOTTOM, THRESHOLD AND ACOUSTICAL ASTRAGAL (AT PAIRS).
ADDITIONAL NOTES: *1) PAIRS AVAILABLE - POTENTIAL SOUND LOSS = 5 STC POINTS* *2) VISIONS AVAILABLE - POTENTIAL SOUND LOSS = 2 STC POINTS FOR NARROW VISIONS. UP TO 300 SQUARE INCHES. LARGER VISIONS MAY RESULT IN ADDITIONAL SOUND LOSS.* *3) INCREASED OPENING SIZES AVAILABLE. POTENTIAL SOUND LOSS MAY OR MAY NOT OCCUR AS SIZE INCREASES.* *4) ASSEMBLY WAS FITTED WITH CYLINDRICAL LOCK. PREPARATIONS FOR ALTERNATE HARDWARE IS ALLOWED, HOWEVER, SOUND LOSS MAY OR MAY NOT OCCUR.* *5) SOUND ASSEMBLIES ARE TESTED AS COMPLETE ASSEMBLIES. SOUND DEGRADATION MAY OCCUR WITH THE USE OF AN EXISTING DOOR OR FRAME.*

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

COMMUNICATING STC56 THRU STC66

1-3/4" SOUND-TECH XPRESS+

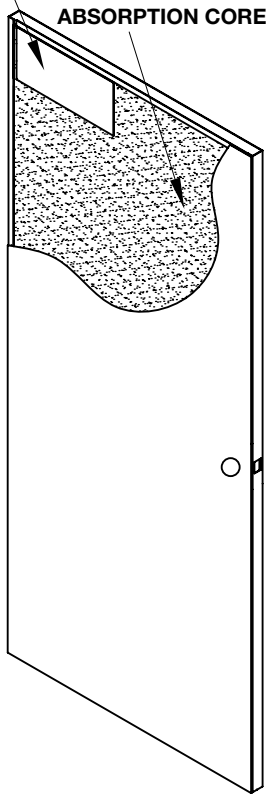
Tested and in compliance with ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235. Door systems are in compliance with HMMA 865 &
SDI-128 specifications. Complete with perimeter sound seals, bottom seals, threshold and cam lift hinges as required for rating.

The required core will be provided to achieve the rating needed. Appropriate accoustical seal sets are provided with each STC rated assembly.

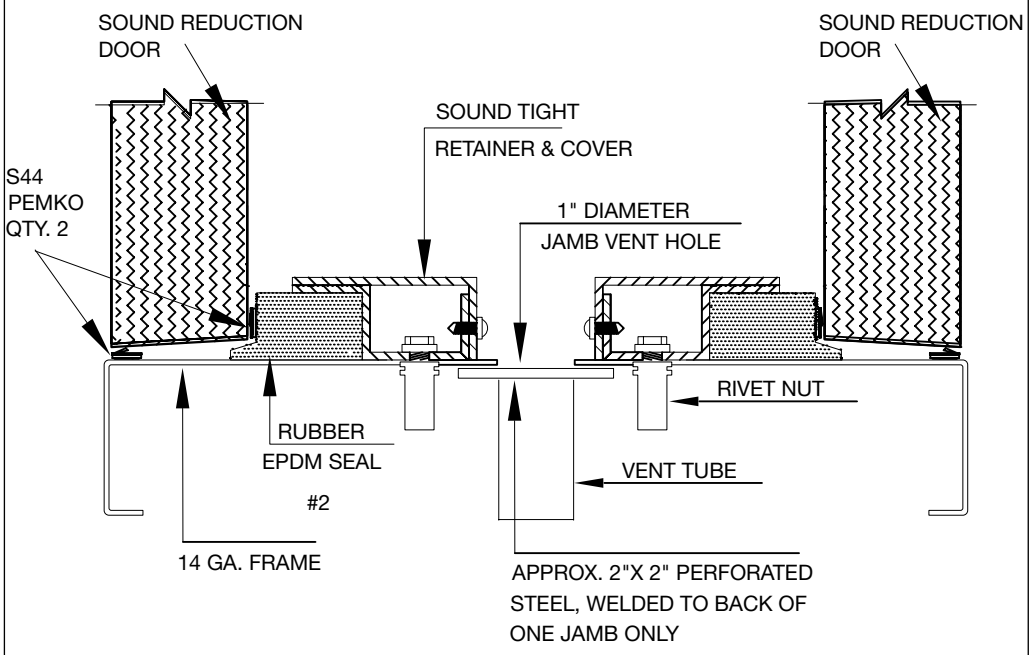
SUGGESTED USE:
- Conference rooms
- Communicating hotel rooms
- Meeting rooms
- Recording studios
- Manufacturing test cells
- Hearing impaired test facilities

OPTIONAL SURFACE MOUNTED CLOSER REINFORCEMENT

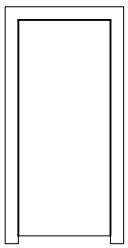
REVOLUTIONARY SOUND ABSORPTION CORE



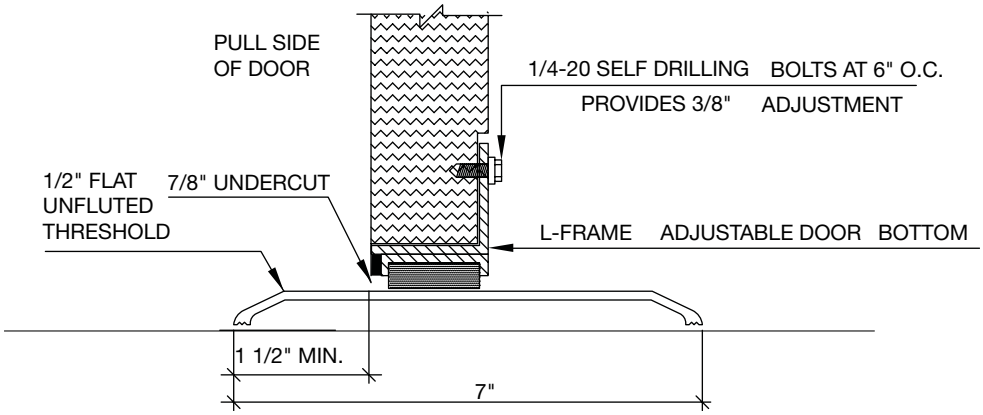
MODEL AS66C
(STANDARD FRAME NOT AVAILABLE)
(SEAL SET 66 FOR SINGLES, SEAL SET 66P FOR PAIRS)



DOOR DESIGN



F
(ELEVATION)

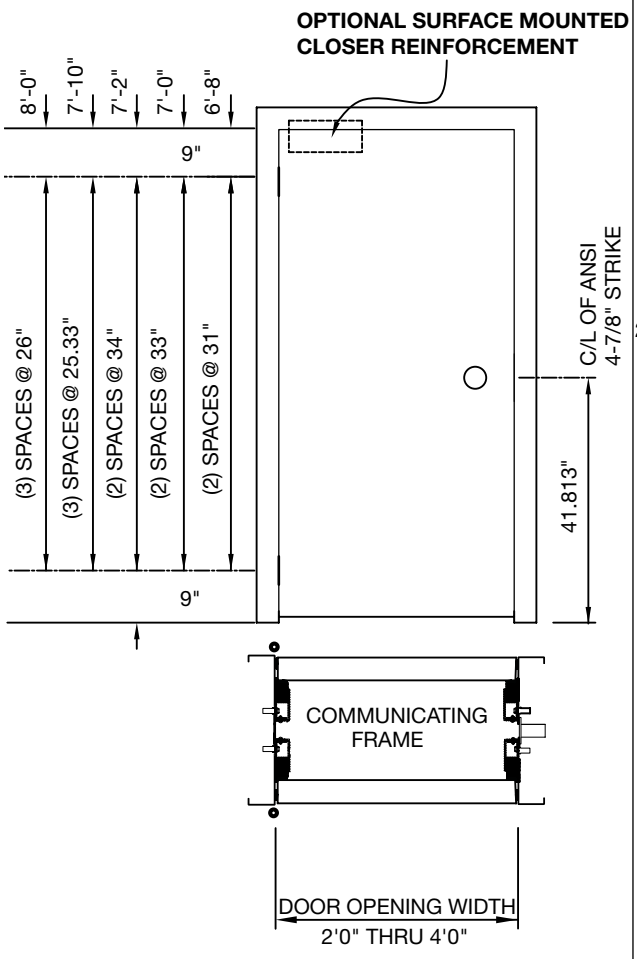


REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

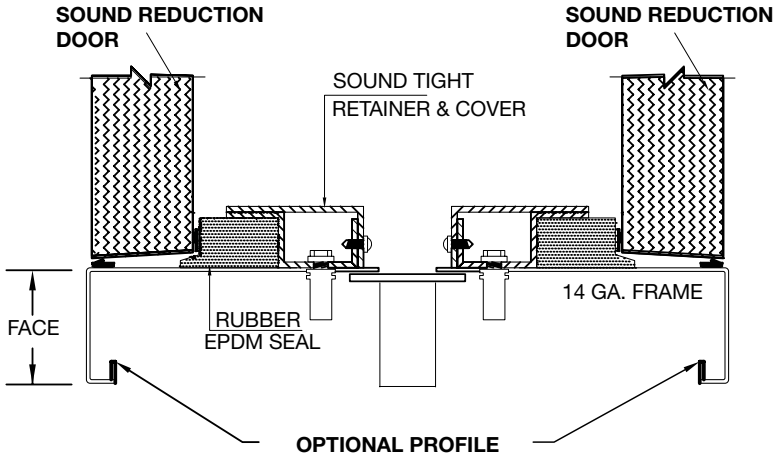
COMMUNICATING STC56 THRU STC66

HORIZONTAL SECTION

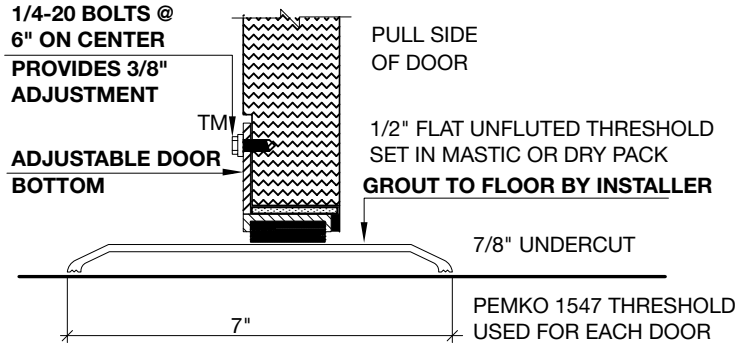


NOTE: DOORS CAN HINGE ON SAME JAMB OR HINGE ON OPPOSITE JAMBS.

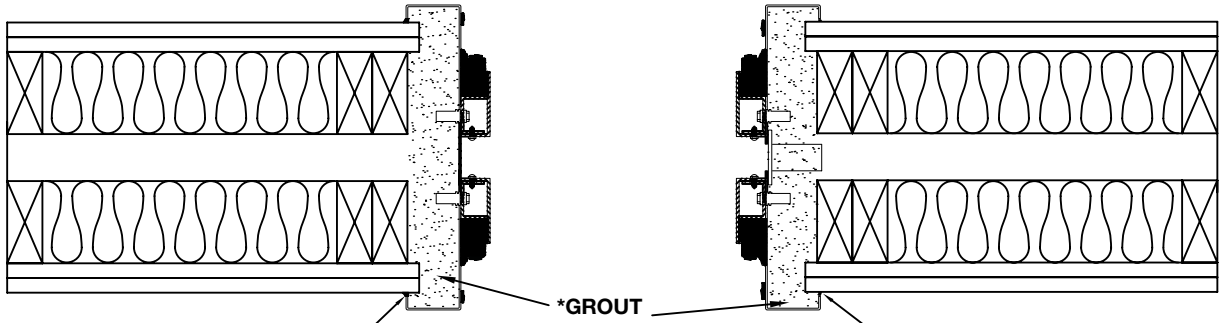
TYPICAL PROFILE



COMMON WALL APPLICATION SHOWN BELOW



THRESHOLDS MUST BE LEVEL AND FILLED TO COMPENSATE FOR UNEVEN FLOORS AND PREVENT SOUND LEAKS. THRESHOLDS SHOULD PROTRUDE 1 1/2" PAST EACH FACE OF FRAME, AT PULL SIDE OF DOOR, TO ALLOW THE EPDM NEOPRENE SEAL SECTION OF THE DOOR BOTTOM TO SEAT PROPERLY DURING NORMAL OPERATION WITH THE GRAVITY GLIDE HINGES. PLEASE SPECIFY THRESHOLD FINISH. AVAILABLE WITH MILL ALUMINUM OR DARK BRONZE FINISH.



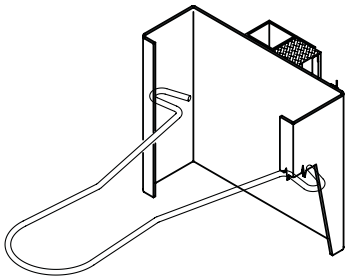
STC WALL CONSTRUCTION VARIES WITH STC RATING REQUIRED
**INSTALLATION IN STUD WALLS WILL REQUIRE GROUTING PRIOR TO INSTALLATION*

IT IS IMPORTANT THAT ACOUSTIC DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT "FLANKING NOISE". ACOUSTICAL SYSTEMS ARE FURNISHED WITH DETAILED INSTALLATION INSTRUCTIONS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

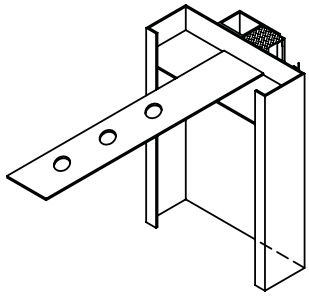
COMMUNICATING STC56 THRU STC66

MASONRY WIRE ANCHOR 100

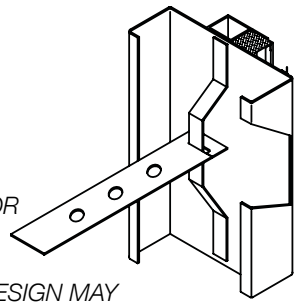


(WITH FLOOR ANCHOR)

MASONRY "T" ANCHOR 101



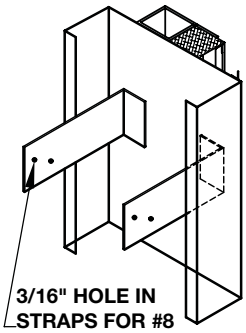
MASONRY STRAP ANCHOR 102



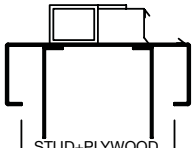
(WITH FLOOR ANCHOR)

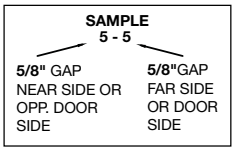
ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

WOOD STUD ANCHOR 400



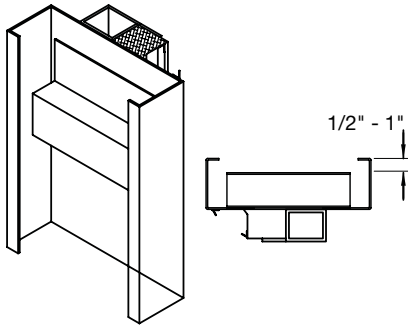
3/16" HOLE IN STRAPS FOR #8 SCREW OR 8D NAIL @ 24" O.C. MAX AT STRAPS





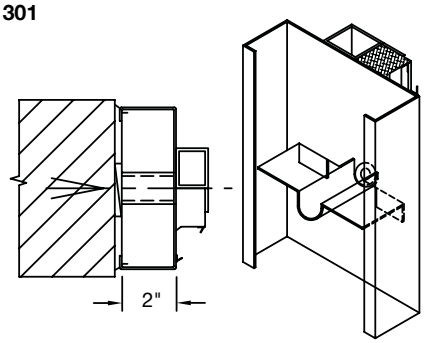
(WITH FLOOR ANCHOR)

STEEL STUD ANCHOR 204

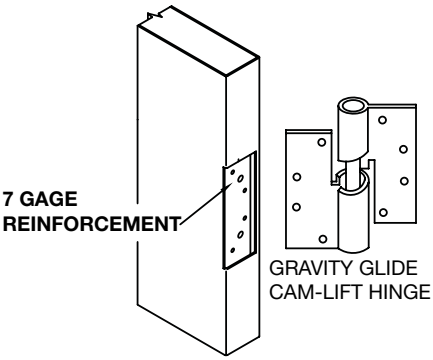


(WITH FLOOR ANCHOR)

EXISTING WALL ANCHOR 301

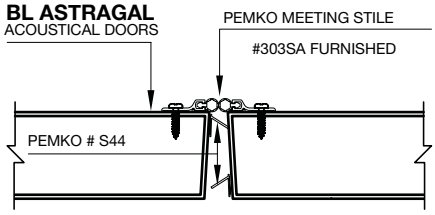


HINGE PREPARATION



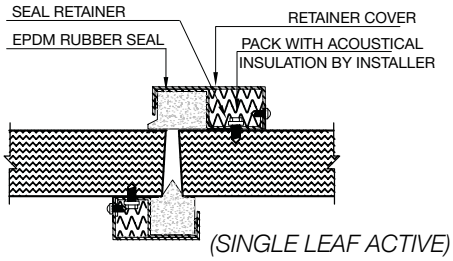
(HINGE PREP IS HANDED)

BL ASTRAGAL
ACOUSTICAL DOORS



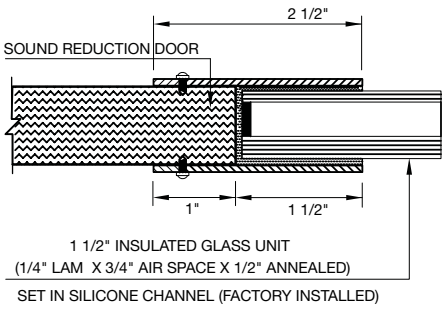
(BOTH LEAF ACTIVE)

IL ASTRAGAL

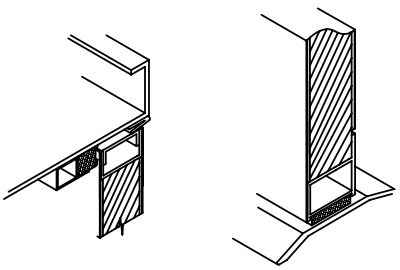


(SINGLE LEAF ACTIVE)

IGU 20 DOOR VISION



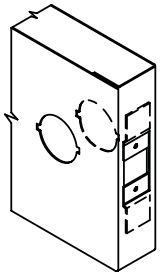
DOOR CONSTRUCTION (TOP AND BOTTOM)



LOCK PREPARATIONS

CYLINDRICAL ANSI A115.2
BACKSET 3-3/4" REQUIRED

CYLINDRICAL & MORTISE
DEADLOCK (OPTIONAL)



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

COMMUNICATING STC56 THRU STC66

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH SINGLE	HEIGHT
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS

SOUND REDUCTION DOOR AND FRAME ASSEMBLY

__**STC** CORE CONSTRUCTION

SPECIFIED LAB STC RATING SHOWN HERE

PRODUCT SPECIFICATIONS:

1) All exposed surfaces of door and frame to receive one coat of rust inhibitive prime paint complying with ASTM A250.10.
2) An aluminum threshold is included. Threshold must protrude 11/2" inches past the face of the frame on the pull side of the door to allow the EPDM rubber section of the door bottom to seat properly during normal operation of the Gravity-Glide cam-lift hinges.
3) Door bottom requires a flush level sealing surface. The threshold must be level and may require shimming to compensate for an uneven floor. This will prevent any sound leaks at this location. Threshold to be grouted solid.
4) Assembly is equipped with metal sound door, frame, seals, door bottom, threshold, Gravity Glide cam - lift hinges and crated for shipment.
5) Door Thickness is 1 3/4". Door weight is 11.9 pounds per square foot. Be aware that the frame must be securely tied to the framing from the sub floor to the structure above. Doubled wood studs or 16 Ga. steel studs are strongly recommended to support the weight of the assembly.
6) Doors are to be formed of no less than 16 Gauge steel face sheets continuously welded at the vertical edges and finished smooth.
7) Frames are to be formed of no less than 14 Gauge sheet steel with corners mitered, continuously welded and ground smooth.
8) Doors and frames are formed from commercial quality zinc coated steel conforming to ASTM A653 & ASTM A924. Acoustical core and internal construction are manufacturer's proprietary standards as tested in accordance with ASTM E90, E413, E1332,& E2235.
9) Frames must be fully grouted.
10) Please be aware industry standard construction tolerances for squareness of frame installation, plumbness of walls, flatness of floors, etc. may result in a difference of 3db-Sdb sound loss in a field test vs. lab results.
11) Please note that tolerances for flatness of acoustical doors tend to exceed those of conventional hollow metal. Installation of exit devices and other wide hardware can exaggerate the slight bow in the door created by sound dampening material used to meet the required STC rating. This is not considered a manufacturing defect.
12) Please reference www.cecodoor.com for installation instructions.

SOUND-TECH XPRESS DOOR SYSTEMS
DOORS TESTED = 3'0"X7'0", 16 GAUGE, FLUSH, SINGLE
FRAMES TESTED = 3'0"X7'0", 14 GAUGE, WELDED, GROUTED
TESTED ASSEMBLY INCLUDES THE FOLLOWING SOUND TIGHT DOOR AND FRAME ASSEMBLIES, PERIMETER SEALS, RETAINER, CAM LIFT HINGES, DOOR BOTTOM, THRESHOLD AND ACOUSTICAL ASTRAGAL (AT PAIRS)
ADDITIONAL NOTES: *1) PAIRS AVAILABLE - POTENTIAL SOUND LOSS = 5 STC POINTS* *2) VISIONS AVAILABLE - POTENTIAL SOUND LOSS = 2 STC POINTS FOR NARROW VISIONS. UP TO 300 SQUARE INCHES. LARGER VISIONS MAY RESULT IN ADDITIONAL SOUND LOSS.* *3) INCREASED OPENING SIZES AVAILABLE. POTENTIAL SOUND LOSS MAY OR MAY NOT OCCUR AS SIZE INCREASES.* *4) ASSEMBLY WAS FITTED WITH CYLINDRICAL LOCK. PREPARATIONS FOR ALTERNATE HARDWARE IS ALLOWED, HOWEVER, SOUND LOSS MAY OR MAY NOT OCCUR.* *5) SOUND ASSEMBLIES ARE TESTED AS COMPLETE ASSEMBLIES. SOUND DEGRADATION MAY OCCUR WITH THE USE OF AN EXISTING DOOR OR FRAME.*

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

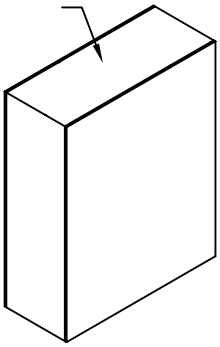
1-3/4" STAINLESS STEEL DOOR

FULL FLUSH STEEL DOORS BEVELED LOCK AND HINGE EDGE, HANDED

POLYSTYRENE CORE (SP)

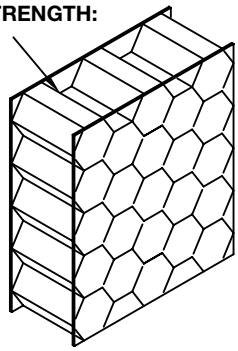
STANDARD
CORE

DENSITY: .90 LB/FT²

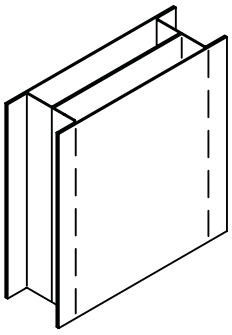


HONEYCOMB CORE (SI)
AVAILABLE AT 3 HOUR
FIRE RATING ONLY

HONEYCOMB
CELL SIZE: 1.2"
CRUSH STRENGTH:
11 LB./IN.²

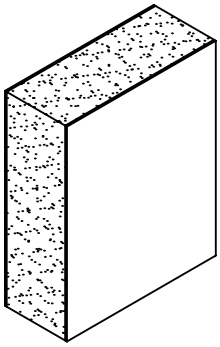


STEEL STIFFENED CORE (SS)



STANDARD 22 GAUGE STIFFENERS.
OPTIONAL STIFFENERS: 20, 18,16
FIBERGLASS INSULATION PLACED
BETWEEN STIFFENERS
DENSITY: 0.5 LB/FT

POLYURETHANE SLAB CORE (SU)



Available in polystyrene, honeycomb, steel stiffened or polyurethane slab core. Ideally suited for applications where food, sanitation, health or corrosive environments require a luxurious durable finish ...

SUGGESTED USE:
- Interior or Exterior ...
- Refineries
- Food Processing
- Salt Mines
- Water Treatment
- Sanitation
- Pharmaceutical Plants
- Swimming Pools
- Coastal Areas
- Research Laboratories
- Chemical Plants

FINISH	304 STAINLESS STEEL			316 STAINLESS STEEL		
	CECO STEEL FINISH CODE			CECO STEEL FINISH CODE		
STEEL GAUGE	12 GAUGE	14 GAUGE	16 GAUGE	12 GAUGE	14 GAUGE	16 GAUGE
#4 BRUSH	12S01	14S01	16S01	12S02	14S02	16S02
#6 SATIN	12S03	14S03	16S03	12S04	14S04	16S04
#8 MIRROR	12S05	14S05	16S05	12S06	14S06	16S06
#2B PAINT GRADE	12S07	14S07	16S07	12S08	14S08	16S08
XL BLEND	12S10	14S10	16S10	12S10	14S10	16S10

SPECIAL NOTE: AT 304 ALLOY, INTERNAL REINFORCEMENTS AND PARTS FOR STAINLESS STEEL DOORS TO BE PROVIDED AS GALVANIZED STEEL.

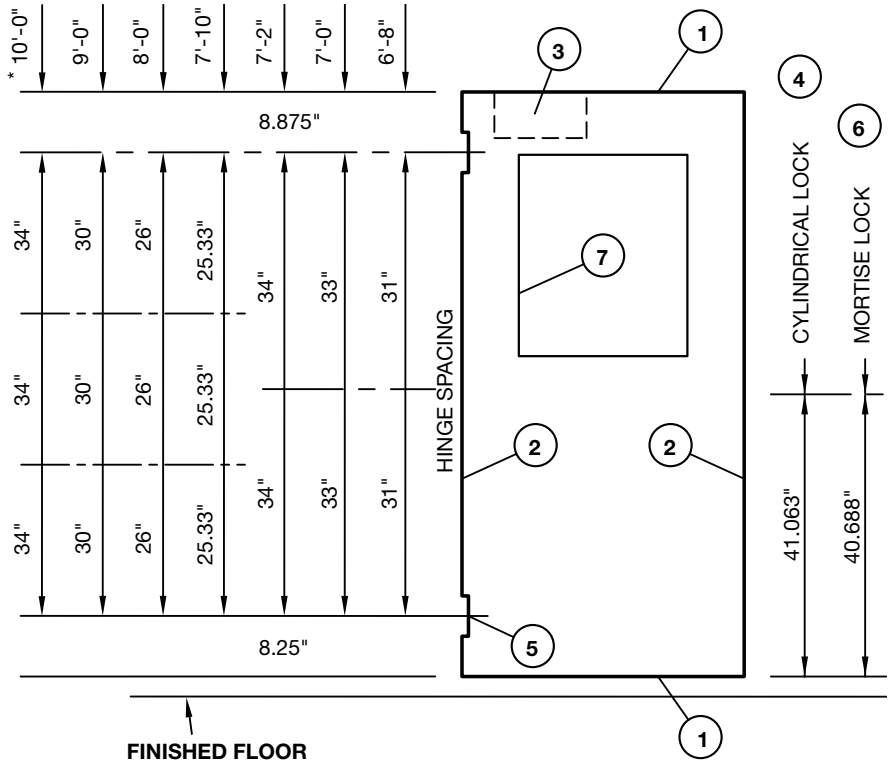
SPECIAL NOTE: AT 316 ALLOY, INTERNAL REINFORCEMENTS AND PARTS FOR STAINLESS STEEL DOORS TO BE PROVIDED AS STAINLESS STEEL.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STAINLESS-TECH DOORS

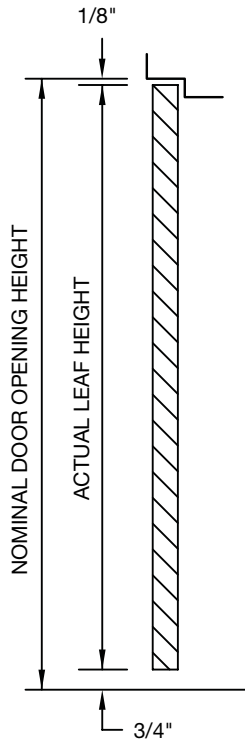
HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

DOOR ELEVATION

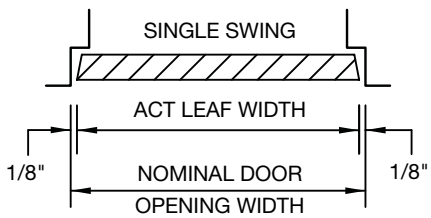


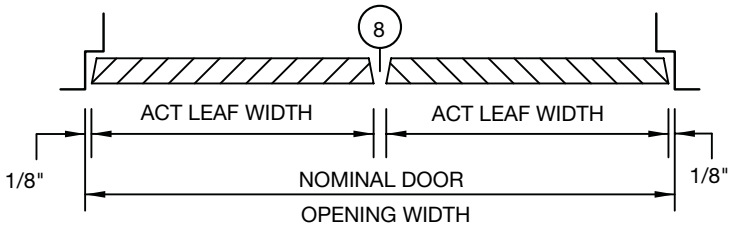
**9'0"MAX HEIGHT IN 18 CAGE*

VERTICAL SECTION



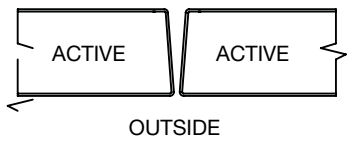
HORIZONTAL SECTIONS





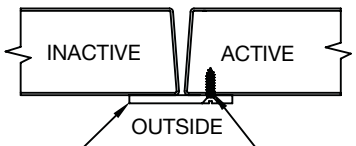
8 STAINLESS STEEL

BOTH HANDS REVERSE ACTIVE



8 STAINLESS STEEL
ASTRAGAL FULL HEIGHT
4481

RHR(SHOWN) UHR OPPOSITE



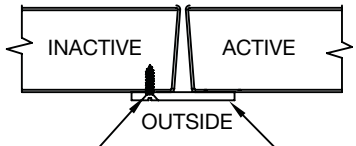
14 GAGE
1-3/4" WIDE

#8 PAN HEAD SMS

ASTRAGAL SHIPPED LOOSE
FIELD APPLIED WITH SCREWS

8 STAINLESS STEEL
ASTRAGAL FULL HEIGHT
4481

RHA(SHOWN) LHR OPPOSITE



#8 PAN HEAD SMS

14 GAGE
1-3/4" WIDE

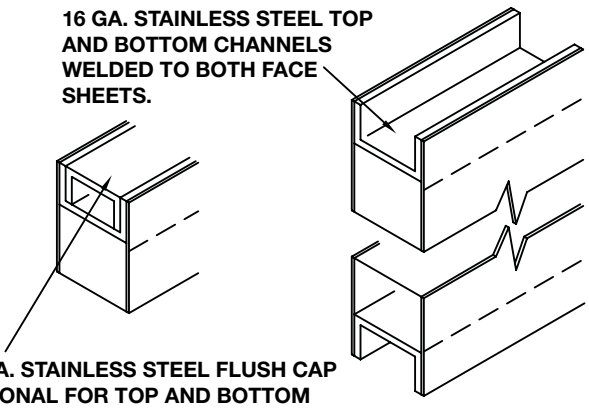
ASTRAGAL SHIPPED LOOSE
FIELD APPLIED WITH SCREWS

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STAINLESS-TECH DOORS

1

16 GA. STAINLESS STEEL TOP AND BOTTOM CHANNELS WELDED TO BOTH FACE SHEETS.

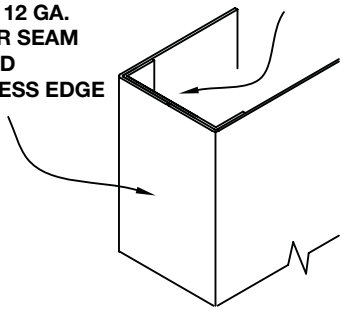


16 GA. STAINLESS STEEL FLUSH CAP OPTIONAL FOR TOP AND BOTTOM CHANNEL, SCREW APPLIED.

2 VERTICAL EDGES

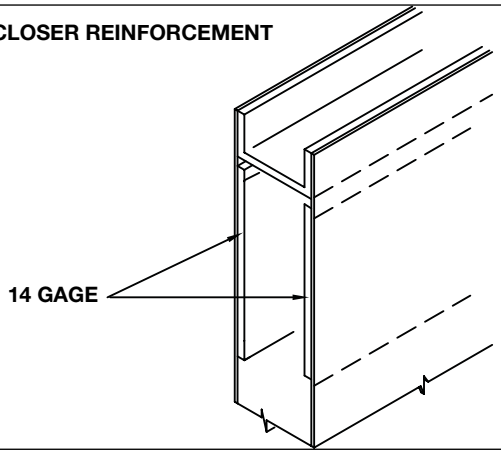
16 GAGE FULL HEIGHT CHANNEL

16,14 & 12 GA. CENTER SEAM WELDED SEAMLESS EDGE



3 OPTIONAL CLOSER REINFORCEMENT

14 GAGE



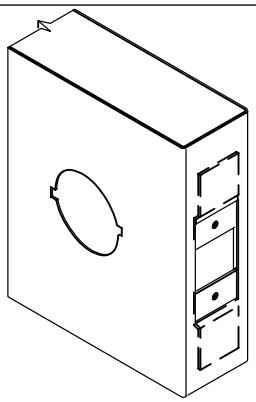
4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

BEVELED LOCK EDGE

2-3/4"
BACKSET

12 GAUGE
LOCK REINFORCEMENT

LOCK EDGE IS BEVELED

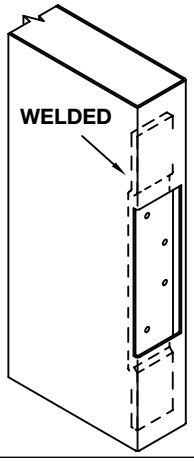


5 HINGE PREPARATION

4-1/2" OR 5" HIGH
STANDARD OR HEAVYWEIGHT
FULL MORTISE HINGES

ANSI A.156.7
TEMPLATE

HINGE EDGE IS BEVELED
HINGE BACKSET 1/4"
7 GAUGE 12 GAUGE
HINGE REINFORCEMENT LOCK
REINFORCEMENT



6 LOCK PREPARATION GOV.86-4 MORTISE TYPE

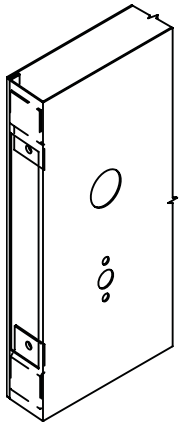
BEVELED LOCK EDGE

2-3/4"
BACKSET

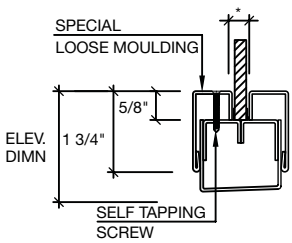
FACE OF DOOR
PREPARED PER
LOCK TEMPLATE

12 GAUGE
LOCK REINFORCEMENT

LOCK EDGE IS BEVELED



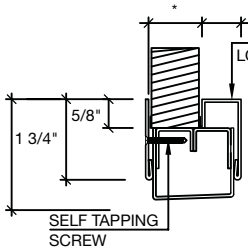
7 STAINLESS STEEL LOW PROFILE GLAZING TRIM



POCKET SIZE :
3/8"
1/2"
5/8"

ALLOY OF KIT WILL MATCH MATERIAL OF DOOR.

7 STAINLESS STEEL LOW PROFILE GLAZING TRIM



POCKET SIZE :
7/8"
1"
1-1/8"
1-1/4"
1-3/8"

ALLOY OF KIT WILL MATCH MATERIAL OF DOOR

SPECIAL NOTE: AT 316 ALLOY, INTERNAL REINFORCEMENTS AND PARTS FOR ALL STAINLESS STEEL DOORS TO BE PROVIDED AS STAINLESS STEEL. AT 304 ALLOY, INTERNAL REINFORCEMENTS AND PARTS FOR ALL STAINLESS STEEL DOORS TO BE PROVIDED AS GALVANIZED.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

STAINLESS-TECH DOORS

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

PRODUCT SPECIFICATIONS:

1-3/4" thick stainless steel doors shall be as provided by Ceco Door Products.

Stainless steel doors are made as full-flush 16, 14 and 12 gauge center seam style. 16, 14 & 12 gauge center seam doors have no visible vertical edge seams. Face sheets are commercial quality stainless steel. Stainless Steel conforms to ASTM A240. Polystyrene core is permanently bonded to face skins. Steel stiffened, polyurethane slab and honeycomb cores are available. The top and bottom 16 gauge channels are inverted. A 16 gauge stainless steel cap is available to flush out the top and and/or bottom of the door, as an option.

Hardware Provisions: Beveled hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). 7 gauge hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The beveled lock edge has a standard bevel (1:16) and is prepared for Gov. series 86 or 160/161 locks in accordance with ANSI A115 (specify which). Optional 14 gauge closer plate reinforcing is available.

Alloy, Finish and Textures: Standard alloy is Type 304, available in #4 brush finish, #6 satin finish, #8 mirror finish, #2B paint grade finish, or XL blend. Type 316 available for corrosive environments available in #4 brush finish, #6 satin finish, #8 mirror finish, #2B paint grade finish, or XL blend.

Protection: Doors are crated for shipment.

FIRE DOORS **LABELING AGENCY:UL** **TEST: UL10C, UL10B**

DOOR CORE	GAUGE	RATING	MAX. SIZE
HONEYCOMB	16	20 MIN.-3HOUR	4'0" X 8'0" SINGLE
HONEYCOMB	16	20 MIN.-90MIN.	8'0" X 8'0" PAIR
POLYURETHANE SLAB	16	20 MIN.-90MIN.	4'0" X 8'0" SINGLE
POLYURETHANE SLAB	16	20 MIN.-90MIN.	8'0" X 8'0" PAIR
POLYSTYRENE	16	20 MIN.-90MIN.	4'0" X 8'0" SINGLE
POLYSTYRENE	16	20 MIN.-90MIN.	8'0" X 8'0" PAIR
STEEL STIFFENED	16	20 MIN.-90MIN.	4'0" X 8'0" SINGLE
STEEL STIFFENED	16	N/A	PAIRS N/A

MATERIAL

DOOR FACE SHEETS	STAINLESS STEEL TYPE	
	304-4	316
16 GAUGE STAINLESS STEEL	STD	OPTIONAL - SEE AVAILABLE FINISH BELOW
14 GAUGE STAINLESS STEEL	STD	
12 GAUGE STAINLESS STEEL	STD	

STAINLESS STEEL ALLOY

TYPE 304
STANDARD
TYPE 316
HIGH CORROSIVE RESISTANCE
OPTIONAL

STAINLESS STEEL FINISH FOR 304 AND 316

#4 BRUSH FINISH
#6 SATIN FINISH
#8 MIRROR FINISH
#2B PAINT GRADE FINISH
XL BLEND LONG GRAIN
BRUSH FINISH

304 STAINLESS STEEL:
18% CHROMIUM AND 8% NICKEL
316 STAINLESS STEEL:
16% CHROMIUM, 10% NICKEL
AND 2% MOLYBDENUM

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT SINGLE FLUSH OPENINGS

BLAST AND HURRICANE RESISTANT:

- Blast Up To 6.16 psi Category I (12 gauge door and frame construction)
- Blast Up To 9.74 psi Category II (14 gauge door and frame construction)

The 3rd party tested Multi-Solution Opening meets UFC 4-010-01 DoD Minimum Anti-terrorism standards and ASTM 2927-12 Response Categories 1 (no damage) and 2 (damaged but operable) following a blast.

UL wind resistant building assemblies and components tested to the following windstorm or severe weather performance standards:

1. ASTM E330/E1886/E1996
2. TAS201, TAS202, TAS203
3. ANSI A250.13

Doors may also be classified as fire doors tested in accordance with UL10B or UL10C. Doors may be fire rated up to and including three hours, except as noted and may also be limited by gauge, size, hardware, construction, etc.. All doors are impact resistant, passed large missile impact for missile level D. Only ASSA ABLOY prescriptive Corbin Russwin BL6600 series or Sargent BL7300 series +/-150 PSF multi-point locking hardware may be used.

Door Opening Sizes: All doors shall be 1 3/4" [44.5 mm] thick. The door opening width and height shall be as defined on the pages and illustrations that follow.

Construction: Special vertical lock edge sti ener and special lock reinforcements are required for the prescriptive +/-150 PSF doors. Special frame head reinforcements are required for multi-point lock head latching. Doors are 14 gauge A60 face sheets or 12 gauge A60 face sheets depending on what blast psi and category level is required.

Glass Lights, Viewer or Louvers: Not available.

Windstorm Classi cation Label: Each wind-resistant building assembly shall bear a classi cation mark of UL Solutions.

Frames may also be eligible to be listed as fire door frames tested in accordance with UL10B or UL10C. Frames may be eligible to be fire rated up to and including three hours where special reinforcements are installed. All frames are impact resistant, passed large missile impact for missile level D.

Frame Sizes: Listed sizes are defined in the pages that follow.

Construction: Each wind resistant building product shall be constructed as detailed in the pages that follow. Special head reinforcing channel and special hardware reinforcements required to be installed during manufacturing for the prescriptive +/- 150 PSF frame with concealed multi-point devices. Frames are constructed of 14 gauge A60 standard and 12 gauge A60 is optional, depending on what blast psi and category level is required. Frames must be factory welded.

FRAME INSTALLATION INSTRUCTIONS: SEE CECO'S PUBLIC WEBSITE AND ANSI A250.11 FRAME INSTALLATION INSTRUCTIONS. WWW.CECODOOR.COM

MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT SINGLE OPENINGS

SUGGESTED USE FOR COMBINATION HURRICANE & BLAST PRODUCTS:

- CRITICAL
- INFRASTRUCTURE,
- GOVERNMENT/MILITARY,
- PETRO CHEMICAL PLANTS,
- MUSEUMS, HURRICANE
- ENVIRONMENTS

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS
IN ACCORDANCE WITH UL 10B,
UL 10C, UL 1784, & NFPA 252.

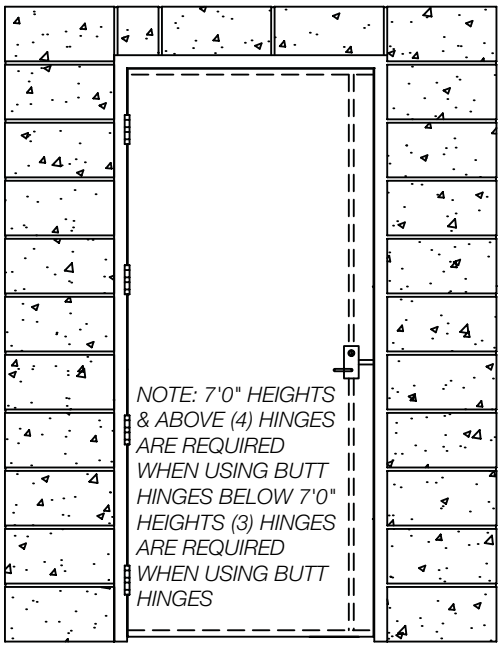
DOOR: MIN. 2'8" X 6'8", MAX. 4'0" X 8'0" LEAF SIZE, 14 OR 12 GAUGE A60 GALVANNEALED FACE SHEETS, WITH STEEL STIFFENED AND FIBERGLASS CORE. 14 GAUGE TOP AND BOTTOM CHANNELS, WELDED TOP CAP.

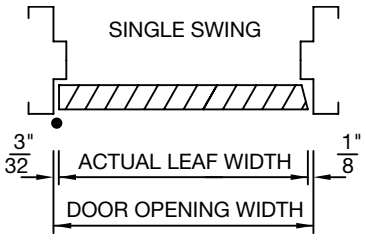
- CORBIN RUSSWIN BL6600 & SARGENT BL7300 CONCEALED VERTICAL RODS, TOP & BOTTOM BOLTS, & MORTISE LOCK BODY CASETTE MUST BE FACTORY INSTALLED IN A CECO MULTI-SOULTION DOOR. ALL OTHER HARDWARE COMPONENTS ARE SHIPPED DIRECTLY FROM SARGENT OR CORBIN
- RUSSWIN & MUST BE INSTALLED BY A FACTORY TRAINED INSTALLER.

IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.

SWING:
THE COMBINATION OF BLAST AND HURRICANE RATED ASSEMBLIES MUST BE SEATED. SEATED IS DEFINED AS THE BLAST PRESSURE ACTING TO PUSH THE DOOR AGAINST THE STOPS OF THE FRAME.

HORIZONTAL SECTION





- 3/8" DOOR UNDERCUT
- 3/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE
- BOTTOM STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAUGE FLOORS.
- STRIKE MUST BE POURED LEVEL AND FRAMES MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

LOCK:
CORBIN RUSSWIN BL6600 SERIES
OR SARGENT BL7300 SERIES

HINGES:
SEE PAGE 361

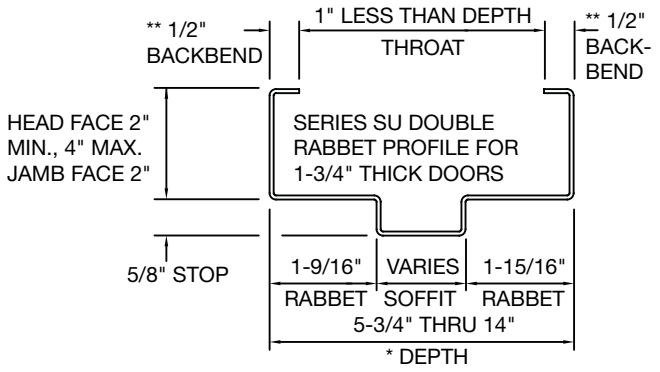
CLOSER:
SEE PAGE 361

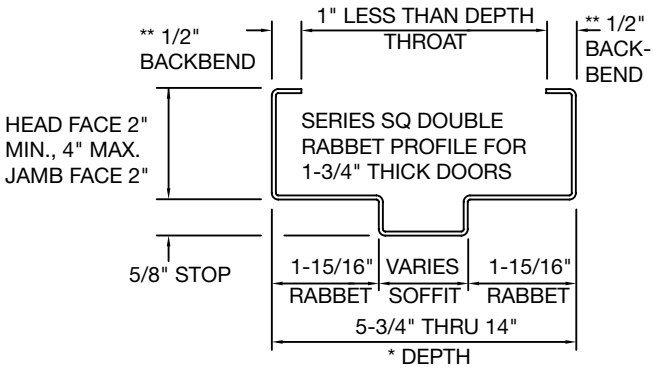
OPTIONAL HARDWARE & ACCESSORIES NOT PROVIDED BY CECO:
SEE PAGE 362

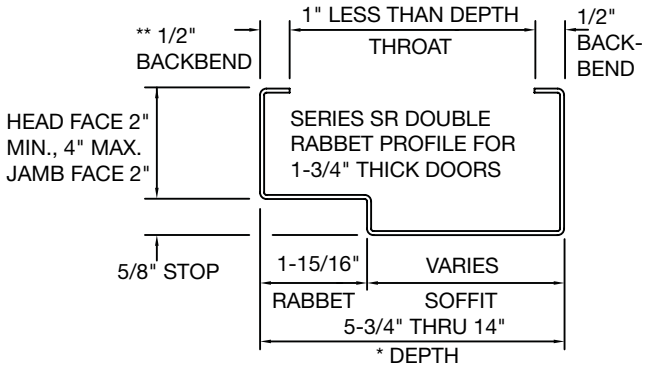
FOR FURTHER INFORMATION: CALL 218-828-6256

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT SINGLE OPENINGS





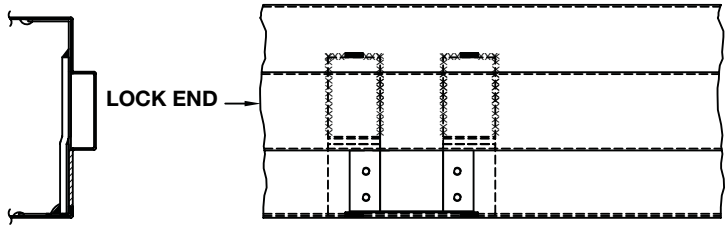


**FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS*
***BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".*
FRAMES REQUIRE FACTORY WELDED CORNERS.

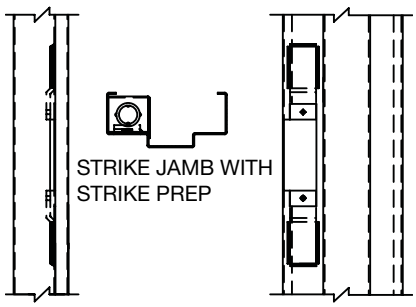
FRAMES ARE CONSTRUCTED OF 14 GAUGE A60 FOR BLAST UP TO 9.74 PSI CATEGORY II.
FRAMES ARE CONSTRUCTED OF 12 GAUGE A60 FOR BLAST UP TO 6.16 CATEGORY I.

7'0" HEIGHTS & ABOVE (4) HINGES ARE REQUIRED WHEN USING BUTT HINGES.
BELOW 7'0" HEIGHTS REQUIRE (3) HINGES WHEN USING BUTT HINGES.

HEAD STRIKE PREP SINGLE OPENING



RIGHT HAND OR LEFT HAND REVERSE SHOWN
LEFT HAND OR RIGHT HAND REVERSE OPPOSITE



MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT PAIRED FLUSH OPENING

BLAST AND HURRICANE RESISTANT:

- Blast Up To 6.84 psi Category II (14 gauge door and frame construction)

The 3rd party tested Multi-Solution Opening meets UFC 4-010-01 DoD Minimum Anti-terrorism standards and ASTM 2927-12 Response Category II (damaged but operable) following a blast.

UL wind resistant building assemblies and components tested to the following windstorm or severe weather performance
standards:
1. ASTM E330/E1886/E1996
2. TAS201, TAS202, TAS203
3. ANSI A250.13

Doors may also be classified as fire doors tested in accordance with UL10B or UL10C. Doors may be fire rated up to and including three hours, except as noted and may also be limited by gauge, size, hardware, construction, etc.. All doors are impact resistant, passed large missile impact for missile level D. Only ASSA ABLOY prescriptive Corbin Russwin BL6600 series or Sargent BL7300 series +/-150 PSF multi-point locking hardware may be used. Only Sargent 988 or Corbin Russwin 988CR surface bolts may be used on inactive door leaf.

Door Opening Sizes: All doors shall be 1 3/4" [44.5 mm] thick. The door opening width and height shall be as defined on the pages and illustrations that follow.

Construction: Special vertical lock edge sti ener and special lock reinforcements are required for the prescriptive +/-150 PSF doors. Special frame head reinforcements are required for multi-point lock head latching. Special strike reinforcing in the inactive door is required for multi-point door latching. Doors are 14 gauge A60 galvannealed steel face sheets.

Glass Lights, Viewer or Louvers: Not available.

Windstorm Classi cation Label: Each wind-resistant building assembly shall bear a classi cation mark of UL Solutions. Frames may also be eligible to be listed as fire door frames tested in accordance with UL10B or UL10C.

Frames may be eligible to be fire rated up to and including three hours where special reinforcements are installed. All frames are impact resistant, passed large missile impact for missile level D.

Frame Sizes: Listed sizes are defined in the pages that follow.

Construction: Each wind resistant building product shall be constructed as detailed in the pages that follow. Special head reinforcing channel and special hardware reinforcements required to be installed during manufacturing for the prescriptive +/- 150 PSF frame with concealed multi-point device and surface bolts. Frames are constructed of 14 gauge A60 galvannealed steel. Frames must be factory welded.

FRAME INSTALLATION INSTRUCTIONS: SEE CECO'S PUBLIC WEBSITE AND ANSI A250.11 FRAME
INSTALLATION INSTRUCTIONS. WWW.CECODOOR.COM

FOR FURTHER INFORMATION: CALL 218-828-6256

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT

SUGGESTED USE FOR COMBINATION HURRICANE & BLAST PRODUCTS:

- CRITICAL
- INFRASTRUCTURE,
- GOVERNMENT/MILITARY,
- PETRO CHEMICAL PLANTS,
- MUSEUMS, HURRICANE
- ENVIRONMENTS

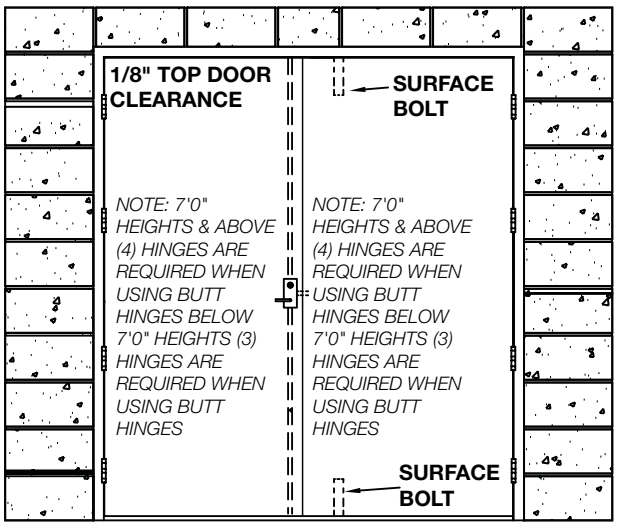
OPTIONAL FIRE RATING:

UP TO AND INCLUDING 3 HRS
IN ACCORDANCE WITH UL 10B,
UL 10C, UL 1784, & NFPA 252.

DOOR: MIN. 5'4" X 6'8", MAX. 8'0" X 8'0" LEAF SIZE, 14 GAUGE A60 GALVANNEALED FACE SHEETS, WITH STEEL STIFFENED AND FIBERGLASS CORE. 14 GAUGE TOP AND BOTTOM CHANNELS, AND WELDED STEEL TOP CAP.- CORBIN RUSSWIN BL6600 & SARGENT BL7300 CONCEALED VERTICAL RODS, TOP & BOTTOM BOLTS, & MORTISE LOCK BODY CASETTE MUST BE FACTORY INSTALLED IN A CECO MULTI-SOULTION DOOR. ALL OTHER HARDWARE COMPONENTS ARE SHIPPED DIRECTLY FROM SARGENT OR CORBIN - RUSSWIN & MUST BE INSTALLED BY A FACTORY TRAINED INSTALLER.
IMPORTANT: DO NOT REMOVE ANY HARDWARE BLOCKING OR FILLER PLATES IN DOOR & THE FRAME UNTIL THE MORTISE LOCK IS READY TO BE INSTALLED.

SWING:
THE COMBINATION OF BLAST AND HURRICANE RATED ASSEMBLIES MUST BE SEATED. SEATED IS DEFINED AS THE BLAST PRESSURE ACTING TO PUSH THE DOOR AGAINST THE STOPS OF THE FRAME.

OPTIONAL:
UNEQUAL DOOR LEAVES ARE ALLOWED. 2'8" X 6'8" MINIMUM AND 4'0" X 8'0" MAXIMUM



- 3/8" DOOR UNDERCUT
- 3/8" MAX. FROM BOTTOM OF DOOR TO TOP OF STRIKE
- BOTTOM STRIKES MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLTS TO PROPERLY ENGAUGE STRIKES.
- BOTTOM LOCK STRIKE IS MANUFACTURED TO BE MORTISED IN FLOOR OR SURFACE MOUNTED. FLOORS MUST BE POURED LEVEL AND FRAMES MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.
- METAL ASTRAGALS ARE NOT ALLOWED.

LOCK:
CORBIN RUSSWIN BL6600 SERIES
OR SARGENT BL7300 SERIES

SURFACE BOLTS:
CORBIN RUSSWIN 988CR
OR SARGENT 988

HINGES:
SEE PAGE 361

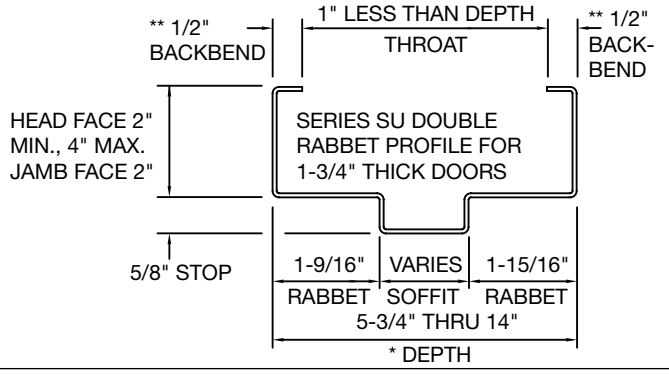
CLOSER:
SEE PAGE 361

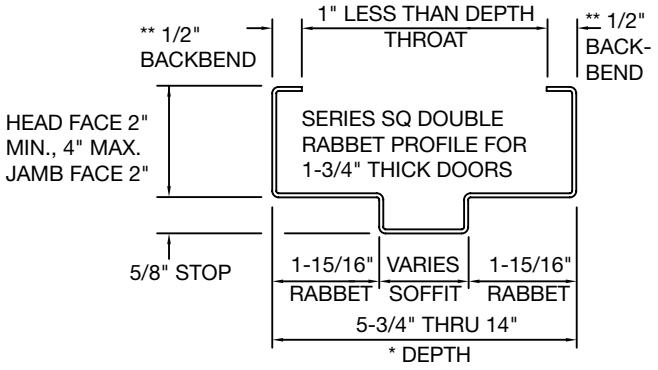
OPTIONAL HARDWARE & ACCESSORIES NOT PROVIDED BY CECO:
SEEPAGE 362

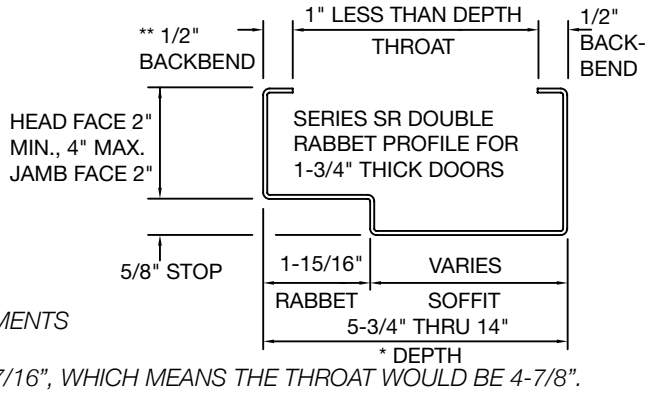
FOR FURTHER INFORMATION: CALL 218-828-6256

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT PAIRED OPENING



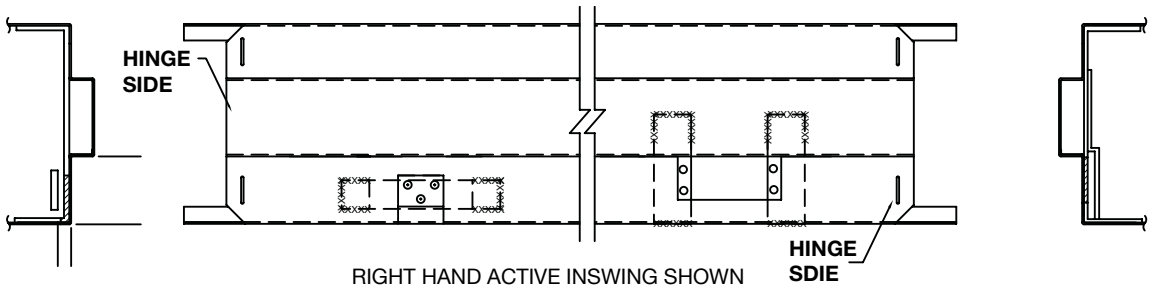




FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS

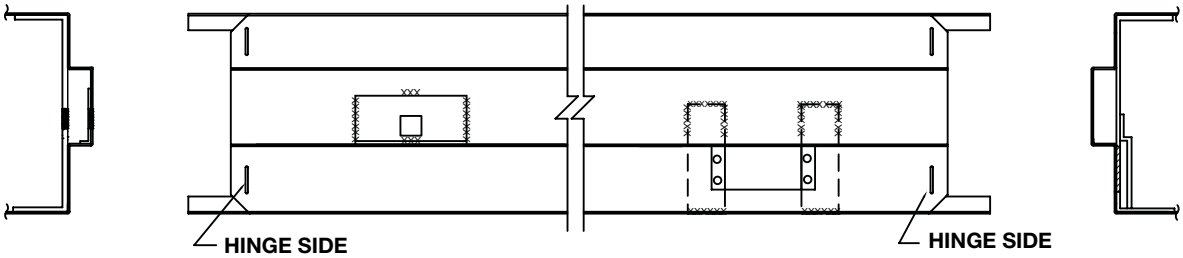
**BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".*
***FRAMES REQUIRE FACTORY WELDED CORNERS.*
FRAMES ARE CONSTRUCTED OF 14 GAUGE A60 GALVANNEALED STEEL FOR BLAST UP TO 7.0 PSI CATEGORY II.
7'0" HEIGHTS & ABOVE (4) HINGES ARE REQUIRED WHEN USING BUTT HINGES.
BELOW 7'0" HEIGHTS REQUIRE (3) HINGES WHEN USING BUTT HINGES.

HEAD STRIKE PREPS PAIRS INSWING



RIGHT HAND ACTIVE INSWING SHOWN
LEFT HAND ACTIVE INSWING OPPOSITE

HEAD STRIKE PREPS PAIRS OUTSWING



LEFT HAND REVERSE ACTIVE OUTSWING SHOWN
RIGHT HAND REVERSE ACTIVE OUTSWING OPPOSITE

"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTINGWALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE."

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

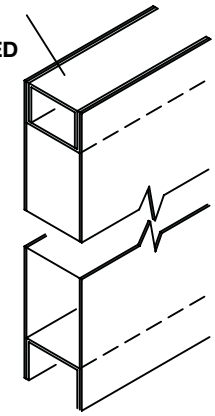
MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT SINGLE AND PAIRED OPENINGS

14 GAUGE STEEL END CHANNELS

WELDED TO BOTH
FACE SHEETS

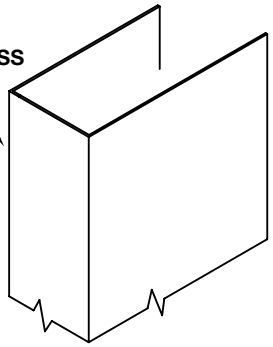
INVERTED TOP AND BOTTOM

18 GAGE WELDED TOP CAP REQUIRED



VERTICAL EDGES

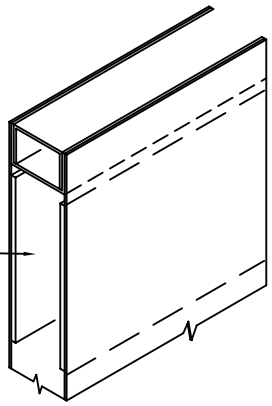
WELDED SEAMLESS



CLOSER REINFORCEMENT (OPTIONAL)

14 GAUGE STEEL
REINFORCEMENT

14 GAGE STEEL REINFORCEMENT



(THRU-BOLT MOUNTING OF BODY TO DOOR ONLY)

OPTIONAL WIRING HARNESS

ELECTROLYNX CABLE
PROVIDED IN DOOR
FOR PLUG & PLAY
APPLICATION

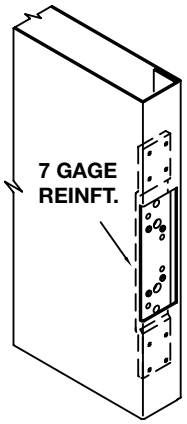
HINGE PREPARATION

HINGE EDGE IS HANDED
AND SQUARE

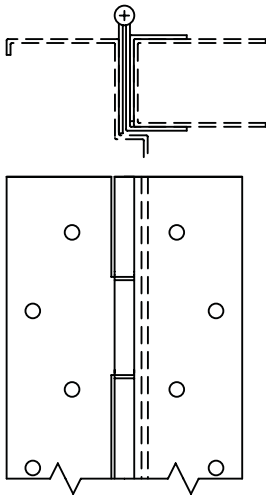
7'0" HEIGHTS & ABOVE (4) HINGES ARE REQUIRED WHEN USING BUTT HINGES. BELOW 7'0" HEIGHTS (3) HINGES ARE REQUIRED WHEN USING BUTT HINGES.

ANSI A156.7
TEMPLATE

7 GAGE REINFT.



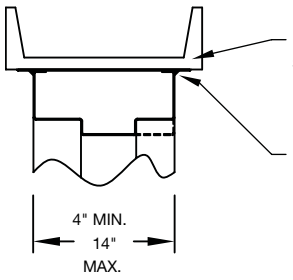
OPTIONAL CONTINUOUS HINGE PREPARATION

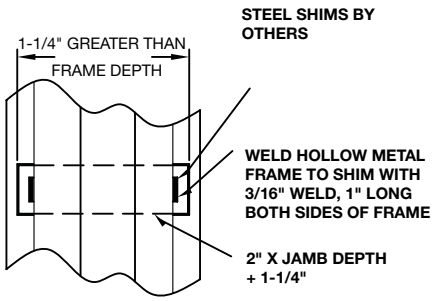


NOTE: A CONTINUOUS HINGE REQUIRES A CONTINUOUS HINGE REINFORCEMENT IN DOOR AND FRAME

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT SINGLE AND PAIRED OPENINGS





FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN WELDED TO BUILDING STRUCTURE

ANCHORING BY WELDING TO BUILDING STRUCTURE

18 GA. MIN. -1/4" MAX. THICK A-36 STEEL SHIMS CENTERED UNDER FRAME. WELD PERIMETER OF 5/8" X 2" X 5/8" ENDS OF SHIMS TO STRUCTURAL BUILDING MEMBER WITH LLET WELDS SIZED AS FOLLOWS USING E6018 ELECTRODES. FILLET WELD SIZE SAME AS SHIM THICKNESS FOR 0.053" TO 0.125" SHIM THICKNESS. WELD SIZE 1/8" FOR 0.125" TO 1/4" SHIM THICKNESS.

FRAME HEAD ANCHOR LOCATIONS

OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
SINGLE OPENINGS 2'8" X 6'8" THRU 4'0" X 8'0"	WELDED TO THE BUILDING STRUCTURE	MINIMUM OF 2 WELD LOCATIONS REQUIRED. LOCATIONS ARE 6" FROM EACH DOOR JAMB RABBET. MUST WELD ON BOTH FACES OF THE FRAME HEAD & SILL AT EACH LOCATION.

JAMB ANCHOR LOCATIONS

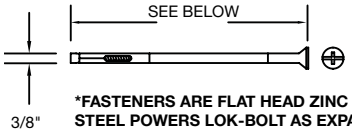
OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
SINGLE OPENINGS 2'8" X 6'8" THRU 4'0" X 8'0"	WELDED TO THE BUILDING STRUCTURE	WELD LOCATIONS, MAXIMUM OF 12" FROM THE SILL, MAX. 10" FROM THE HEAD RABBET AND 24" MAX. ON CENTER. MUST WELD ON BOTH FACES OF THE FRAME AT EACH LOCATION.

PAIRED OPENINGS FRAME HEAD ANCHOR LOCATIONS

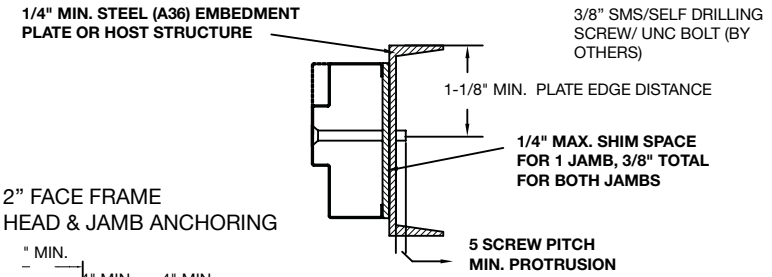
	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
PAIRS	**APPROVED MIN. OPENING SIZE UP TO AND INCLUDING MAX. OPENING SIZE**	WELDED TO THE BUILDING STRUCTURE	MINIMUM OF 5 WELD LOCATIONS & MUST WELD ON BOTH FACES OF THE FRAME HEAD & SILL AT EACH LOCATION; ONE LOCATION AT THE CENTERLINE OF THE DOOR MEETING EDGES. 2 ARE LOCATED 6" FROM THE CENTERLINE OF THE DOOR MEETING EDGES & 2 WELDS ARE LOCATED 6" FROM EACH DOOR JAMB RABBET.

PAIRED OPENINGS JAMB ANCHOR LOCATIONS

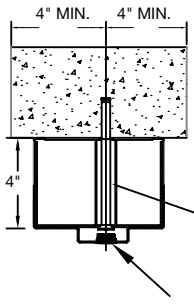
	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
PAIRS	**APPROVED MIN. OPENING SIZE UP TO AND INCLUDING MAX. OPENING SIZE**	WELDED TO THE BUILDING STRUCTURE	WELD LOCATIONS, MAXIMUM OF 12" FROM THE SILL, MAX. 10" FROM THE HEAD RABBET AND BUILDING STRUCTURE 24" MAX. ON CENTER. MUST WELD ON BOTH FACES OF THE FRAME AT EACH LOCATION.



***FASTENERS ARE FLAT HEAD ZINC PLATED CARBON STEEL POWERS LOK-BOLT AS EXPANSION BOLTS FOR MASONRY. FASTENER LENGTH: 3/8" X 6" STEEL BOLT**



4" FACE FRAME HEAD ANCHORING



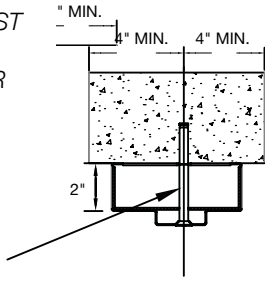
NOTE: MINIMUM PRECAST OR CMU WALL EDGE DISTANCE 4" TO CENTER OF BOLT HOLE @ HEAD OR HEAD & JAMBS.

NOTE: 1-1/4" MINIMUM BOLT EMBEDMENT

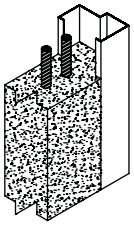
3/8" EXPANSION BOLT (SHIPS LOOSE FOR FIELD INSTALLATION)

VINYL CAP PLUG
VINYL CAP PLUG (BAG OF 10) PART # 6111049
VINYL CAP PLUG (BAG OF 100) PART # 6111050
(SHIPS LOOSE FOR FIELD INSTALLATION)

2" FACE FRAME HEAD & JAMB ANCHORING

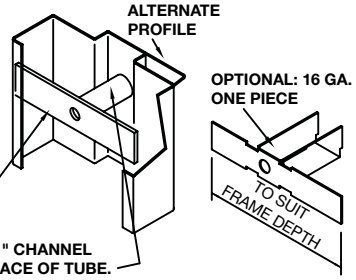


SCREW ATTACHMENT THROUGH EXISTING EMBEDMENT PLATE PROVIDED THAT DRILLING THROUGH PLATE IS PERMISSIBLE AS VERIFIED BY OTHERS.



POURED IN PLACE WALL

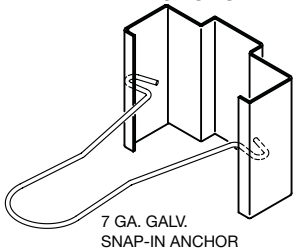
EXISTING OPENING -PIPE & PLATE FRAME NOT REQUIRED TO BE GROUTED



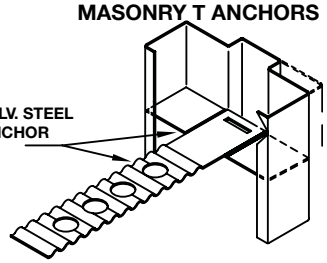
12 GA. MIN. X 1-1/4" PLATE & 1" TUBE WELDED TOGETHER WITH ARC WELDS

OR 12 GA. X 1/2" X 1" CHANNEL MAY BE USED IN PLACE OF TUBE.

MASONRY - WIRE ANCHORS



MASONRY T ANCHORS



THE THROAT OF THE FRAME JAMBS MUST BE FULLY GROUTED WITH MIN. 1800 PSI GROUT.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT SINGLE AND PAIRED OPENINGS

HEAD ANCHOR LOCATIONS

	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
SINGLE OPENING	2'8" X 6'8" UP TO AND INCLUDING 4'0" X 8'0"	EXISTING WALL ANCHORS POWERS 3/8" LOCK-BOLT AS SLEEVE EXPANSION BOLT OR 3/8" SMS/SELF DRILLING SCREW/UNC BOLT	MINIMUM OF 2 ANCHORS REQUIRED. LOCATIONS ARE 6" FROM EACH DOOR JAMB RABBET. WHEN ANCHORS ARE LOCATED IN THE DOOR RABBET, THE ANCHOR AT THE LOCK JAMB SIDE WILL BE LOCATED AT 9".

ANCHORS MAY BE INSTALLED THROUGH EXISTING EMBEDMENT PLATES, PROVIDED THAT DRILLING THROUGH EXISTING EMBEDMENT PLATES IS PERMISSIBLE AS VERIFIED BY OTHERS. ANY EXISTING EMBEDMENT PLATES SHALL BE DESIGNED AND VERIFIED BY OTHERS.
FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS.

JAMB ANCHOR LOCATIONS

EXISTING OPENING BOLT OR SCREW FASTENED JAMB ANCHOR LOCATIONS

	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
SINGLE OPENING	2'8" X 6'8" UP TO & INCLUDING 3'0"X7'0"	EXISTING WALL ANCHORS POWERS 3/8" LOK-BOLT AS SLEEVE ANCHOR OR 3/8" SMS/ SELF DRILLING SCREW/ UNC BOLT	MAXIMUM OF 8" FROM THE SILL, MAXIMUM OF 4" FROM THE HEAD RABBET, AND 21" MAXIMUM ON CENTER.
	GREATER THAN 3'0" X 7'0" AND UP TO AND INCLUDING 4'0" X 8'0"	EXISTING WALL ANCHORS POWERS 3/8" LOK-BOLT AS SLEEVE ANCHOR OR 3/8" SMS/ SELF DRILLING SCREW/ UNC BOLT	MAXIMUM OF 8" FROM THE SILL, MAXIMUM OF 4" FROM THE HEAD RABBET, AND 18" MAXIMUM ON CENTER.

FRAMES ARE REQUIRED TO BE GROUTED WHEN USING MASONRY T OR WIRE MASONRY WALL JAMB ANCHORS.

12 GAUGE MASONRY "T" JAMB ANCHOR LOCATIONS

	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
SINGLE OPENING	2'8" X 6'8" UP TO AND INCLUDING 4'0" X 8'0"	12 GA. MASONRY "T" ANCHORS	MAX. OF 8" FROM THE SILL, MAX. 6" FROM THE HEAD RABBET, AND 24" ON CENTER MAX.

WIRE MASONRY JAMB ANCHOR LOCATIONS

	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
SINGLE OPENING	2'8" X 6'8" UP TO & INCLUDING 3'0"X7'0"	WIRE MASONRY ANCHORS	MAX. OF 12" FROM THE SILL, MAX. 10" FROM THE HEAD RABBET, AND 18" ON CENTER MAX.
	GREATER THAN 3'0" X 7'0" AND UP TO AND INCLUDING 4'0" X 8'0"	WIRE MASONRY ANCHORS	MAX. OF 12" FROM THE SILL, MAX. 10" FROM THE HEAD RABBET, AND 12" ON CENTER MAX.

HEAD ANCHOR LOCATIONS

NOTE: FOR UNEQUAL WIDTH PAIRS; ANCHOR QUANTITY/SPACING FOR EACH SIDE OF THE CENTERLINE OF THE DOOR MEETING EDGES SHALL BE DETERMINED AS THOUGH THE LEAF SIZE WAS PART OF AN EQUAL WIDTH PAIR.

	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
PAIRED OPENING	APPROVED MIN. OPENING SIZE UP TO & INCLUDING 8'0" X 8'0"	EXISTING WALL ANCHORS POWERS 3/8" LOK-BOLT AS SLEEVE ANCHOR OR 3/8" SMS/ SELF DRILLING SCREW/UNC BOLT	MINIMUM OF 6 ANCHORS. ON BOTH SIDES OF THE CENTERLINE OF THE DOOR MEETING EDGES: ONE EACH LOCATED AT 8" AND 15" FROM THE CENTERLINE OF THE DOOR MEETING EDGES. 2 ANCHORS REQUIRED 6" FROM EACH DOOR JAMB RABBET.

ANCHORS MAY BE INSTALLED THROUGH EXISTING EMBEDMENT PLATES, PROVIDED THAT DRILLING THROUGH EXISTING EMBEDMENT PLATES IS PERMISSIBLE AS VERIFIED BY OTHERS. ANY EXISTING EMBEDMENT PLATES SHALL BE DESIGNED AND VERIFIED BY OTHERS. FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS. JAMB ANCHOR LOCATIONS FOR BL7300/BL6600

EXISTING OPENING & SCREW FASTENED JAMB ANCHOR LOCATIONS

	OPENING SIZE	ANCHOR TYPE	ANCHOR SPACING
PAIRED OPENING	APPROVED MIN. OPENING SIZE UP TO AND INCLUDING 8'0" X 8'0"	EXISTING WALL ANCHORS POWERS 3/8" LOK-BOLT AS SLEEVE ANCHOR OR 3/8" SMS/ SELF DRILLING SCREW/UNC BOLT	MAXIMUM OF 8" FROM THE SILL, MAXIMUM OF 4" FROM THE HEAD RABBET, AND 24" MAXIMUM ON CENTER.

12 GAUGE MASONRY "T" ANCHORS & WIRE MASONRY ANCHORS

PAIRED OPENING	APPROVED MIN. OPENING SIZE UP TO AND INCLUDING MAX. OPENING SIZE	12 GA. MASONRY "T" ANCHORS	MAXIMUM OF 8" FROM THE SILL, MAXIMUM OF 6" FROM THE HEAD RABBET, AND 24" MAXIMUM ON CENTER.
PAIRED OPENING	APPROVED MIN. OPENING SIZE UP TO AND INCLUDING 7'0" X 7'0"	WIRE MASONRY ANCHORS	MAXIMUM OF 12" FROM THE SILL, MAXIMUM OF 10" FROM THE HEAD RABBET, AND 16" MAXIMUM ON CENTER.
PAIRED OPENING	GREATER THAN 7'0" X 7'0" OPENING SIZE UP TO AND INCLUDING 8'0" X 8'0"	WIRE MASONRY ANCHORS	MAXIMUM OF 12" FROM THE SILL, MAXIMUM OF 10" FROM THE HEAD RABBET, AND 14" MAXIMUM ON CENTER.

MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT SINGLE AND PAIRED OPENINGS

CONTINUOUS HINGES

MARKAR HG305 CONTINUOUS HINGE
MARKAR FM300 CONTINUOUS HINGE (OUTSWING SEATED ONLY)
MARKAR CONTINUOUS HINGES WITH OR WITHOUT EL OPTION

NOTE: A CONTINUOUS HINGE REQUIRES A CONTINUOUS HINGE REINFORCEMENT IN DOOR AND FRAME

WIDE THROW CONTINUOUS HINGES

MARKAR HG305WT10 WIDE THROW HINGE WITH OR WITHOUT EL OPTION
MARKAR FM300WT WIDE THROW HINGE (WT10 THRU WT50) OUTSWING SEATED ONLY WITH OR WITHOUT EL OPTION

NOTE: A CONTINUOUS HINGE REQUIRES A CONTINUOUS HINGE REINFORCEMENT IN DOOR AND FRAME

HEAVY WEIGHT STANDARD AND WIDE THROW FULL MORTISE BUTT HINGES

MCKINNEY SP3786 (4-1/2" X 4-1/2" X .180 OR 5" X 4-1/2" X .190)
MCKINNEY SP3386 (4-1/2" X 4-1/2" X .180 OR 5" X 4-1/2" X .190)
MCKINNEY SP3386 & SP3786 (4-1/2" X 5", 4-1/2" X 6", 4-1/2" X 7", 4-1/2" X 8", 5" X 4-1/2", 5" X 5", 5" X 6", 5" X 7" & 5" X 8")
MCKINNEY SP3386 & SP3786 WITH OR WITHOUT QC OPTION.
MCKINNEY SP3386 & SP3786 WITH OR WITHOUT NRP

DOOR CLOSERS

CORBIN RUSSWIN DC8000 SERIES DOOR CLOSER (THRU-BOLT MOUNTING OF BODY TO DOOR ONLY)
NORTON 7500 SERIES DOOR CLOSER (THRU-BOLT MOUNTING OF BODY TO DOOR ONLY)
SARGENT 281 SERIES DOOR CLOSER (THRU-BOLT MOUNTING OF BODY TO DOOR ONLY)
ASSA ABLOY ACCENTRA 4400 SERIES DOOR CLOSER (THRU-BOLT MOUNTING OF BODY TO DOOR ONLY)

DOOR CLOSERS/HOLDERS

SARGENT 2409 CLOSER/HOLDER (THRU-BOLT MOUNTING OF BODY TO DOOR ONLY)
SARGENT 351 EHT CLOSER/HOLDER (THRU-BOLT MOUNTING OF BODY TO DOOR ONLY)
NORTON 7700PT ELECTRIC DOOR CLOSER (THRU-BOLT MOUNTING OF BODY TO DOOR ONLY)

OVERHEAD STOP/HOLDERS

RIXSON 9 SERIES OVERHEAD STOP/HOLDER (THRU-BOLT MOUNTING OF BODY TO DOOR ONLY)

MECHANICAL HOLDERS

ROCKWOOD 491S OR 494S MECHANICAL HOLDERS (THRU-BOLT MOUNTING OF BODY TO DOOR ONLY)

ELECTROMECHANICAL HOLDERS

RIXSON 998, 998M, 999M, 980M, 990M, 991M, 996M OR 997M
ELECTROMECHANICAL HOLDERS (THRU-BOLT MOUNTING OF DOOR ARMATURE TO DOOR ONLY)
SARGENT 1560, 1561 OR 1562 ELECTROMECHANICAL HOLDERS
(THRU-BOLT MOUNTING OF CONTACT PLATE TO DOOR ONLY)

MULTI-SOLUTION OPENING: BLAST AND HURRICANE RESISTANT SINGLE AND PAIRED OPENINGS

PEMKO PERIMETER SEALS:

S773 OR 305 PERIMETER SEAL
346 RAIN DRIP (THREAT SIDE MOUNTING ONLY)
345 DOOR BOTTOM (THREAT SIDE MOUNTING ONLY)
S771 OR S772 ASTRAGALS
2715 THRESHOLD

ELECTRONIC POWER TRANSFER:

CEPT, HANCHETT ENTRY SYSTEMS, DBA SECURITRON MAGNALOCK CORP

DOOR POSITION SWITCH:

DPS-M, SECURITRON MAGNALOCK CORP.

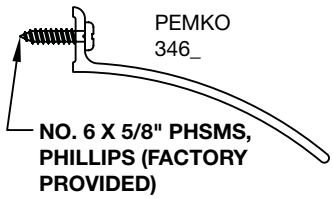
KICK PLATE:

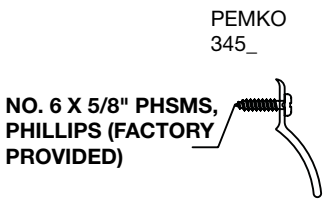
ROCKWOOD K1050 (MUST BE SCREW APPLIED FOR FIRE RATED ASSEMBLIES)

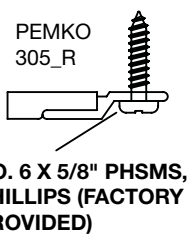
NOTE: KICK PLATES MUST BE INSTALLED ON THE THREAT SIDE OF THE OPENING.

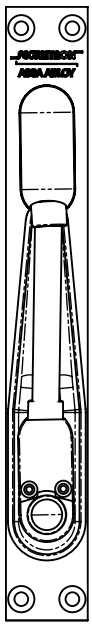
WIRE HARNESS:

QC-C1500P ELECTROLYNX WIRE HARNESS



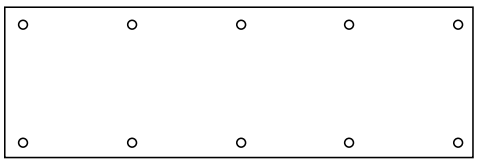




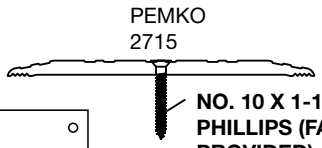


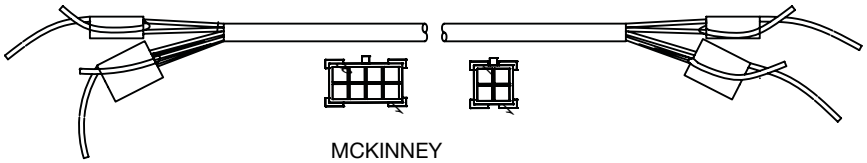
H.E.S.
CEPT
FACE OF ONE SIDE

SECURITRON
MAGNALOCK
DPS-M



K1050 KICK PLATE



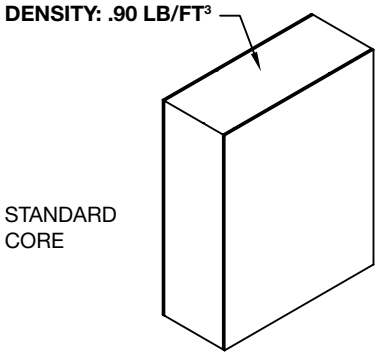


MCKINNEY
QC-C1500P WIRING HARNESS

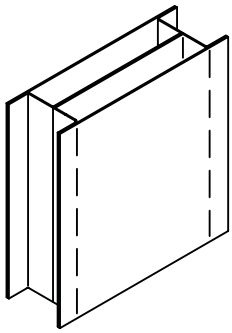
1-3/4" WATER RESISTANT STEEL DOORS

FULL FLUSH STEEL DOORS. BEVELED LOCK AND SQUARE HINGE EDGE, HANDED

POLYSTYRENE CORE (WP)



STEEL STIFFENED CORE WELDED STEEL STIFFENERS (WS) OR PERMANENTLY BONDED STEEL STIFFENERS (WSB)

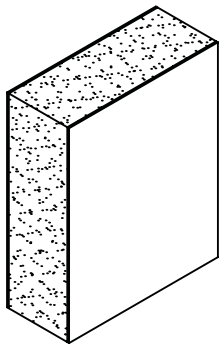


STANDARD 22 GAUGE STIFFENERS.

OPTIONAL STIFFENERS: 20, 18, 16

FIBERGLASS INSULATION PLACED BETWEEN STIFFENERS
DENSITY: 0.5 LB/FT

POLYURETHANE SLAB CORE (WU)



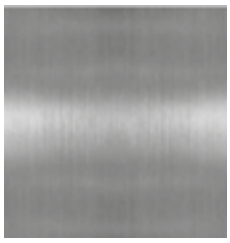
Available in polystyrene, steel stiffened or polyurethane slab core. Ideally suited for applications where food, sanitation, health or corrosive environments require a luxurious durable finish ...

SUGGESTED USE:
- Interior or Exterior ...
- Medical Laboratory,
- Food Processing,
- Sanitary Wash Down Applications,
- Pharmaceutical Plants,
- Research Laboratories,
- Chemical Plants, etc.

AVAILABLE FINISHES
A60 galvanized (standard)
G90 galvanized

*Stainless steel
*Available finishes:
*#4 Brush, #6 satin, #8 mirror,
*#2b paint grade & XLI blend

STAINLESS STEEL OPTION

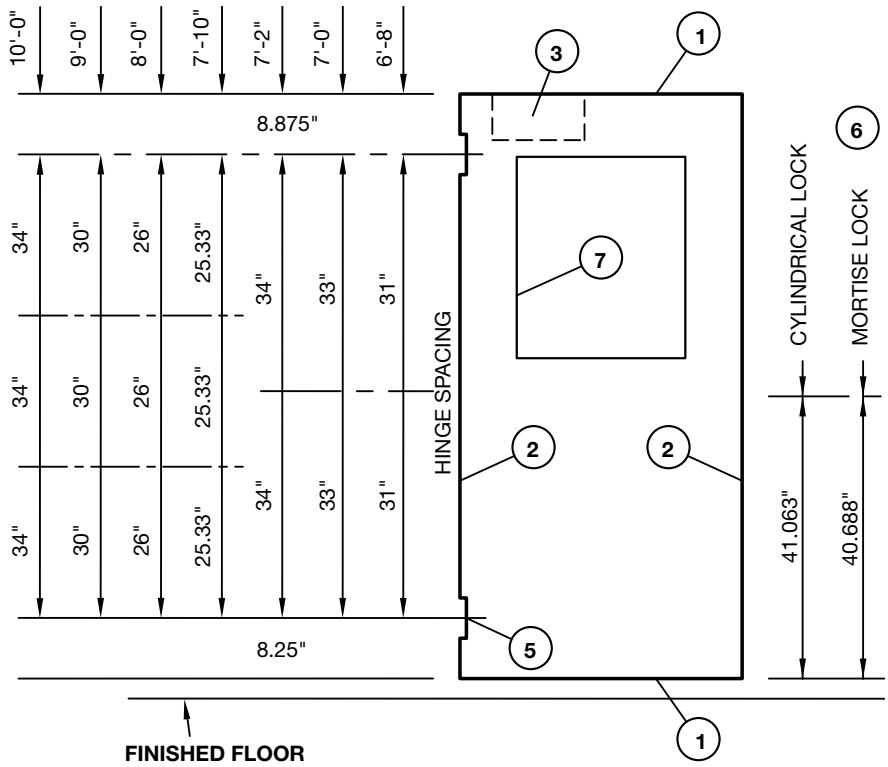


304
316

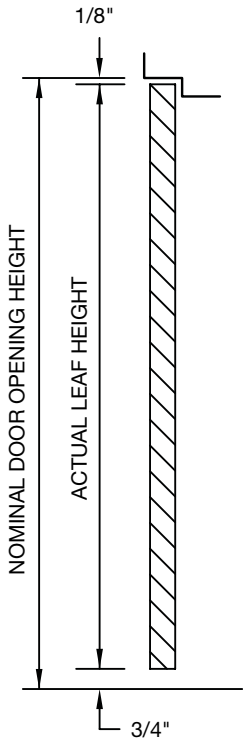
WATER RESISTANT DOORS

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

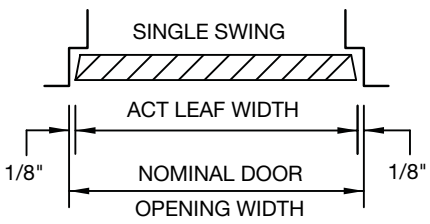
DOOR ELEVATION

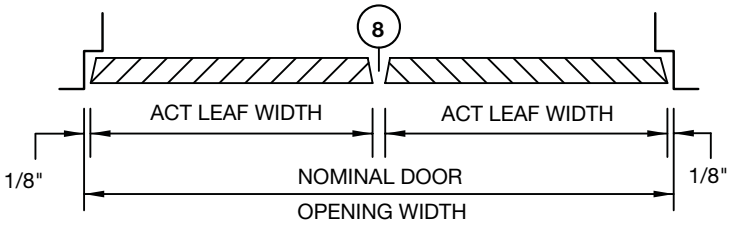


VERTICAL SECTION



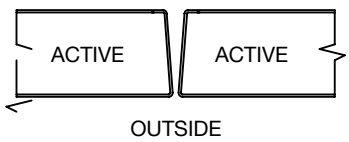
HORIZONTAL SECTIONS





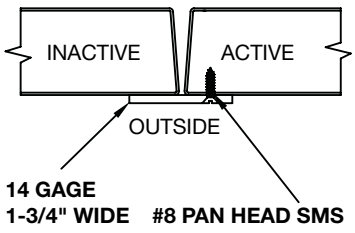
8 WATER RESISTANT HANDING

BOTH HANDS REVERSE ACTIVE



8 WATER RESISTANT ASTRAGAL FULL HEIGHT 4481

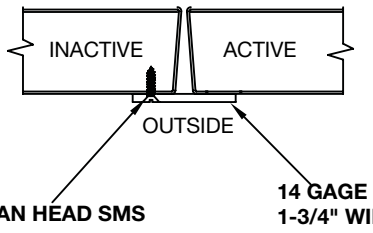
RHR(SHOWN)
LHR OPPOSITE



ASTRAGAL SHIPPED LOOSE
FIELD APPLIED WITH SCREWS

8 WATER RESISTANT ASTRAGAL FULL HEIGHT 4481

RHA(SHOWN)
LHA OPPOSITE

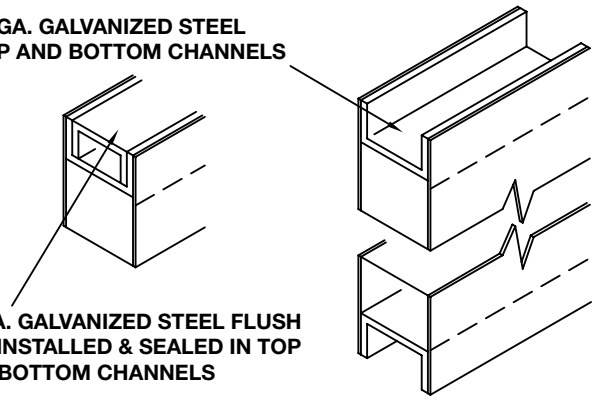


ASTRAGAL SHIPPED LOOSE
FIELD APPLIED WITH SCREWS

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

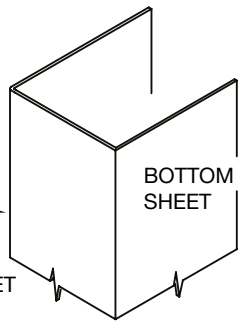
WATER RESISTANT DOORS & FRAMES

1 **16 GA. GALVANIZED STEEL TOP AND BOTTOM CHANNELS**



18 GA. GALVANIZED STEEL FLUSH CAP INSTALLED & SEALED IN TOP AND BOTTOM CHANNELS

2 **VERTICAL EDGES SEAMLESS (WELDED) EDGE**

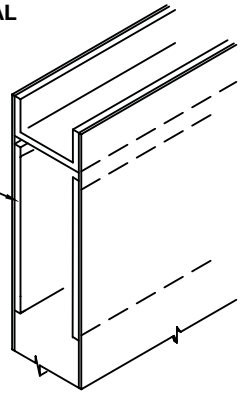


SEAMLESS (WELDED) EDGE AVAILABLE IN 16 & 14 GAUGE WITH OFFSET SEAM

OPTIONAL 12 GAUGE WELDED SEAMLESS CONSTRUCTED WITH CENTER SEAM

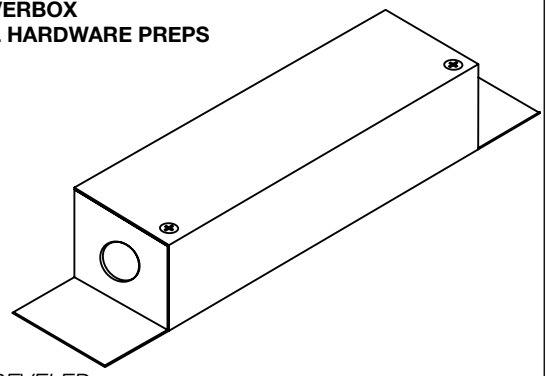
3 **CLOSER REINFORCEMENT OPTIONAL**

14 GAGE STANDARD



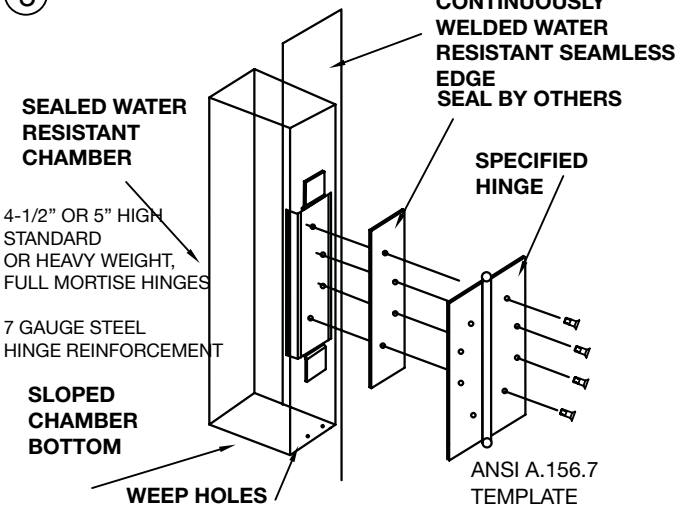
12 GAUGE OPTIONAL PLATE REINFORCEMENTS AVAILABLE

ELECTRICAL COVERBOX FOR ELECTRICAL HARDWARE PREPS IN FRAME

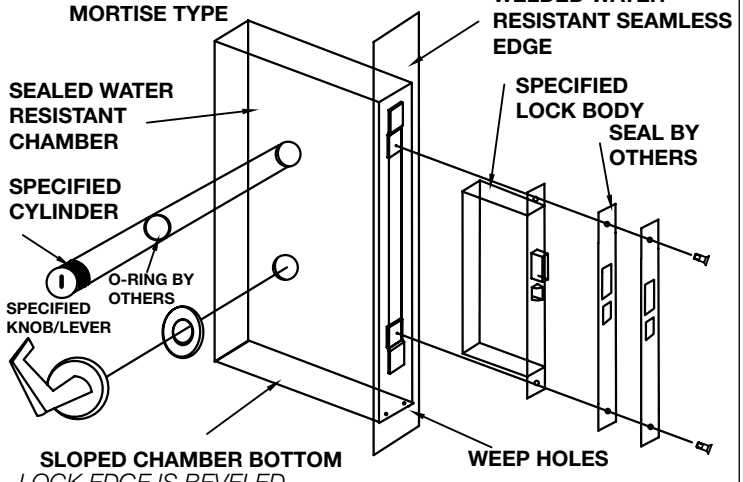


LOCK EDGE IS BEVELED

5 **HINGE PREPARATION**

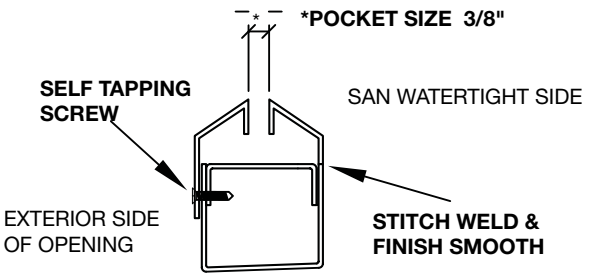


6 **LOCK PREPARATION GOV. 86 MORTISE TYPE**



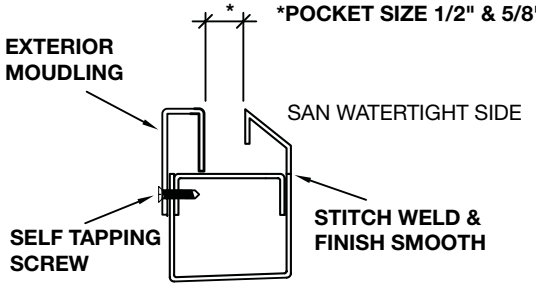
LOCK EDGE IS BEVELED

7 **OPTIONAL: SANITARY GLAZING MAX. SIZE "G" DESIGN**



OPTIONAL FACTORY GLASS INSTALLATION AVAILABLE

7 **OPTIONAL: SANITARY GLAZING THICK GLASS TRIM MAX. SIZE "G" DESIGN**

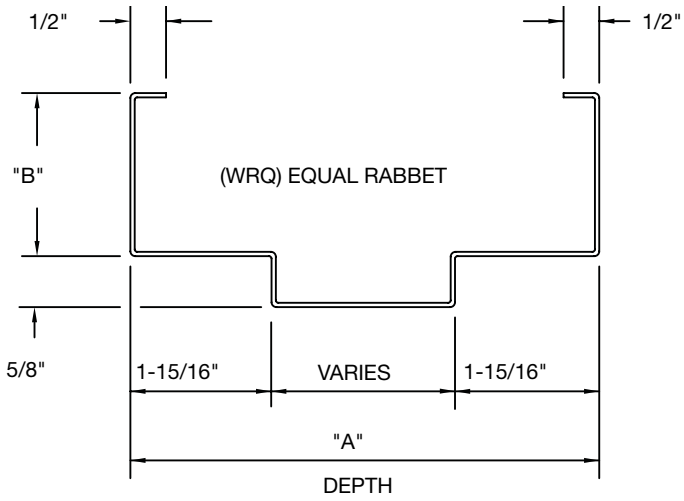


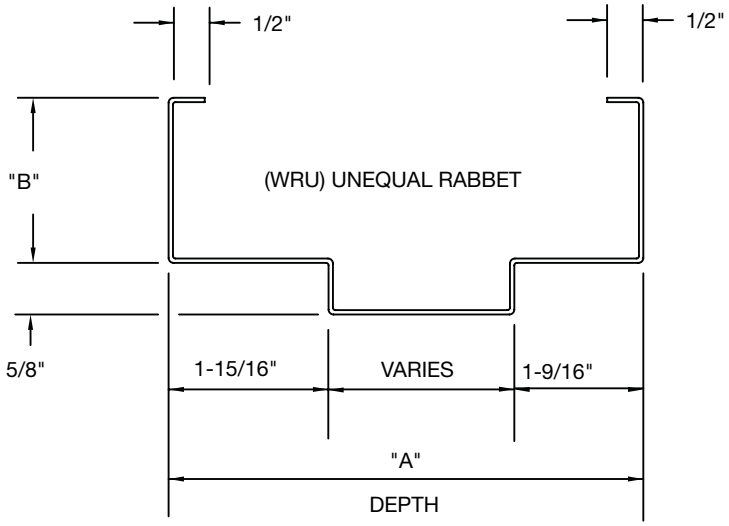
OPTIONAL FACTORY GLASS INSTALLATION AVAILABLE

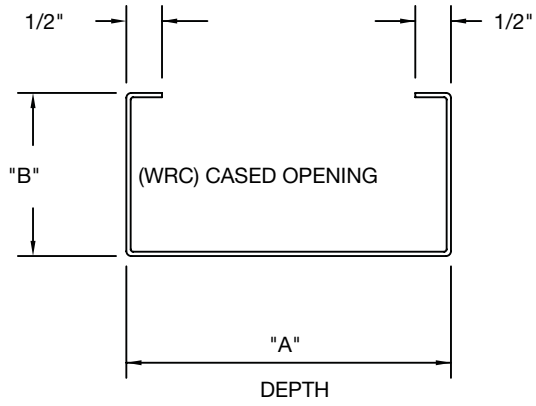
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

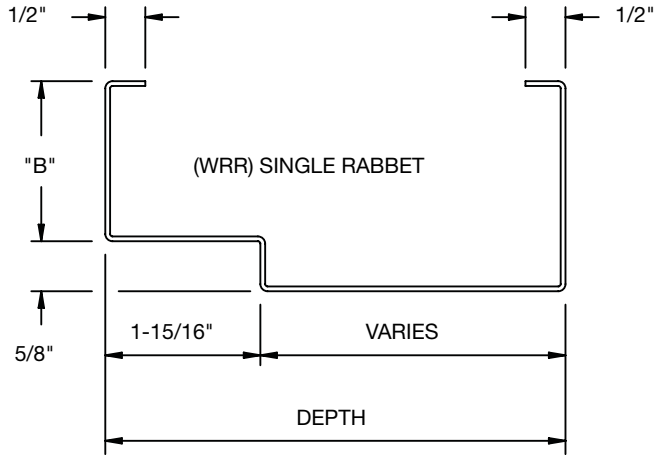
WATER RESISTANT SERIES WRQ, WRU, WRR AND WRC STEEL FRAMES

FOR 1-3/4" THICK DOORS. STANDARD WALL APPLICATION, HANDED









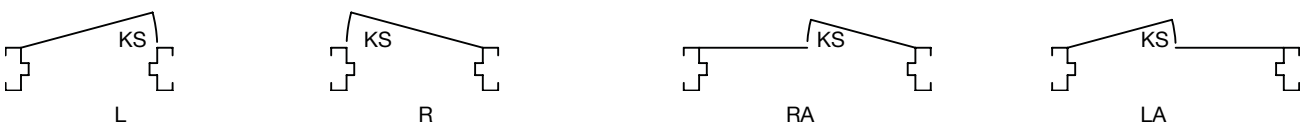
FRAMES WITH BACKBEND RETURNS SHOULD BE CONSIDERED FOR FINISHED WALL PROTECTION.

DEPTH RANGE	DIM A
	3-1/2" THRU 14"

FACES	DIM B
JAMB	2"
HEAD	2" TRHU 4"

MINIMUM DEPTHS WILL BE LIMITED BY FORMING AND HARDWARE

INSIDE

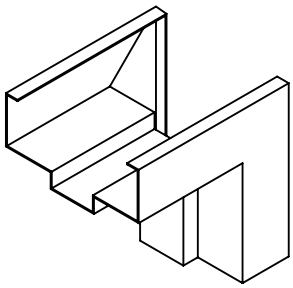


OUTSIDE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

WATER RESISTANT SERIES FRAMES

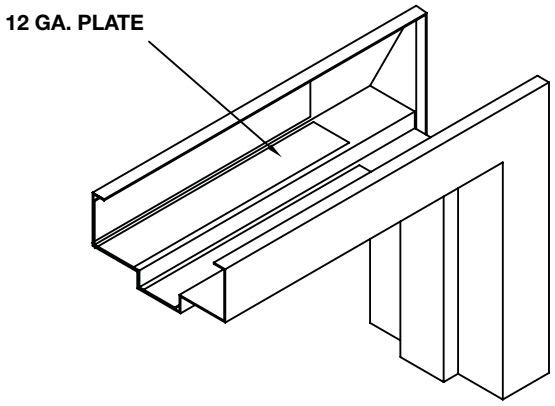
1 WELDED CORNERS - STANDARD



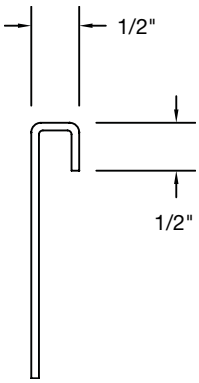
CORNER JOINTS ARE MITERED, WELDED AND GROUND SMOOTH.

AVAILABLE WITH 4" HEAD

2 CLOSER REINFORCEMENTS (OPTIONAL)

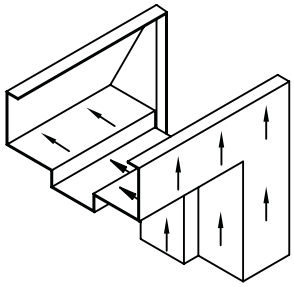


3 OPTIONAL BACKBEND RETURN



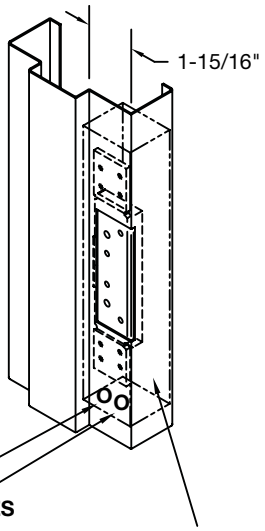
FRAMES WITH BACKBEND RETURNS SHOULD BE CONSIDERED FOR WALL PROTECTION.

OPTIONAL:
STAINLESS STEEL
DIRECTION OF STANDARD GRAIN



STANDARD GRAIN RUNS VERTICALLY ON FRAME FACES AND JAMB FACE, RABBETS & SOFFITS, BUT PERPENDICULAR TO THE HEAD RABBETS & SOFFIT.

4 HINGE PREPARATION

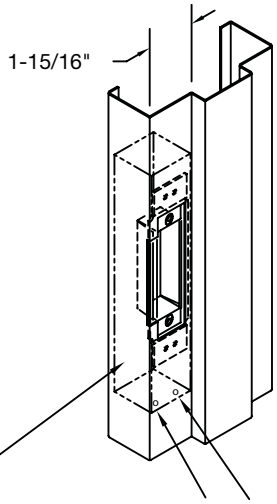


4-1/2" X .134 OR .180
5" X .146 OR .190

ANSI A156.7 TEMPLATE

7 GAUGE STEEL REINFORCING

5 LOCK STRIKE PREPARATION



UNIVERSAL (4-7/8") (SHOWN)
ANSI A115.1 & 2 TEMPLATE

ALSO AVAILABLE WITH PREP FOR 2-3/4" "T" STRIKE

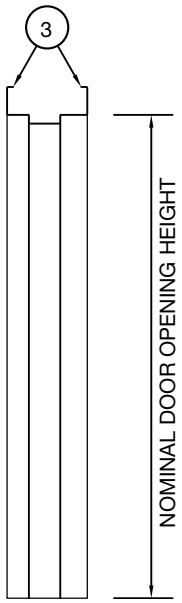
12 GAUGE STEEL REINFORCING

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

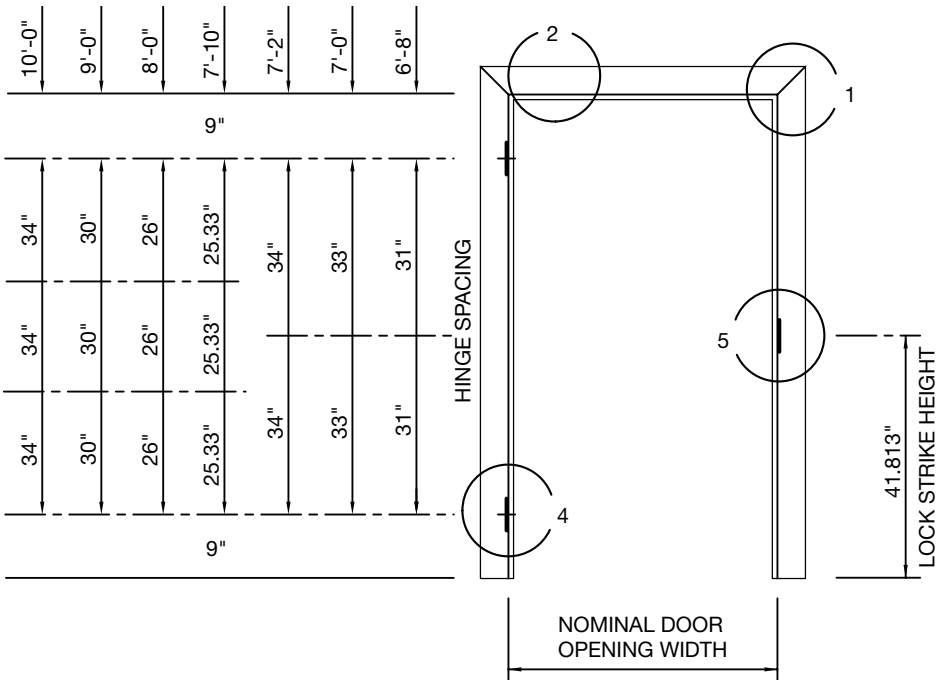
WATER RESISTANT SERIES FRAMES

HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

VERTICAL SECTION

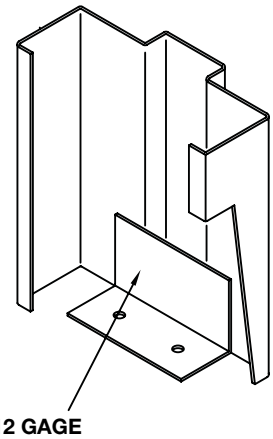


TYPICAL ELEVATION

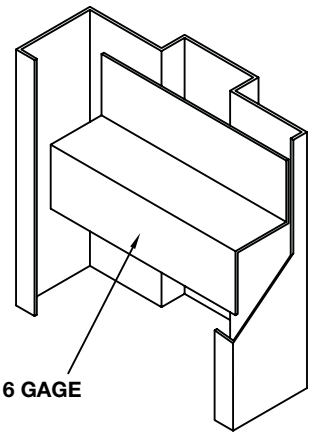


HORIZONTAL SECTION

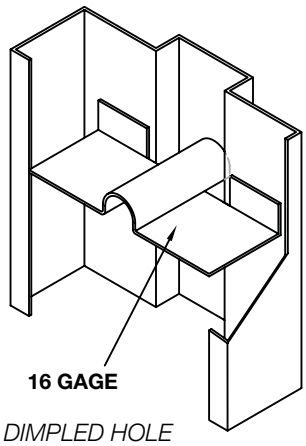
6 STANDARD STEEL FLOOR ANCHOR



6 METAL STUD ANCHOR



6 EXISTING OPENING ANCHOR



3/8" PUNCH & DIMPLED HOLE BOLTS BY OTHERS

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

WATER RESISTANT DOORS & FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2’-0”	4’-0”	
2’-4”	4’-8”	
2’-6”	5’-0”	6’-8”
2’-8”	5’-4”	7’-0”
2’-10”	5’-8”	7’-2”
3’-0”	6’-0”	7’-10”
3’-4”	6’-8”	8’-0”
3’-6”	7’-0”	9’-0”
3’-8”	7’-4”	10’-0”
3’-10”	7’-8”	
4’-0”	8’-0”	

FIRE LABELING
NOT AVAILABLE

FOR SIZES GREATER THAN 4’ WIDE OR 10’ TALL, CONSULT WITH FACTORY

PRODUCT SPECIFICATIONS:

Water resistant steel door frames and 1-3/4” thick steel doors shall be as provided by Ceco Door Products. Doors and frames shall conform to NAAMM HMMA 866 stainless steel guide specifications, if provided as stainless steel.

Water Resistant Series Steel Frames are formed from commercial quality 16, 14 or 12 gauge galvanized. 3 piece door frames in 304 or 316 stainless steel are optional. Integral door stops are 5/8” high. Double Rabbet, Single Rabbet and Cased Open profiles are sized to suit wall applications. Jamb anchors are available for new masonry, wood stud, metal stud or existing opening wall conditions (indicate which). Sealing of frame to wall, screws and/or bolts is by installation contractor. Floor anchors or extra jamb anchors are provided to anchor sill.

Galvanized steel doors are made as full-flush 16 or 14 gauge offset seamed edge or 12 gauge center seamed edge. Face sheets are commercial quality galvanized or stainless steel. Doors have no visible seams. Standard polystyrene core is permanently bonded to face skins. Welded steel stiffened or permanently bonded steel stiffened or polyurethane slab cores are also available. The top and bottom 16 gauge galv. channels are inverted and welded to both face skins. An 18 gauge galvanized top and bottom cap is installed to flush out the top and bottom of the door. Door is welded and sealed for water resistance.

Hardware Provisions: Doors and frames are handed. Door beveled hinge edges are mortised for 4-1/2” or 5” high, standard or heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded in place and are drilled and tapped for fasteners in accordance with ANSI A156.7. The door lock edge has a standard bevel (1:16) and is prepared for Gov. series 86 or 160/161 locks in accordance with ANSI A115 (specify which). Strike jambs are prepped in accordance to ANSI A115.1 & 2 for a universal 4-7/8” strike. 14 gauge door closer reinforcements or 12 gauge closer plate frame reinforcing is available. Concealed hardware is not available. Sealing of screws and/or thru bolts to attach surface mounted hardware or signs is by installation contractor.

Steel Finish: Standard A60 galvanized is standard, with G90 galvanized as an option. Also type 304 stainless steel is available in #4 brush finish, #6 satin finish, #8 mirror finish, or #2B paint grade finish. Type 316 is available for corrosive environments available in #4 brush finish, #6 satin finish, #8 mirror finish, #2B paint grade finish or XL blend.

Paint: 1-3/4” steel doors & frames shall be provided with one coat of oven cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. Finish colorstyle paint not available from factory.

Protection: Doors and frames are crated for shipment

MATERIAL

DOOR FACE SHEETS	
16 GAUGE A60 GALV. STEEL	STD.
16 GAUGE G90 GALV.	OPT.
14 GAUGE A60, G90 GALV.	OPT.
12 GAUGE A60, G90 GALV.	OPT.
16, 14 OR 12 GAUGE STAINLESS STEEL	OPT.

**OPTIONAL:*
STAINLESS STEEL ALLOY

TYPE 304 STANDARD

TYPE 316
HIGH CORROSIVE RESISTANCE

**STAINLESS STEEL FINISH*
FOR 304 AND 316

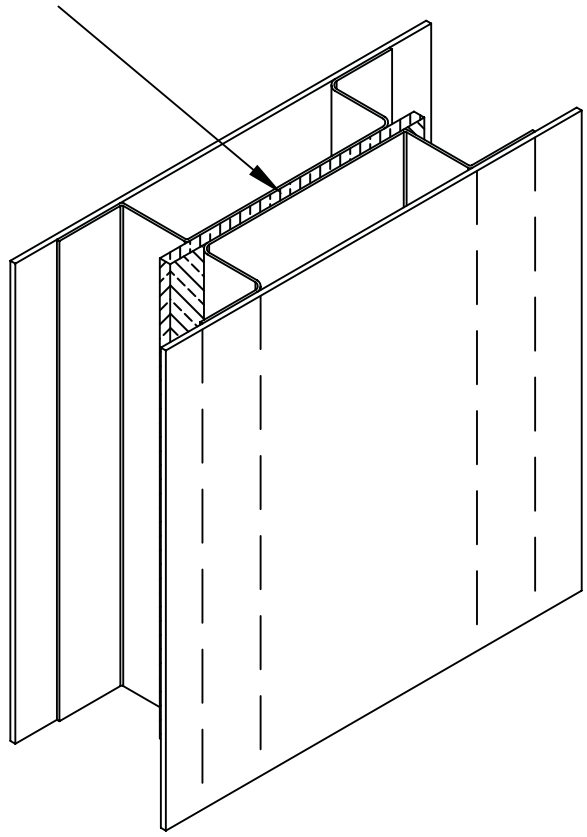
#4 BRUSH FINISH
#6 SATIN FINISH
#8 MIRROR FINISH
#2B PAINT GRADE FINISH XL BLEND

(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

1-3/4” LEAD LINED

VERTICALLY STEEL STIFFENED, SEAMED EDGES, CUSTOM TYPE STEEL DOORS, BEVELED LOCK , HANDED

LEAD PLACED BETWEEN EACH HALF OF STIFFENER



FIBERGLASS INSULATION BETWEEN STIFFENERS

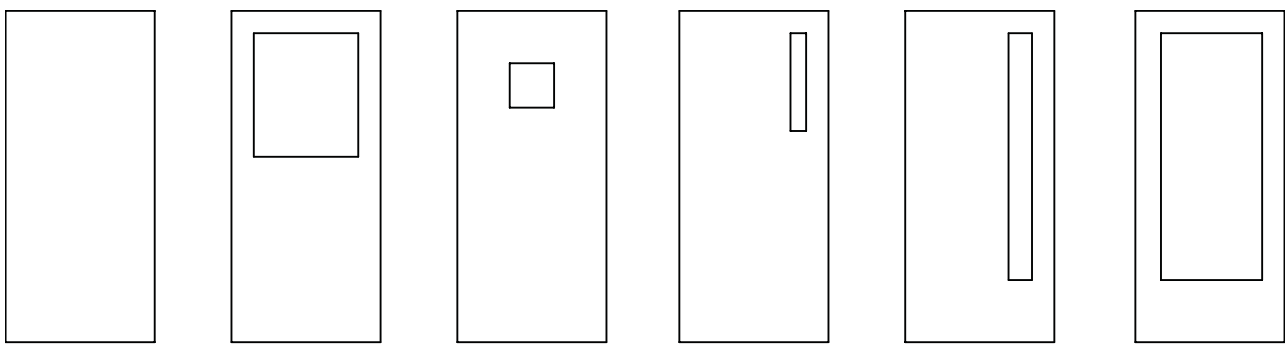
Designed to restrict radiation transmission.

Complies with NAAMM Specifications 22 gauge steel stiffeners placed 6” apart and welded every 5” along their length. Seamless edges. Fiberglass, sound deadening insulation between stiffeners.

SUGGESTED USE:
- Interior or Exterior...
- Medical X-Ray Labs
- Nuclear Medicine Storage
- Industrial Applications
- Cancer Treatment Facilities
- Produce Irradiation Areas
- Research Facilities
- Inspection Departments

MODEL	LEAD THICKNESS
LL32	1/32”
LL16	1/16”
LL08	1/8”
LL04	1/4”
LLXX	CUSTOM

DOOR DESIGNS

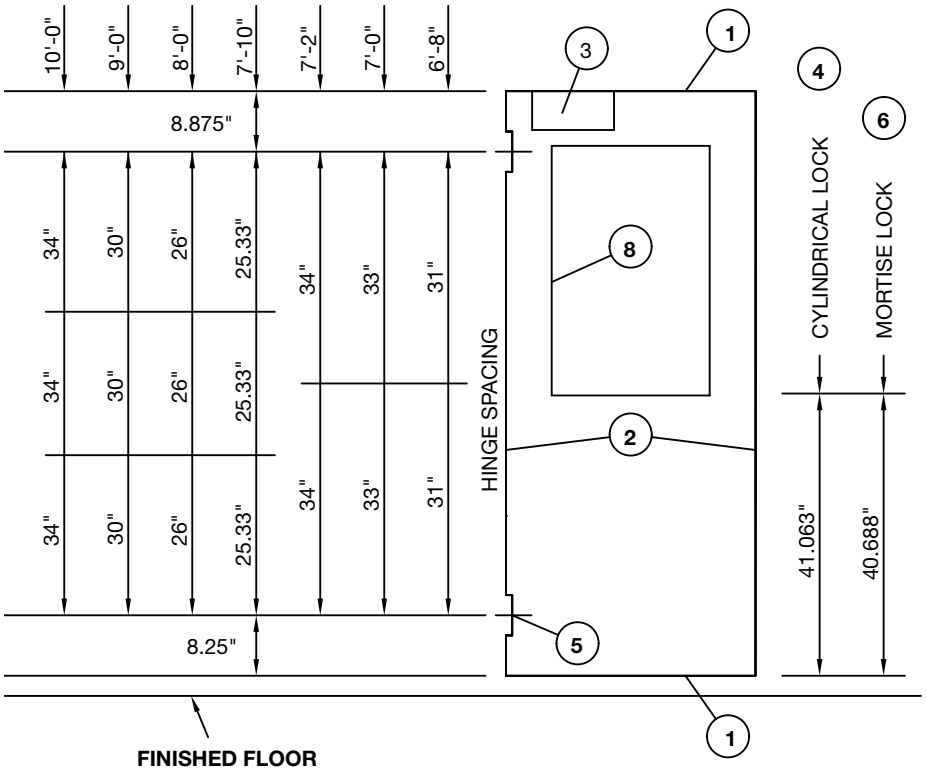


F G V N N FG

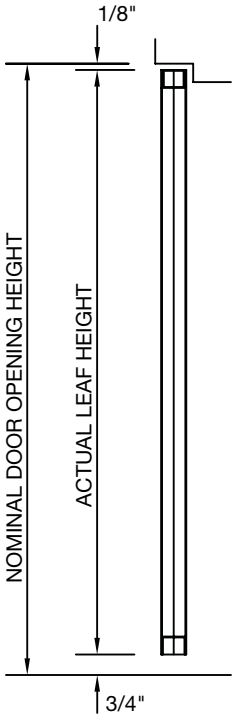
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

LEAD LINED DOORS

DOOR ELEVATION

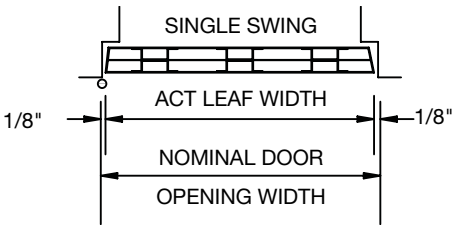


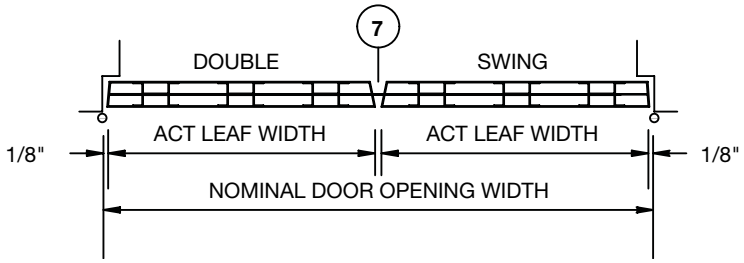
VERTICAL SECTION



HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

HORIZONTAL SECTIONS

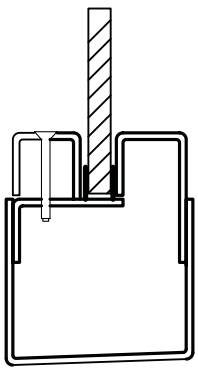




OPTIONAL: GLASS KIT

GLASS KIT DESIGN MAY VARY GLASS KIT FACTORY INSTALLED. WITH GLASS THICKNESS GLASS & GLAZING NOT FACTORY INSTALLED.

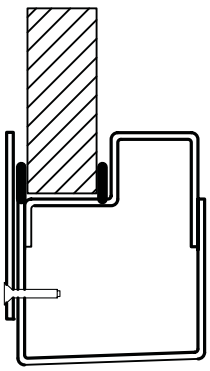
POCKET SIZE 3/8"-3/4"



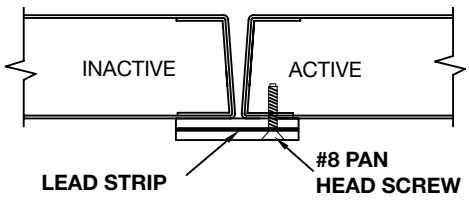
OPTIONAL: GLASS KIT

GLASS KIT DESIGN MAY VARY GLASS KIT FACTORY INSTALLED. WITH GLASS THICKNESS GLASS & GLAZING NOT FACTORY INSTALLED.

POCKET SIZE 7/8"-1-3/8"



7 OVERLAPPING ASTRAGAL (OPTIONAL)
FOR 1-3/4" THICK DOORS



(2) 1/8" STEEL PLATES

ASTRAGAL SHIPPED LOOSE FROM FACTORY.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LEAD LINED DOORS

1 END CHANNEL PREPARATION

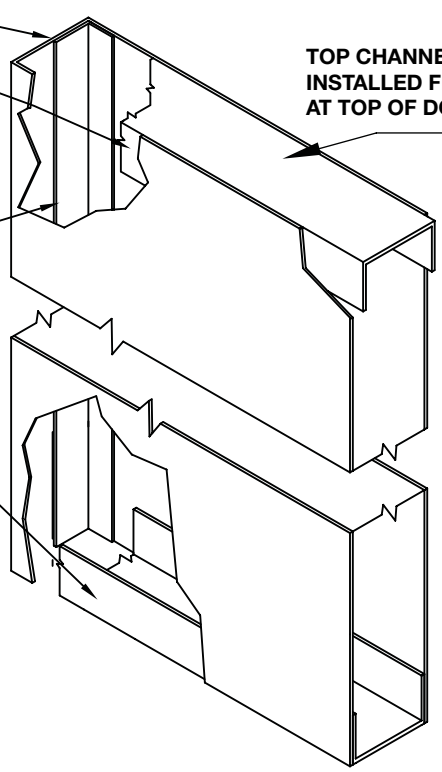
SEAMLESS EDGE

TOP CHANNEL WELDED TO BOTH THE TOP AND BOTTOM SKINS

TOP CHANNEL INSTALLED FLUSH AT TOP OF DOOR

16GA. FULL HEIGHT ANGLE

BOTTOM CHANNEL WELDED TO BOTH THE TOP AND BOTTOM SKINS



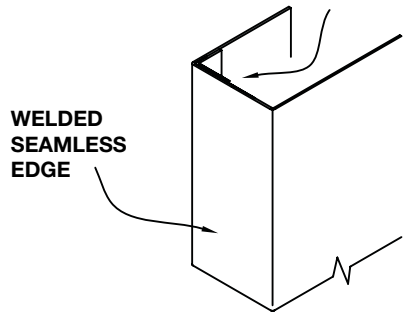
16 GA. FULL HEIGHT ANGLE

BOTTOM CHANNEL INSTALLED FLUSH AT BOTTOM OF DOOR

2 VERTICAL EDGES

16 GAGE FULL HEIGHT ANGLE

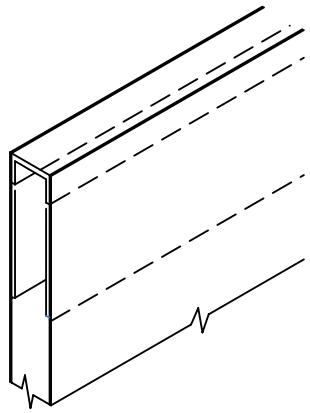
WELDED SEAMLESS EDGE



14 GAUGE STEEL WELDED SEAMLESS (ONLY)

3 CLOSER REINFORCEMENT (OPTIONAL)

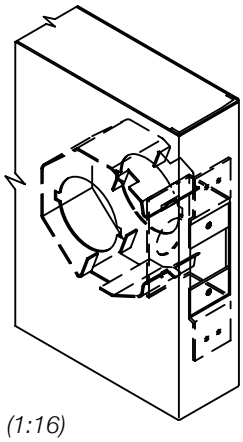
14 GAUGE STEEL PLATES 20" LONG



4 LOCK PREPARATION GOV.160/161 CYLINDRICAL TYPE

LEAD SHIELDED HARDWARE BY OTHERS

(LC1)
(ANSI A115.2)
2-3/4" BACKSET



LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

5 HINGE PREPARATION

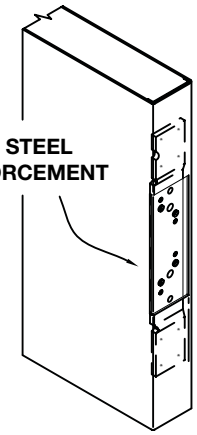
4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

ANSI 156.7 TEMPLATE

HINGE EDGE IS HANDED AND SQUARE

14 GA AND 12 GA DOORS REQUIRE HEAVY WEIGHT, FULL MORTISE HINGES

7 GAGE STEEL REINFORCEMENT



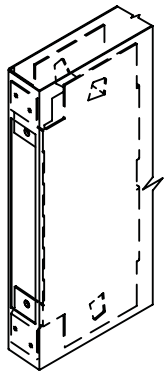
6 LOCK PREPARATION GOV.86-4 MORTISE TYPE

LEAD SHIELDED HARDWARE BY OTHERS

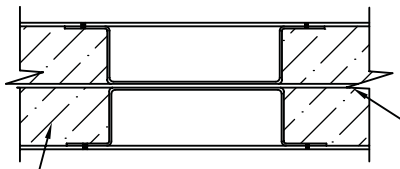
(LM0)
SIMILAR TO DETAIL LESS FACE CUTOUT

(LP0) SIMILAR TO DETAIL LESS ALL CUTOUTS AND REINFORCEMENT

LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)



CORE 22 GAUGE MINIMUM STIFFENERS SPACED NOT MORE THAN 6" APART



HORIZONTAL SECTION

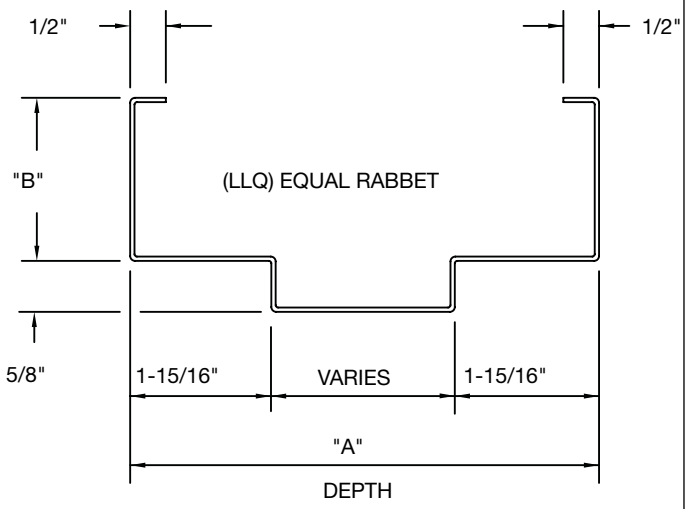
LEAD SHEET BETWEEN STIFFNER SURFACE

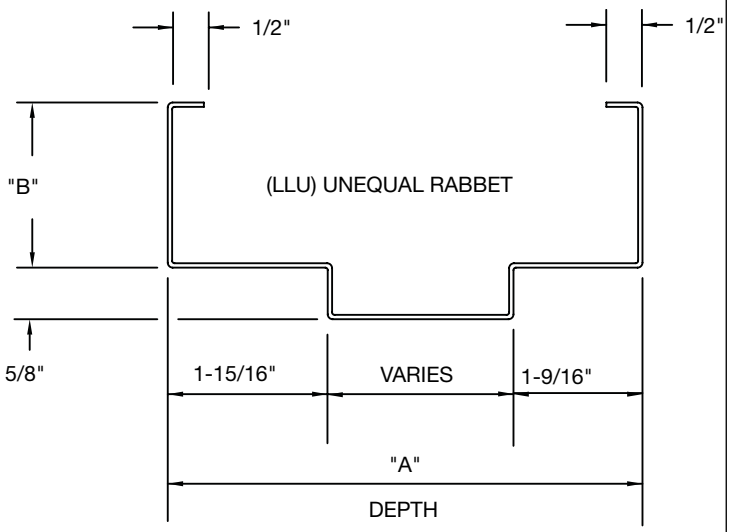
FIBERGLASS INSULATION BETWEEN STIFFENERS

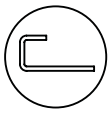
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

SERIES LLQ, LLU, LLR LEAD LINED STEEL FRAMES

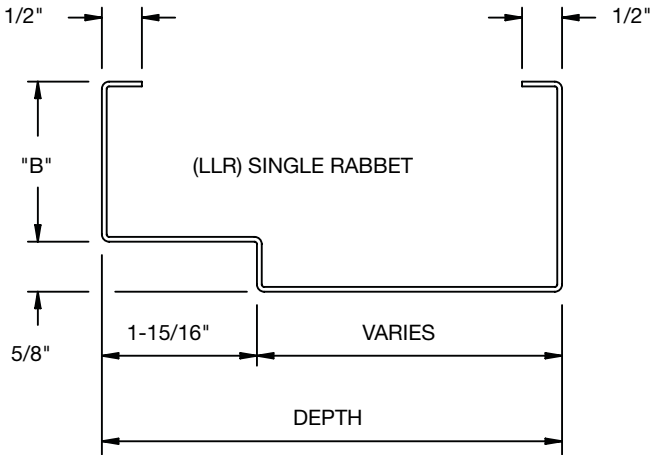
FOR 1-3/4" THICK DOORS STANDARD WALL APPLICATION, HANDED







FRAMES WITH BACKBEND RETURNS SHOULD BE CONSIDERED FOR FINISHED WALL PROTECTION

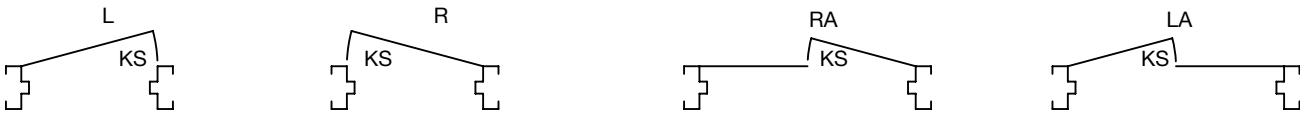


DEPTHS	DIM A
	3-1/2" THRU 14"

MINIMUM DEPTHS WILL BE LIMITED BY FORMING, LEAD THICKNESS AND HARDWARE.

FACES	DIM B
JAMB	2"
HEAD	2" THRU 4"

INSIDE



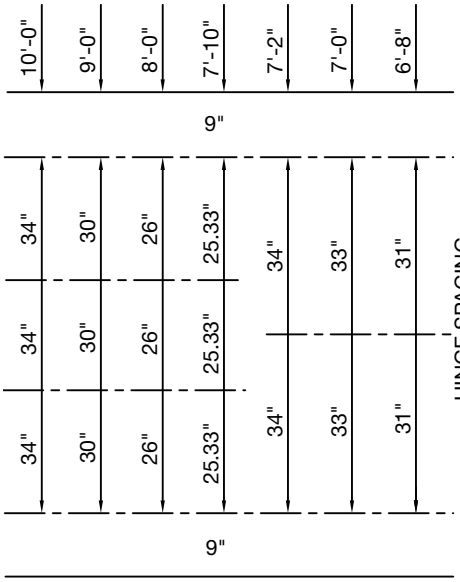
OUTSIDE

"KS" = KEY SIDE

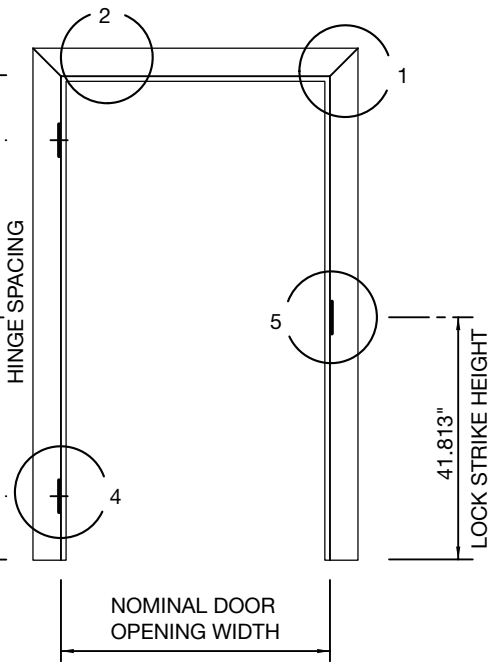
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LEAD LINED STEEL FRAMES

VERTICAL SECTION



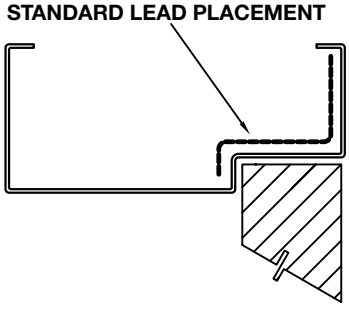
TYPICAL ELEVATION



HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

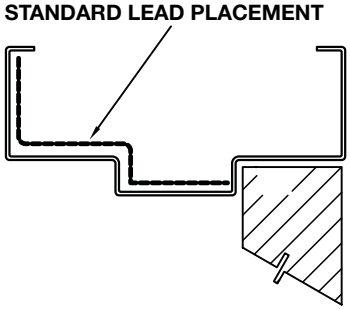
LH/RH
STANDARD SWING

STANDARD LEAD PLACEMENT



LHR/RHR
REVERSE SWING

STANDARD LEAD PLACEMENT



AS A STANDARD, DOOR HAND WILL DETERMINE IF LEAD OF FRAME. IS INSTALLED ON DOOR SIDE (DS) OR OPPOSITE DOOR SIDE OF FRAME. IF LEFT OR RIGHT HAND, LEAD WILL BE PLACED ON DOOR SIDE OF FRAME. IF REVERSE HANDED LEAD WILL BE PLACED ON OPPOSITE DOOR SIDE (ODS)

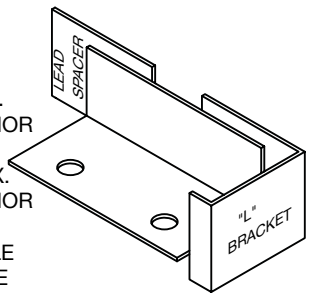
HORIZONTAL SECTIONS

6 STANDARD LEAD LINED STEEL FLOOR ANCHOR

14 GAUGE MIN.
WELDED ANCHOR

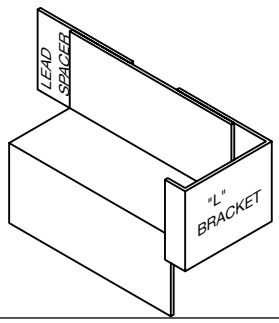
12 GAUGE MAX.
WELDED ANCHOR

5/16" MIN. HOLE
3/8" MAX. HOLE



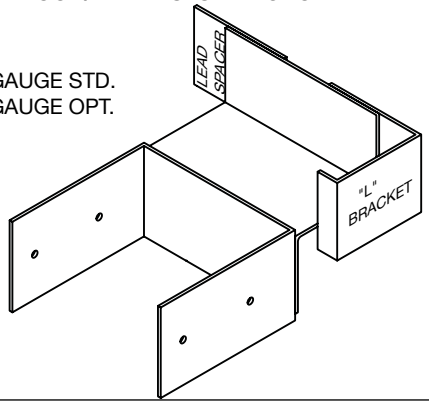
6 LEAD LINED STEEL METAL STUD ANCHOR

16 GAUGE
STD.
14 GAUGE
OPT.



6 LEAD LINED STEEL WOOD/METAL STUD ANCHOR

16 GAUGE STD.
14 GAUGE OPT.



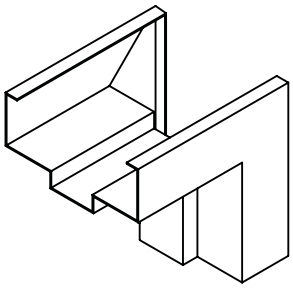
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LEAD LINED DOORS

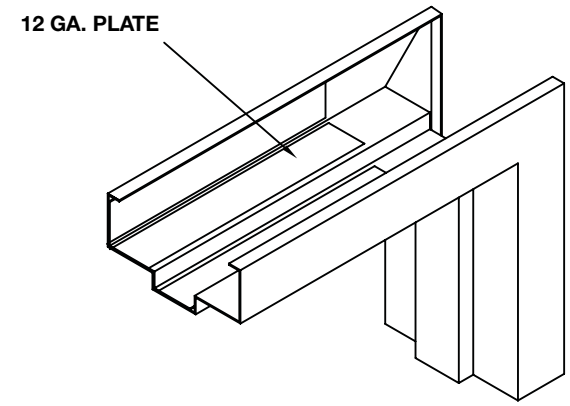
1 WELDED CORNERS - STANDARD

CORNER JOINTS ARE MITERED, WELDED AND GROUND SMOOTH.

AVAILABLE WITH 4" HEAD



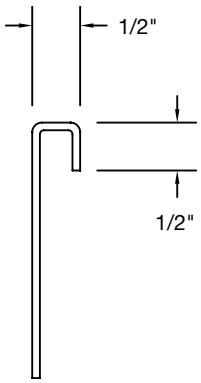
2 CLOSER REINFORCEMENTS



3 OPTIONAL BACKBEND

FRAMES WITH BACKBEND RETURNS, BEFORE DRYWALL APPLICATION

16 OR 14 GAUGE ONLY

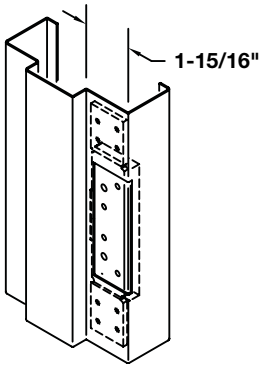


4 HINGE PREPARATION

4-1/2" X .134 OR .180
5" X .146 OR .190

ANSI A156.7 TEMPLATE

STEEL 7 GAUGE REINFORCING

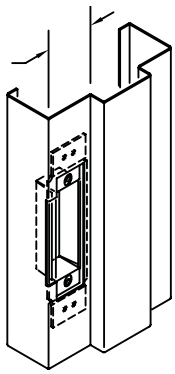


5 LOCK STRIKE PREPARATION

UNIVERSAL (4-7/8") (SHOWN)
ANSI A115.1 & 2 TEMPLATE

ALSO AVAILABLE WITH PREP FOR 2-3/4" "T" STRIKE

STEEL 12 GAUGE REINFORCING



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

LEAD LINED DOORS & FRAMES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

FIRE DOORS

LABELING AGENCIES :
UL SOLUTIONS

TEST: UL10C, UL10B, UL1784, & NFPA 252

RATING: 20 MIN, 3/4 HR, 1 HR OR 1-1/2 HR

MAX. SIZE: 4'0" X 9'0" SINGLE
8'0" X 9'0" PAIR

16, 14 & 12 GA. FRAMES
18 & 16 GA. DOORS

DESIGNS: F, FG, G, N, & V

LEAD LINED ASTRAGAL
REQUIRED ON PAIRS

TEMPERATURE RISE N/A

LOUVERS NOT ALLOWED

LEAD THICKNESS 1/16"
THRU 3/16" ALLOWED.

NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be by Ceco Door Products. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8 and NAAMM specifications. See chart below for performance classifications.

LEAD LINED doors are welded seamless design. Face sheets are commercial quality hot-dipped galvannealed or galvanized steel (conforming to ASTM A924 and A653) - see chart below.

Door face sheets are joined at their vertical edge with a center seam the full height of door (welded seamless design). 22 gauge steel vertical
stiffeners (other gauges optional) are placed no more than 6" apart and
welded to both face sheets no more than 5" on center along their length. Fiberglass batting insulates the area between stiffeners. The top and bottom door edges are closed flush with 16 gauge steel channels welded to both face sheets. Lead is placed between each half of the stiffeners.

Door and Frame Hardware Provisions: Consult hinge manufacturer for weight limitations and hinge recommendations. Mortised butt type hinges will have 7 gauge steel reinforcements welded inside the frame throat and door edge. Reinforcements are drilled and tapped for fasteners in accordance with ANSI A156. 7. Mortised hinge preparations are handed. Door hinge edges are square. The door lock edge has a standard bevel (1:16). Lock edge is prepared for Gov. series 86, 160/161, or 90 locks in accordance with ANSI A115 (specify which). Strike jambs are prepared for a 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A115.1 & 2 (specify which). Optional door closer reinforcement plates are 14 gauge steel and 12 gauge for frames. Lead shielded hardware provided by others. Frame corners are welded. Integral frame stop heights are 5/8". Silencers shall be adhesive back, supplied by others.

Paint: 1-3/4" steel doors & frames shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. Finish colorstyle paint not available from factory.

MATERIAL

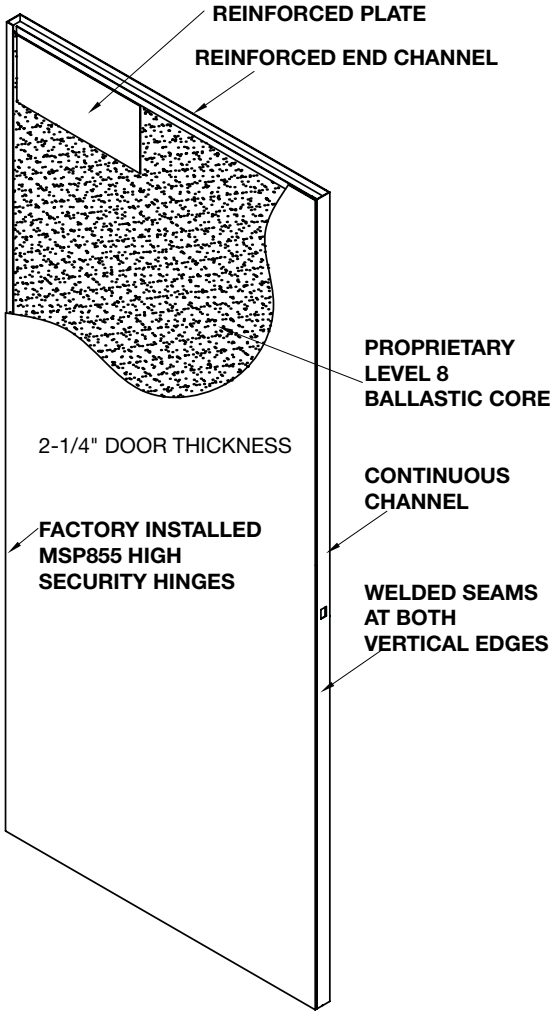
DOOR FACE SHEETS	GALV		RECOMMENDED DOOR FRAME MATERIAL
	A60	G90	
18 GAUGE STEEL	STD	OPT	16 GAUGE STEEL
16 GAUGE STEEL	STD	OPT	16 OR 14 GAUGE STEEL
14 GAUGE STEEL	STD	OPT	14 OR 12 GAUGE STEEL
12 GAUGE STEEL	STD	-	12 GAUGE STEEL

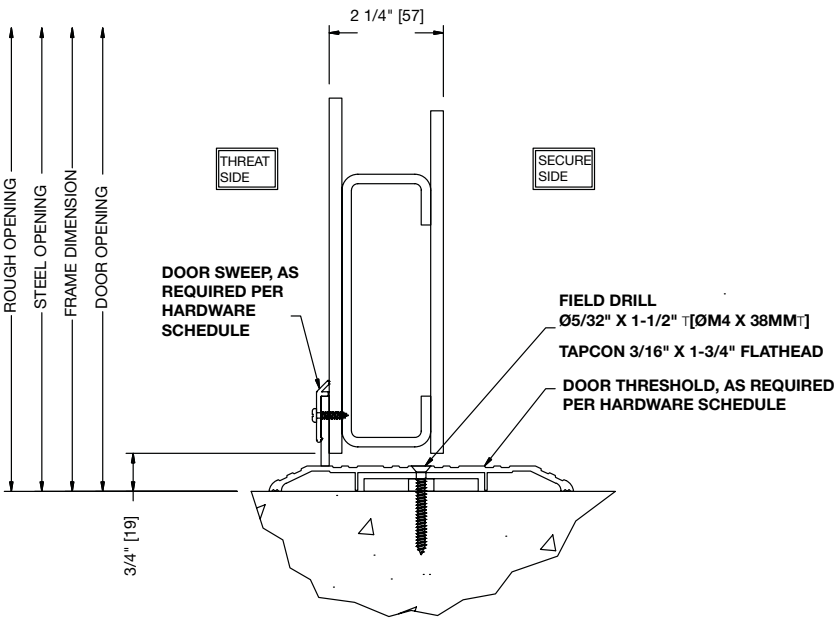
PERFORMANCE

PHYSICAL ENDURANCE / LEVEL:
MEET ANSI A250.4 PERFORMANCE TEST
LEVEL A (1,000,000 CYCLES) (4'0"X10'00" MAX. SIZE)

2-1/4” FORCED ENTRY / LEVEL 8 BULLET RESISTANT DOOR (FE8) AND FRAME SYSTEM

3’0”X7’0” FLUSH SINGLE



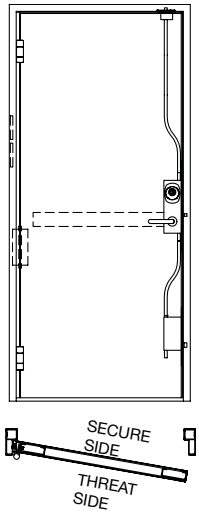


Openings For The Protection Of: Classrooms K-12, Universities, Healthcare, Mission Critical Buildings, Government, Military, Executive Offices, Guard Houses, Control Rooms and anywhere the highest level of protection and durability are important considerations.

Hardware preparation MSP855 high security hinges and forced entry resistant exit device with multi-point deadbolt provided and installed.

SUGGESTED USE:
- Interior or Exterior ...

DOOR DESIGNS



F

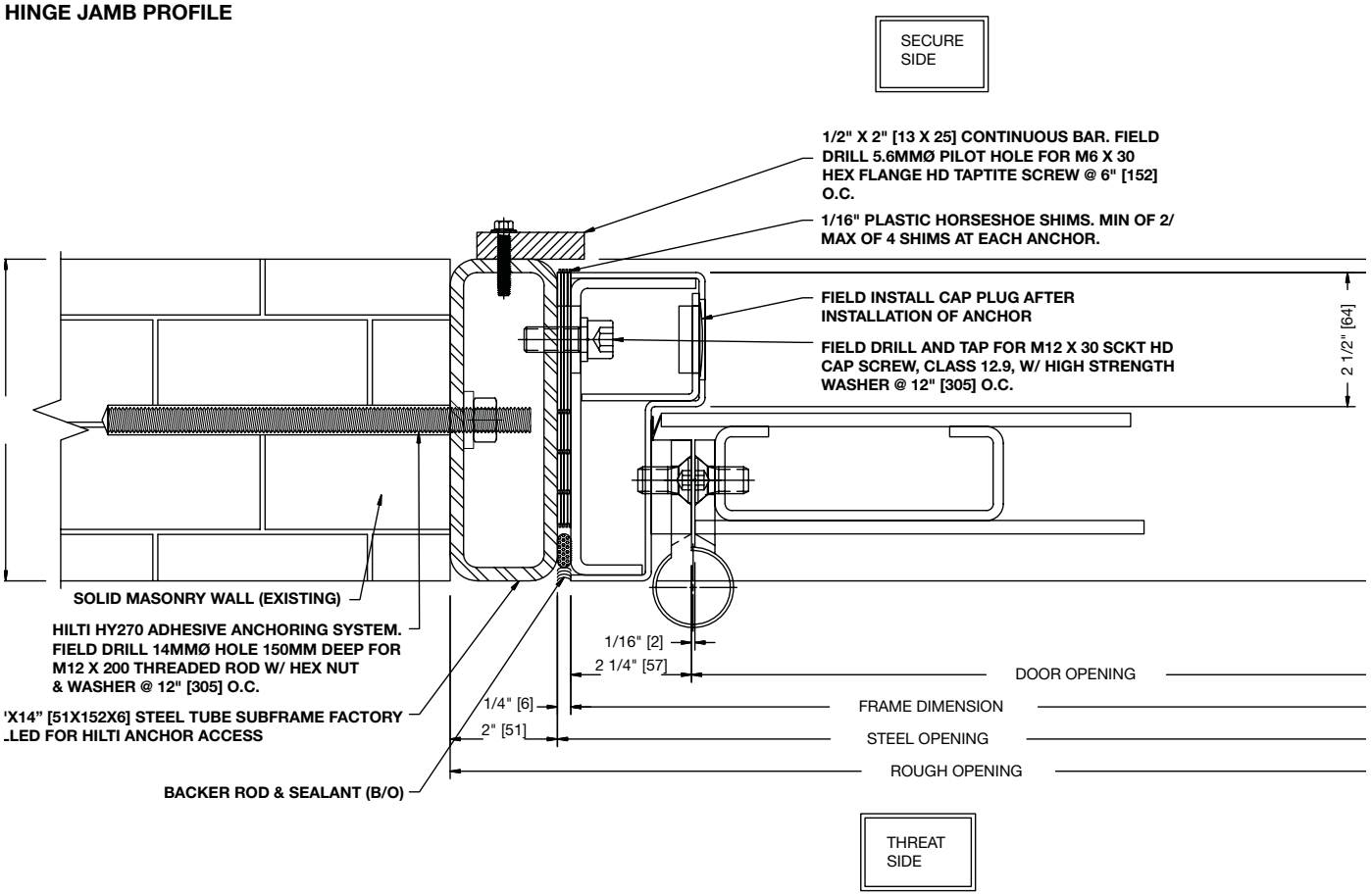
TEST METHODS AND QUALIFICATIONS

- FORCED ENTRY AND BALLISTIC RESISTANCE OF STRUCTURAL SYSTEMS-DOORS WERE TESTED PER DOS SD-STD-01.01 REV. G SHOT WITH 5.56 AND 7.62 ROUNDS AND THEN ATTACKED BY A SIX MAN CONCENTRATED ASSUALT TEAM FOR 15 MINUTES ON THE LOCK EDGE, 15 MINUTES ON THE HINGE EDGE, 15 MINUTES ON THE CENTER OF THE DOOR.
- TESTED IN ACCORDANCE WITH STANDARD FOR SAFETY UL752: STANDARD FOR BULLET RESISTANT EQUIPMENT
- ANSI/BHMA A156.1: BUTTS AND HINGES
- ASTM F3038-14: STANDARD TEST METHOD FOR TIMED EVALUATION OF FORCED ENTRY RESISTANT SYSTEMS
- COMPLIES WITH DEPARTMENT OF STATE SD-STD-01.01 REV G (AMENDED)

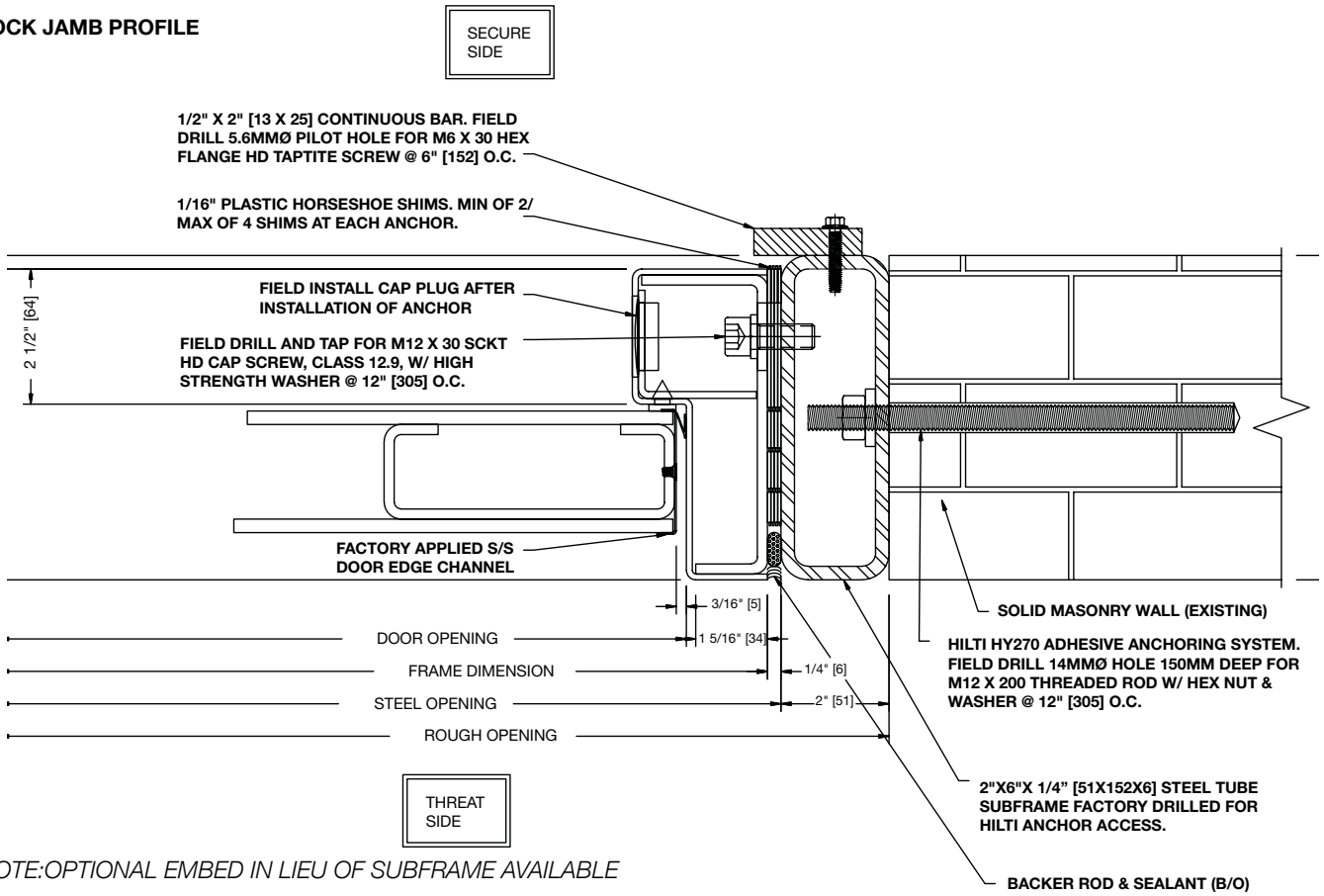
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

FORCED ENTRY / LEVEL 8 BULLET RESISTANT SYSTEM

HINGE JAMB PROFILE



LOCK JAMB PROFILE



NOTE:OPTIONAL EMBED IN LIEU OF SUBFRAME AVAILABLE

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

FORCED ENTRY / LEVEL 8 BULLET RESISTANT SYSTEM

SPECIFICATIONS:

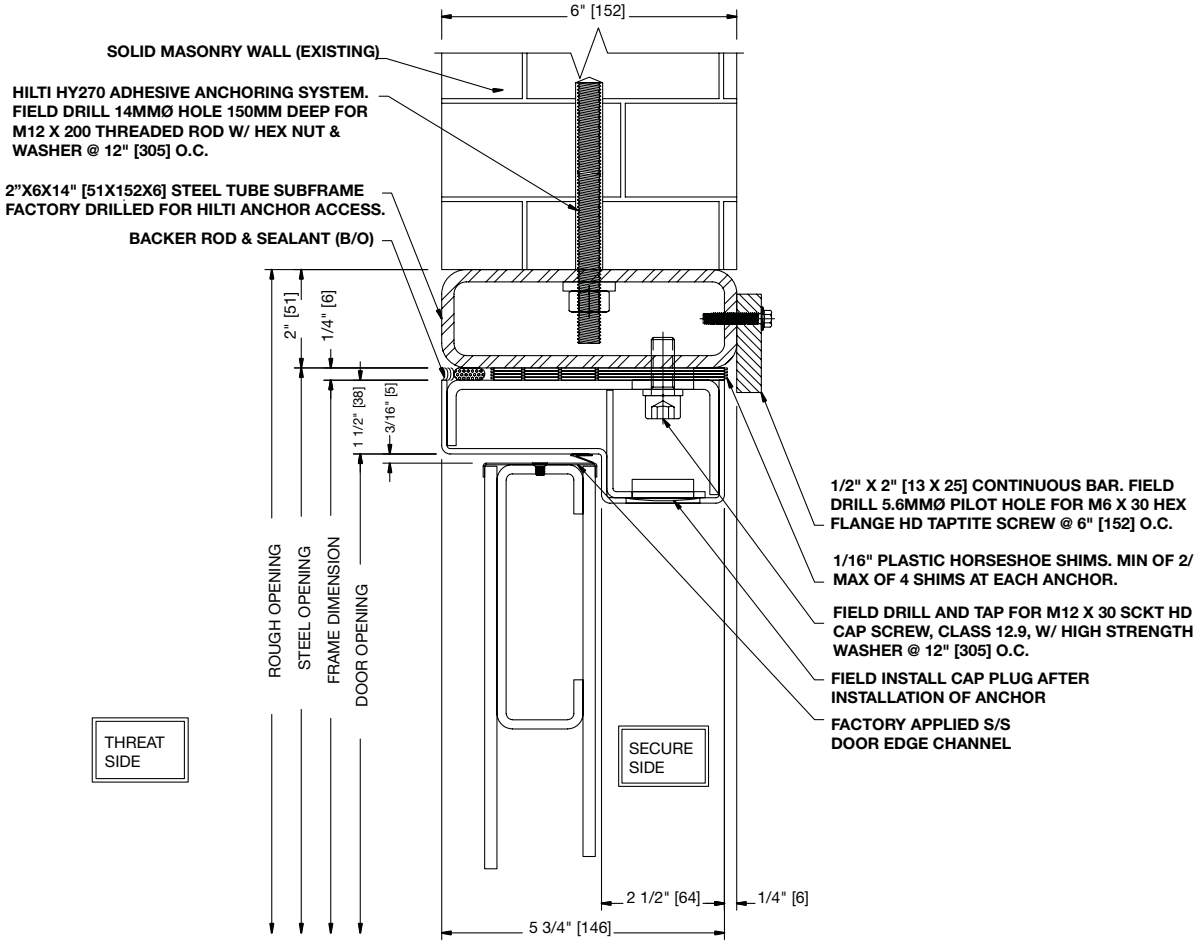
1. All exposed surfaces of door and frame to receive one coat of rust inhibitive prime paint. Assembly is shipped with hollow metal door and frame pre-hung with lock & hinges Pre-installed.
2. Surelock McGill Slimline Multipoint Lock

A. Concealed or surface mounted
B. Functions include manual, electric latch retraction, delayed egress
C. Optional lever or panic bar available

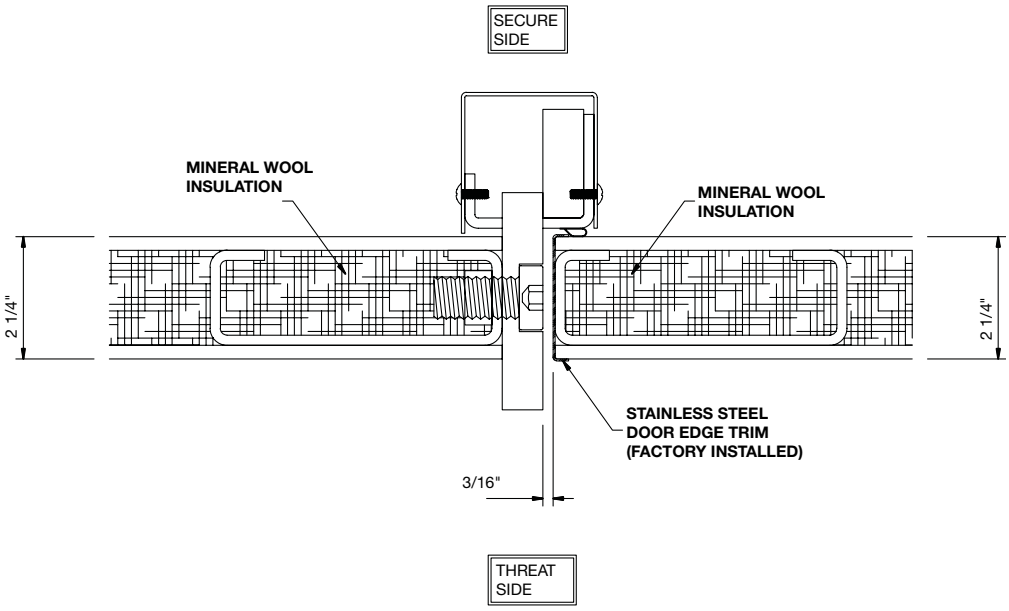
4. MSP855 High Security Hinge
5. Nominal Door Thickness is 2-1/4”
6. Door Weight is approximately 30 pounds per square foot
7. Custom frame anchor types are required based on wall conditions
8. Can be installed in steel stud, masonry or precast walls
9. Vision options are available with factory installed glass
10. Flush door design only for 60 minute FEBR rating with for 5 and 15 minute FEBR ratings only optional viewer sidelites and transoms are available 90 minute fire rated construction label only; all components have Been individually tested by ul factory supplied shop drawing approval is required meets ul752 level 8 bullet resistance, forced entry sd-std-01.01 rev.G, (amended) and astm F3038-14

FORCED ENTRY / LEVEL 8 BULLET RESISTANT SYSTEM

FRAME HEAD PROFILE



MULLION FOR PAIR OPENINGS

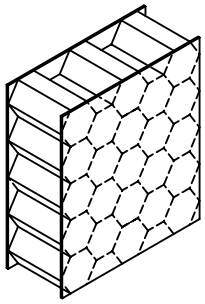


(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

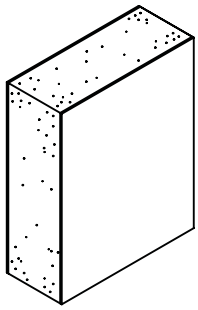
1-3/4" ATTACK RESISTANT REGENT, LEGION OR IMPERIAL NON-FIRE RATED DOORS

GLAZED STEEL DOORS ONLY BEVELED LOCK EDGE, HANDED - INSWING OR OUTSWING

PASSED 3RD PARTY TESTING AT H.P.WHITE LABORATORY INC. TESTED TO 5AA10 - CERTIFICATION STANDARDS FOR REINFORCING & TESTING OF STANDARD WOOD & HOLLOW METAL DOORS, FRAMES & HARDWARE FOR 4 MINUTE ATTACK.



REGENT WITH FIBER HONEYCOMB CORE, BONDED TO THE INSIDE OF BOTH FACE SHEETS WITH A WATER RESISTANT, CONTACT ADHESIVE.

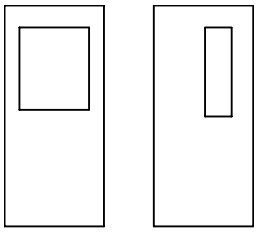


LEGION WITH POLYSTYRENE SLAB, BONDED TO THE INSIDE OF BOTH FACE SHEETS WITH A WATERPROOF, CONTACT ADHESIVE OR IMPERIAL WITH FOAMED-IN-PLACE POLYURETHANE CHEMICALLY BONDED TO INTERIOR SURFACES.

SUGGESTED USE:

- Interior or Exterior ...
- Classrooms K-12
- Executive Office
- Guard Houses
- Control Rooms
- Mission Critical Buildings
- University
- Healthcare
- Government & Municipality

DOOR DESIGNS



G N

SEE GLASS LIMITS BELOW

SCHOOL GUARD NON-FIRE RATED GLASS SG5 IS A SCRATCH RESISTANT LAMINATED PRODUCT CONSISTING OF GLASS WITH CUSTOM SECURITY HEAT STRENGTHENED, CHEMICALLY BONDED CORE.

GLASS WEIGHT= 4.6 LBS PER SQ.FT.
GLASS COMPLIES WITH:
ASTM C1036
ASTM C1172
ANSI Z97.1
UL 972

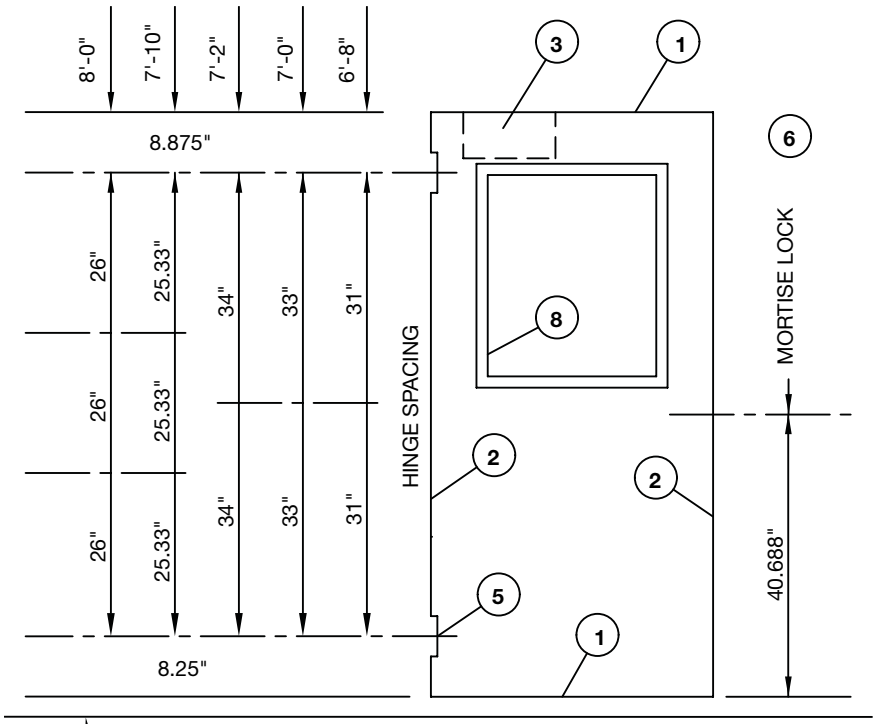
- ATTACK RESISTANT LAMINATED GLASS TO BE FACTORY INSTALLED IN DOORS.
- SURFACE MOUNTED CLOSERS ONLY WHEN CLOSER IS ATTACHED TO DOOR.
- 4881 FLUSH KIT ONLY IN REGENT & LEGION DOORS & TYPE 2 KIT IN IMPERIAL DOORS.
- 16 GAUGE DOORS ONLY, WITH MINIMUM 16 GAUGE SU, SQ, SR, BU, BR & BQ FRAMES ONLY.
- FRAME DEPTHS 5-3/4" THRU 14". KD OR WELDED 3 SIDED FRAMES.
- WELDED SIDELITE AND BORROWED LITE FRAMES.
- MIN. 4-1/2" X 4-1/2" MORTISED BUTT HINGES AND STEEL CONTINUOUS HINGES ARE OPTIONAL
- MIN. GLASS WIDTH 3", MAX WIDTH 35-13/16" IN DOORS. MIN. STILE WIDTH 6" TO VISIBLE GLASS.
- MIN. GLASS HEIGHT 10", MAX HEIGHT 44" IN DOORS. 7-3/4" TOP RAIL TO VISIBLE GLASS.
- DOOR OPENING SIZES 2'8" X 6'8" THRU 4'0" X 8'0"
- TESTED WITH SARGENT 8200 SERIES MORTISE LOCK WITH LATCH BOLT, DEAD BOLT FUNCTION, LS ESCUTCHEON & LEVER TRIM.
- LIMITED TO FUNCTIONS 8224, 8225, 8226, 8227, 8235, 8239, 8240, 8241, 8243, 8245, 8246, 8247, 8248, 8248, 8249, 8250, 8251, 8252, 8266 & 8268.
  *CORBIN RUSSWIN ML2000 SERIES MORTISE LOCK WITH LATCHBOLT, DEADBOLT FUNCTION & VR ESCUTCHEON & LEVER TRIM.
- LIMITED TO FUNCTIONS ML2020, ML2022, ML2024, ML2029, ML2030, ML2048, ML2065, ML2067, ML2072, ML2073, ML2075, ML2082 & ML2092.
  *ASSA ABLOY ACCENTRA 8800 SERIES MORTISE LOCK WITH LATCH BOLT, DEAD BOLT FUNCTION, SL ESCUTCHEON & LEVER TRIM.
- LIMITED TO FUNCTIONS SL8802, SL8811, SL8812, SL8817, SL8818, SL8822, SL8823, SL8827, SL8830, SL8831, SL8832, SL8840, SL8847, SL8860 & SL8861.
- DOOR POSITION SWITCHES, ELECTRIC HINGES, OVERHEAD CONCEALED CLOSERS/HOLDERS IN FRAMES, HOLD OPENS (MAGNETIC HOLDERS, NOT MAGNETIC LOCKS) MAY BE USED.
- 18 GAUGE MINIMUM TOP & BOTTOM CAPS ARE OPTIONAL.

*EQUIVALENT HARDWARE NOT TESTED

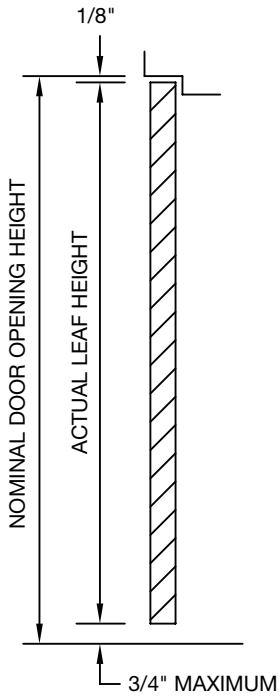
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

NON-FIRE RATED ATTACK RESISTANT

DOOR ELEVATION

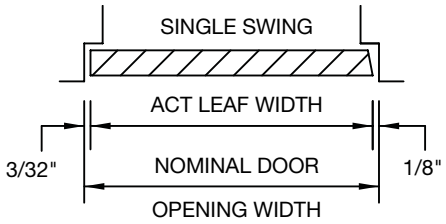


VERTICAL SECTION

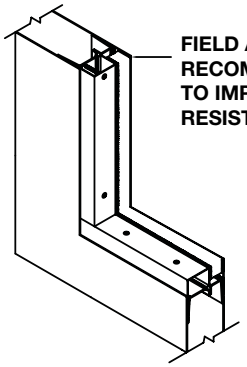


HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

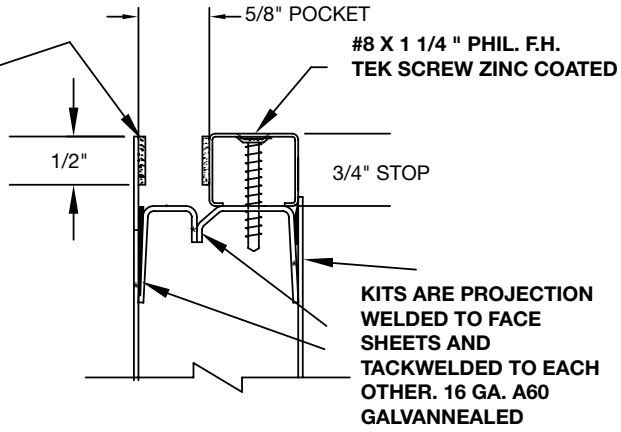
HORIZONTAL SECTION



8 **4881 FLUSH KIT FOR REGENT & LEGION DOORS**



FIELD APPLIED CAULK IS RECOMMENDED ON THIS SEAM TO IMPROVE ESTHETICS AND RESIST WATER INSTRUSION.



SGG™ School Guard Glass

NON-FIRE RATED SG5™

GLASS COMPLIES WITH: UL 972,
GLASS SURFACE IS SCRATCH RESISTANT.
ASTM C1036, ASTM C1172 & ANSI Z97.1
ATTACK RESISTANT GLASS IS INSTALLED
AT THE FACTORY

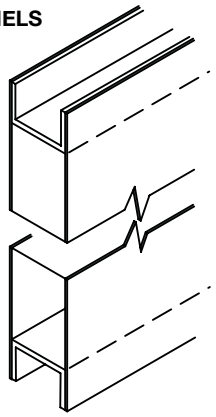
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

NON-FIRE RATED ATTACK RESISTANT

1 16 GAUGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

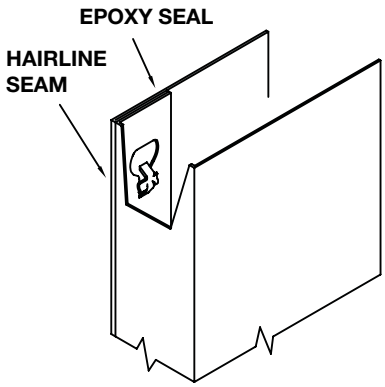


OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

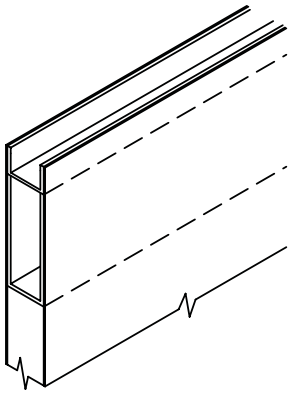
MECHANICALLY INTERLOCKED HEMMED EDGES

ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)



3 CLOSER REINFORCEMENT(OPTIONAL)

14 GAUGE STEEL CHANNEL 20" LONG

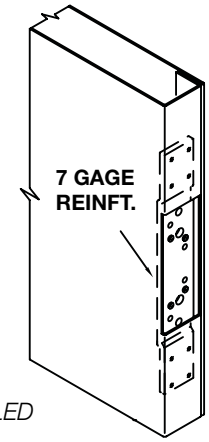


5 HINGE PREPARATION

4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

ANSI A156.7 TEMPLATE

OPTIONAL: STEEL CONTINUOUS HINGE



HINGE EDGE IS HANDED AND NOT BEVELED

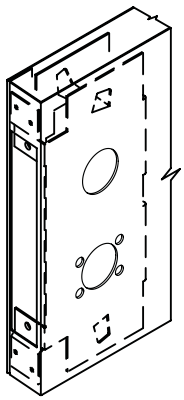
6 LOCK PREPARATION ANSI/BHMA A115.1 MORTISE TYPE

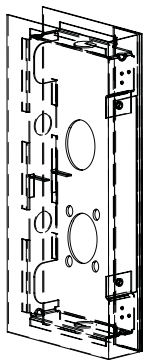
LOCK EDGE IS BEVELED 1/8" IN 2" (1:16)

(LM2) 2-3/4" BACKSET FOR SARGENT 8200 SERIES WITH LATCH BOLT, DEAD BOLT & LS ESCUTCHEON

(LM2) 2-3/4" BACKSET FOR SARGENT 8200 SERIES WITH LATCH BOLT, DEAD BOLT & LS ESCUTCHEON

LOCK FUNCTION HOLES ARE PREPARED AT THE FACTORY.





NOTE: EITHER OF THE LOCK REINFORCEMENTS/ ANY MORTISE LOCK PREPARATION. GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

8

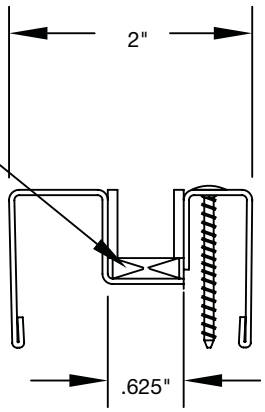
SGG™ School Guard Glass

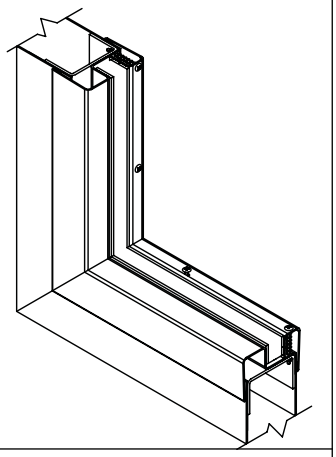
NON-FIRE RATED SG5™

GLASS SURFACE IS SCRATCH RESISTANT
GLASS COMPLIES WITH: UL 972, ASTM C1036, ASTM C1172 & ANSI Z97.1

ATTACK RESISTANT GLASS IS INSTALLED AT THE FACTORY.

- 18 GA. (.043) MIN. TYPE 2 VISION LIGHT KIT
- FOR USE IN IMPERIAL DOORS

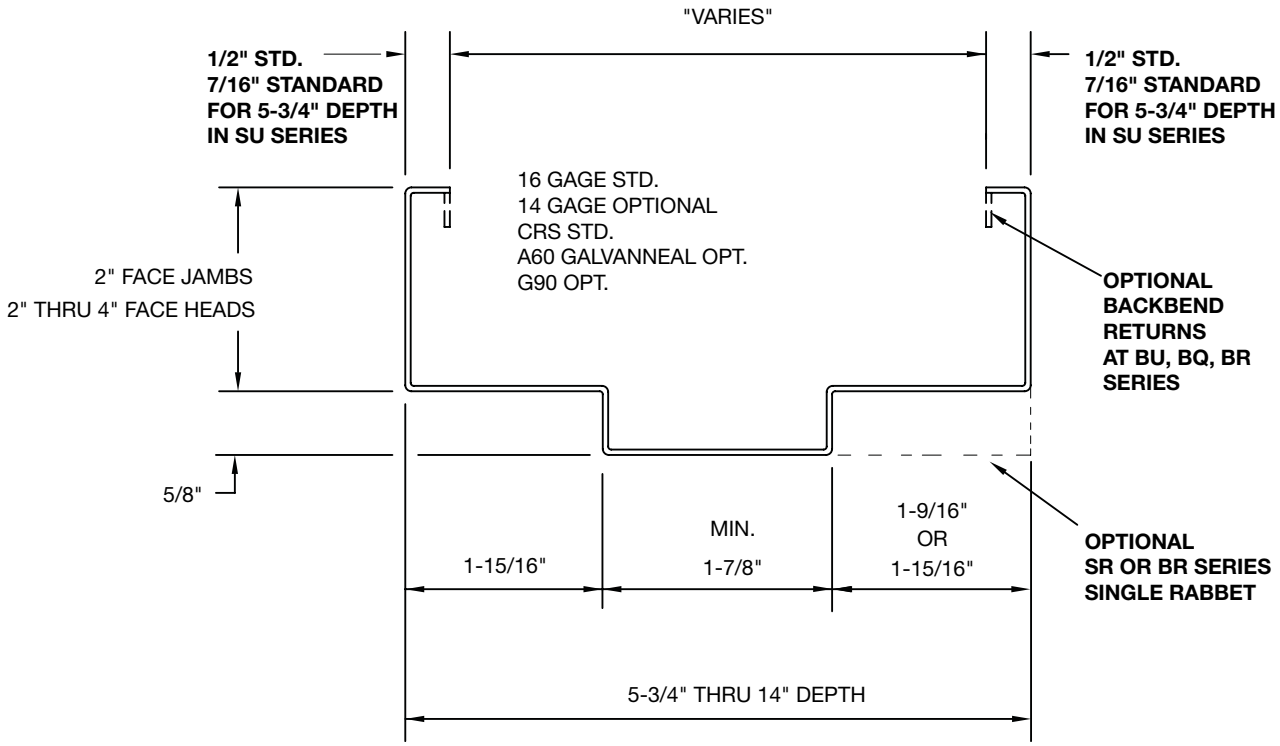




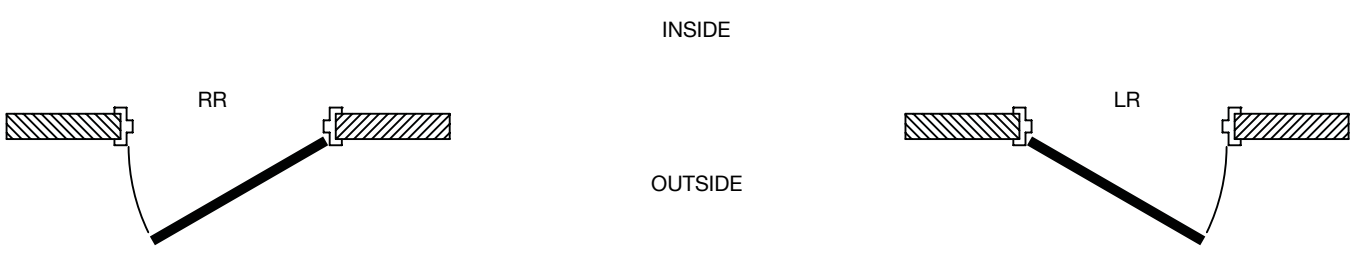
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

NON-FIRE RATED ATTACK RESISTANT SERIES SU, SQ, SR, BU, BQ & BR STEEL FRAMES

FOR 1-3/4" THICK DOORS STANDARD WALL APPLICATION, HANDED INSWING OR OUTSWING

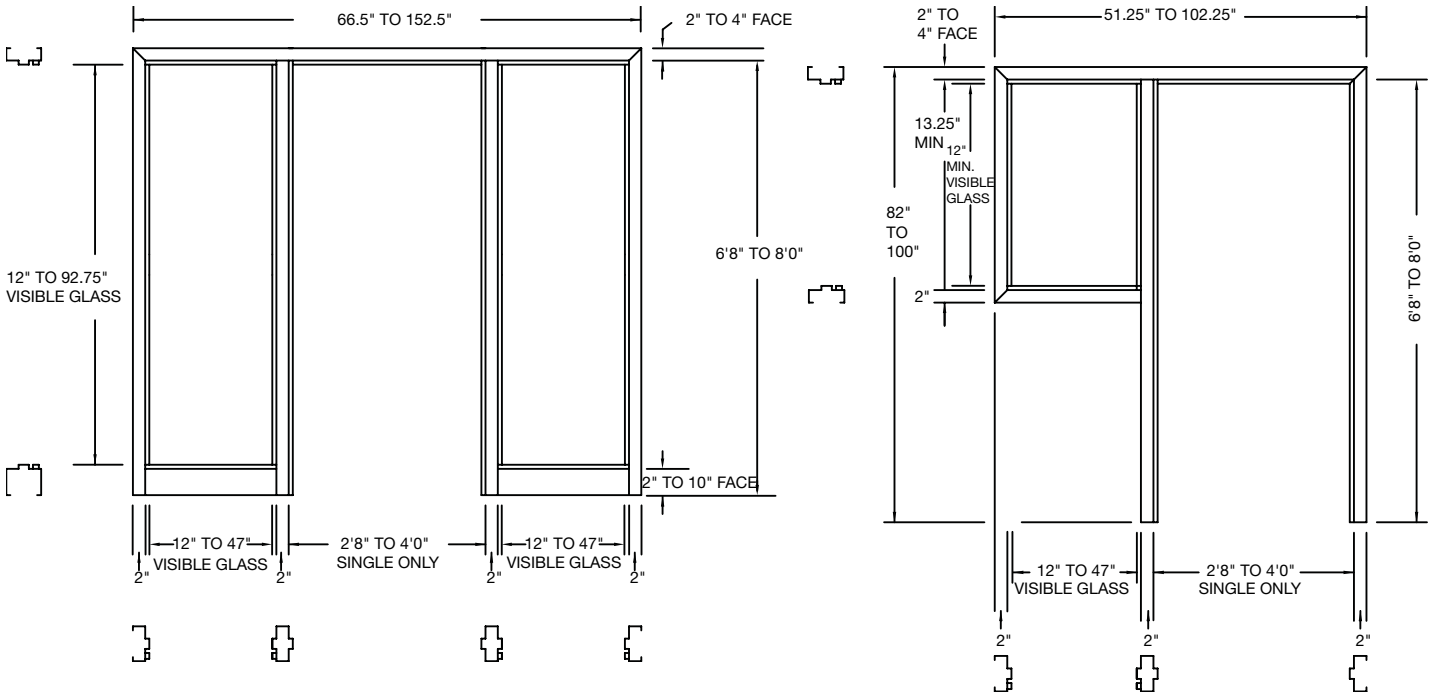


- KD OR WELDED CORNERS 3 SIDED DOOR FRAMES, WELDED SIDELITES & BORROWED LITES.
- 4-1/2" X 4-1/2" OR 5" STANDARD OR HEAVY WEIGHT MORTISED BUTT HINGES
- STEEL CONTINUOUS HINGES ARE OPTIONAL
- STD. ANSI 4-7/8" STRIKE ONLY.
- HOSPITAL STOPS NOT AVAILABLE
- WELDED WOOD STUD, STEEL STUD, EXISTING OPENING, YOKE & STRAP AND FLOOR ANCHORS
- ARE AVAILABLE AS ANCHOR OPTIONS.
- DOOR POSITION SWITCHES, ELECTRIC HINGES, OVERHEAD CONCEALED HOLDERS/CLOSERS,
- AND HOLD OPENS ARE OPTIONAL.
- SURFACE MOUNTED CLOSERS ALLOWED WHEN CLOSER BODY IS ATTACHED TO DOOR.
- MAG LOCKS AND ELECTRIC STRIKES ARE NOT AVAILABLE.
- TRANSOM OR COMBINATION OF SIDELITE AND TRANSOM FRAMES ARE NOT AVAILABLE.



SINGLE SWING DOORS

NON-FIRE RATED ATTACK RESISTANT



SIDELITE FRAMES:

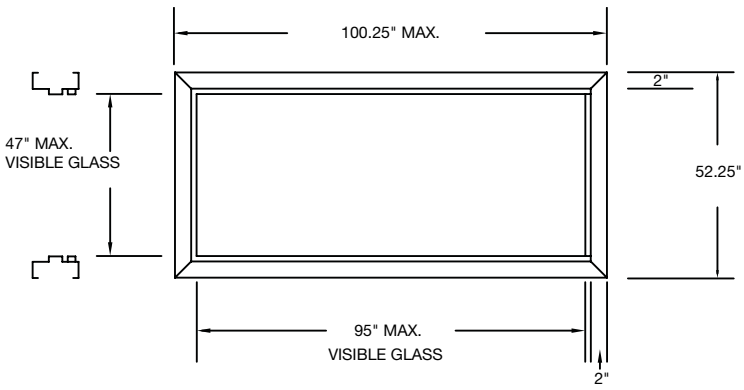
- WELDED UNITS ONLY AVAILABLE IN SQ, SU, SR, BQ, BU OR BR FRAME PROFILES.
- FRAME DEPTHS RANGE FROM 5-3/4" MINIMUM TO 14" MAXIMUM
- MINIMUM OVERALL WIDTH OF A SINGLE DOOR & DOUBLE SIDELITE IS 66-1/2"
- 2" FACE HORIZONTAL AND/OR VERTICAL MULLIONS ARE OPTIONAL.
- 5/8" MINIMUM STOP HEIGHT
- 12 GAUGE X 2" SILL BRACING STRAP TO BE APPLIED TO SILLS ON FACES GREATER THAN 4" AND SILL IS LONGER THAN 24". LOCATED 24" ON CENTER MAX.
- (2) 12 GAUGE X 2" BRACING STRAPS TO BE APPLIED TO SILLS ON FACES GREATER THAN 9" AND SILL IS LONGER THAN 24". LOCATED 24" ON CENTER MAX.

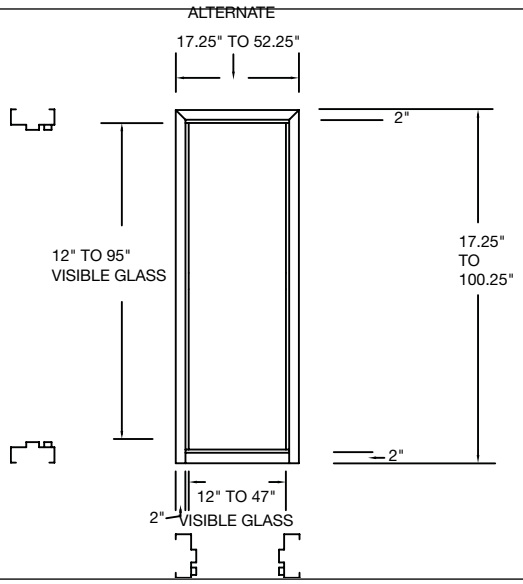
BORROWED LITE FRAMES:

- WELDED UNITS ONLY AVAILABLE IN SQ, SU, SR, BQ, BU OR BR FRAME PROFILES.
- FRAME DEPTHS RANGE FROM 5-3/4" MINIMUM TO 14" MAXIMUM
- VISIBLE GLASS WIDTH OF 95" MAX. AVAILABLE WHEN VISIBLE GLASS HEIGHT DOES NOT EXCEED 47".
- 2" FACE HORIZONTAL AND/OR VERTICAL MULLIONS ARE OPTIONAL.
- 5/8" MINIMUM STOP HEIGHT

SGG™ School Guard Glass

NON-FIRE RATED SG5™





GLASS AND GLAZING NOTES:

- SCHOOL GUARD NON-FIRE RATED 1/2" NOMINAL THICK SG5T M SCRATCH RESISTANT LAMINATED GLASS CONSISTING OF GLASS WITH A CUSTOM SECURITY HEAT STRENGTHENED, CHEMICALLY BONDED CORE IS SHIPPED LOOSE FOR FIELD INSTALLATION BY OTHERS.
- TREMCO 440 GLAZING TAPE, DOW CORNING 995 SILICONE GLAZING CAULK, 1/16" OR 1/8" FOAM TAPE AND INSTALLATION INSTRUCTIONS WILL BE SHIPPED WITH SG5T M GLASS.
- SETTING BLOCKS AND CAP BEAD CAULK ARE PROVIDED BY GLASS INSTALLER.
- REMOVABLE GLASS STOP TO BE INSTALLED ON ATTACK SIDE OF FRAMES.
- GLASS COMPLIES WITH: ASTM C1036, ASTM C1172, ANSI Z97.1 & UL 972
- GLASS WEIGHT = 4.6 LBS. PER SQ.FOOT

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

NON-FIRE RATED ATTACK RESISTANT

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-8"	6'-8"
2'-10"	7'-0"
3'-0"	7'-2"
3'-4"	7'-10"
3'-6"	8'-0"
3'-8"	
3'-10"	
4'-0"	

PAIRS

NOT AVAILABLE

FIRE DOORS

SEE SEE PAGE 387 THRU PAGE 392 FOR FIRE RATED DOORS AND FRAMES

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors and frames shall be as manufactured by Ceco Door Products. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8; see chart below for performance classifications.

NON-FIRE RATED ATTACK RESISTANT doors are made full-flush or (optional) seamless style. Face sheets are commercial quality cold rolled steel conforming to ASTM A1008 .. or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 -- see chart below. Doors have mechanically interlocked, hemmed, hairline seams on vertical edges and have no visible seams on faces. Doors specified "seamless" have no visible seams on faces or vertical edges (S.DJ Model 2).

A one piece, kraft honeycomb or polystyrene core is securely bonded to both face sheets under pressure with contact adhesive. Foamed-in-place polyurethane chemically bonded to interior surfaces is also available. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets. Doors are provided with factory installed non-fire rated attack resistant glass. Attack resistant School Guard Glass SG5 '" is a scratch resistant laminated product consisting of glass with a custom security heat strengthened chemically bonded core. Complies with ASTM C1036, ASTM C1172, ANSI Z97.1 & UL 972.

NON-FIRE RATED ATTACK RESISTANT frames for 1-3/4" doors & borrowed lite frames are formed from commercial quality cold rolled steel conforming to ASTM A1008 ... or (optional) hot-dipped galvanized steel conforming to ASTM A924 and A653 - see chart below. 3 sided door frames are knocked down (KO) field assembled type or welded type.
Head and jamb members of KO frames have diecut mitered corners that interlock rigidly when field assembled Welded-in jamb anchors are required. Sidelite and borrowed lite frames have welded construction. Attack resistant laminated SG5™ glass, Tremco 440 glazing tape and Dow Corning 995 silicone glazing compound is shipped loose for field installation in frame.

Hardware Provisions: Hinge preparations are handed. Door hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gauge steel hinge reinforcements are welded inside the door edge and frame jamb and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1:16) and is prepared for a Sargent 8200 series mortise lock with latch bolt dead bolt function and LS escutcheon or Corbin Russwin series mortise lock with latch bolt deadbolt function and VR escutcheon or ASSA ABLOY ACCENTRA 8800 series mortise lock with latch bolt, deadbolt function and SL escutcheon. Optional surface mounted closer reinforcement is 14 gauge steel inside door and frame head. Plaster guards are provided at frame hinge and strike preps. The strike jamb is prepared for 4-7/8' universal strike in accordance with ANSI A115.1.

PAINT: 1-3/4" steel doors and frames shall be provided with one coat of oven-cured neutral color primer paint Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	STD	N/A	16 GAUGE STEEL
DOOR FRAME MATERIAL	LEVEL				16 GAUGE STEEL
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT	

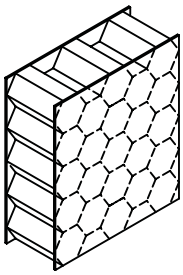
PERFORMANCE

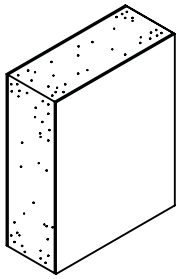
PHYSICAL ENDURANCE /LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, 16 GAUGE DOORS, 16 & 14 GAUGE FRAMES: LEVEL A (1,000,000 CYCLES)

1-3/4” WARNOCK HERSEY FIRE RATED ATTACK RESISTANT POLYSTYRENE, HONEYCOMB OR POLYURETHANE SLAB CORE DOORS

GLAZED STEEL DOORS ONLY BEVELED LOCK EDGE , HANDED - INSWING OR OUTSWING

PASSED 3RD PARTY TESTING AT H.P.WHITE LABORATORY INC. TESTED TO 5AA10 - CERTIFICATION STANDARDS FOR REINFORCING & TESTING OF STANDARD WOOD & HOLLOW METAL DOORS, FRAMES & HARDWARE FOR 4 MINUTE ATTACK.



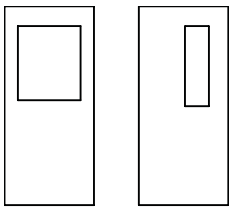


POLYSTYRENE, HONEYCOMB OR POLYURETHANE SLAB, BONDED TO THE INSIDE OF BOTH FACE SHEETS WITH A WATERPROOF, CONTACT ADHESIVE

SUGGESTED USE:

- Interior or Exterior ...
- Classrooms K-12
- Executive Office
- Guard Houses
- Control Rooms
- Mission Critical Buildings
- University
- Healthcare
- Government & Municipality

DOOR DESIGNS



G N

SEE GLASS LIMITS BELOW

SGG™ School Guard Glass

SCHOOL GUARD SG5FR FIRE RATED GLASS

20 MIN. - 45 MIN. GLASS WEIGHT: 1.25” THICK = 13.82 LBS. PER SQ. FT.
60 MIN. - GLASS WEIGHT: 1.41” THICK = 15.46 LBS. PER SQ. FT.
90 MIN. - GLASS WEIGHT: 1.96” THICK = 22.21 LBS. PER SQ. FT.

GLASS COMPLIES WITH:
ANSI Z97.1
UL 972
UL10C, UL10B & UL9

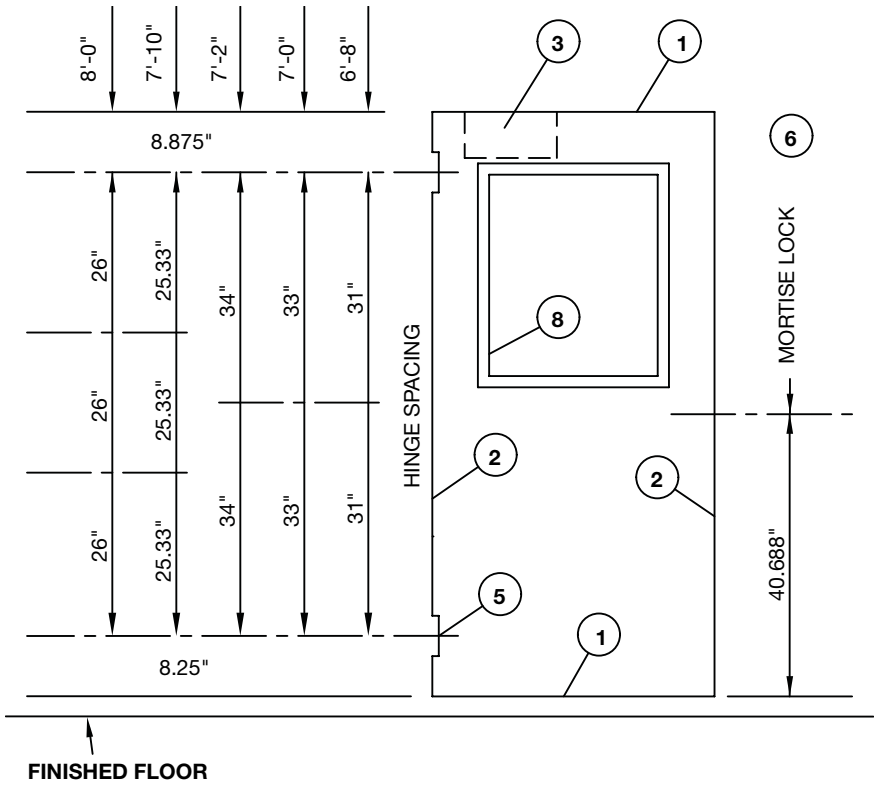
- FIRE RATED ATTACK RESISTANT LAMINATED GLASS TO BE FACTORY INSTALLED IN DOORS.
- SURFACE MOUNTED CLOSERS ONLY WHEN CLOSER IS ATTACHED TO DOOR.
- TYPE 8 GLASS LITE KIT
- 16 GAUGE DOORS (14 GAUGE OPTIONAL), WITH MINIMUM 16 GAUGE SU, SQ, SR, BU, BR & BQ FRAMES ONLY.
- FRAME DEPTHS 5-3/4” THRU 14”. KD OR WELDED 3 SIDED FRAMES.
- WELDED SIDELITE AND BORROWED LITE FRAMES.
- MIN. 4-1/2” X 4-1/2” MORTISED BUTT HINGES AND STEEL CONTINUOUS HINGES ARE OPTIONAL.
- MIN. GLASS WIDTH 3”, MAX WIDTH 35-13/16” IN DOORS. MIN. STILE WIDTH 6” TO VISIBLE GLASS.
- MIN. GLASS HEIGHT 10”, MAX HEIGHT 44” IN DOORS. MIN. 7-3/4” TOP RAIL TO VISIBLE GLASS.
- DOOR OPENING SIZES 2’8” X 6’8” THRU 4’0” X 8’0” SINGLES ONLY
- TESTED WITH SARGENT 8200 SERIES MORTISE LOCK WITH LATCH BOLT, DEAD - BOLT FUNCTION, LS ESCUTCHEON & LEVER TRIM.
- LIMITED TO FUNCTIONS 8224, 8225, 8226, 8227, 8235, 8239, 8240, 8241, 8243, 8245, 8246, 8247, 8248, 8248, 8249, 8250, 8251, 8252, 8266 & 8268.
  *CORBIN RUSSWIN ML2000 SERIES MORTISE LOCK WITH LATCHBOLT, DEADBOLT FUNCTION & VR ESCUTCHEON & LEVER TRIM.
- LIMITED TO FUNCTIONS ML2020, ML2022, ML2024, ML2029, ML2030, ML2048, ML2065, ML2067, ML2072, ML2073, ML2075, ML2082 & ML2092.
  *ASSA ABLOY ACCENTRA 8800 SERIES MORTISE LOCK WITH LATCH BOLT, DEAD BOLT FUNCTION, SL ESCUTCHEON & LEVER TRIM.
- LIMITED TO FUNCTIONS SL8802, SL8811, SL8812, SL8817, SL8818, SL8822, SL8823, SL8827, SL8830, SL8831, SL8832, SL8840, SL8847, SL8860 & SL8861.
- DOOR POSITION SWITCHES, ELECTRIC HINGES, OVERHEAD CONCEALED CLOSERS/HOLDERS IN FRAMES,
- HOLD OPENS (MAGNETIC HOLDERS, NOT MAGNETIC LOCKS) MAY BE USED.
- 18 GAUGE MINIMUM TOP & BOTTOM CAPS ARE OPTIONAL.
  *EQUIVALENT HARDWARE NOT TESTED

NOTE: SEE PAGE 387 THRU PAGE 392 FOR FIRE RATED ATTACK RESISTANT DOORS AND FRAMES.

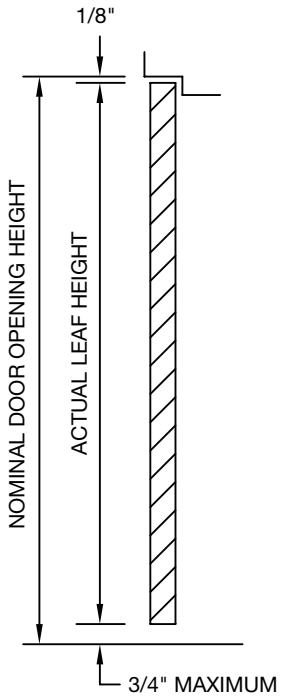
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

WARNOCK HERSEY FIRE RATED ATTACK RESISTANT

DOOR ELEVATION

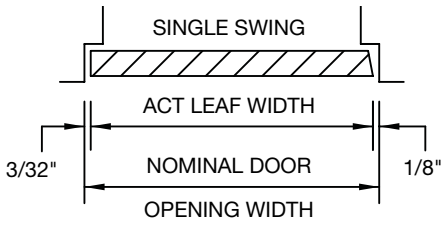


VERTICAL SECTION



HARDWARE LOCATIONS SHOWN MATCH CECO STANDARD FRAMES.

HORIZONTAL SECTIONS

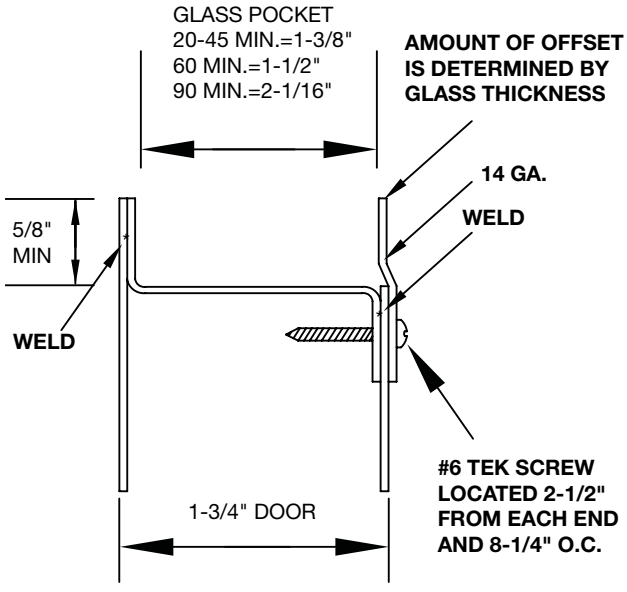


(8) **TYPE 8 KIT**

SGG School Guard Glass™

FIRE RATED SG5FR GLASS

GLASS COMPLIES WITH: UL 972, UL10C & UL10B,
ANSI Z97.1
FIRE RATED ATTACK RESISTANT GLASS IS INSTALLED AT THE FACTORY.



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

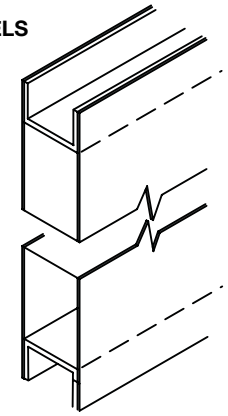
WARNOCK HERSEY FIRE RATED ATTACK RESISTANT

1 16 GAUGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS 3”

FROM EACH END & 6” ON CENTER

INVERTED TOP AND BOTTOM CHANNELS

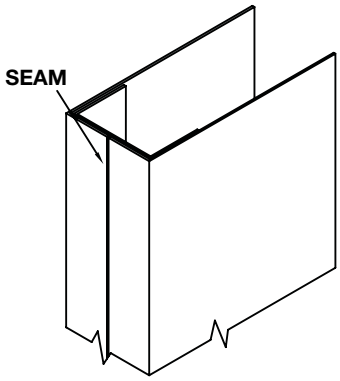


OPTIONAL 18 GA. MIN. TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

VISIBLE EDGE SEAM WITH INTERMITTENT SPOT WELDS.

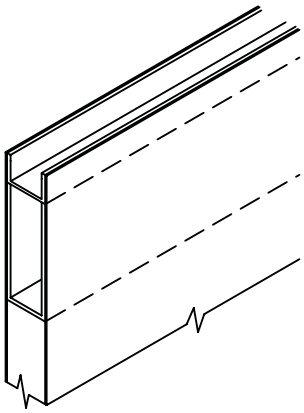
SPOT WELDS ARE FILLED AND GROUND SMOOTH.



OPTIONAL SEAMLESS EDGES AVAILABLE

3 CLOSER REINFORCEMENT(OPTIONAL)

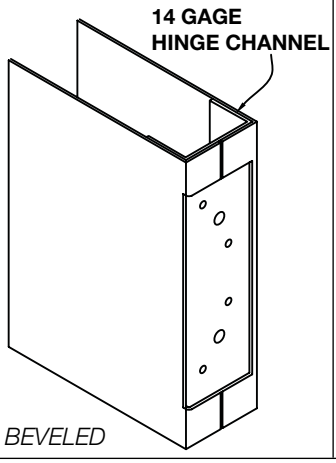
14 GAUGE STEEL CHANNEL WELDED TO END CHANNEL



5 HINGE PREPARATION

4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

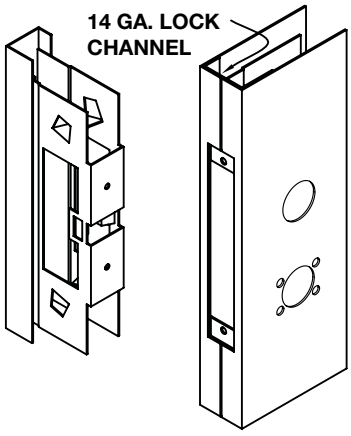
ANSI A156.7 TEMPLATE



HINGE EDGE IS HANDED AND NOT BEVELED

6 LOCK PREPARATION MORTISE TYPE

(LM2)
(ANSI/BHMA A115.1)
2-3/4” BACKSET FOR LOCKS SHOWN ON PAGE 387.

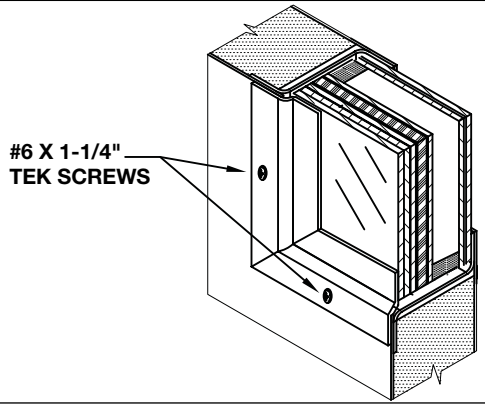


LOCK EDGE IS BEVELED 1/8” IN 2” (1:16)

8 TYPE 8 GLAZING KIT

20-45 MIN.: 1-3/8” WIDE GLAZING POCKET
60 MIN.: 1-1/2” WIDE GLAZING POCKET

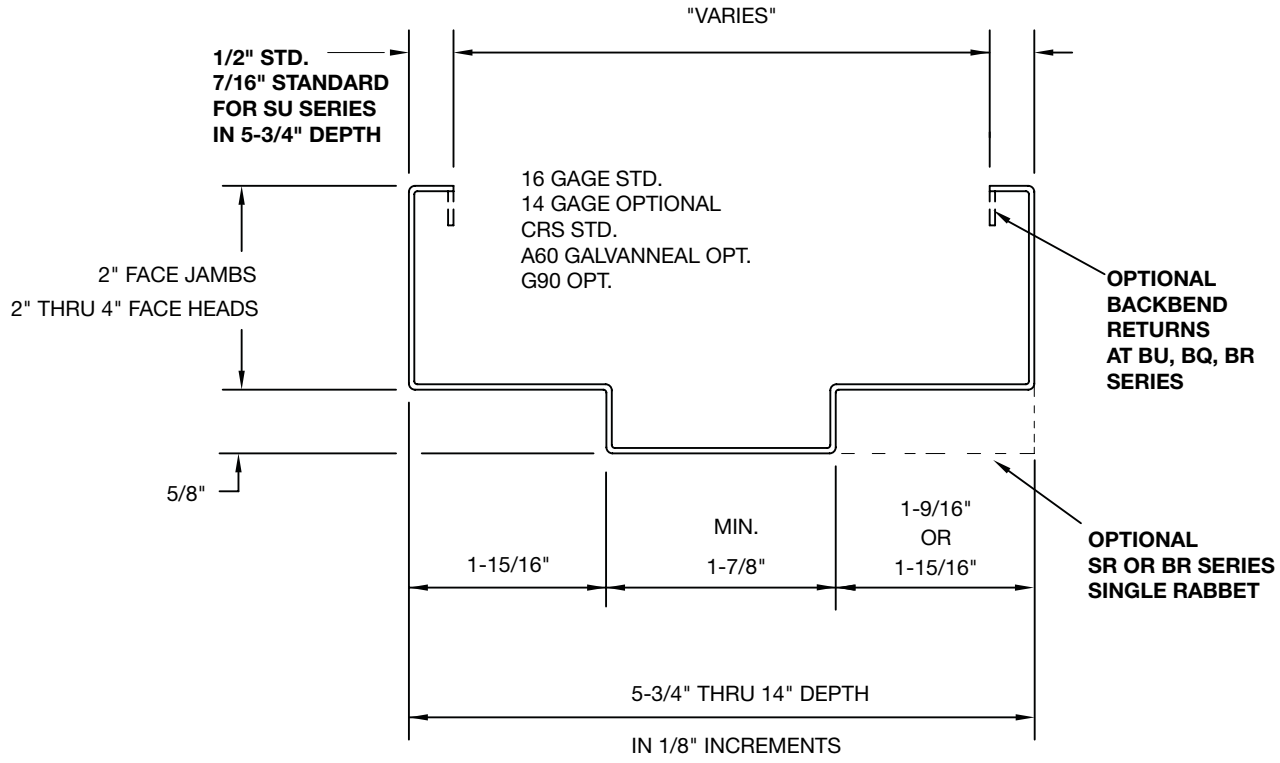
90 MIN.: 2-1/16” WIDE GLAZING POCKET



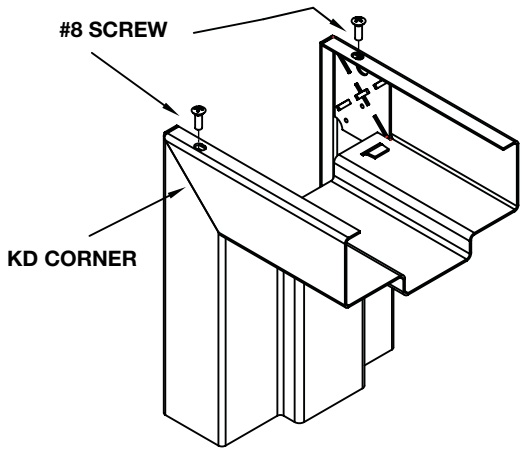
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

WARNOCK HERSEY FIRE RATED ATTACK RESISTANT

FOR 1-3/4" THICK DOORS STANDARD WALL APPLICATION, HANDED

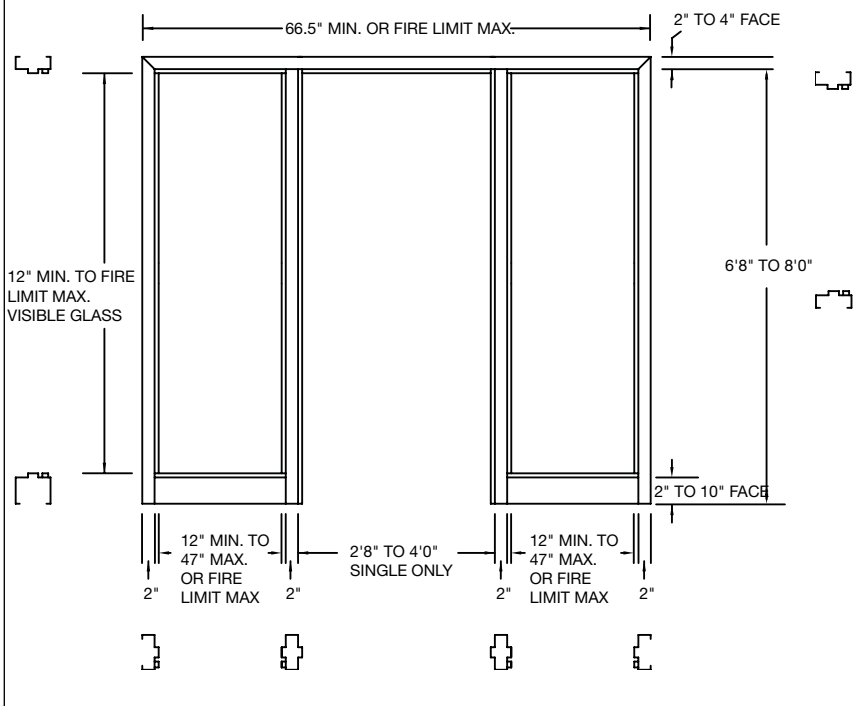


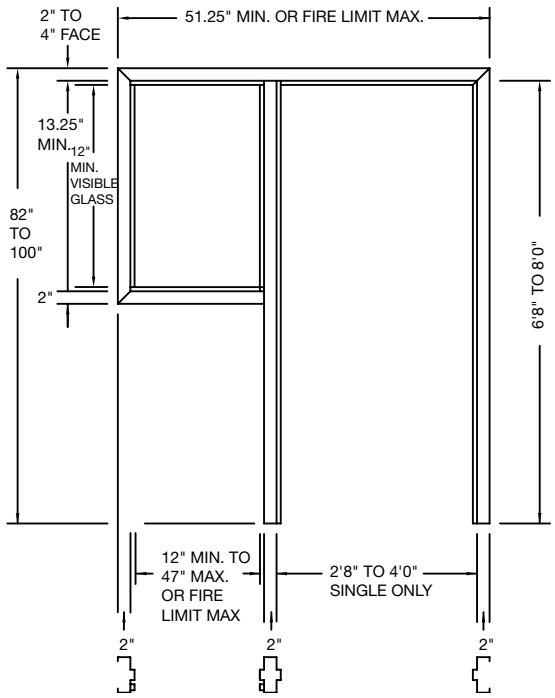
- WARNOCK HERSEY FIRE RATINGS AVAILABLE FROM 20 MIN. THRU 90 MIN.
- KD OR WELDED CORNERS 3 SIDED DOOR FRAMES, WELDED SIDELITES & BORROWED LITES.
- 4-1/2" X 4-1/2" OR 5" STANDARD OR HEAVY WEIGHT MORTISED BUTT HINGES
- STEEL CONTINUOUS HINGES ARE OPTIONAL
- STD. ANSI 4-7/8" STRIKE ONLY.
- HOSPITAL STOPS NOT AVAILABLE
- WELDED WOOD STUD, STEEL STUD, EXISTING OPENING, YOKE & STRAP, MASONRY T AND FLOOR ANCHORS ARE AVAILABLE AS ANCHOR OPTIONS.
- DOOR POSITION SWITCHES, ELECTRIC HINGES, OVERHEAD CONCEALED HOLDERS/CLOSERS, AND HOLD OPENS ARE OPTIONAL.
- SURFACE MOUNTED CLOSERS ALLOWED WHEN CLOSER BODY IS ATTACHED TO DOOR.
- MAG LOCKS AND ELECTRIC STRIKES ARE NOT AVAILABLE.
- TRANSOM OR COMBINATION OF SIDELITE AND TRANSOM FRAMES ARE NOT AVAILABLE.



(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

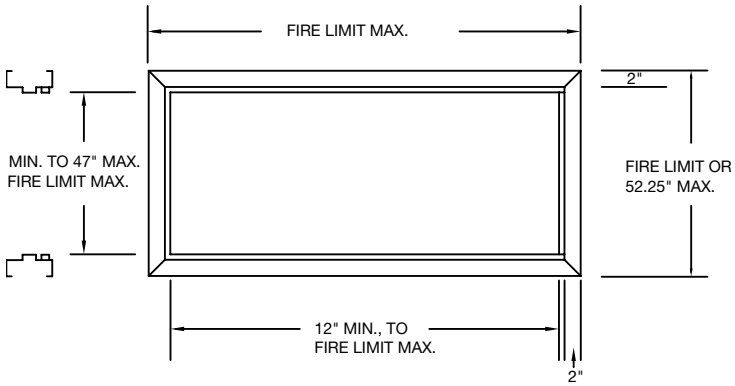
WARNOCK HERSEY FIRE RATED ATTACK RESISTANT

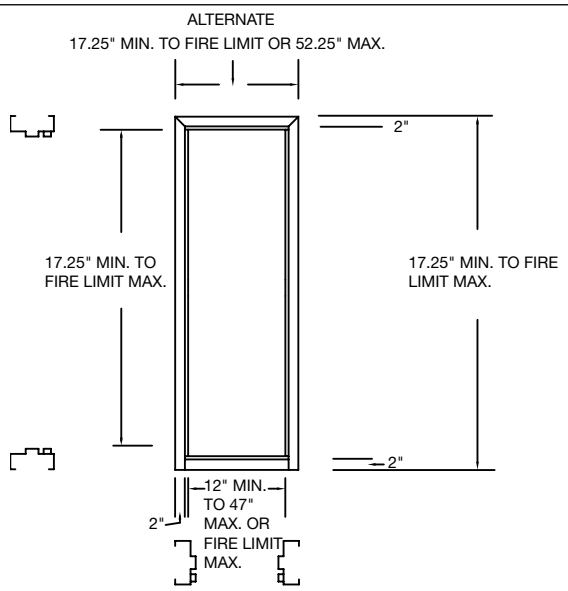




SIDELITE FRAMES: 20 MIN. THRU 90 MIN. FIRE PROTECTIVE
- WELDED UNITS ONLY AVAILABLE IN SQ, SU, SR, BQ, BU OR BR FRAME PROFILES.
- FRAME DEPTHS RANGE FROM 5-3/4" MINIMUM TO 14" MAXIMUM
- 2" FACE HORIZONTAL AND/OR VERTICAL MULLIONS ARE OPTIONAL, AND MAY BE REQUIRED BY FIRE LISTING.
- 5/8" MINIMUM STOP HEIGHT

BORROWED LITE FRAMES: 20 MIN. THRU 90 MIN. FIRE PROTECTIVE
- WELDED UNITS ONLY AVAILABLE IN SQ, SU, SR, BQ, BU OR BR FRAME PROFILES.
- FRAME DEPTHS RANGE FROM 5-3/4" MINIMUM TO 14" MAXIMUM
- 2" FACE HORIZONTAL AND/OR VERTICAL MULLIONS ARE OPTIONAL, AND MAY BE REQUIRED BY FIRE LISTING.
- 5/8" MINIMUM STOP HEIGHT





GLASS AND GLAZING NOTES:
- WARNOCK HERSEY FIRE RATED SCHOOL GUARD GLASS SG5FR SHIPPED LOOSE FOR FIELD INSTALLATION BY OTHERS.
- TREMCO 440 GLAZING TAPE, DOW CORNING 995 SILICONE GLAZING CAULK, 1/16" OR 1/8" FOAM TAPE AND INSTALLATION INSTRUCTIONS WILL BE SHIPPED WITH SG5FR GLASS.
- SETTING BLOCKS AND CAP BEAD CAULK ARE PROVIDED BY GLASS INSTALLER.
- REMOVABLE GLASS STOP TO BE INSTALLED ON ATTACK SIDE OF FRAMES.
- GLASS COMPLIES WITH: UL10C, UL10B, UL9 & ANSI Z97.1 & UL 972
- GLASS WEIGHT: LBS. PER SQ.FOOT
  20-45 MIN. - 1.25" THICK = 13.82 LBS. PER SQ.FOOT
  60 MIN. - 1.41" THICK = 15.46 LBS. PER SQ.FOOT
  90 MIN. - 1.96" THICK = 22.21 LBS. PER SQ.FOOT

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

NON-FIRE RATED ATTACK RESISTANT

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-8"	6'-8"
2'-10"	7'-0"
3'-0"	7'-2"
3'-4"	7'-10"
3'-6"	8'-0"
3'-8"	
3'-10"	
4'-0"	

PAIRS

NOT AVAILABLE

FIRE DOORS

LABELLING AGENCY : - WARNOCK HERSEY
TEST: UL1 OC, UL1 OB, UL9, & NFPA 252 • RATING: 20 MIN. THRU 90 MIN. *NOT ALL RATINGS ARE AVAILABLE IN ALL SIZES, DESIGNS AND MATERIALS.*

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors and door frames shall be as provided by Ceco Door Products. Doors and frames shall conform to the Steel Door Institute guide specification, ANSI A250.8; see chart below for performance classifications

ATTACK RESISTANT doors are made full-flush or (optional) seamless style. Face sheets are commercial quality cold rolled steel conforming to ASTM A 1008 ... or (optional) hot-dipped galvannealed or galvanized steel conforming to ASTM A924 and A653 -- see chart below. Doors are center edge seams with intermittent spot welds. Doors have hairline seams on vertical edges and have no visible seams on faces. Doors specified "seamless" have no visible seams on faces or vertical edges (S.D.I. Model 2). A one piece, polystyrene core is securely bonded to both face sheets under pressure with contact adhesive. The top and bottom door edges are closed with 16 gauge steel channels welded to both face sheets. Doors are provided with factory installed fire rated SG5FR attack resistant glass and applied type 8 glass kit.

ATTACK RESISTANT frames for 1-3/4" doors are formed from commercial quality cold rolled steel conforming to ASTM A1008 ... or (optional) hot-dipped galvanized steel conforming to ASTM A924 and A653 - see chart below. (3) sided door frames are knocked down (K.D.) field assembled type or welded type. Head and jamb members of K.D. frames have diecut mitered corners that interlock rigidly when field assembled. Welded-in jamb anchors are required. Sidelite and borrowed lite frames have welded construction. Fire rated attack resistant laminated SG5FR glass, Tremco 440 glazing tape and Dow Corning 995 silicone glazing compound is shipped loose for field installation in frame.

Hardware Provisions: Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, standard or heavy weight hinges (specify which). 14 gauge steel hinge channels are welded inside the door edge with extruded screw holes to provide thread depth equal to 10 gauge plate. 7 gauge steel hinge reinforcements are welded into frame jamb and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1 : 16) and is prepared for one of the mortise locks shown on page 387. Optional surface mounted closer reinforcement is a 14 gauge steel channel inside door and frame head. Plaster guards are provided at frame hinge and strike preps. The strike jamb is prepared for 4-7 /8" universal strike in accordance with ANSI A115.1.

Paint: 1-3/4" steel doors and frames shall be provided with one coat of ovencured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available for doors and KO frames from a selection of standard colors (optional). Colorstyle finish shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

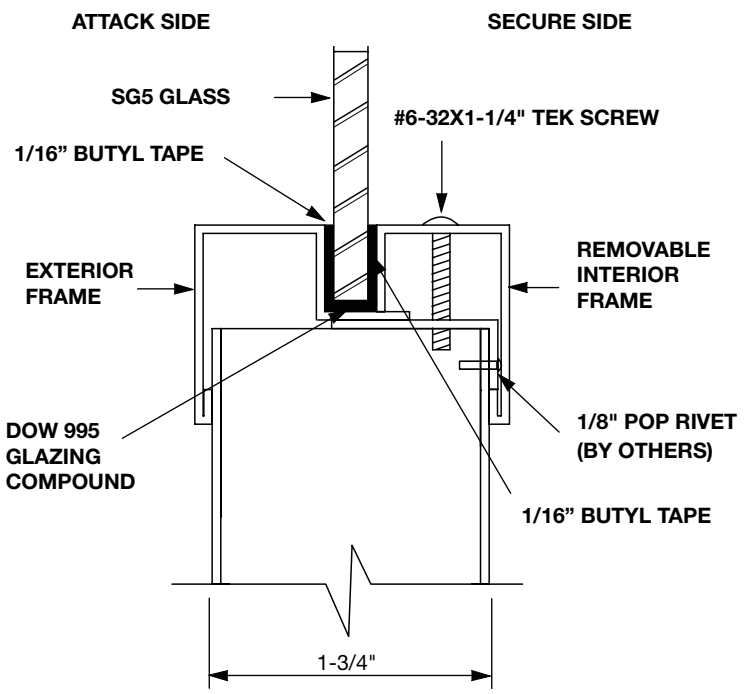
DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	16 OR 14 GAUGE STEEL
DOOR FRAME MATERIAL	LEVEL				
16 GAUGE STEEL	EXTRA HEAVY DUTY	STD	OPT	OPT	
14 GAUGE STEEL	MAXIMUM DUTY	STD	OPT	OPT	

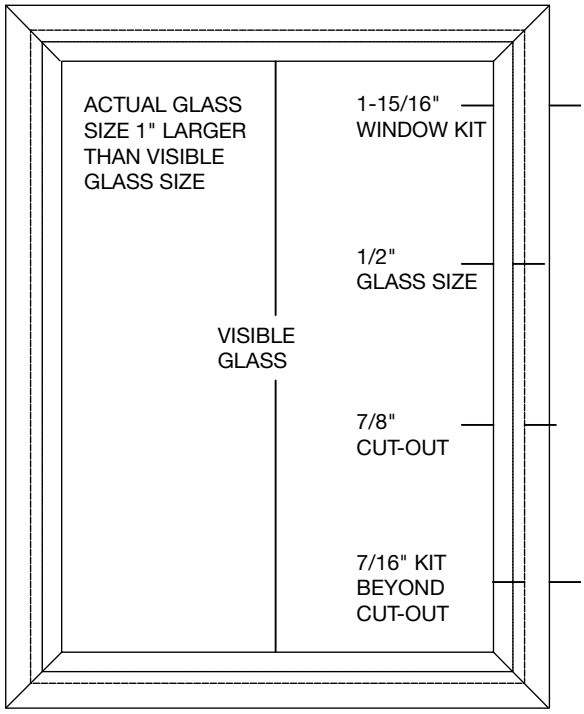
PERFORMANCE

PHYSICAL ENDURANCE /LEVEL:	MEETS ANSI A250.4 PERFORMANCE TEST, 16 GAUGE DOORS, 16 & 14 GAUGE FRAMES: LEVEL A (1,000,000 CYCLES)

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ATTACK RESISTANT RETRO-FIT TYPE 2 KIT FOR HOLLOW METAL DOORS





ATTACK RESISTANT RETROFIT KIT INCLUDES:

- TYPE 2 LIGHT KIT FOR EXISTING HOLLOW METAL DOORS & SCHOOL GUARD GLASS SG5 ATTACK RESISTANT GLASS*
- DOW 995 SILICONE GLAZING COMPOUND*
- TREMCO 440 BUTYL TAPE TO BE APPLIED TO THE GLASS KIT INTERIOR & EXTERIOR SIDES*

** GLASS & GLAZING SHIPS FROM A SEPARATE LOCATION.*

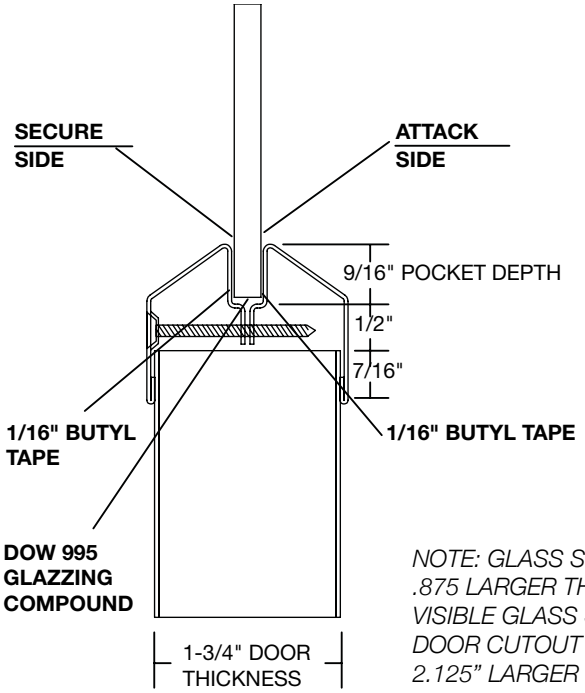
TYPE 2 KIT	VISIBLE GLASS	CUTOUT SIZE NUMBER	PART
ARKMV	10" X 10"	11-3/4" X 1-3/4"	CD149692
ARKMV1212	12" X 12"	13-3/4" X 13-3/4"	CD150402
ARKMN616	6" X 16"	7-3/4" X 17-3/4"	CD151232
ARKMN636	6" X 36"	7-3/4" X 37-3/4"	CD152062
ARKMN333	3" X 33	4-3/4" X 34-3/4"	CD154462
ARKMN424	4" X 24"	5-3/4" X 25-3/4"	CD155292
ARKMN520	5" X 20"	6-3/4" X 21-3/4"	CD156022
ARKMN624	6" X 24"	7-3/4" X 25-3/4"	CD156852
ARKMN630	6" X 30"	7-3/4" X 31-3/4"	CD157682
ARKMN425	4" X 25"	5-3/4" X 26-3/4"	CD158422
ARKMG (3'0" X 6'8")	23-13/16" X 28"	25-9/16" X 29-3/4"	CD159252
ARKMG (3'0" X 7'0")	23-13/16" X 32"	25-9/16" X 33-3/4"	CD160062
ARKMG (3'0" X 7'2")	23-13/16" X 34"	25-9/16" X 35-3/4"	CD160892
ARKMC	**CUSTOM SIZE RETRO-FIT KITS ARE AVAILABLE PER SQ. FT. OF VISIBLE GLASS (3 SQ FT MIN.)**		

ATTACK RESISTANT RETRO-FIT KITS MUST BE USED WITH THE ATTACK RESISTANT COMPONENT MATERIALS AS SUPPLIED: CECO DOOR KITS, SG5 GLASS, APPROVED AND TESTED INSTALLATION COMPONENTS ONLY - NO SUBSTITUTIONS.

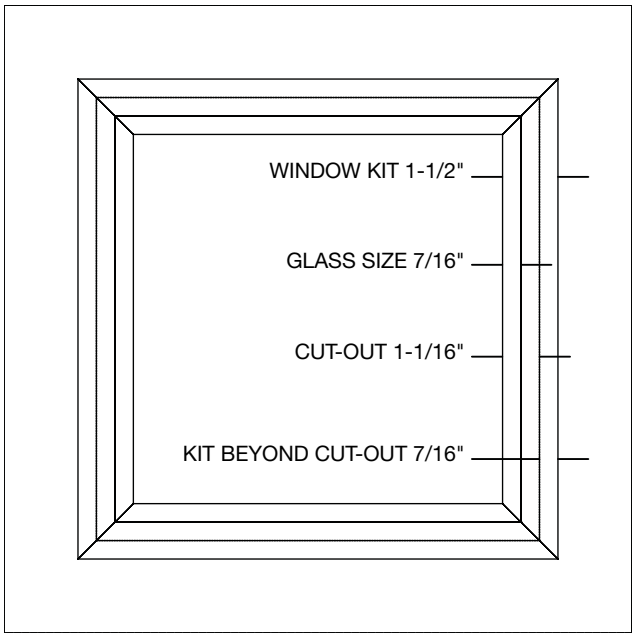
CECO AND SCHOOL GUARD GLASS ARE COMMITTED TO PROVIDING THE SAFEST AND MOST ROBUST MEANS AND METHODS FOR ATTACHMENT INTO COMPLETE FACTORY INSTALLED OEM ATTACK RESISTANT ASSEMBLIES AS WELL AS THE REPAIR, PARTIAL REPLACEMENT OR ENHANCEMENT OF EXISTING DOORS AND FRAMES. WE HAVE INDEPENDENT TESTING PARTIES REGULARLY TEST OUR INSTALLATION PROCEDURES AND PRODUCTS AS WELL AS THE FRAMES AND GLASS IT IS INSTALLED INTO. HOWEVER, PLEASE Be ADVISED THAT IT IS POSSIBLE THAT NOT ALL EXISTING DOORS, FRAMES, OR HARDWARE ON YOUR PROJECT HAVE BEEN TESTED TO OUR STANDARDS. FURTHERMORE, IF DOORS, WINDOWS OR HARDWARE ARE OLD, OF INFERIOR QUALITY, BROKEN OR PARTIALLY BROKEN, THEN THEY MAY NOT MEET THE TESTING OUTCOMES THAT NEW MATERIALS MEET. OUR PRODUCTS WILL NOT CAUSE YOUR EXISTING PRODUCTS TO BE LESS SECURE, BUT EXISTING PRODUCTS THAT ARE DEFECTIVE MAY REDUCE THE ABILITY OF OUR PRODUCTS TO MEET THEIR FULL POTENTIAL.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ATTACK RESISTANT RETRO-FIT TYPE 10 KIT FOR WOOD DOORS



NOTE: GLASS SIZE IS .875 LARGER THAN VISIBLE GLASS SIZE. DOOR CUTOUT IS 2.125" LARGER THAN VISIBLE GLASS SIZE.



ATTACK RESISTANT RETROFIT KIT INCLUDES:

- TYPE 10 LIGHT KIT FOR EXISTING WOOD DOORS & SCHOOL GUARD GLASS SG5 ATTACK RESISTANT GLASS*
- DOW 995 SILICONE GLAZING COMPOUND*
- TREMCO 440 BUTYL TAPE TO BE APPLIED TO THE GLASS KIT INTERIOR & EXTERIOR SIDES*

** GLASS & GLAZING SHIPS FROM A SEPARATE LOCATION.*

TYPE 10 KIT	VISIBLE GLASS	CUTOUT SIZE NUMBER	PART
ARKWV	10" X 10"	12-1/8" X 12-1/8"	CD137632
ARKWV1212	12" X 12"	14-1/8" X 14-1/8"	CD138472
ARKWN616	6" X 16"	8-1/8" X 18-1/8"	CD139202
ARKWN654	6" X 54"	8-1/8" X 56-1/8"	CD141672
ARKWN333	3" X 33	5-1/8" X 35-1/8"	CD142412
ARKWN424	4" X 24"	6-1/8" X 26-1/8"	CD143242
ARKWN520	5" X 20"	7-1/8" X 22-1/8"	CD144072
ARKWN624	6" X 24"	8-1/8" X 26-1/8"	CD144802
ARKWN630	6" X 30"	8-1/8" X 32-1/8"	CD145632
ARKWN425	4" X 25"	6-1/8" X 27-1/8"	CD146472
ARKWG (3'0" X 6'8")	23-5/16" X 27-1/4"	25-7/16" X 29-3/8"	CD147202
ARKWG (3'0" X 7'0")	23-5/16" X 31-1/4"	25-7/16" X 33-3/8"	CD148032
ARKWG (3'0" X 7'2")	23-5/16" X 33-1/4"	25-7/16" X 35-3/8"	CD148862
ARKWC	**CUSTOM SIZE RETRO-FIT KITS ARE AVAILABLE PER SQ. FT. OF VISIBLE GLASS (3 SQ FT MIN.)**		

ATTACK RESISTANT RETRO-FIT KITS MUST BE USED WITH THE ATTACK RESISTANT COMPONENT MATERIALS AS SUPPLIED: CECO DOOR KITS, SG5 GLASS, APPROVED AND TESTED INSTALLATION COMPONENTS ONLY - NO SUBSTITUTIONS.

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OUR PRODUCTS WILL NOT CAUSE YOUR EXISTING PRODUCTS TO Be LESS SECURE, BUT EXISTING PRODUCTS THAT ARE DEFECTIVE MAY REDUCE THE ABILITY OF OUR PRODUCTS TO MEET THEIR FULL POTENTIAL.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

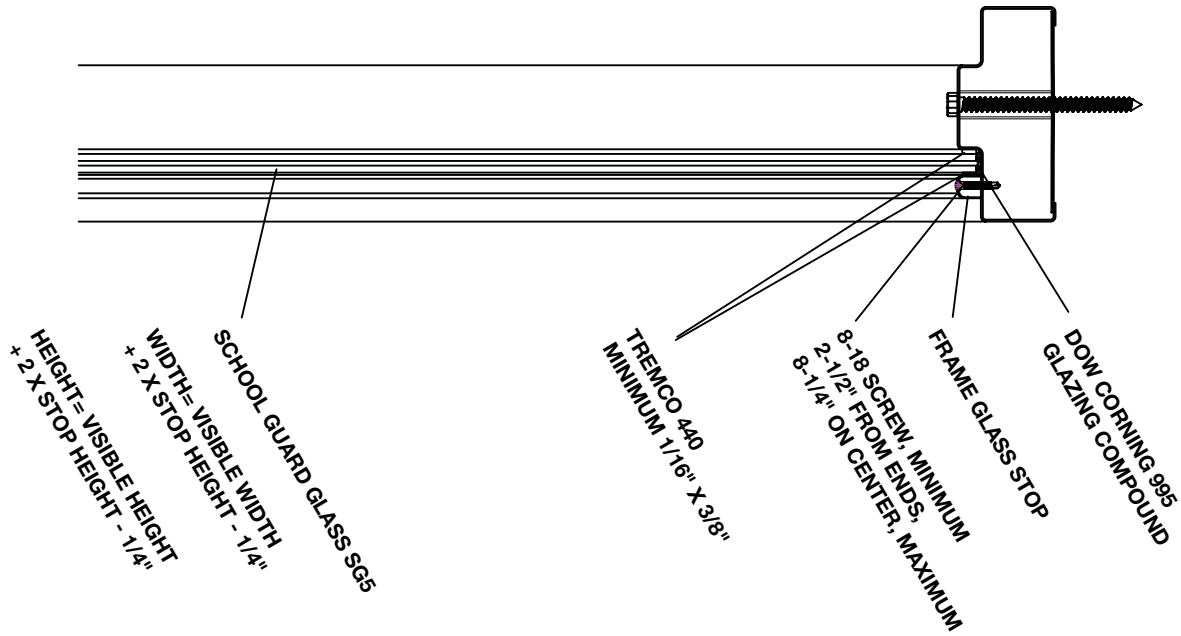
ATTACK RESISTANT RETRO-FIT SIDELIGHT & BORROWED LIGHT DETAILS

ATTACK RESISTANT SGS GLASS FOR EXISTING SIDELIGHTS AND BORROWED LIGHTS
- DOW 995 SILICONE GLAZING COMPOUND AND TREMCO 440 BUTYL TAPE SHIPPED WITH THE GLASS

SIDELIGHT GLASS SIZE
- 6" X 10" - 47" X 92.75"

BORROWED LIGHT GLASS SIZE
- 3" X 10" - 95" X 47" GLASS HORIZONTAL ORIENTED
- 3" X 10" - 47" X 95" GLASS VERTICAL ORIENTED

CUSTOM SIZES AVAILABLE (3 SQ. FT. MIN.)



ATTACK RESISTANT RETRO-FIT GLASS MUST BE USED WITH THE ATTACK RESISTANT COMPONENT MATERIALS AS SUPPLIED: SG5 GLASS, APPROVED AND TESTED INSTALLATION COMPONENTS ONLY - NO SUBSTITUTIONS.

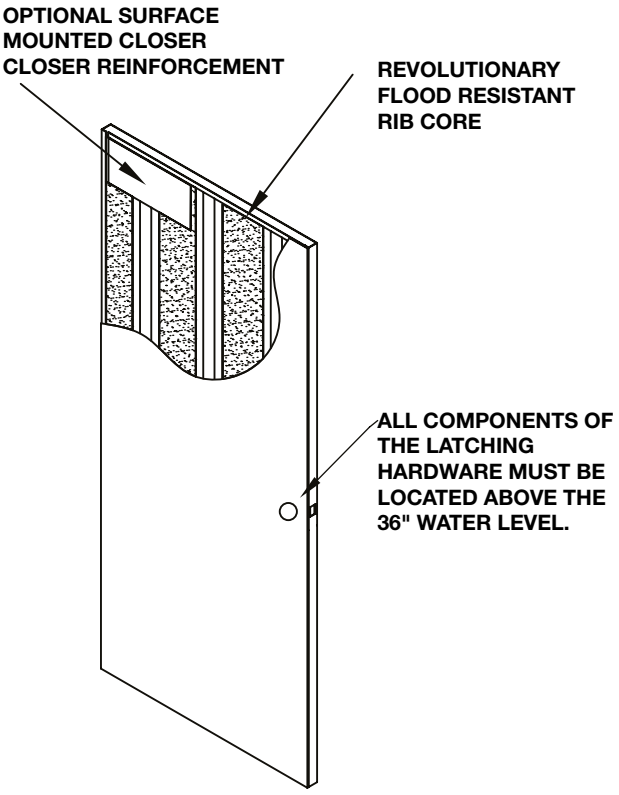
CECO AND SCHOOL GUARD GLASS ARE COMMITTED TO PROVIDING THE SAFEST AND MOST ROBUST MEANS AND METHODS FOR ATTACHMENT INTO COMPLETE FACTORY INSTALLED OEM ATTACK RESISTANT ASSEMBLIES AS WELL AS THE REPAIR, PARTIAL REPLACEMENT OR ENHANCEMENT OF EXISTING DOORS AND FRAMES. WE HAVE INDEPENDENT TESTING PARTIES REGULARLY TEST OUR INSTALLATION PROCEDURES AND PRODUCTS AS WELL AS THE FRAMES AND GLASS IT IS INSTALLED INTO. HOWEVER, PLEASE Be ADVISED THAT IT IS POSSIBLE THAT NOT ALL EXISTING DOORS, FRAMES, OR HARDWARE ON YOUR PROJECT HAVE BEEN TESTED TO OUR STANDARDS. FURTHERMORE, IF DOORS, WINDOWS OR HARDWARE ARE OLD, OF INFERIOR QUALITY, BROKEN OR PARTIALLY BROKEN, THEN THEY MAY NOT MEET THE TESTING OUTCOMES THAT NEW MATERIALS MEET. OUR PRODUCTS WILL NOT CAUSE YOUR EXISTING PRODUCTS TO Be LESS SECURE, BUT EXISTING PRODUCTS THAT ARE DEFECTIVE MAY REDUCE THE ABILITY OF OUR PRODUCTS TO MEET THEIR FULL POTENTIAL

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

1-3/4" FLOOD RESISTANT ASSEMBLY

FD (FLUSH SINGLES)

FLOOD RESISTANT DOOR DESIGN
PREPPED FOR CONVENTIONAL BUTT HINGES

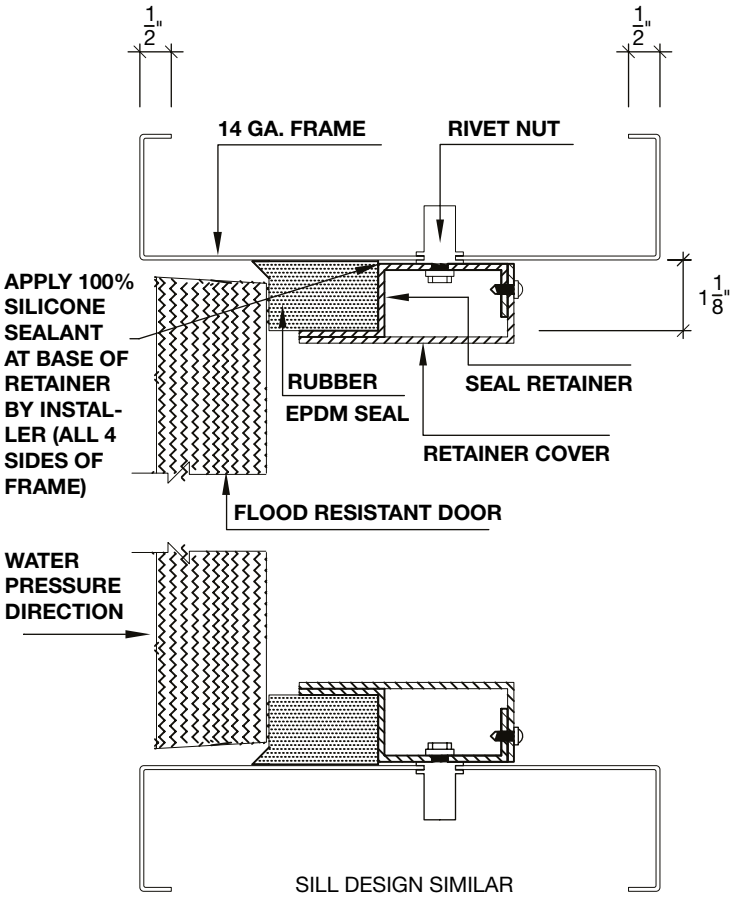


Tested and in compliance with American national standard for flood abatement equipment. Ansi / fm approvals 2510-2014, section 4.3. For water levels up to 36". Complete with perimeter seals and bottom seals.

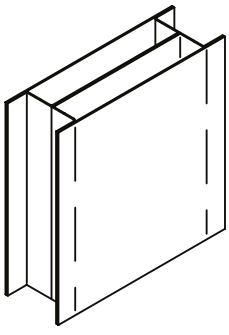
The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Flood Resistant Seal Sets Are Provided With Each Rated Assembly.

SUGGESTED USES:
- Sump rooms
- Below ground mechanical rooms

MODEL FD DOOR UTILIZES "FC" PROFILE FRAME
(SEAL SET FLD4 FOR SINGLES
(STANDARD FRAME NOT AVAILABLE)



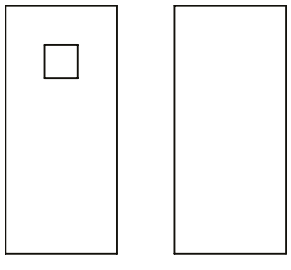
REVOLUTIONARY FLOOD RESISTANT RIB CORE



STANDARD 22 GAUGE STIFFENERS. OPTIONAL STIFFENERS: 20, 18, 16

FIBERGLASS INSULATION PLACED BETWEEN STIFFENERS DENSITY: 0.5 LB/FT^3

DOOR DESIGNS



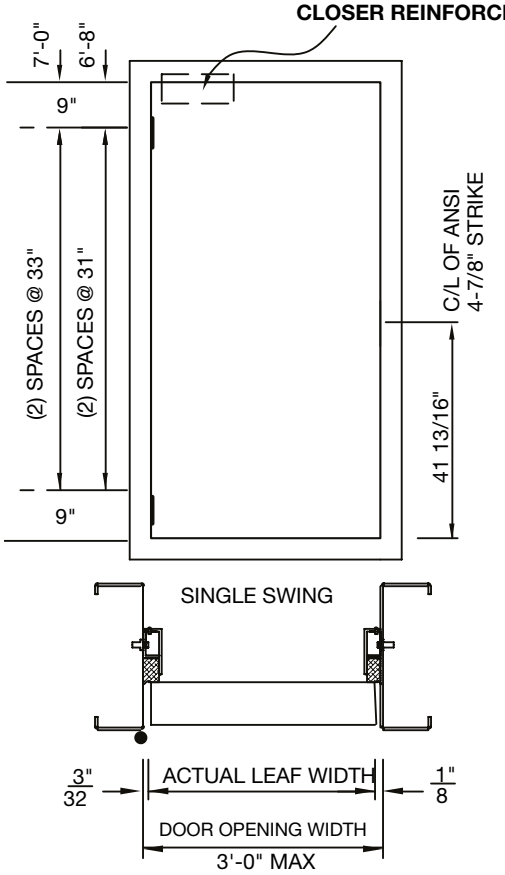
10" X 10" MAX. VISION LITE WILL BE LOCATED 60" CENTERLINE ABOVE DOOR BOTTOM UNLESS NOTED OTHERWISE.

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

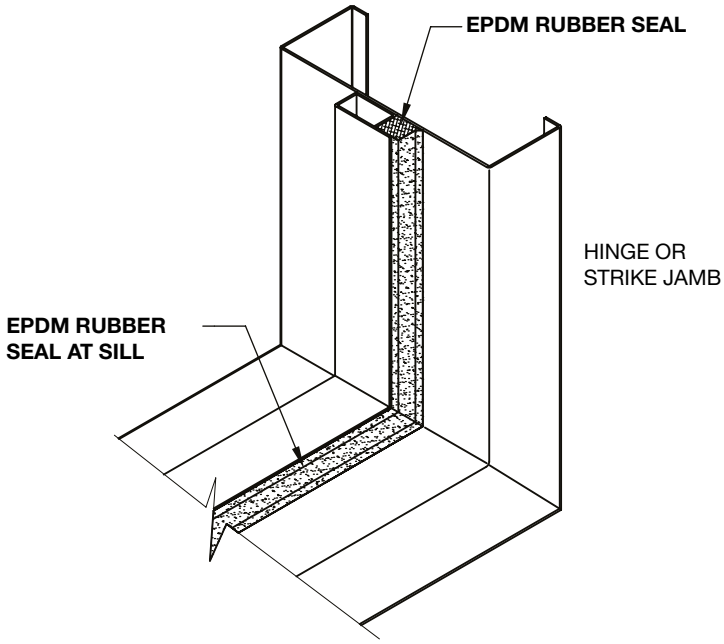
FLOOD RESISTANT DOOR SYSTEMS

HORIZONTAL SECTION

OPTIONAL SURFACE MOUNTED CLOSER REINFORCEMENT

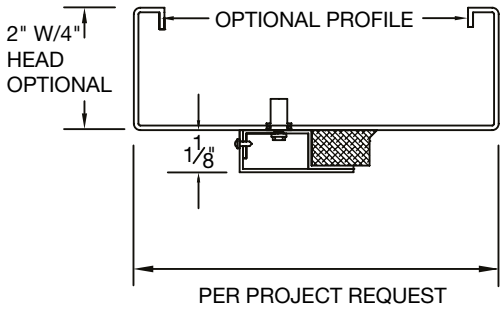


SEALS FOR MODEL FD DOOR AND "FC" FRAME PROFILE (SEAL SET FLD4)

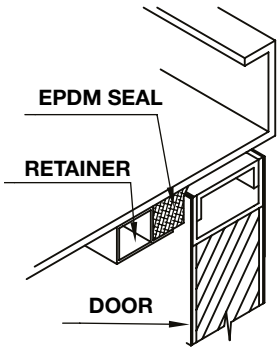


ALL LATCHING HARDWARE COMPONENTS MUST BE ABOVE THE 36" WATER LEVEL.

TYPICAL PROFILE

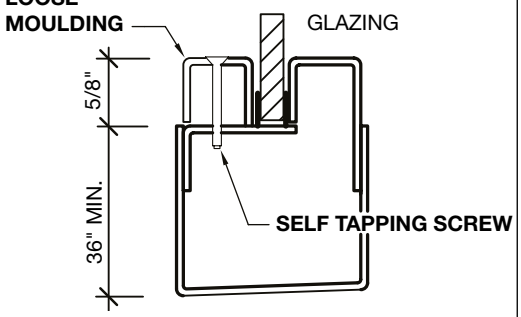


DOOR, FRAME AND SEAL -TOP (BOTTOM SIMILAR)

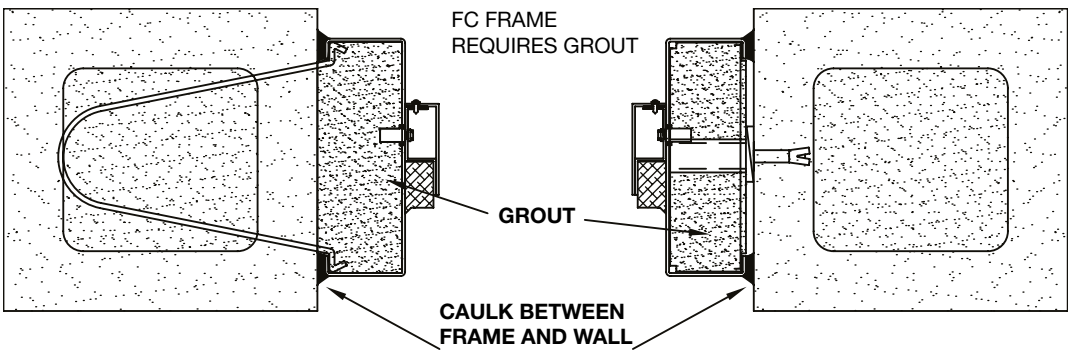


DOOR FRAME & GLAZING DETAIL

10" X 10" VISIBLE GLASS MAX.



SOME COMMON MASONRY APPLICATIONS SHOWN BELOW.

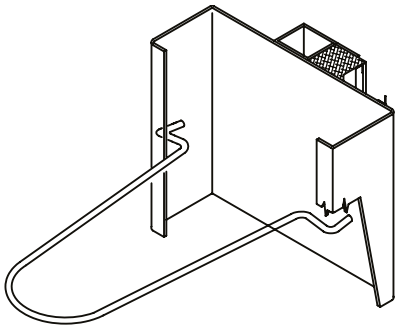


IT IS IMPORTANT THAT FLOOD DOOR SYSTEMS BE PROPERLY INSTALLED AND SEALED INTO THE WALL TO PREVENT LEAKAGE. FLOOD RESISTANT SYSTEMS ARE FURNISHED WITH SPECIFIC DETAILED SEAL INSTALLATION INSTRUCTIONS.

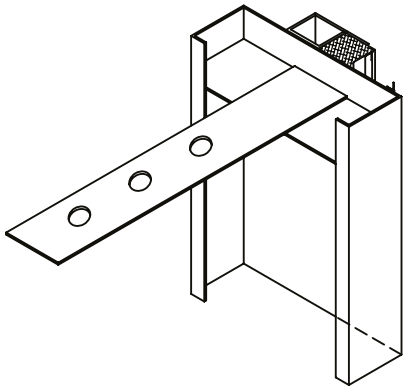
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

FLOOD RESISTANT DOOR SYSTEMS

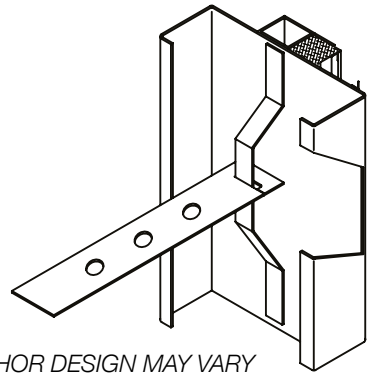
MASONRY WIRE ANCHOR 100



MASONRY "T" ANCHOR 101

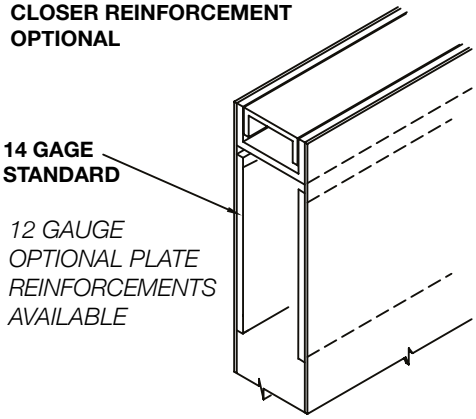


MASONRY STRAP ANCHOR 102

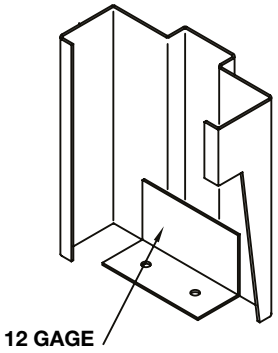


ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

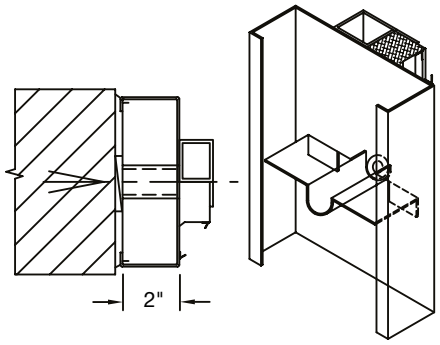
CLOSER REINFORCEMENT OPTIONAL



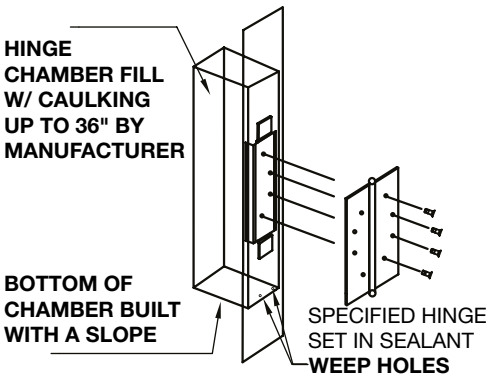
STANDARD STEEL FLOOR ANCHOR



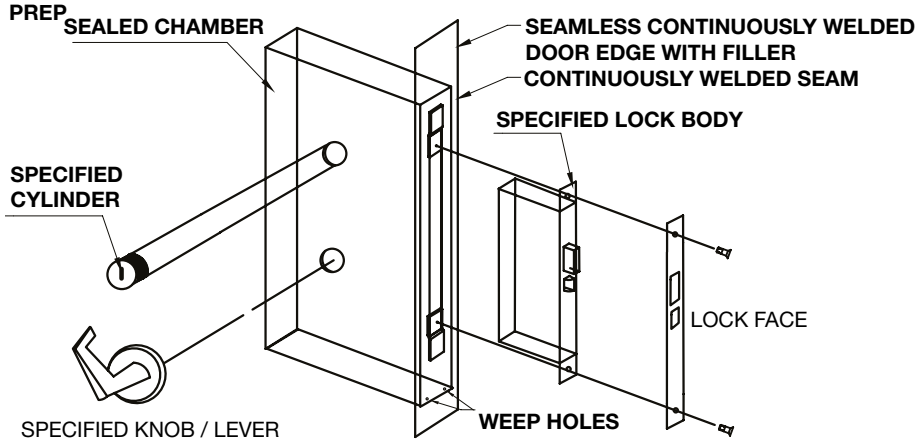
EXISTING WALL ANCHOR 301



FLOOD RESISTANT DOOR HINGE PREP

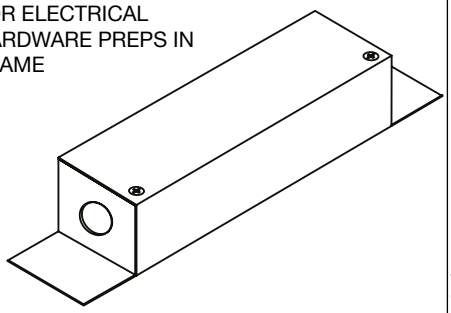


FLOOD RESISTANT DOOR LOCK PREP

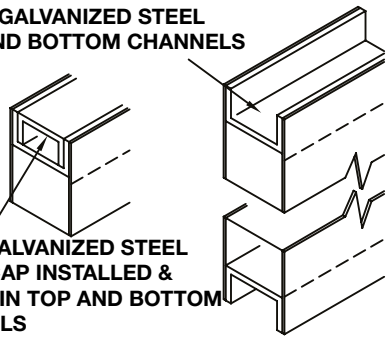


ALL COMPONENTS OF THE LATCHING HARDWARE MUST BE ABOVE THE 36º WATER LEVEL

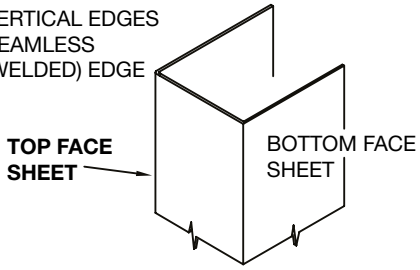
ELECTRICAL COVERBOX FOR ELECTRICAL HARDWARE PREPS IN FRAME



16 GA. GALVANIZED STEEL TOP AND BOTTOM CHANNELS



VERTICAL EDGES SEAMLESS (WELDED) EDGE



SEAMLESS (WELDED) EDGE AVAILABLE IN 16 & 14 GAUGE WITH OFFSET SEAM
OPTIONAL 12 GAUGE WELDED SEAMLESS CONSTRUCTED WITH CENTER SEAM

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

FLOOD RESISTANT DOOR SYSTEMS

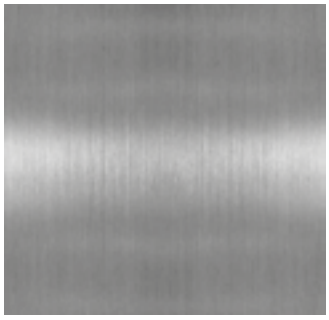
STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'-0" 2'-4" 2'-6" 2'-8" 3'-0" MAX.	6'-8" 7'-0" MAX.

(CUSTOM SIZES AVAILABLE UPON REQUEST)

FLOOD FIRE DOORS FIRE RATING NOT AVAILABLE

STAINLESS STEEL
OPTIONS AVAILABLE



AVAILABLE FINISHES
A60 GALVANIZED (STANDARD)
G90 GALVANNEALED
**STAINLESS STEEL*
**AVAILABLE FINISHES:*
**#4 BRUSH, #6 SATIN, #8 MIRROR,*
**#2B PAINT GRADE & XL BLEND*

SPECIFICATIONS:

1) All exposed surfaces of door and frame to receive one coat of rust inhibitive prime paint complying with ASTM A250.10.
2) Frame is required to be 4 sided, complete with EPDM compression seals.
3) Flood assembly should be installed in the seated position only. Meaning as the water rises, it applies pressure to the door, pressing it tighter against the seals.
4) Assembly is equipped with flood resistant door, frame, seals and crated for shipment.
5) Door Thickness is 1 3/4". Door weight is 6.75 pounds per square foot. Be aware that the frame must be securely tied to the framing from the sub floor to the structure above and grouted solid.
6) Flood resistant doors are to be formed of no less than 16 Gauge steel face sheets continuously welded at the vertical edges and finished smooth. Capped top and bottom and sealed.
7) Frames are to be formed of no less than 14 Gauge sheet steel with corners mitered, continuously welded and ground smooth.
8) Doors and frames are formed from commercial quality zinc coated steel conforming to ASTM A653 & ASTM A924. Flood resistant core and internal construction are manufacturer's proprietary standards as tested in accordance with American National Standard for Flood Abatement Equipment ANSI/FM Approvals 2510-2014, Section 4.3. It is tested for water depths up to and including 36" to standards set forth by ANSI/FM Approvals 2510-2014 (Section 4.3) including maximum allowable water see page.
9) Frames must be fully grouted above the expected waterline.
10) Please be aware industry standard construction tolerances for squareness of frame installation, plumbness of walls, flatness of floors, etc. may result in potential leakage.
11) Viewers are not allowed.
12) Only (1) glass lite allowed per door leaf.
13) Maximum visible glass 10" x 10".
14) Please reference www.cecodoor.com for installation instructions.

MATERIAL

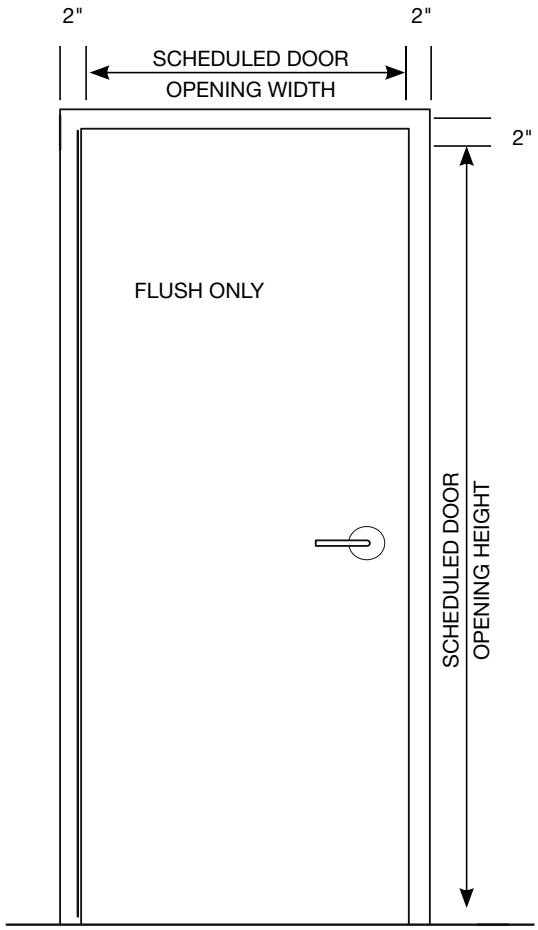
FLOOD RESISTANT DOOR SYSTEM
DOORS TESTED = 3'0"X7'0", 16 GAUGE, FLUSH, SINGLE
FRAMES TESTED = 3'0"X7'0", 14 GAUGE, CONTINUOUSLY WELDED.
TESTED ASSEMBLY INCLUDES THE FOLLOWING- FLOOD DOOR SYSTEM AND FRAME ASSEMBLIES, PERIMETER SEALS, RETAINERS AND RETAINER COVERS.
ADDITIONAL NOTES: *1) PAIRS NOT AVAILABLE.* *2) ASSEMBLY WAS FITTED WITH CYLINDRICAL UNIT LOCK. PREPARATIONS FOR ALTERNATE LOCKING HARDWARE ARE ALLOWED WITH ALL COMPONENTS BEING ABOVE THE 36" WATER LINE.* *3) FLOOD ASSEMBLIES ARE TESTED AS COMPLETE ASSEMBLIES.*

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

1-3/4” EMI-RFI SHIELDING DOOR & FRAME ASSEMBLIES

FULL FLUSH STEEL DOORS BEVELED LOCK AND HINGE EDGE, HANDED

TYPICAL ELEVATION



ADDITIONAL OPTIONS:
OPTIONAL STC 45 - 50 SINGLES AND PAIRS, SCIF COMPLIANT, BULLET RATINGS, BLAST RATINGS & LEAD LINED CONTACT SPECIALTY TECH SUPPORT FOR DETAILS.

SUGGESTED USE:

- Business Offices
- Test Labs
- Emergency Call Centers
- Healthcare Facilities
- Sensitive Electronic Installations
- Computer Data Processing
- Security Centers
- Government - Security Centers
- Financial Centers
- RFID Scanning Areas

FINISH	304 STAINLESS STEEL			316 STAINLESS STEEL		
	CECO STEEL FINISH CODE			CECO STEEL FINISH CODE		
	12 Gauge	14 Gauge	16 Gauge	12 Gauge	14 Gauge	16 Gauge
#4 BRUSH	12S01	14S01	16S01	12S02	14S02	16S02
#6 SATIN	12S03	14S03	16S03	12S04	14S04	16S04
#8 MIRROR	12S05	14S05	16S05	12S06	14S06	16S06
#2B PAINT GRADE	12S07	14S07	16S07	12S08	14S08	16S08
XL BLEND	12S10	14S10	16S10	12S10	14S10	16S10

SPECIAL NOTE: AT 304 ALLOY, INTERNALR EINFORCEMENTASN D PARTS FOR STAINLESSS TEEL DOORST O BE PROVIDEDA S GALVANIZEDS TEEL.

SPECIAL NOTE: AT 316 ALLOY, INTERNALR EINFORCEMENTASN D PARTS FOR STAINLESS STEEL DOORS TO BE PROVIDED AS STAINLESS STEEL..

1. DOOR AND FRAME TO BE MANUFACTURED WITH STAINLESS STEEL.
2. ASSEMBLY IS EQUIPPED WITH METAL EMI-RFI STAINLESS STEEL SHIELDING DOOR, EMI-RFI STAINLESS STEEL FRAME, SEALS, CONDUCTIVE SEALING MATERIALS AND THRESHOLD.
3. PRODUCT IS CRATED FOR SHIPMENT.
4. DOOR THICKNESS IS 1-3/ 4”. DOOR WEIGHT IS 11.9 POUNDS PER SQUARE FOOT. BE AWARE THAT THE FRAME MUST BE SECURELY TIED TO THE EMI-RFI SHIELDING SYSTEM
   FOR THE STRUCTURE, ROOM OR BUILDING FRAMING FROM THE SUB FLOOR TO THE STRUCTURE ABOVE.
5. DOORS ARE TO BE FORMED OF NO LESS THAN 16 GAUGE STAINLESS STEEL FACE SHEETS.
6. STAINLESS STEEL HAS EXCEPTIONAL CORROSION RESISTANCE, CONFORMING TO ASTM A666.
7. IEEE STD. 299-2006 STANDARD METHOD FOR MEASURING THE EFFECTIVENESS OF ELECTROMAGNETIC SHIELDING ENCLO SURES FOR EFFECTIVENESS, FROM 9 KHZ TO 18 GHZ.
8. THIS ASSEMBLY MEETS ADA REQUIREMENTS.

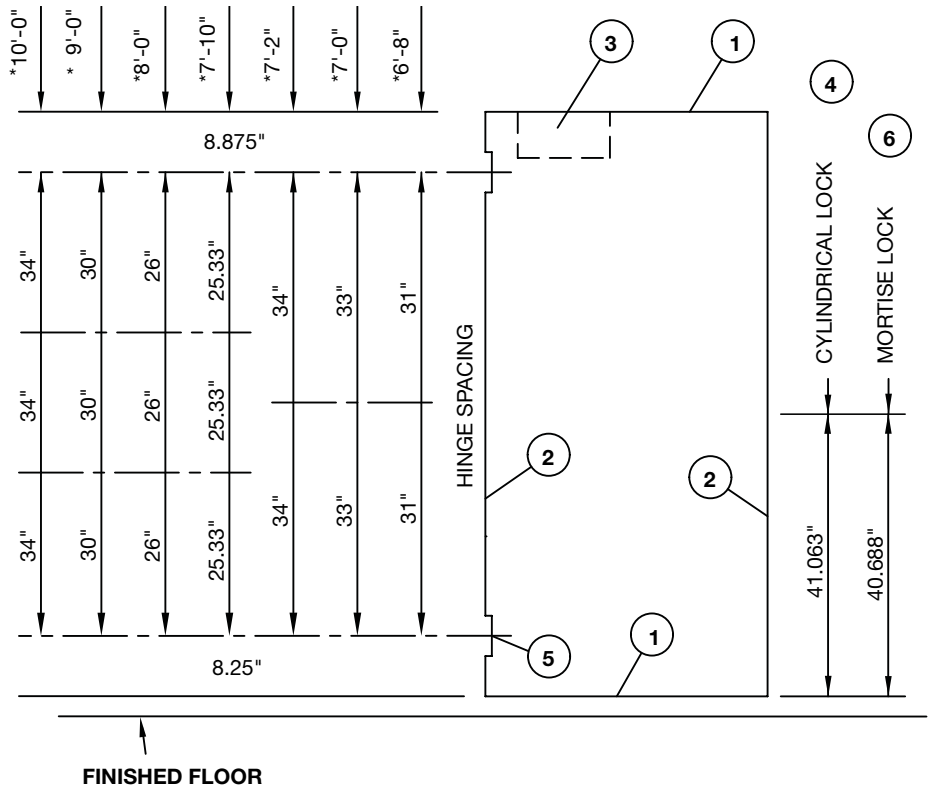
OPENING	LOCK	AVERAGE SHIELDING EFFECTIVENESS (IEEE-299-2066) UP TO	SHIELDING PROTECTION	STC CONSTRUCTION
Singles	Mortise or Cylindrical	68.72 (9 kHz - 18 GHz)	87 dB	STC 45-50
Singles	Lockmaster (SCIF)	67.84 (9 kHz - 18 GHz)	103 dB	STC 45-50
Pairs	Exit Device	64.10 (9 kHz - 18 GHz)	93 dB	STC 45-50

EMI-RFI SHIELDING ASSEMBLIES MAY BE USED IN SPECIFIC TEMPEST APPLICATIONS DEPENDENT ON CUSTOMER REQUIREMENTS. PLEASE CONTACT SPECIALTY TECH SUPPORT TEAM FOR MORE INFORMATION: SPECIALTYPRODUCTS.TECHSUPPORT@ASSAABLOY.COM / TELEPHONE: 218-828-6256

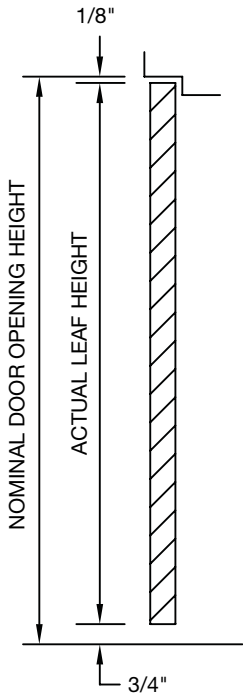
(CONVERSION: 1” = 25.4 MM, E.G., 1-3/4” = 44.45 MM)

EMI-RFI SHIELDING ASSEMBLIES

DOOR ELEVATION

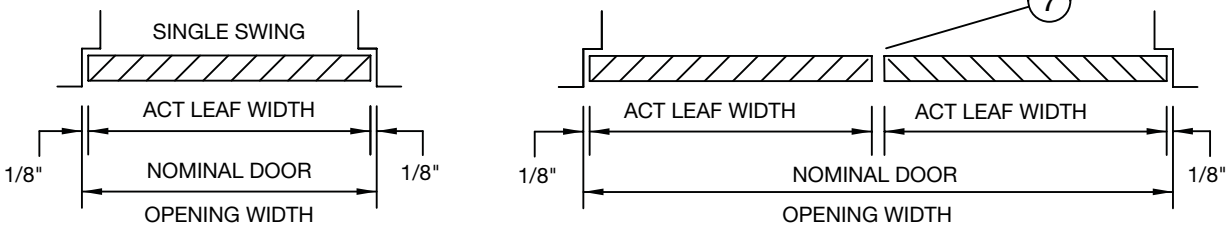


VERTICAL SECTION

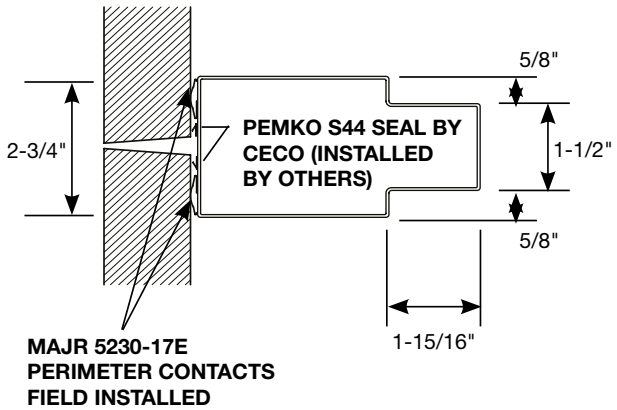


HARDWARE LOCATIONS SHOWN MATCH CECO STAINLESS STEEL FRAMES.

HORIZONTAL SECTIONS



7 FIXED OR REMOVABLE MULLION PAIR OPENINGS

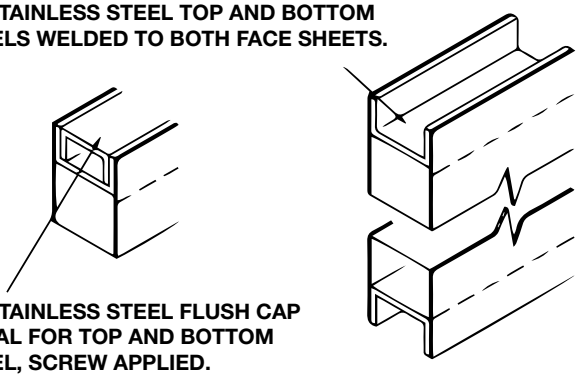


(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

EMI-RFI SHIELDING ASSEMBLIES

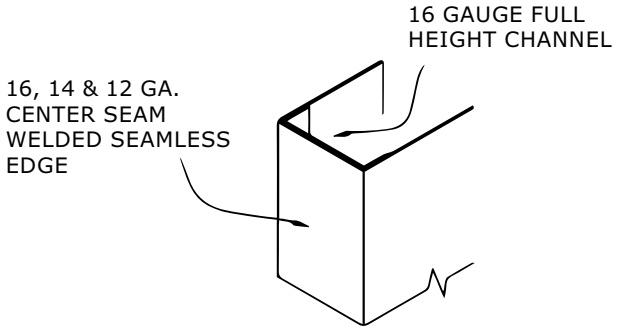
1

16 GA. STAINLESS STEEL TOP AND BOTTOM CHANNELS WELDED TO BOTH FACE SHEETS.

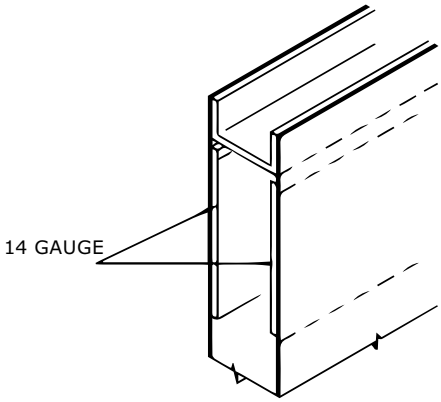


16 GA. STAINLESS STEEL FLUSH CAP OPTIONAL FOR TOP AND BOTTOM CHANNEL, SCREW APPLIED.

2 VERTICAL EDGES



3 OPTIONAL CLOSER REINFORCEMENT

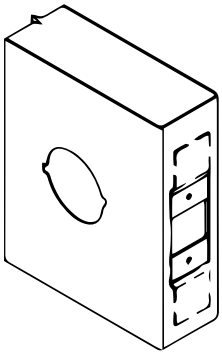


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

BEVELED LOCK EDGE

2-3/4" BACKSET

12 GAUGE LOCK REINFORCEMENT



LOCK EDGE IS BEVELED

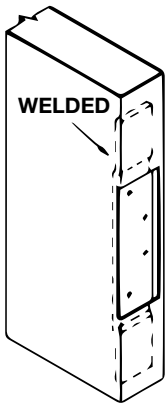
5 HINGE PREPARATION

4-1/2" OR 5" HIGH, STANDARD OR HEAVYWEIGHT, FULL MORTISE HINGES

ANSI A156.7 TEMPLATE

HINGE EDGE IS BEVELED
HINGE BACKSET 1/4"

7 GAUGE HINGE REINFORCEMENT



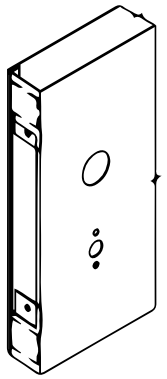
6 LOCK PREPARATION GOV. 86-4 MORTISE TYPE

BEVELED LOCK EDGE

2-3/4" BACKSET

FACE OF DOOR PREPARED PER LOCK TEMPLATE

12 GAUGE LOCK REINFORCEMENT

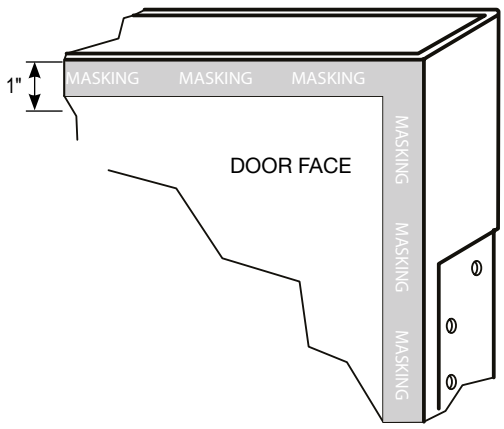


DOOR CORNER

STAINLESS STEEL FACTORY FINISHES ONLY. FIELD FINISHING BY OTHERS

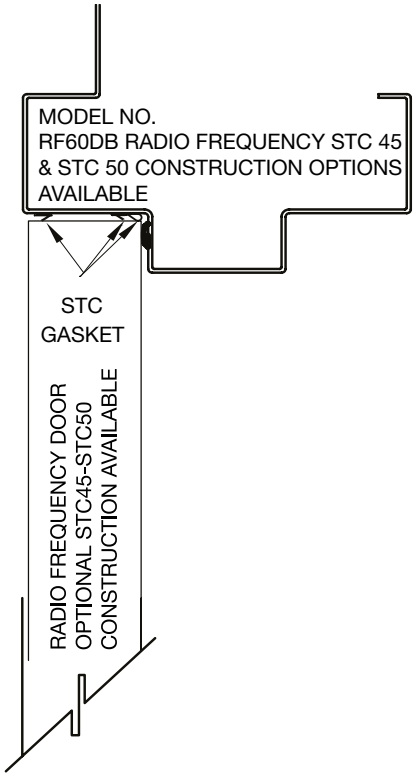
NO MASKING REQUIRED AT TOP, BOTTOM, OR EDGES OF THE DOOR. NARROW FACE ONLY

MASK OFF 1" PERIMETER OF THE NARROW OR PUSH SIDE OF THE DOOR. DOOR FACE ONLY (MASKING IS FOR PROTECTION OF STAINLESS STEEL DURING FINISH PAINTING BY OTHERS)

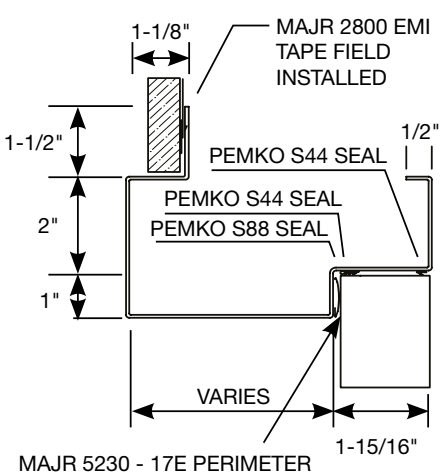


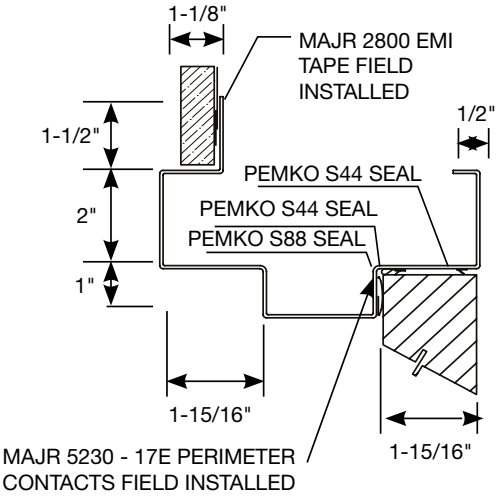
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

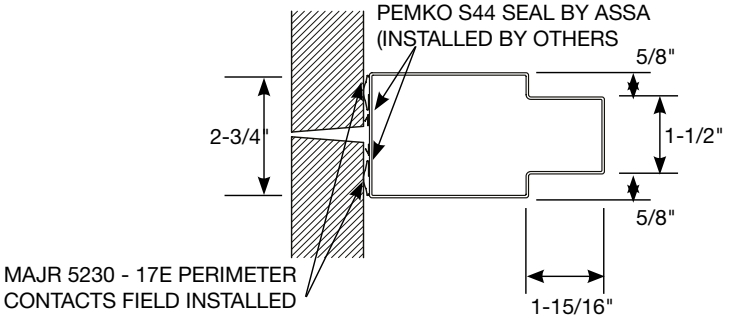
1-3/4" EMI-RFI SHIELDING DOOR & FRAME ASSEMBLIES



3-1/2" THRU 14" JAMB DEPTHS
TYPICAL FRAME PROFILES
WELDED CORNER CONSTRUCTION

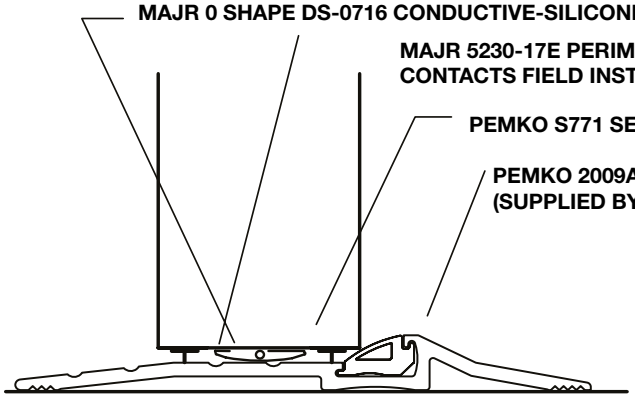


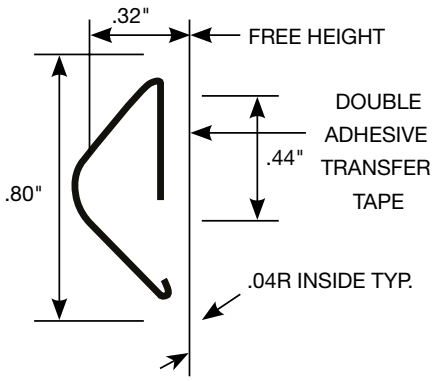




FIXED OR REMOVABLE MULLION FOR PAIR OPENINGS

DOOR BOTTOM CONSTRUCTION





1. AN ALUMINUM EMI-RFI SHIELDING THRESHOLD IS INCLUDED (OPTIONS FOR SS).
2. ASSEMBLY IS EQUIPPED WITH METAL EMI-RFI STAINLESS STEEL SHIELDING DOOR, EMI-RFI STAINLESS STEEL FRAME, SEALS, CONDUCTIVE SEALING MATERIAL & THRESHOLD.
3. PRODUCT IS ALSO CRATED FOR SHIPMENT.
4. BOTTOM SEALS REQUIRE A FLUSH LEVEL SEALING SURFACE. THE THRESHOLD MUST BE LEVEL AND MAY REQUIRE SHIMMING TO COMPENSATE FOR AN UNEVEN FLOOR. CONDUCTIVE CAULK SHOULD BE APPLIED TO THRESHOLD MAKING CONTACT POINTS WITH FRAME ESPECIALLY IN GAPS OR JOINTS. THIS WILL PREVENT ANY EMI-RFI LEAKS AT THIS LOCATION.

EMI-RFI SHIELDING ASSEMBLIES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	
2'-4"	4'-8"	
2'-6"	5'-0"	6'-8"
2'-8"	5'-4"	7'-0"
2'-10"	5'-8"	7'-2"
3'-0"	6'-0"	7'-10"
3'-4"	6'-8"	8'-0"
3'-6"	7'-0"	9'-0"
3'-8"	7'-4"	10'-0"
3'-10"	7'-8"	
4'-0"	8'-0"	

PRODUCT SPECIFICATIONS:

1-3/4" thick stainless steel doors shall be as provided by Ceco Door.

Stainless steel doors are made as full-flush 16, 14 and 12 gauge center seam style. 16, 14 & 12 gauge center seam doors have no visible vertical edge seams. Face sheets are commercial quality stainless steel. Stainless Steel conforms to ASTM A240. The top and bottom 16 gauge channels are inverted. A 16 gauge stainless steel cap is available to flush out the top and and/or bottom of the door, as an option.

Hardware Provisions: Square hinge edges are mortised for 4-1 /2" or 5" high, standard or heavy weight hinges (specify which). 7 gauge hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A 156. 7. The beveled lock edge has a standard bevel (1: 16) and is prepared for Gov. series 86 or 160/161 locks in accordance with ANSI A 115 (specify which). Optional 14 gauge closer plate reinforcing is available.

Alloy, Finish and Textures: Standard alloy is Type 304, available in #4 brush finish, #6 satin finish, #8 mirror finish, #2B paint grade finish, or XL blend. Type 316 available for corrosive environments available in #4 brush finish, #6 satin finish, #8 mirror finish, #2B paint grade finish, or XL blend.

Protection: Doors and frames are crated for shipment.

FIRE DOORS — LABELING AGENCY: UL — TEST: UL10C, UL10B

DOOR CORE	GAUGE	RATING	MAX. SIZE
HONECOMB	16	20 MIN. - 3 HOUR	4'0" X 8'0" SINGLE
HONEYCOMB	16	20 MIN - 90 MIN.	8'0" X 8'0" PAIR
POLYURETHANE LAB	16	20 MIN - 90 MIN.	4'0" X 8'0" SINGLE
POLYURETHANE LAB	16	20 MIN - 90 MIN.	8'0" X 8'0" PAIR
POLYSTYRENE	16	20 MIN - 90 MIN.	4'0" X 8'0" SINGLE
POLYSTYRENE	16	20 MIN - 90 MIN.	8'0" X 8'0" PAIR
STEEL STIFFENED	16	20 MIN - 90 MIN.	4'0" X 8'0" SINGLE
STEEL STIFFENED	16	N/A	PAIRS N/A

MATERIAL

DOOR FACE SHEETS	STAINLESS STEEL TYPE	
	304-4	316
16 GAUGE STAINLESS STEEL	STD	OPTIONAL - SEE AVAILABLE FINISH BELOW
14 GAUGE STAINLESS STEEL	STD	
12 GAUGE STAINLESS STEEL	STD	

STAINLESS STEEL ALLOY

TYPE 304
STANDARD

TYPE 316
HIGH CORROSIVE
RESISTANCE OPTIONAL

STAINLESS STEEL FINISH FOR 304 AND 316

#4 BRUSH FINISH
#6 SATIN FINISH
#8 MIRROR FINISH
#28 PAINT GRADE FINISH
XL BLEND LONG GRAIN
BRUSH FINISH

304 STAINLESS STEEL:
18% CHROMIUM AND 8% NICKEL

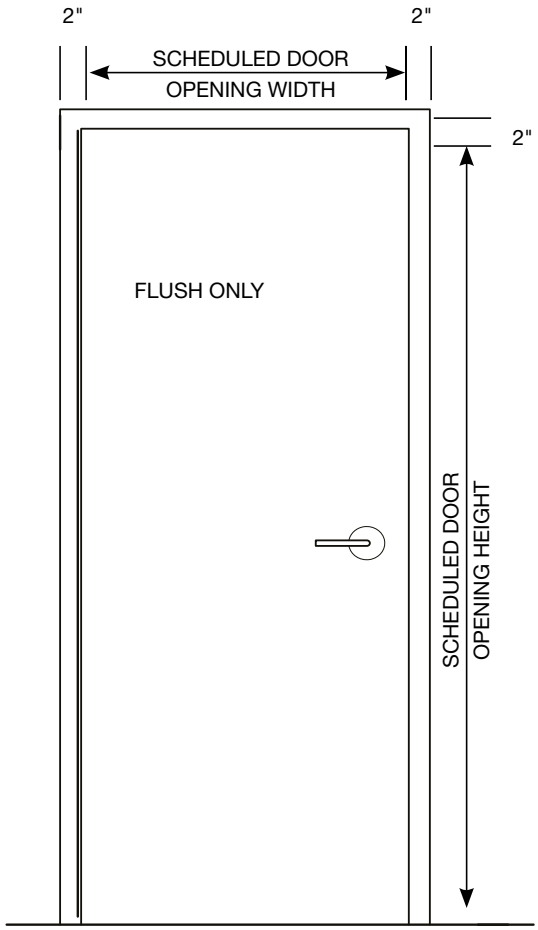
316 STAINLESS STEEL:
16% CHROMIUM, 10% NICKEL AND 2% MOLYBDENUM

(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ADJUSTABLE EMI-RFI/STC SHIELDING ASSEMBLIES

FULL FLUSH STEEL DOORS BEVELED LOCK AND HINGE EDGE, HANDED

TYPICAL ELEVATION



ADDITIONAL OPTIONS:
OPTIONAL STC 47 OPERABLE SINGLES AND PAIRS, SCIF COMPLIANT, BULLET RATINGS, BLAST RATINGS & LEAD LINED CONTACT SPECIALTY TECH SUPPORT FOR DETAILS.

SUGGESTED USE:

- Business Offices
- Test Labs
- Emergency Call Centers
- Healthcare Facilities
- Sensitive Electronic Installations
- Data Centers
- Security Centers
- Government - Security Centers
- Financial Centers
- RFID Scanning Areas

SPECIAL NOTE: AT 304 ALLOY, INTERNAL REINFORCEMENTS AND PARTS FOR STAINLESS STEEL DOORS TO BE PROVIDED AS GALVANIZED STEEL.

SPECIAL NOTE: AT 316 ALLOY, INTERNAL REINFORCEMENTS AND PARTS FOR STAINLESS STEEL DOORS TO BE PROVIDED AS GALVANIZED STEEL.

1. DOOR AND FRAME TO BE MANUFACTURED WITH STAINLESS STEEL.
2. ASSEMBLY IS EQUIPPED WITH METAL EMI-RFI STAINLESS STEEL SHIELDING DOOR, EMI-RFI/STC STAINLESS STEEL FRAME, ADJUSTABLE SHIELDING/STC SEALS, CONDUCTIVE CAULK, SHIELDING TAPE, CAM-LIFT HINGES AND THRESHOLD.
3. PRODUCT IS CRATED FOR SHIPMENT.
4. DOOR THICKNESS IS 1-3/ 4". DOOR WEIGHT IS 11.9 POUNDS PER SQUARE FOOT. BE AWARE THAT THE FRAME AND THRESHOLD MUST BE SECURELY TIED TO THE EMI-RFI SHIELDING SYSTEM FOR THE STRUCTURE, ROOM OR BUILDING FRAMING FROM THE SUB FLOOR TO THE STRUCTURE ABOVE.
5. DOORS ARE TO BE FORMED OF NO LESS THAN 16 GAUGE STAINLESS STEEL FACE SHEETS.
6. STAINLESS STEEL HAS EXCEPTIONAL CORROSION RESISTANCE, CONFORMING TO ASTM A666.
7. IEEE STD. 299. STANDARD METHOD FOR MEASURING THE EFFECTIVENESS OF ELECTROMAGNETIC SHIELDING ENCLOSURES FOR EFFECTIVENESS, FROM 9 KHZ TO 18 GHZ INTELLIGENCE COMMUNITY DIRECTIVE (ICD) 705 (SENSITIVE COMPARTMENTED INFORMATION FACILITIES), SCIF (GROUP 3-ICD 705).
   MAY BE USED IN SPECIFIC TRANSIENT ELECTROMAGNETIC PULSE EMANATION (TEMPEST) STANDARD APPLICATIONS DEPENDENT ON PROJECT REQUIREMENTS WHICH LIMITS ELECTRIC OR ELECTROGANETIC RADIATION.
8. THIS ASSEMBLY MEETS ADA REQUIREMENTS.

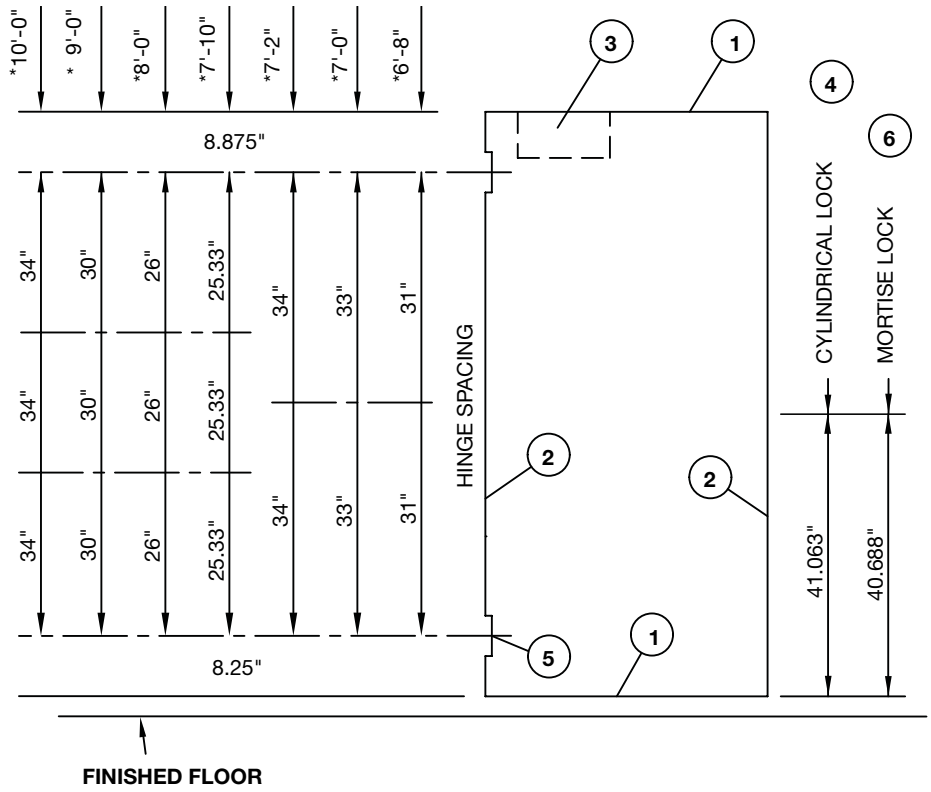
OPENING	LOCK	STC CONSTRUCTION
Singles	Mortise or Cylindrical	Up to STC 47 operable
Singles	Lockmaster (SCIF)	
Pairs	Exit Device	

EMI-RFI SHIELDING ASSEMBLIES MAY BE USED IN SPECIFIC TEMPEST APPLICATIONS DEPENDENT ON CUSTOMER REQUIREMENTS. PLEASE CONTACT SPECIALTY TECH SUPPORT TEAM FOR MORE INFORMATION: SPECIALTYPRODUCTS.TECHSUPPORT@ASSAABLOY.COM / TELEPHONE: 218-828-6256

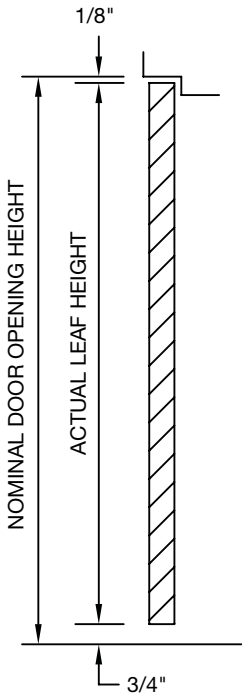
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ADJUSTABLE EMI-RFI/STC SHIELDING ASSEMBLIES

DOOR ELEVATION

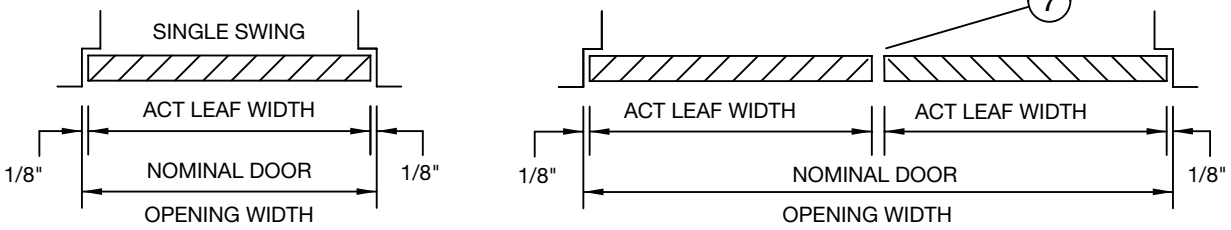


VERTICAL SECTION

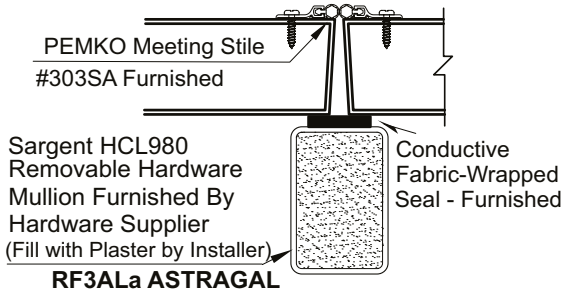


HARDWARE LOCATIONS SHOWN MATCH CECO STAINLESS STEEL FRAMES.

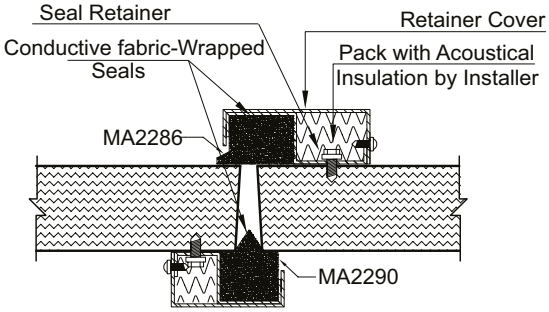
HORIZONTAL SECTIONS



7 FIXED OR REMOVABLE MULLION PAIR OPENINGS



RF3ALa ASTRAGAL



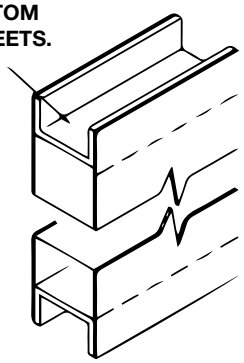
RF1ALa Astragal

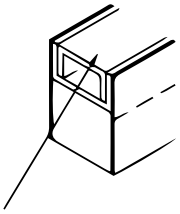
For Pairs with Inactive Leaf

ADJUSTABLE EMI-RFI/STC SHIELDING ASSEMBLIES

1

16 GA. STAINLESS STEEL TOP AND BOTTOM CHANNELS WELDED TO BOTH FACE SHEETS.



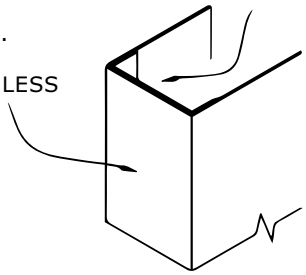


16 GA. STAINLESS STEEL FLUSH CAP OPTIONAL FOR TOP AND BOTTOM CHANNEL, SCREW APPLIED.

2 VERTICAL EDGES

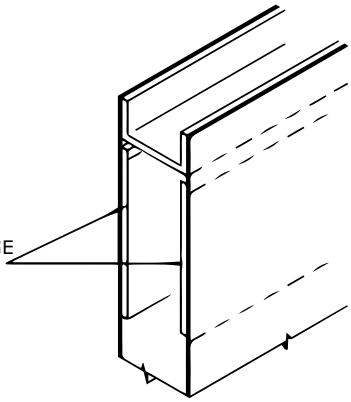
16 GAUGE FULL HEIGHT CHANNEL

16, 14 & 12 GA. CENTER SEAM WELDED SEAMLESS EDGE



3 OPTIONAL CLOSER REINFORCEMENT

14 GAUGE

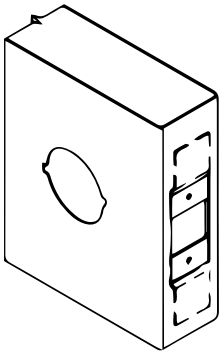


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

BEVELED LOCK EDGE

2-3/4" BACKSET

12 GAUGE LOCK REINFORCEMENT



LOCK EDGE IS BEVELED

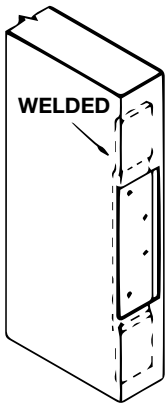
5 HINGE PREPARATION

4-1/2" OR 5" HIGH, STANDARD OR HEAVYWEIGHT, FULL MORTISE HINGES

ANSI A156.7 TEMPLATE

HINGE EDGE IS BEVELED
HINGE BACKSET 1/4"

7 GAUGE HINGE REINFORCEMENT



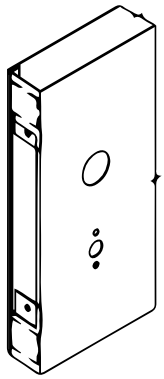
6 LOCK PREPARATION GOV. 86-4 MORTISE TYPE

BEVELED LOCK EDGE

2-3/4" BACKSET

FACE OF DOOR PREPARED PER LOCK TEMPLATE

12 GAUGE LOCK REINFORCEMENT

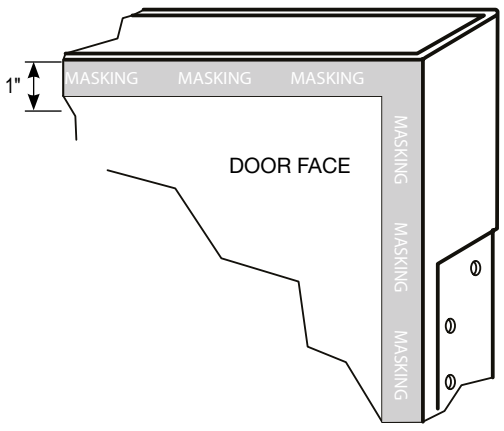


DOOR CORNER

STAINLESS STEEL FACTORY FINISHES AND PRIME PAINTED. FIELD FINISHING BY OTHERS

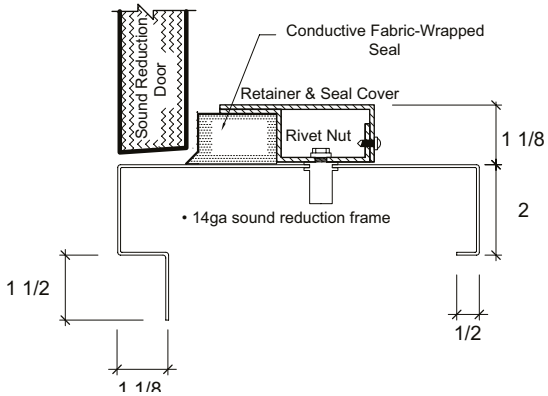
NO MASKING REQUIRED AT TOP, BOTTOM, OR EDGES OF THE DOOR. NARROW FACE ONLY

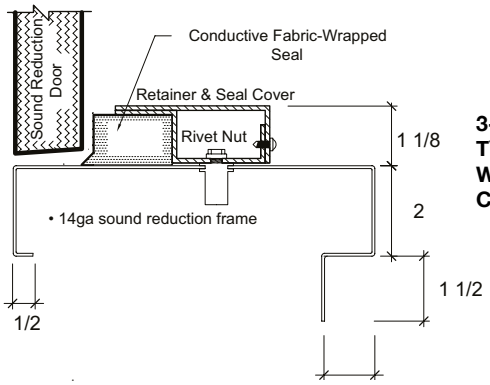
MASK OFF 1" PERIMETER OF THE NARROW OR PUSH SIDE OF THE DOOR. DOOR FACE ONLY (MASKING IS FOR PROTECTION OF STAINLESS STEEL DURING FINISH PAINTING BY OTHERS)



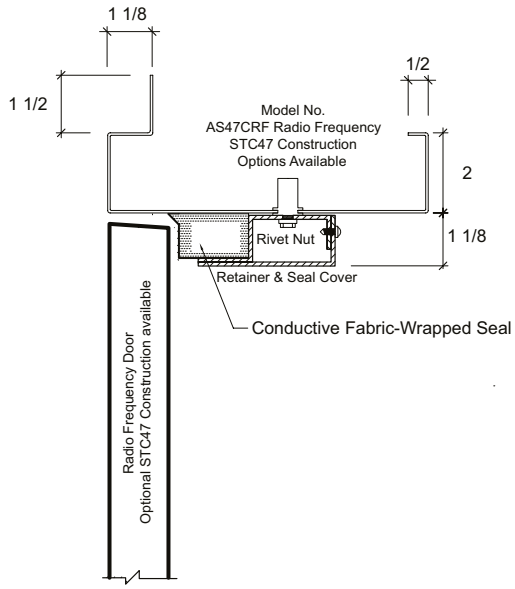
(CONVERSION: 1" = 25.4 MM, E.G., 1-3/4" = 44.45 MM)

ADJUSTABLE EMI-RFI/STC SHIELDING ASSEMBLIES

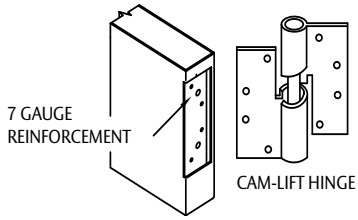




3-1/2" THRU 14" JAMB DEPTHS
TYPICAL FRAME PROFILES
WELDED CORNER
CONSTRUCTION



CAM-LIFT HINGES



HINGE PREPARATION
(HINGE PREP. IS HANDED)

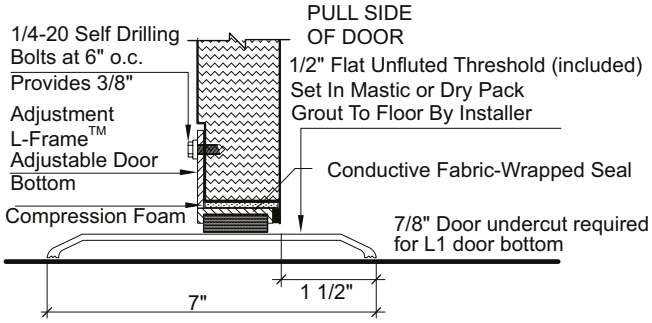
DOOR BOTTOM CONSTRUCTION

L1RF (L- Frame)

Door Bottom

Threshold must be level and filled to compensate for uneven floors and prevent sound leaks.

Threshold should protrude 1 1/2" past face of frame to allow the conductive fabric-wrappedseal section of the door bottom to seat properly during normal operation with the Cam hinges.



1. AN ALUMINUM EMI-RFI SHIELDING THRESHOLD IS INCLUDED (OPTIONS FOR SS).
2. EMI-RFI/STC SHIELDING ASSEMBLY IS EQUIPPED WITH STAINLESS STEEL HOLLOW METAL EMI-RFI/STC SHIELDING DOOR, EMI-RFI/STC STAINLESS STEEL FRAME, ADJUSTABLE EMI-RFI/STC SEALS, CONDUCTIVE CAULK AND TAPE, PEMKO THRESHOLD, AND CAM-LIFT HINGES.
3. PRODUCT IS ALSO CRATED FOR SHIPMENT.
4. BOTTOM SEALS REQUIRE A FLUSH LEVEL SEALING SURFACE. THE THRESHOLD MUST BE LEVEL AND MAY REQUIRE SHIMMING TO COMPENSATE FOR AN UNEVEN FLOOR. CONDUCTIVE CAULK SHOULD BE APPLIED TO THRESHOLD MAKING CONTACT POINTS WITH FRAME ESPECIALLY IN GAPS OR JOINTS. THIS WILL PREVENT ANY EMI-RFI/STC LEAKS AT THIS LOCATION.

ADJUSTABLE EMI-RFI/STC SHIELDING ASSEMBLIES

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2’-0”	4’-0”	
2’-4”	4’-8”	
2’-6”	5’-0”	6’-8”
2’-8”	5’-4”	7’-0”
2’-10”	5’-8”	7’-2”
3’-0”	6’-0”	7’-10”
3’-4”	6’-8”	8’-0”
3’-6”	7’-0”	9’-0”
3’-8”	7’-4”	10’-0”
3’-10”	7’-8”	
4’-0”	8’-0”	

PRODUCT SPECIFICATIONS:

1-3/4” thick stainless steel doors shall be as provided by Ceco Door.

Stainless steel doors are made as full-flush 16, 14 and 12 gauge center seam style. 16, 14 & 12 gauge center seam doors have no visible vertical edge seams. Face sheets are commercial quality stainless steel. Stainless Steel conforms to ASTM A240. The top and bottom 16 gauge channels are inverted. A 16 gauge stainless steel cap is available to flush out the top and and/or bottom of the door, as an option.

Hardware Provisions: Hinge edges mortised for cam-lift hinges. 7 gauge hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A 156. 7. The beveled lock edge has a standard bevel (1: 16) and is prepared for Gov. series 86 or 160/161 locks in accordance with ANSI A 115 (specify which). Optional 14 gauge closer plate reinforcing is available.

Alloy, Finish and Textures: Standard alloy is Type 304 factory prime painted, available in #4 brush finish, #6 satin finish, #8 mirror finish, #2B paint grade finish, or XL blend. Type 316 available for corrosive environments available in #4 brush finish, #6 satin finish, #8 mirror finish, #2B paint grade finish, or XL blend.

Protection: Doors and frames are crated for shipment.

MATERIAL

DOOR FACE SHEETS	STAINLESS STEEL TYPE	
	304-4	316
16 GAUGE STAINLESS STEEL	STD	OPTIONAL - SEE AVAILABLE FINISH BELOW
14 GAUGE STAINLESS STEEL	STD	
12 GAUGE STAINLESS STEEL	STD	

STAINLESS STEEL ALLOY

TYPE 304
STANDARD

TYPE 316
HIGH CORROSIVE
RESISTANCE OPTIONAL

STAINLESS STEEL FINISH FOR 304 AND 316

#4 BRUSH FINISH
#6 SATIN FINISH
#8 MIRROR FINISH
#28 PAINT GRADE FINISH
XL BLEND LONG GRAIN
BRUSH FINISH

304 STAINLESS STEEL:
18% CHROMIUM AND 8% NICKEL

316 STAINLESS STEEL:
16% CHROMIUM, 10% NICKEL AND 2% MOLYBDENUM