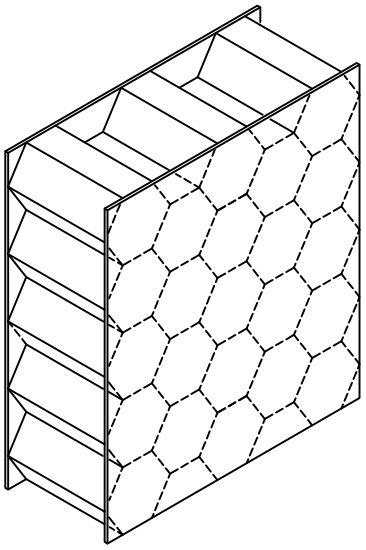
Return to Index

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

FLUSH AND EMBOSSED PANEL STEEL DOORS
BEVELED LOCK EDGE, HANDED

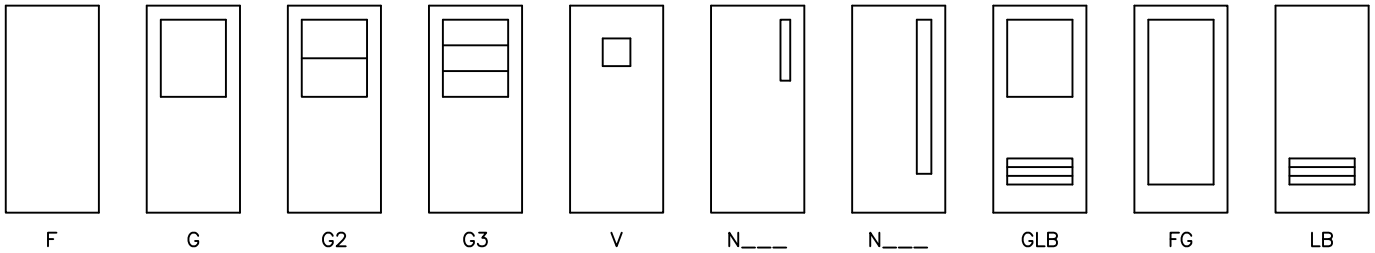


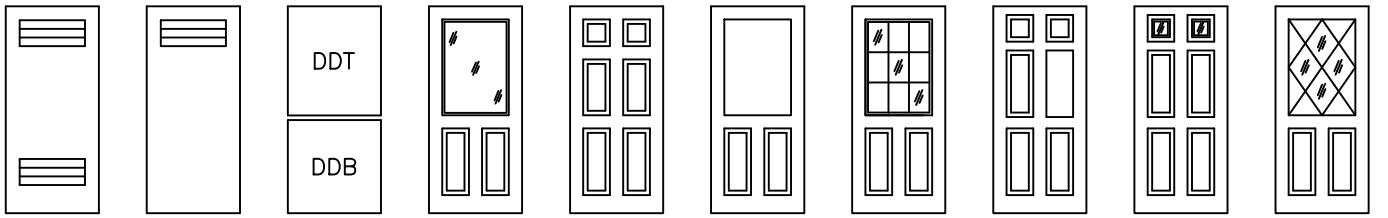
Kraft fiber honeycomb slab, bonded to the inside of both face sheets with a water resistant, contact adhesive.

Suggested Use:

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

DOOR DESIGNS



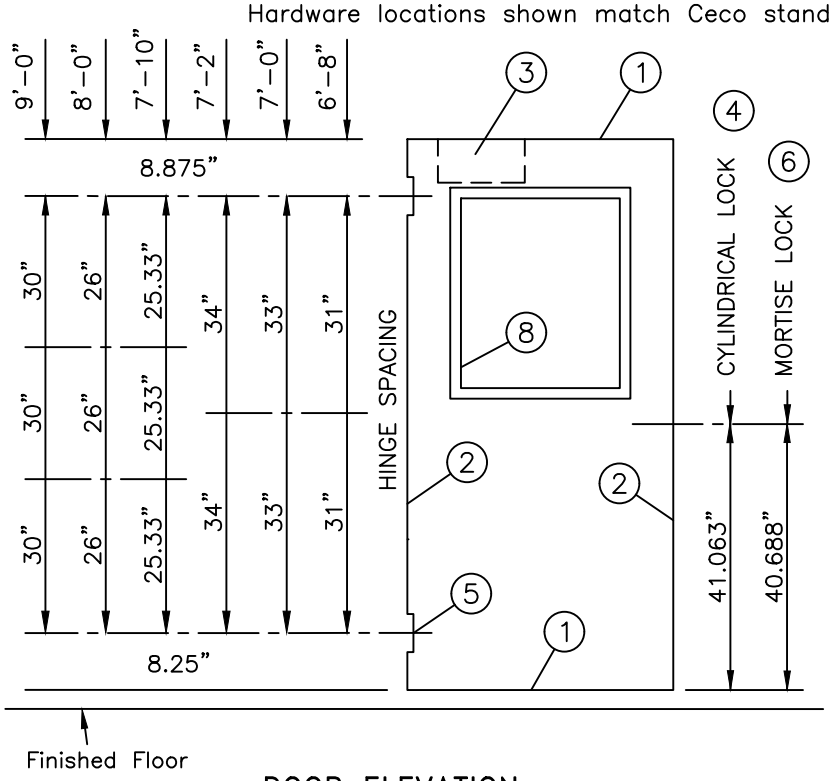


EMBOSSED 6 PANEL ORDER CODES AND DOOR WIDTHS	
2'6", 2'8" NARROW 6 PANEL	2'8", 3'0" STD. 6 PANEL
EN61	E603
EN62	E601
EN63	E602
EN66	E605
E607	E606
E608	E607
EN69	E608
EN63	E609
E603	E604

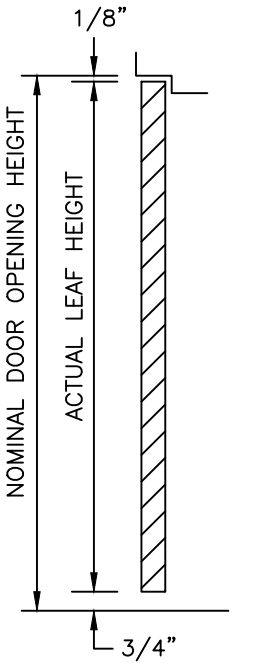
6 PANEL	
MAX. SIZE	3'0"x7'0"
MIN. SIZE	2'6"x6'8"

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

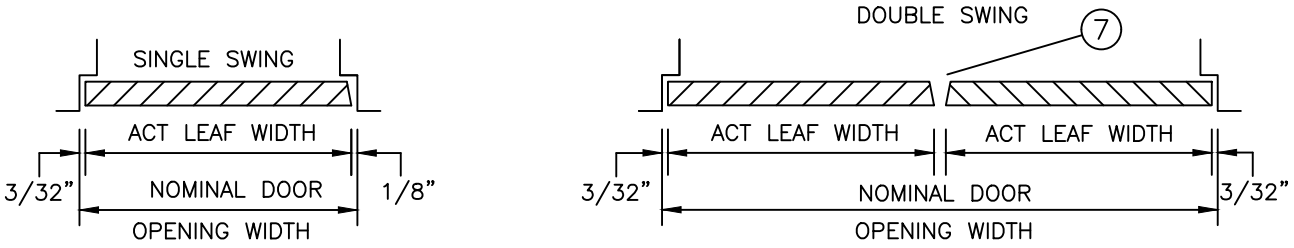
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



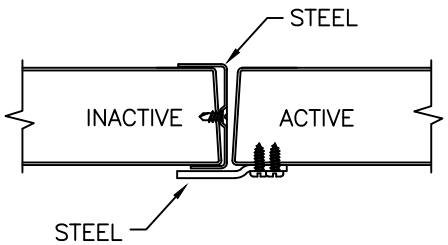
VERTICAL SECTION



HORIZONTAL SECTIONS

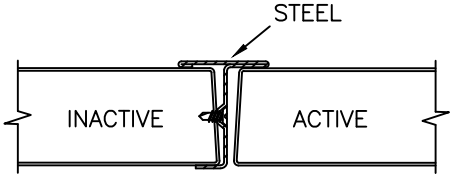
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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



LISTED

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



LISTED

CecoDoor

TECH-DATA

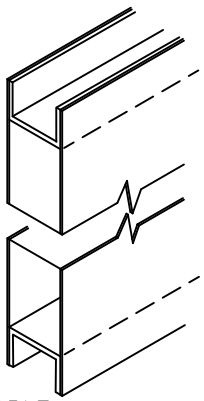
D1-3

16 GAGE STEEL END CHANNELS

1

WELDED TO BOTH FACE SHEETS

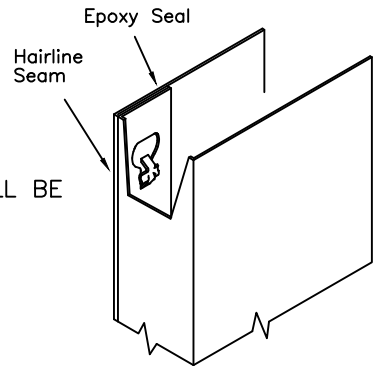
INVERTED TOP AND BOTTOM



OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

VERTICAL EDGES

2



MECHANICALLY INTERLOCKED HEMMED EDGES

14 GAGE DOORS WILL BE CENTER EDGE SEAM CONSTRUCTION

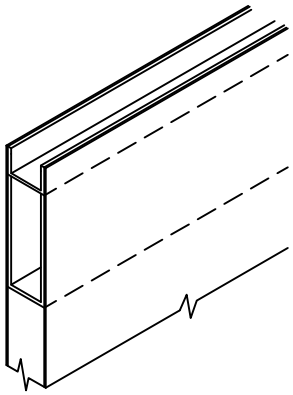
OPTIONAL: SEAMLESS (WELDED OR BODY FILLER)

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

CLOSER REINFORCEMENT (OPTIONAL)

3

14 GAGE STEEL CHANNEL 20" LONG



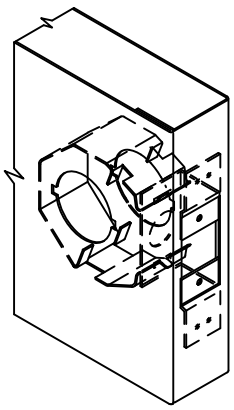
LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

4

(LC1)

(ANSI A115.2)

2-3/4" BACKSET



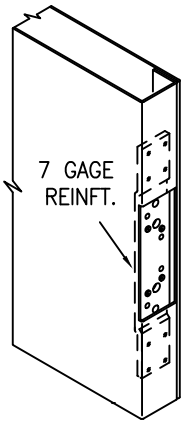
LOCK EDGE IS BEVELED 1/8" in 2" (1:16)

HINGE PREPARATION

5

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

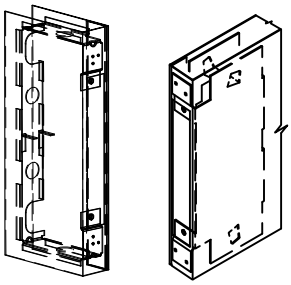
HINGE EDGE IS HANDED AND NOT BEVELED.



ANSI A156.7 TEMPLATE

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

6



(LM0)

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

VERTICAL EDGES

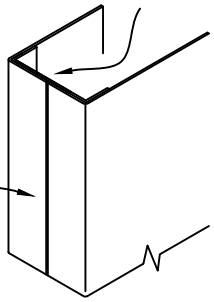
2

16 GAGE FULL HEIGHT CHANNEL

ALL 6 PANEL DESIGNS ARE CENTER EDGE SEAM CONSTRUCTION

14 GAGE WILL BE CENTER EDGE SEAM CONSTRUCTION

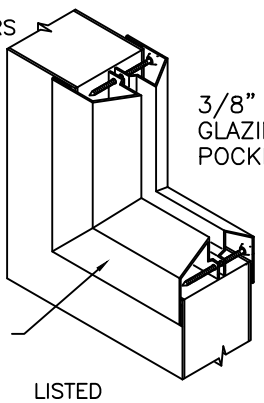
WELD SEAMLESS AND BODY FILLER SEAMLESS IS OPTIONAL



GLAZING TRIM SlimTrim

8

FOR ALL FIRE DOORS



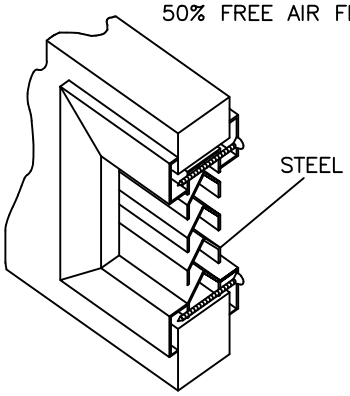
LISTED

FIXED SLAT TYPE LOUVER 4634

9

FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW



07/14/20

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(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

BACK TO TOP

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 gage 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 gage 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 gage 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.

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: UL10C, UL10B, UL1784, & 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, FG, G, N, & V

Not all ratings are available in all sizes, designs and materials.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
20 Gage Steel (4080 max.)	Standard Duty	N/A	STD	N/A	16 Gage Steel
18 Gage Steel	Heavy Duty	STD	OPT	OPT	16 Gage Steel
16 Gage Steel	Extra Heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel
14 Gage Steel	Maximum Duty	STD	OPT	OPT	14 or 12 Gage Steel

PERFORMANCE

Sound Transmission Class:	STC 32 (F Design, 18 Gage Face Sheets, ASTM E90 & E413 [Fully Operable])
Physical Endurance /Level:	Meets ANSI A250.4 Performance Test, 20 GAGE: Level B (500,000 Cycles); 18 and 16 Gage: Level A (1,000,000 Cycles)

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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BACK TO TOP

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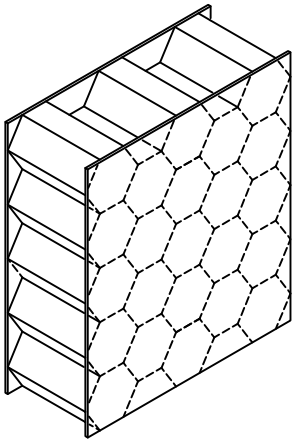
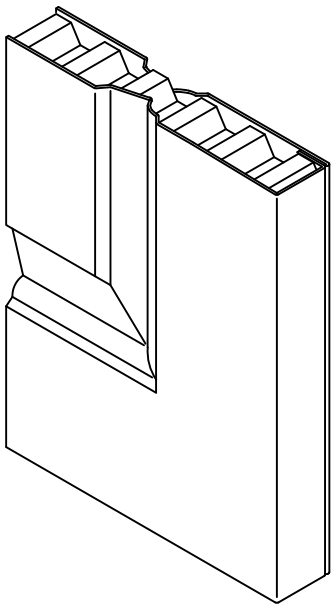
Return to Index

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

FLUSH AND EMBOSSED PANEL STEEL DOORS
UNIVERSAL, NON-HANDED



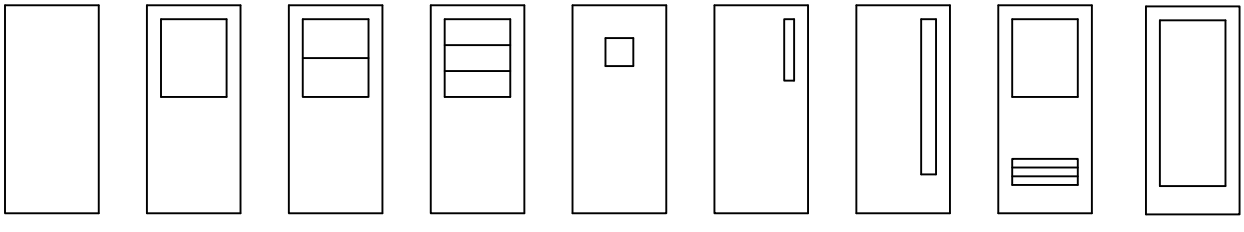


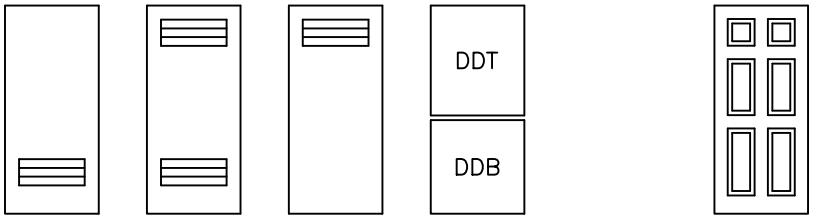
Kraft fibre honeycomb slab, bonded to the inside of both face sheets with a waterproof, contact adhesive.

Suggested Use:

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

DOOR DESIGNS

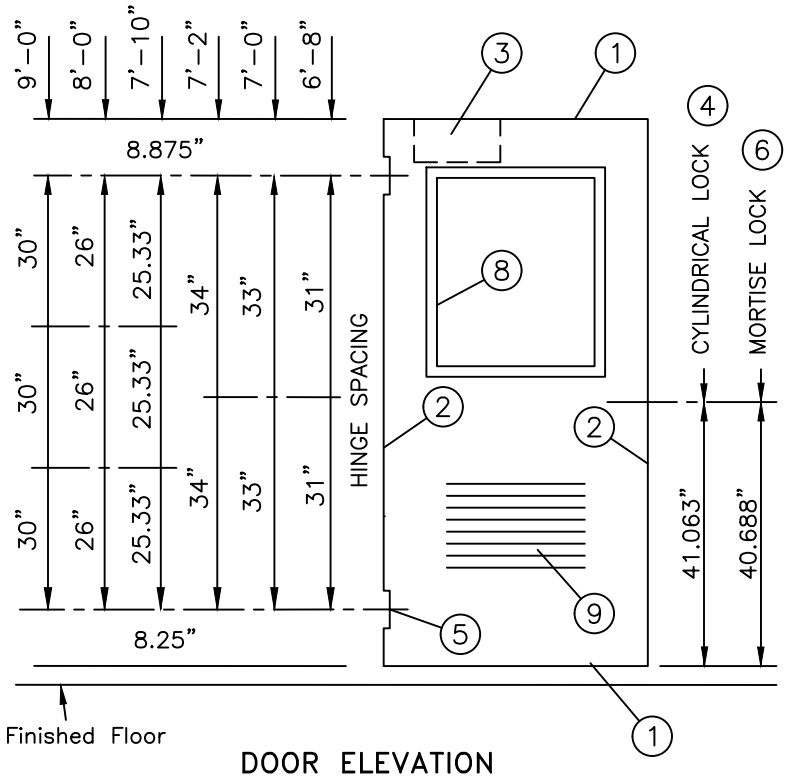




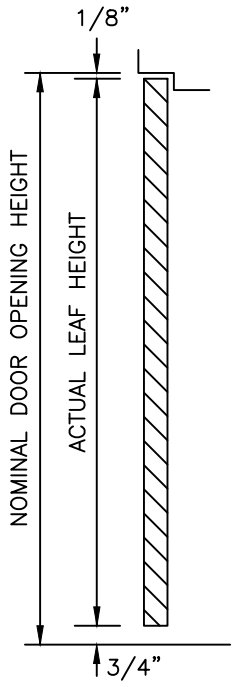
6 PANEL	
MAX. SIZE	3'0"x7'0"
MIN. SIZE	2'6"x6'8"

ALL 6 PANEL EMBOSSED DESIGNS WILL BE CENTER EDGE SEAM CONSTRUCTION

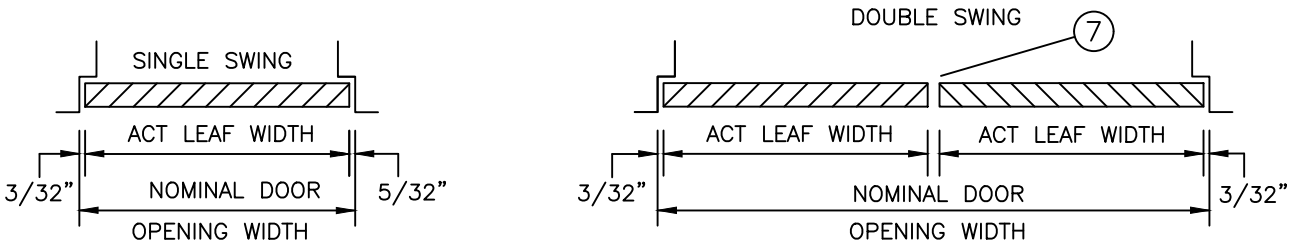
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



VERTICAL SECTION

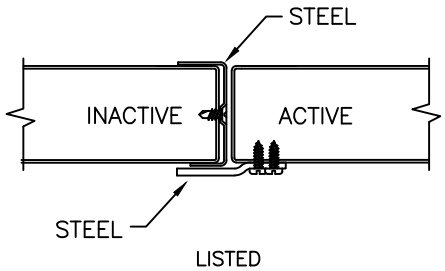


HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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

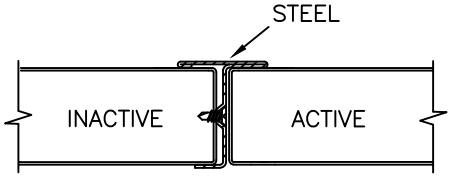
7



LISTED

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

7



LISTED

TECH-DATA

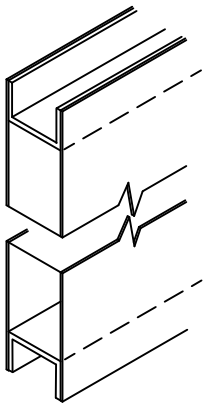
D2-3

16 GAGE STEEL END CHANNELS

1

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM



OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

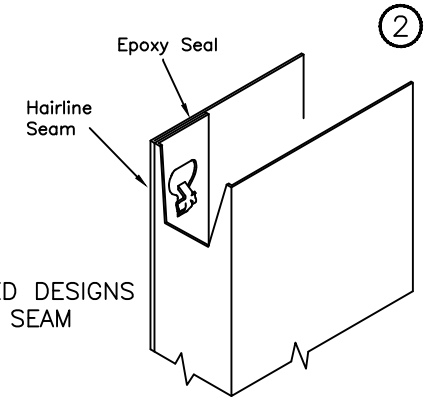
VERTICAL EDGES

2

MECHANICALLY INTERLOCKED HEMMED EDGES

OPTIONAL: SEAMLESS (WELDED OR BODY FILLER)

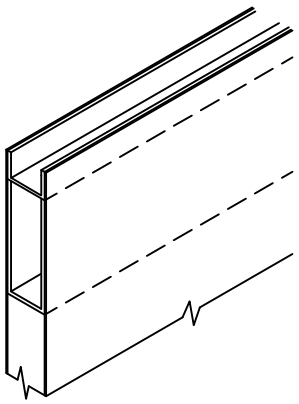
ALL 6 PANEL EMBOSSED DESIGNS WILL BE CENTER EDGE SEAM CONSTRUCTION.



CLOSER REINFORCEMENT (OPTIONAL)

3

14 GAGE STEEL CHANNEL 20" LONG



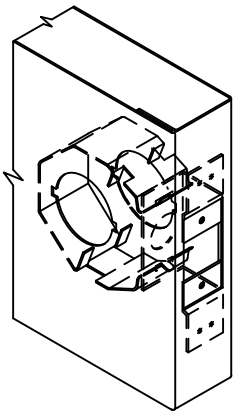
LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

4

(LC1)

(ANSI A115.2)

2-3/4" BACKSET



LOCK EDGE IS SQUARE

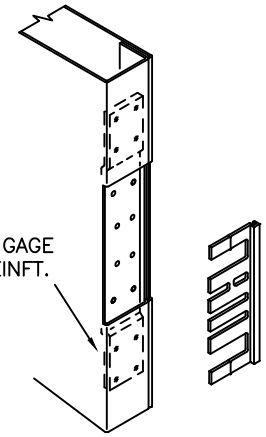
HINGE PREPARATION

5

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

ANSI A156.7 TEMPLATE

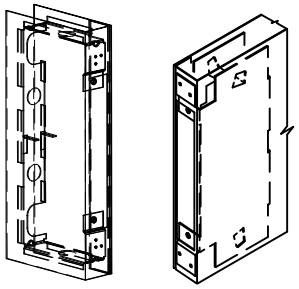
NON-HANDED



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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

6



(LM0)

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

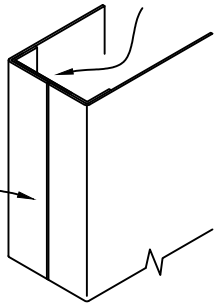
VERTICAL EDGES

2

16 GAGE FULL HEIGHT CHANNEL

ALL 6 PANEL DESIGNS ARE CENTER EDGE SEAM CONSTRUCTION

WELD SEAMLESS AND BODY FILLER SEAMLESS IS OPTIONAL



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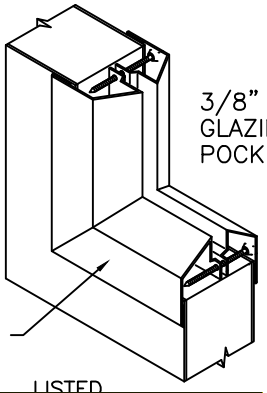
GLAZING TRIM SlimTrim

8

FOR ALL FIRE DOORS



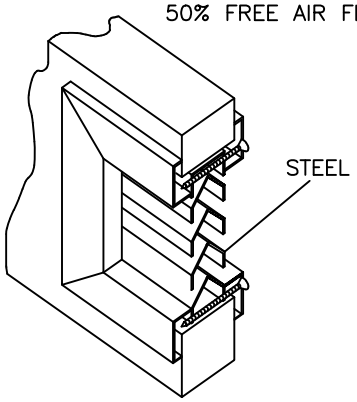
LISTED

FIXED SLAT TYPE LOUVER 4634

9

FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW



RETURN TO TOP

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 gage 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 gage 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 gage 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.

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, N, & V

Not all ratings are available in all sizes, designs and materials.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
20 Gage Steel (4080 max.)	Standard Duty	N/A	STD	N/A	16 Gage Steel
18 Gage Steel	Heavy Duty	STD	OPT	OPT	16 Gage Steel
16 Gage Steel	Extra Heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel

PERFORMANCE

Sound Transmission Class:	STC 32 (F Design, 18 Gage Face Sheets, ASTM E90 & E413 [Fully Operable])
Physical Endurance /Level:	Meets ANSI A250.4 Performance Test, 20 GAGE: Level B (500,000 Cycles); 18 and 16 Gage: Level A (1,000,000 Cycles)

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

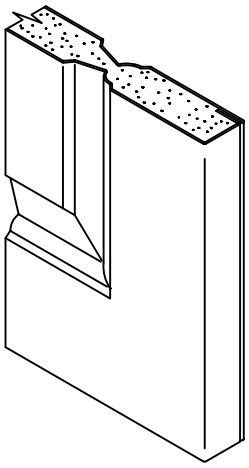
1-3/4" IMPERIAL (IU) POLYURETHANE CORE

FLUSH AND EMBOSSED PANEL STEEL DOORS
BEVELED LOCK EDGE, HANDED

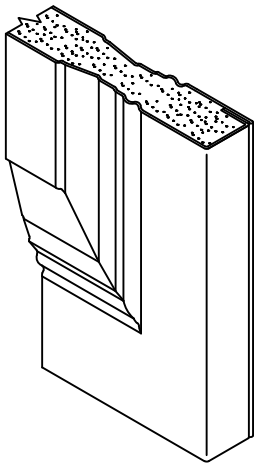
FULL FLUSH OR SEAMLESS STYLE...
FOAMED-IN-PLACE POLYURETHANE CORE FILLS ENTIRE DOOR CAVITY. CORE IS CHEMICALLY BONDED TO ALL INTERIOR SURFACES. HIGH IMPACT RESISTANCE. EXCELLENT INSULATION CHARACTERISTICS.

SUGGESTED USE:
INTERIOR OR EXTERIOR...
CONDOMINIUMS
DORMITORIES
MOTELS/HOTELS
OFFICE BUILDINGS
URBAN RENEWAL
HEALTH CARE
INSTITUTIONAL
DATA PROCESSING
MERCANTILE
FOOD PROCESSING

FLUSH DESIGNS SIMILAR LESS EMBOSSED PANEL

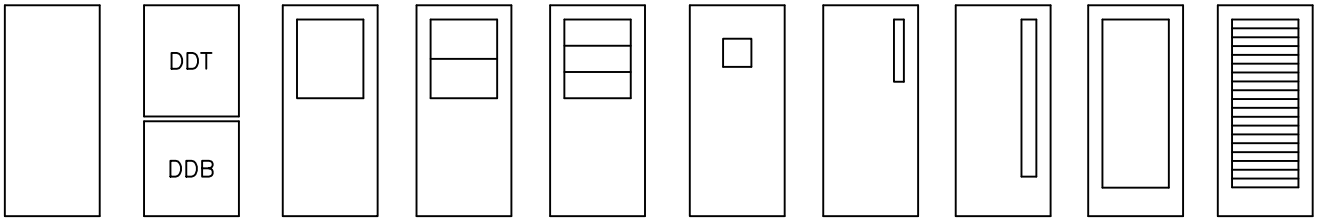


EMBOSSED PANEL DESIGNS:
6 PANEL
CROSSBUCK



HIGH DEFINITION EMBOSSED
PANEL DESIGNS:
1 & 2 PANEL

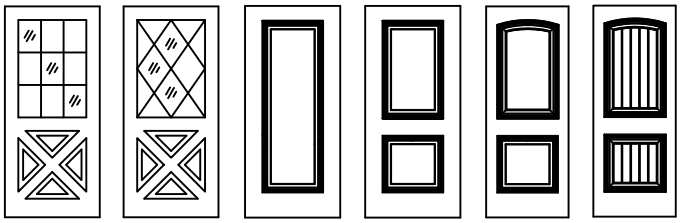
FLUSH DESIGNS



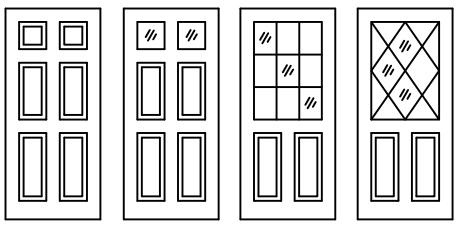
F | DUTCH | G | G2 | G3 | V | N___ | N___ | FG | LF

DUTCH
V, G, & N
DESIGNS AVAILABLE

EMBOSSED PANEL DESIGNS



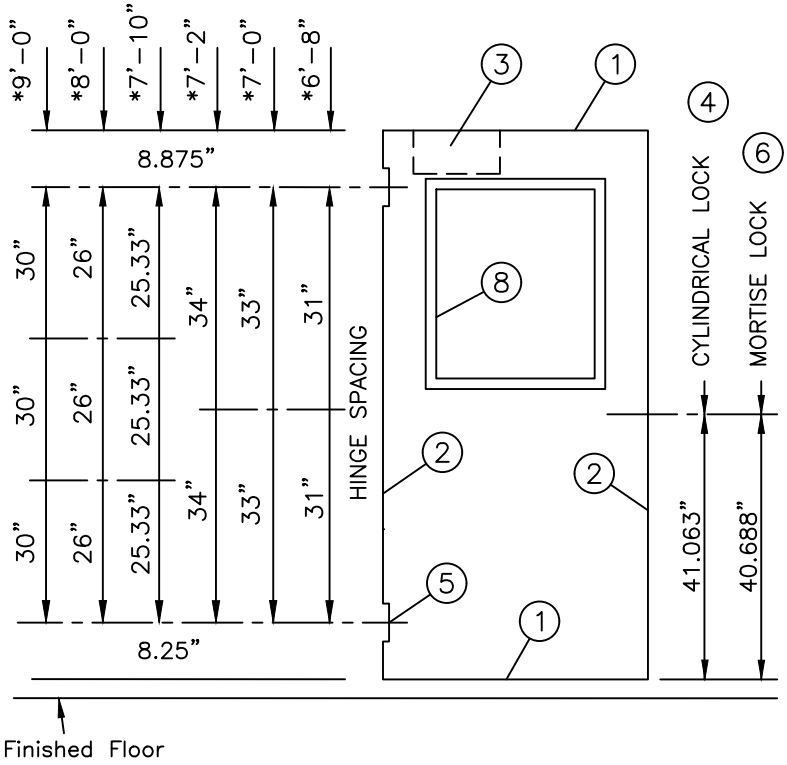
EC05 | EC04 | E101 | E201 | E202 | E203



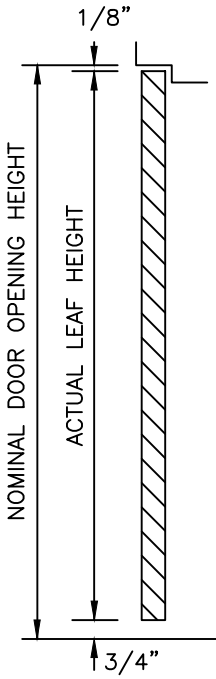
E601 | E609 | E605 | E604

	1 PANEL	2 PANEL	6 PANEL	CROSS BUCK & LITES
MAX. SIZE	3'0x8'0"	3'0"x8'0"	3'0"x7'0"	3'0"x7'0"
MIN. SIZE	2'8"x6'8"	2'8"x6'8"	2'6"x6'8"	2'8"x6'8"

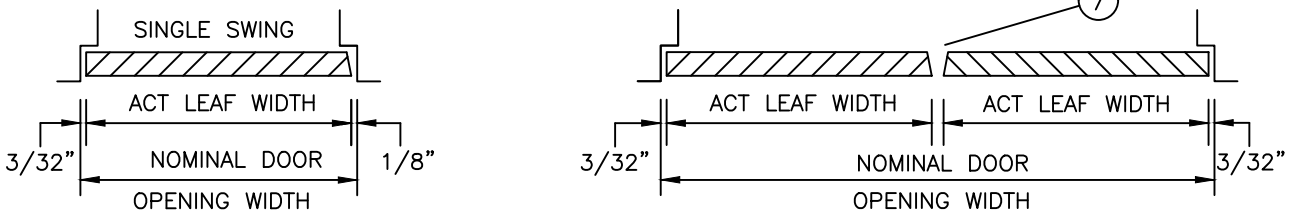
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



VERTICAL SECTION

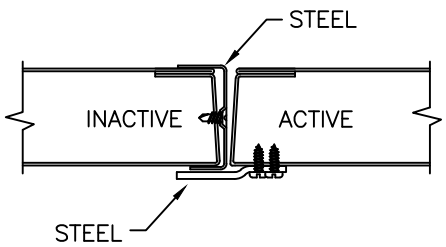


HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

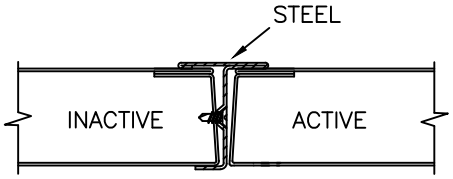
*See all embossed panel designs and size limitations on pages D3–1 or D3–4.

OVERLAPPING ASTRAGAL
4441
FOR 1–3/4" THICK DOORS



LISTED

OVERLAPPING ASTRAGAL
4471
FOR 1–3/4" THICK DOORS



LISTED

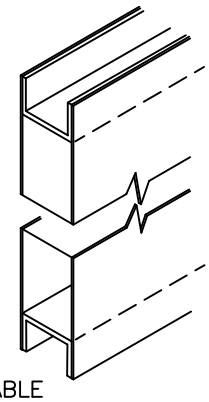
TECH-DATA

D3–3

1 16 GAGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

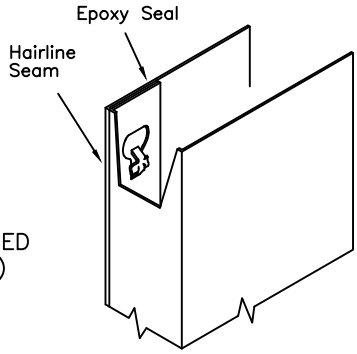


OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

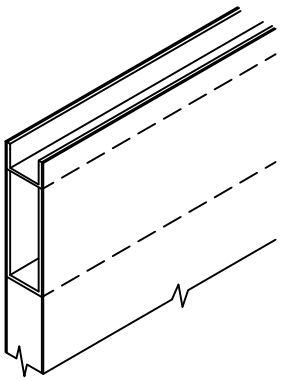
MECHANICALLY INTERLOCKED HEMMED EDGES

ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)



3 CLOSER REINFORCEMENT (OPTIONAL)

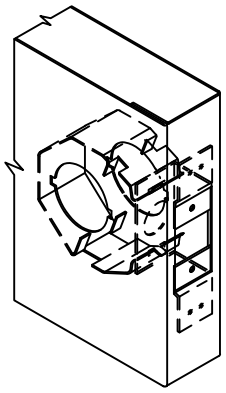
14 GAGE STEEL CHANNEL 20" LONG



4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)
2–3/4" BACKSET

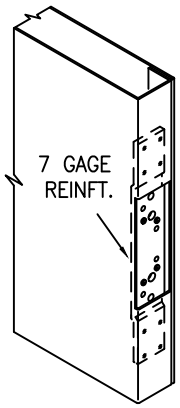


LOCK EDGE IS BEVELED 1/8" in 2" (1:16)

5 HINGE PREPARATION

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

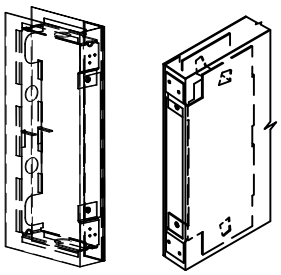
HINGE EDGE IS HANDED AND NOT BEVELED.



ANSI A156.7 TEMPLATE

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

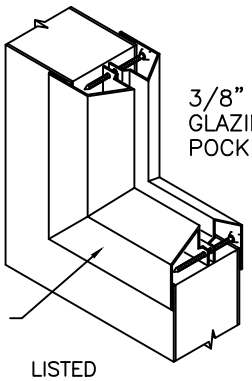
6 LOCK PREPARATION GOV. 86, ANSI/BHMA A115.1 MORTISE TYPE



(LM0)

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

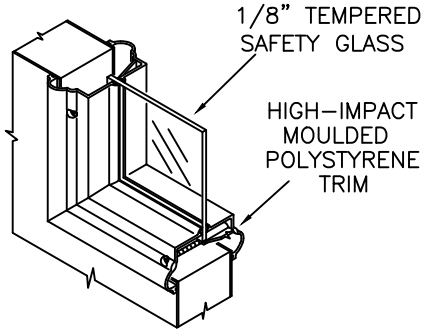
8 GLAZING TRIM SlimTrim



LISTED

8 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

08/20/19

CecoDoor
ASSA ABLOY

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BACK TO TOP

D3-4

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 AGENCY:
- UL LLC (UL)
- WARNOCK HERSEY (WH)

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

- DESIGNS: F, G, N, V, E1, E2, E6 or ECB.
- RATING: (18, 16 & 14 GAGE) 1/3 HR, 3/4 HR, 1 HR, 1-1/2 or 3 HR.
  MAX. SIZE: 4'0" x 7'0" SINGLE
  MAX. SIZE: 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; 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 gage 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 gage 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 gage 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 DESIGN	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"

EXEPTIONS:
- E1, E2 & E6 designs: mortise lock preparation limited to 3'0" width.
- 1 & 2 panel doors are available in 18 gage face sheets only.
- Crossbuck doors are available in 20 & 18 gage face sheets only.
- 6 panel is available in 20, 18, & 16 gage.
- 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 Gage Steel (4080 max.)	Standard Duty	N/A	STD	N/A	16 Gage Steel
18 Gage Steel	Heavy Duty	STD	OPT	OPT	16 Gage Steel
16 Gage Steel	Extra heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel

PERFORMANCE

Thermal Characteristic Value:	CORE CALCULATED (ASTM C518)	R = 11.01	U = 0.091
	*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 Gage Face Sheets, ASTM E90 & E413 [Fully Operable])
Physical Endurance Level:	Meets ANSI A250.4 Performance Test, 20 GAGE: Level B (500,000 Cycles); 18 and 16 Gage: Level A (1,000,000 Cycles)

04/06/22

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

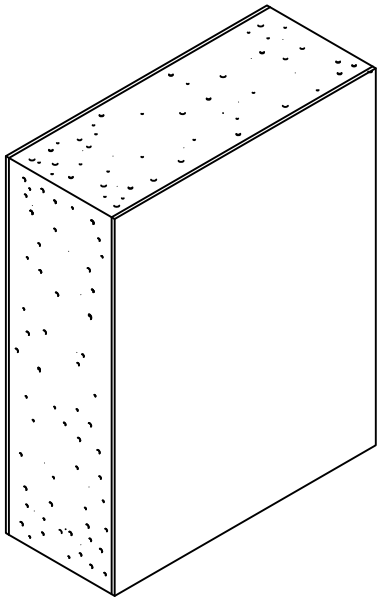
Experience a safer and more open world

RETURN TO TOP

CecoDoor
ASSA ABLOY

1-3/4" IMPERIAL MAXIM (IU) 14 GAGE 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:

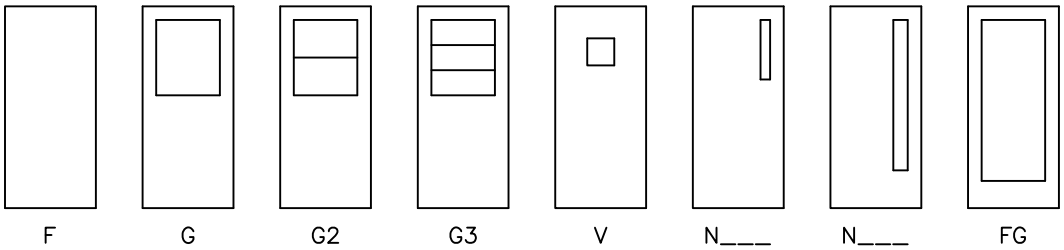
Interior or Exterior ...

- ** Primary Schools*
- ** Middle Schools/High Schools*
- ** College/Universities*
- ** Vocational Training Centers*

Rehabilitation Centers
Mental Health Care Facilities

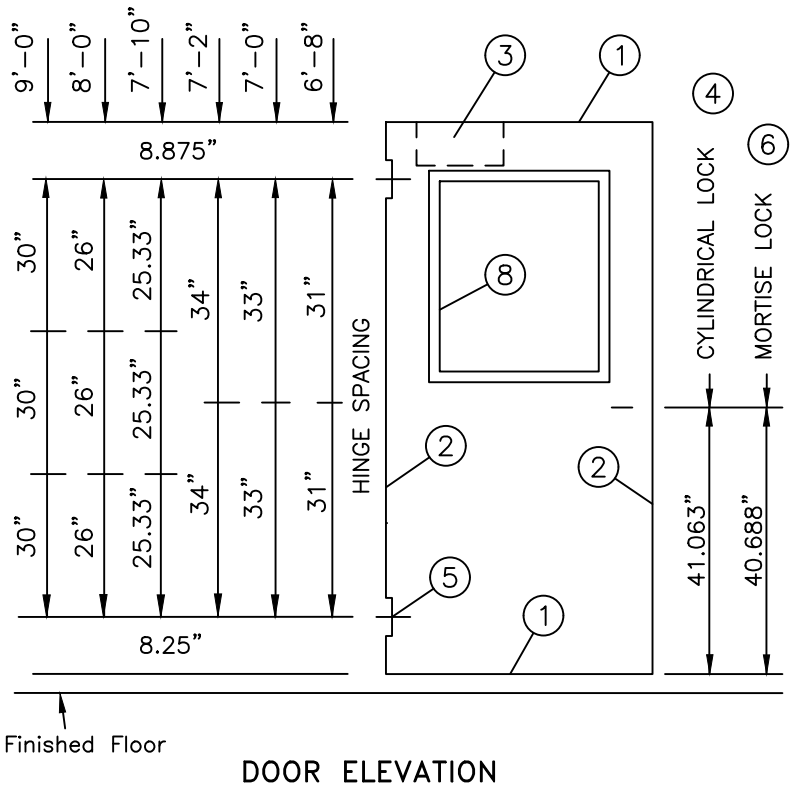
** Door has Full Lifetime Warranty when used in Schools*

FLUSH DESIGNS

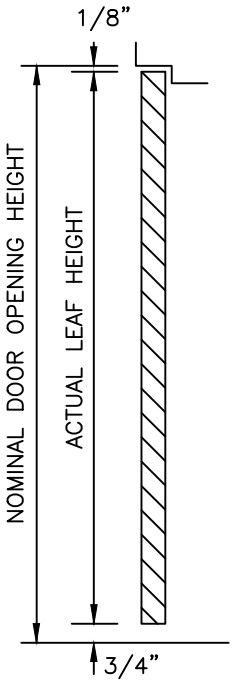


D3A-2

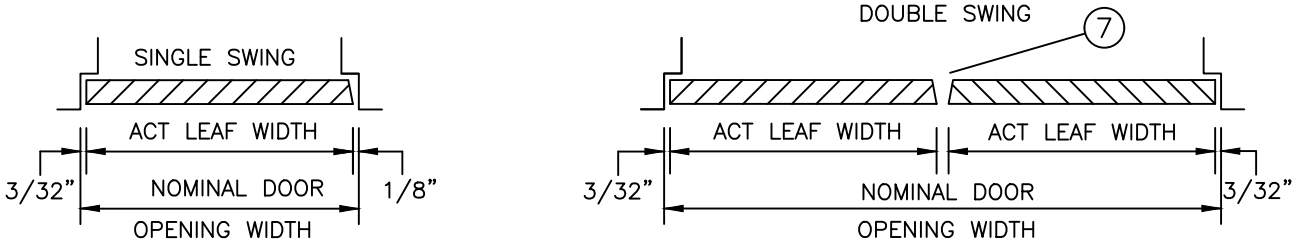
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



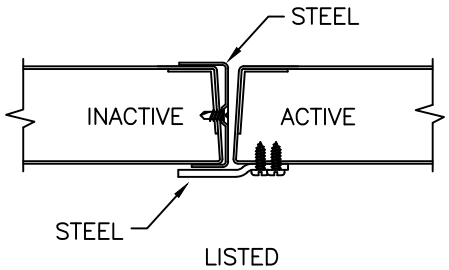
VERTICAL SECTION



HORIZONTAL SECTIONS

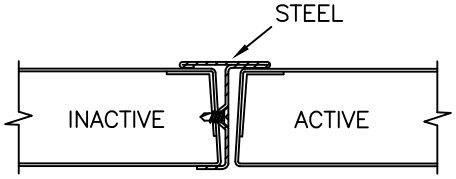
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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



LISTED

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



LISTED

01/07/20

TECH-DATA

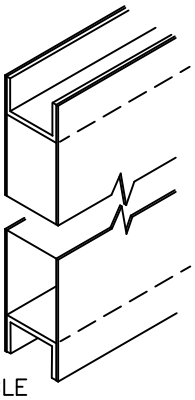
IMPERIAL MAXIM DOORS

D3A–3

1 16 GAGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

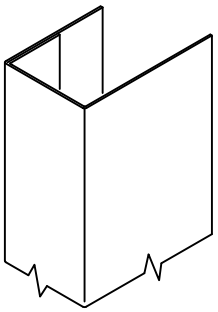


OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

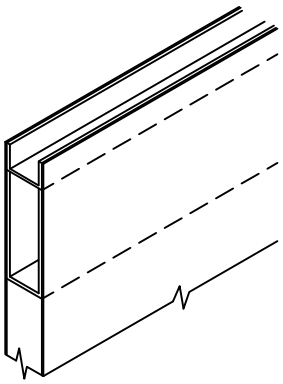
SEAMLESS VERTICAL EDGES

CONTINUOUS SEAM WELDED FULL HEIGHT AND GROUND SMOOTH



3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAGE STEEL CHANNEL 20" LONG



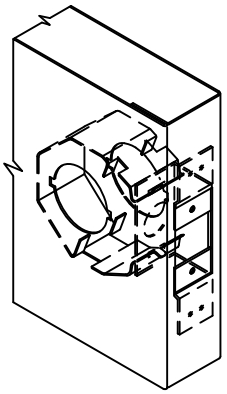
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2–3/4" BACKSET

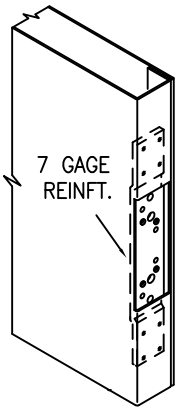


LOCK EDGE IS BEVELED 1/8" in 2" (1:16)

5 HINGE PREPARATION

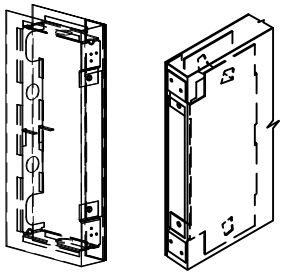
4–1/2 OR 5 IN. HIGH HEAVY WEIGHT, FULL MORTISE HINGES

HINGE EDGE IS HANDED AND NOT BEVELED.



ANSI A156.7 TEMPLATE

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

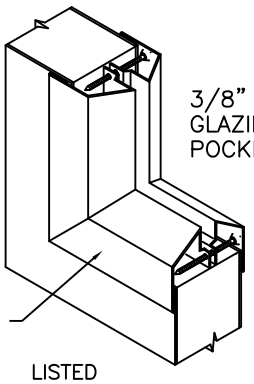


(LM0)

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

8 GLAZING TRIM SlimTrim

FOR ALL FIRE DOORS

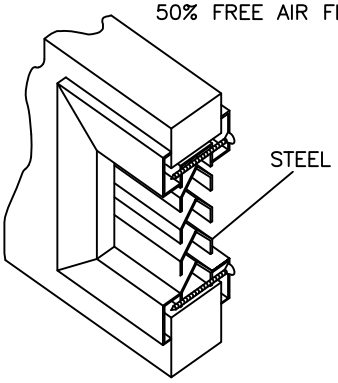


LISTED

9 FIXED SLAT TYPE LOUVER 4634

FOR 1–3/4" THICK DOORS

50% FREE AIR FLOW



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RETURN TO TOP

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 AGENCY:
- UNDERWRITERS LABORATORY
- 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 3 HR 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 gage 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 gage 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 gage 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 Gage Steel	Maximum Duty	STD	OPT	OPT	12 or 14 Gage Steel

PERFORMANCE

Thermal Characteristic Value:	CORE CALCULATED (ASTM C518)	R = 11.01	U = 0.091

Thermal Characteristic Value:	CORE CALCULATED (ASTM C518)	R = 11.01	U = 0.091
	*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)

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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Ceco Door

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CecoDoor
ASSA ABLOY

D4–1

1-3/4" VERSADOOR (VU)

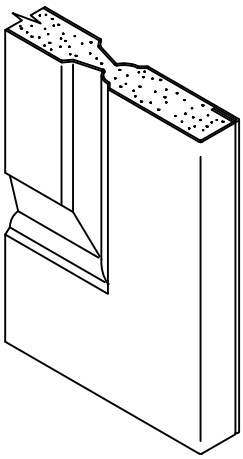
POLYURETHANE FOAM CORE
FLUSH AND EMBOSSED PANEL STEEL DOORS, NON-HANDED

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.

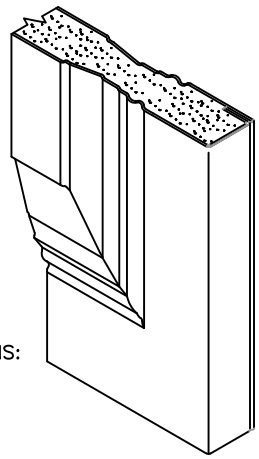
SUGGESTED USE:

INTERIOR OR EXTERIOR...
CONDOMINIUMS
DORMITORIES
MOTELS/HOTELS
OFFICE BUILDINGS
URBAN RENEWAL
HEALTH CARE, INSTITUTIONAL
DATA PROCESSING
MERCANTILE
FOOD PROCESSING

FLUSH DESIGNS SIMILAR LESS EMBOSSED PANEL

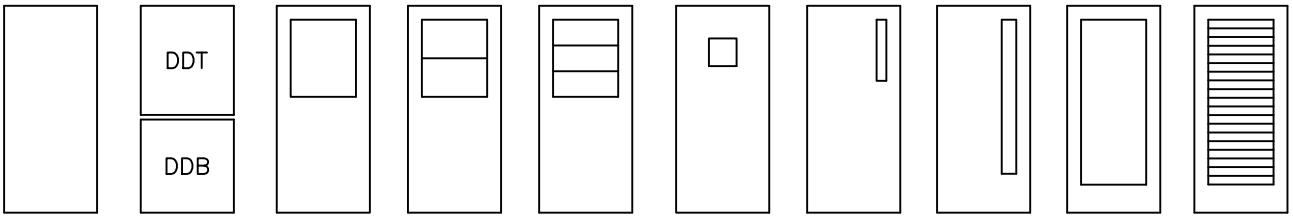


EMBOSSED PANEL DESIGNS:
6 PANEL
CROSSBUCK



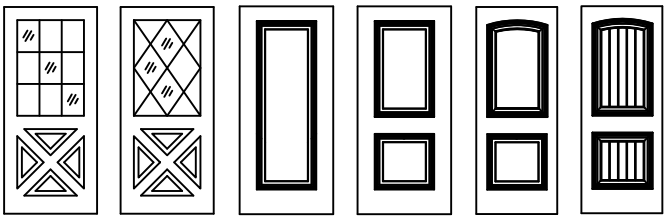
HIGH DEFINITION EMBOSSED PANEL DESIGNS:
1 & 2 PANEL

FLUSH DESIGNS

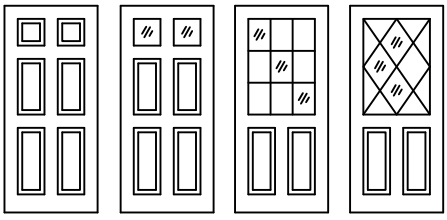


F | DUTCH V, G, & N DESIGNS AVAILABLE | G | G2 | G3 | V | N___ | N___ | FG | LF

EMBOSSED PANEL DESIGNS



EC05 | EC04 | E101 | E201 | E202 | E203

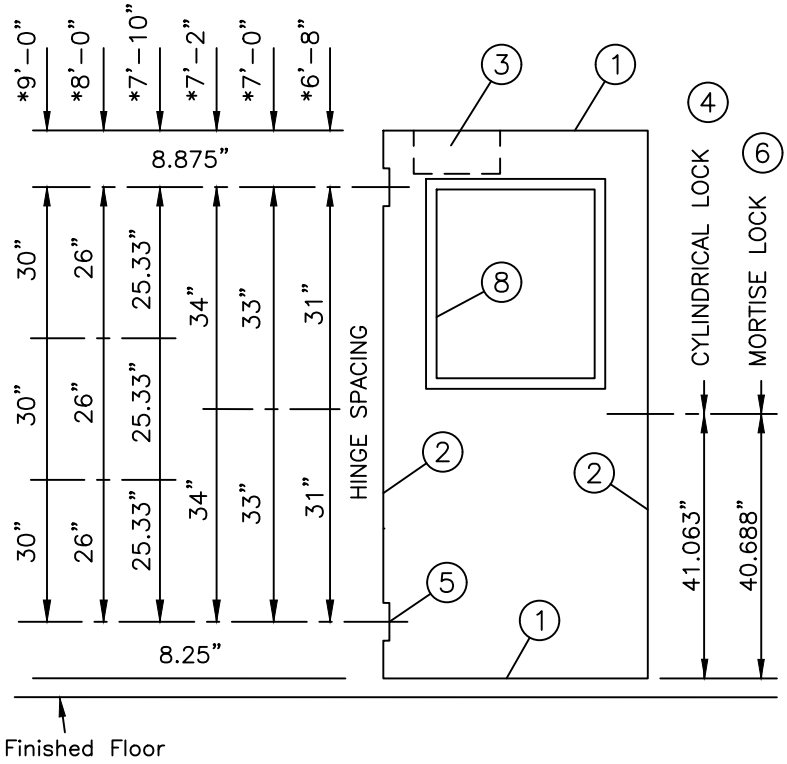


E601 | E609 | E605 | E604

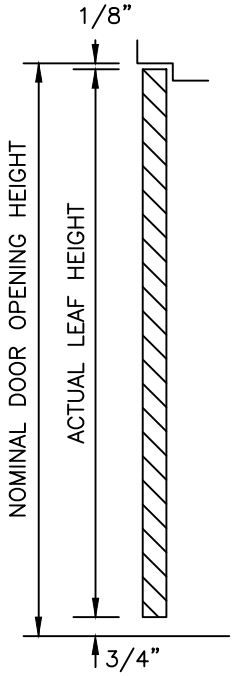
	1 & 2 PANEL	6 PANEL	CROSS BUCK & LITES
MAX. SIZE	3'0"x8'0"	3'0"x7'0"	3'0"x7'0"
MIN. SIZE	2'8"x6'8"	2'6"x6'8"	2'8"x6'8"

04/06/22

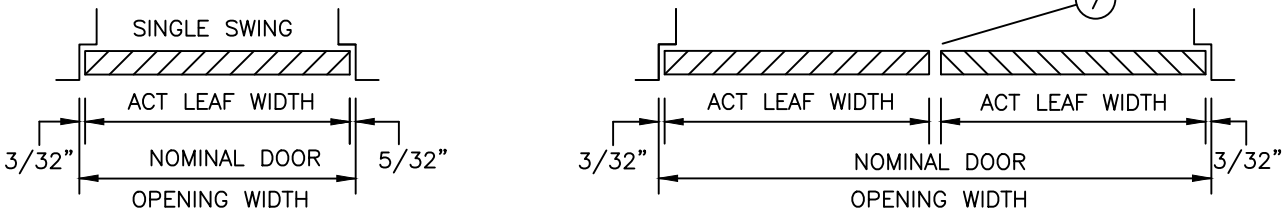
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



VERTICAL SECTION

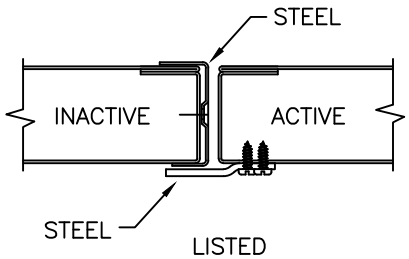


HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

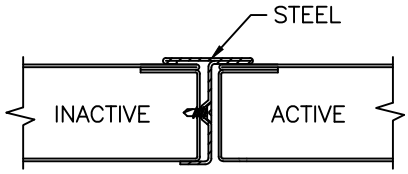
*See all embossed panel designs and size limitations on pages D4–1 or D4–4.

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



LISTED

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



LISTED

TECH-DATA

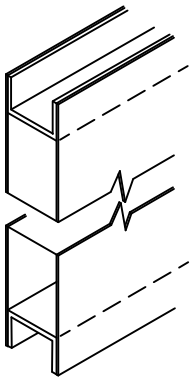
VERSADOOR DOORS

D4–3

1 16 GAGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

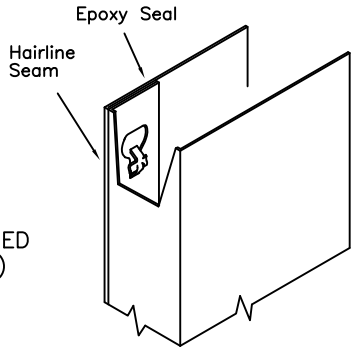


OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

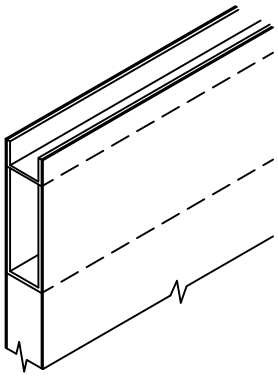
MECHANICALLY INTERLOCKED HEMMED EDGES

ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)



3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAGE STEEL CHANNEL 20" LONG

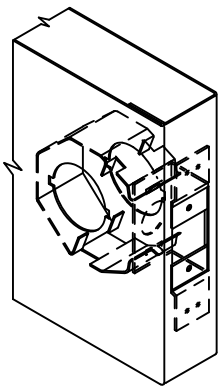


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2–3/4" BACKSET

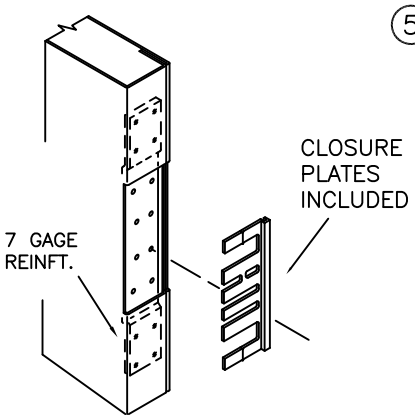


LOCK EDGE IS SQUARE

5 HINGE PREPARATION

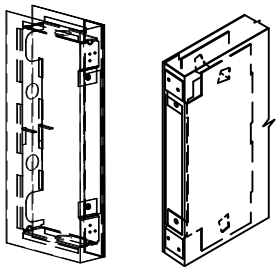
4–1/2" X .134" HIGH, STANDARD OR HEAVY WT. FULL MORTISE HINGE PREPS

NON–HANDED



(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

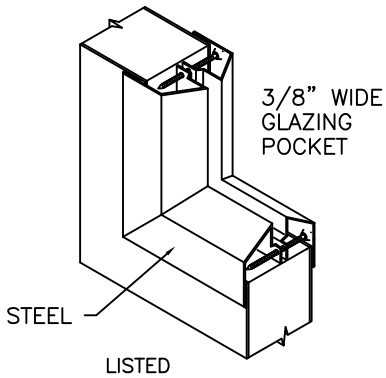
6 LOCK PREPARATION GOV. 86, ANSI/BHMA A115.1 MORTISE TYPE



(LM0)

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

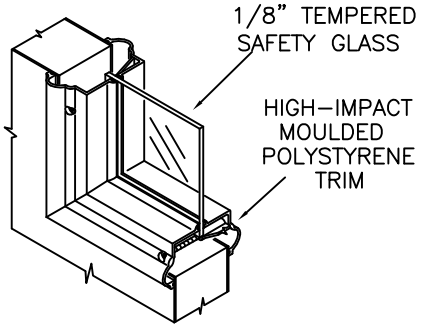
8 GLAZING TRIM SlimTrim



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

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RETURN TO TOP

D4-4

STANDARD SIZES
NOMINAL DOOR OPENING

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

FIRE DOORS

LABELING AGENCY:
- UL LLC (UL)
- WARNOCK HERSEY (WH)

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

- DESIGNS: F, G, N, V, E1, E2, E6, or ECB.
- RATING: (18, 16 & 14 GAGE) 1/3 HR, 3/4 HR, 1 HR, 1–1/2 or 3 HR.

MAX. SIZE: 4'0" x 7'0" SINGLE
MAX. SIZE: 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 gage 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 gage 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 gage 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 DESIGN	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"

EXEPTIONS:
- E1, E2 & E6 designs: mortise lock preparation limited to 3'0" width.
- 1 & 2 panel doors are available in 18 gage face sheets only.
- Crossbuck doors are available in 20 & 18 gage face sheets only.
- 6 panel is available in 20, 18, & 16 gage.
- 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 Gage Steel (4080 max.)	Standard Duty	N/A	STD	N/A	16 Gage Steel
18 Gage Steel	Heavy Duty	STD	OPT	OPT	16 Gage Steel
16 Gage Steel	Extra heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel

PERFORMANCE

Thermal Characteristic Value:	CORE CALCULATED (ASTM C518)	R = 11.01	U = 0.091
	*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 Gage Face Sheets, ASTM E90 & E413 [Fully Operable])
Physical Endurance Level:	Meets ANSI A250.4 Performance Test, 20 GAGE: Level B (500,000 Cycles); 18 and 16 Gage: Level A (1,000,000 Cycles)

04/06/22

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

ASSA ABLOY

D4A–1

1-3/4" LEGION (LP) POLYSTYRENE CORE DOORS

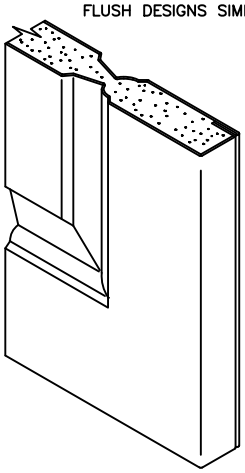
FLUSH PANEL STEEL DOORS
BEVELED LOCK EDGE, HANDED

POLYSTYRENE SLAB, BONDED TO THE INSIDE OF BOTH FACE SHEETS WITH A WATERPROOF, CONTACT ADHESIVE.

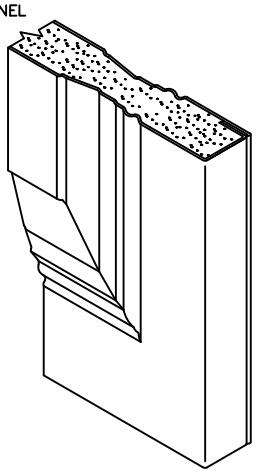
SUGGESTED USE:

INTERIOR OR EXTERIOR...
OFFICE
MOTEL/HOTEL
APARTMENT
CONDOMINIUMS
DORMITORIES
URBAN RENEWAL
HEALTH CARE
INSTITUTIONAL
MERCANTILE
PUBLIC UTILITY
FACTORY
WAREHOUSE

FLUSH DESIGNS SIMILAR LESS EMBOSSED PANEL

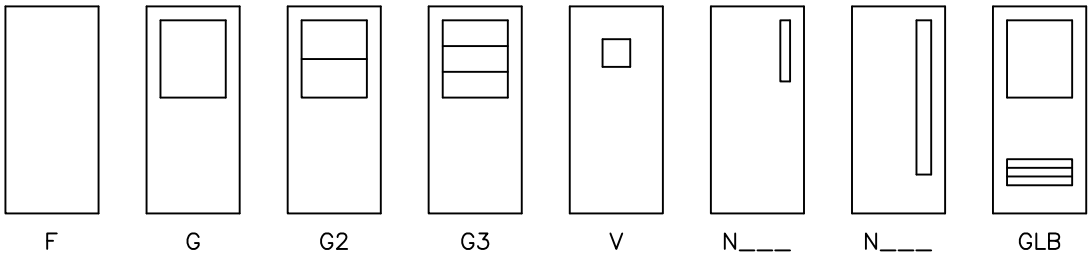


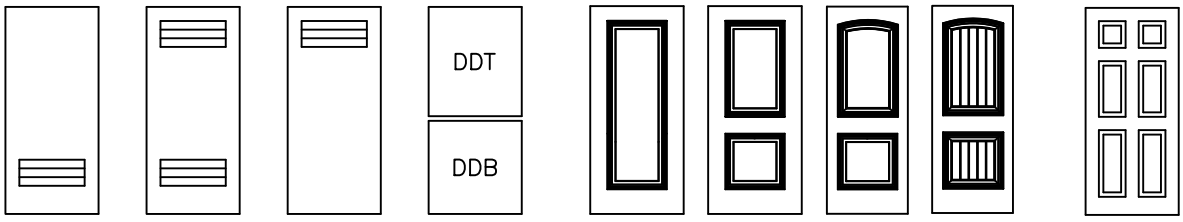
EMBOSSED PANEL DESIGNS:
6 PANEL
CROSSBUCK



HIGH DEFINITION EMBOSSED PANEL DESIGNS:
1 PANEL
2 PANEL

DOOR DESIGNS



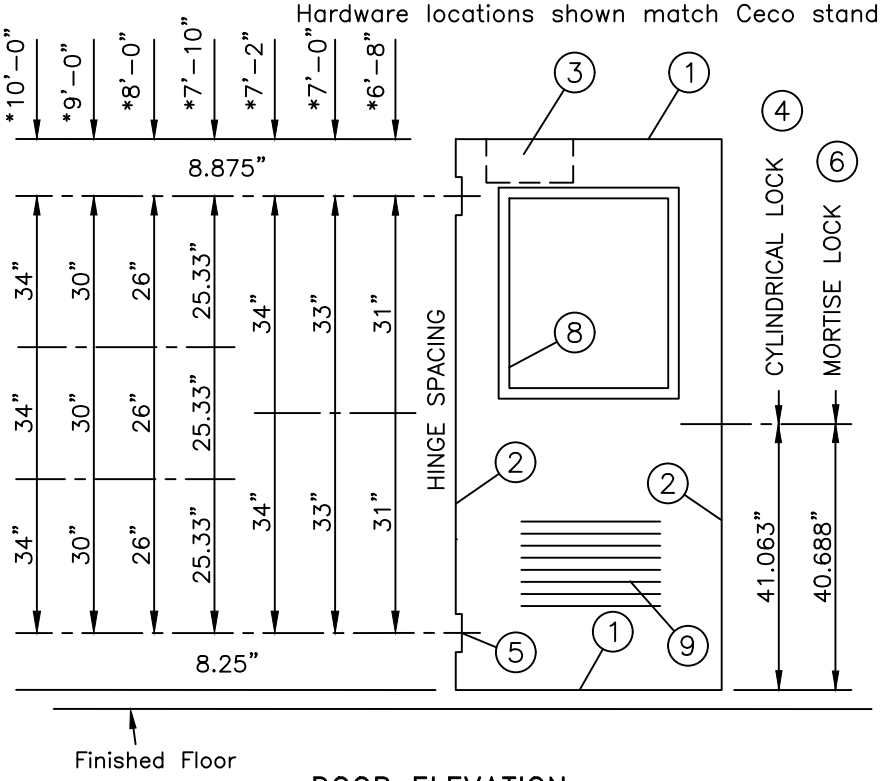


	1 PANEL	2 PANEL	6 PANEL
MAX. SIZE	3'0"X8'0"	3'0"X8'0"	3'0"X7'0"
MIN. SIZE	2'8"X6'8"	2'8"X6'8"	2'6"X6'8"

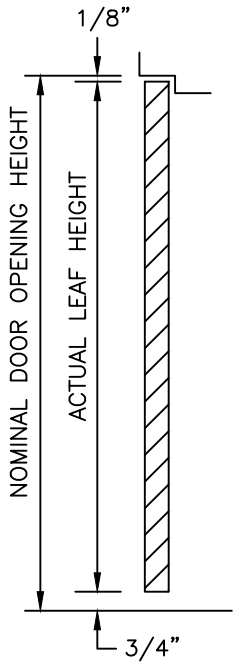
EMBOSSED NARROW 6 PANEL DESIGNS WILL BE CENTER EDGE SEAM CONSTRUCTION.

07/14/20

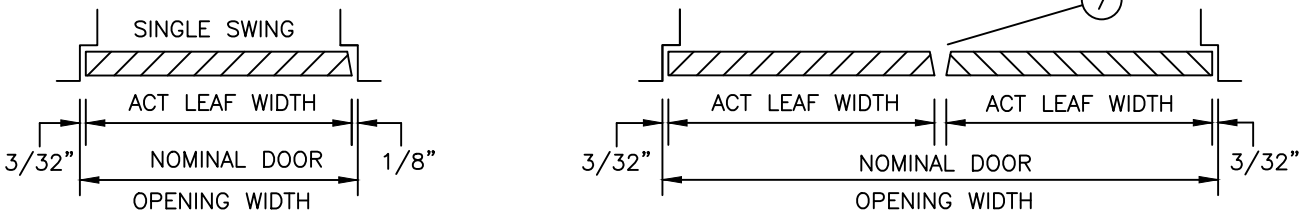
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



VERTICAL SECTION

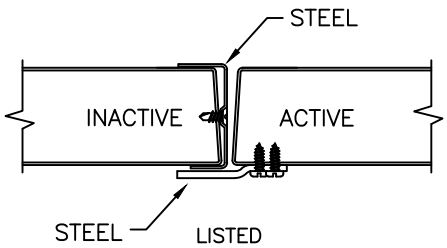


HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

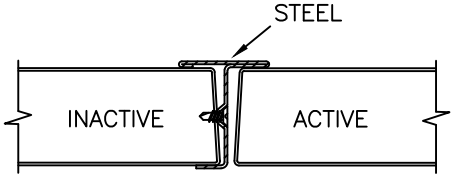
*See all embossed panel designs and size limitations on pages D4A-1 or D4A-4.

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



LISTED

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



LISTED

TECH-DATA

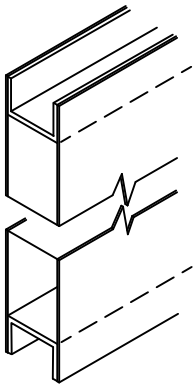
D4A-3

16 GAGE STEEL END CHANNELS

1

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM



OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

VERTICAL EDGES

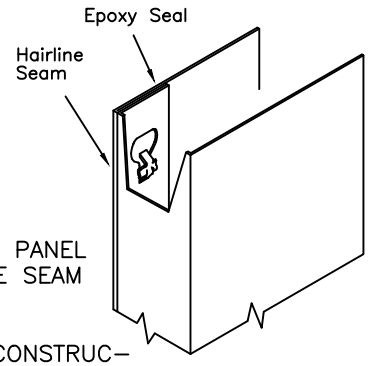
2

MECHANICALLY INTERLOCKED HEMMED EDGES

OPTIONAL: SEAMLESS (WELDED OR BODY FILLER)

EMBOSSED NARROW 6 PANEL WILL BE CENTER EDGE SEAM CONSTRUCTION.

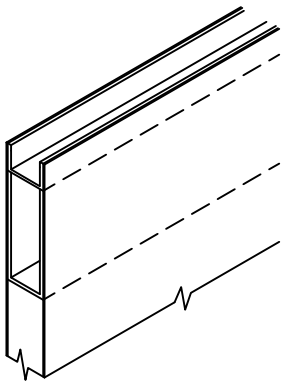
CENTER EDGE SEAM CONSTRUCTION PROVIDED WITH 14 GAGE SKINS



CLOSER REINFORCEMENT (OPTIONAL)

3

14 GAGE STEEL CHANNEL 20" LONG



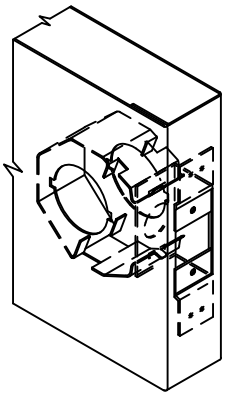
LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

4

(LC1)

(ANSI A115.2)

2-3/4" BACKSET



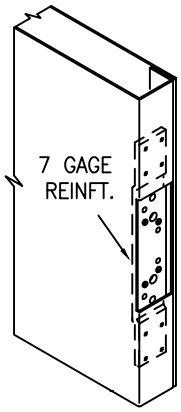
LOCK EDGE IS BEVELED 1/8" in 2" (1:16)

HINGE PREPARATION

5

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

HINGE EDGE IS HANDED AND NOT BEVELED.

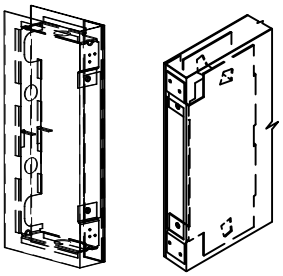


ANSI A156.7 TEMPLATE

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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

6



(LM0)

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

VERTICAL EDGES

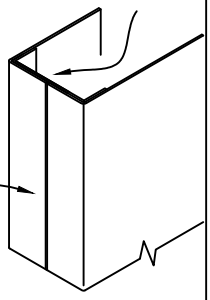
2

NARROW 6 PANEL DESIGNS ARE CENTER EDGE SEAM CONSTRUCTION

14 GAGE WILL BE CENTER EDGE SEAM CONSTRUCTION

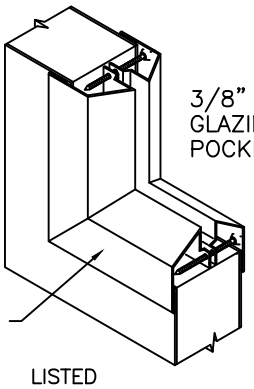
WELD SEAMLESS AND BODY FILLER SEAMLESS IS OPTIONAL

16 GAGE FULL HEIGHT CHANNEL



GLAZING TRIM SlimTrim

8



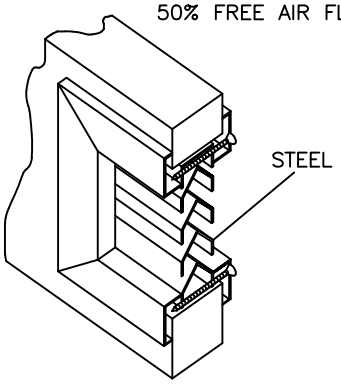
LISTED

FIXED SLAT TYPE LOUVER 4634

9

FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW



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BACK TO TOP

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:

- UNDERWRITERS LABORATORY
- 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" with VERTICAL RODS

- DESIGNS: F, G, N, & V

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 gage 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 gage 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 gage 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 shallconform to ANSI A250.3 . For accurate color selectors ask for a Ceco Colorstyle chart.

SIZE LIMITS – DESIGNS

	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"

EXCEPTIONS:

E1, E2, and E6 designs: mortise lock preparation limited to 3'0" width.
1 & 2 panel doors are available in 18 gage face sheets only.
6 panel doors are available in 20, 18, & 16 gage face sheets only.
Panel design door face sheets are formed from A40 galv. steel.
Embossed narrow 6 panel design will have center edge seam construction.

MATERIAL

DOOR FACE SHEETS	LEVEL	COLD ROLLED	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
20 Gage Steel (4080 max.)	Standard Duty	N/A	STD	N/A	16 Gage Steel
18 Gage Steel	Heavy Duty	STD	OPT	OPT	16 Gage Steel
16 Gage Steel	Extra heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel
14 Gage Steel	Maximum Duty	STD	OPT	OPT	14 or 12 Gage Steel

PERFORMANCE

Thermal Characteristic Value:	CORE CALCULATED (ASTM C518)	R = 6.08	U = 0.16
	*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 Gage Face Sheets, ASTM E90 & E413 [Fully Operable])
Physical Endurance /Level:	Meets ANSI A250.4 Performance Test, 20 GAGE: Level B (500,000 Cycles); 18 and 16 Gage: Level A (1,000,000 Cycles)

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

RETURN TO TOP

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1-3/4" ULTRADOR (UP) POLYSTYRENE CORE DOORS

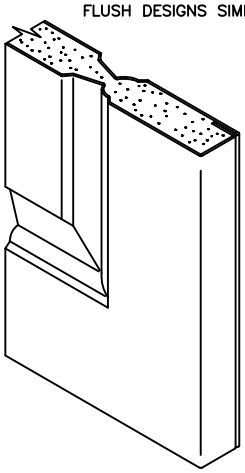
FLUSH PANEL STEEL DOORS
UNIVERSAL, NON-HANDED

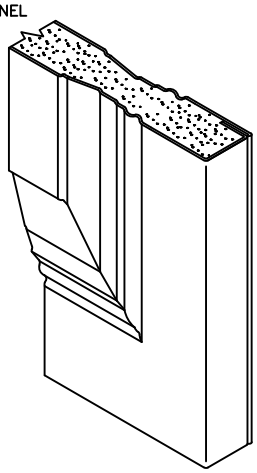
POLYSTYRENE SLAB, BONDED TO THE INSIDE OF BOTH FACE SHEETS WITH A WATERPROOF, CONTACT ADHESIVE.

SUGGESTED USE:

INTERIOR OR EXTERIOR...
OFFICE
MOTEL/HOTEL
APARTMENT
CONDOMINIUMS
DORMITORIES
URBAN RENEWAL
HEALTH CARE
INSTITUTIONAL
MERCANTILE
PUBLIC UTILITY
FACTORY
WAREHOUSE

FLUSH DESIGNS SIMILAR LESS EMBOSSED PANEL

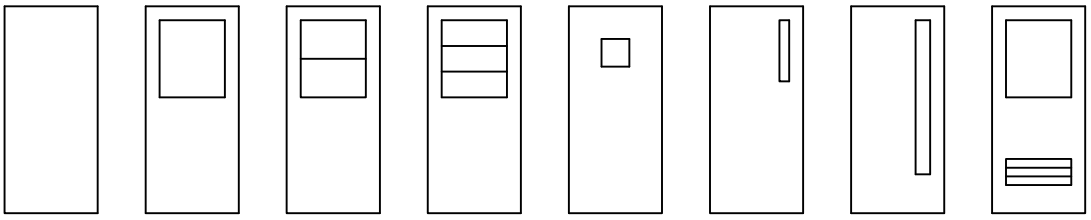


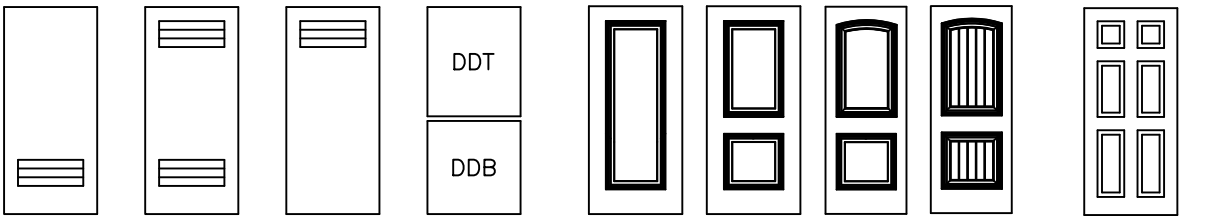


EMBOSSED PANEL DESIGNS:
6 PANEL
CROSSBUCK

HIGH DEFINITION EMBOSSED PANEL DESIGNS:
1 PANEL
2 PANEL

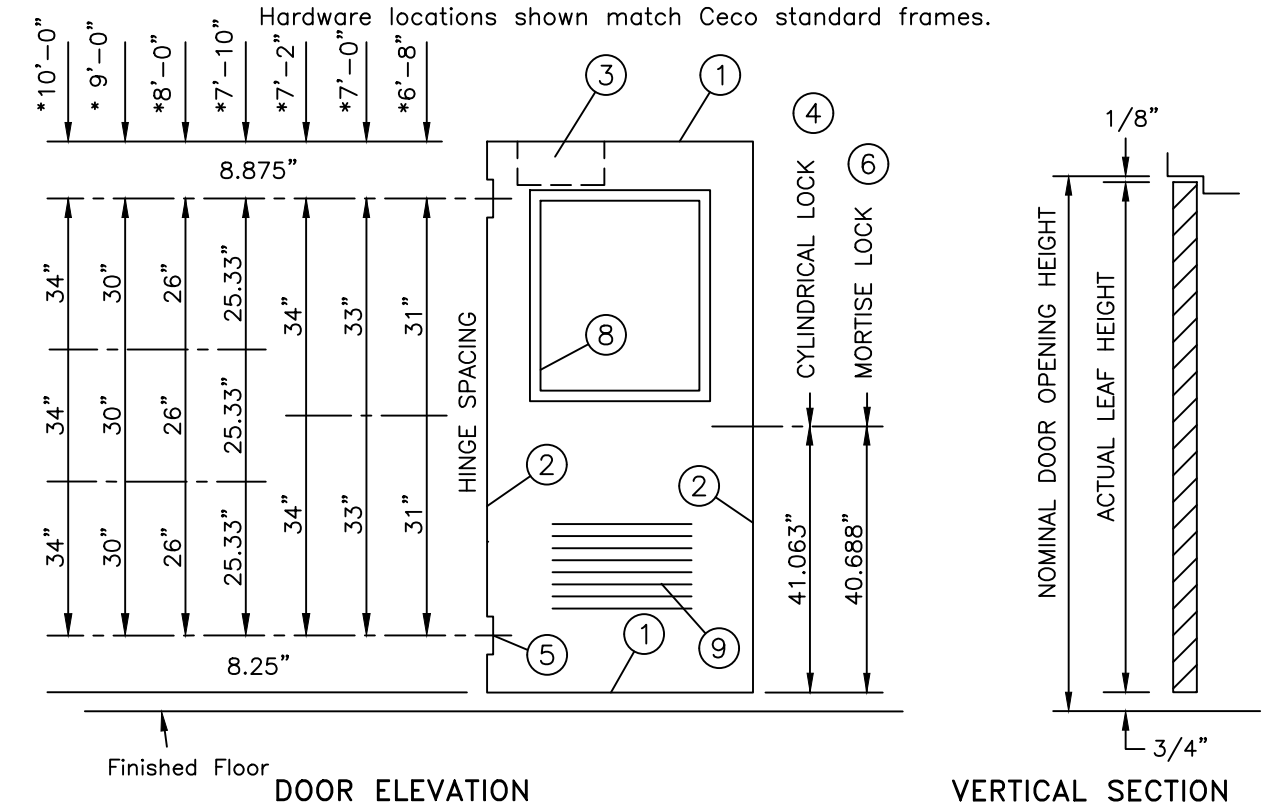
DOOR DESIGNS

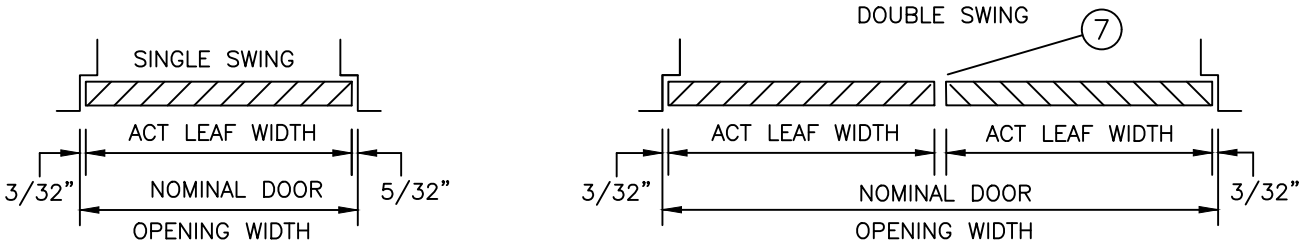




EMBOSSED NARROW 6 PANEL WILL BE CENTER EDGE SEAM CONSTRUCTION.

	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"



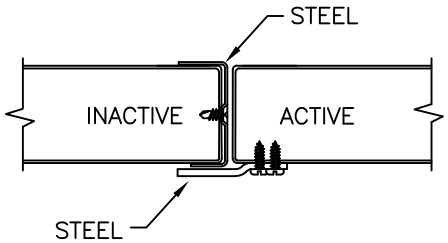


HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

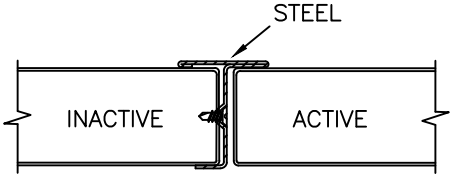
*See all embossed panel designs and size limitations on pages D4B–1 and D4B–4.

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



LISTED

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



LISTED

Ceco Door

TECH-DATA

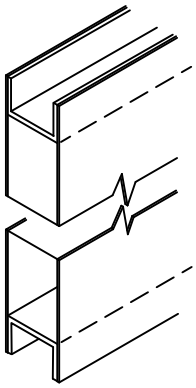
ULTRADOR

D4B-3

1 16 GAGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM



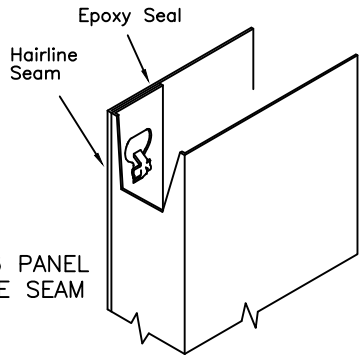
OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

MECHANICALLY INTERLOCKED HEMMED EDGES

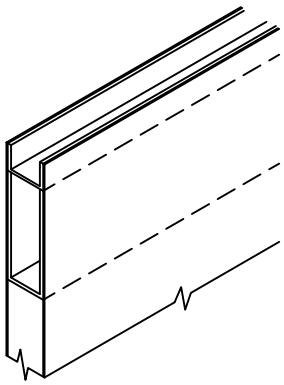
ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)

EMBOSSED NARROW 6 PANEL WILL BE CENTER EDGE SEAM CONSTRUCTION.



3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAGE STEEL CHANNEL 20" LONG

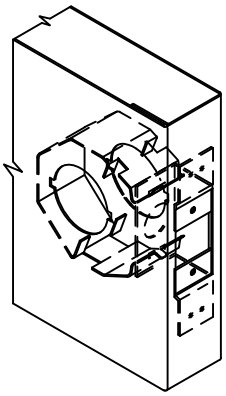


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4" BACKSET

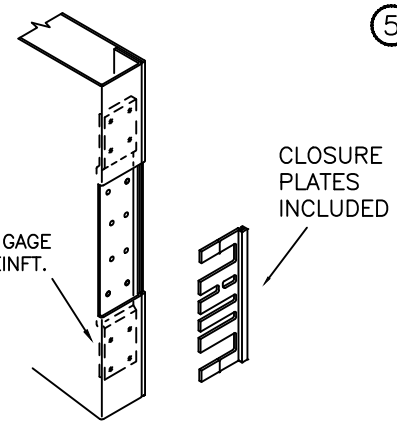


5 HINGE PREPARATION

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

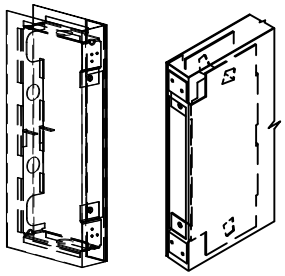
ANSI A156.7 TEMPLATE

NON-HANDED



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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



(LM0)

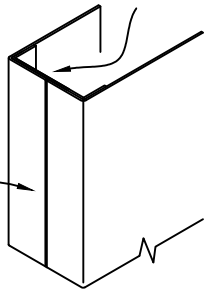
NOTE: EITHER OF THE LOCK REINFORCEMENTS/ GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

2 VERTICAL EDGES

16 GAGE FULL HEIGHT CHANNEL

NARROW 6 PANEL DESIGNS ARE CENTER EDGE SEAM CONSTRUCTION

WELD SEAMLESS AND BODY FILLER SEAMLESS IS OPTIONAL



07/14/20

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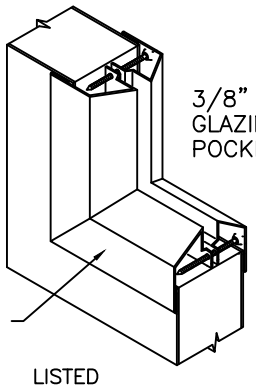
8 GLAZING TRIM SlimTrim

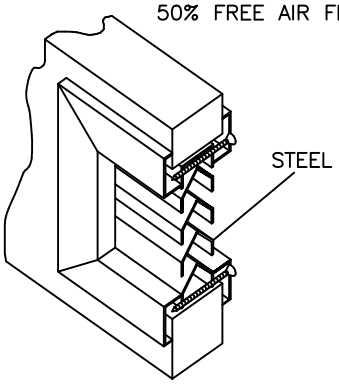


LISTED

9 FIXED SLAT TYPE LOUVER 4634

FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW



RETURN TO TOP

D4B-4

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:

- UNDERWRITERS LABORATORY
- 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

Not all ratings are available in all sizes, designs and materials.

SIZE LIMITS – DESIGNS

	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"

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 gage 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 gage 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 gage 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.

EXEPTIONS:

E1, E2, and E6 designs: mortise lock preparation limited to 3'0" width.
1 & 2 panel doors are available in 18 gage face sheets only.
6 panel doors are available in 20, 18, & 16 gage 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 A60	GALV G90	RECOMMENDED DOOR FRAME MATERIAL
20 Gage Steel (4080 max.)	Standard Duty	N/A	STD	N/A	16 Gage Steel
18 Gage Steel	Heavy Duty	STD	OPT	OPT	16 Gage Steel
16 Gage Steel	Extra heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel

PERFORMANCE

Thermal Characteristic Value:	CORE CALCULATED (ASTM C518)	R = 6.08	U = 0.16
	*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.

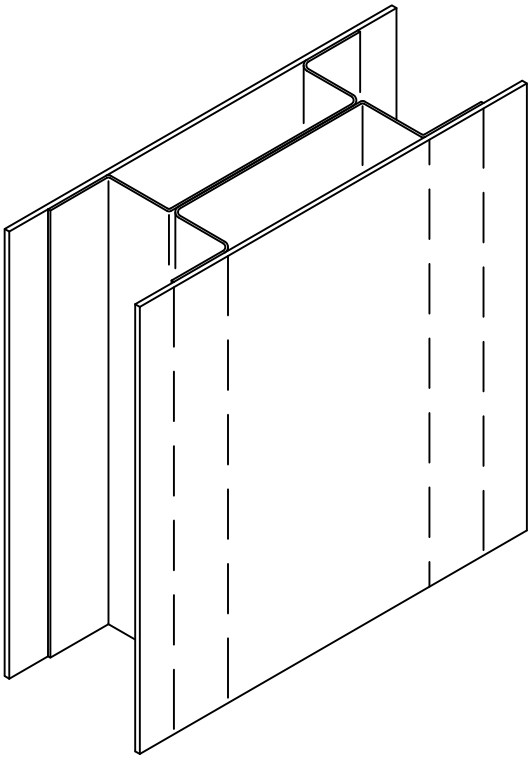
Sound Transmission Class:	STC 27 (F Design, 18 Gage Face Sheets, ASTM E90 & E413 [Fully Operable])
Physical Endurance /Level:	Meets ANSI A250.4 Performance Test, 20 GAGE: Level B (500,000 Cycles); 18 and 16 Gage: Level A (1,000,000 Cycles)

07/14/20

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

1-3/4"MEDALLION (MS)

VERTICALLY STEEL STIFFENED, CENTER SEAM, CUSTOM TYPE
STEEL DOORS, BEVELED LOCK , HANDED



FIBERGLASS INSULATION BETWEEN
STIFFENERS

Designed to Take Extreme People punishment...

Complies with NAAMM Specifications 22 gage steel stiffeners placed 6" apart and welded every 5" along their length. Center seam edges. Fiberglass, sound deadening insulation between stiffeners.

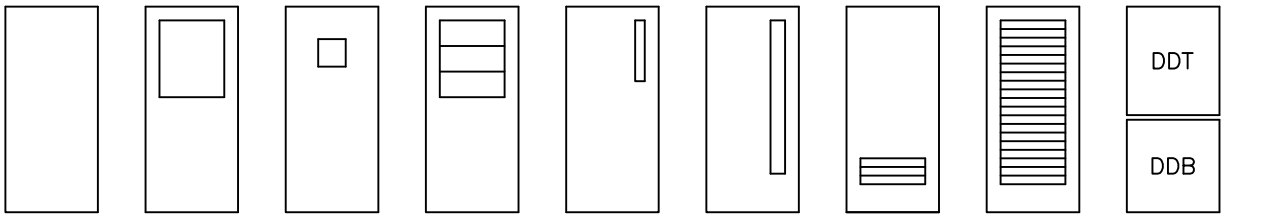
Suggested Use:

Interior or Exterior...

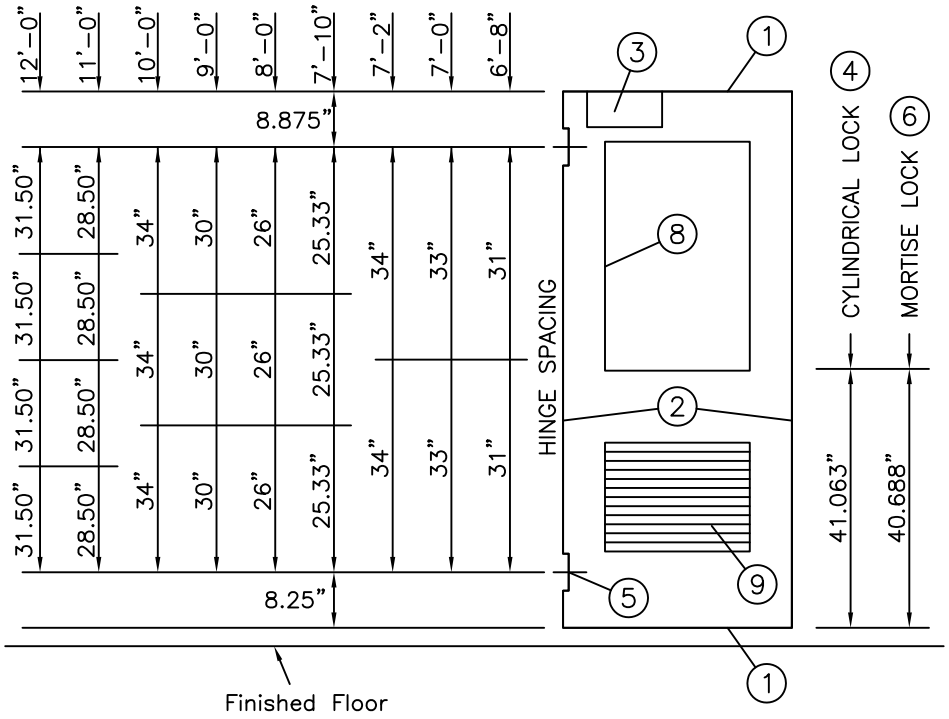
** Schools/Training Centers*
Institutional Facilities
Public Utility Stations
Government Buildings
Warehouses/Factories
Manufacturing Plants
Transportation Terminals
Vehicle Service Facilities

** 14 Ga Medallion Maxim Door has a Full Lifetime Warranty when used in Schools*

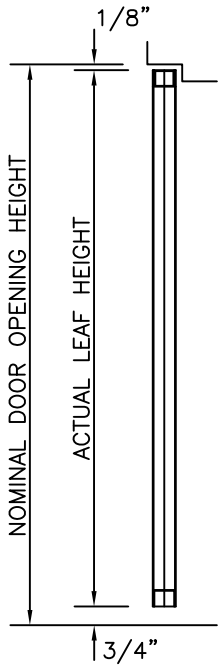
DOOR DESIGNS



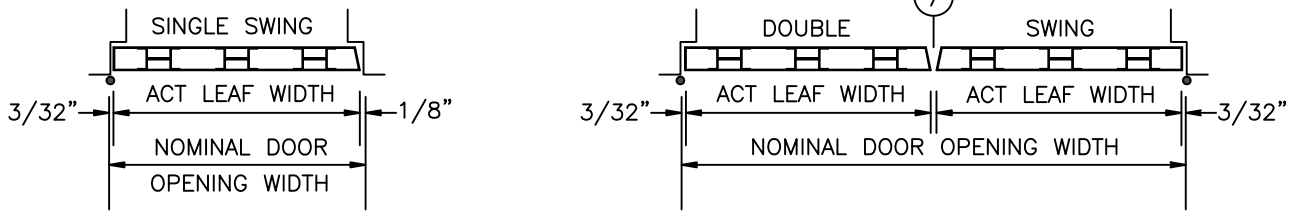
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



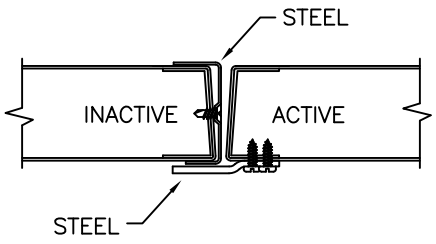
VERTICAL SECTION



HORIZONTAL SECTIONS

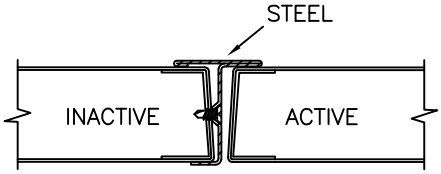
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.4 mm)

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



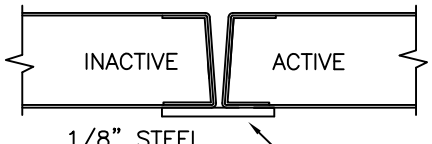
LISTED

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



LISTED

OVERLAPPING ASTRAGAL 7
4491 (OPTIONAL)
FOR 1-3/4" THICK DOORS



LISTED

TECH-DATA

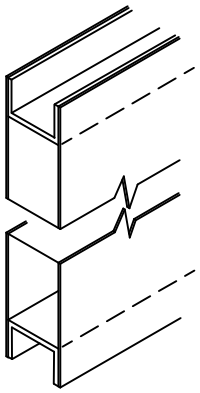
16 GAGE STEEL END CHANNELS

1

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE



VERTICAL EDGES

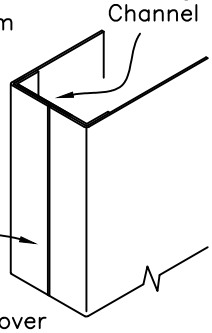
2

16 Gage Full Height Channel

Visible Edge Seam (Standard)

Filled Edge Seam (Optional)

Welded Seamless Edge (Optional)

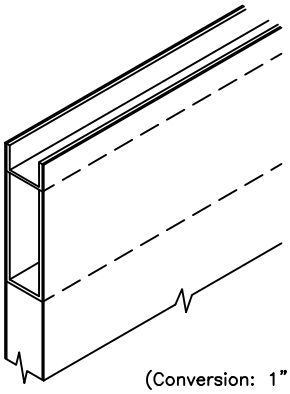


Welded Seamless Edge For Doors over 10' in height.

CLOSER REINFORCEMENT (OPTIONAL)

3

14 GAGE STEEL CHANNEL 20" LONG



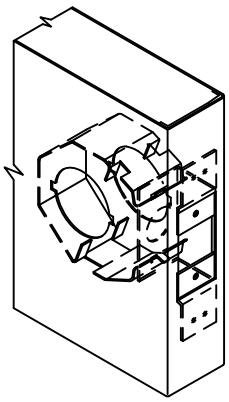
LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

4

(LC1)

(ANSI A115.2)

2-3/4" BACKSET



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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

HINGE PREPARATION

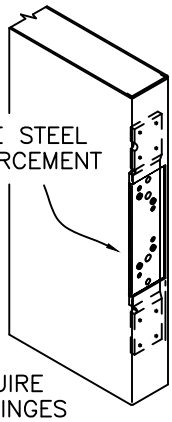
5

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

ANSI 156.7 TEMPLATE

HINGE EDGE IS HANDED AND SQUARE

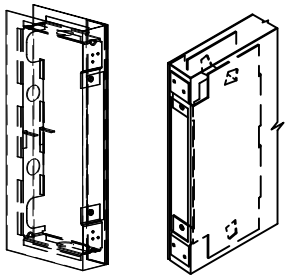
14 GA AND 12 GA DOORS REQUIRE HEAVY WEIGHT, FULL MORTISE HINGES



7 GAGE STEEL REINFORCEMENT

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

6



(LM0)

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

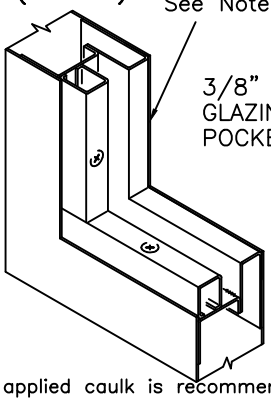
STANDARD GLAZING TRIM

4884 (FLUSH)

8

See Note 1

3/8" WIDE GLAZING POCKET



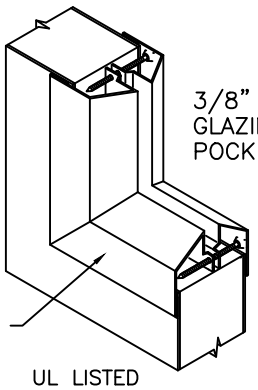
Notes:
1. Field applied caulk is recommended on this seam to improve esthetics and resist water intrusion.
2. Drawing Not to Scale

GLAZING TRIM

SlimTrim

8

3/8" WIDE GLAZING POCKET



STEEL

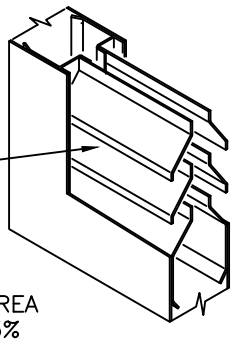
UL LISTED

FLUSH MOUNTED FIXED SLAT LOUVER

4684 (FLUSH)

9

STEEL



FREE AIR AREA APPROX. 43%

CecoDoor

Experience a safer and more open world

RETURN TO TOP

ASSA ABLOY

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. 22 gage steel vertical stiffeners (other gages 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 gage 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 gage 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 gage 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.

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'–0"	4'–0"	6'–8"
2'–4"	4'–8"	7'–0"
2'–6"	5'–0"	7'–2"
2'–8"	5'–4"	7'–10"
2'–10"	5'–8"	8'–0"
3'–0"	6'–0"	9'–0"
3'–4"	6'–8"	10'–0"
3'–6"	7'–0"	11'–0"
3'–8"	7'–4"	12'–0"
3'–10"	7'–8"	
4'–0"	8'–0"	
5'–0"	10'–0"	

FIRE DOORS

LABELING AGENCIES:
- UNDERWRITERS LABORATORY
- WARNOCK HERSEY
- FACTORY MUTUAL

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

- RATING: 20 MIN THRU 3 HR

- 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.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
18 Gage Steel	Heavy Duty	STD	OPT	N/A	16 Gage Steel
16 Gage Steel	Extra heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel
* 14 Gage Steel (MAXIM)	Maximum Duty	STD	OPT	OPT	14 or 12 Gage Steel
12 Gage Steel	ANSI / NAAMM	STD	OPT	–	12 Gage 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 gage A60 steel.

PERFORMANCE

Sound Transmission Class:	STC 38 (F Design, 18 Gage 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)

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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RETURN TO TOP

CecoDoor

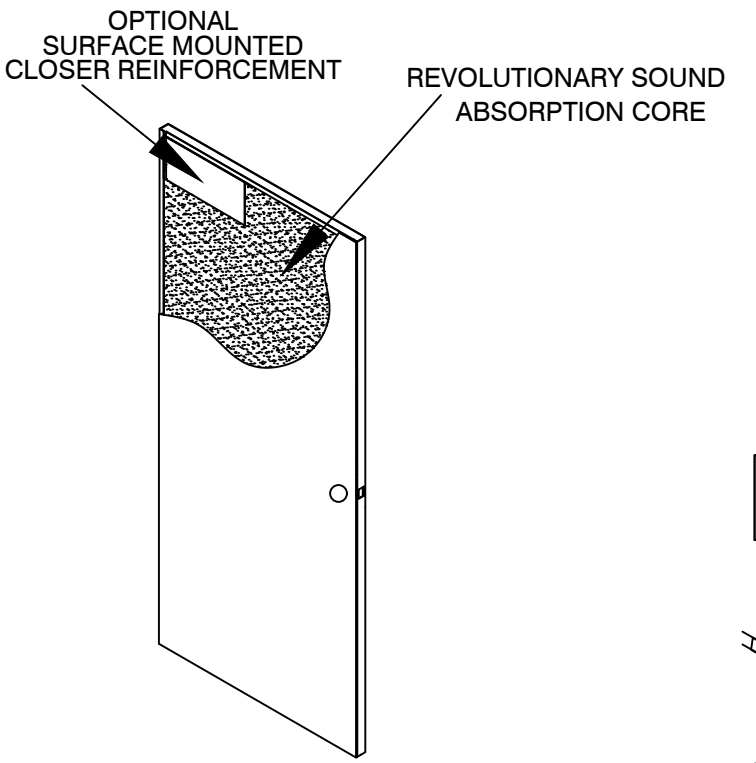
ASSA ABLOY

ASSA ABLOY

1-3/4" Sound-Tech Xpress

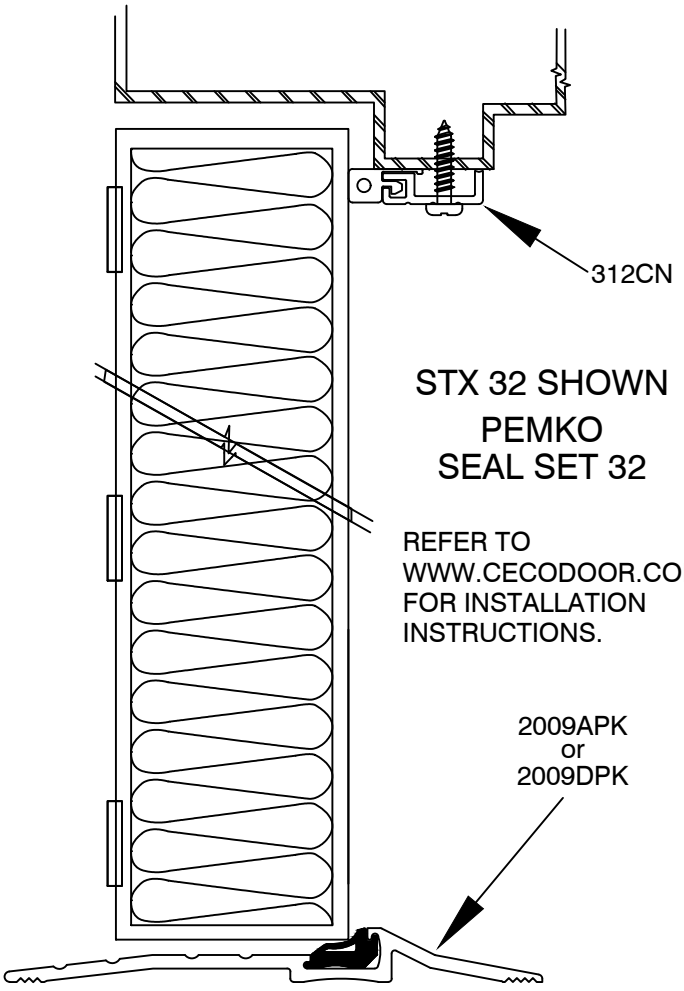
STC 32 (Flush Singles)

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.



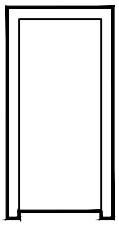
DOOR DESIGN

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated Assembly.



STX 32 SHOWN
PEMKO
SEAL SET 32

REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.



F
(ELEVATION)

Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

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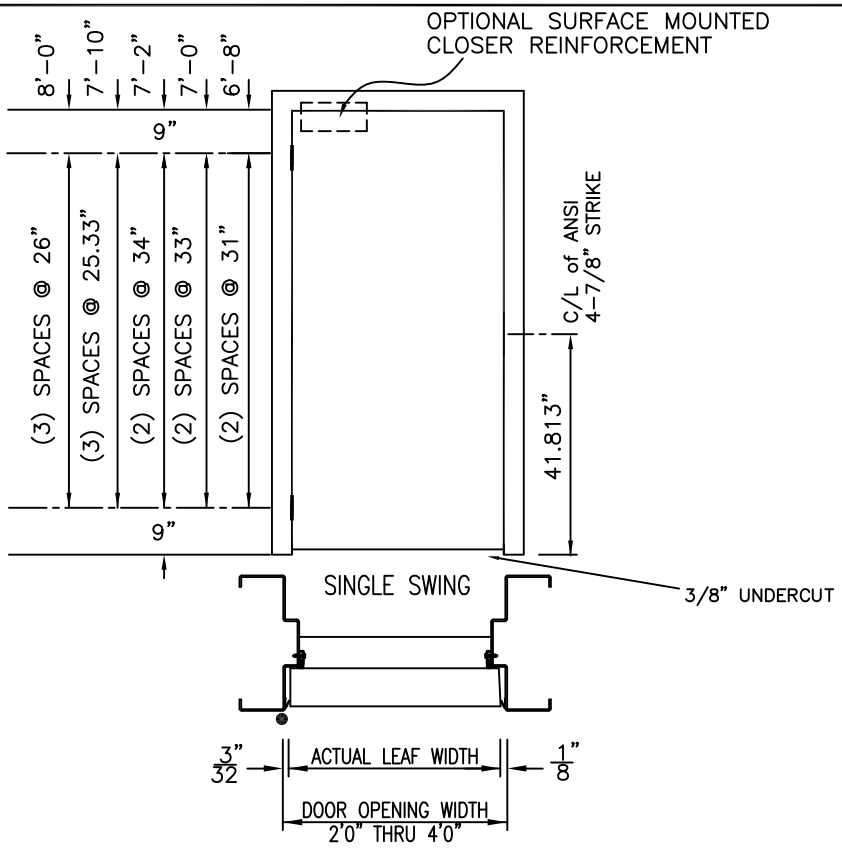
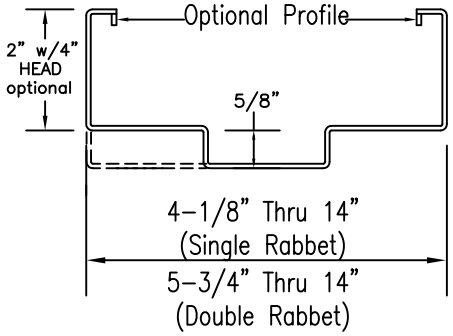
and more open world

D12-2

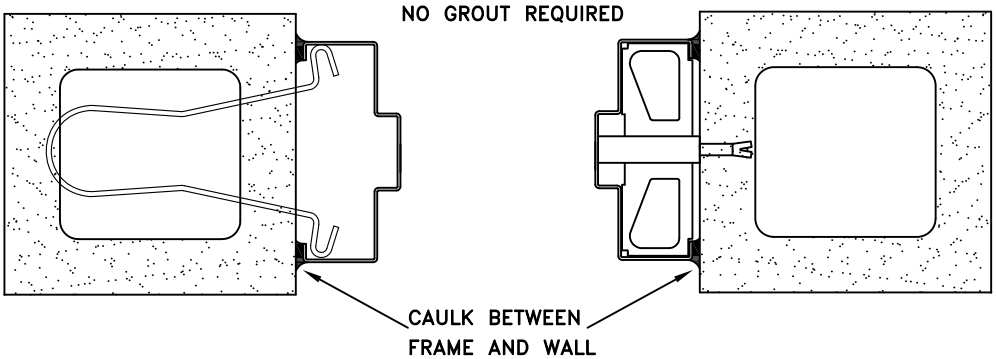


HORIZONTAL SECTION

TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW



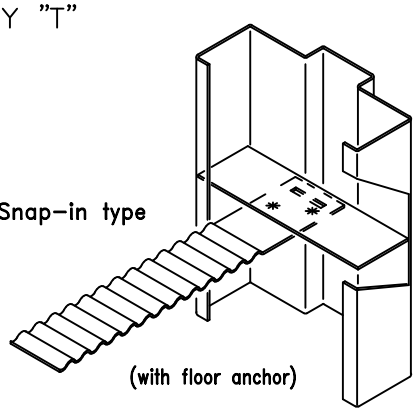
It is important that acoustic door systems be properly installed and sealed into the wall to prevent "flanking noise". Acoustical systems are furnished with specific detailed sound seal installation instructions.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

05/13/19

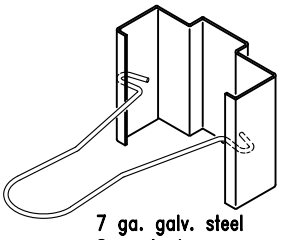
D12H-3

MASONRY "T" ANCHOR



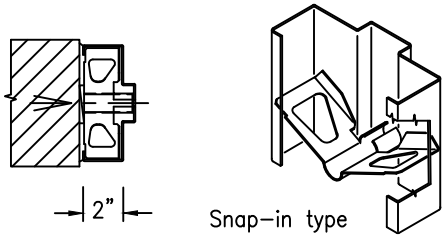
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

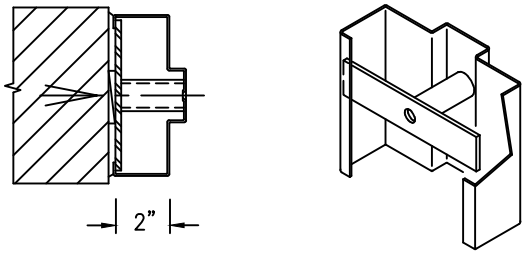
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



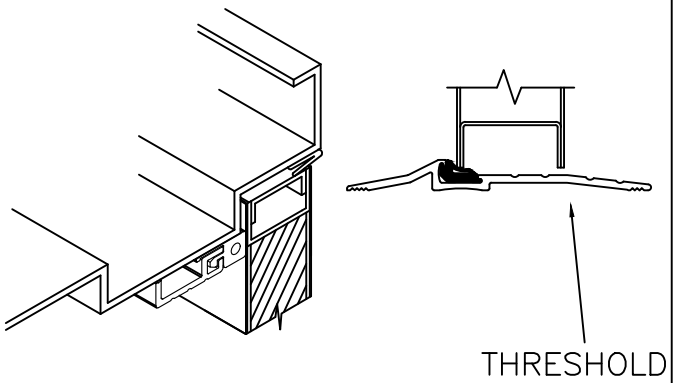
SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

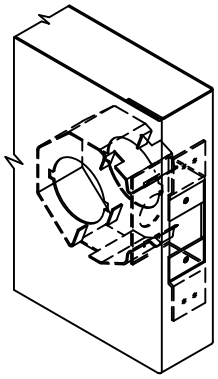
ANCHOR FITS VARIOUS DEPTHS



DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS



CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)

3-3/4" BACKSET (OPT)
3'0" WIDTH ONLY

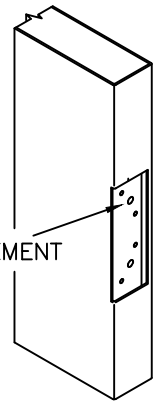
2-3/8" BACKSET
2'8" WIDTH ONLY

VERIFY ROSE SIZE IS COMPATIBLE WITH SEAL SET AND LOCK BACKSET.

LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

HINGE PREP IS HANDED



4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7

03/18/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

D12–4

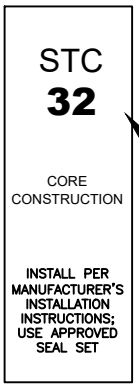
STANDARD SIZES
NOMINAL DOOR OPENING

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

ACOUSTICAL FIRE DOORS

LABELING AGENCIES:
- UL
- WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252
RATING:
- 20 MIN. THRU 3 HRS. (STX 32) FLUSH SINGLES 4'0" x 8'0" MAX.
- DESIGNS: FLUSH ONLY



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 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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	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.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

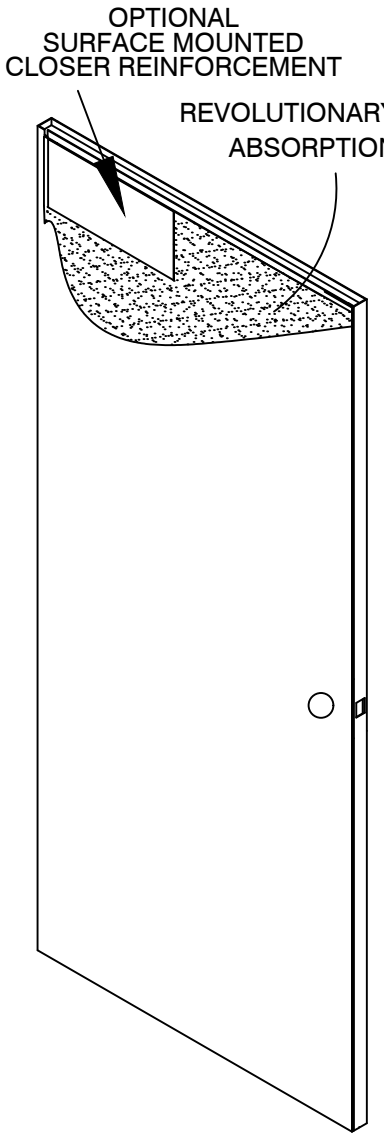
ASSA ABLOY

1-3/4" Sound-Tech Xpress

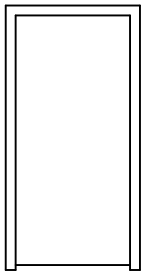
STC33 thru STC38 (Flush Singles)

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.

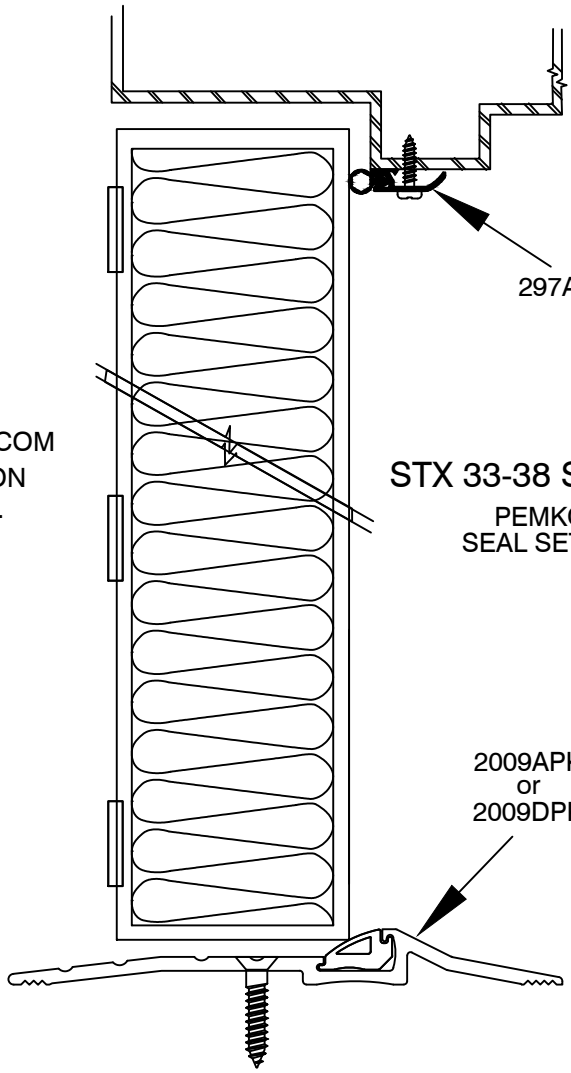
The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated Assembly.



DOOR DESIGN



REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.



STX 33-38 SHOWN

PEMKO
SEAL SET 38

Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

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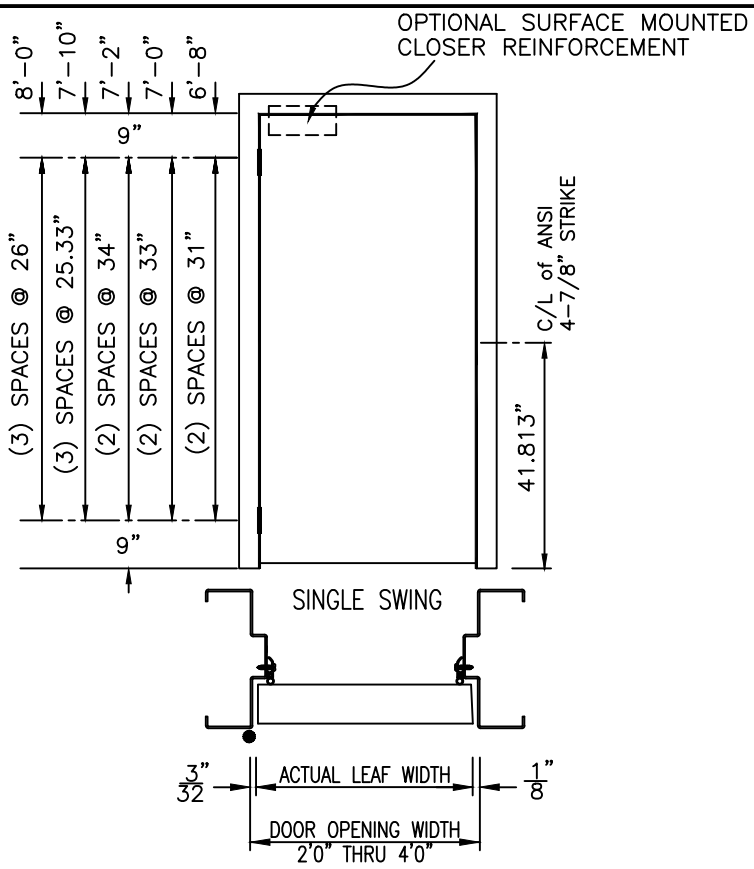
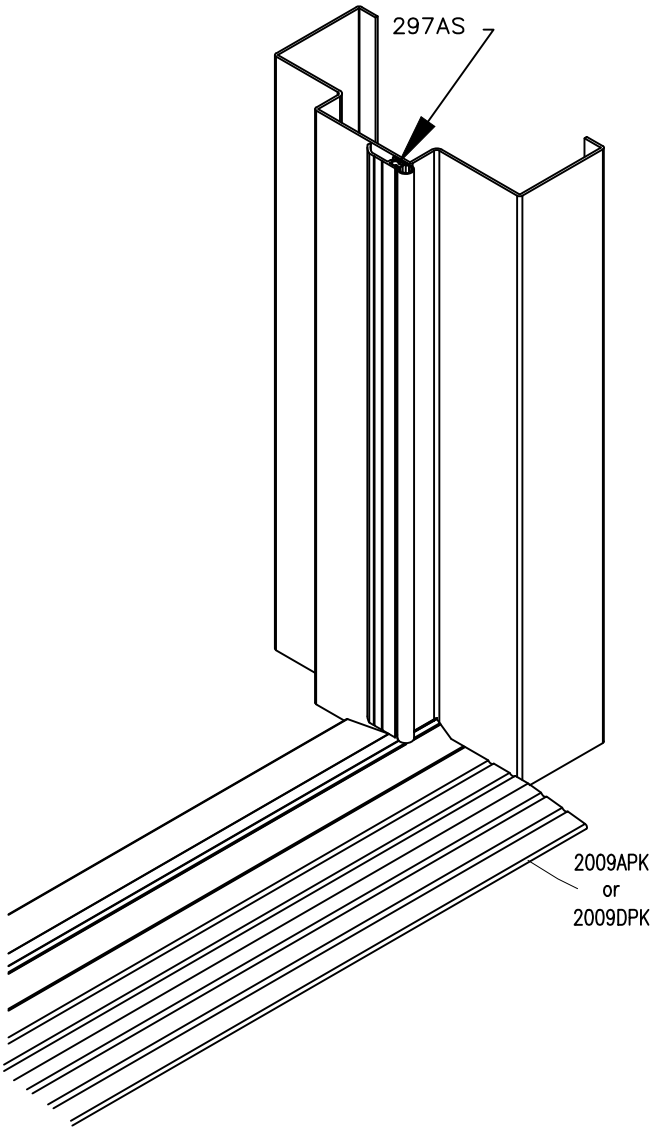
and more open world

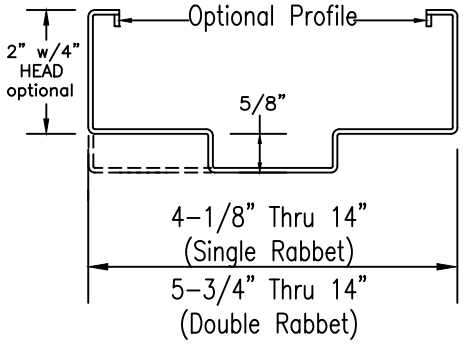
D12A-2



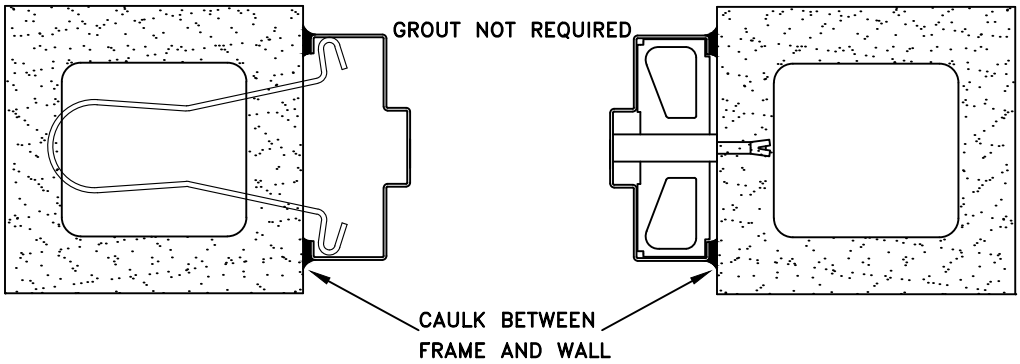
HORIZONTAL SECTION



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.

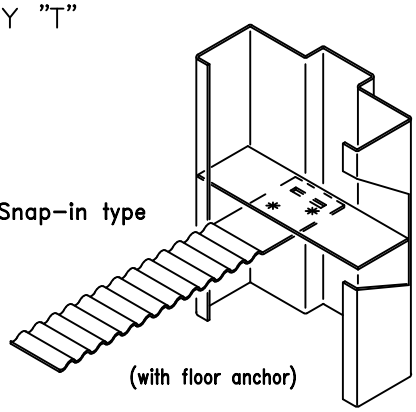
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/13/20

TECH-DATA

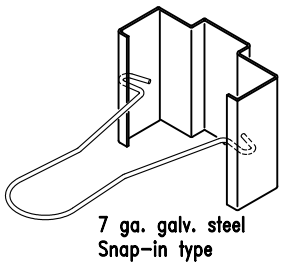
D12A-3

MASONRY "T" ANCHOR



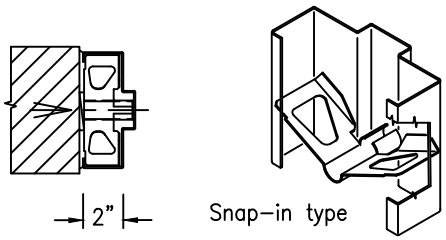
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

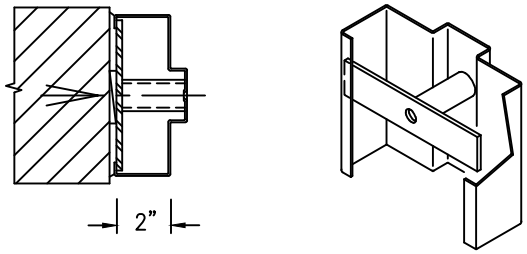
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



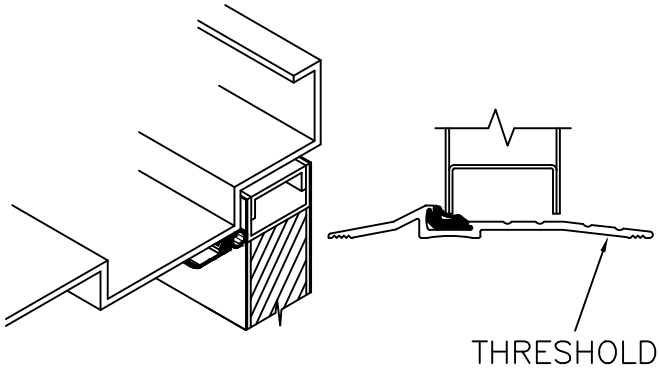
SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS

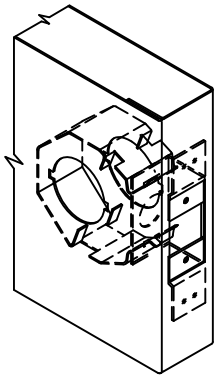


DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

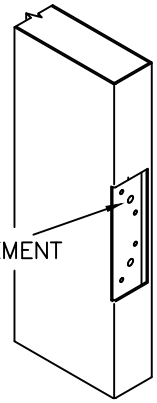


LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

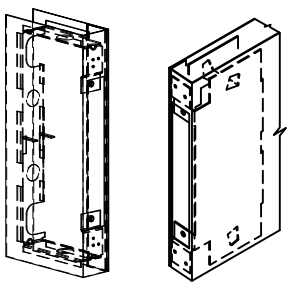
HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



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)

03/13/20

CecoDoor

ASSA ABLOY

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BACK TO TOP

D12A-4

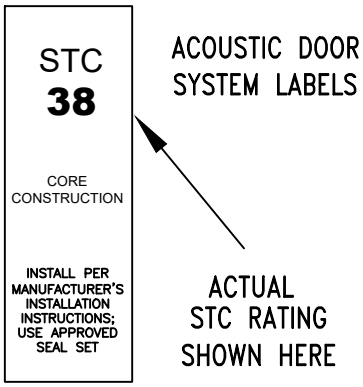
STANDARD SIZES
NOMINAL DOOR OPENING

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

ACOUSTICAL FIRE DOORS

LABELING AGENCIES
- UL
- 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



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 A115.2 cylindrical, ANSI A115.1 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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	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.

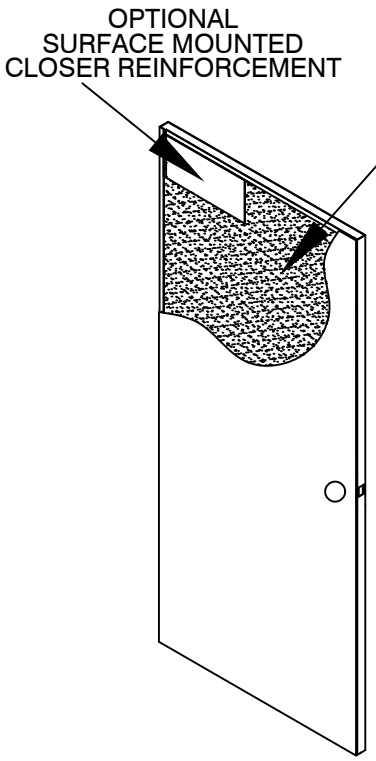
OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

1-3/4" Sound-Tech Xpress

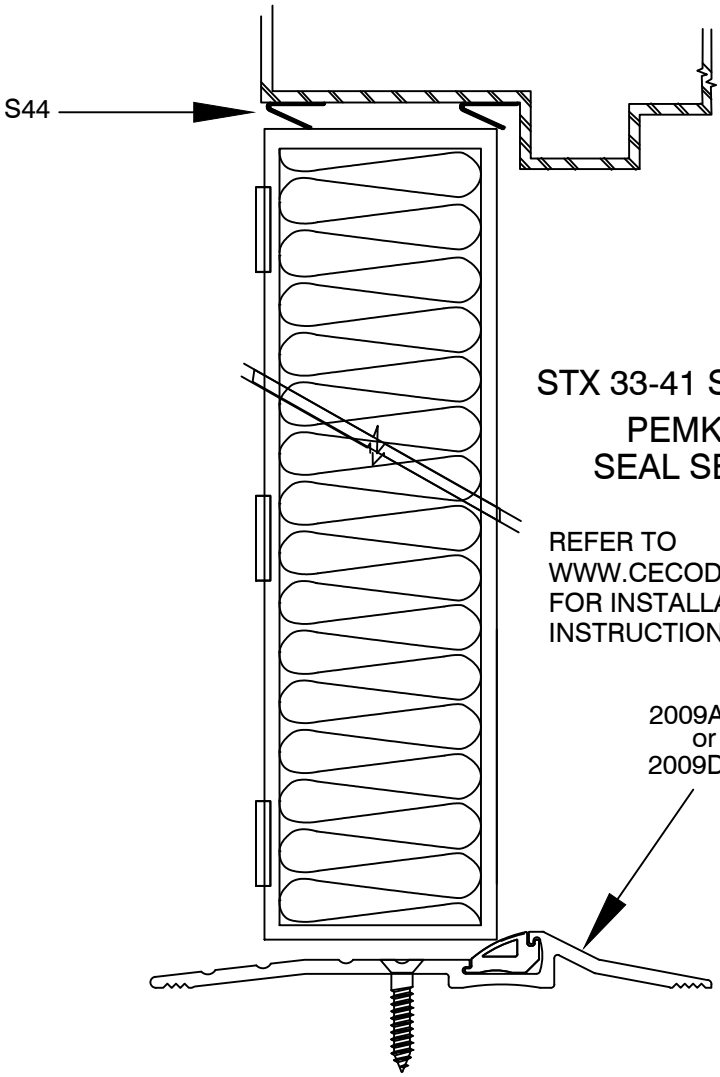
STC 33-41 (Flush Singles)

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.



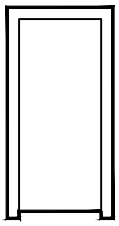
DOOR DESIGN

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated Assembly.



STX 33-41 SHOWN
PEMKO
SEAL SET 1

REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.



F
(ELEVATION)

Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

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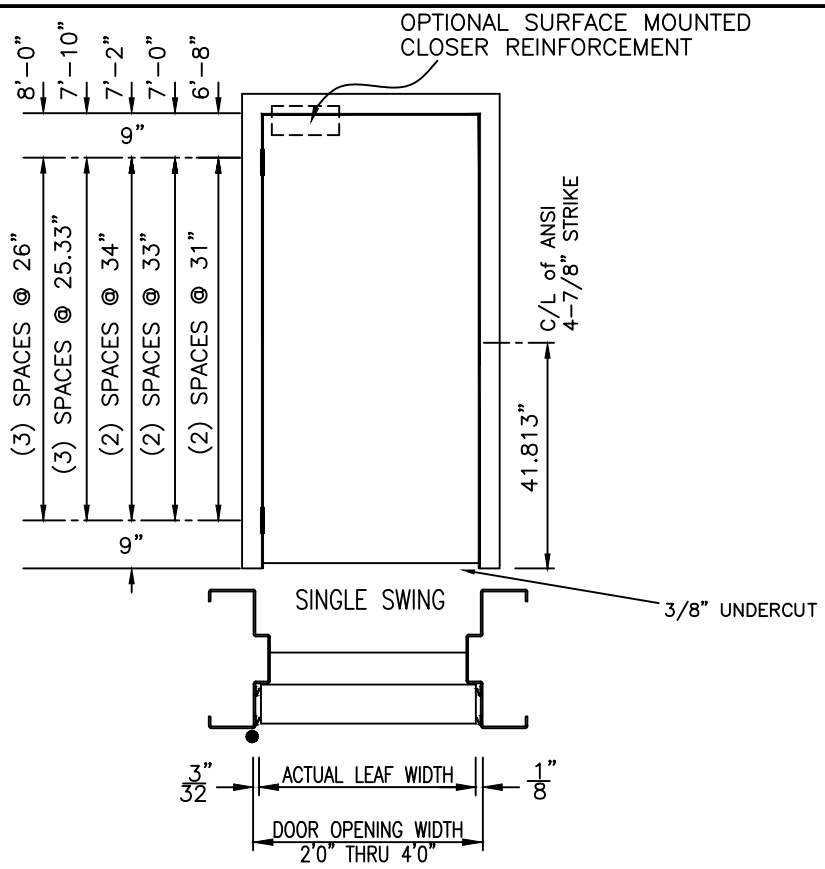
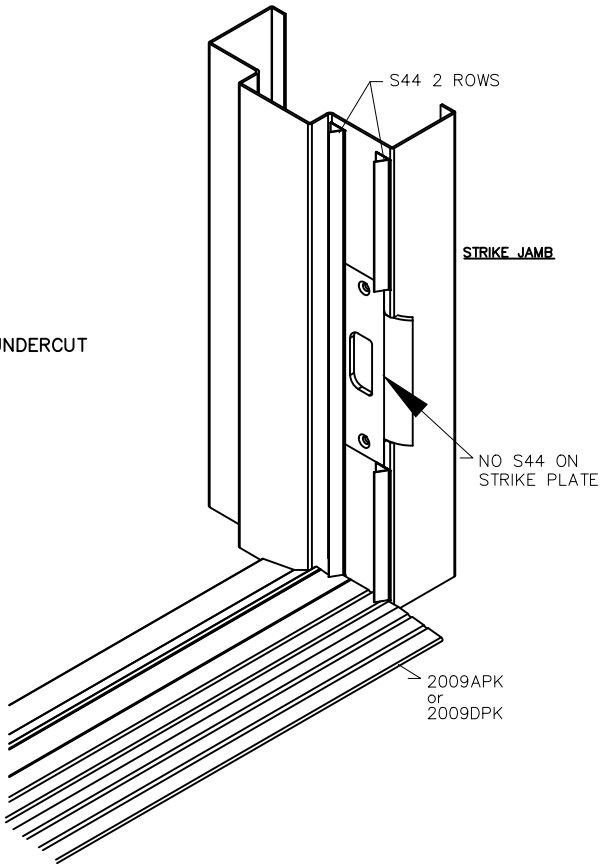
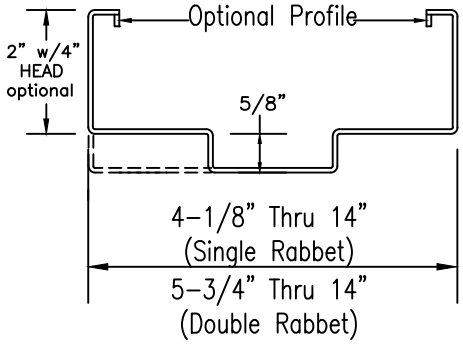
D12B-2



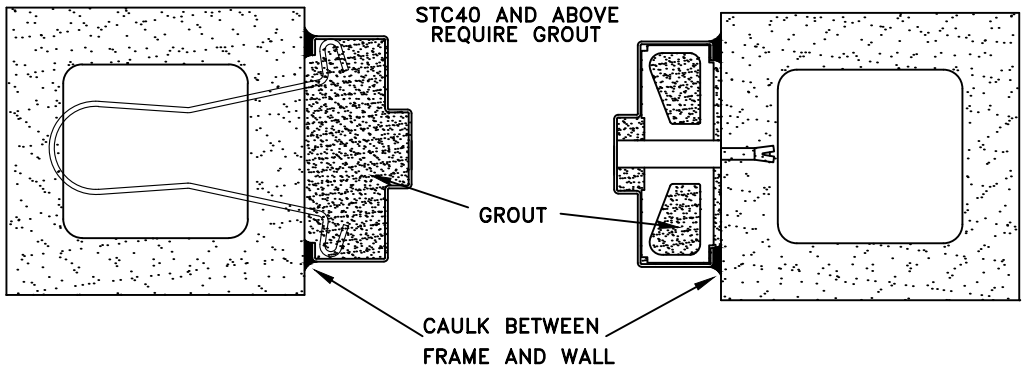
HORIZONTAL SECTION



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.

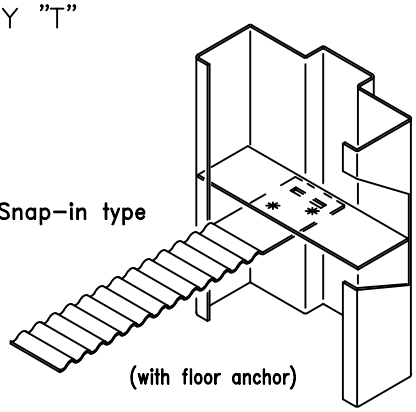
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/13/20

TECH-DATA

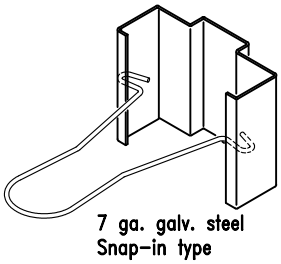
D12B-3

MASONRY "T" ANCHOR



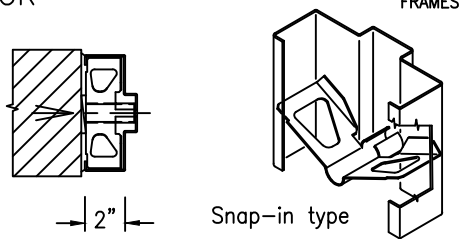
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

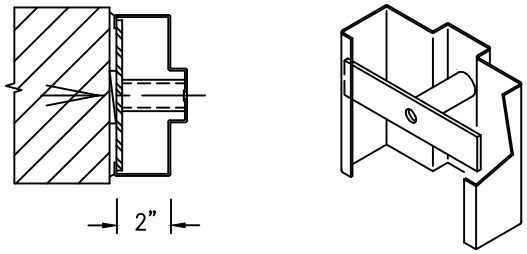
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



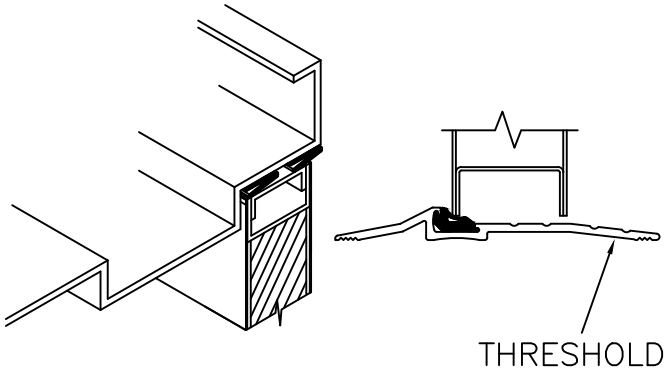
SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS



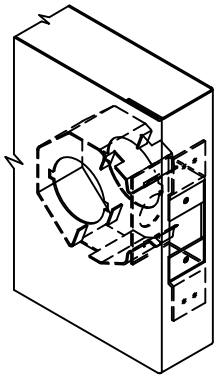
DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

CYLINDRICAL & MORTISE DEADLOCK (optional)

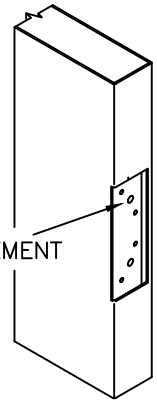


LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

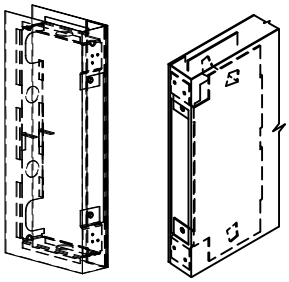
HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



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.

03/13/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

D12B–4

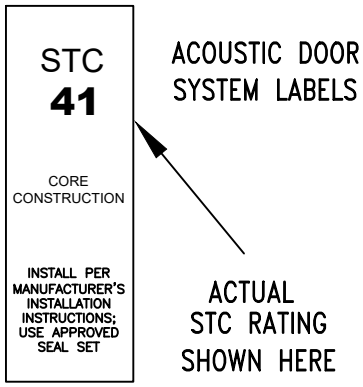
STANDARD SIZES
NOMINAL DOOR OPENING

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

LABELING AGENCIES:
- UL
- 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



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 must also be grout filled to achieve an STC rating of 40 and above.

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 A115.1 mortise lock or rim exit device. Lock jamb preparation is for 4-7/8" high strike (ANSI A115.1 or 2) or ANSI 156.3 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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	Max. Fire Rating	Seal Set Description
Single Doors	See Below	See Below	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.

03/13/20

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

RETURN TO TOP

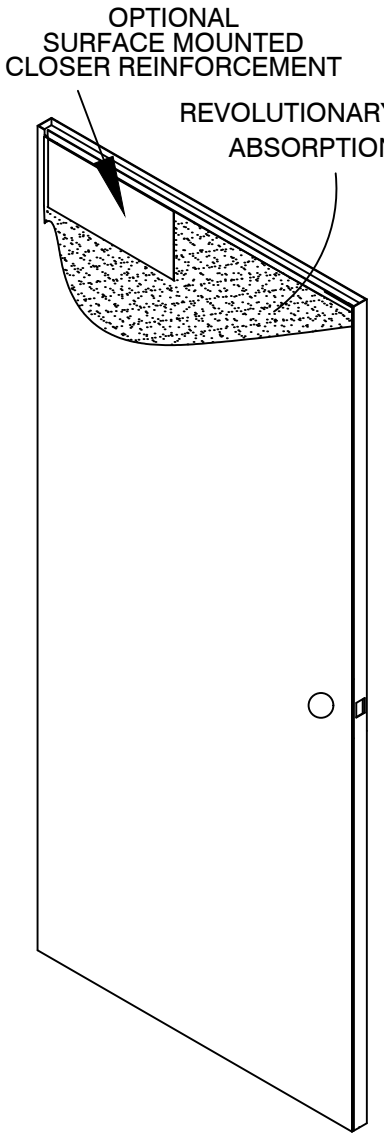
D12C-1

1-3/4" Sound-Tech Xpress

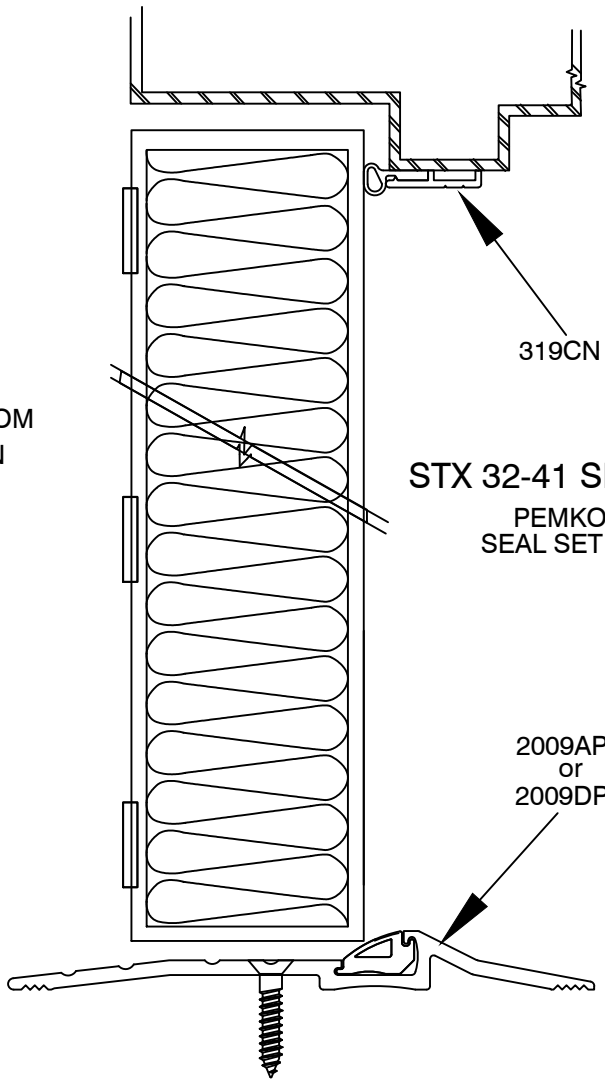
STC32 thru STC41 (Flush Single 450° Temperature Rise)

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.

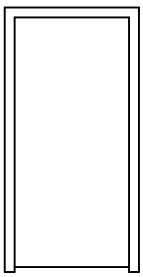


REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.



STX 32-41 SHOWN
PEMKO
SEAL SET 41

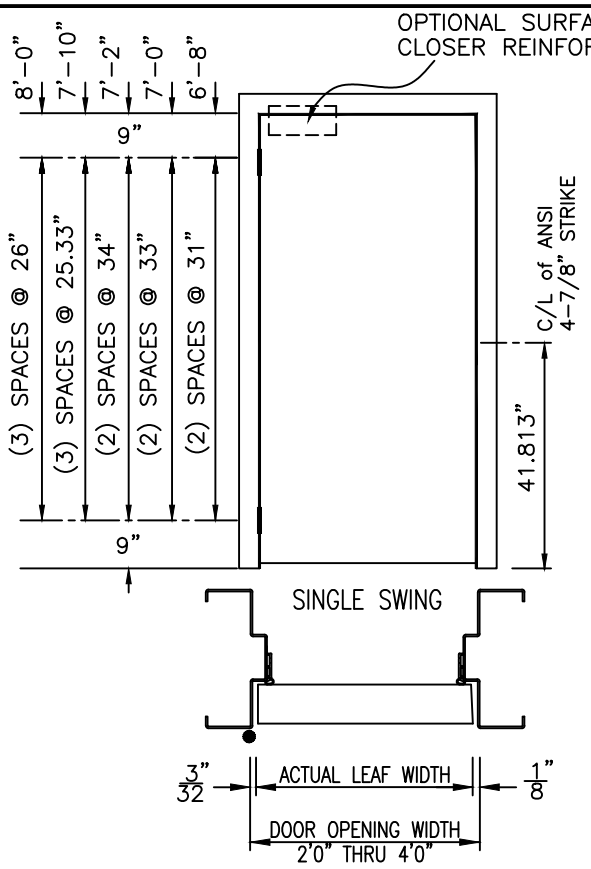
DOOR DESIGN



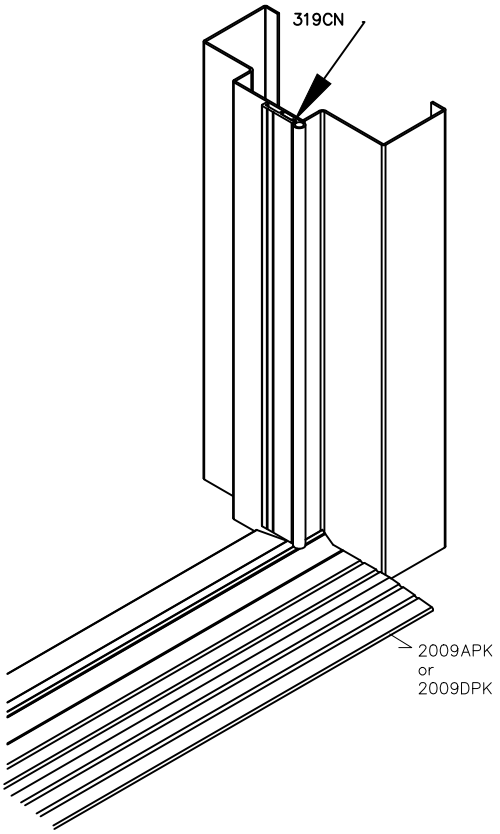
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/13/20

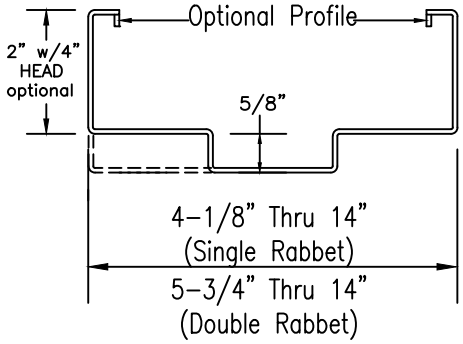
D12C-2



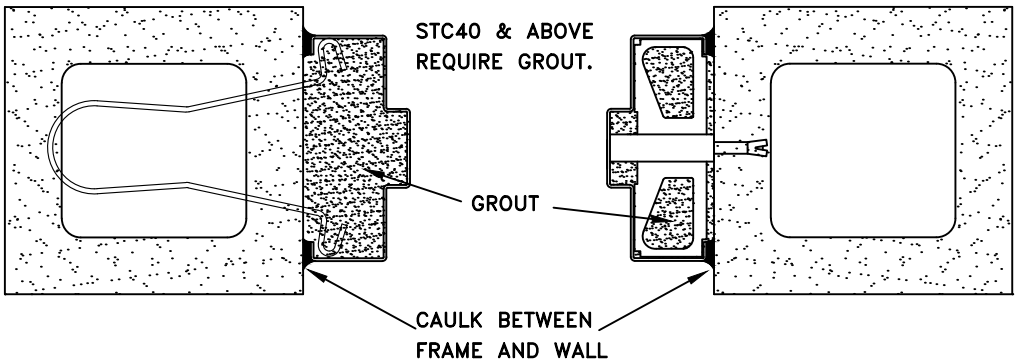
HORIZONTAL SECTION



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.

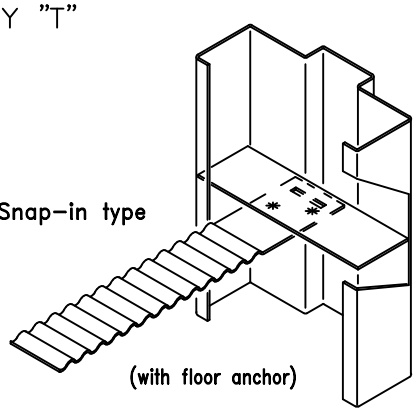
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/13/20

TECH-DATA

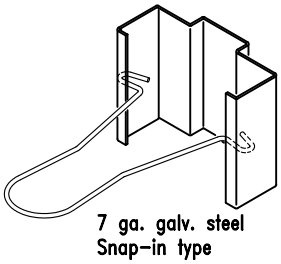
D12C-3

MASONRY "T" ANCHOR



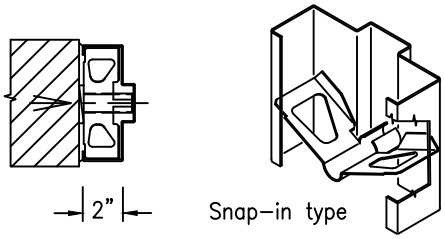
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

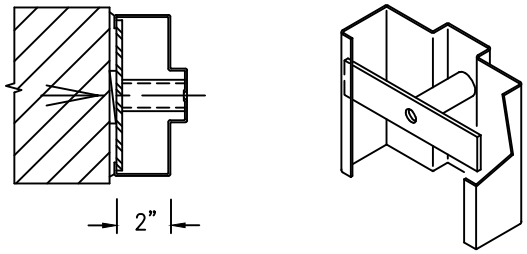
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



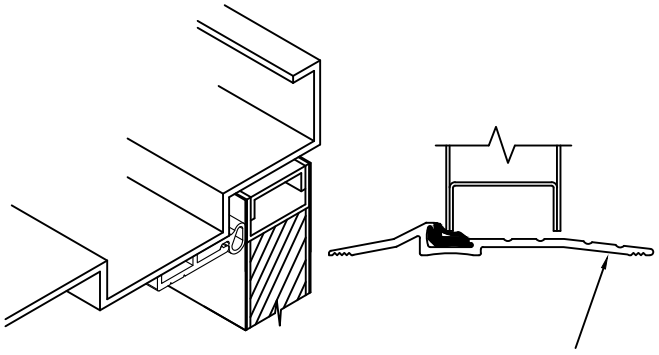
SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS

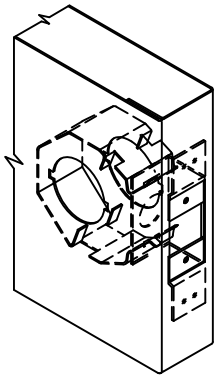


DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

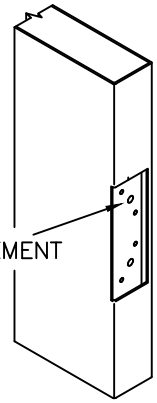


LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

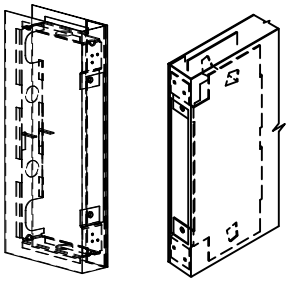
HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



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)

03/13/20

CecoDoor

ASSA ABLOY

Experience a safer and more open world

BACK TO TOP

D12C-4

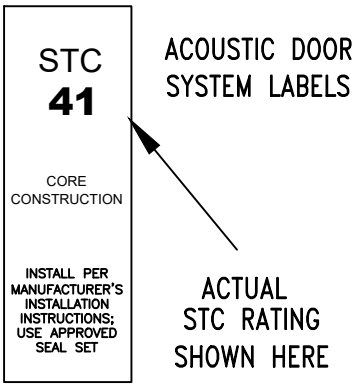
STANDARD SIZES
NOMINAL DOOR OPENING

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

ACOUSTICAL FIRE DOORS

LABELING AGENCIES
- UL
- WH

TEST: UL 10B, UL 10C, UL 1784 & NFPA 252
FIRE RATING:
- 20 MIN. THRU 1–1/2 HRS. (STX 32–41) 4'0" x 8'0" MAX.
- DESIGN: FLUSH



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. 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 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, ANSI A115.1 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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	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 41

STC 32-41 WITH CYLINDRICAL LOCK OR MORTISE LOCK, OPTIONAL PREPARATIONS NOT ALLOWED.

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

03/13/20

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

CecoDoor

ASSA ABLOY

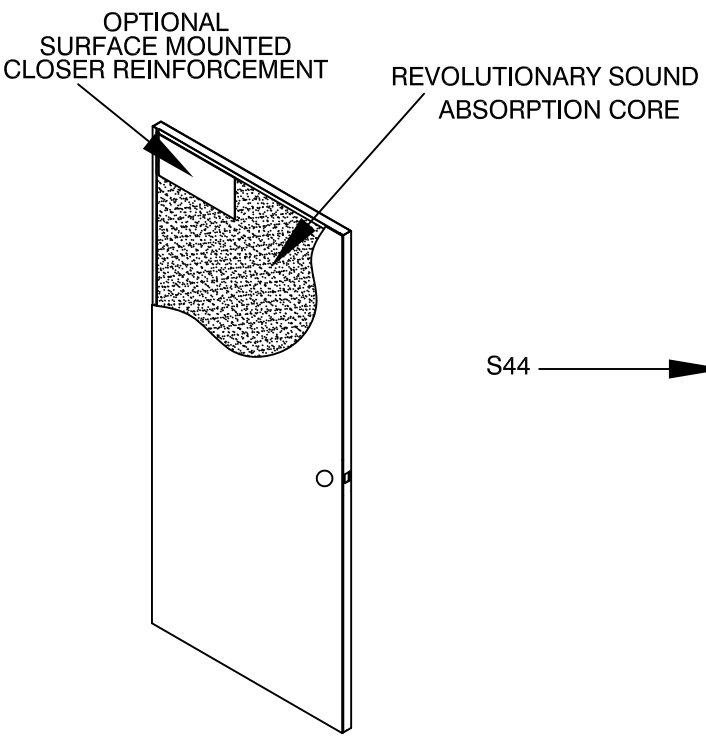
1-3/4" Sound-Tech Xpress

D12D–1

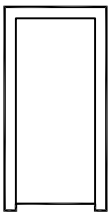
STC 42-51 (Flush Singles)

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.

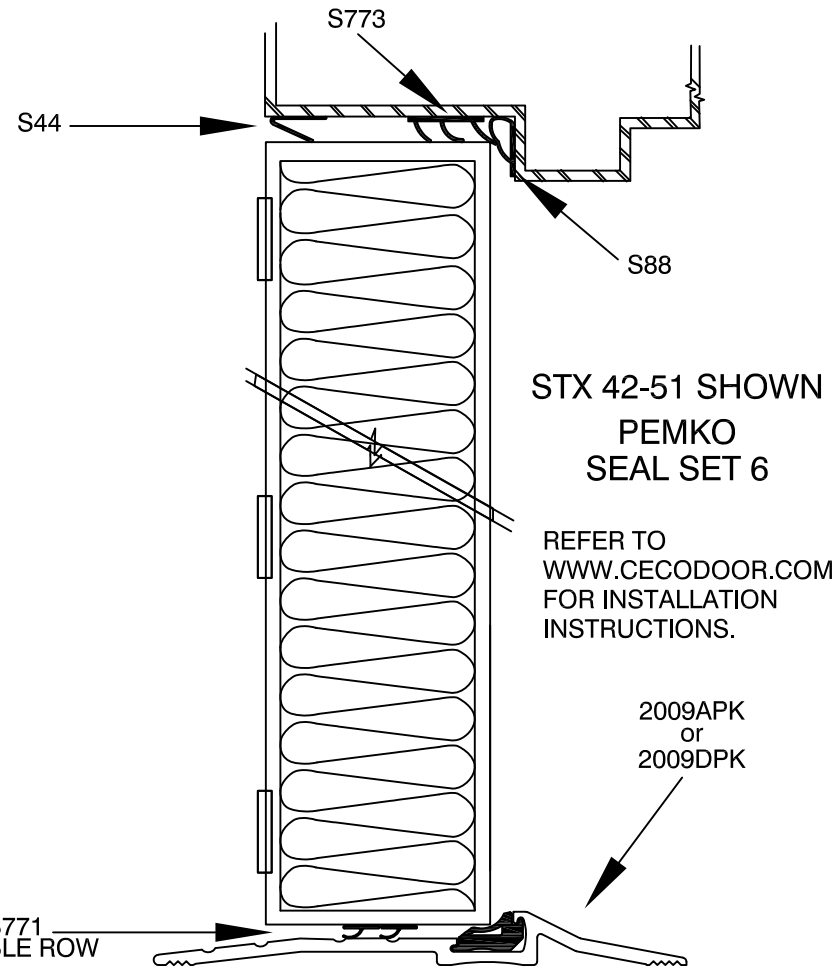
The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated Assembly.



DOOR DESIGN



F
(ELEVATION)



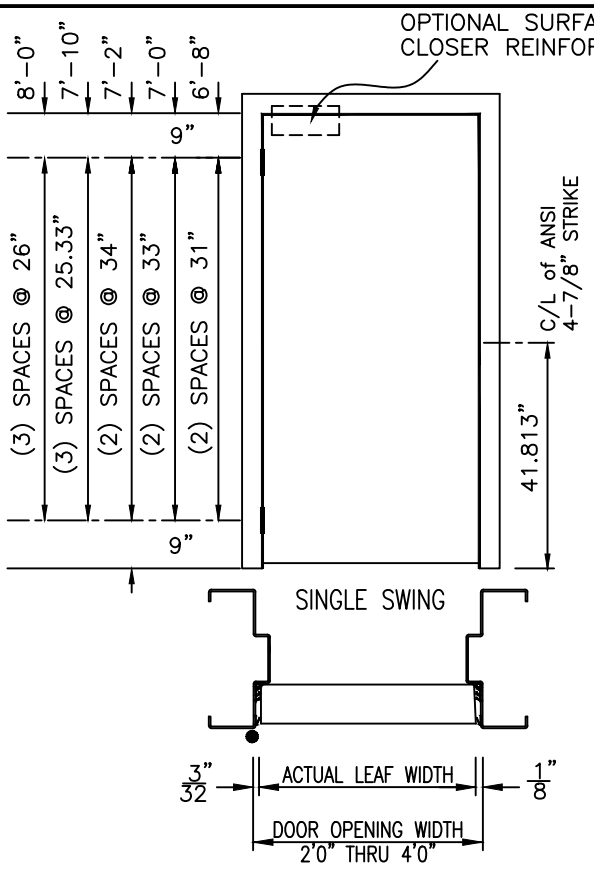
STX 42-51 SHOWN
PEMKO
SEAL SET 6

REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.

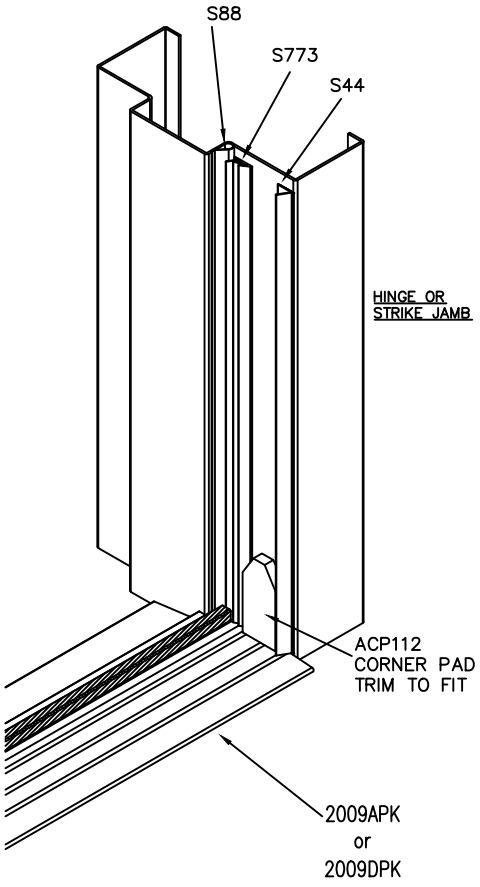
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/16/20

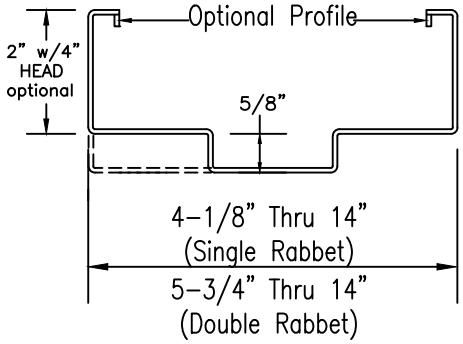
D12D-2



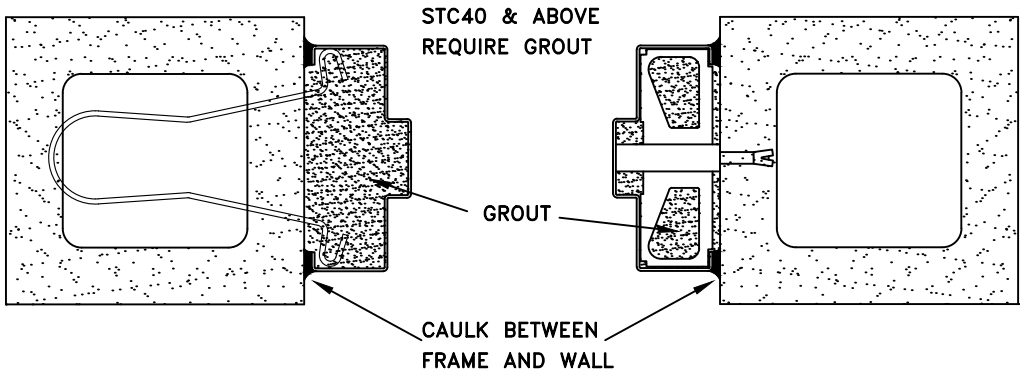
HORIZONTAL SECTION



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.

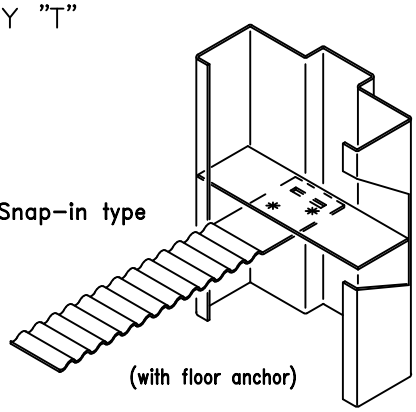
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/16/20

TECH-DATA

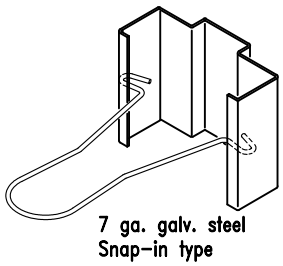
D12D-3

MASONRY "T" ANCHOR



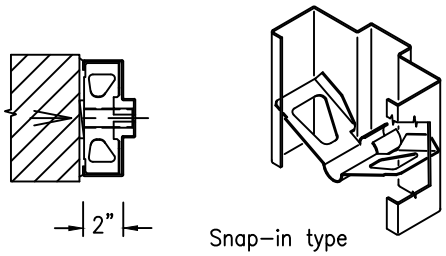
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

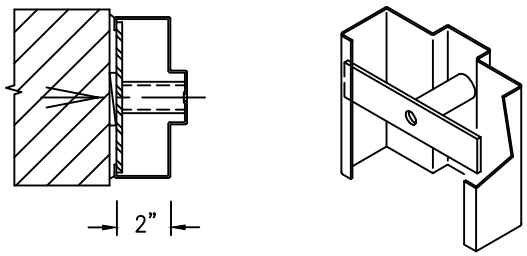
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



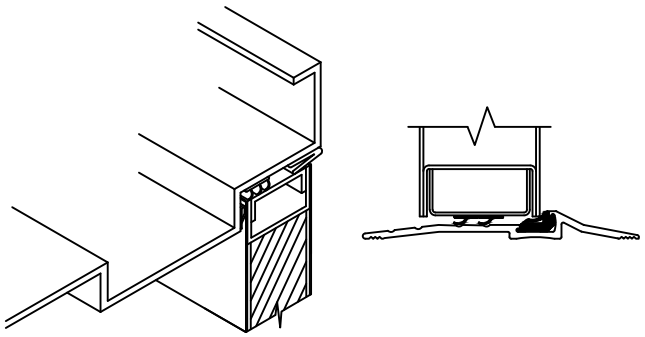
SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS



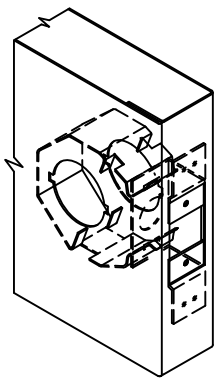
DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)
3-3/4" (OPT)

CYLINDRICAL & MORTISE DEADLOCK (optional)

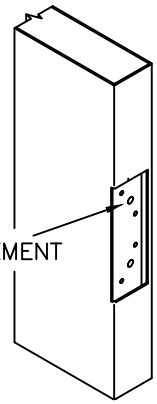


LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

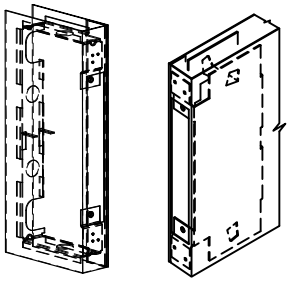
HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



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)

03/16/20

D12D–4

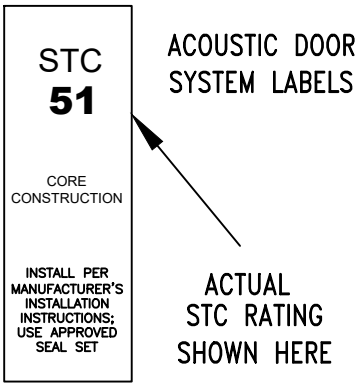
STANDARD SIZES
NOMINAL DOOR OPENING

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
- 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



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. 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 A115.1 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 A115.1 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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	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.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

03/13/20

CecoDoor
ASSA ABLOY

Return to Index

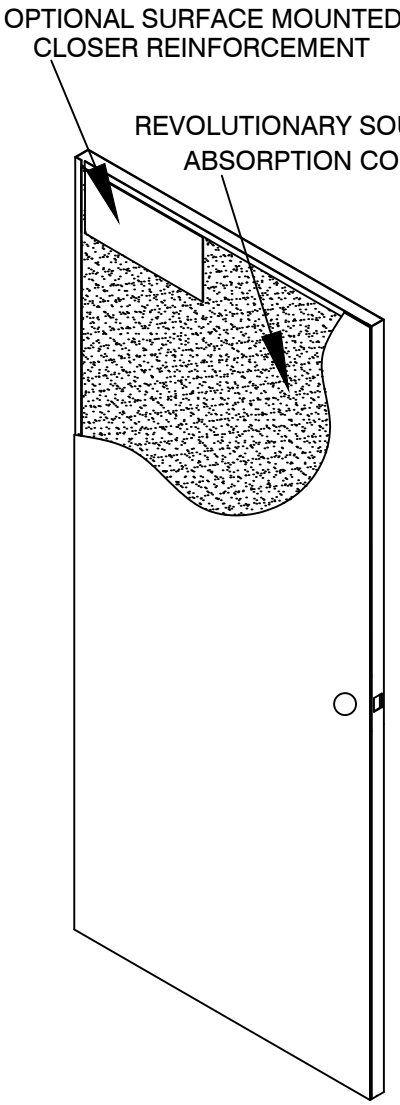
1-3/4" Sound-Tech Xpress

D12E-1

STC52 (Flush Singles)

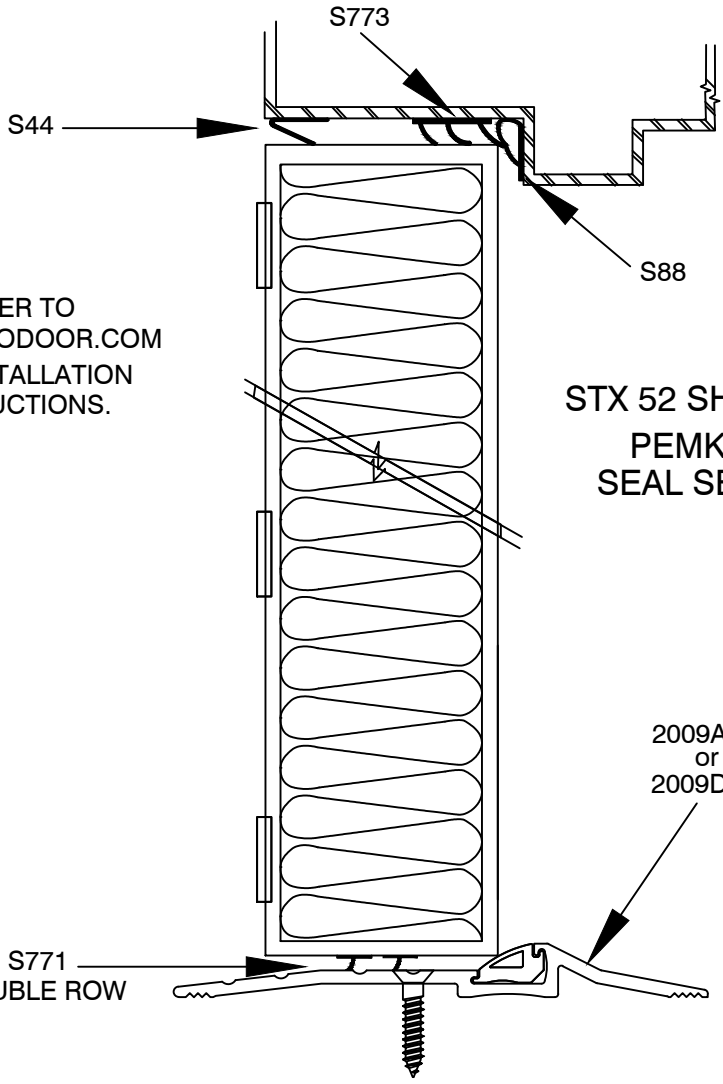
TESTED AND IN COMPLIANCE WITH ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235.
DOOR SYSTEMS ARE IN COMPLIANCE WITH HMMA 865 & SDI-128 SPECIFICATIONS.
COMPLETE WITH PERIMETER SOUND SEALS, BOTTOM SEALS AND THRESHOLD AS REQUIRED FOR RATING.

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated Assembly.

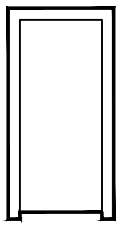


DOOR DESIGN

REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.



STX 52 SHOWN
PEMKO
SEAL SET 6

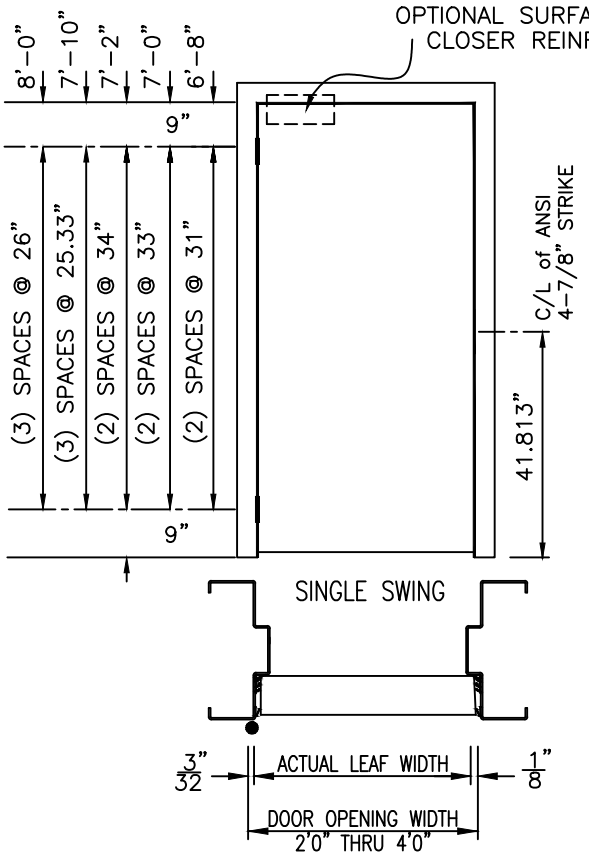


F
(ELEVATION)

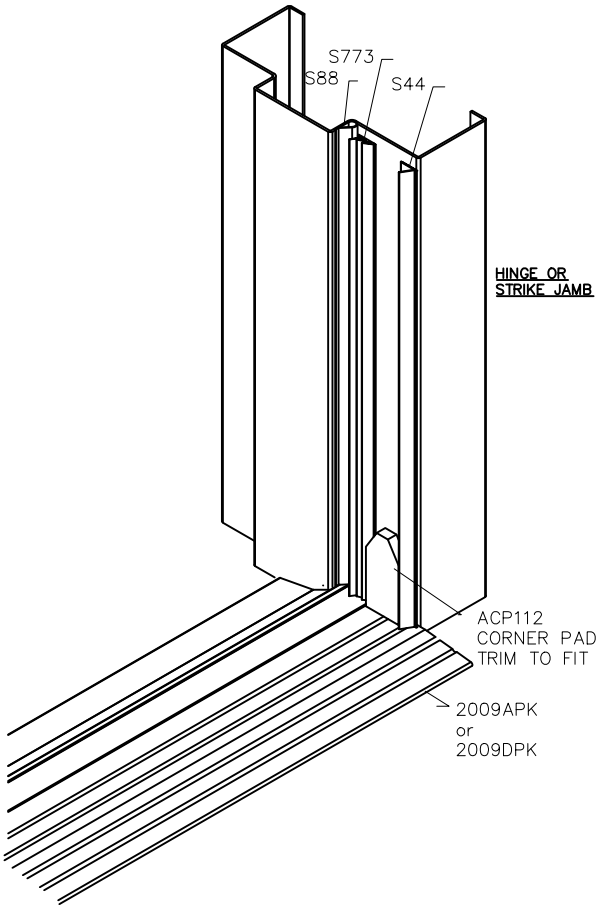
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/18/20

D12E-2

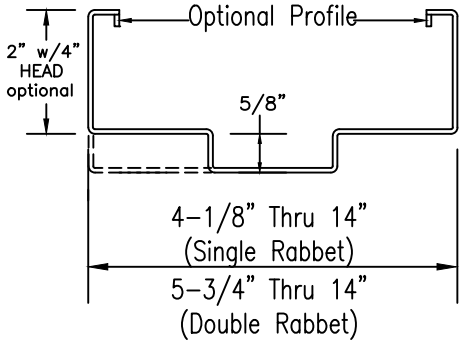


HORIZONTAL SECTION

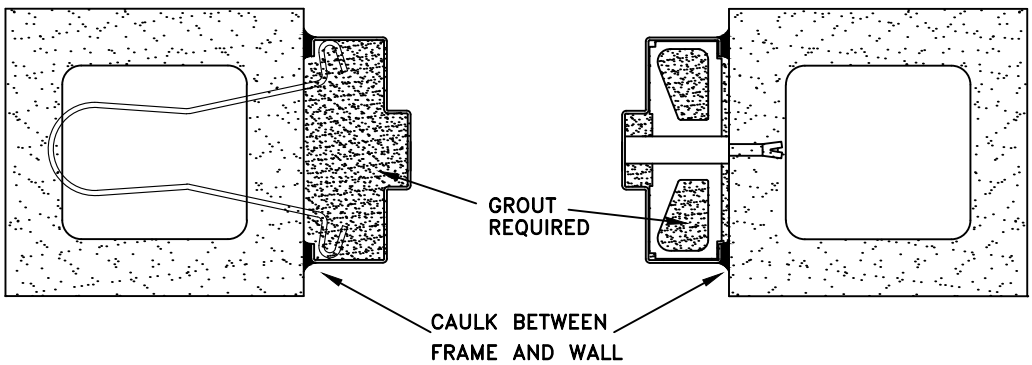


VERTICAL SECTION

TYPICAL PROFILE



SOME COMMON MASONARY APPLICATIONS SHOWN BELOW



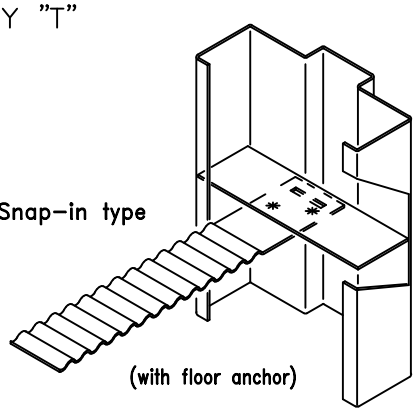
It is important that acoustic door systems be properly installed and sealed into the wall to prevent "flanking noise". Acoustical systems are furnished with detailed installation instructions.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/18/20

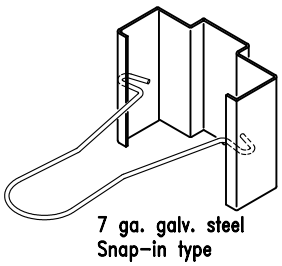
D12E-3

MASONRY "T" ANCHOR



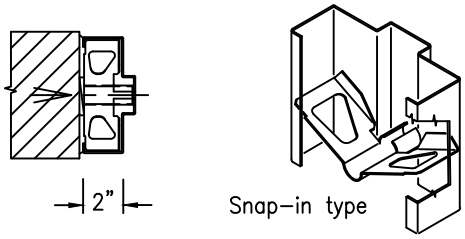
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

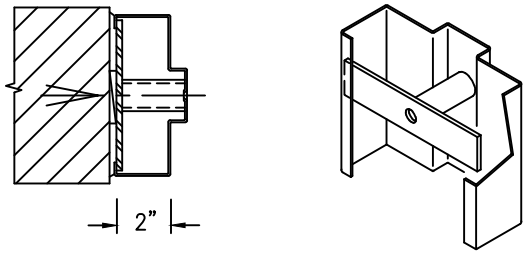
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



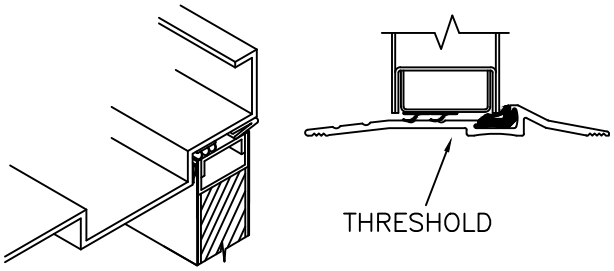
SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS



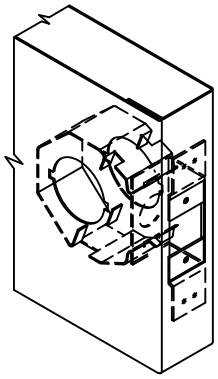
DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)
3-3/4" (OPT)

CYLINDRICAL & MORTISE DEADLOCK (optional)

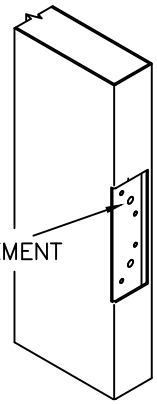


LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

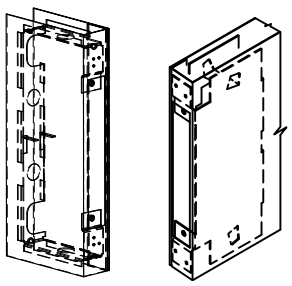
HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



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.

03/18/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

D12E–4

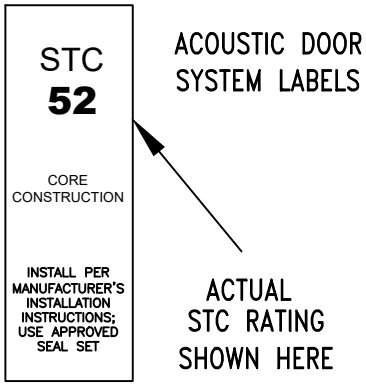
STANDARD SIZES
NOMINAL DOOR OPENING

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

ACOUSTICAL FIRE DOORS

LABELING AGENCIES:
- UL
- WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252
RATING:
- 20 MIN. THRU 3 HRS. (STX 52) FLUSH SINGLES 4'0" x 8'0" MAX.
- DESIGNS: FLUSH ONLY



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. 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 A115.1 or 2). Optional surface mounted closer reinforcements are available. Mag locks, Electric Power Transfer (EPT) and deadlocks are options for STC 52.

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" 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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	Max. Fire Rating	Seal Set Description
Single Doors	52	Cyl/Mort.	3/8"	3 HOUR	Pemko Seals: S88, S44, S773, S771, ACP112, 2009_PK Threshold-Set 6

OPTIONAL HARDWARE PREPARATIONS ARE: ELECTRIC POWER TRANSFER (EPT), MAG LOCK OR DEADLOCK.

STC 52 WITH CYLINDRICAL LOCK MAY HAVE ANY 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.

03/18/20

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

BACK TO TOP

Experience a safer and more open world
CecoDoor
ASSA ABLOY

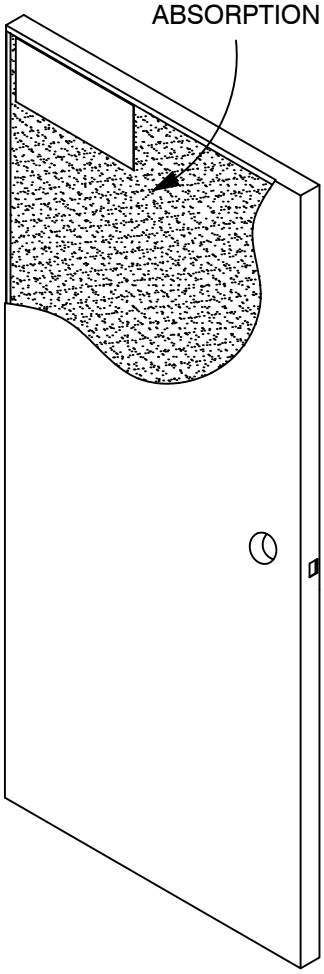
D12F-1

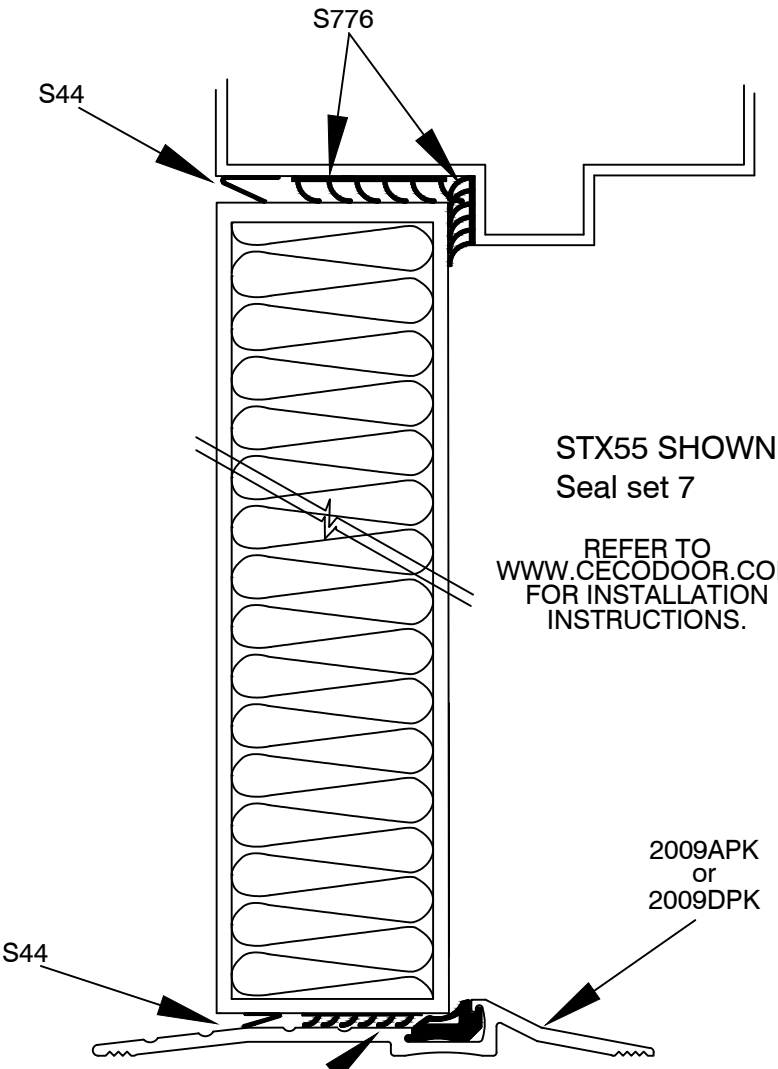
2-1/2" STC 55 Sound-Tech Xpress

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 Set Is Provided With Each STC Rated Assembly.

REVOLUTIONARY SOUND ABSORPTION CORE

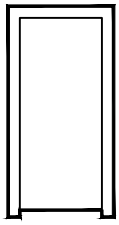




STX55 SHOWN
Seal set 7

REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

DOOR DESIGN

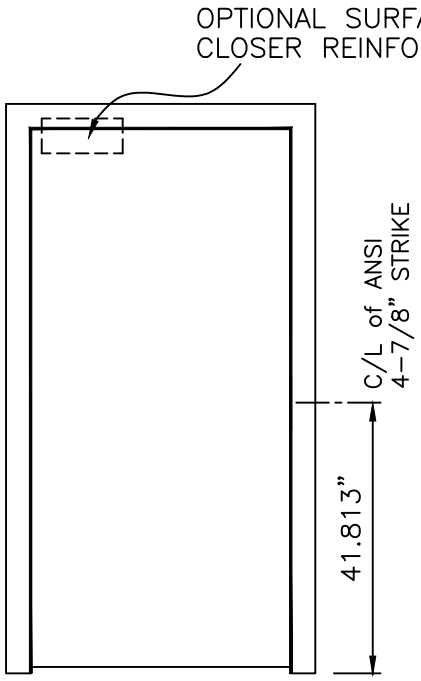


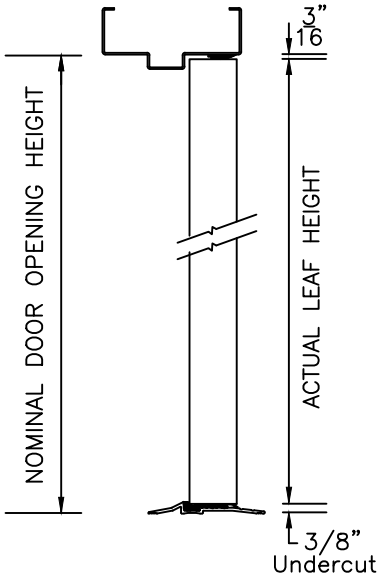
F
(ELEVATION)

Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military/Government facilities.

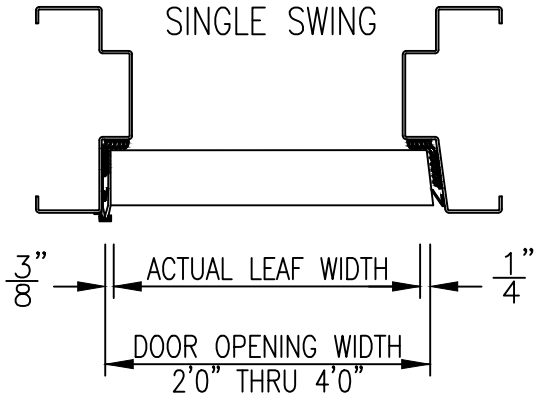
03/18/20

D12F-2



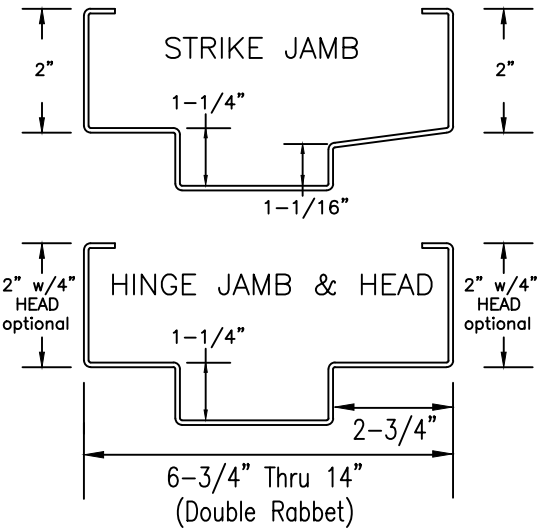


VERTICAL SECTION

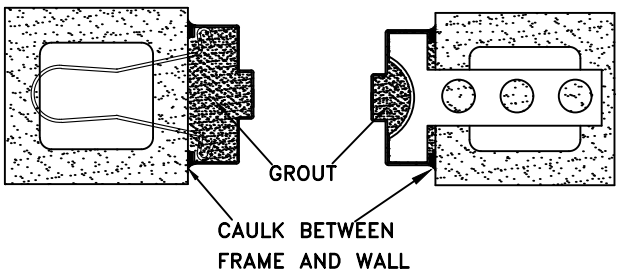


HORIZONTAL SECTIONS

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.

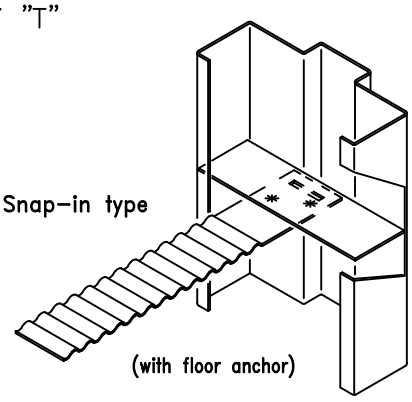
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/18/20

TECH-DATA

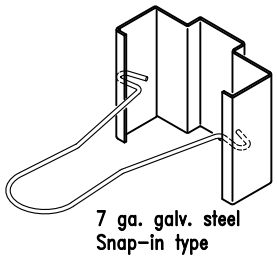
D12F-3

MASONRY "T" ANCHOR



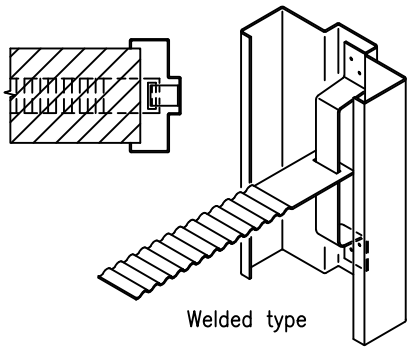
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



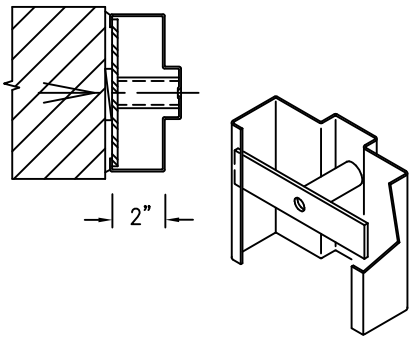
YOKE AND STRAP MASONRY ANCHOR YS

ANCHOR FITS VARIOUS DEPTHS

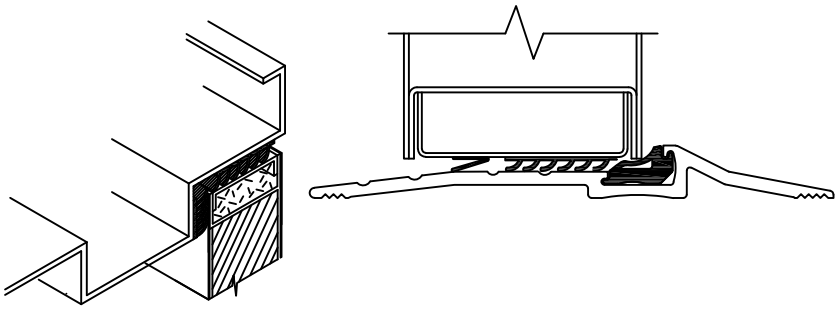


EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS

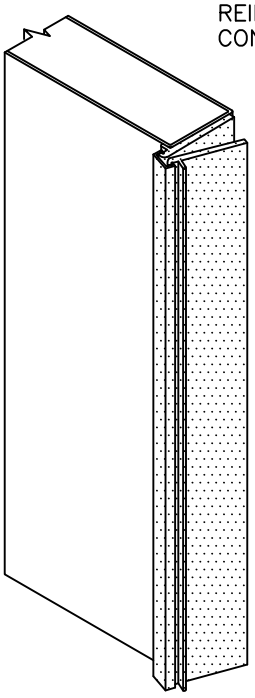


DOOR CONSTRUCTION TOP AND BOTTOM



HINGE PREPARATION

REINFORCED FOR CONTINUOUS HINGE



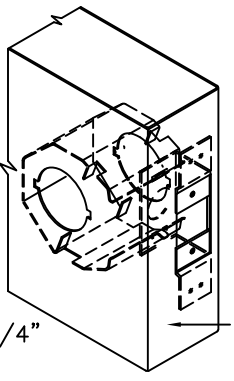
PEMKO X25MC or XM25D (SPECIFY FINISH)
EXTRA-HEAVY DUTY CONTINUOUS HINGE
SUPPLIED BY CECO

LOCK PREPARATIONS

* SARGENT 11 LINE CYLINDRICAL ("B" OR "O" ROSE) OR
* CORBIN-RUSSWIN CL3100 CYLINDRICAL ("C" OR "K" ROSE) ANSI A115.2 (BY OTHERS)

BACKSET = 2-3/4"
OPTIONAL BACKSET = 3-3/4"
LOCK EDGE IS BEVELED

* CHECK WITH THE LOCK 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)

03/18/20

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BACK TO TOP

CecoDoor

ASSA ABLOY

D12F-4

STANDARD SIZES
NOMINAL DOOR OPENING

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

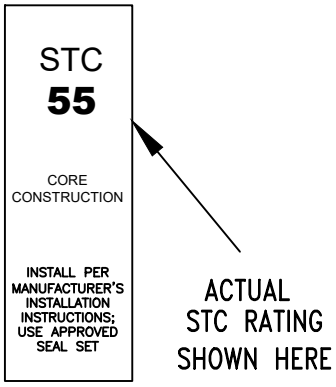
PRODUCT SPECIFICATIONS:

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 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. 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.

ACOUSTIC DOOR
SYSTEM LABELS



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 A115.2) cylindrical lock. Check with Sargent for the STC 55 11 Line lock order code. Check with Corbin Russwin for the STC 55 CL3100 lock order code. When a 2-3/4" back set is used, Sargent "B" or "O" rose, Corbin Russwin "C" 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 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 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 a field test versus lab test.

Sound-Tech Xpress Door System

	STC Rating	Lock Type	Under-cut	Max. Fire Rating	Seal Set Description
Single Door	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.

03/19/20

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

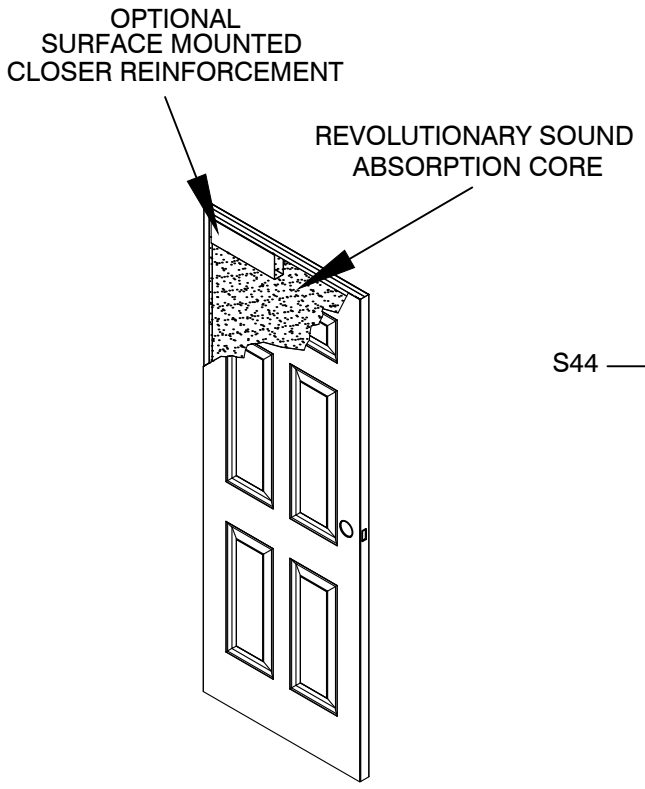
D12G-1

1-3/4" Sound-Tech Xpress

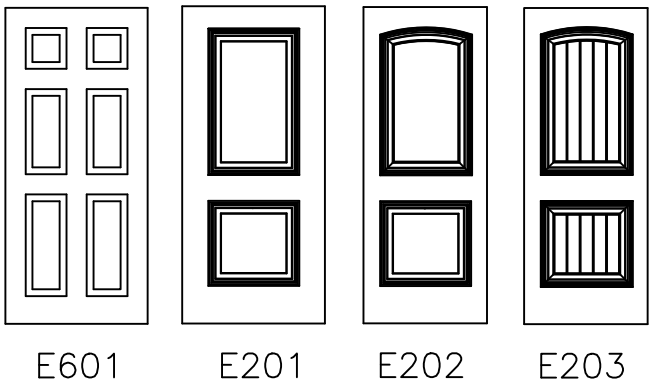
STC 32-47 (Single Embossed 2 and 6 Panel Doors)

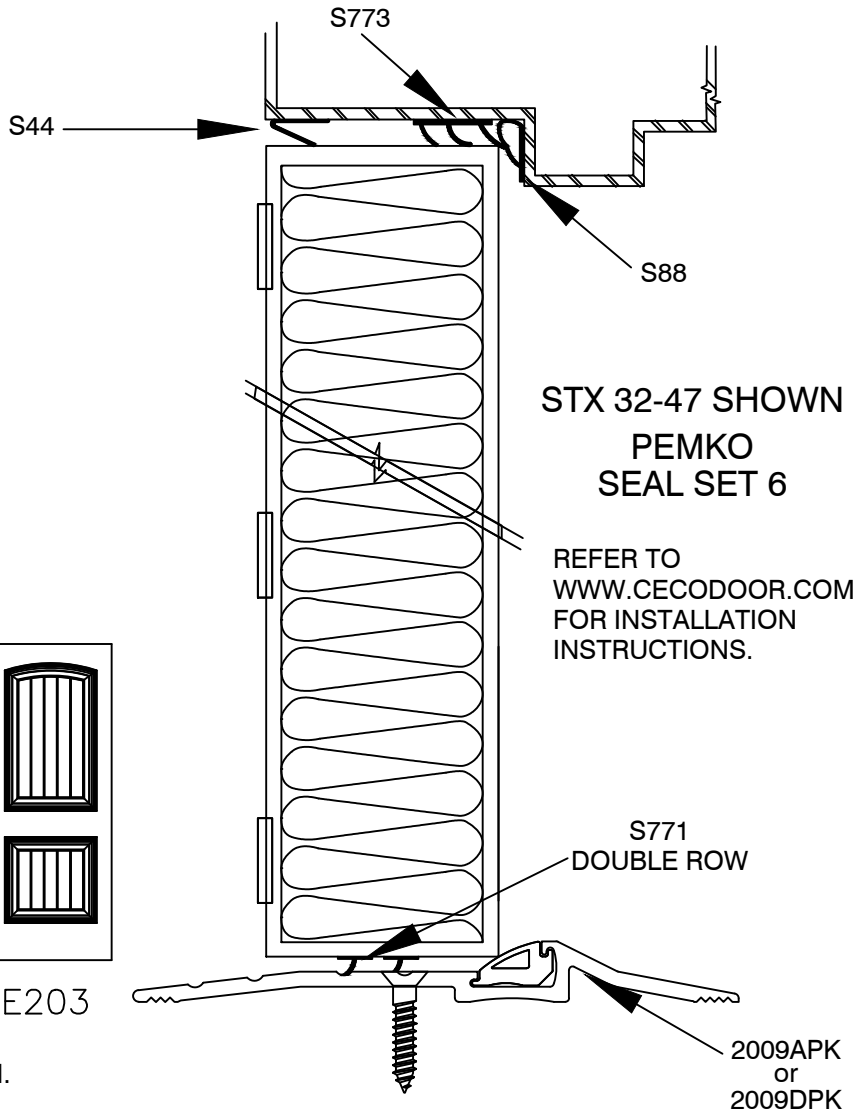
TESTED AND IN COMPLIANCE WITH ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235.
DOOR SYSTEMS ARE IN COMPLIANCE WITH HMMA 865 & SDI-128 SPECIFICATIONS.
COMPLETE WITH PERIMETER SOUND SEALS, BOTTOM SEALS AND THRESHOLD AS REQUIRED FOR RATING.

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated Assembly.



EMBOSSED DOOR DESIGN





STX 32-47 SHOWN
PEMKO
SEAL SET 6

REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.

*2-3/8" LOCK BACKSET ONLY, IN 2'8" WIDTH.
*CYLINDRICAL LOCKS ONLY IN 2'8" WIDTH.
*CONFIRM ROSE SIZE IS COMPATIBLE WITH SEAL SET AND LOCK BACKSET.
NARROW 6 PANEL DESIGN IS NOT AVAILABLE
GLASS CUTOUTS ARE NOT ALLOWED.

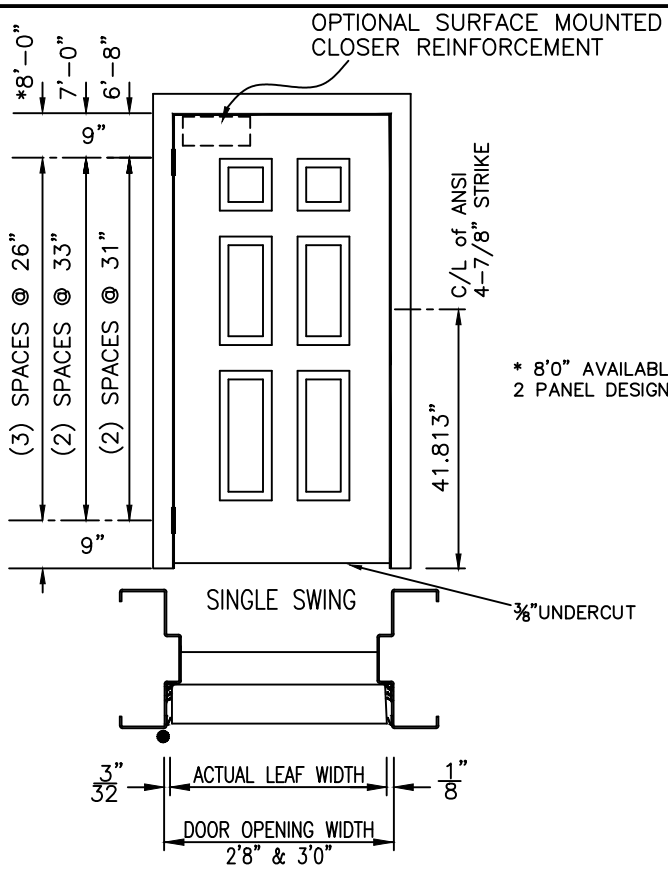
6 PANEL	
WIDTH	*2'8", 3'0"
HEIGHT	6'8", 7'0"
GAGE	18 STD., 16 OPT.

2 PANEL	
WIDTH	*2'8", 3'0"
HEIGHT	6'8", 7'0", 8'0"
GAGE	18

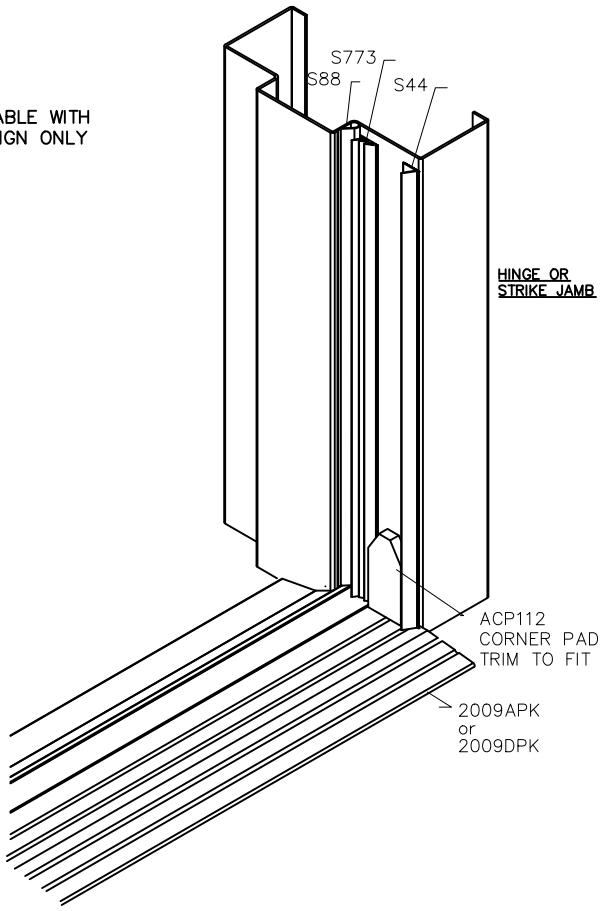
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/18/20

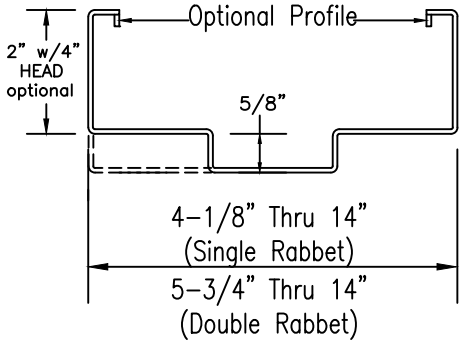
D12G-2



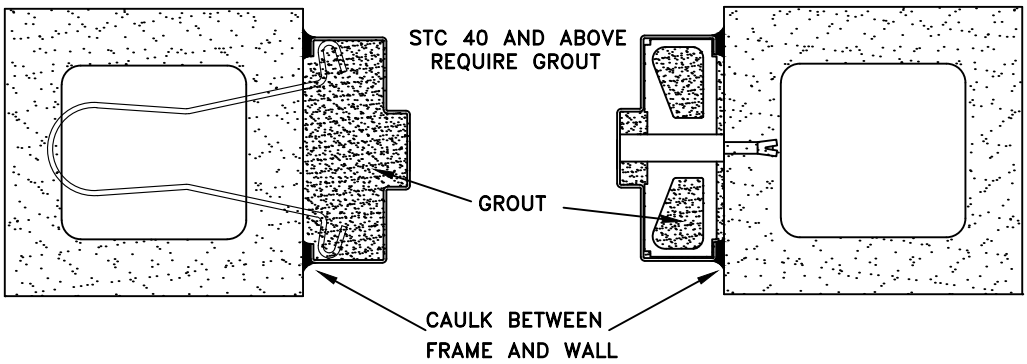
HORIZONTAL SECTION



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.

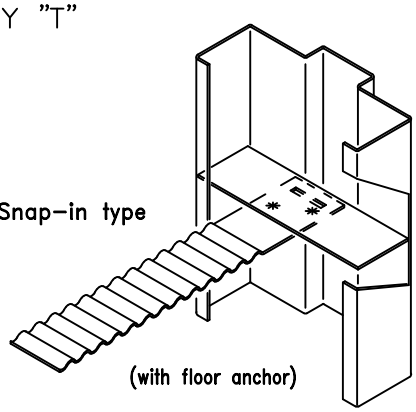
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/18/20

TECH-DATA

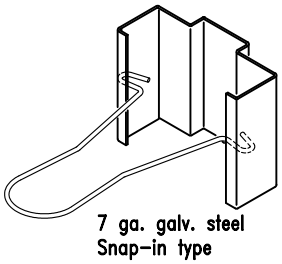
D12G-3

MASONRY "T" ANCHOR



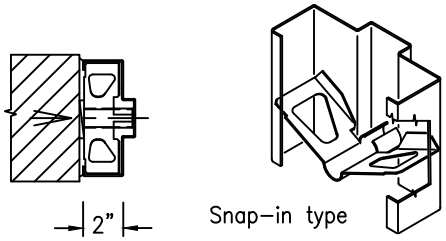
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

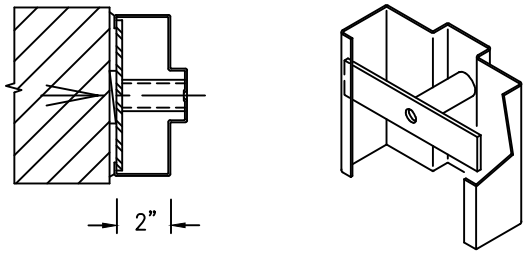
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



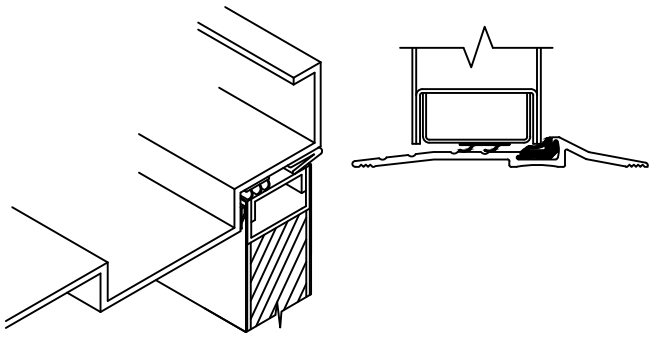
SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS



DOOR CONSTRUCTION TOP AND BOTTOM

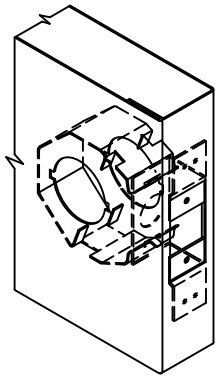


LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)

3-3/4" BACKSET (OPT)
3'0" WIDTH ONLY

2'8" WIDTH
2-3/8" BACKSET ONLY



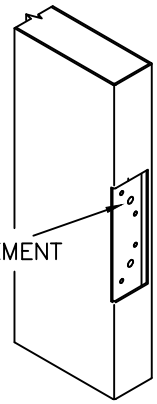
VERIFY ROSE SIZE IS COMPATIBLE WITH LOCK STILE AND PANEL LOCATION.

LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

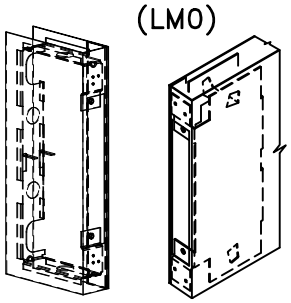
HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7

LOCK PREPARATION GOV. 86, ANSI/BHMA A115.1 MORTISE TYPE (LM0)



MORTISE LOCKS AVAILABLE IN 3'0" WIDTH ONLY

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

03/19/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

BACK TO TOP

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CecoDoor

ASSA ABLOY

D12G-4

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH SINGLE	HEIGHT
2'–8" 3'–0"	6'–8" 7'–0" **8'–0"

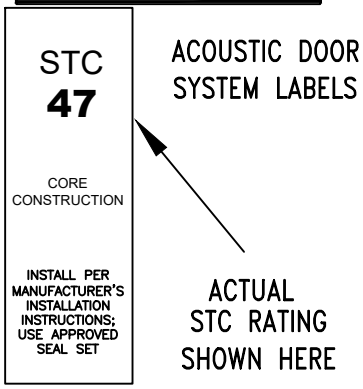
**2 PANEL ONLY

ACOUSTICAL FIRE DOORS

LABELING AGENCIES:
- UL
- WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252
RATING:
- 20 MIN. THRU 45 MIN.

- DESIGNS: EMBOSSED 2 OR 6 PANEL



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 A1008 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 heavy weight 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 A115.1 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 A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	Max. Fire Rating	Seal Set Description
Single Doors	SEE BELOW	SEE BELOW	3/8"	45 MIN.	Pemko Seals: S88, S44, S773, S771, ACP112, 2009_PK Threshold-Set 6

OPTIONAL HARDWARE PREPARATIONS ARE: ELECTRICAL POWER TRANSFER(EPT), MAG SWITCH AND DEADLOCK.

STC 47 (6) PANEL WITH CYLINDRICAL LOCK. ADDTIONAL OPTIONS NOT ALLOWED.
STC 46 (6) PANEL WITH CYLINDRICAL LOCK. ONE OPTIONAL PREPARATION ALLOWED.
STC 46 (6) PANEL WITH MORTISE LOCK. ADDTIONAL 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 PREPARTIONS 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 PREPARTIONS 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)

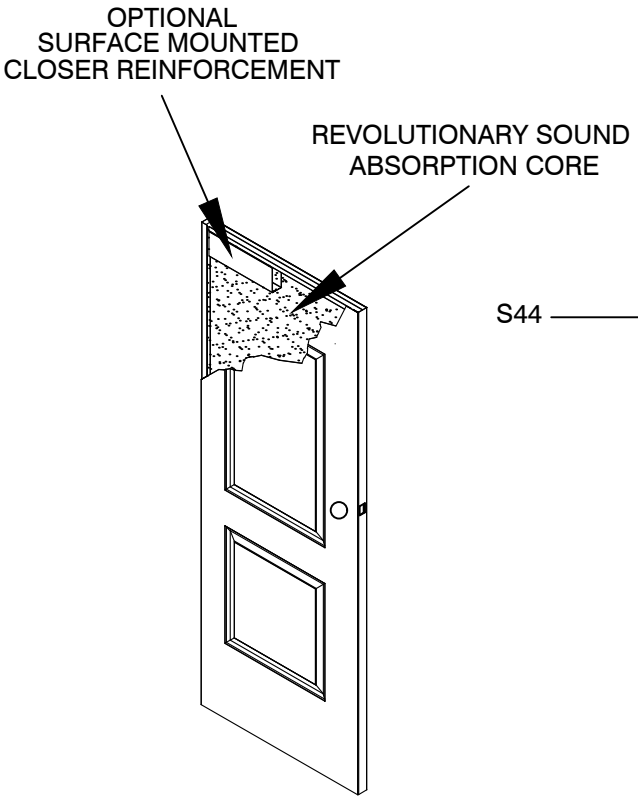
D12H-1

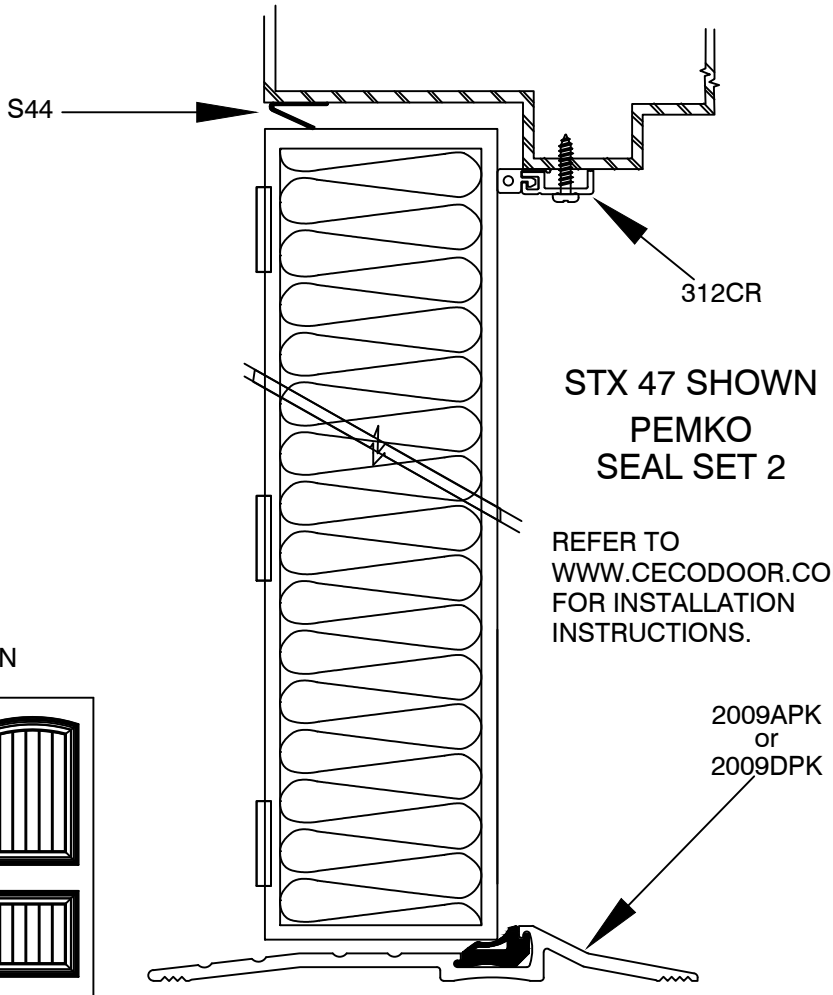
1-3/4" Sound-Tech Xpress

STC 47 (Embossed 2 Panel Single Doors)

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.

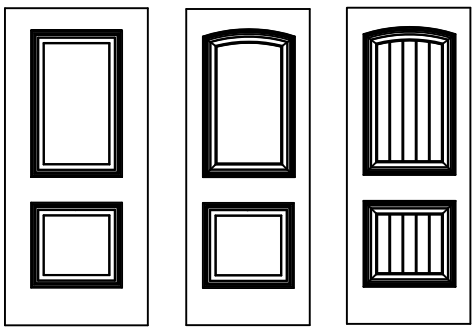




STX 47 SHOWN
PEMKO
SEAL SET 2

REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.

EMBOSSED DOOR DESIGN



E201 E202 E203

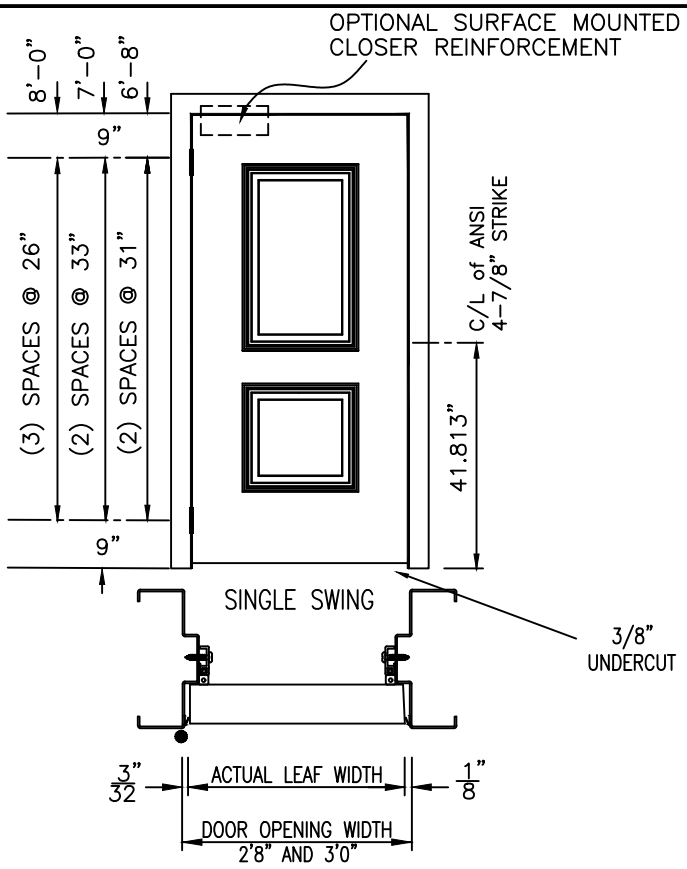
2 PANEL	
WIDTH	*2'8", 3'0"
HEIGHT	6'8", 7'0", 8'0"
GAGE	18

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.

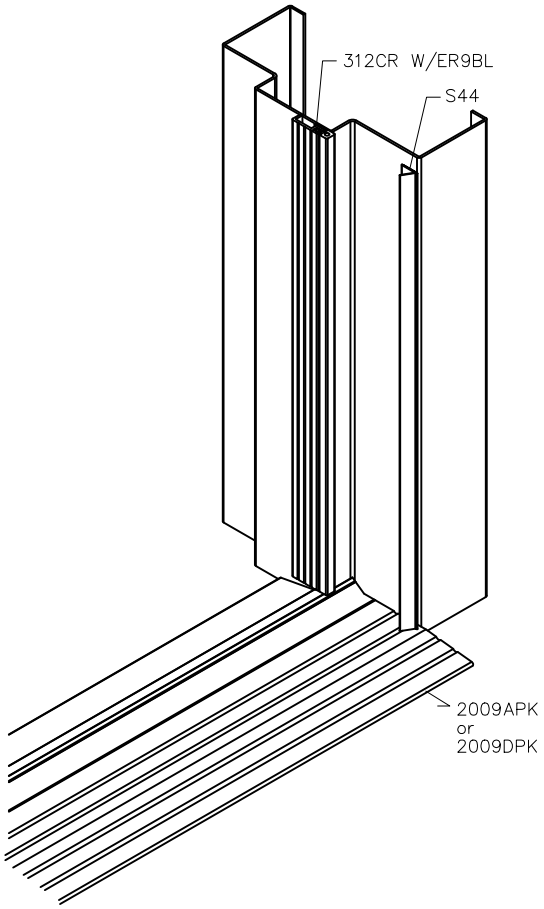
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/18/20

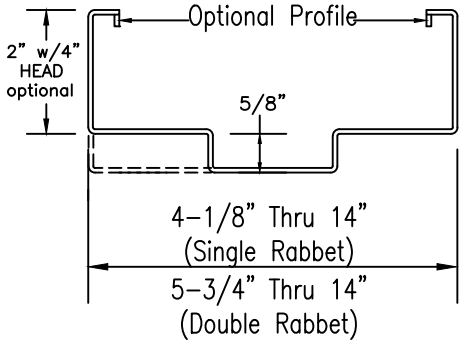
D12H-2



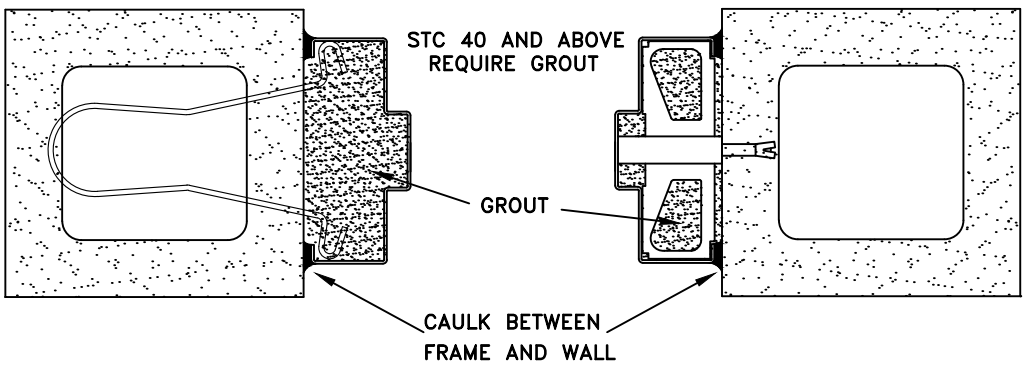
HORIZONTAL SECTION



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.

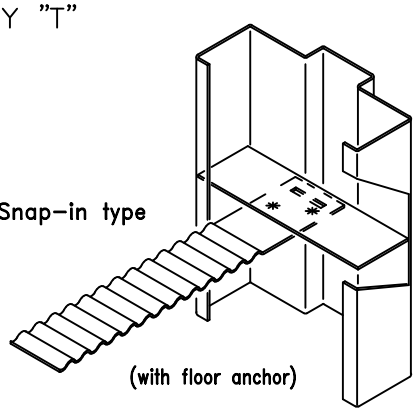
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/18/20

TECH-DATA

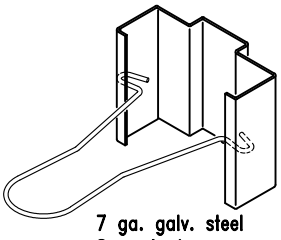
D12H-3

MASONRY "T" ANCHOR



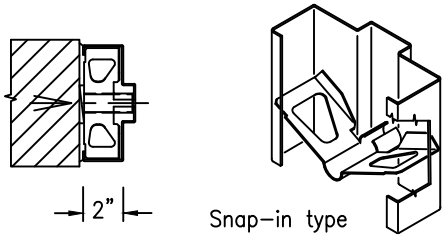
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

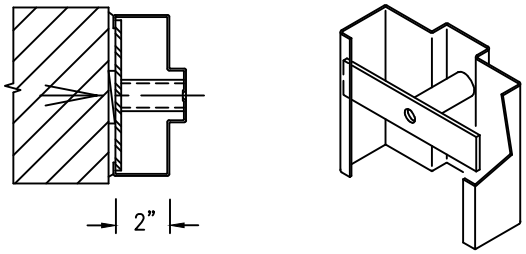
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



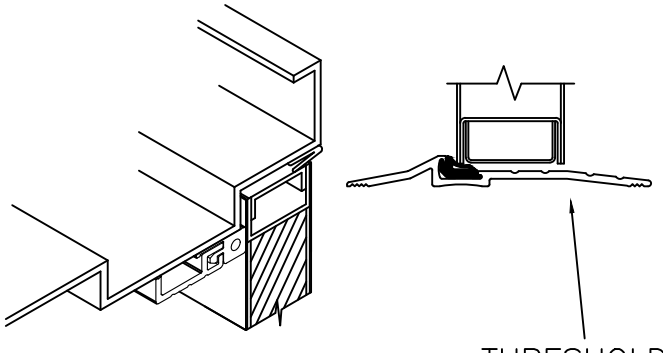
SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

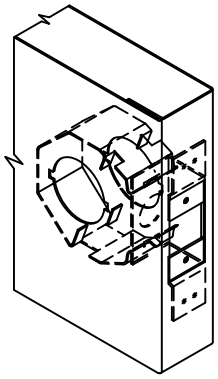
ANCHOR FITS VARIOUS DEPTHS



DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS



CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)

3-3/4" BACKSET (OPT)
3'0" WIDTH ONLY

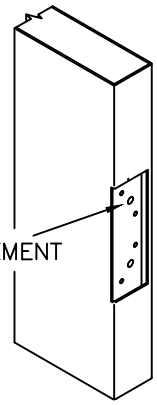
2-3/8" BACKSET
2'8" WIDTH ONLY

VERIFY ROSE SIZE IS COMPATIBLE WITH SEAL SET AND LOCK BACKSET.

LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

HINGE PREP IS HANDED



4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7

03/18/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

D12H-4

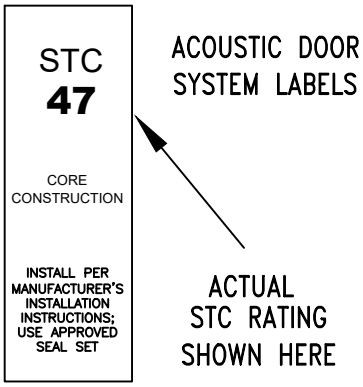
STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'–8" 3'–0"	6'–8" 7'–0" 8'–0"

ACOUSTICAL FIRE DOORS

LABELING AGENCIES:
- UL
- 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 2 PANEL TYPE



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" 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 A115.2 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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	Max. Fire Rating	Seal Set Description
Single Doors	47	SEE BELOW	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.

03/18/20

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

Experience a safer and more open world
CecoDoor
ASSA ABLOY

CecoDoor

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Return to Index

1-3/4" Sound-Tech Xpress

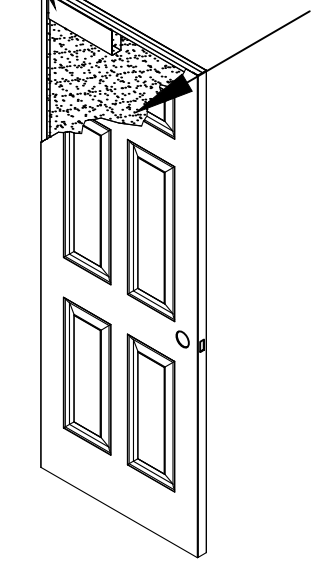
STC 48 (Embossed 6 Panel Single Doors)

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.

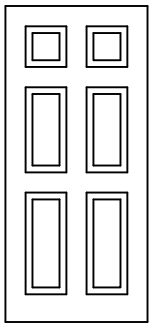
The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated Assembly.

OPTIONAL
SURFACE MOUNTED
CLOSER REINFORCEMENT

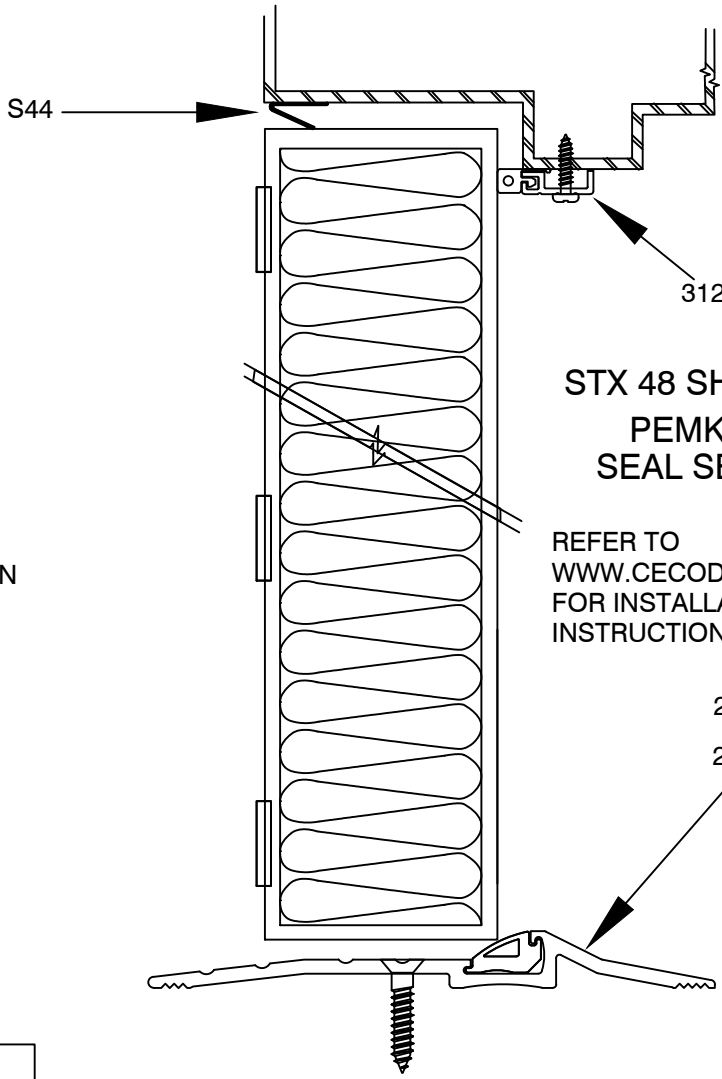
REVOLUTIONARY SOUND
ABSORPTION CORE



EMBOSSED DOOR DESIGN



E601



STX 48 SHOWN
PEMKO
SEAL SET 2

REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.

6 PANEL	
WIDTH	* 2'8", 3'0"
HEIGHT	6'8", 7'0"
GAGE	18 STD., 16 OPT.

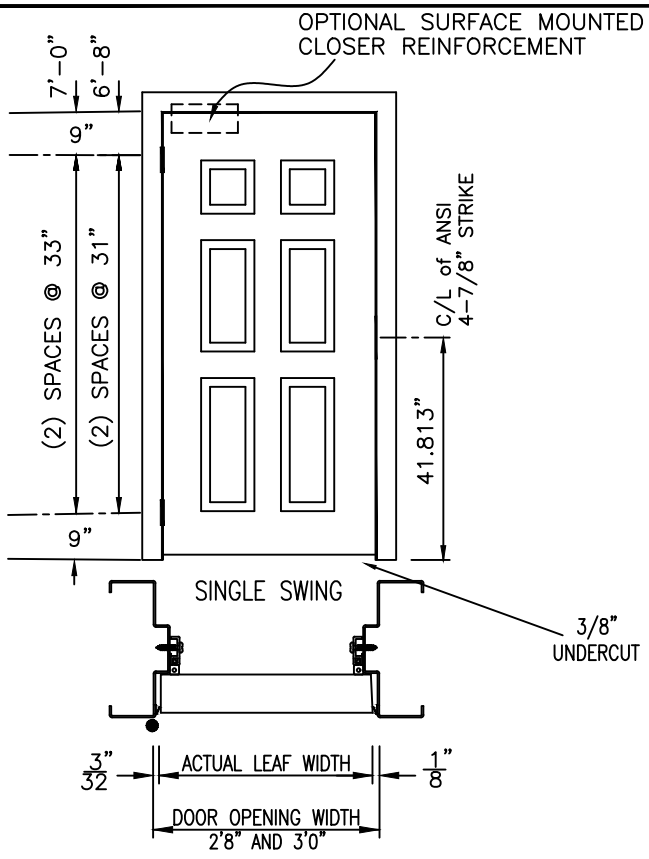
*2-3/8" LOCK BACKSET ONLY, IN 2'8" WIDTH.
*CONFIRM ROSE SIZE IS COMPATIBLE WITH SEAL SET AND LOCK BACKSET.
NARROW 6 PANEL DESIGN NOT ALLOWED.
GLASS CUTOUTS ARE NOT ALLOWED.

Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

D12I–1

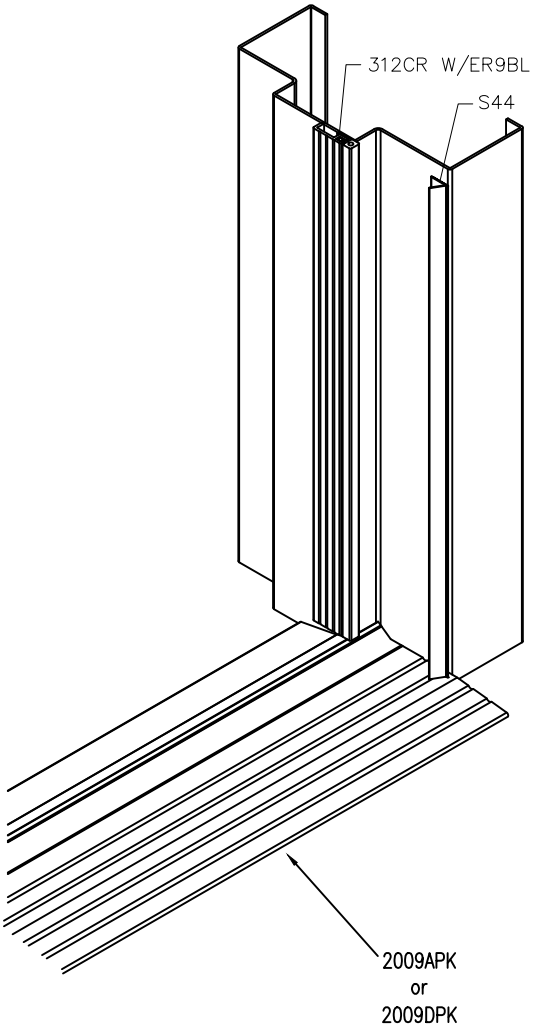
03/22/20

D12I-2

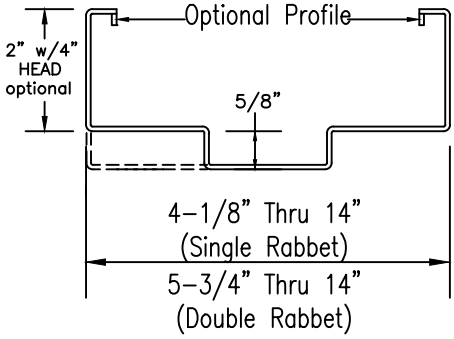


HORIZONTAL SECTION

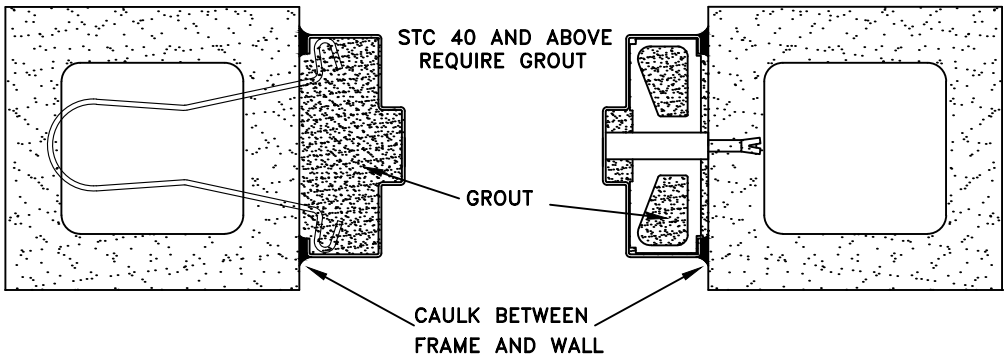
NOTE: 6'8" & 7'0" ARE ONLY HEIGHTS WITH 6 PANEL DESIGN.



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.

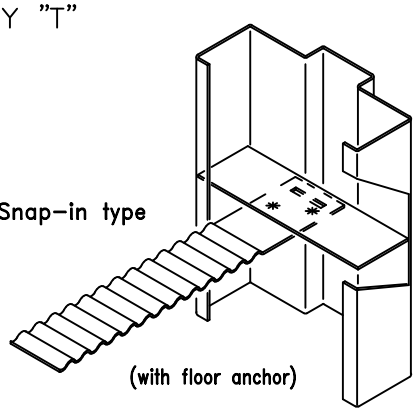
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/22/20

TECH-DATA

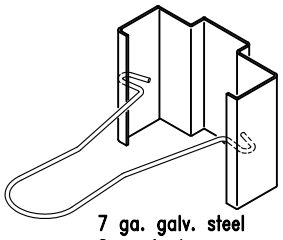
D12I-3

MASONRY "T" ANCHOR



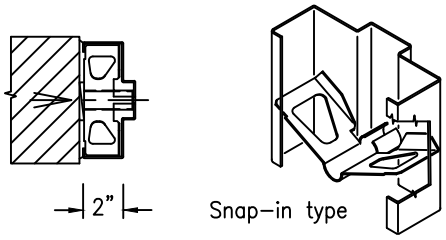
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

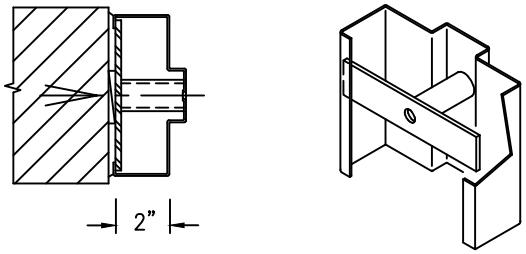
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



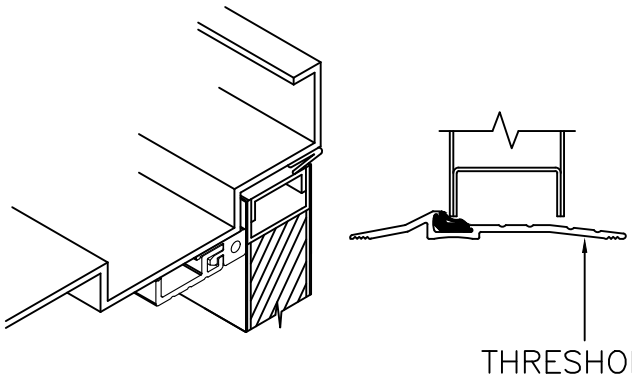
SU PROFILE	EO/S6:	4-3/4" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6:	5-1/8" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

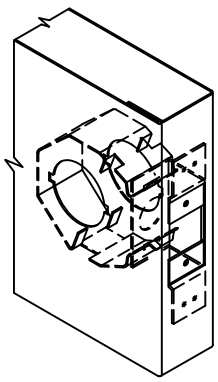
ANCHOR FITS VARIOUS DEPTHS



DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS



CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)

3-3/4" BACKSET (OPT)
3'0" WIDTH ONLY

2'8" WIDTH
2-3/8" BACKSET ONLY

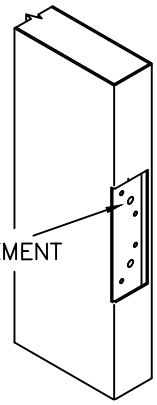
VERIFY ROSE SIZE IS COMPATIBLE WITH SEAL SET AND LOCK BACKSET.

LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7

03/22/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

D12I–4

STANDARD SIZES
NOMINAL DOOR OPENING

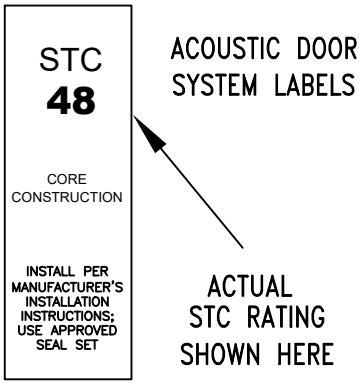
WIDTH	HEIGHT
SINGLE	
*2'–8" 3'–0"	6'–8" 7'–0"

* 2–3/8" LOCK BACKSET ONLY
NARROW 6 PANEL NOT AVAILABLE

ACOUSTICAL FIRE DOORS

LABELING AGENCIES:
- UL
- 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



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 A115.2 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 & 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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	Max. Fire Rating	Seal Set Description
Single Doors	48	SEE BELOW	3/8"	3/4 HOUR (3'0"X7'0" MAX.)	Pemko Seals: S44, 312CR & 2009_PK Threshold-Set 2

STC 48 WITH CYLINDRICAL LOCK, NO OPTIONAL HARDWARE PREPARATIONS ALLOWED.

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

03/22/20

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

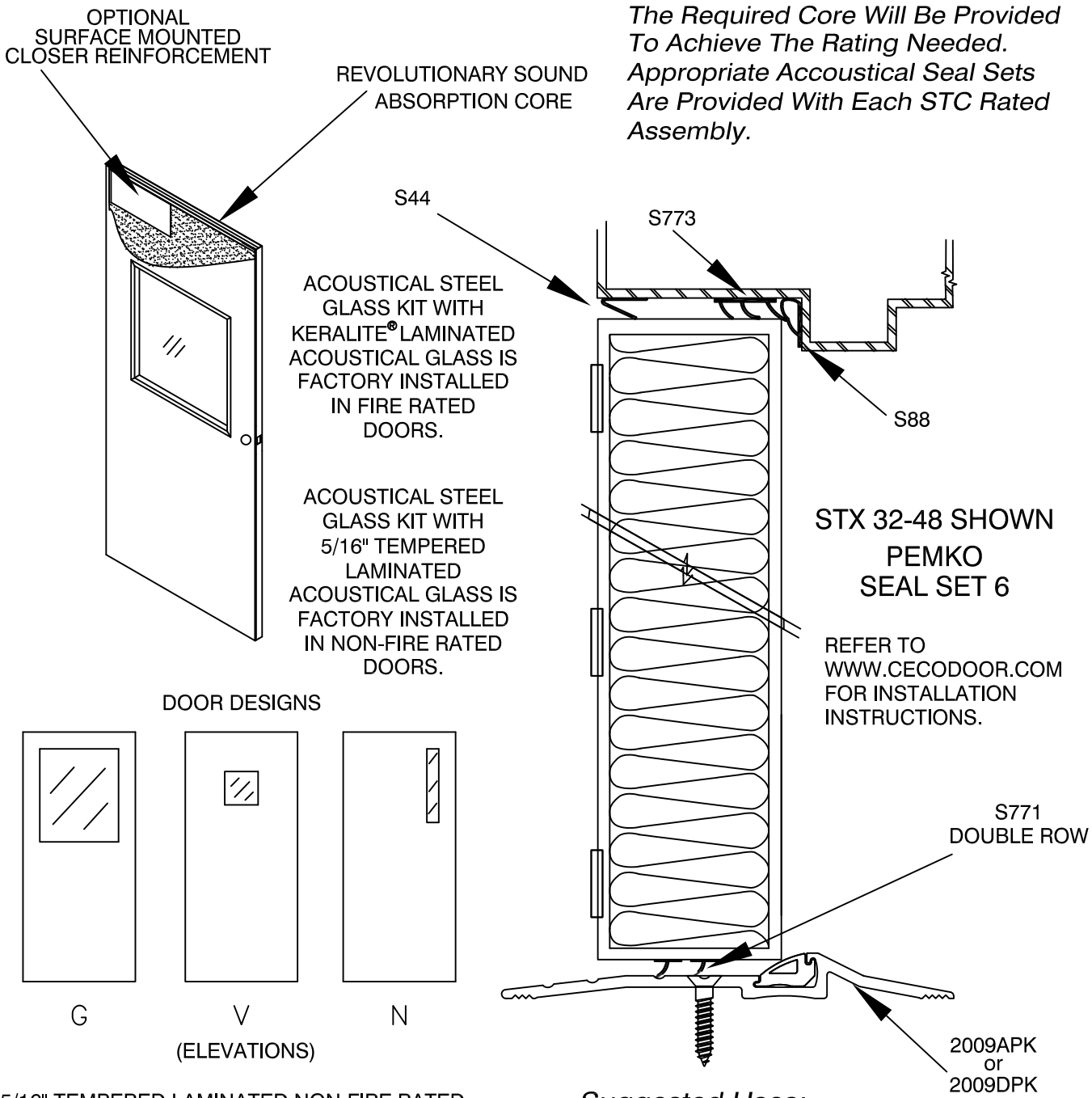
D12J–1

1-3/4" Sound-Tech Xpress

STC 32-48 (Fire Rated or Non-Fire Rated Single Doors with Glass)

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 Rated Assembly.



5/16" TEMPERED LAMINATED NON-FIRE RATED GLASS REDUCES STC RATING BY 1 POINT.

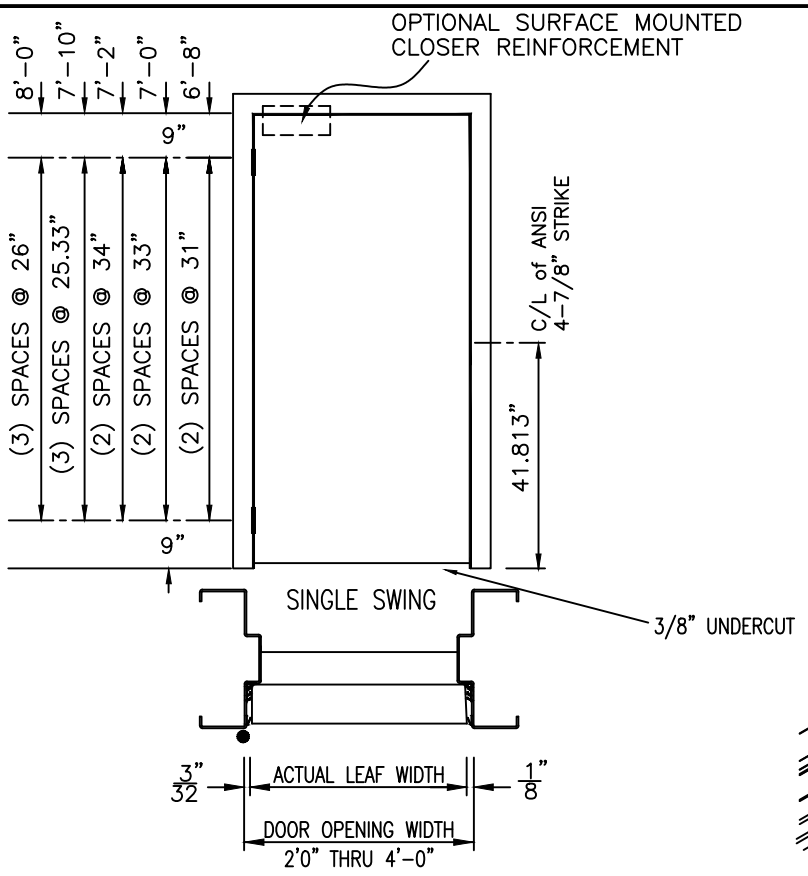
NOTE:
ONE GLASS LITE PER DOOR ALLOWED.

REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

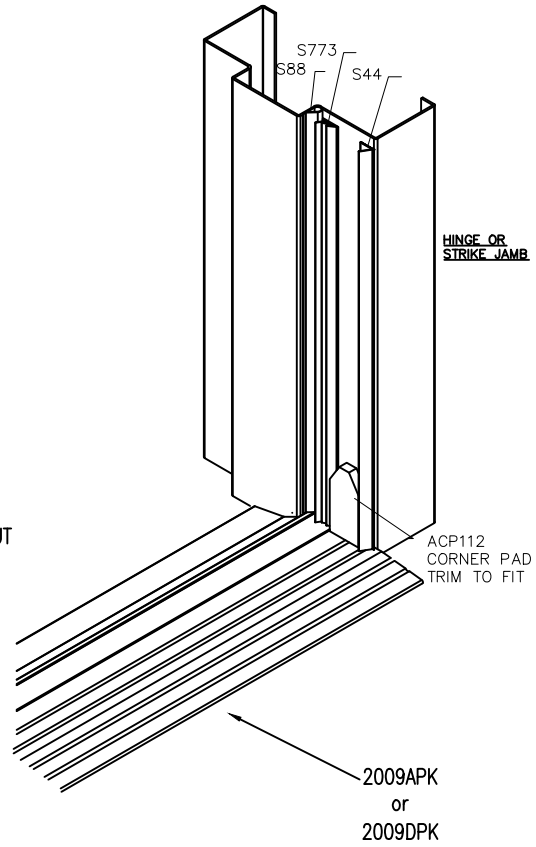
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/20/20

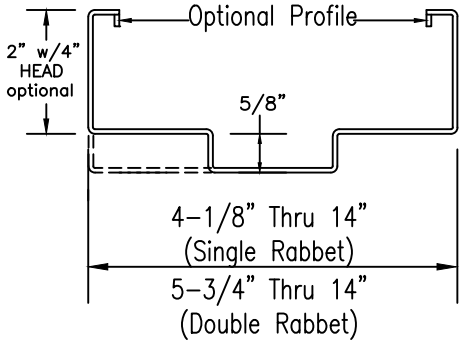
D12J-2



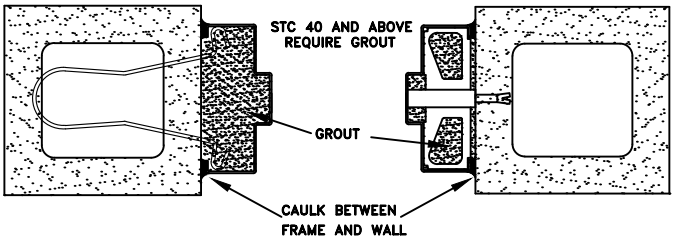
HORIZONTAL SECTION

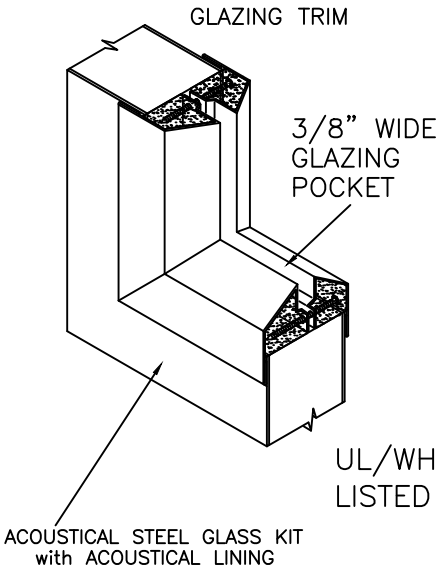


TYPICAL PROFILE



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.

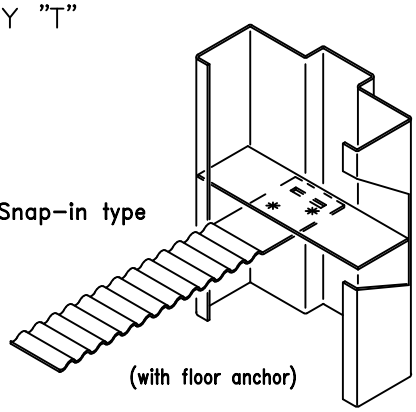
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/20/20

TECH-DATA

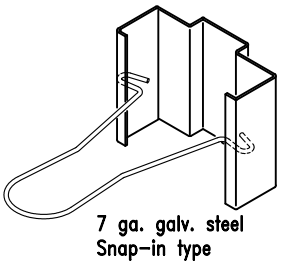
D12J-3

MASONRY "T" ANCHOR



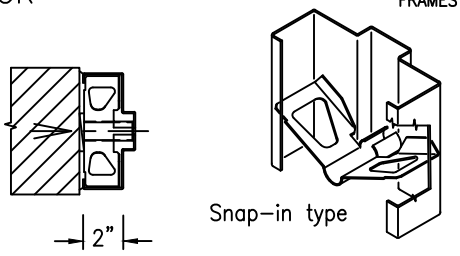
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

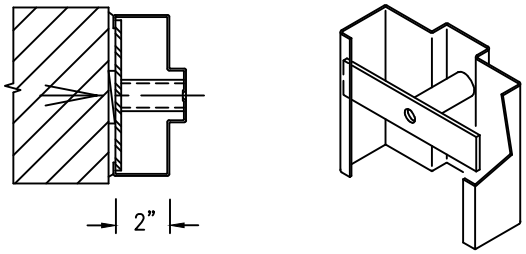
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



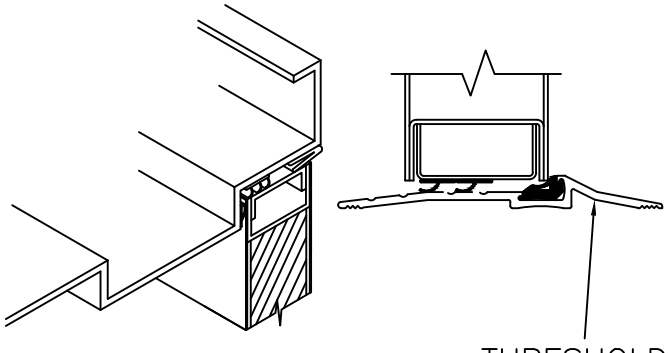
SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS

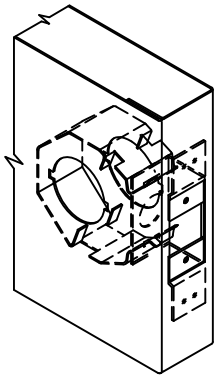


DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

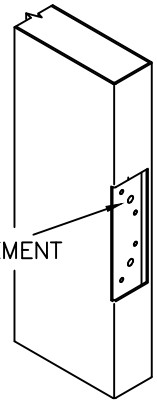


LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

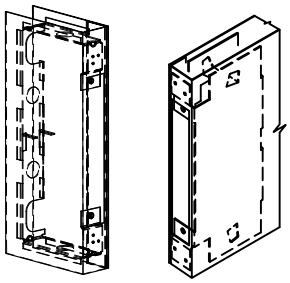
HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



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)

03/20/20

D12J-4

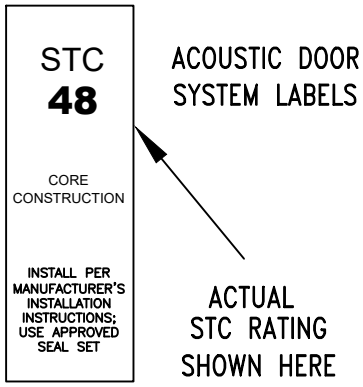
STANDARD SIZES
NOMINAL DOOR OPENING

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

ACOUSTICAL FIRE DOORS

LABELING AGENCIES:
- UL
- WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252
RATING:
- 20 MIN. THRU 3 HRS. SEE CHART BELOW
- DESIGNS: FLUSH TYPE WITH GLASS



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. 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. 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 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 A115.1 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 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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	Max. Fire Rating	Seal Set Description
Single Doors	32-48	SEE BELOW	3/8"	SEE BELOW	Pemko Seals: S88, S44, S773, S771, ACP112, 2009_PK Threshold-Set 6

OPTIONAL LOCK PREPARATIONS WITH: UP TO AND INCLUDING 100² " 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 288² " 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 720² " 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.

08/27/21

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

CecoDoor

ASSA ABLOY

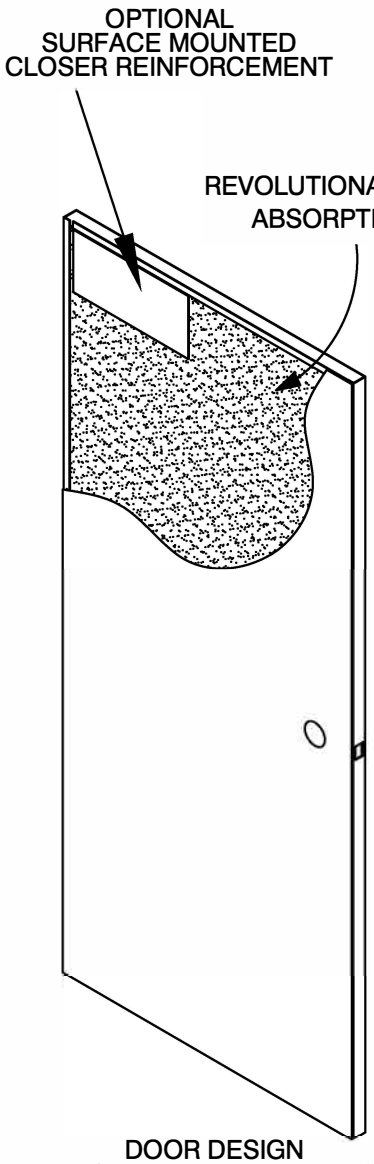
1-3/4" Sound-Tech Xpress

D12K–1

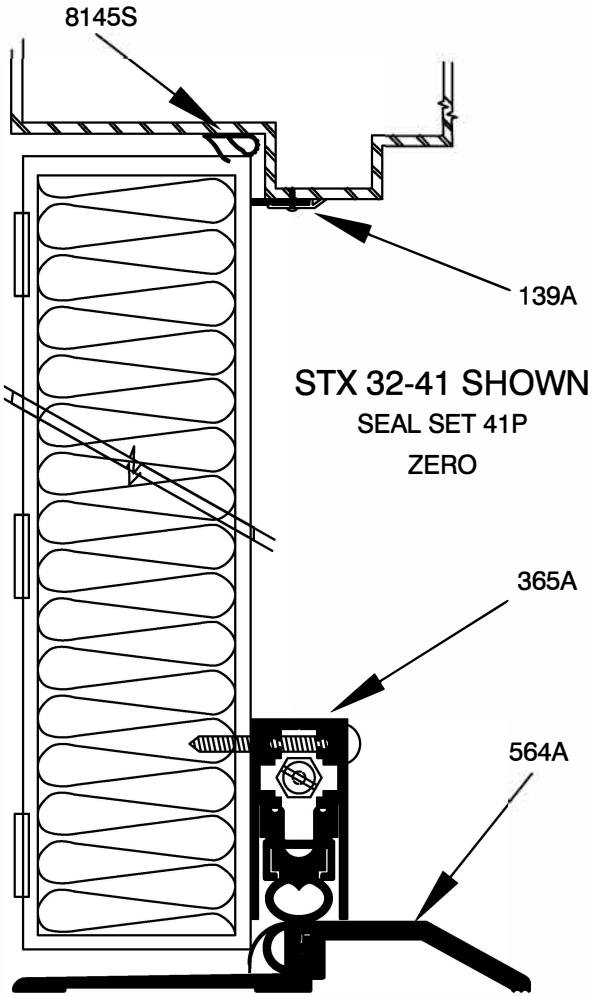
STC32 thru STC41 (Fire Rated or Non-Fire Rated Flush Pairs)

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, DOOR BOTTOM 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.

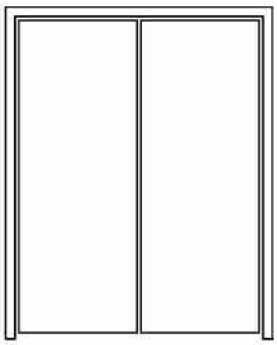


REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.



STX 32-41 SHOWN
SEAL SET 41P
ZERO

DOOR DESIGN

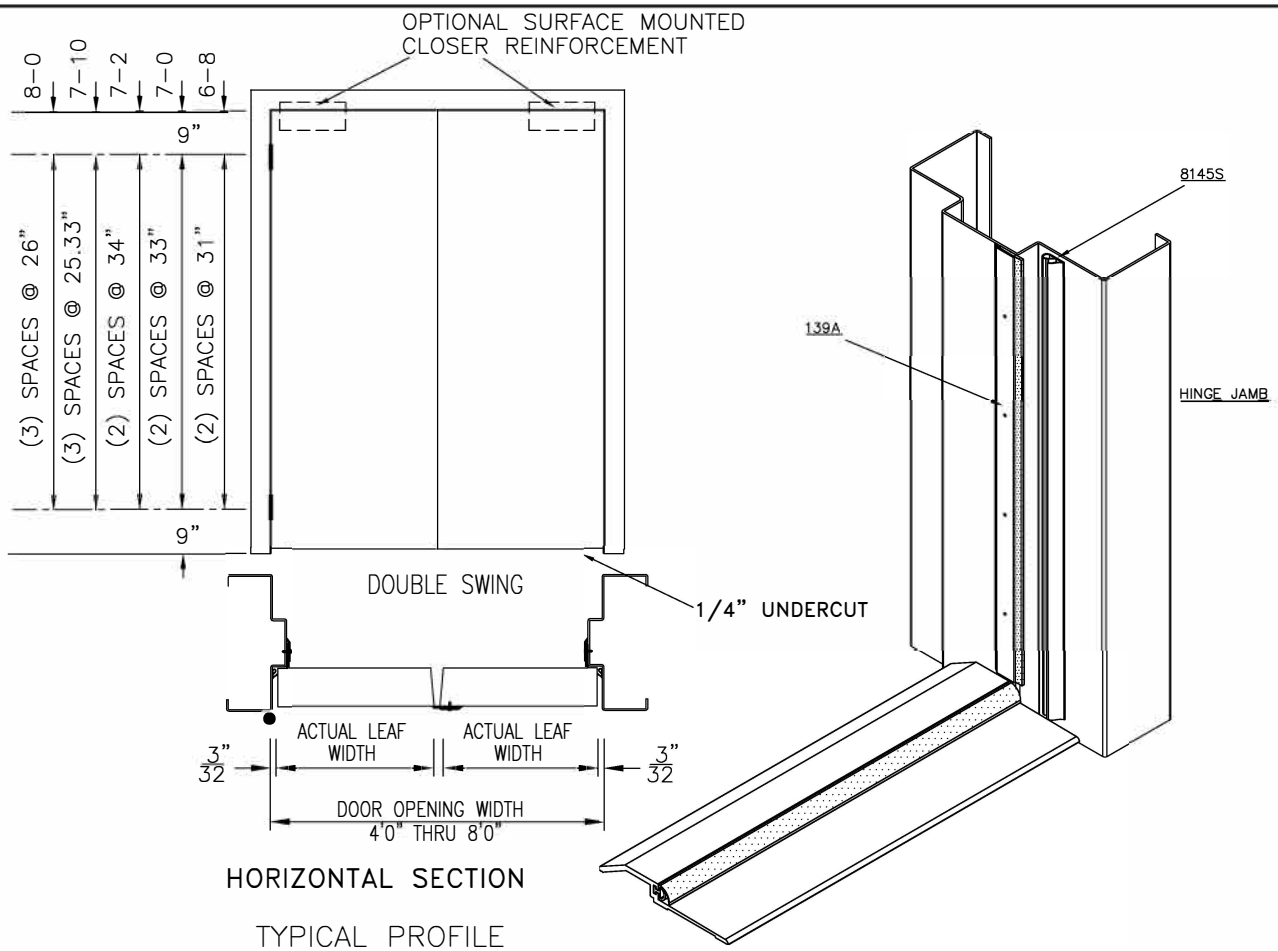


DOUBLE SWING DOORS
F
(ELEVATION)

Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

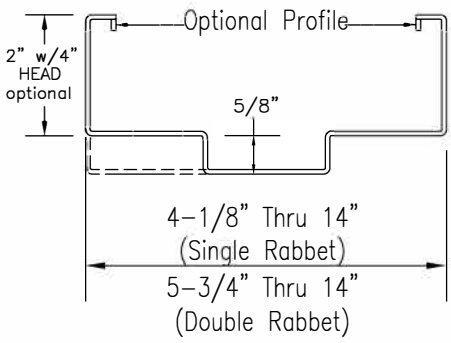
12/04/14

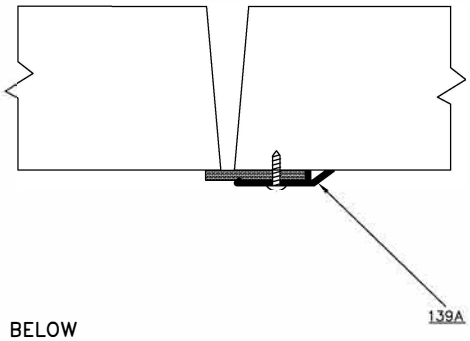
D12K-2



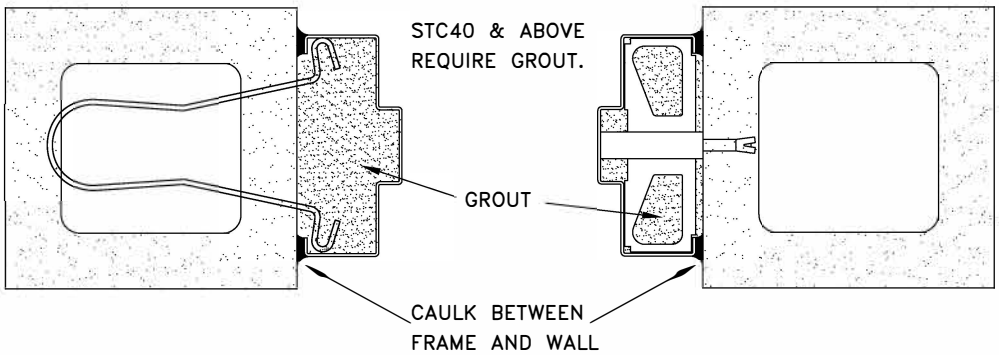
HORIZONTAL SECTION

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)

10/18/16

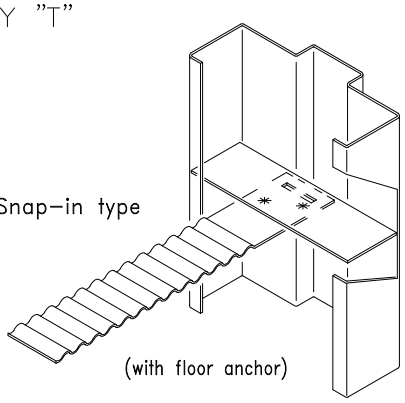
CecoDoor
ASSA ABLOY

BACK TO TOP

TECH-DATA

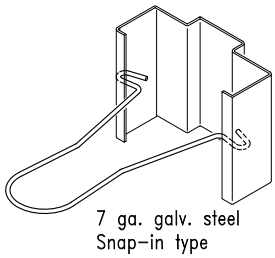
D12K-3

MASONRY "T" ANCHOR



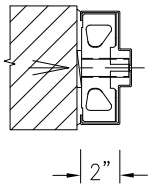
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

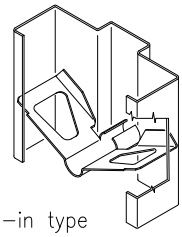
WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)

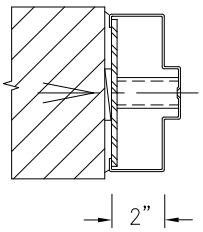


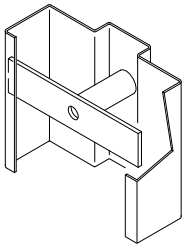


SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

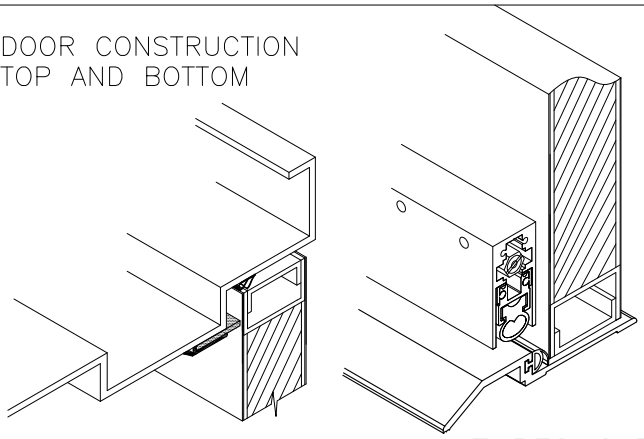
EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS





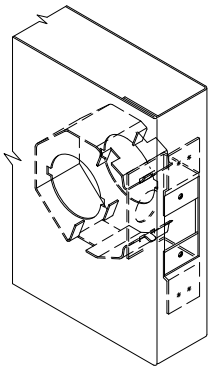
DOOR CONSTRUCTION TOP AND BOTTOM



THRESHOLD

LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

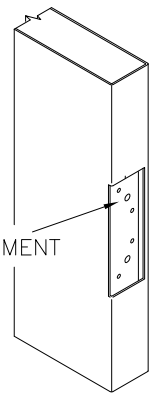


LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

HINGE PREP IS HANDED

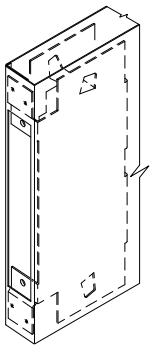
7 GAGE REINFORCEMENT



4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7

LOCK PREPARATIONS

MORTISE
ANSI A115.1



10/21/16

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

CecoDoor
ASSA ABLOY

BACK TO TOP

D12K–4

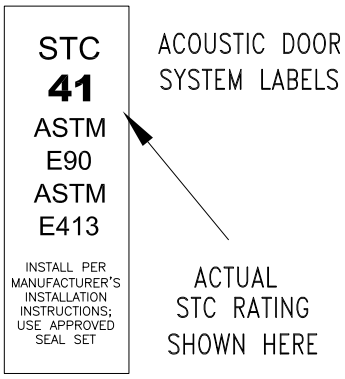
STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH PAIR	HEIGHT
4'–0" 5'–0" 5'–4" 6'–0" 7'–0" 8'–0"	6'–8" 7'–0" 7'–2" 7'–10" 8'–0"

ACOUSTICAL FIRE DOORS

LABELING AGENCIES:
- UL
- WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252
RATING:
- 20 MIN. THRU 3 HRS. (STX 32–41) FLUSH PAIRS 8'0" x 8'0" MAX.
- DESIGNS: FLUSH ONLY



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 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. The frames must also be grout filled to achieve an STC rating of 40 and above.

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 bolt, ANSI A115.1 mortise lock x surface or flushbolt. Electrical power transfer, mag switch and deadbolts 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.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	Max. Fire Rating	Max. Temp. Rise Rating	Seal Set Description
PAIRS	See Below	See Below	1/4"	3 Hr.	N/A	Zero Seals: 139A, 8145S, 365A, 564A Threshold-Set 41P

OPTIONAL HARDWARE PREPARATIONS ARE NOT ALLOWED.

STC 32-41 CYLINDRICAL LOCK x SURFACE BOLT OR FLUSHBOLT.
STC 32-41 MORTISE LOCK x SURFACE BOLT OR FLUSHBOLT.

OTHER NON-TESTED ASSEMBLIES ARE AVAILABLE. CONTACT FACTORY FOR DETAILS.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

BACK TO TOP

Ceco Door
ASSA ABLOY

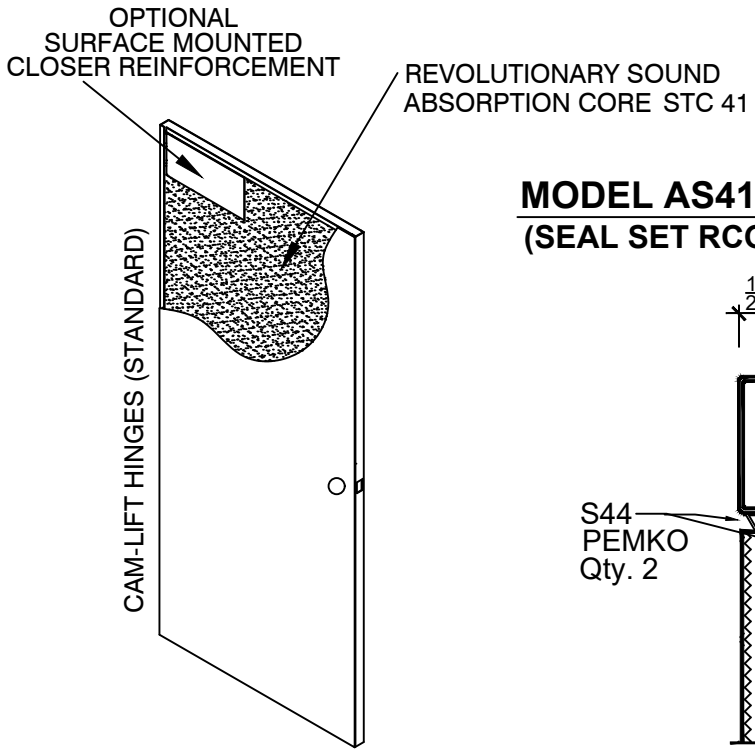
D12R–1

1-3/4" Sound-Tech Xpress

UP TO STC 41 (Flush Singles)

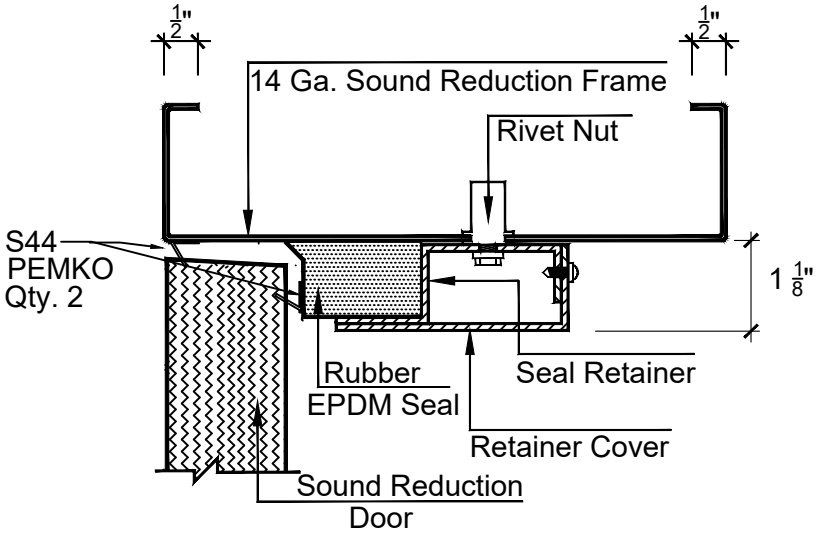
TESTED AND IN COMPLIANCE WITH ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235.
DOOR SYSTEMS ARE IN COMPLIANCE WITH HMMA 865 & SDI-128 SPECIFICATIONS.
COMPLETE WITH PERIMETER SOUND SEALS, BOTTOM SEALS, GRAVITY GLIDE CAM-LIFT HINGES AND THRESHOLD AS REQUIRED FOR RATING.

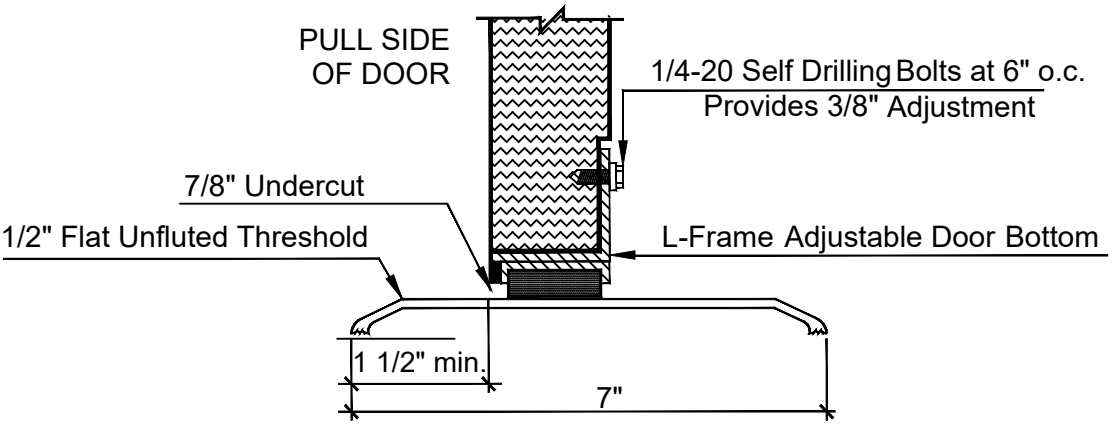
The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Acoustical Seal Sets Are Provided With Each STC Rated Assembly.

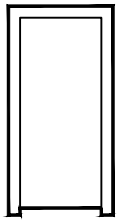


DOOR DESIGN

MODEL AS41C UTILIZES "ADJ" PROFILE FRAME
(SEAL SET RCG FOR SINGLES, RCGP FOR PAIRS)







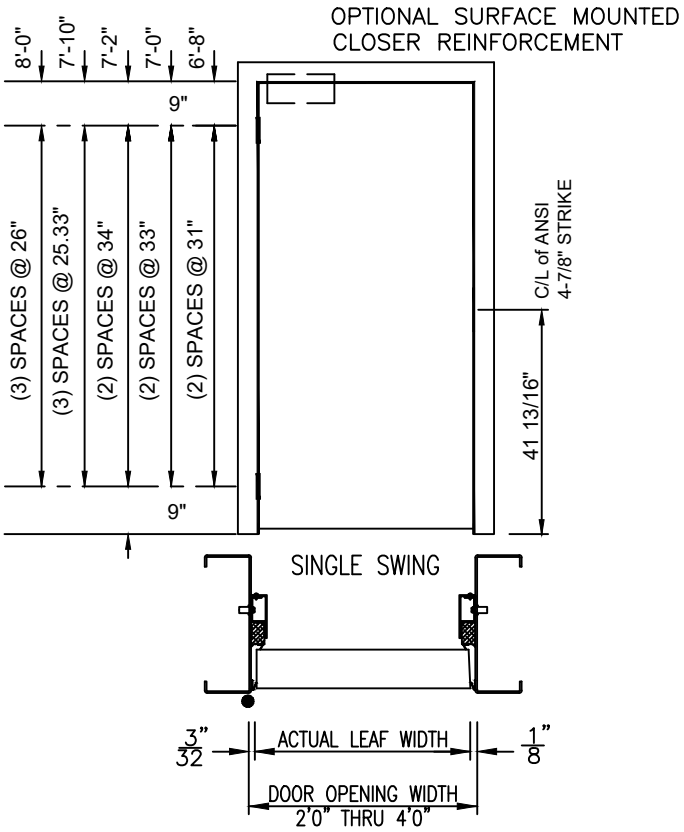
F
(ELEVATION)

Please reference www.cecodoor.com for installation instructions.

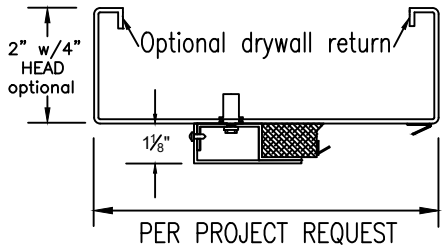
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

10/16/19

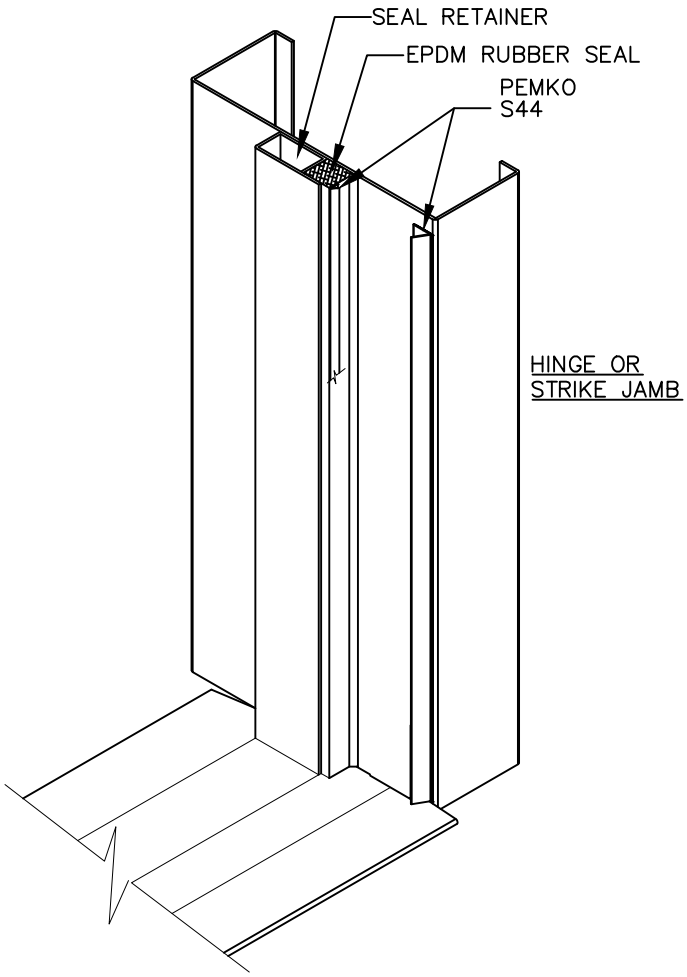
D12R–2



HORIZONTAL SECTION

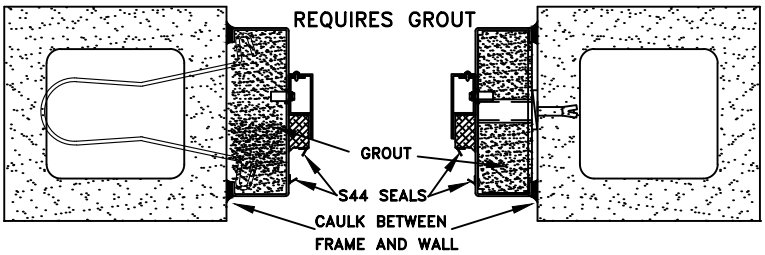


PROFILE AS41C



ADJ PROFILE AND SEALS FOR MODEL AS41C
(SEAL SET RCG)

SOME COMMON MASONRY 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.

10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

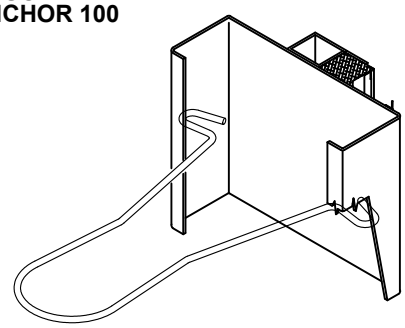
TECH-DATA

Return to Top

Sound-Tech Xpress Door Systems

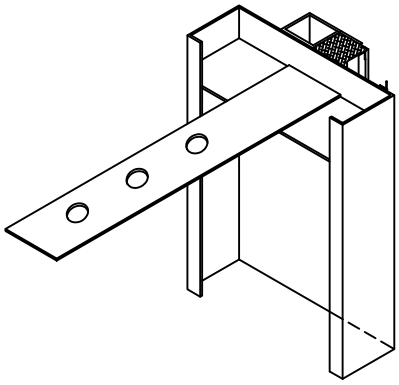
D12R-3

MASONRY WIRE ANCHOR 100

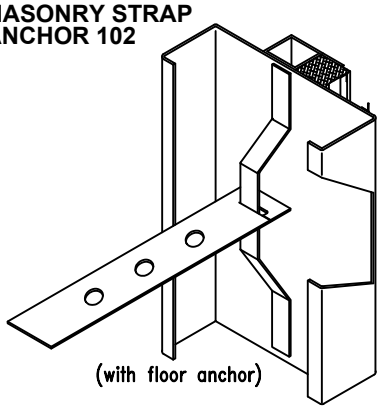


(with floor anchor)

MASONRY "T" ANCHOR 101



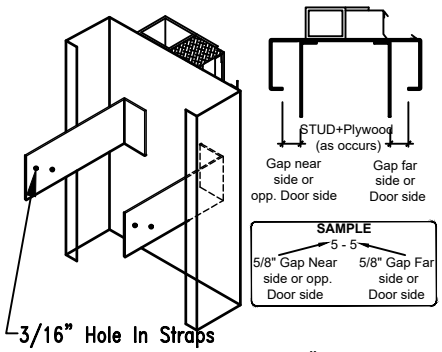
MASONRY STRAP ANCHOR 102



(with floor anchor)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

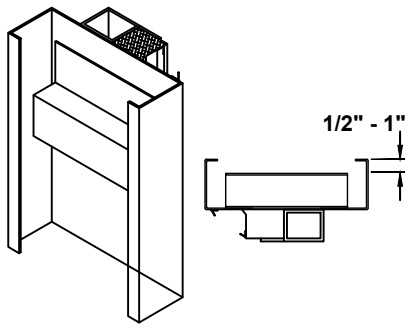
WOOD STUD ANCHOR 400



3/16" Hole In Straps For #8 Screw Or 8d Nail @ 24" O.C. max at Straps

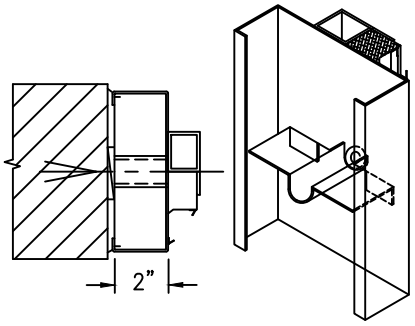
(with floor anchor)

STEEL STUD ANCHOR 204



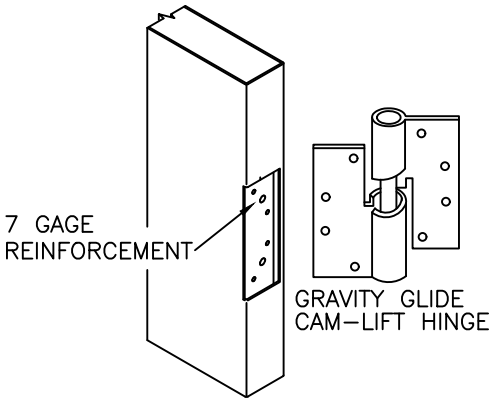
(with floor anchor)

EXISTING WALL ANCHOR 301

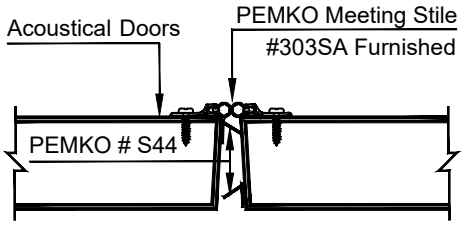


HINGE PREPARATION

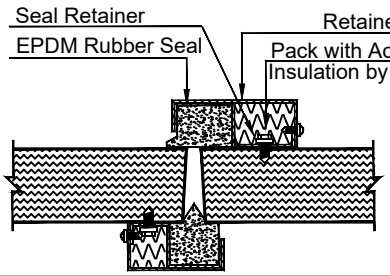
(HINGE PREP. IS HANDED)



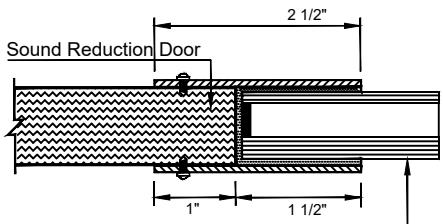
BL ASTRAGAL (Both leaf active)



IL ASTRAGAL (Single leaf active)



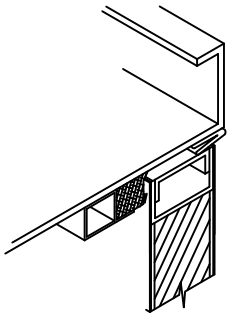
IGU 20 DOOR VISION

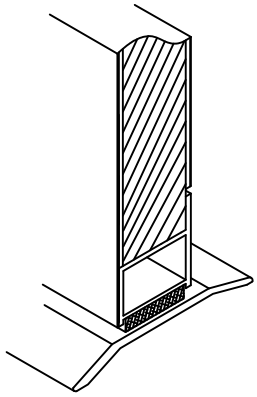


1 1/2" Insulated Glass Unit (1/4" Lam x 3/4" air space x 1/2" Annealed)

Set In Silicone Channel (Factory Installed)

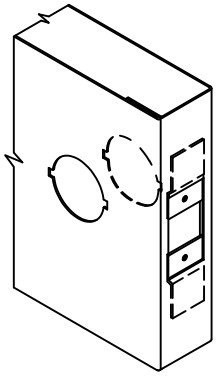
DOOR CONSTRUCTION (TOP AND BOTTOM)





THRESHOLD

LOCK PREPARATIONS



CYLINDRICAL
ANSI A115.2
BACKSET
3-3/4" REQUIRED

CYLINDRICAL & MORTISE DEADLOCK (optional)

10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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D12R-4

STANDARD SIZES
NOMINAL DOOR OPENING

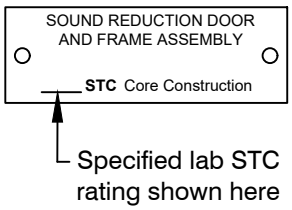
WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

(Custom sizes available upon request.)

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS



Specified lab STC rating shown here

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-5db sound loss in a field test vs. lab results.
11) 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)

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Return to Index

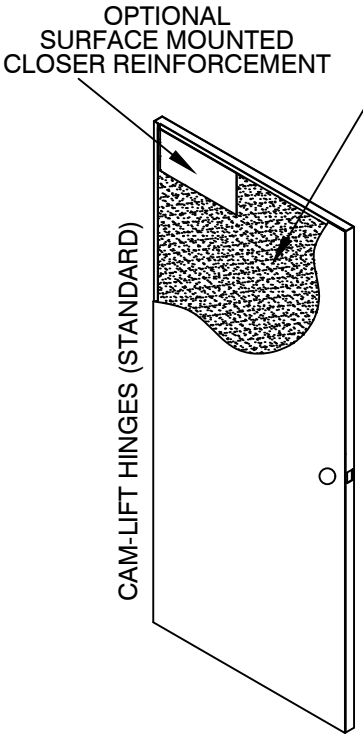
1-3/4" Sound-Tech Xpress

D12S–1

STC 42-46 (Flush Singles)

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.

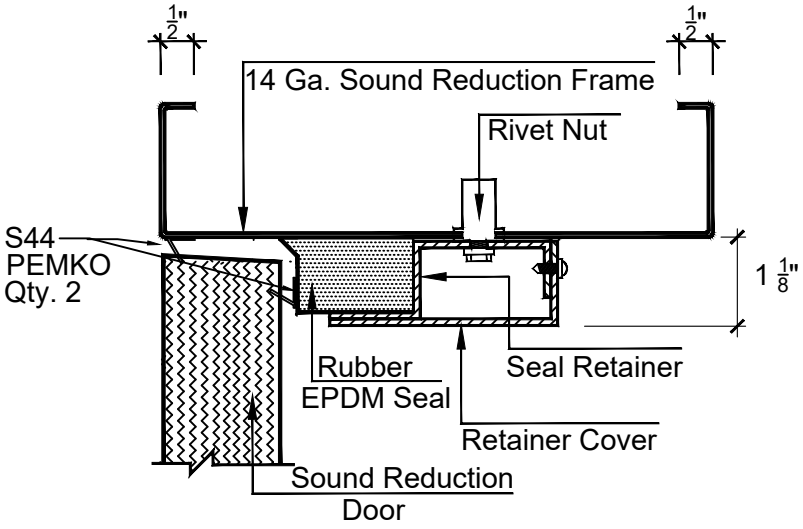
The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Acoustical Seal Sets Are Provided With Each STC Rated Assembly.

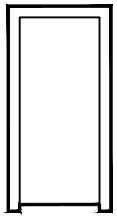


DOOR DESIGN

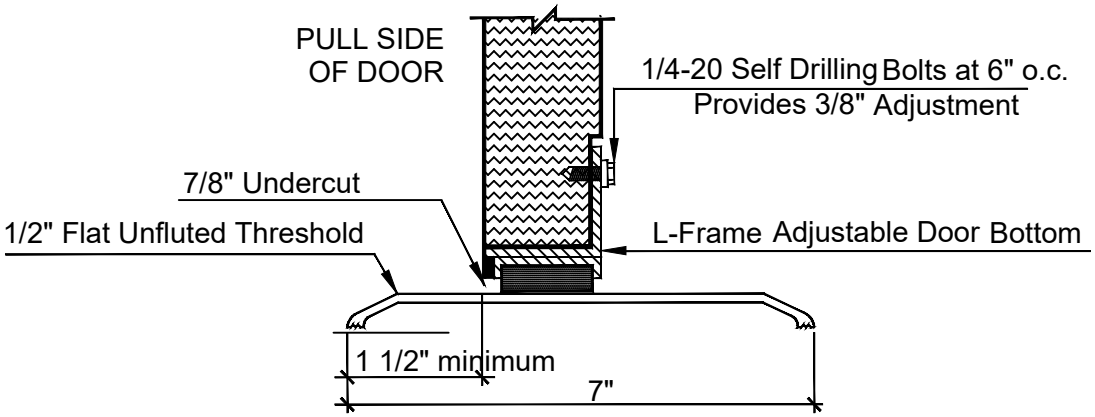
MODEL AS46C UTILIZES "ADJ" PROFILE FRAME

(SEAL SET RCG FOR SINGLES, RCGP FOR PAIRS)





F
(ELEVATION)



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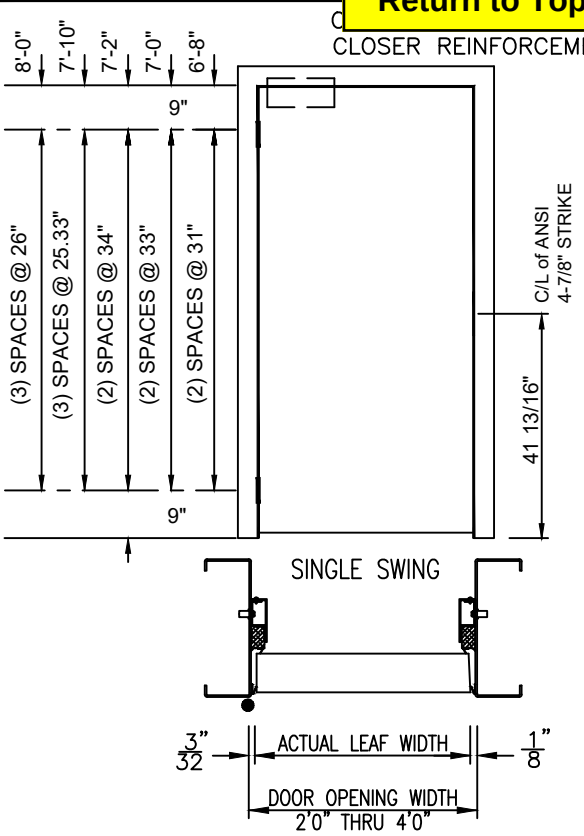
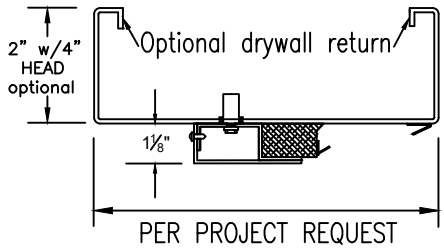
10/16/19

Return to Top

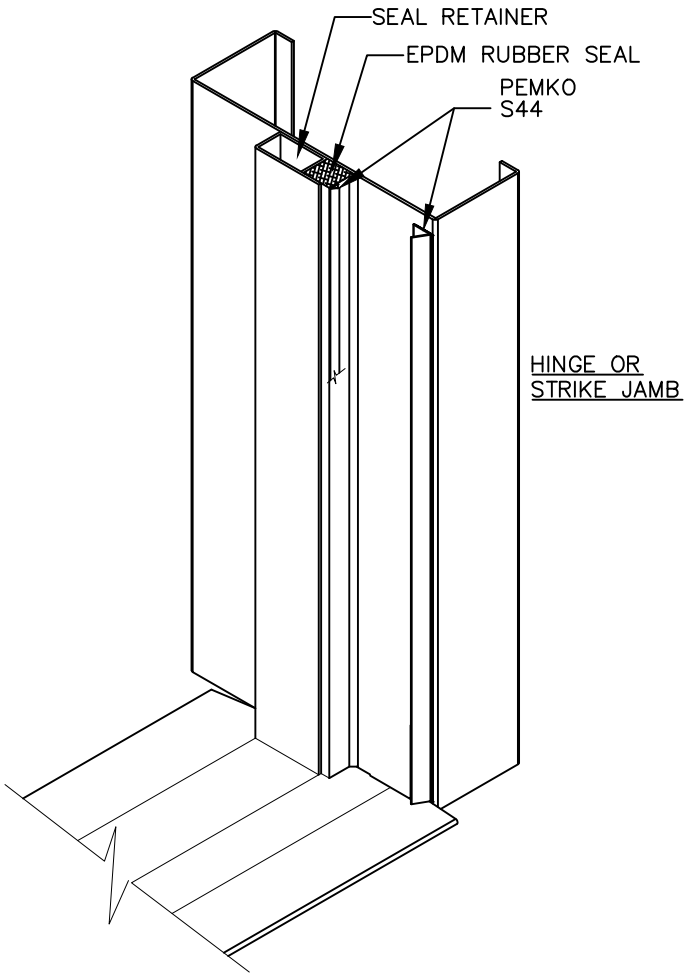
D12S–2



HORIZONTAL SECTION

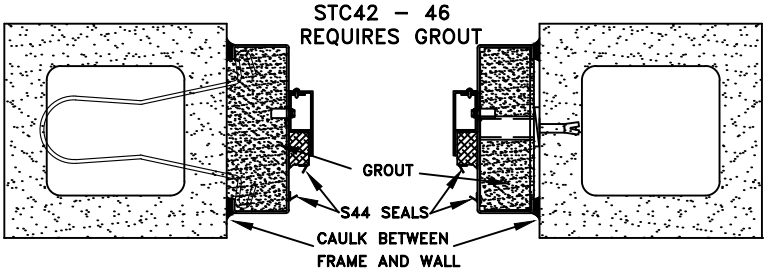


PROFILE AS46C



ADJ PROFILE FOR MODEL AS46C
(SEAL SET RCG)

SOME COMMON MASONRY APPLICATIONS SHOWN BELOW



DRAWING DEPICTS INSTALLATION.
PROFILES, SEALS AND ANCHORS MAY VARY.

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10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

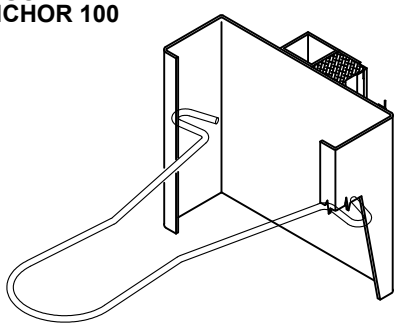
TECH-DATA

Return to Top

Sound-Tech Xpress Door Systems

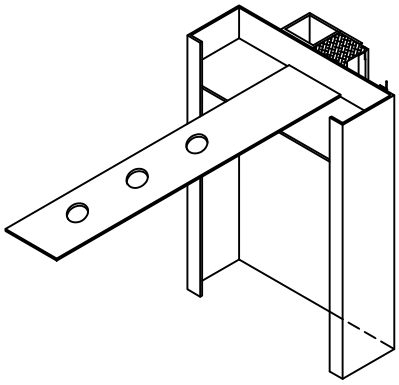
D12S-3

MASONRY WIRE ANCHOR 100

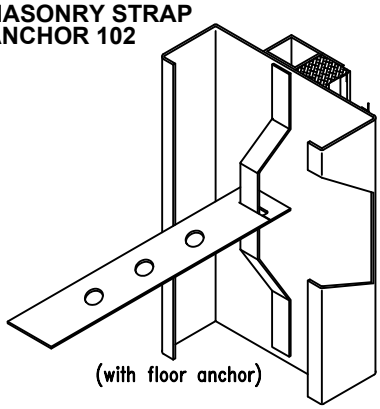


(with floor anchor)

MASONRY "T" ANCHOR 101



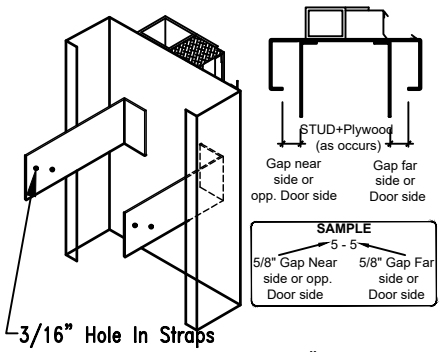
MASONRY STRAP ANCHOR 102



(with floor anchor)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

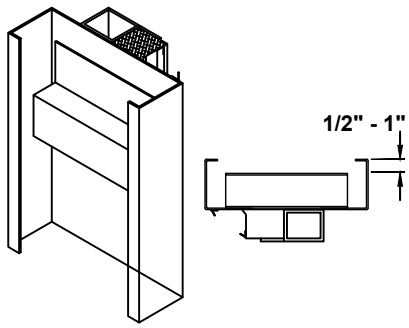
WOOD STUD ANCHOR 400



3/16" Hole In Straps For #8 Screw Or 8d Nail @ 24" O.C. max at Straps

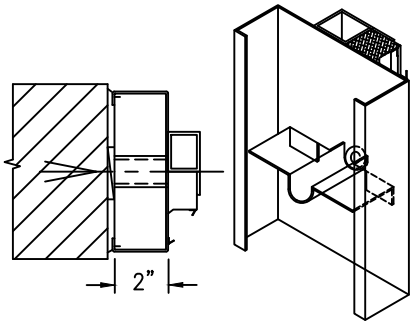
(with floor anchor)

STEEL STUD ANCHOR 204



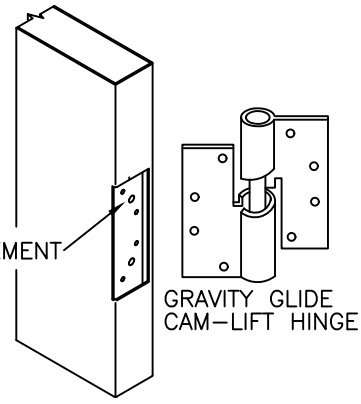
(with floor anchor)

EXISTING WALL ANCHOR 301

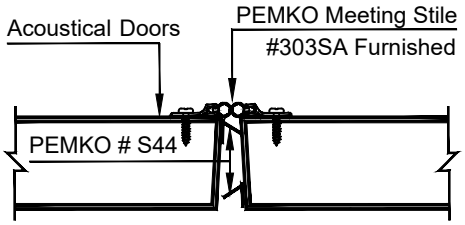


HINGE PREPARATION

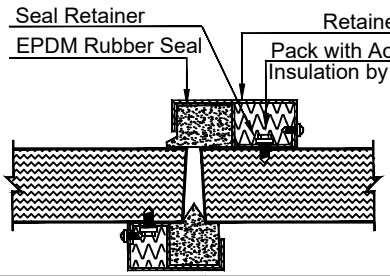
(HINGE PREP. IS HANDED)



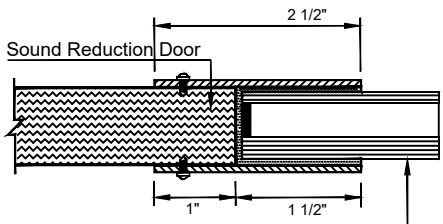
BL ASTRAGAL (Both leaf active)



IL ASTRAGAL (Single leaf active)



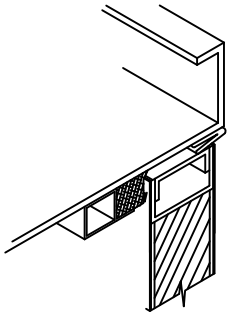
IGU 20 DOOR VISION

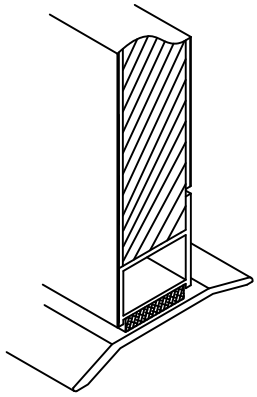


1 1/2" Insulated Glass Unit (1/4" Lam x 3/4" air space x 1/2" Annealed)

Set In Silicone Channel (Factory Installed)

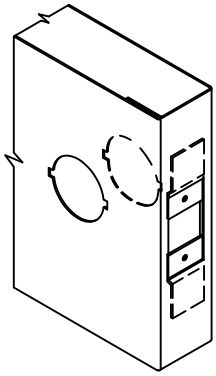
DOOR CONSTRUCTION (TOP AND BOTTOM)





THRESHOLD

LOCK PREPARATIONS



CYLINDRICAL
ANSI A115.2
BACKSET
3-3/4" REQUIRED

CYLINDRICAL & MORTISE DEADLOCK (optional)

10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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D12S–4

STANDARD SIZES
NOMINAL DOOR OPENING

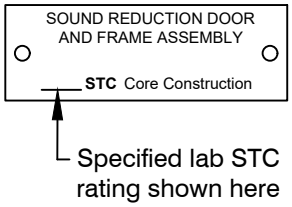
WIDTH	HEIGHT
SINGLE	
2'–0"	6'–8"
2'–4"	7'–0"
2'–6"	7'–2"
2'–8"	7'–10"
3'–0"	8'–0"
3'–4"	
3'–6"	
3'–8"	
4'–0"	

(Custom sizes available upon request.)

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS



Specified lab STC rating shown here

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-5db sound loss in a field test vs. lab results.
11) 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)

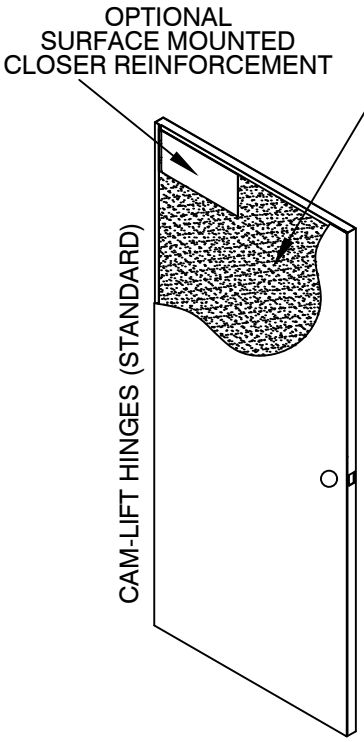
D12T–1

1-3/4" Sound-Tech Xpress

STC 47-49 (Flush Singles)

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.

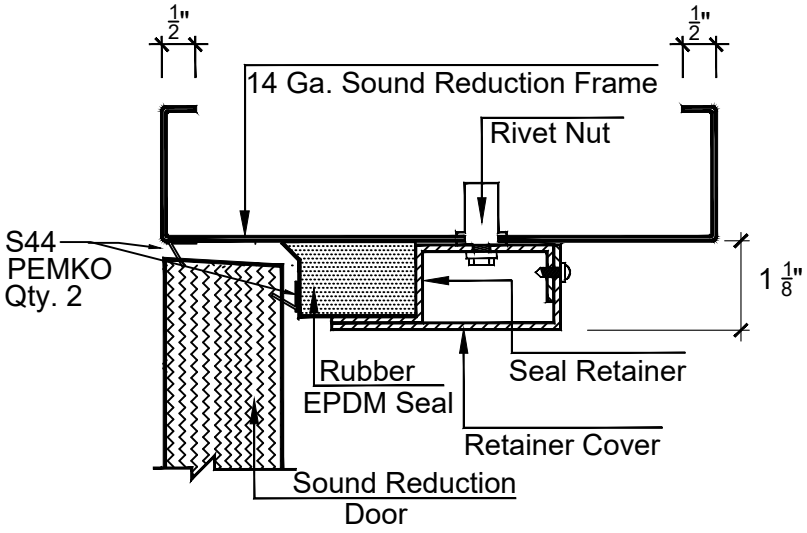
The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Acoustical Seal Sets Are Provided With Each STC Rated Assembly.

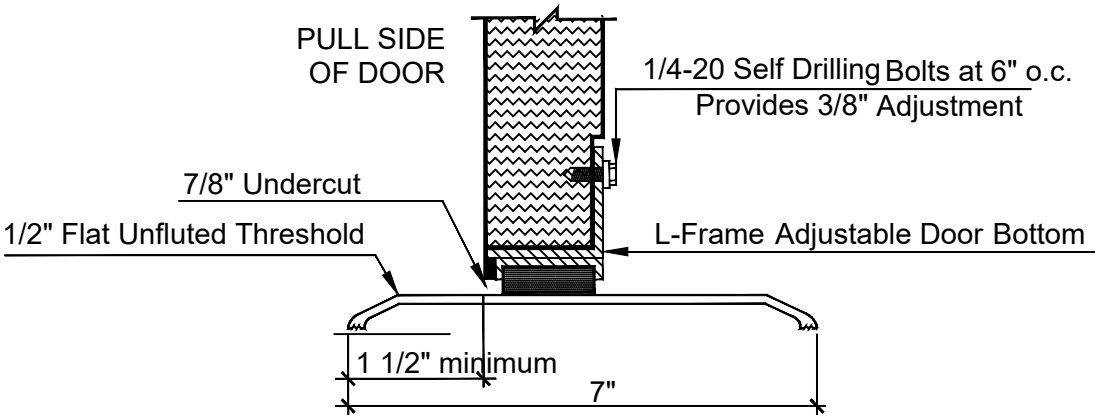


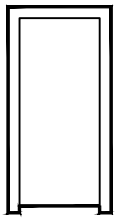
DOOR DESIGN

MODEL AS49C UTILIZES "ADJ" PROFILE FRAME

(SEAL SET RCG FOR SINGLES AND RCGP FOR PAIRS)







F
(ELEVATION)

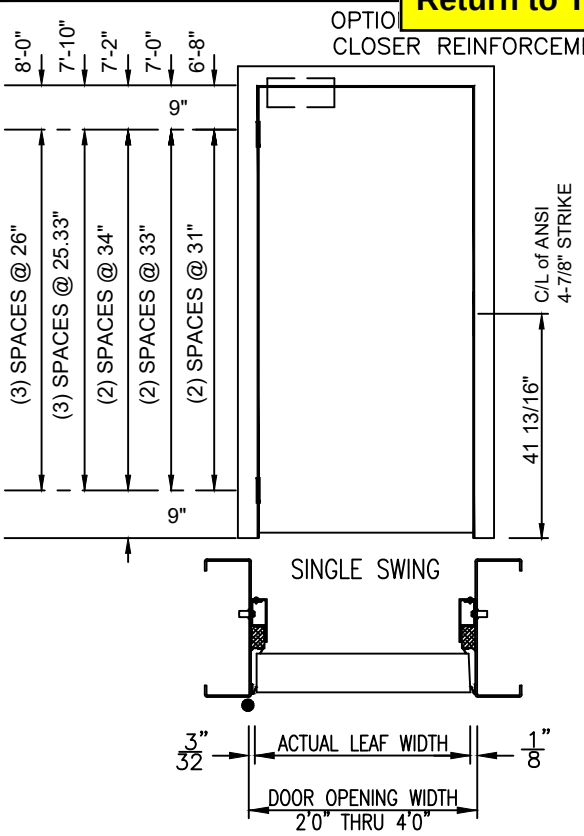
Please reference www.cecodoor.com for installation instructions.

Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

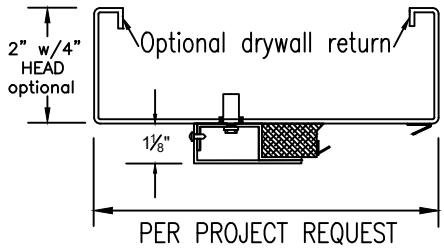
10/16/19

Return to Top

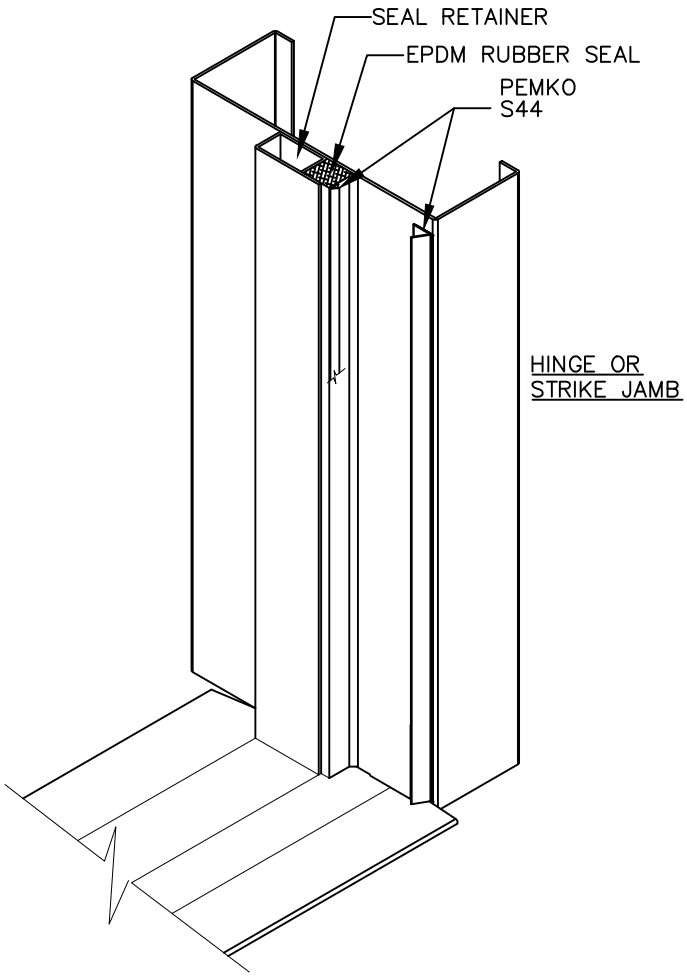
D12T–2



HORIZONTAL SECTION



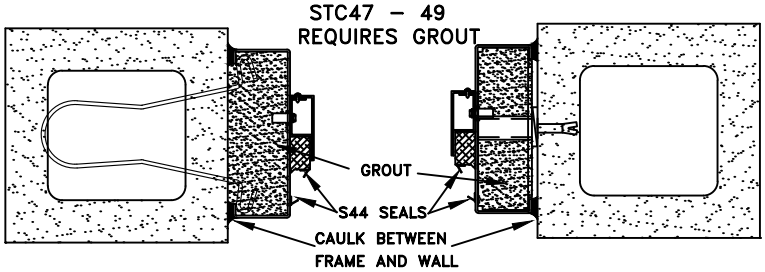
PROFILE AS49C



ADJ PROFILE FOR MODEL AS49C

(SEAL SET RCG)

SOME COMMON MASONRY 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.

10/16/19

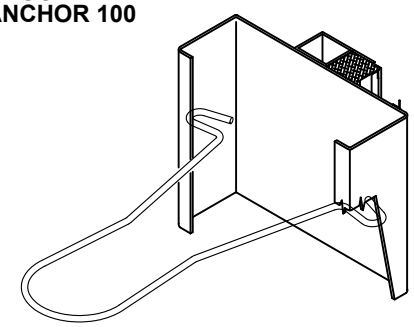
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

TECH-DATA

Return to Top

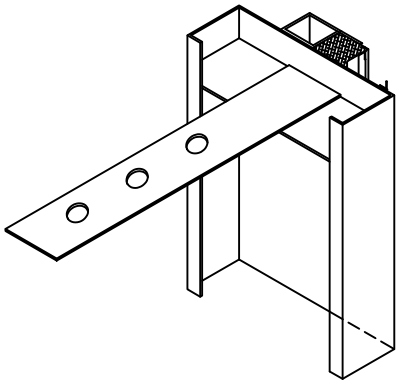
D12T-3

MASONRY WIRE ANCHOR 100

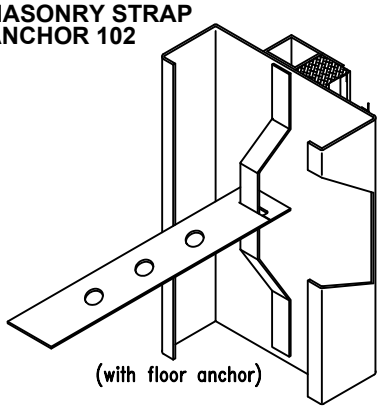


(with floor anchor)

MASONRY "T" ANCHOR 101



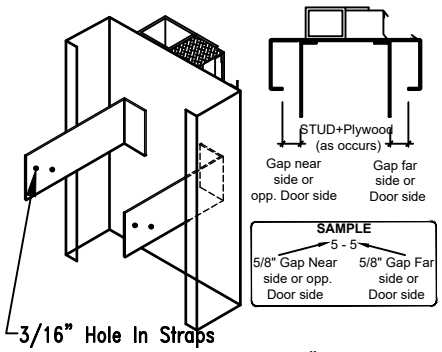
MASONRY STRAP ANCHOR 102



(with floor anchor)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

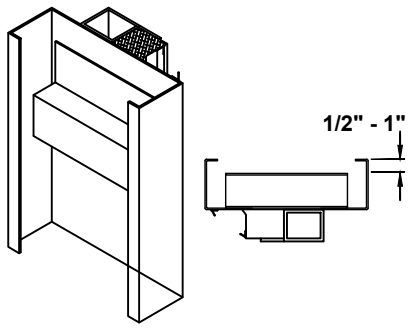
WOOD STUD ANCHOR 400



3/16" Hole In Straps For #8 Screw Or 8d Nail @ 24" O.C. max at Straps

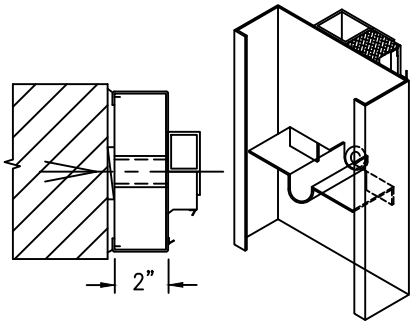
(with floor anchor)

STEEL STUD ANCHOR 204



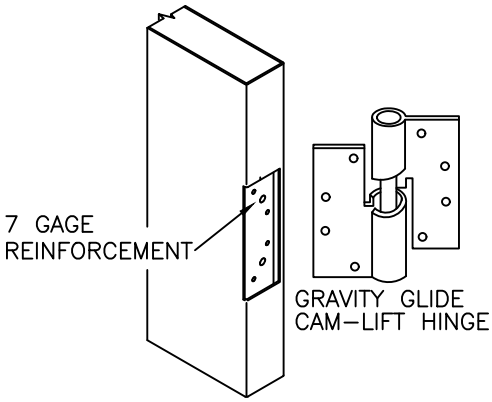
(with floor anchor)

EXISTING WALL ANCHOR 301

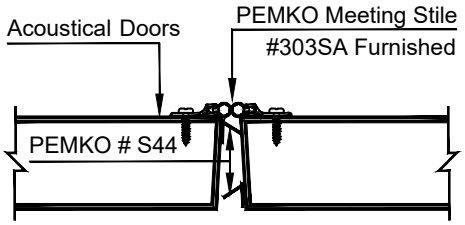


HINGE PREPARATION

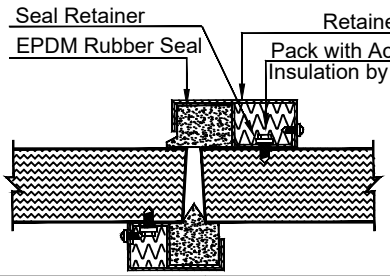
(HINGE PREP. IS HANDED)



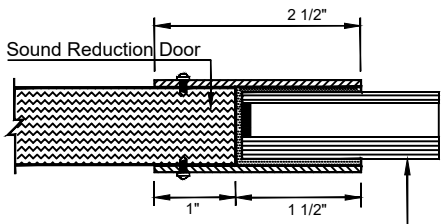
BL ASTRAGAL (Both leaf active)



IL ASTRAGAL (Single leaf active)



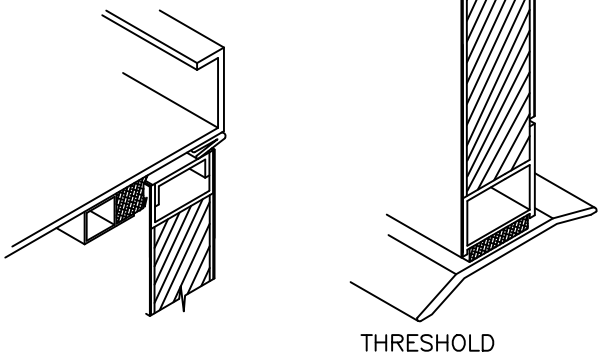
IGU 20 DOOR VISION



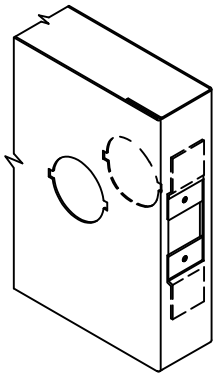
1 1/2" Insulated Glass Unit (1/4" Lam x 3/4" air space x 1/2" Annealed)

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)

10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

CecoDoor

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D12T-4

STANDARD SIZES
NOMINAL DOOR OPENING

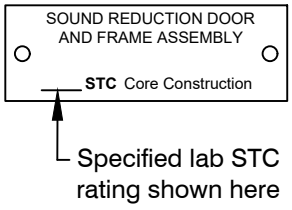
WIDTH	HEIGHT
SINGLE	
2'-0"	6'-8"
2'-4"	7'-0"
2'-6"	7'-2"
2'-8"	7'-10"
3'-0"	8'-0"
3'-4"	
3'-6"	
3'-8"	
4'-0"	

(Custom sizes available upon request.)

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR SYSTEM LABELS



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 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)

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CecoDoor
ASSA ABLOY

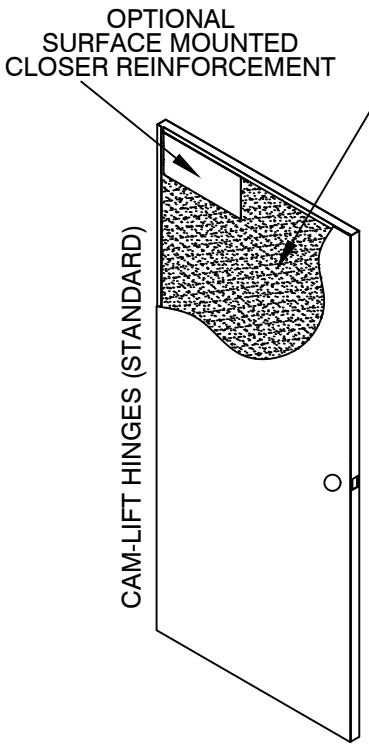
1-3/4" Sound-Tech Xpress

D12U–1

STC 50-52 (Flush Singles)

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.

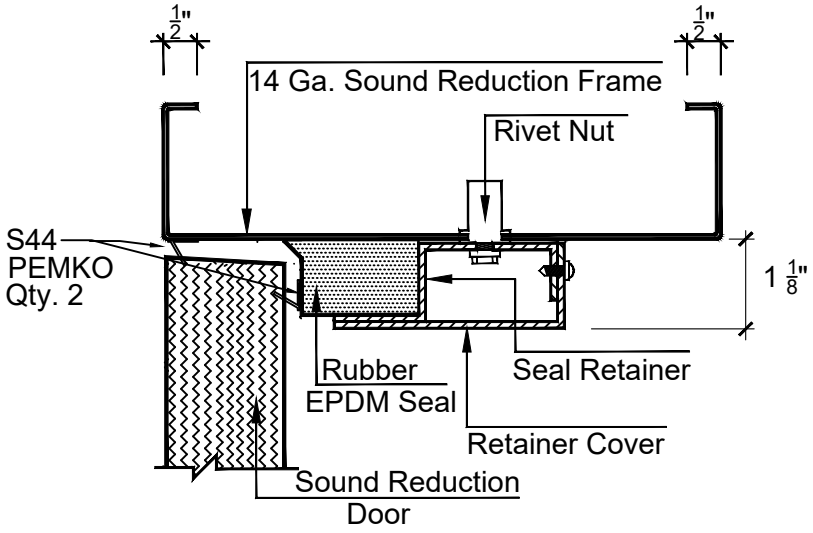
The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Acoustical Seal Sets Are Provided With Each STC Rated Assembly.

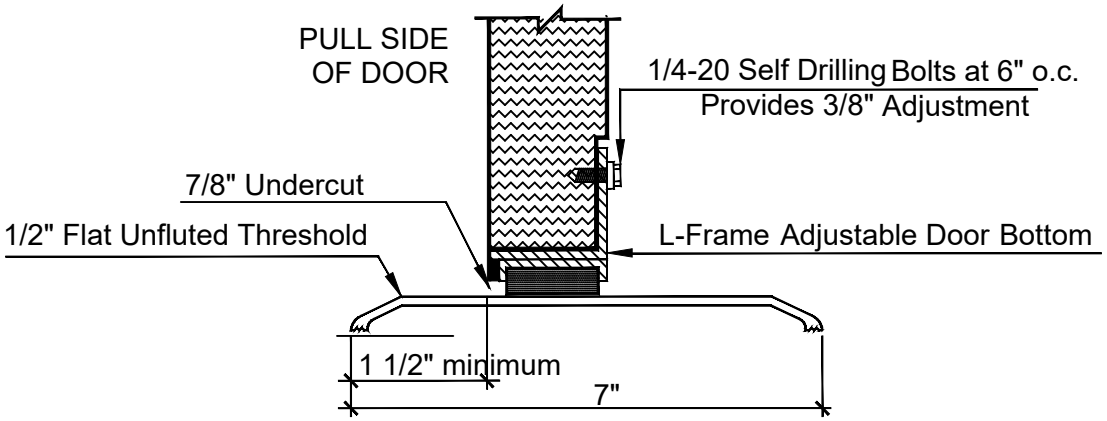


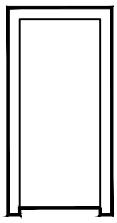
DOOR DESIGN

MODEL AS52C UTILIZES "ADJ" PROFILE FRAME

(SEAL SET RCG FOR SINGLES, RCGP FOR PAIRS)







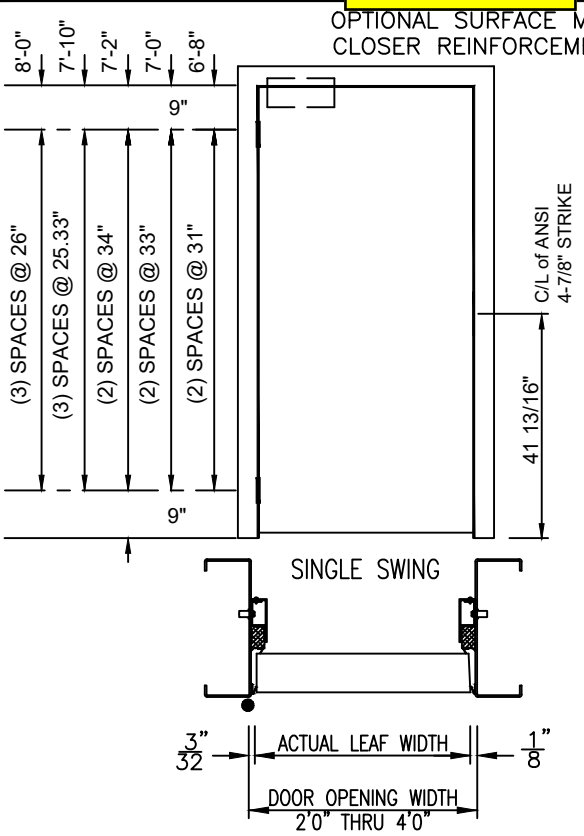
F
(ELEVATION)

Please reference www.cecodoor.com for installation instructions.

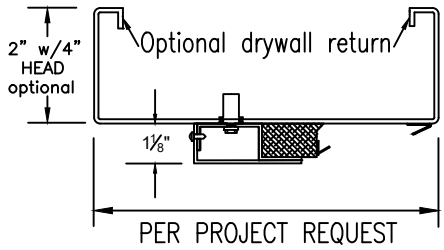
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

10/16/19

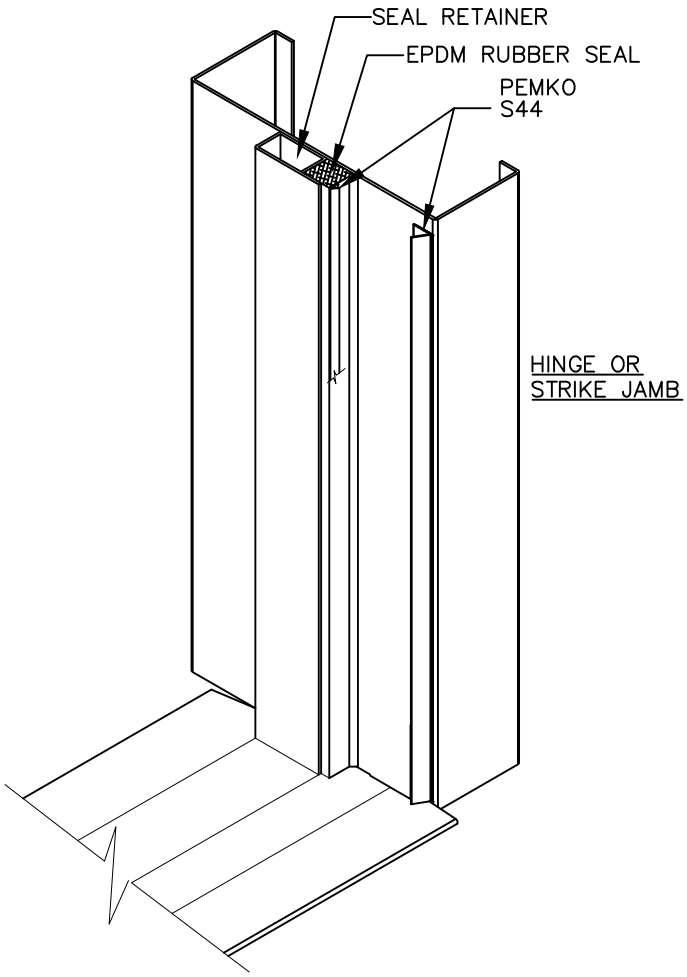
D12U-2



HORIZONTAL SECTION



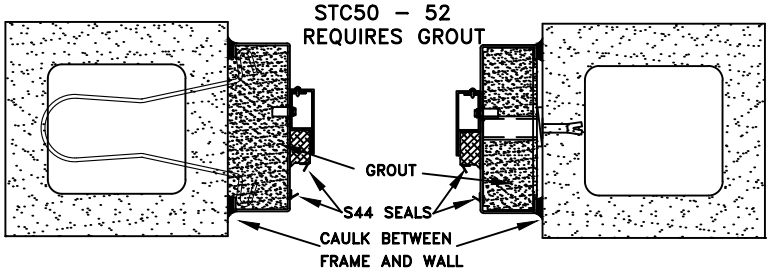
PROFILE AS52C



ADJ PROFILE FOR MODEL AS52C

(SEAL SET RCG)

SOME COMMON MASONRY 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.

10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

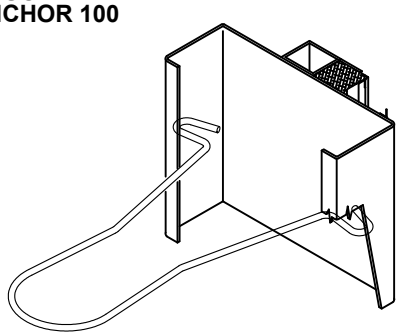
TECH-DATA

Return to Top

Sound-Tech Xpress Door Systems

D12U-3

MASONRY WIRE ANCHOR 100



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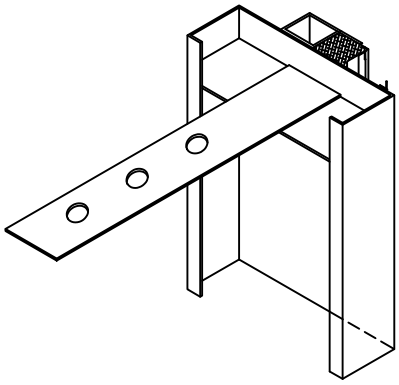
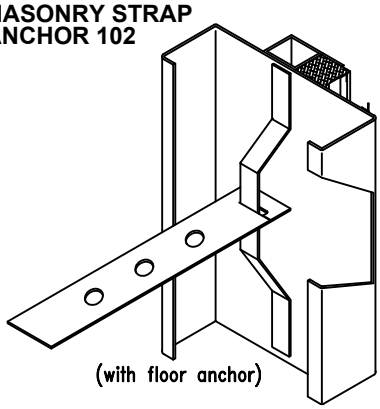
MASONRY "T" ANCHOR 101



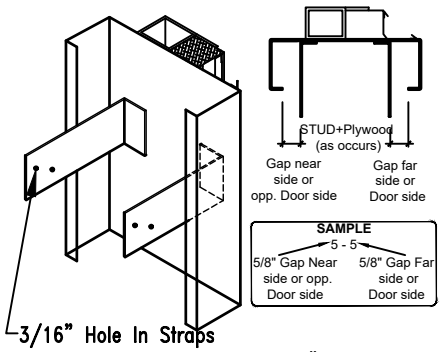
MASONRY STRAP ANCHOR 102



(with floor anchor)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

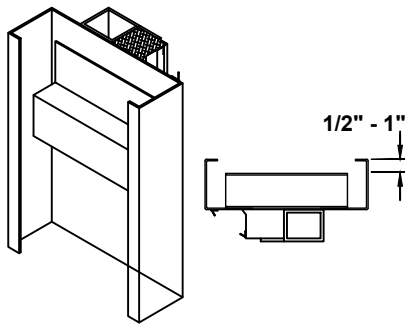
WOOD STUD ANCHOR 400



3/16" Hole In Straps For #8 Screw Or 8d Nail @ 24" O.C. max at Straps

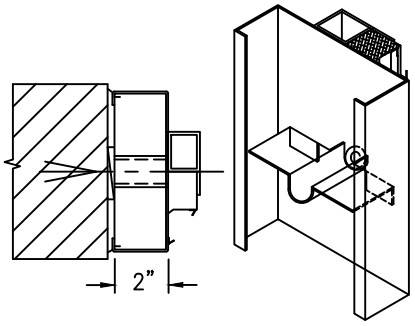
(with floor anchor)

STEEL STUD ANCHOR 204



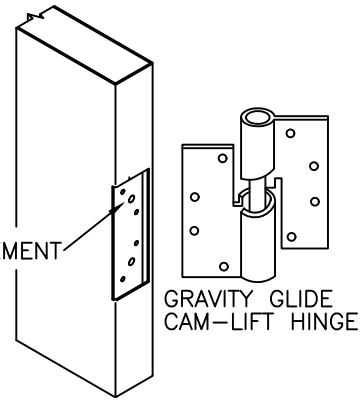
(with floor anchor)

EXISTING WALL ANCHOR 301

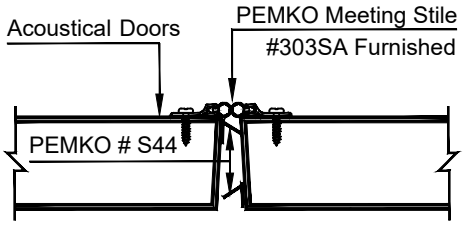


HINGE PREPARATION

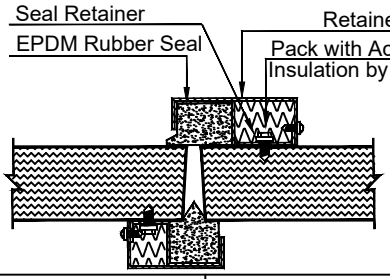
(HINGE PREP. IS HANDED)



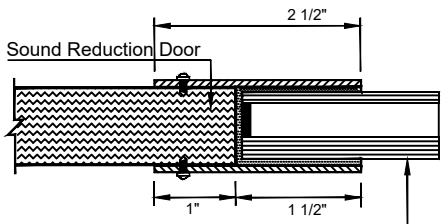
BL ASTRAGAL (Both leaf active)



IL ASTRAGAL (Single leaf active)



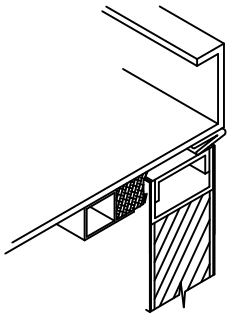
IGU 20 DOOR VISION

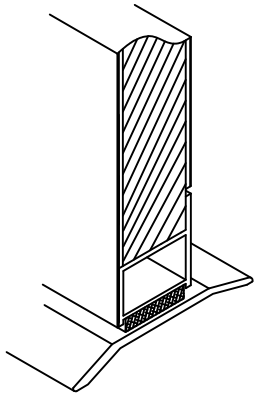


1 1/2" Insulated Glass Unit (1/4" Lam x 3/4" air space x 1/2" Annealed)

Set In Silicone Channel (Factory Installed)

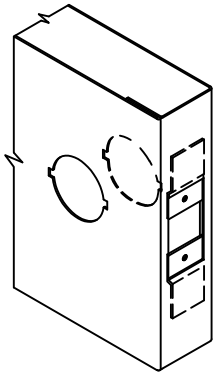
DOOR CONSTRUCTION (TOP AND BOTTOM)





THRESHOLD

LOCK PREPARATIONS



CYLINDRICAL
ANSI A115.2
BACKSET
3-3/4" REQUIRED

CYLINDRICAL & MORTISE DEADLOCK (optional)

10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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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

SOUND REDUCTION DOOR AND FRAME ASSEMBLY

STC Core Construction

Specified lab STC rating shown here

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 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)

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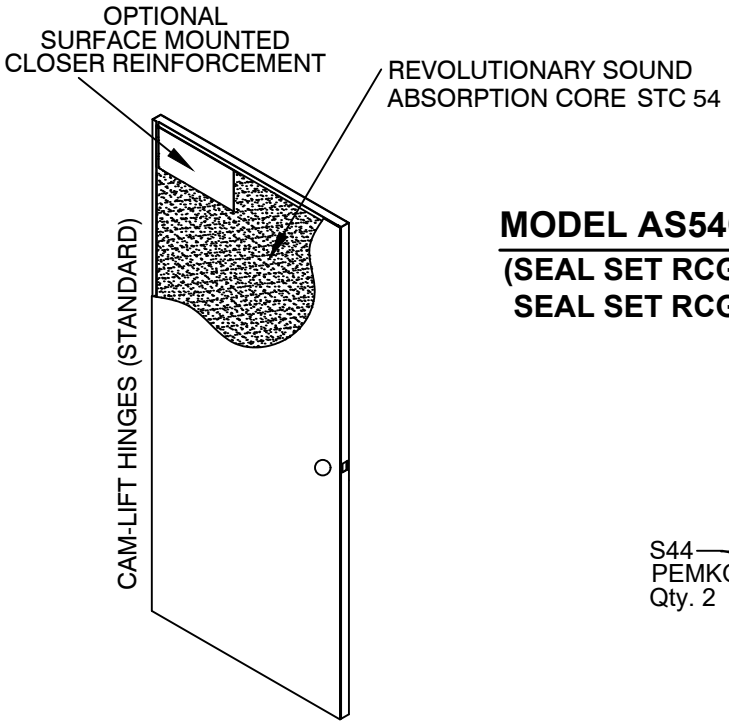
1-3/4" Sound-Tech Xpress

STC 53-54 (Flush Singles)

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.

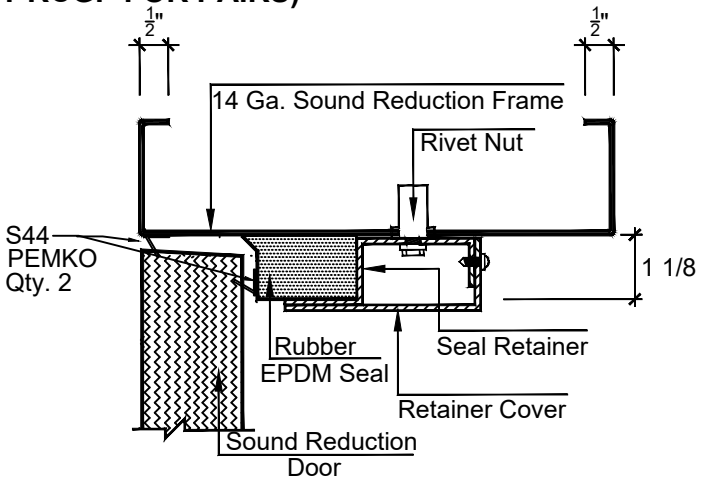


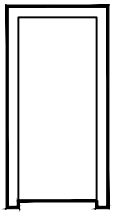
DOOR DESIGN

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Acoustical Seal Sets Are Provided With Each STC Rated Assembly.

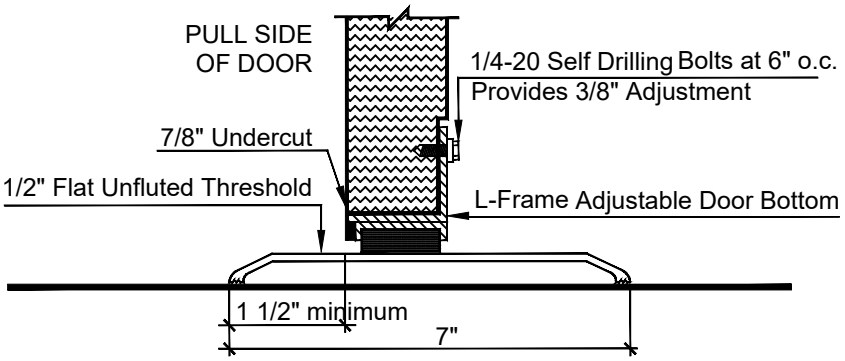
MODEL AS54C UTILIZES "ADJ" PROFILE FRAME

(SEAL SET RCG FOR SINGLES, (STANDARD FRAME NOT AVAILABLE)
SEAL SET RCGP FOR PAIRS)





F
(ELEVATION)

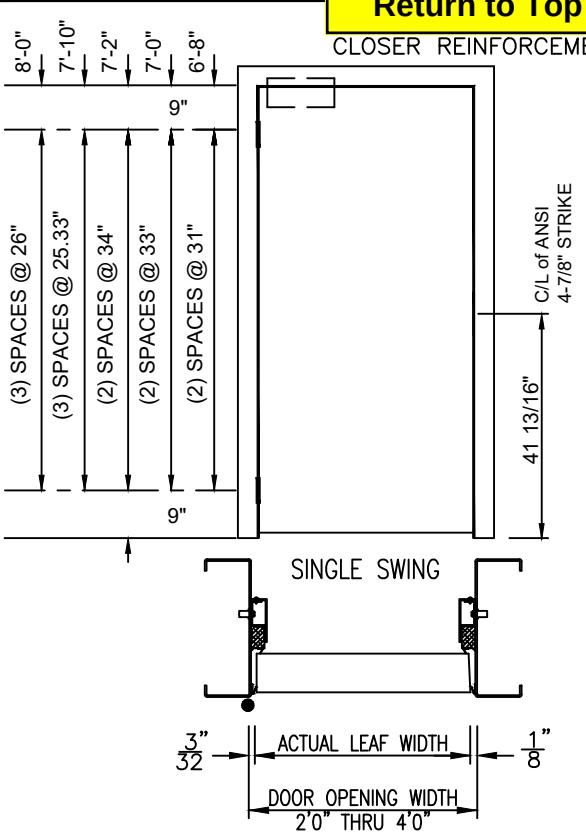


Please reference www.cecodoor.com for installation instructions.

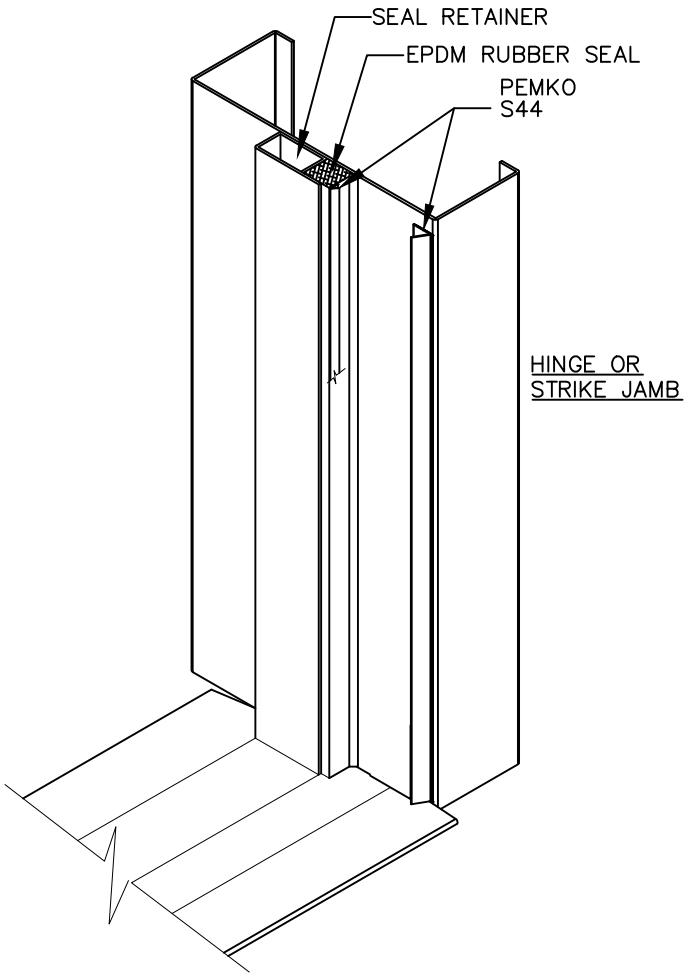
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

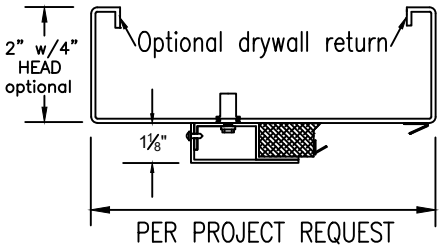
10/16/19

D12V–2



HORIZONTAL SECTION

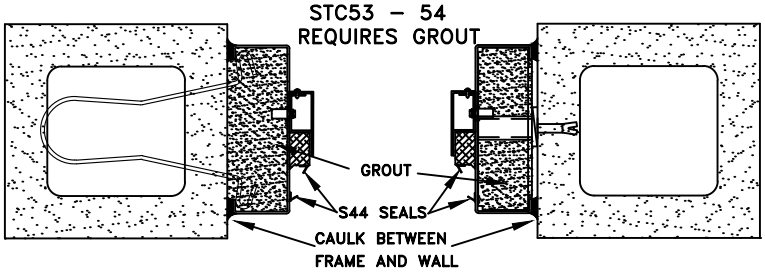




ADJ PROFILE FOR MODEL AS54C ADJ PROFILE

(SEAL SET RCG)

SOME COMMON MASONRY 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.

10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

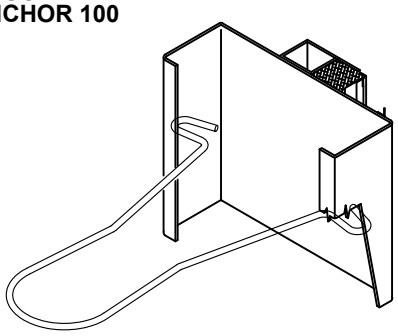
TECH-DATA

Return to Top

Sound-Tech Xpress Door Systems

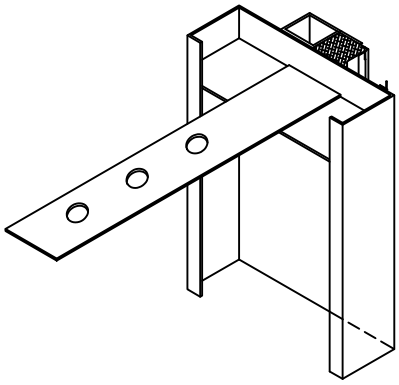
D12V-3

MASONRY WIRE ANCHOR 100

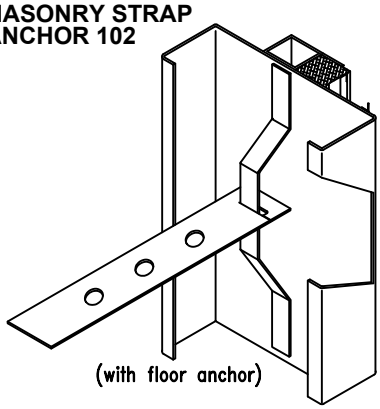


(with floor anchor)

MASONRY "T" ANCHOR 101



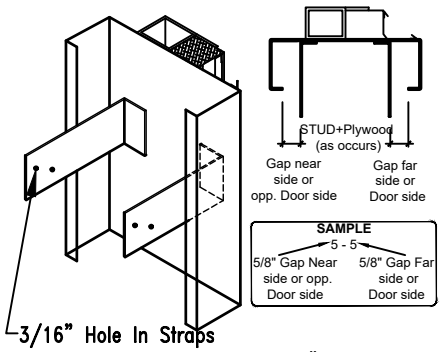
MASONRY STRAP ANCHOR 102



(with floor anchor)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

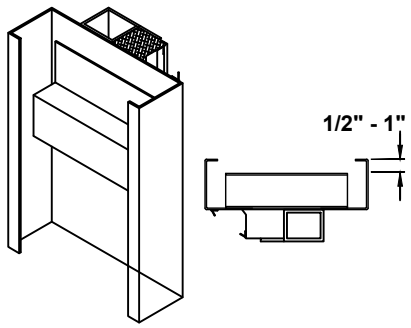
WOOD STUD ANCHOR 400



3/16" Hole In Straps For #8 Screw Or 8d Nail @ 24" O.C. max at Straps

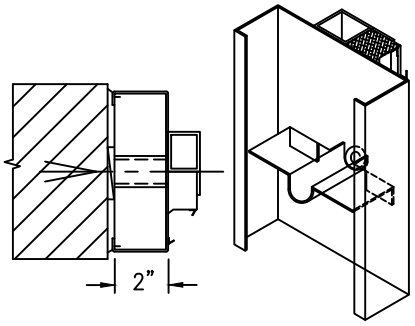
(with floor anchor)

STEEL STUD ANCHOR 204



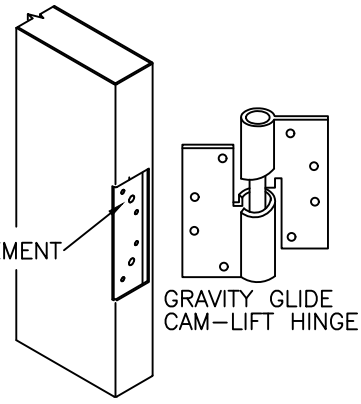
(with floor anchor)

EXISTING WALL ANCHOR 301

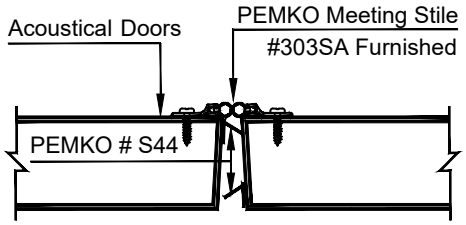


HINGE PREPARATION

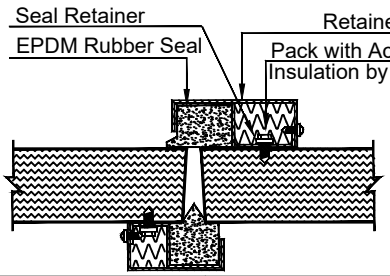
(HINGE PREP. IS HANDED)



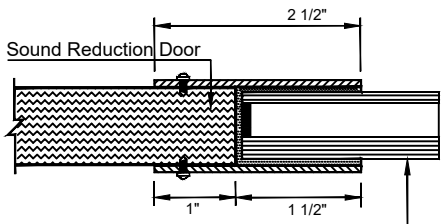
BL ASTRAGAL (Both leaf active)



IL ASTRAGAL (Single leaf active)



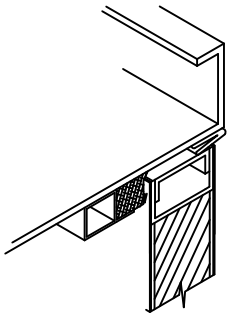
IGU 20 DOOR VISION

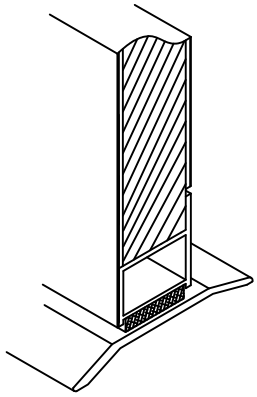


1 1/2" Insulated Glass Unit (1/4" Lam x 3/4" air space x 1/2" Annealed)

Set In Silicone Channel (Factory Installed)

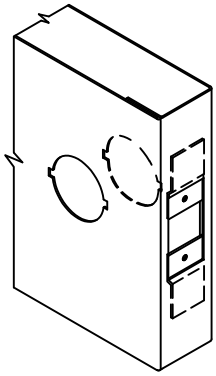
DOOR CONSTRUCTION (TOP AND BOTTOM)





THRESHOLD

LOCK PREPARATIONS



CYLINDRICAL
ANSI A115.2
BACKSET
3-3/4" REQUIRED

CYLINDRICAL & MORTISE DEADLOCK (optional)

10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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STANDARD SIZES
NOMINAL DOOR OPENING

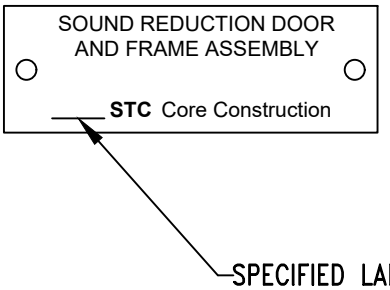
WIDTH	HEIGHT
SINGLE	
2'–0" 2'–4" 2'–6" 2'–8" 3'–0" 3'–4" 3'–6" 3'–8" 4'–0"	6'–8" 7'–0" 7'–2" 7'–10" 8'–0"

(Custom sizes available upon request.)

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR
SYSTEM LABELS



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 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-5db sound loss in a field test vs. lab results.
11) 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)

10/16/19

D12W-1

1-3/4" Sound-Tech Xpress+

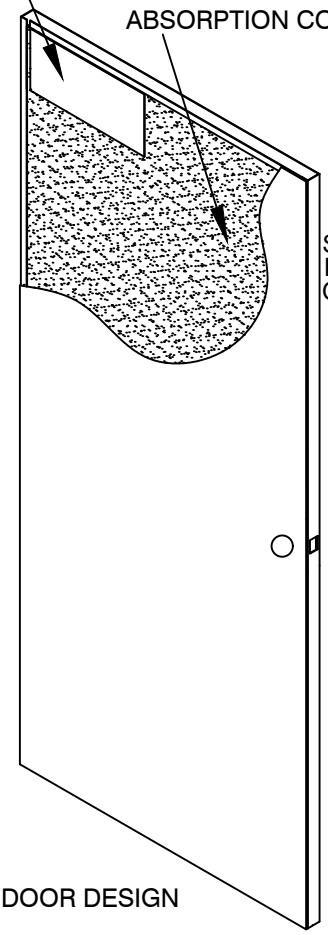
Communicating STC56 thru STC66 (Flush Singles)

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 Acoustical Seal Sets Are Provided With Each STC Rated Assembly.

OPTIONAL SURFACE MOUNTED CLOSER REINFORCEMENT

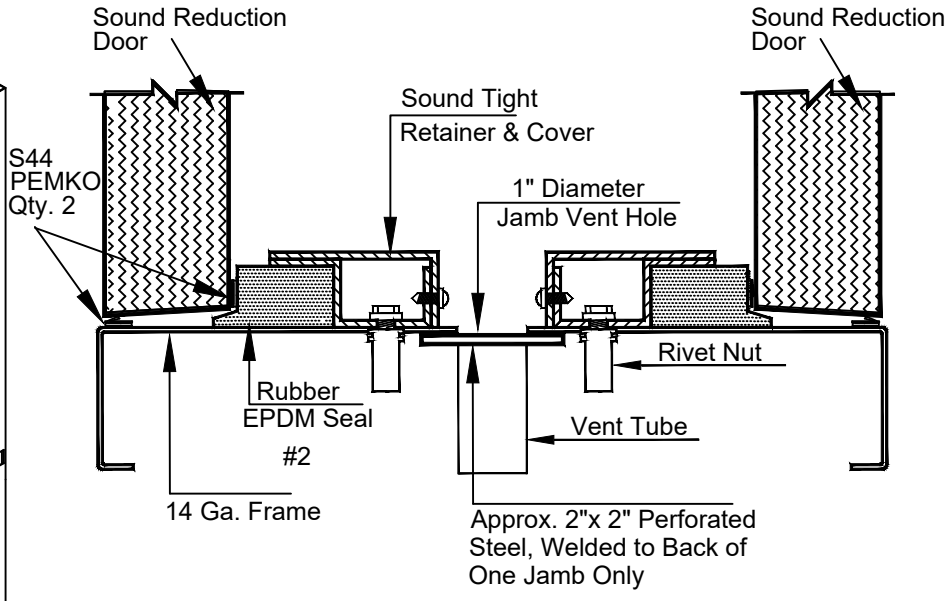
REVOLUTIONARY SOUND ABSORPTION CORE

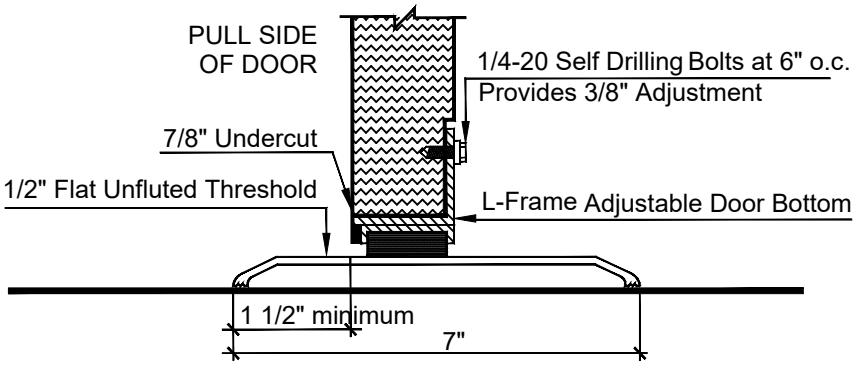


DOOR DESIGN

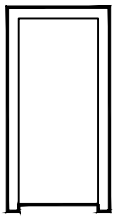
MODEL AS66C (STANDARD FRAME NOT AVAILABLE)

(SEAL SET 66 FOR SINGLES, SEAL SET 66P FOR PAIRS)





Please reference www.cecodoor.com for installation instructions.



F
(ELEVATION)

Suggested Uses:
Conference Rooms, Communicating Hotel Rooms, Meeting Rooms, Recording Studios, Manufacturing Test Cells, and Hearing Impaired Test Facilities.

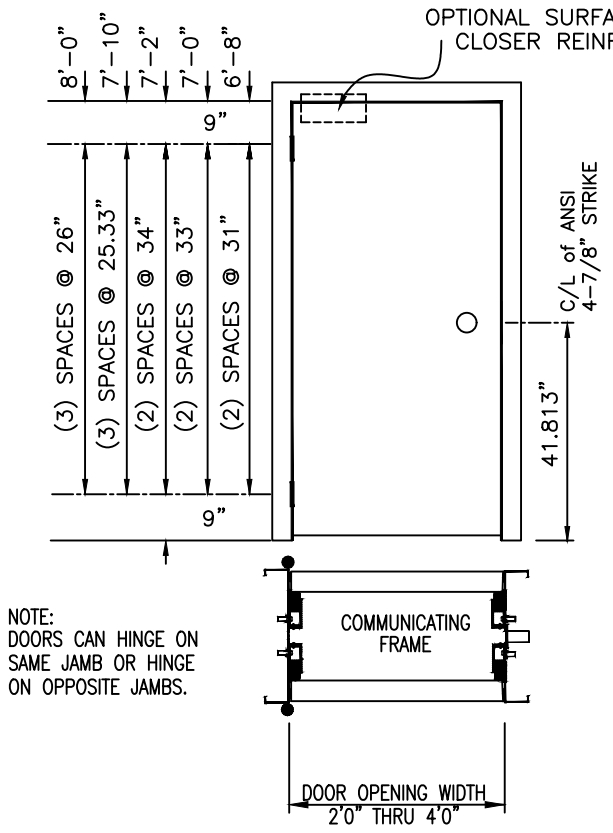
10/16/19

TECH-DATA

Return to Top

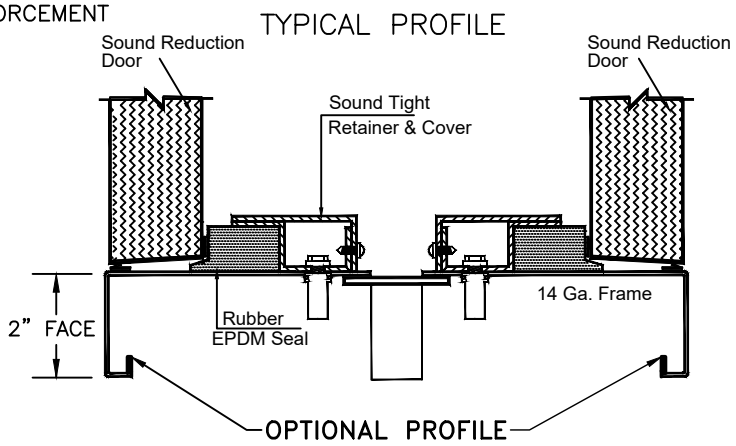
Sound-Tech Xpress Door System

D12W-2

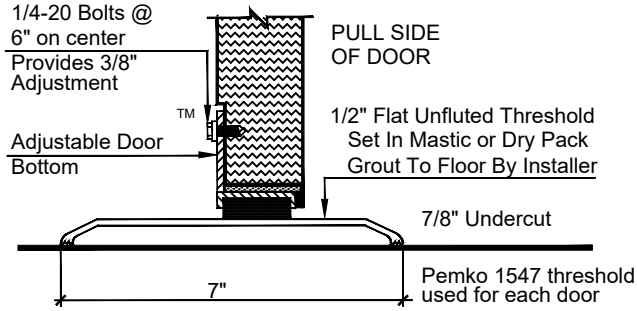


NOTE:
DOORS CAN HINGE ON SAME JAMB OR HINGE ON OPPOSITE JAMBS.

HORIZONTAL SECTION

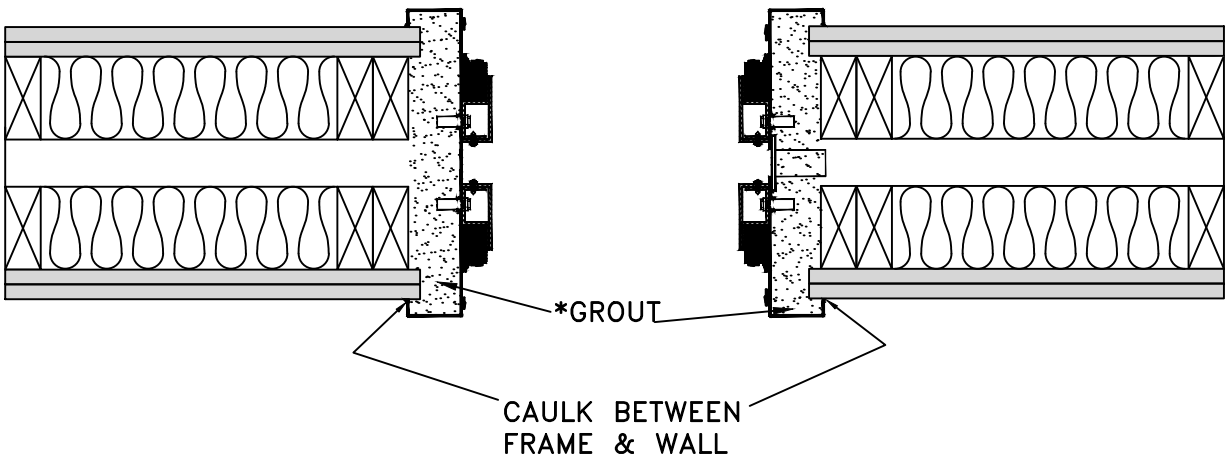


COMMON WALL APPLICATION SHOWN BELOW



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 installtion.

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)

10/16/19

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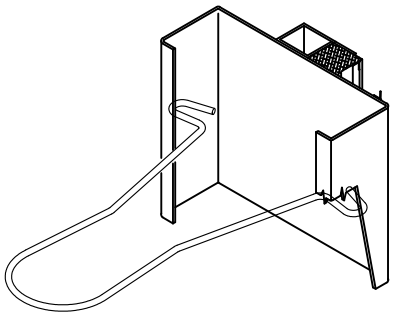
TECH-DATA

Return to Top

Sound-Tech Xpress Door Systems

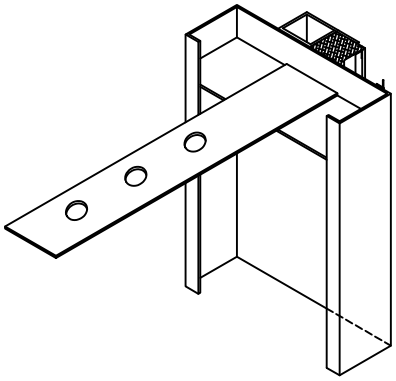
D12W-3

MASONRY WIRE ANCHOR 100

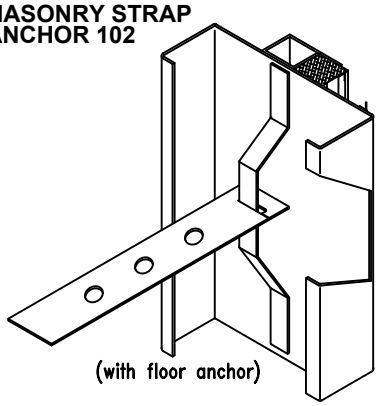


(with floor anchor)

MASONRY "T" ANCHOR 101



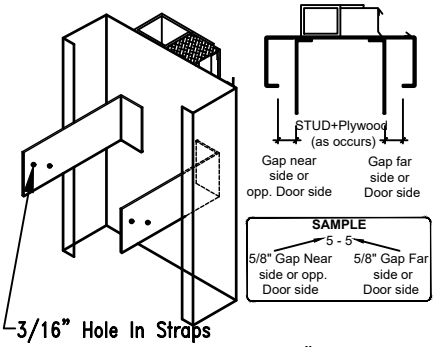
MASONRY STRAP ANCHOR 102



(with floor anchor)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

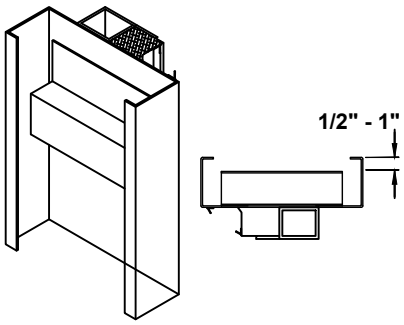
WOOD STUD ANCHOR 400



3/16" Hole In Straps For #8 Screw Or 8d Nail @ 24" O.C. max at Straps

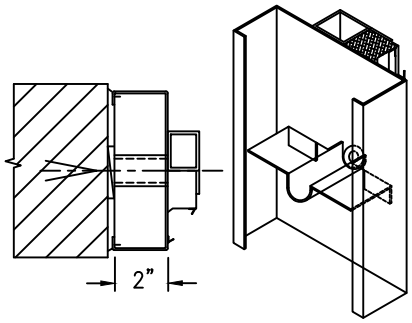
(with floor anchor)

STEEL STUD ANCHOR 204



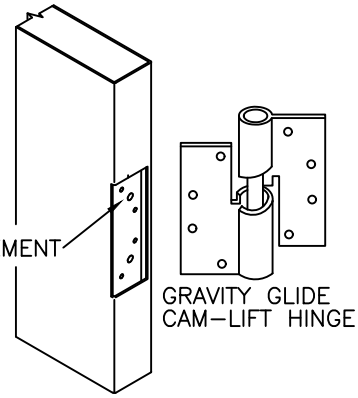
(with floor anchor)

EXISTING WALL ANCHOR 301

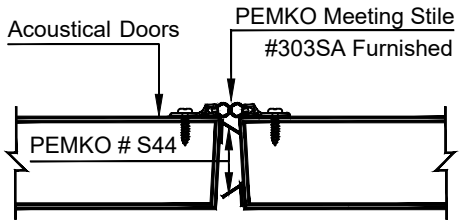


HINGE PREPARATION

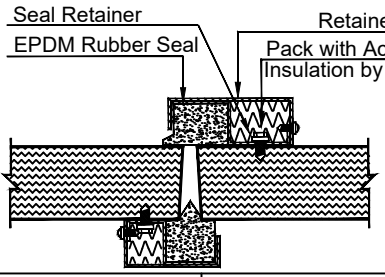
(HINGE PREP. IS HANDED)



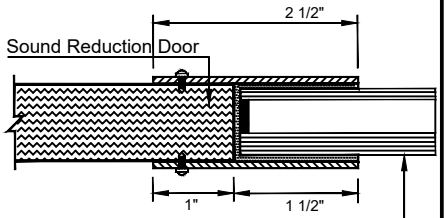
BL ASTRAGAL (Both leaf active)



IL ASTRAGAL (Single leaf active)

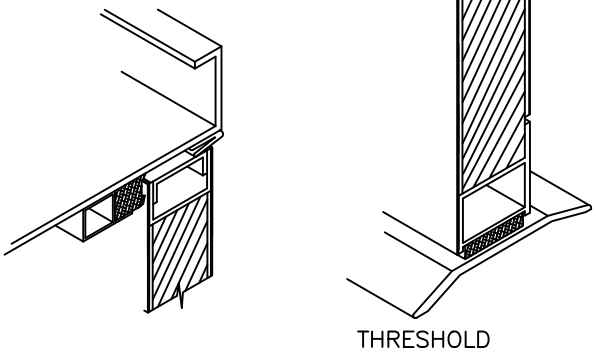


IGU 20 DOOR VISION

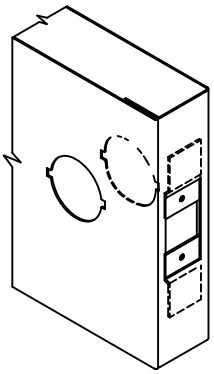


1 1/2" Insulated Glass Unit
(1/4" Lam x 3/4" air space x 1/2" Annealed)
Set In Silicone Channel (Factory Installed)

DOOR CONSTRUCTION (TOP AND BOTTOM)



LOCK PREPARATIONS



CYLINDRICAL
ANSI A115.2
BACKSET
3-3/4" REQUIRED

CYLINDRICAL & MORTISE DEADLOCK (optional)

10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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STANDARD SIZES
NOMINAL DOOR OPENING

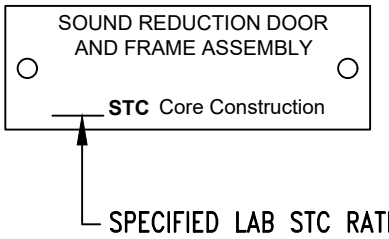
WIDTH	HEIGHT
SINGLE	
2'–0"	6'–8"
2'–4"	7'–0"
2'–6"	7'–2"
2'–8"	7'–10"
3'–0"	8'–0"
3'–4"	
3'–6"	
3'–8"	
4'–0"	

(Custom sizes available upon request.)

ACOUSTICAL FIRE DOORS

FIRE RATING NOT AVAILABLE

ACOUSTIC DOOR
SYSTEM LABELS



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 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-5db sound loss in a field test vs. lab results.
11) 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)

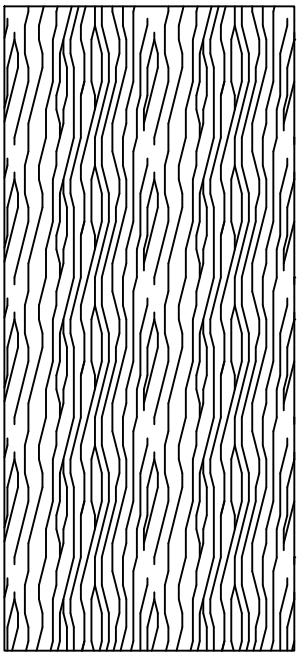
10/16/19

1-3/4" MADERA® & MADERA® SMOOTH GRAIN (SG) WOOD GRAIN STEEL DOORS

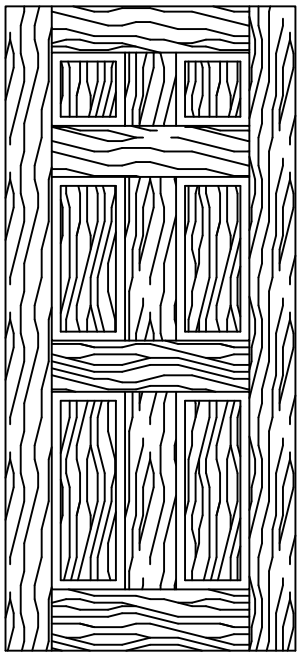
FULL FLUSH OR 6 PANEL DESIGNS

Madera® (M40) oak stain embossed grain design

Madera® SG (M60) cherry, maple stain design



Maximum Size
4'0" x 9'0"

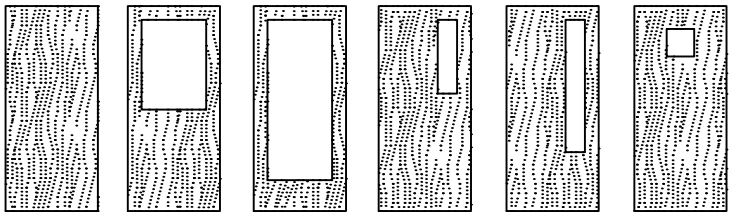


Maximum Size
3'0" x 7'0"
3'6" x 7'0" - SG

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 below. 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)



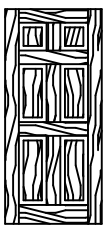
F G FG N N V

STANDARD STAIN COLORS

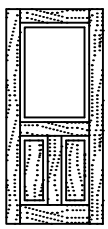
GOLDEN, AUTUMN, BOURBON SALEM, PROVINCIAL or NUTMEG

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



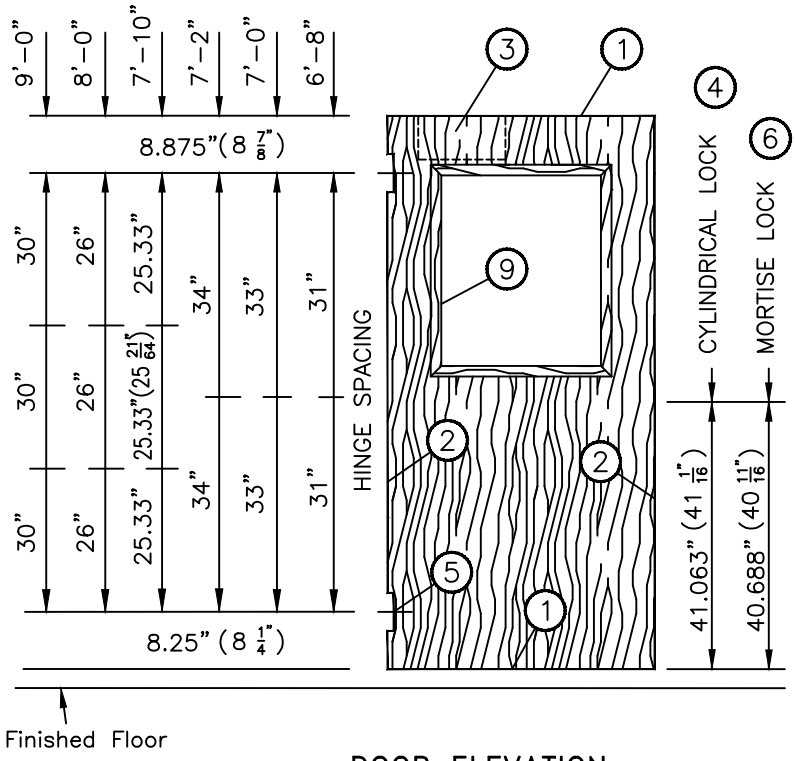
E603

CUSTOM STAIN COLORS

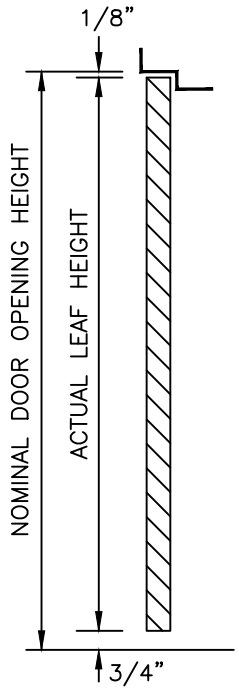
Custom stain color matching is available. Physical custom stain sample must be submitted to factory for color matching, then matched samples will be returned for approval before order can be processed. Additional lead-times may apply.

D13-2

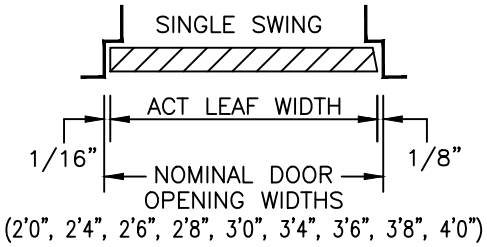
Hardware locations shown match Ceco standard frames.

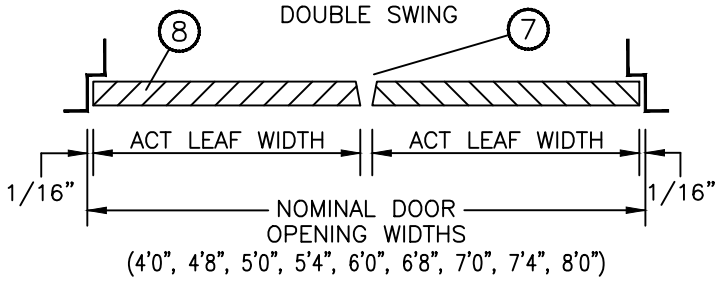


DOOR ELEVATION



VERTICAL SECTION



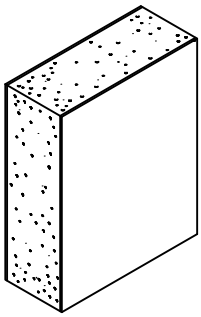


HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.4 mm)

Note: All visible surfaces are wood grained. Grain is not shown on all details for clarity.

POLYSTYRENE FOAM CORE (8)
(STANDARD) FOR EMBOSSED OR FLUSH DOORS

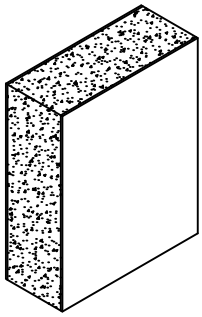


SOLID SLAB OF EXPANDED *POLY-STYRENE FOAM PERMANENTLY BONDED TO THE INSIDE OF EACH FACE SKIN.

*OPTIONAL - POLYURETHANE DROP-IN SLAB CORE (FLUSH ONLY)

MINERAL CORE (OPTIONAL) (8)
FLUSH DOORS ONLY

PERMANENTLY BONDED TO THE INSIDE OF BOTH FACE SHEETS.



08/07/20

TECH-DATA

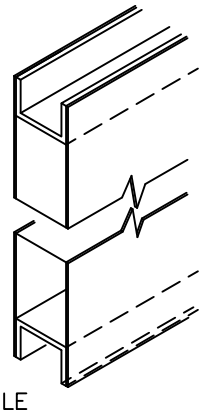
1-3/4" MADERA® & MADERA® SMOOTH GRAIN (SG) WOOD GRAIN STEEL DOORS

D13-3

1 16 GAGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM CHANNELS

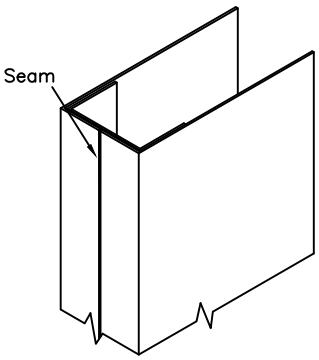


OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES

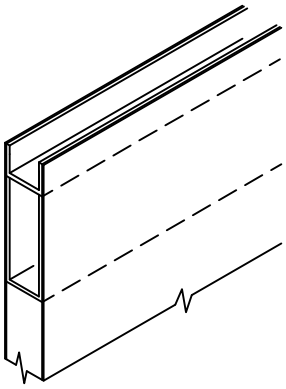
CENTER EDGE SEAM WITH INTERMITTENT SPOT WELDS.

SPOT WELDS ARE FILLED AND GROUND SMOOTH.

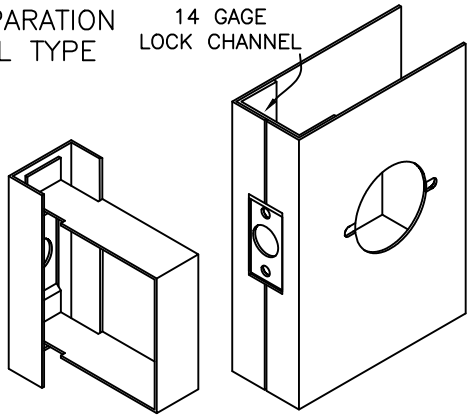


3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAGE STEEL CHANNEL WELDED TO END CHANNEL



4 LOCK PREPARATION CYLINDRICAL TYPE

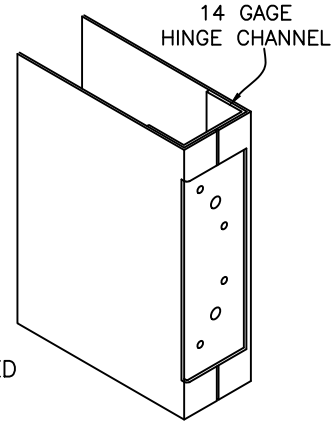


(LC1)
(ANSI A115.2)

2-3/4" BACKSET

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

5 HINGE PREPARATION

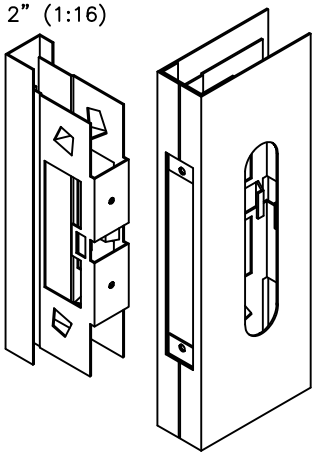


4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

ANSI A156.7 TEMPLATE

HINGE EDGE IS HANDED AND NOT BEVELED.

6 LOCK PREPARATION MORTISE TYPE



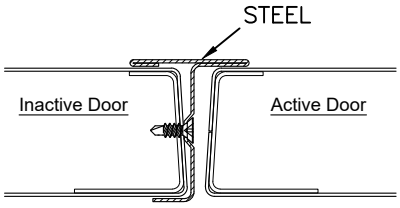
(LM1)
(ANSI A115.1)
2-3/4" BACKSET

(LM0)
SIMILAR TO DETAIL LESS FACE CUTOUT

(LP0)
SIMILAR TO DETAIL LESS ALL CUTOUTS AND REINFORCEMENT

7 OVERLAPPING ASTRAGAL 4471M

FOR 1-3/4" THICK DOORS

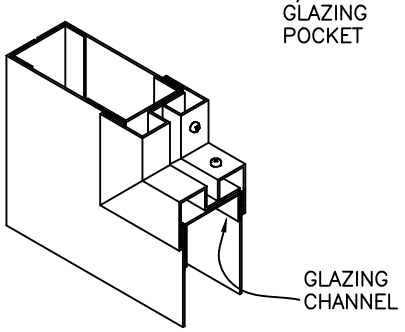


SMOOTH GRAIN SHOWN. TEXTURED GRAIN USED ON MADERA®

9 GLAZING TRIM

SMOOTH GRAIN SHOWN. TEXTURED GRAIN USED ON MADERA®

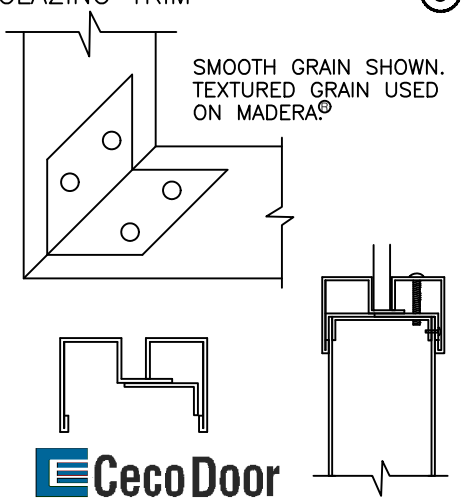
3/8" WIDE GLAZING POCKET



Optional Glass Pocket Width: 5/8", 7/8", 1-1/8"

9 GLAZING TRIM

SMOOTH GRAIN SHOWN. TEXTURED GRAIN USED ON MADERA®



08/07/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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RETURN TO TOP

CecoDoor

ASSA ABLOY

D13-4

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"	
3'-4"	6'-8"	7'-10"
3'-6"	7'-0"	8'-0"
3'-8"	7'-4"	
4'-0"	8'-0"	9'-0"

SIZE LIMITS DESIGN/MATERIAL

	FLUSH DESIGN 16,18 ga.	6 PANEL 18 ga.	SG 6 PANEL 18 ga.
MAX.	4'0"x9'0"	3'0"x7'0"	3'6"x7'0"
MIN.	2'0"x6'8"	2'8"x6'8"	2'8"x6'8"

FIRE DOORS

LABELING AGENCIES:
- UNDERWRITERS LABORATORY
- WARNOCK HERSEY

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

- RATING: 20 MIN, 3/4 HR, 1 HR, 1-1/2 HR, OR 3 HR
- 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 gage 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 gage steel hinge channels 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 locks in accordance with ANSI A115. Optional closer reinforcement is a 14 gage 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	A60	A40	—	RECOMMENDED DOOR FRAME MATERIAL
18 Gage Steel (4090 max.)	Heavy Duty	—	Std	—	16 Gage Steel
16 Gage Steel (4090 max.)	Extra Heavy Duty	—	Std	—	16 Gage Steel
18 Gage SG Steel (4090 max.)	Heavy Duty	Std	—	—	16 Gage Steel
16 Gage SG Steel (4090 max.)	Extra Heavy Duty	Std	—	—	16 Gage Steel

PERFORMANCE

	Polystyrene
Core Thermal Insulation:	Calculated R Factor = 6.35 (ASTM C518)
Door Sound Transmission	STC 24 (F Design, 18 Gage Face Sheets, ASTM E90 & E413 [Fully Operable])
Physical Endurance /Level: ANSI A250.4	18 Gage: Level A (1,000,000 Cycles) 16 Gage: Level A (1,000,000 Cycles)

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

07/27/20

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 Madera® 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.

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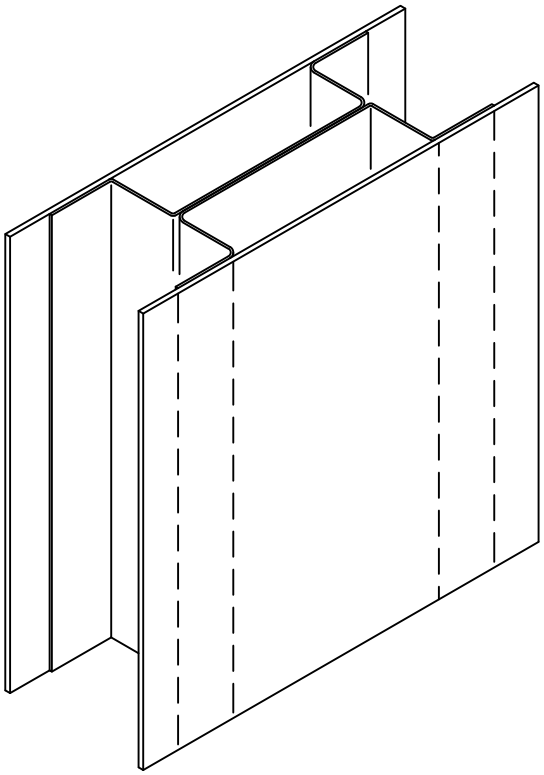
2" RESTRICTDOR DETENTION SECURITY SYSTEM

VERTICALLY STEEL STIFFENED, SEAMLESS STEEL DOORS
BEVELED LOCK AND HINGE EDGE, HANDED
WELDED FRAMES WITH INVISIBLE CORNERS



MINERAL WOOL INSULATION BETWEEN STIFFENERS

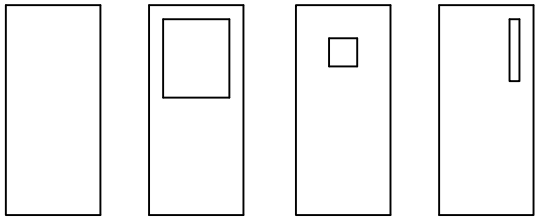
The RestrictDor Detention Security System is designed for smaller projects where detention and security issues must be addressed.

Complies with ANSI/NAAMM HMMA 863-98, Guide Specifications For Detention Security Hollow Metal Doors & Frames. (Grade 4 or Grade 3) 18 gage steel stiffeners placed 4" apart and welded every 3" max. along their length. Doors and frames are 14 gage steel. Optional 12 gage doors: Level 3 Bullet Resistant per UL Standard For Safety Bullet Resistant Equipment Test: UL 752. Doors & Frames prepared for detention/ security hardware.

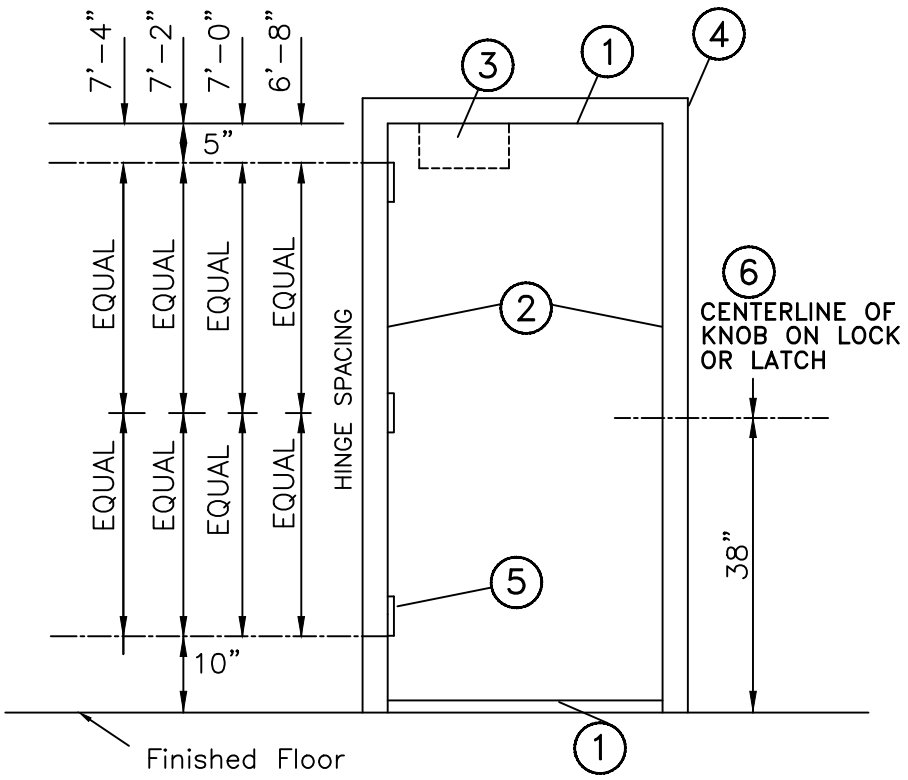
Suggested Use:

Interior or Exterior...
Holding or Security Areas for
Police Stations
Court Houses
Other Municipal Buildings
Hospitals
Entertainment Venues, Stadiums

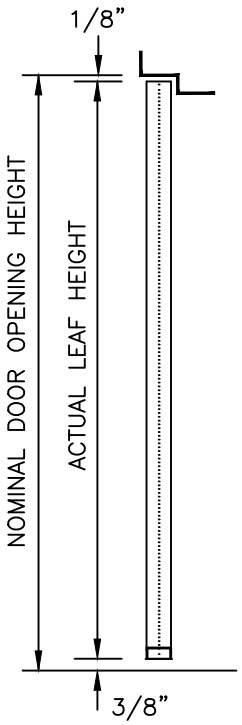
DOOR DESIGNS



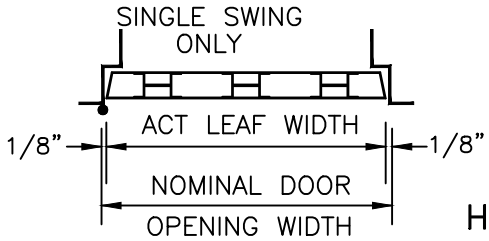
TECH-DATA



DOOR ELEVATION



VERTICAL SECTION

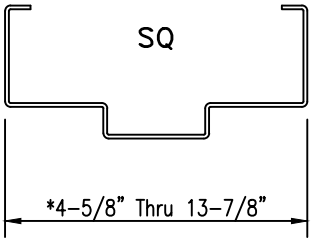


HORIZONTAL SECTION

3'6" MAX WIDTH

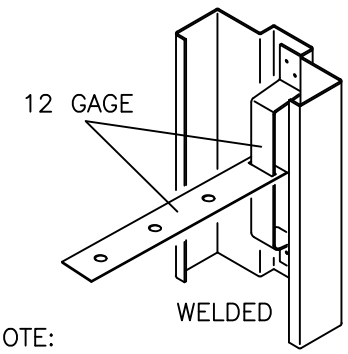
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.4 mm)

TYPICAL PROFILE



*5-1/4" MIN. DEPTH IN 12 GAGE

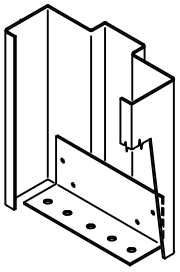
YOKE AND STRAP MASONRY ANCHOR



NOTE:
EXISTING WALL BOLT ANCHORING IS NOT AVAILABLE

FLOOR ANCHOR

ONE PIECE



Welded

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RETURN TO TOP

TECH-DATA

RESTRICTDOR DETENTION SECURITY DOORS

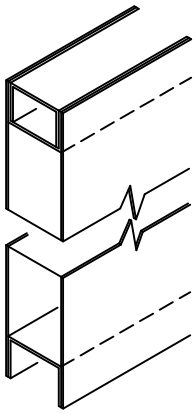
D14-3

1 10 GAGE STEEL END CHANNELS

WELDED TO DOOR

INVERTED TOP CHANNEL W/STEEL CLOSURE CAP

INVERTED BOTTOM CHANNEL

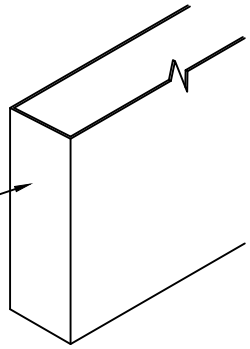


2 VERTICAL EDGES

SEAMLESS VERTICAL EDGES

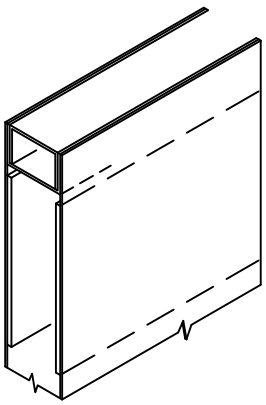
SEAMS WELDED FULL HEIGHT GROUND, DRESSED AND FILLED SMOOTH

EXTRA HEAVY PERIMETER REINFORCEMENT

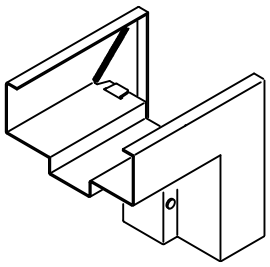


3 CLOSER REINFORCEMENT

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

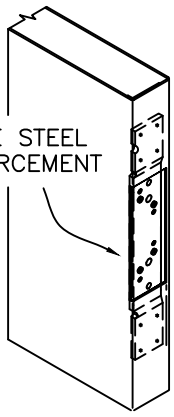
5 HINGE PREPARATION

4-1/2" HEAVY WEIGHT FULL MORTISE HINGES

SOUTHERN STEEL 204FM OR EQUIVALENT

HINGE EDGE IS HANDED AND BEVELED

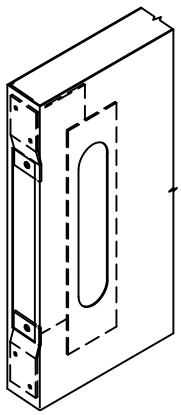
7 GAGE STEEL REINFORCEMENT



6 LOCK PREPARATION

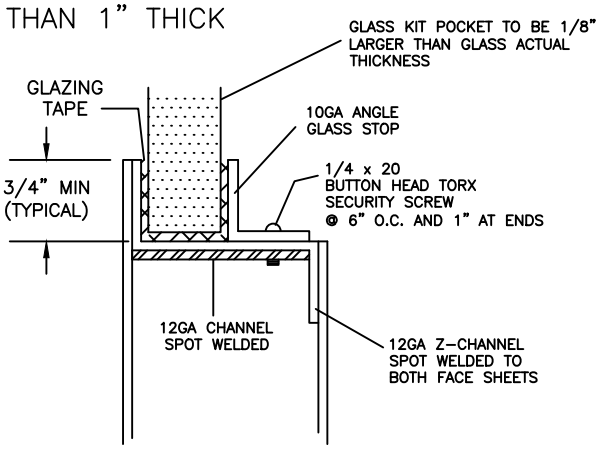
FOR SOUTHERN STEEL 70 SERIES OR EQUIVALENT

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

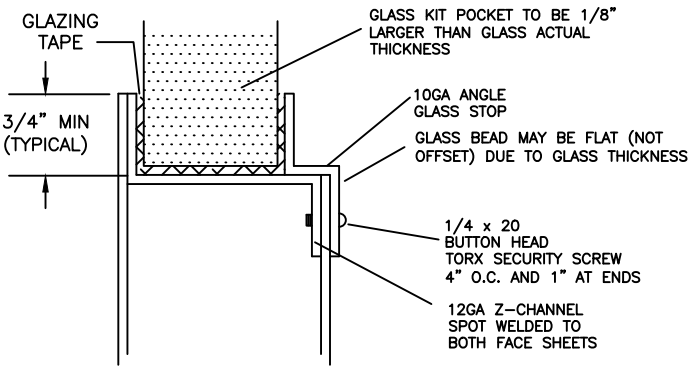


(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

SECURITY GLAZING TRIM FOR GLASS LESS THAN 1" THICK



SECURITY GLAZING TRIM FOR GLASS 1" THICK & GREATER



09/23/20

D14-4

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 gage 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 gage steel and are welded to both face sheets.

RestrictDor frames are all welded, 14 gage 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 gage 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 gage 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 gage 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.

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:

- UNDERWRITERS LABORATORY

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

- RATING: 20 MIN THRU 90 MIN
- MAX. SIZE: 3'6" x 7'4" SINGLE (UL)

Not all ratings are available in all sizes, designs and materials.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV. A60	GALV. G90	RECOMMENDED DOOR FRAME MATERIAL
14 Gage Steel	MAXIMUM DUTY	STD	OPT	OPT	14 Gage Steel
12 Gage Steel	ANSI/NAAMM	STD	OPT	—	12 Gage Steel

10/16/19

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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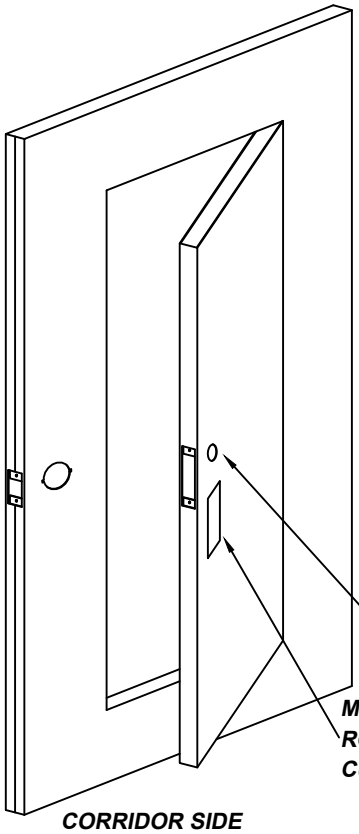
TECH-DATA

BEHAVIORAL HEALTHCARE PATIENT ROOM ACCESS

FULL FLUSH DESIGN
BEVELED LOCK EDGE, HANDED

***STEP THROUGH DOOR (BH-S)**
WITH STEEL STIFFENED CORE
(OPTIONAL HONEYCOMB CORE)

***STEP THROUGH DOOR (BH-SC)**
WITH CUSTOM SIZE ACCESS DOOR
AND STEEL STIFFENED CORE
(OPTIONAL HONEYCOMB CORE)



***MORTISE DEAD BOLT &**
ROCKWOOD 94C FLUSH
CUP PULL RECOMMENDED

CORRIDOR SIDE

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.

**The BH-PRA STEP THROUGH door Accreditation has been accepted by the New York State Office of Mental Health.*

Maximum 45 minute (Warnock Hersey) fire rating is available on Step Thru door with steel stiffened core only.

Frame requirements:
Minimum 16 gage, KD or welded, masonry or drywall. Slip on drywall frame with adjustable plumb anchor is not allowed.

Suggested Use:

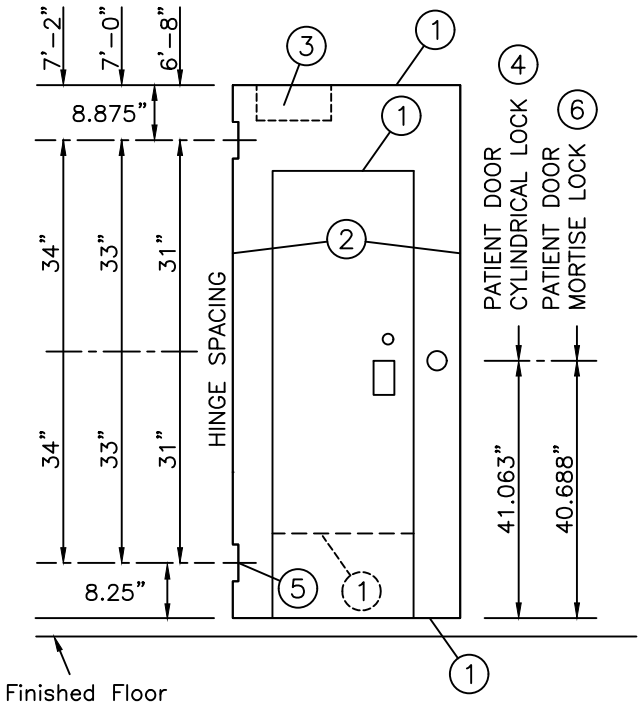
- *Behavioral Health Units*
- *Patient Room Doors*
- *Psychiatric Facilities*
- *De-escalation Rooms*
- *Assisted Living Facilities*
- *Nursing Homes*
- *Correctional Facilities*

TECH-DATA

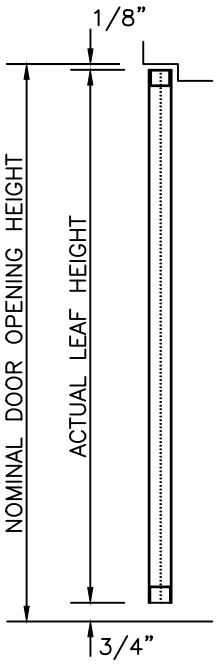
BEHAVIORAL HEALTHCARE PATIENT ROOM ACCESS OPENING

D15-2

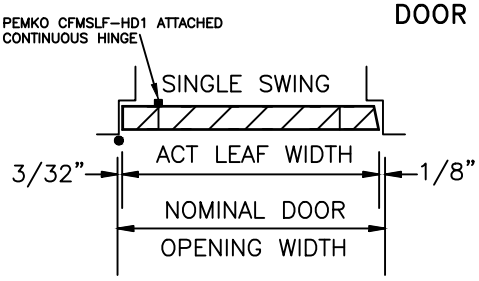
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION

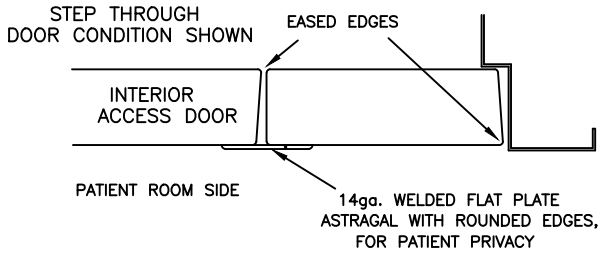


VERTICAL SECTION



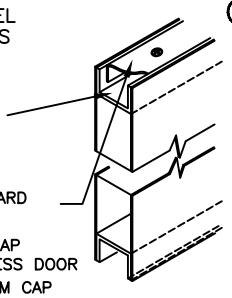
HORIZONTAL SECTION

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)



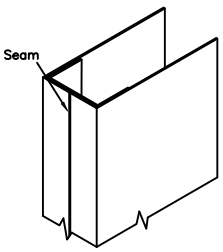
① 16 GAGE STEEL END CHANNELS

- WELDED TO BOTH FACE SHEETS
- INVERTED TOP AND BOTTOM CHANNELS
- TOP CAP IS STANDARD ON PATIENT DOOR
- OPTIONAL – TOP CAP AVAILABLE ON ACCESS DOOR
- OPTIONAL – BOTTOM CAP IS AVAILABLE



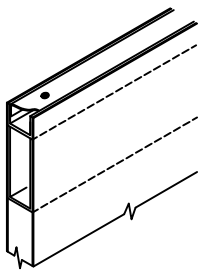
② VERTICAL EDGES PATIENT & ACCESS DOOR

- VISIBLE EDGE SEAM (STANDARD)
- FILLED OR WELDED (OPTIONAL)



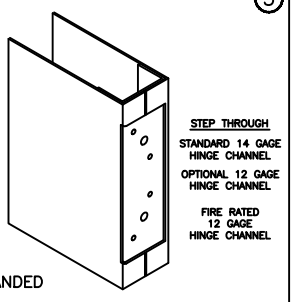
③ CLOSER REINFORCEMENT (OPTIONAL)

- 14 GAGE STEEL CHANNEL WELDED TO END CHANNEL



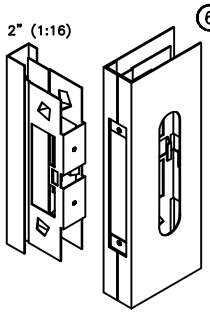
⑤ HINGE PREPARATION (PATIENT DOOR)

- 4-1/2" OR 5" HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES
- ANSI A156.7 TEMPLATE
- HINGE EDGE IS HANDED AND NOT BEVELED.



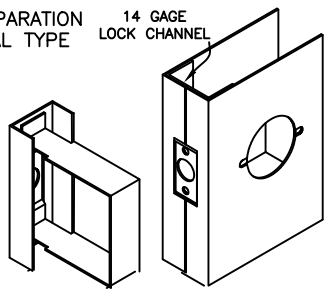
⑥ LOCK PREPARATION MORTISE TYPE

- **(LM1)** (ANSI A115.1) 2-3/4" BACKSET
- **(LM0)** SIMILAR TO DETAIL LESS FACE CUTOUT



④ LOCK PREPARATION CYLINDRICAL TYPE

- **(LC1)** (ANSI A115.2) 2-3/4" BACKSET



LOCK EDGE IS BEVELED

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RETURN TO TOP

TECH-DATA

BEHAVIORAL HEALTHCARE PATIENT ROOM ACCESS OPENING

D15-3

STANDARD SIZES
NOMINAL DOOR OPENING

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

FIRE DOORS

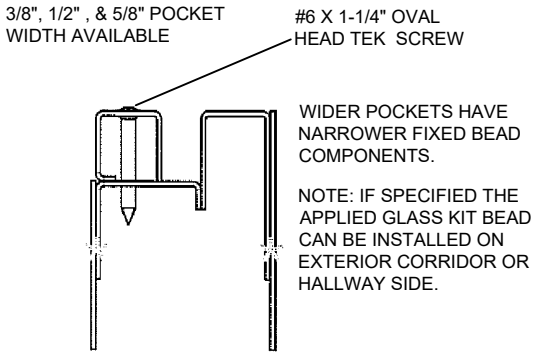
LABELING AGENCY:
WARNOCK HERSEY

TEST: UL10C, NFPA252
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)

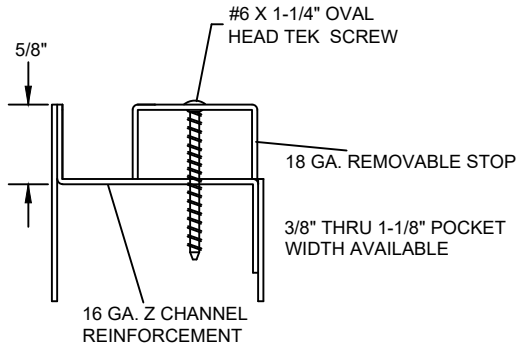
GLASS LITE KITS ARE AVAILABLE

TYPE 11 STANDARD KIT
FIRE RATED & NON-FIRE RATED

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". AVAILABLE WITH STEEL STIFFENED CORE ONLY WHEN FIRE RATED. DOOR MAY BE 16 OR 14 GAUGE.



TYPE 4 KIT
FOR GLASS OVER 1/2" THRU 1"
FIRE RATING-NOT AVAILABLE



MATERIAL

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.

Step Through door face sheets are 16 gage standard, 14 gage optional. Face sheets are joined at their vertical edge with a center seam the full height of door (optional seamless design). 14 gage hinge and lock vertical edge channels are standard, with an option for 12 gage. Door is steel stiffened core standard, with honeycomb core as an option. Fire rated door core shall be steel stiffened. Top and bottom door edges are closed with 16 gage steel channels welded to both face sheets. A 14 gage one piece flat plate astragal is applied around access door opening on patient room side of door. Astragal is applied to top, bottom and lock side. An optional maximum 45 minute (Warnock Hersey) fire rating is available with steel stiffened core and 12 gage hinge channel.

Standard size of access door is 1'8" x 5'0" with custom sizes available.

Frame Requirements: Minimum 16 gage, 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 (specify which). 12 or 14 gage steel channels 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 gage steel channel. The smaller "access door" has a PEMKO CFMSLF-HD1 continuous hinge that is attached. 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 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) and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

DOOR SERIES	DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
				A60	G90	
BH-S, BH-SC	16 Gage Steel (14 Gage Optional)	Extra heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel

02/11/21

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

Ceco Door
ASSA ABLOY
Experience a safer and more open world

RETURN TO TOP

1-3/4" StormPro® 361 TORNADO RESISTANT DOOR & FRAME WITH SARGENT FM8700 SURFACE VERTICAL ROD EXIT DEVICE

DOOR:
MIN. 3'–0" x 6'–8", MAX. 4'–0" x 8'–0" SINGLES or MIN. 6'–0" 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 POLYSTYRENE CORE.

EXIT DEVICE:
SARGENT FM8700 SERIES SURFACE VERTICAL ROD.

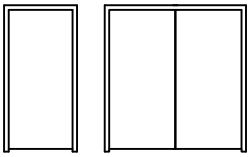
CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR HONEYCOMB CORE DOORS ONLY.

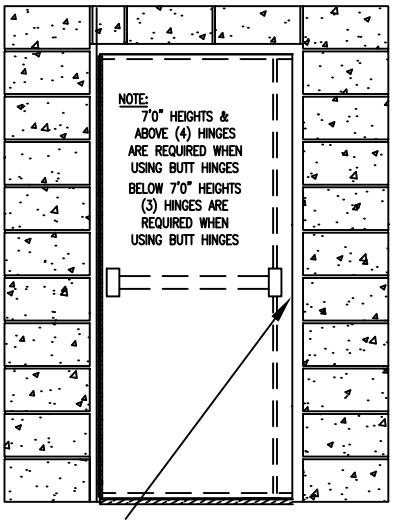
DOOR DESIGN



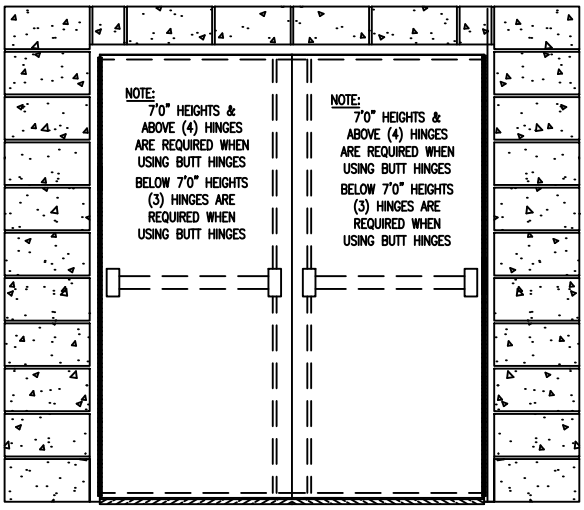
F F

SUGGESTED USE:
DISASTER AND TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL SAFE ROOMS
RESIDENTIAL "SAFE" ROOMS

UL 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 ENGAGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.

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

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 GAGE.

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

Experience a safer and more open world

D17A–1A

1-3/4" StormPro® 361 TORNADO RESISTANT 10" x 10" GLAZED DOOR & FRAME WITH SARGENT FM8700 SURFACE VERTICAL ROD EXIT DEVICE

DOOR:
MIN. 3'–0" x 6'–8", MAX. 4'–0" x 8'–0" SINGLES or MIN. 6'–0" 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 POLYSTYRENE CORE.

EXIT DEVICE:
SARGENT FM8700 SERIES SURFACE VERTICAL ROD.

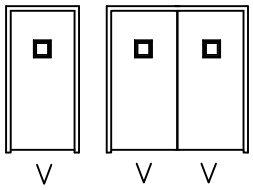
CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE FOR GLAZED OPENINGS. IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR HONEYCOMB CORE DOORS ONLY.

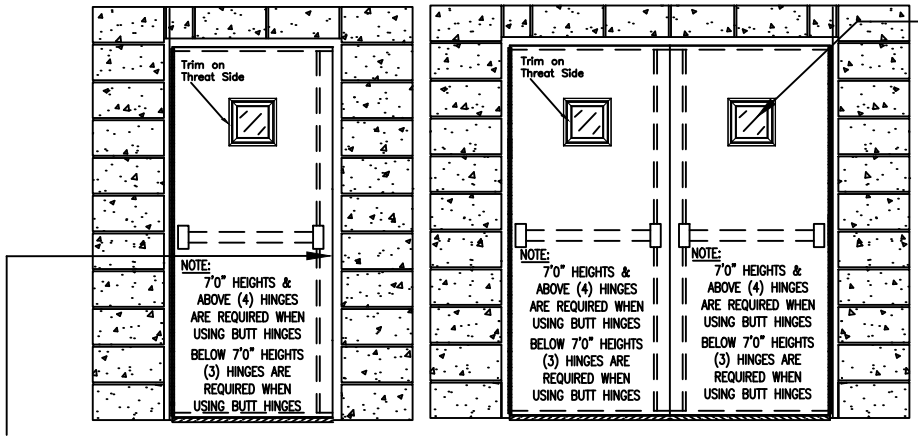
DOOR DESIGN



SUGGESTED USE:
DISASTER AND TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL SAFE ROMS
RESIDENTIAL "SAFE" ROOMS

UL 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"*



10"x10" VISIBLE GLASS ONLY

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2–1/16" NOMINAL. GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.

GLASS NOMINALLY CENTERED IN WIDTH AND LOCATED 60–1/8" ABOVE DOOR BOTTOM TO CENTERLINE OF GLASS ONLY WHEN 653 STRKE IS USED. GLASS WILL BE LOCATED 60–3/8" ABOVE DOOR BOTTOM TO CENTERLINE OF GLASS WITH 655 STRIKE.

MULTIPLE LITES NOT ALLOWED.

(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 ENGAGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.

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

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

08/11/22

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® 361 TORNADO RESISTANT 4" x 25" GLAZED DOOR AND FRAME WITH SARGENT FM8700 SURFACE VERTICAL ROD EXIT DEVICE

DOOR:
MIN. 3'–0" x 6'–8", MAX. 4'–0" x 8'–0" SINGLES or MIN. 6'–0" 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 POLYSTYRENE CORE.

EXIT DEVICE:
SARGENT FM8700 SERIES SURFACE VERTICAL ROD.

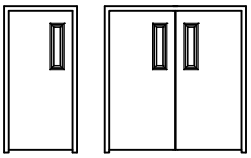
CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

FIRE RATING:
NOT AVAILABLE

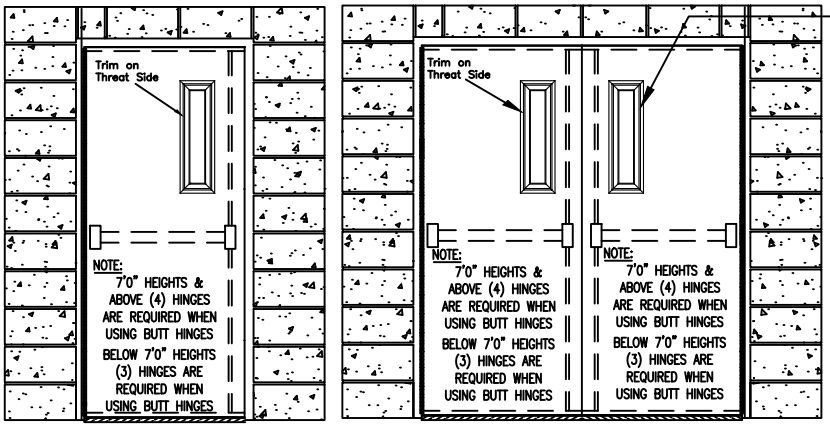
DOOR DESIGN



SUGGESTED USE:
DISASTER AND TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL SAFE ROMS
RESIDENTIAL "SAFE" ROOMS

UL 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"x25" VISIBLE GLASS ONLY

KERALITE ULTRA 90 STORM SHELTER GLASS MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 1–3/4" NOMINAL.

GLASS LOCATED APPROXIMATELY 8–5/8" 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 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 ENGAGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.

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

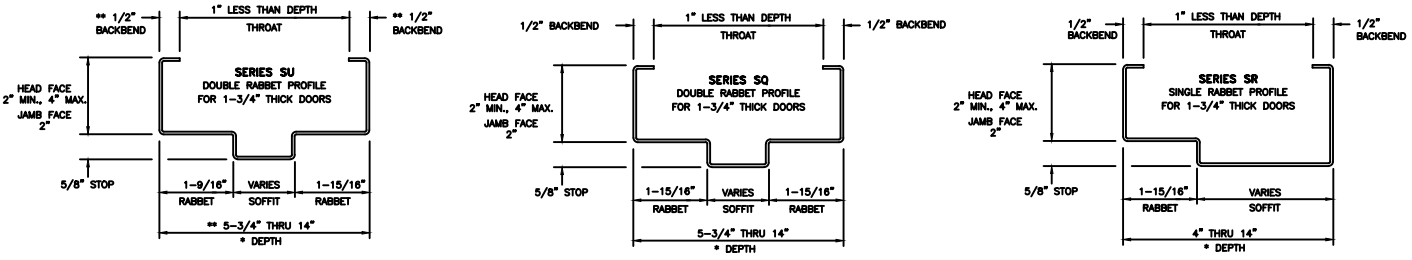
ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

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® 361 TORNADO RESISTANT DOOR & FRAME WITH SARGENT FM8700 SURFACE VERTICAL ROD EXIT DEVICE UL 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.

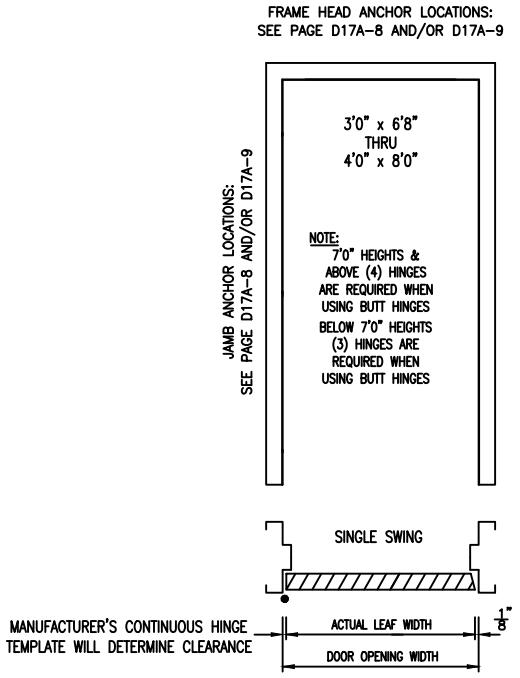
FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE.

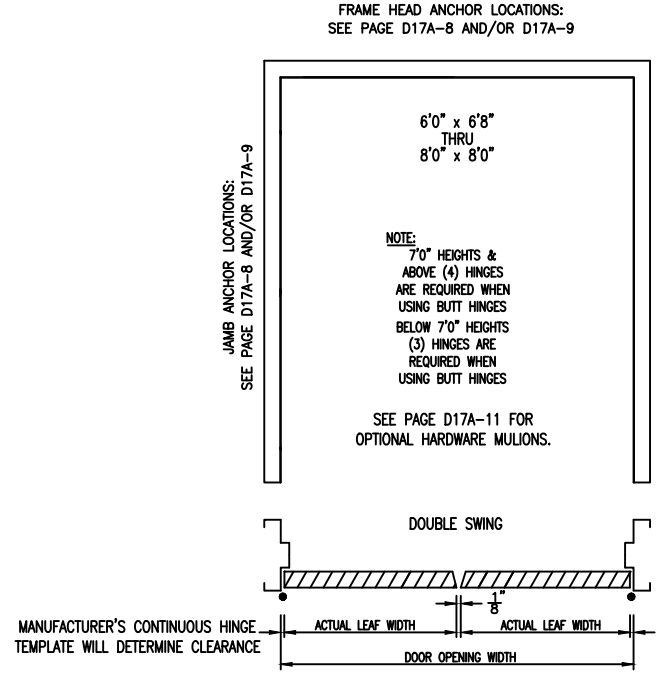
SEE PAGES D17A-8 & D17A-9 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAGE (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 PAGES D17A-10 AND D17A-11.





HORIZONTAL SECTIONS

"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 SURFACE MULTI POINT EXIT DEVICE

DOOR:
MIN. 3'–0" X 6'–8", MAX. 4'–0" X 8'–0" SINGLES or MIN. 6'–0" X 6'–8", MAX. 8'–0" x 8'–0" PAIRS, 14 GA. A60 (OPTIONAL 12 GA.) GALVANNEALED OR COLD ROLLED FACE SHEETS, WITH 14 GA. TOP & BOTTOM CHANNELS, WELDED TOP CAP AND POLYSTYRENE CORE.

EXIT DEVICE:
CORBIN RUSSWIN FE5400S SERIES

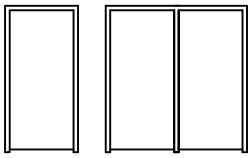
CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR HONEYCOMB CORE DOORS ONLY.

DOOR DESIGN



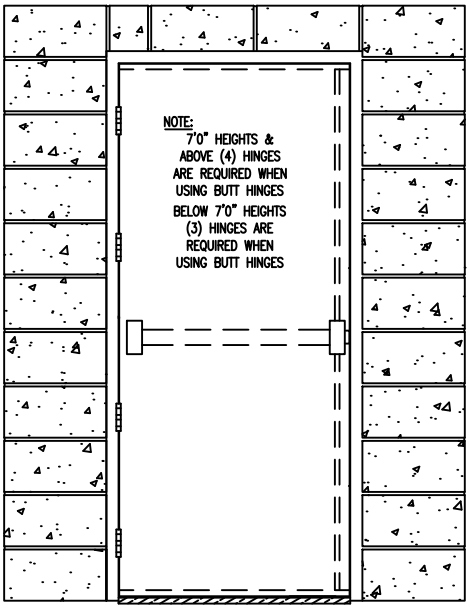
MULLION:
CORBIN RUSSWIN
FE707A or FE708A

SUGGESTED USE:

DISASTER AND TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
RESIDENTIAL "SAFE" ROOMS

UL 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 ENGAGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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

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 GAGE.

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

Experience a safer
and more open world

D17A–2A

ASSA ABLOY 1-3/4" StormPro® 361 TORNADO RESISTANT 10" x 10" GLAZED DOOR AND FRAME WITH CORBIN RUSSWIN FE5400S SURFACE MULTI POINT EXIT DEVICE

DOOR:
MIN. 3'–0" X 6'–8", MAX. 4'–0" X 8'–0" SINGLES or MIN. 6'–0" 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 POLYSTYRENE CORE.

EXIT DEVICE:
CORBIN RUSSWIN FE5400S SERIES

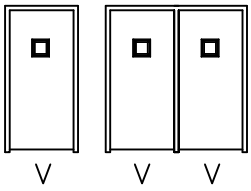
CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 FOR HONEYCOMB CORE DOORS ONLY.

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

UL CERTIFIED TO:

- *ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"*
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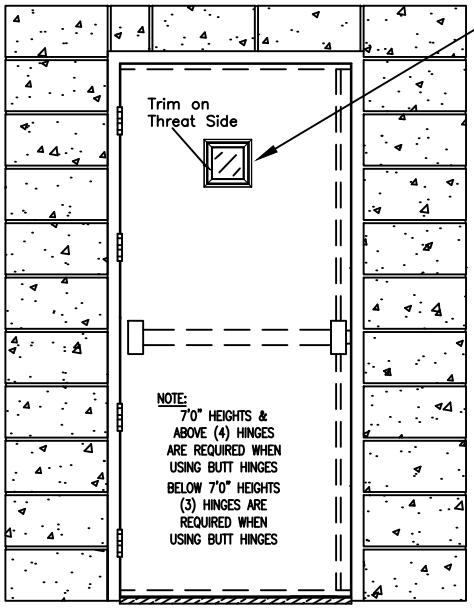


10"x10" VISIBLE GLASS ONLY

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED.
GLASS THICKNESS IS 2–1/16" NOMINAL.
GLASS WILL EXTEND BEYOND THE FACE OF THE DOOR ON THE THREAT SIDE.
GLASS NOMINALLY CENTERED IN WIDTH AND LOCATED 60–1/8" ABOVE DOOR BOTTOM TO CENTERLINE OF GLASS ONLY.

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 ENGAGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

08/11/22

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

D17A–2B

ASSA ABLOY 1-3/4" StormPro® 361 TORNADO RESISTANT 4" x 25" GLAZED DOOR AND FRAME WITH CORBIN RUSSWIN FE5400S SURFACE MULTI POINT EXIT DEVICE

DOOR:
MIN. 3'–0" X 6'–8", MAX. 4'–0" X 8'–0" SINGLES or MIN. 6'–0" 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 POLYSTYRENE CORE.

EXIT DEVICE:
CORBIN RUSSWIN FE5400S SERIES

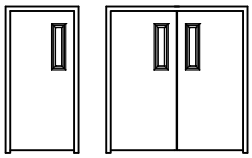
CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

OPTIONAL FIRE RATING:
NOT AVAILABLE

DOOR DESIGN



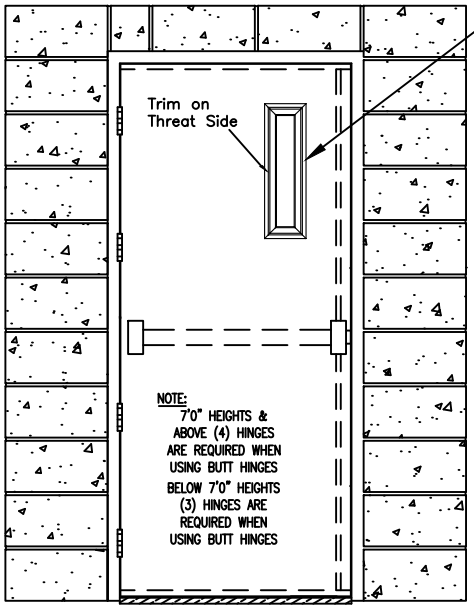
MULLION:
CORBIN RUSSWIN
FE707A or FE708A

SUGGESTED USE:

DISASTER AND TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
RESIDENTIAL "SAFE" ROOMS

UL 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"x25" VISIBLE GLASS ONLY

KERALITE ULTRA 90 STORM SHELTER
GLASS MUST BE FACTORY INSTALLED.
GLASS THICKNESS IS 1–3/4" NOMINAL.

GLASS LOCATED APPROXIMATELY 8–5/8" FROM
CENTER OF BEVELED LOCK EDGE TO VISIBLE GLASS.
BOTTOM OF VISIBLE GLASS LOCATED 48–1/4"
ABOVE FINISHED FLOOR STANDARD.
ADA COMPLIANT LOCATION IS NOT AVAILABLE.

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 ENGAGE STRIKE.
- FLOOR MUST BE POURED LEVEL AND FRAME MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW DOORS TO FUNCTION PROPERLY.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

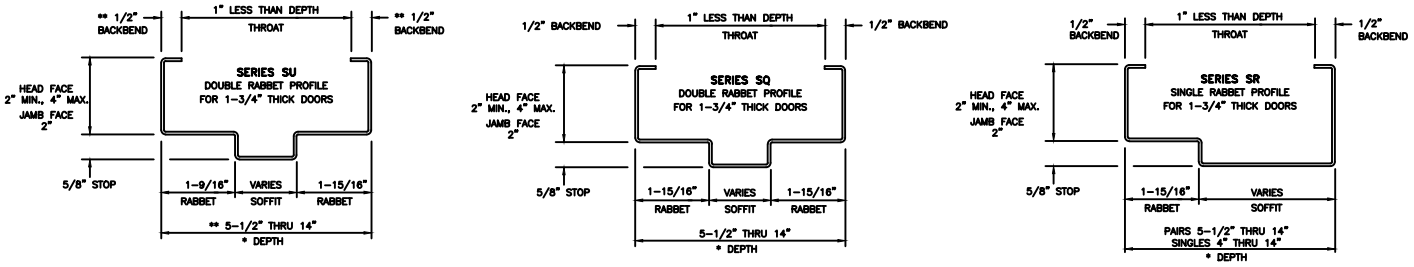
08/11/22

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® 361 TORNADO RESISTANT DOOR & FRAME
WITH CORBIN RUSSWIN FE5400S SURFACE MULTI POINT EXIT DEVICE
UL 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.

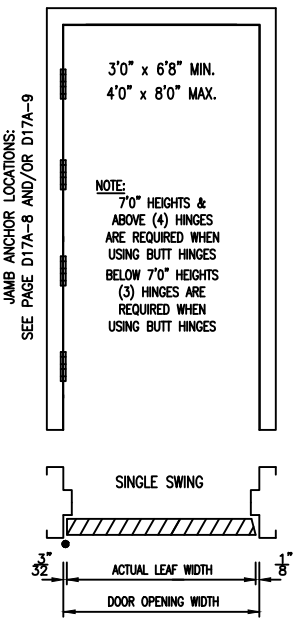
SEE PAGES D17A–8 & D17A–9 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAGE (OPTIONAL 12 GA.) HOT–DIPPED A60 GALVANNEALED or COLD ROLLED STEEL.

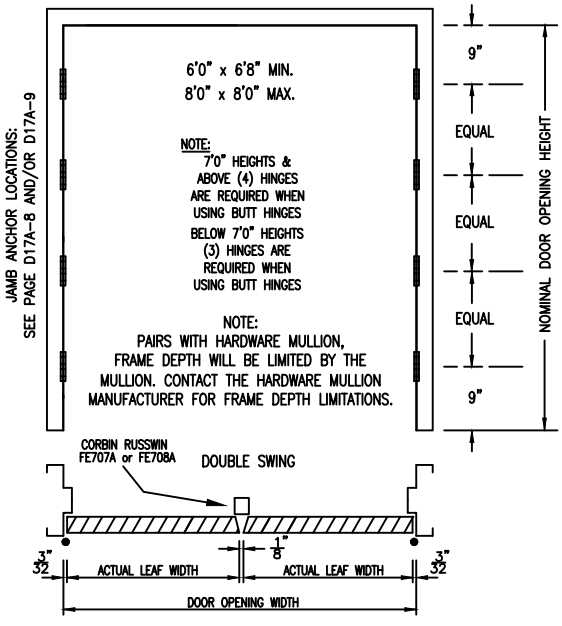
FRAMES MAY BE KNOCK DOWN or WELDED CORNERS.

APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE SHOWN ON PAGES D17A–10 AND D17A–11.

FRAME HEAD ANCHOR LOCATIONS:
SEE PAGE D17A–8 AND/OR D17A–9



FRAME HEAD ANCHOR LOCATIONS:
SEE PAGE D17A–8 AND/OR D17A–9



HORIZONTAL SECTIONS

"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)

Experience a safer
and more open world

ASSA ABLOY

D17A-3

1-3/4" StormPro® 361 TORNADO RESISTANT DOOR & FRAME WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

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 POLYSTYRENE CORE. POLYURETHANE CORE MAY BE PROVIDED AT FACTORY DISCRETION.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A-11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A-11.

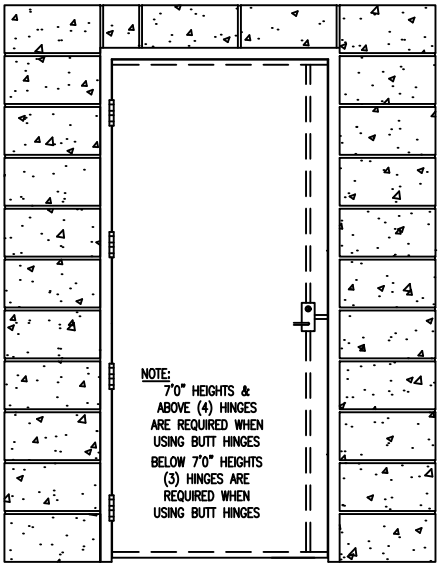
OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A-10 and D17A-11.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HOUR IN ACCORDANCE, WITH UL10B, UL 10C, UL 1784, & NFPA 252 IN HONEYCOMB CORE ONLY.

SUGGESTED USE:
DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A-8 & D17A-9 FOR ALL ANCHOR LOCATIONS.



UL CERTIFIED TO:

- **ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of Storm Shelters"**
- **FEMA P-361(2021) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**

- 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 ENGAGE STRIKE.
- WHEN USING 3-SIDED FRAMES, 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.
- 4-SIDED FRAMES ARE OPTIONAL.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

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

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 GAGE.

08/11/22

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)

ASSA ABLOY

1-3/4" StormPro® 361 TORNADO RESISTANT 10" x 10" GLAZED DOOR & FRAME WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

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 POLYSTYRENE CORE.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A-11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A-11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A-10 AND D17A-11.

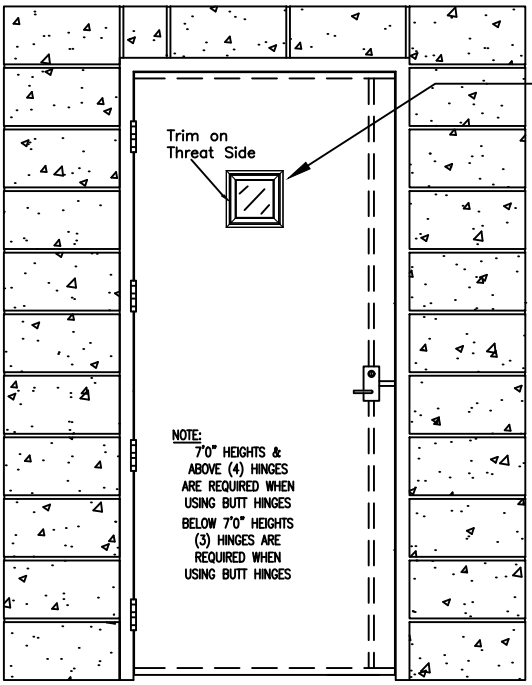
OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTES IN ACCORDANCE, WITH UL 10B, UL 10C, UL 1784, & NFPA 252 IN HONEYCOMB CORE ONLY.

SUGGESTED USE:

DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A-8 & D17A-9 FOR ALL ANCHOR LOCATIONS.



10"x10" VISIBLE GLASS ONLY

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED.
GLASS THICKNESS IS 2-1/16" 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 ENGAGE STRIKE.
- WHEN USING 3-SIDED FRAMES, 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.
- 4-SIDED FRAMES ARE OPTIONAL.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

UL CERTIFIED TO:

- **ICC 500(2020 & 2104) "ICC/NSSA Standard for the Design and Construction or Storm Shelters"**
- **FEMA P-361(2021) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**

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

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)

ASSA ABLOY

1-3/4" StormPro® 361 TORNADO RESISTANT 4" x 25" GLAZED DOOR & FRAME WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

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 POLYSTYRENE CORE.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A-11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A-11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A-10 AND D17A-11.

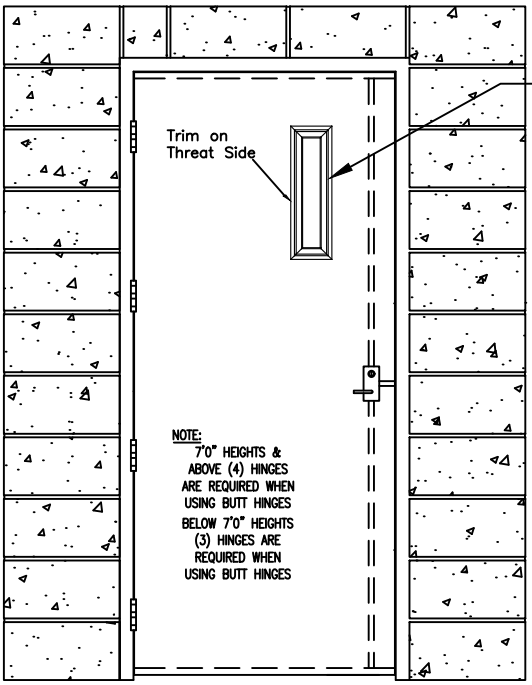
OPTIONAL FIRE RATING:
NOT AVAILABLE

SUGGESTED USE:

DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A-8 & D17A-9 FOR ALL ANCHOR LOCATIONS.



4"x25" VISIBLE GLASS ONLY

KERALITE ULTRA 90 STORM SHELTER GLASS MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 1-3/4" NOMINAL.

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 STRIKE MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLT TO PROPERLY ENGAGE STRIKE.
- WHEN USING 3-SIDED FRAMES, 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.
- 4-SIDED FRAMES ARE OPTIONAL.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

UL CERTIFIED TO:

- **ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction or Storm Shelters"**
- **FEMA P-361(2021) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**

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

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)

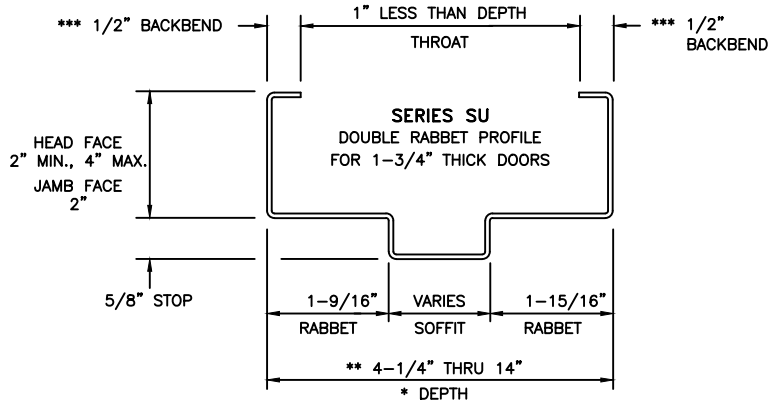
ASSA ABLOY

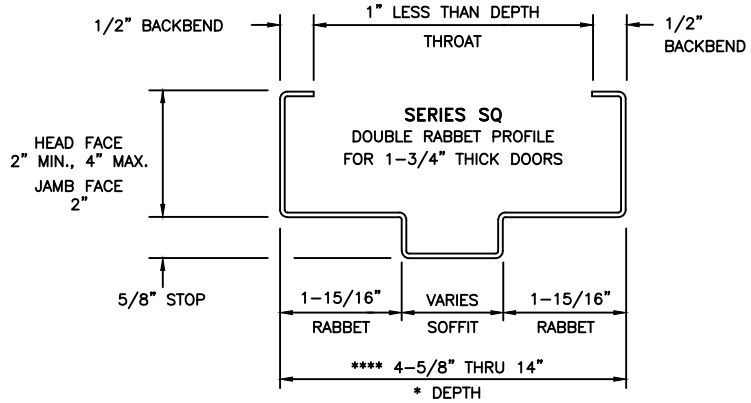
D17A–3C

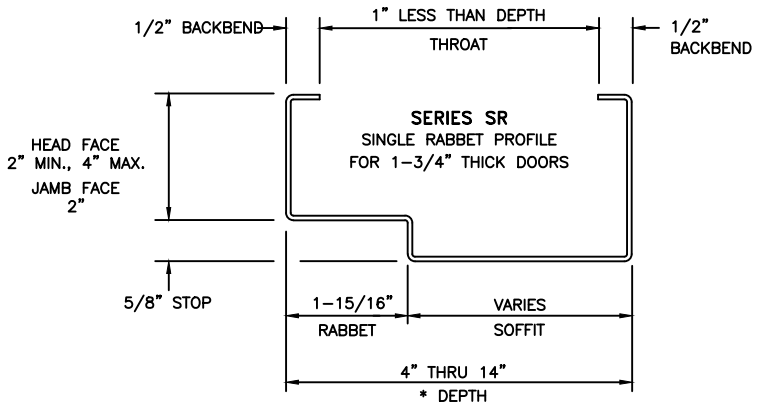
1-3/4" StormPro®361 TORNADO RESISTANT DOOR & FRAME WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

UL 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 PAGES D17A–8 & D17A–9 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAGE (OPTIONAL 12 GA.) HOT–DIPPED A60 GALVANNEALED or COLD ROLLED STEEL.

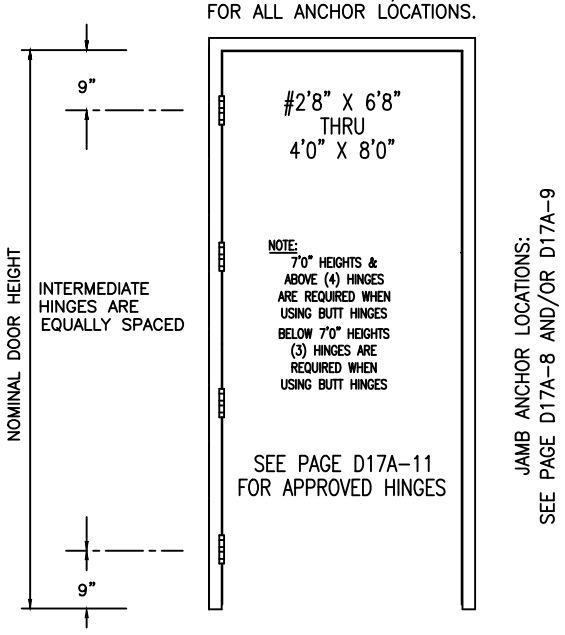
FRAMES MAY BE KNOCK DOWN or WELDED CORNERS.

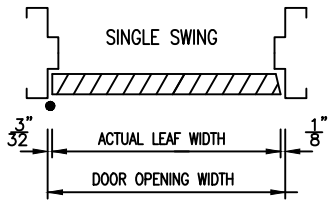
SEE FRAME ELEVATION BELOW FOR HINGE QUANTITIES, LOCATIONS AND OPENING SIZES.

APPROVED HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

4–SIDED FRAMES ARE OPTIONAL.

SEE PAGE D17A–8 AND/OR D17A–9
FOR ALL ANCHOR LOCATIONS.





HORIZONTAL SECTION

 # ASSEMBLIES MAY BE LIMITED TO 3'0"x7'0" MINIMUM SIZE FOR COMPLIANCE WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

08/11/22

ASSA ABLOY

1-3/4" StormPro® 361 TORNADO RESISTANT COMMUNICATING SINGLE DOOR & FRAME WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

D17A–3D

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 POLYSTYRENE CORE.
POLYURETHANE CORE MAY BE PROVIDED AT FACTORY DISCRETION.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.
NON–STORMPRO DOORS DO NOT REQUIRE THE SAME HARDWARE, QUANTITIES OR LOCATIONS AS THE STORMPRO DOORS.

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 and D17A–11.

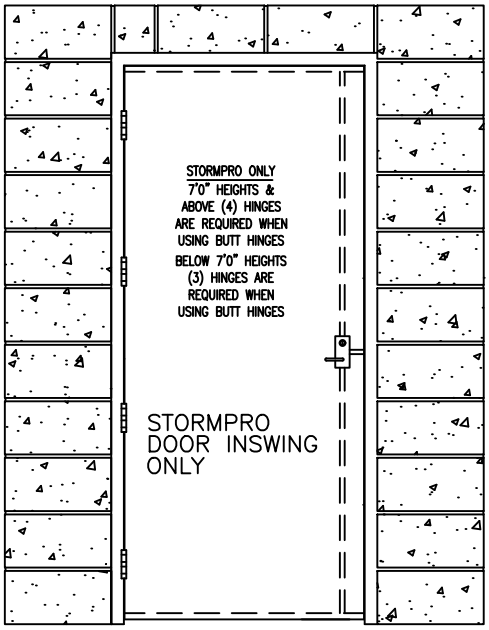
OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE, WITH UL10B, UL10C, UL 1784, & NFPA 252 IN HONEYCOMB CORE ONLY.

SUGGESTED USE:

DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A–8 & D17A–9 FOR ALL ANCHOR LOCATIONS.



UL CERTIFIED TO:

- **ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction of Storm Shelters"**
- **FEMA P-361(2021) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**

- 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 ENGAGE 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.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

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

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 GAGE.

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)

08/11/22

D17A-3E

1-3/4" StormPro® 361 TORNADO RESISTANT 10" x 10" GLAZED COMMUNICATING SINGLE DOOR & FRAME WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

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 POLYSTYRENE CORE.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A-11.
NON-STORMPRO DOORS DO NOT REQUIRE THE SAME HARDWARE, QUANTITIES OR LOCATIONS AS THE STORMPRO DOORS.

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A-11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A-10 AND D17A-11.

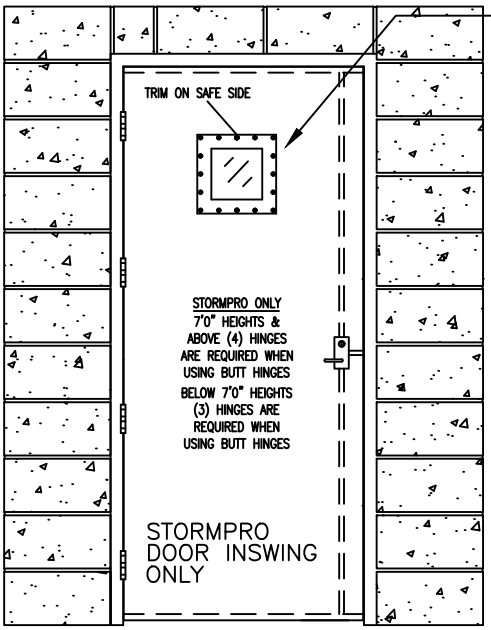
OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE, WITH UL10B, UL 10C, UL 1784, & NFPA 252 IN HONEYCOMB CORE ONLY.

SUGGESTED USE:

DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A-8 & D17A-9 FOR ALL ANCHOR LOCATIONS.



10"x10" VISIBLE GLASS ONLY

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED.
GLASS THICKNESS IS 2-1/16" 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 ENGAGE 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.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

UL CERTIIFIED TO:

- **ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction or Storm Shelters"**
- **FEMA P-361(2021) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**

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

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

08/11/22

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 CONCEALED MULTI POINT LOCK

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 POLYSTYRENE CORE.

LOCK:
CORBIN RUSSWIN FE6600 SERIES OR SARGENT FM7300 SERIES

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.
NON–STORMPRO DOORS DO NOT REQUIRE THE SAME HARDWARE, QUANTITIES OR LOCATIONS AS THE STORMPRO DOORS.

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

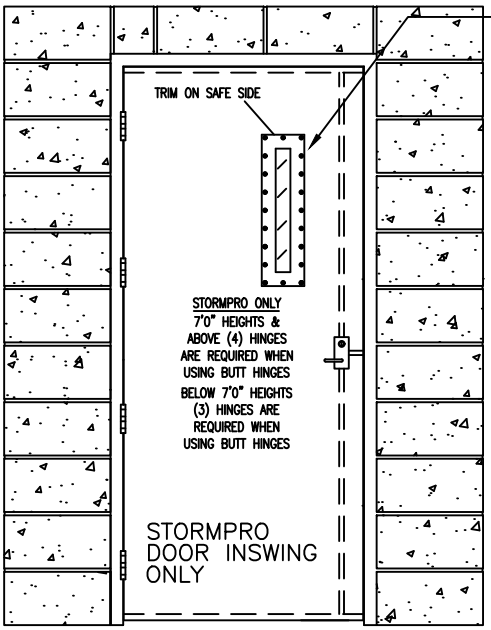
OPTIONAL FIRE RATING:
NOT AVAILABLE

SUGGESTED USE:

DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A–8 & D17A–9 FOR ALL ANCHOR LOCATIONS.



4"x25" VISIBLE GLASS ONLY

KERALITE ULTRA 90 STORM SHELTER GLASS MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 1–3/4" NOMINAL.

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 ARE 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 ENGAGE 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.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

UL CERTIFIED TO:

- **ICC 500(2020 & 2014) "ICC/NSSA Standard for the Design and Construction or Storm Shelters"**
- **FEMA P-361(2021) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**

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

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"

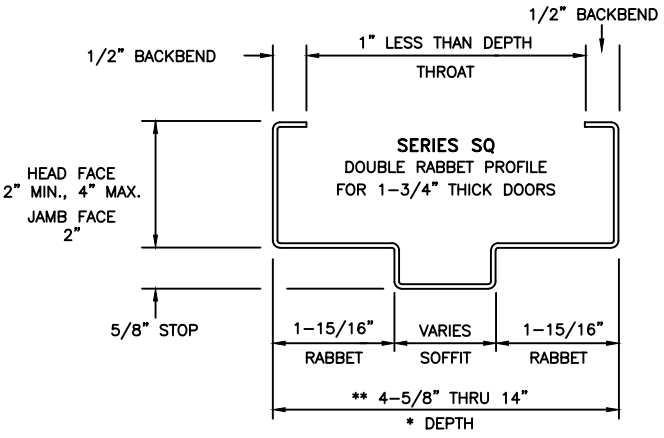
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

D17A-3G

1-3/4" STORMPRO® 361 TORNADO RESISTANT COMMUNICATING SINGLE STORMPRO DOOR & FRAME WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 MULTI POINT LOCK

UL 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 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 PAGES D17A-8 & D17A-9 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAGE (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 PAGES D17A-10 AND D17A-11.

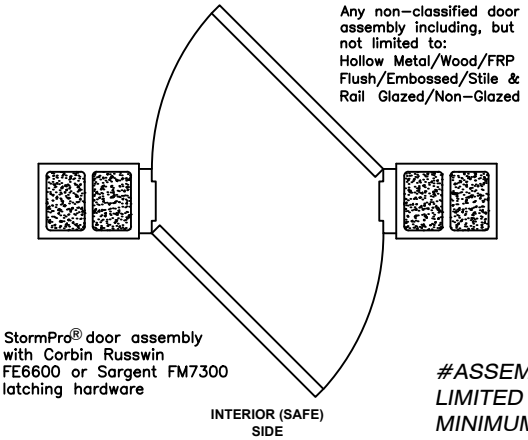
4-SIDED FRAMES ARE NOT ALLOWED.

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.

OPPOSITE JAMB SWING

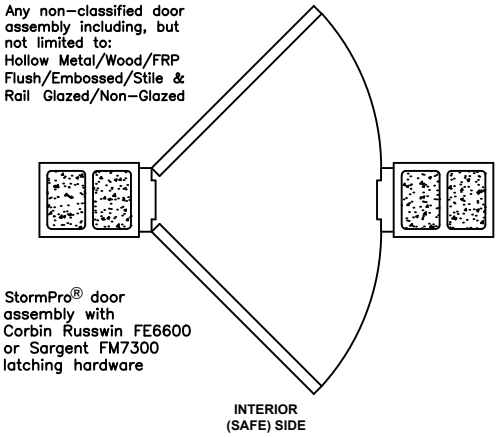
EXTERIOR (THREAT) SIDE



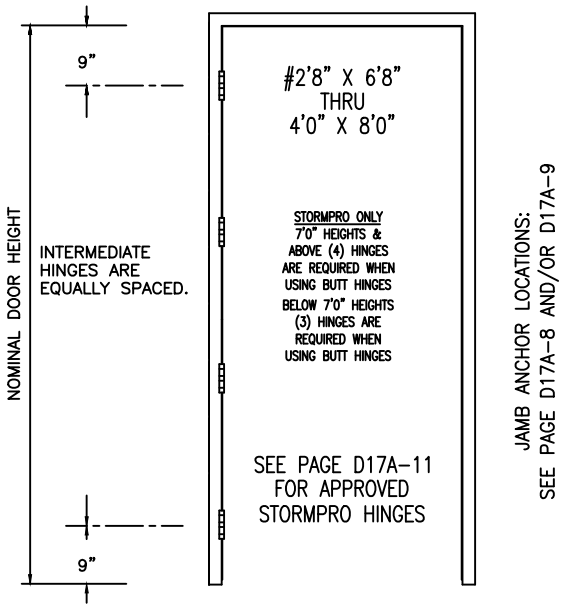
#ASSEMBLIES MAY BE LIMITED TO 3'0"x7'0" MINIMUM SIZE FOR COMPLIANCE WITH DOMESTIC GOVERNMENT SOURCING RESTRICTIONS, TRADE AGREEMENT OR ACQUISITION PLOICIES.

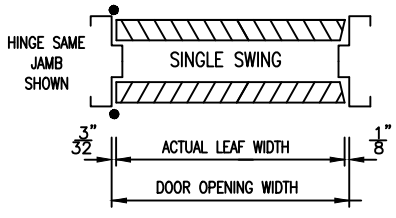
SAME JAMB SWING

EXTERIOR (THREAT) SIDE



SEE PAGE D17A-8 AND/OR D17A-9 FOR ALL ANCHOR LOCATIONS.





HORIZONTAL SECTION

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

08/11/22

ASSA ABLOY

1-3/4" StormPro® 361 & 320 TORNADO RESISTANT PAIRS WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

DOORS:
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 POLYSTYRENE CORE. POLYURETHANE CORE MAY BE PROVIDED AT FACTORY DISCRETION.

LOCK:
CORBIN RUSSWIN FE6600 SERIES or SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR YALE 988Y

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A-11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A-11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A-10 AND D17A-11.

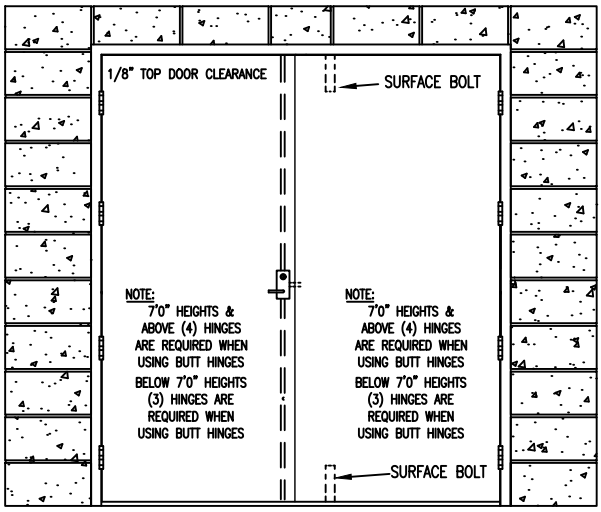
OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 IN HONEYCOMB CORE ONLY.

SUGGESTED USE:

DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A-8 & D17A-9 FOR ALL ANCHOR LOCATIONS.



- 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 BOLTS TO PROPERLY ENGAGE STRIKES.
- WHEN USING 3-SIDED FRAMES, 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.
- 4-SIDED FRAMES ARE OPTIONAL.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

10 GAGE 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.

UL CLASSIFIED TO:

- **ICC 500(2014) "ICC/NSSA Standard for the Design and Construction or Storm Shelters"**
- **FEMA P-361(2015) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**
- **FEMA P-320 (2014) "Taking Shelter from the storm: Buildng a Safe Room for Your Home or Small Buisness"**

"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE"

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341
FEMA 320, 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341

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 GAGE.

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 500-2014 STANDARD.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

ASSA ABLOY

1-3/4" StormPro®361 & 320 TORNADO RESISTANT 10" x 10" GLAZED PAIRS WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

DOORS:
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 POLYSTYRENE CORE.

LOCK:
CORBIN RUSSWIN FE6600 SERIES or SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR YALE 988Y

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

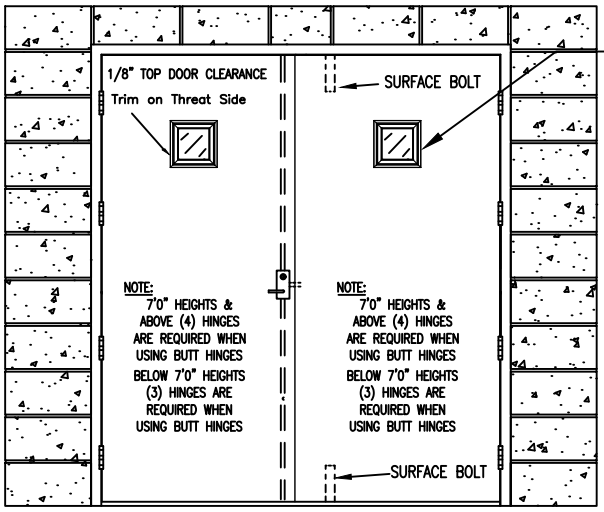
OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 IN HONEYCOMB CORE ONLY.

SUGGESTED USE:

DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A–8 & D17A–9 FOR ALL ANCHOR LOCATIONS.



10"x10" VISIBLE GLASS ONLY

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 2–1/16" 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 STRIKES MUST BE ATTACHED TO CONCRETE OR STRUCTURAL STEEL AND ALLOW BOTTOM BOLTS TO PROPERLY ENGAGE STRIKES.
- WHEN USING 3–SIDED FRAMES, 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.
- 4–SIDED FRAMES ARE OPTIONAL.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

10 GAGE 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.

UL CLASSIFIED TO:

- **ICC 500(2014) "ICC/NSSA Standard for the Design and Construction or Storm Shelters"**
- **FEMA P-361(2015) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**
- **FEMA P-320 (2014) "Taking Shelter from the storm: Buildng a Safe Room for Your Home or Small Buisness"**

"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE"

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC500/NSSA	INSWING OR OUTSWING	15–LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341
FEMA 320, 361		15–LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341

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 500-2014 STANDARD.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

ASSA ABLOY

1-3/4" StormPro®361 & 320 TORNADO RESISTANT 4" x 25" GLAZED PAIRS WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

DOORS:
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 POLYSTYRENE CORE.

LOCK:
CORBIN RUSSWIN FE6600 SERIES or SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR YALE 988Y

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A-11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A-11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A-10 AND D17A-11.

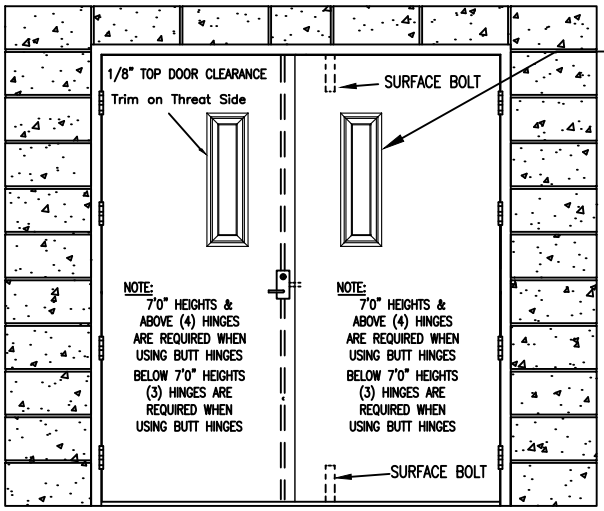
OPTIONAL FIRE RATING:
NOT AVAILABLE

SUGGESTED USE:

DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A-8 & D17A-9 FOR ALL ANCHOR LOCATIONS.



4"x25" VISIBLE GLASS ONLY

KERALITE ULTRA 90 STORM SHELTER GLASS MUST BE FACTORY INSTALLED. GLASS THICKNESS IS 1-3/4" NOMINAL.

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 BOLTS TO PROPERLY ENGAGE STRIKES.
- WHEN USING 3-SIDED FRAMES, 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.
- 4-SIDED FRAMES ARE OPTIONAL.
- DOORS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

10 GAGE 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.

UL CLASSIFIED TO:

- **ICC 500(2014) "ICC/NSSA Standard for the Design and Construction or Storm Shelters"**
- **FEMA P-361(2015) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**
- **FEMA P-320 (2014) "Taking Shelter from the storm: Buildng a Safe Room for Your Home or Small Buisness"**

"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE"

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341
FEMA 320, 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

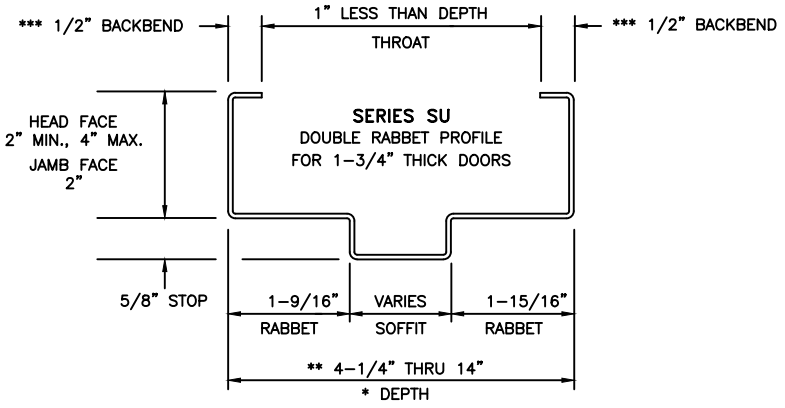
DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2014 STANDARD.

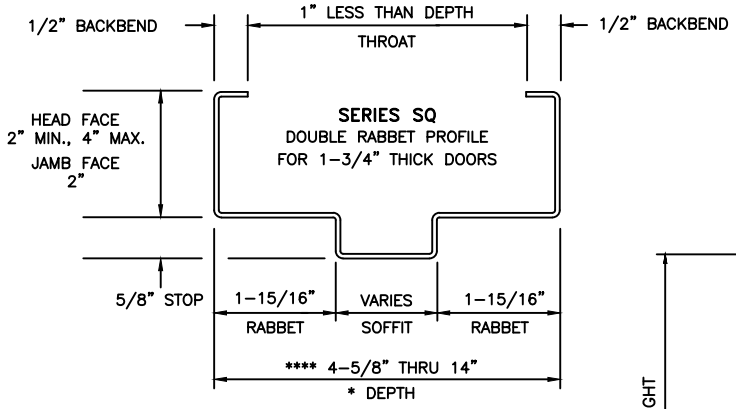
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

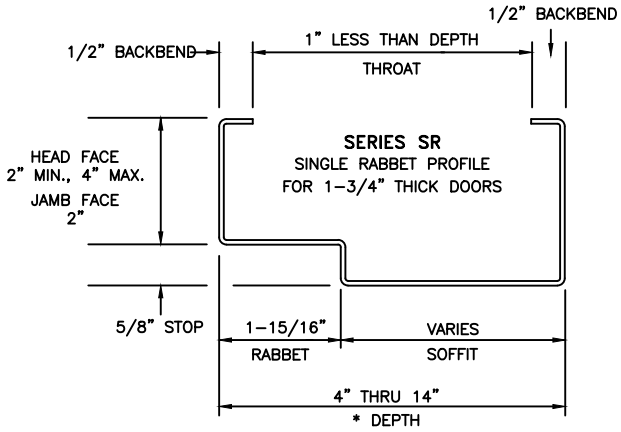
1-3/4" StormPro®361 & 320 TORNADO RESISTANT PAIRS WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

UL Classified to ICC 500 (2014), FEMA P-361 (2015) and FEMA P-320 (2014)

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 PAGES D17A-8 & D17A-9 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAGE (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.

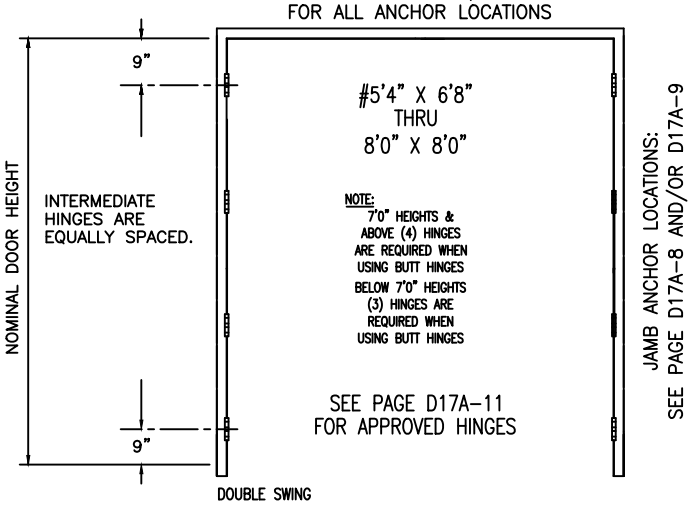
HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A-10 AND D17A-11.

4-SIDED FRAMES ARE OPTIONAL.

3/8" STD DOOR UNDERCUT

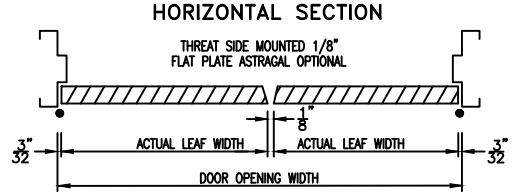
3/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE.

SEE PAGE D17A-8 AND/OR D17A-9 FOR ALL ANCHOR LOCATIONS



#ASSEMBLIES MAY BE LIMITED TO 6'0"x7'0" MINIMUM SIZE FOR COMPLIANCE WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

HORIZONTAL SECTION



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

ASSA ABLOY 1-3/4" StormPro® 361 & 320 TORNADO RESISTANT COMMUNICATING PAIRS WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOORS:
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 POLYSTYRENE CORE. POLYURETHANE CORE MAY BE PROVIDED AT FACTORY DISCRETION.

LOCK:
CORBIN RUSSWIN FE6600 SERIES or SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR YALE 988Y

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A-11.
NON-STORMPRO DOORS DO NOT REQUIRE THE SAME HARDWARE, QUANTITIES OR LOCATIONS AS THE STORMPRO DOORS.

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A-11.

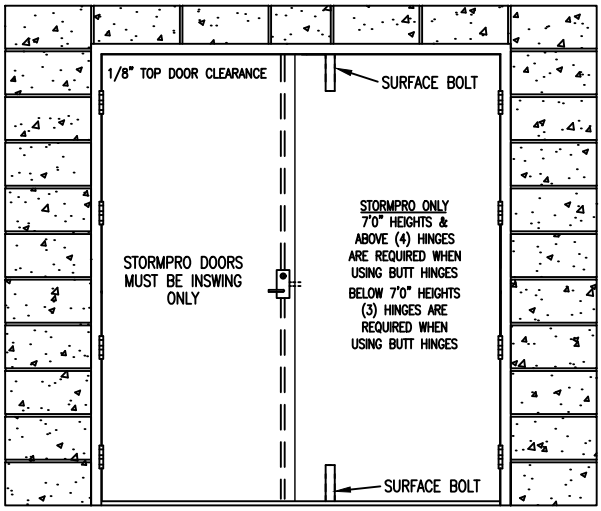
OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A-10 AND D17A-11.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 IN HONEYCOMB CORE ONLY.

SUGGESTED USE:
DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A-8 & D17A-9 FOR ALL ANCHOR LOCATIONS.



10 GAGE FLAT PLATE ASTRAGAL STRIP IS OPTIONAL AND WOULD BE FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE INACTIVE DOOR.

UL CLASSIFIED TO:

- **ICC 500(2014) "ICC/NSSA Standard for the Design and Construction of Storm Shelters"**
- **FEMA P-361(2015) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**
- **FEMA P-320 (2014) "Taking Shelter from the storm: Building a Safe Room for Your Home or Small Buisness"**

- 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 ENGAGE 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.

"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE"

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC500/NSSA	INSWING ONLY	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341
FEMA 320, 361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341

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 GAGE.

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 500-2014 STANDARD.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

Experience a safer and more open world

D17A–4E

ASSA ABLOY 1-3/4" StormPro® 361 & 320 TORNADO RESISTANT 10" x 10" GLAZED COMMUNICATING PAIRS WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI-POINT LOCK

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOORS:
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 POLYSTYRENE CORE.

LOCK:
CORBIN RUSSWIN FE6600 SERIES or SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR YALE 988Y

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.
NON–STORMPRO FRAMES DO NOT REQUIRE THE SAME HARDWARE, QUANTITIES OR LOCATIONS AS THE STORMPRO FRAMES.

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

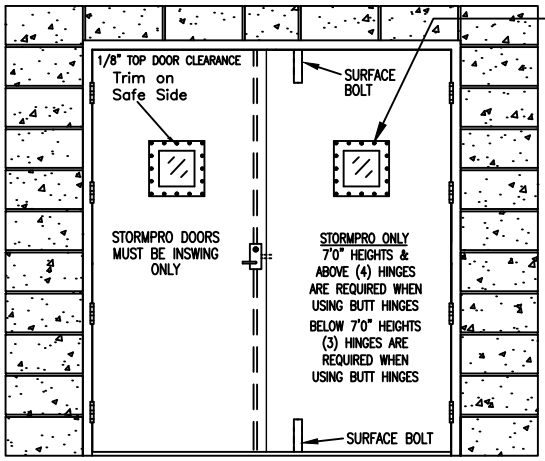
OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 90 MINUTE IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252 IN HONEYCOMB CORE ONLY.

SUGGESTED USE:
DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A–8 & D17A–9 FOR ALL ANCHOR LOCATIONS.



10"x10" VISIBLE GLASS ONLY

CONTRAFLAM ULTIMAX 90 MUST BE FACTORY INSTALLED.
GLASS THICKNESS IS 2–1/16" 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 BOLTS TO PROPERLY ENGAGE 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.

10 GAGE FLAT PLATE ASTRAGAL STRIP IS OPTIONAL AND WOULD BE FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE INACTIVE DOOR.

UL CLASSIFIED TO:

- **ICC 500(2014) "ICC/NSSA Standard for the Design and Construction or Storm Shelters"**
- **FEMA P-361(2015) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**
- **FEMA P-320 (2014) "Taking Shelter from the storm: Buildng a Safe Room for Your Home or Small Buisness"**

"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE"

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC500/NSSA	INSWING ONLY	15–LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341
FEMA 320, 361		15–LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341

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 500-2014 STANDARD.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

07/16/21

ASSA ABLOY

1-3/4" StormPro®361 & 320 TORNADO RESISTANT 4" x 25" GLAZED COMMUNICATING PAIRS WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI-POINT LOCK

ALL INFORMATION ON THIS PAGE APPLIES TO THE STORMPRO ASSEMBLY

DOORS:
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 POLYSTYRENE CORE.

LOCK:
CORBIN RUSSWIN FE6600 SERIES or SARGENT FM7300 SERIES

INACTIVE DOOR SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR YALE 988Y

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.
NON–STORMPRO FRAMES DO NOT REQUIRE THE SAME HARDWARE, QUANTITIES OR LOCATIONS AS THE STORMPRO FRAMES.

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

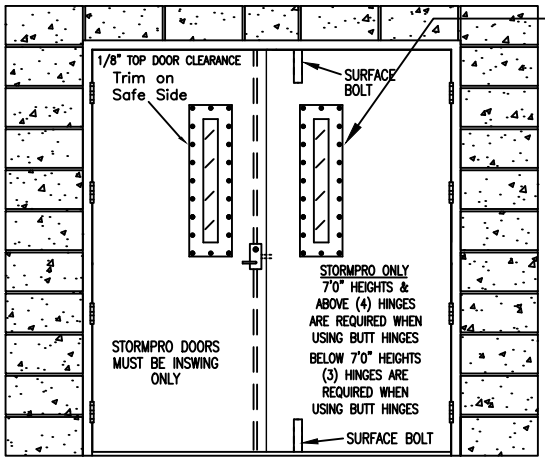
OPTIONAL FIRE RATING:
NOT AVAILABLE

SUGGESTED USE:

DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
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 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.

SEE PAGES D17A–8 & D17A–9
FOR ALL ANCHOR LOCATIONS.



4"x25" VISIBLE GLASS ONLY

KERALITE ULTRA 90 STORM SHELTER GLASS MUST BE FACTORY INSTALLED.
GLASS THICKNESS IS 1–3/4" NOMINAL.

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 ENGAGE 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.

10 GAGE FLAT PLATE ASTRAGAL STRIP IS OPTIONAL AND WOULD BE FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE INACTIVE DOOR.

UL CLASSIFIED TO:

- **ICC 500(2014) "ICC/NSSA Standard for the Design and Construction or Storm Shelters"**
- **FEMA P-361(2015) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**
- **FEMA P-320 (2014) "Taking Shelter from the storm: Buildng a Safe Room for Your Home or Small Buisness"**

"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE"

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC500/NSSA	INSWING ONLY	15–LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341
FEMA 320, 361		15–LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341

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 500-2014 STANDARD.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

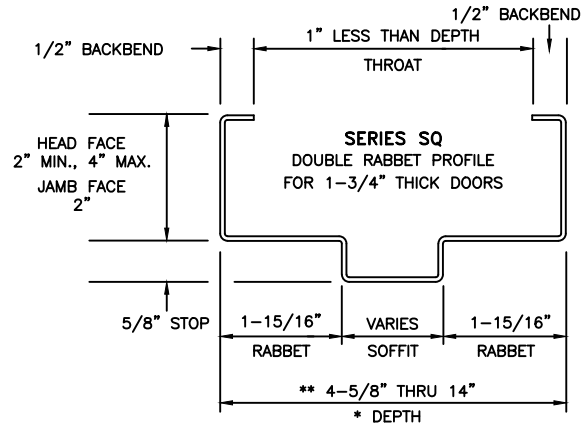
D17A-4G

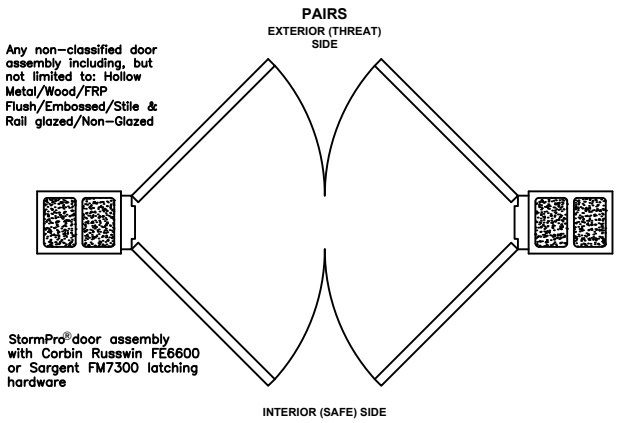
ASSA ABLOY

1-3/4" StormPro® 361 & 320 TORNADO RESISTANT COMMUNICATING PAIRS WITH CORBIN RUSSWIN FE6600 or SARGENT FM7300 CONCEALED MULTI POINT LOCK

UL Classified to ICC 500 (2014), FEMA P-361 (2015) and FEMA P-320 (2014)

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 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 PAGES D17A-8 & D17A-9 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAGE (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 PAGES D17A-10 AND D17A-11.

SEE FRAME ELEVATION BELOW FOR HINGE QUANTITES, LOCATIONS AND OPENING SIZES. NON-STORMPRO FRAMES DO NOT REQUIRE THE SAME HARDWARE, QUANTITIES OR LOCATIONS AS THE STORMPRO FRAMES.

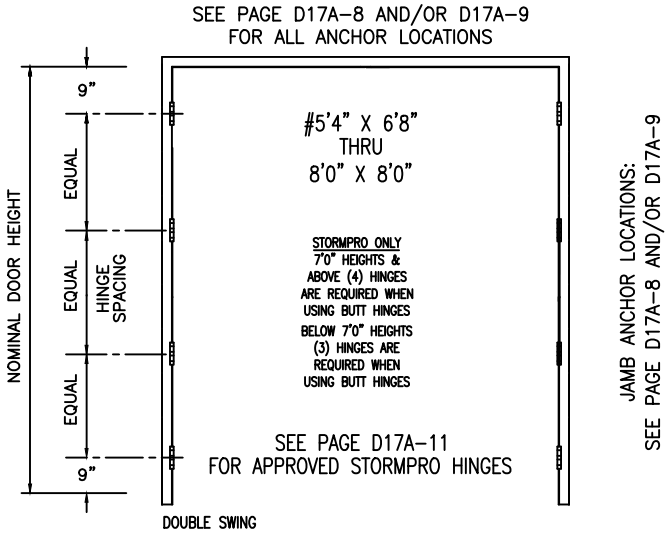
FRAMES MAY BE KNOCK DOWN or WELDED CORNERS.

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.

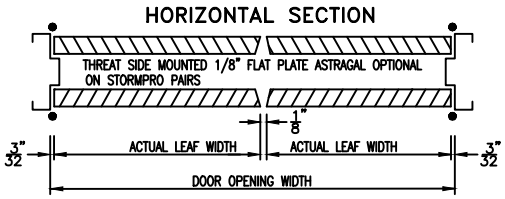
#Assemblies may be limited to 6'0"x7'0" minimum size for compliance with domestic government sourcing regulations, trade agreements or acquisition policies.



3/8" STD DOOR UNDERCUT

3/8" MAX. BETWEEN BOTTOM OF DOOR AND TOP OF STRIKE.

STORMPRO PAIRS INSWING ONLY



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

07/16/21

D17A-5

ASSA ABLOY 1-3/4" StormPro® Shutter TORNADO RESISTANT SINGLES WITH CORBIN RUSSWIN FE6700 or SARGENT FM6100 CONCEALED MULTI POINT LOCK

SHUTTER:
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 & POLYSTYRENE CORE.

LOCK:
CORBIN RUSSWIN FE6700 SERIES or SARGENT FM6100 SERIES

CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A-11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A-11.

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.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE SHOWN ON PAGES D17A-10 AND D17A-11.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HOURS IN ACCORDANCE WITH UL 10B, UL 10C & NFPA 252 WITH STEEL STIFFENED CORE ONLY.

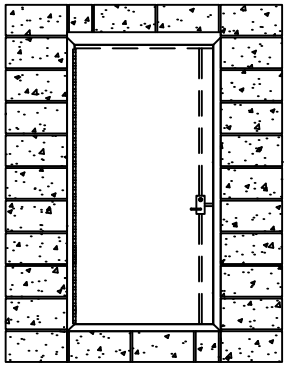
REFERENCE STORMPRO 361 & 320 TORNADO RESISTANT DOOR AND FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 CONCEALED MULTI-POINT LOCK CONSTRUCTION (PAGES D17A-3 & D17A-3B FOR SIZES GREATER THAN 6'8" IN HEIGHT).

SUGGESTED USE:
DISASTER AND TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
RESIDENTIAL "SAFE" ROOMS

UL CERTIFIED TO:

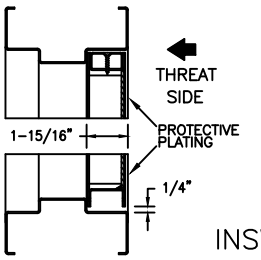
- **ICC 500 (2020 & 2014) "ICC/NSSA Standard for the Design and Construction of Storm Shelters"**
- **FEMA P-361 (2021) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**

SEE PAGE D17A-5B FOR ALL ANCHOR LOCATIONS

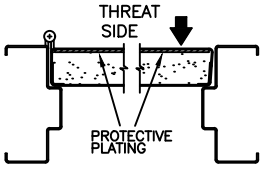


- 1/4" UNDERCUT ONLY
- SILL MUST BE LEVEL & FRAME MUST BE INSTALLED SQUARE & PLUMB TO ALLOW SHUTTER TO FUNCTION PROPERLY.
- SHUTTER AND FRAME MUST BE ORDERED AT THE SAME TIME.

VERTICAL SECTION



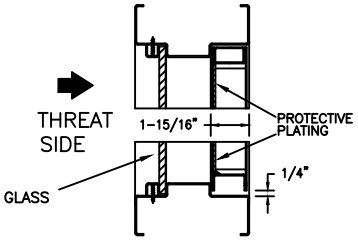
HORIZONTAL SECTION



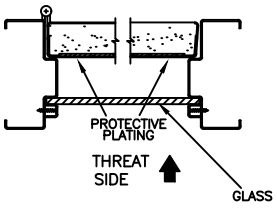
INSWING OR OUTSWING

SHUTTER & WINDOW ASSEMBLY OPTION

VERTICAL SECTION



HORIZONTAL SECTION



- 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.

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

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGLUATIONS, 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.

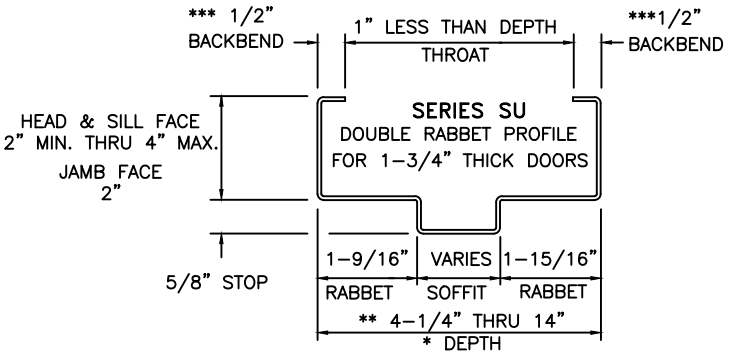
"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE"

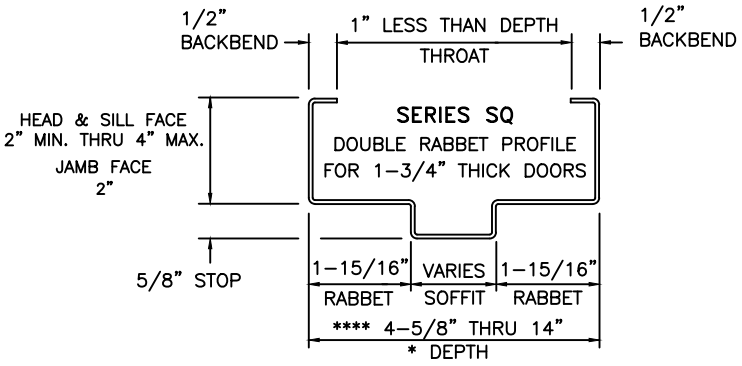
Experience a safer
and more open world

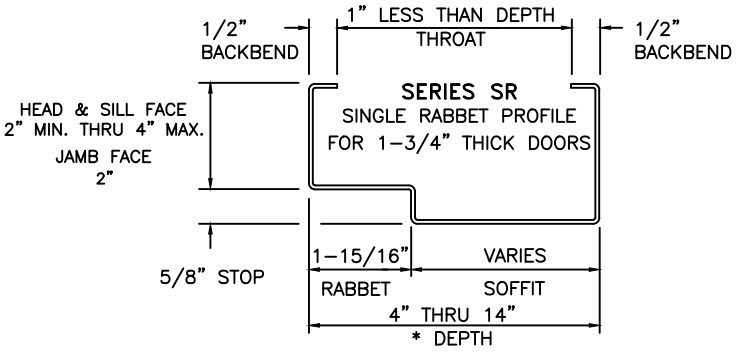
D17A–5A

ASSA ABLOY 1-3/4" StormPro® Shutter TORNADO RESISTANT SINGLES WITH CORBIN RUSSWIN FE6700 or SARGENT FM6100 CONCEALED MULTI POINT LOCK UL CERTIFIED TO ICC 500(2020 & 2014) & FEMA P-361(2021)

Frame Profile Options and Parameters







(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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.

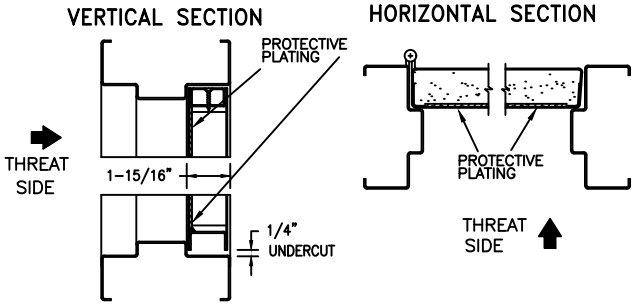
SEE PAGE D17A–5B FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 14 GAGE (OPTIONAL 12 GA.) HOT–DIPPED A60 GALVANNEALED or COLD ROLLED STEEL.

FRAMES WILL HAVE WELDED CORNERS.

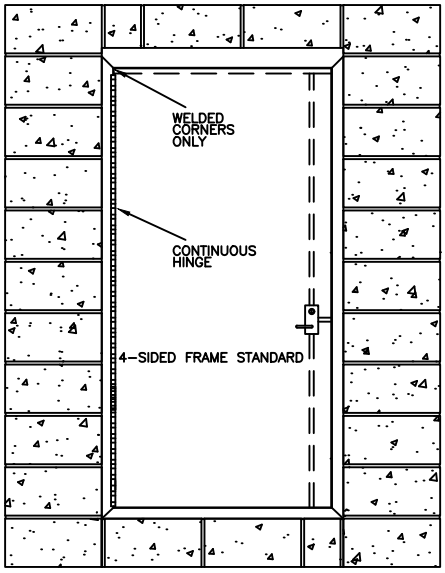
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE SHOWN ON PAGES D17A–10 AND D17A–11.

REFERENCE STORMPRO 361 & 320 TORNADO RESISTANT DOOR AND FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 CONCEALED MULTI–POINT LOCK CONSTRUCTION (PAGES D17A–3 & D17A–3B FOR SIZES GREATER THAN 6'8" IN HEIGHT).



INSWING OR OUTSWING

SEE PAGE D17A–5B FOR ALL ANCHOR QUANTITIES & LOCATIONS.



08/10/22

D17A–5B

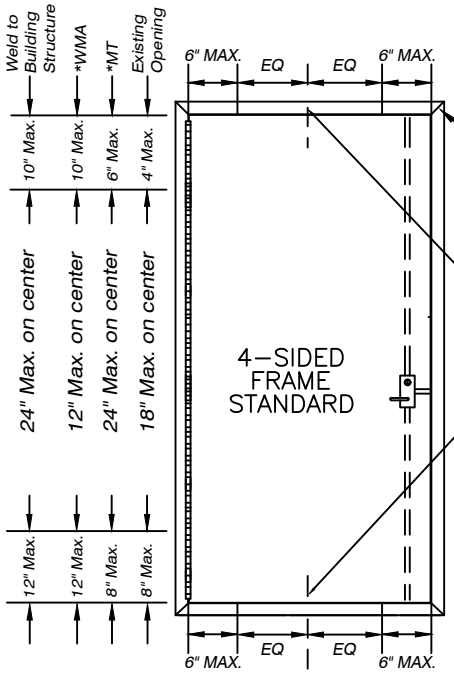
ASSA ABLOY 1-3/4" StormPro® Shutter TORNADO RESISTANT SINGLES WITH CORBIN RUSSWIN FE6700 or SARGENT FM6100 CONCEALED MULTI POINT LOCK

UL CERTIFIED TO ICC 500 (2020 & 2014) & FEMA P-361 (2021)

FRAME ANCHORING

FRAME HEAD & SILL ANCHORS:
EXISTING OPENING DIMPLES W/ BOLTS, SCREWS OR WELD TO BUILDING STRUCTURE
3 ANCHORS PER HEAD & SILL 2'6" THRU 4'0".

SEE PAGE D17A–8 FOR WIRE & MASONRY "T" ANCHORS, ANCHOR BOLTS & CAP PLUGS.



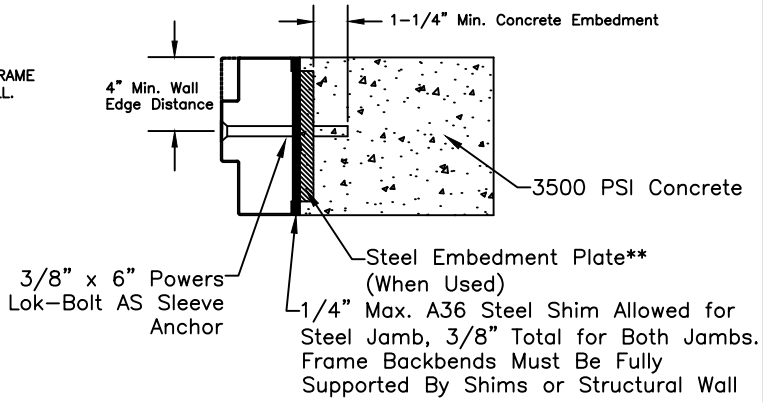
WELDED CORNERS ONLY

THE CENTER LOCK BOLT & CENTERLINE OF LOCK JAMB STRIKE WILL BE LOCATED AT THE VERTICAL CENTER OF THE OPENING AS A STANDARD.

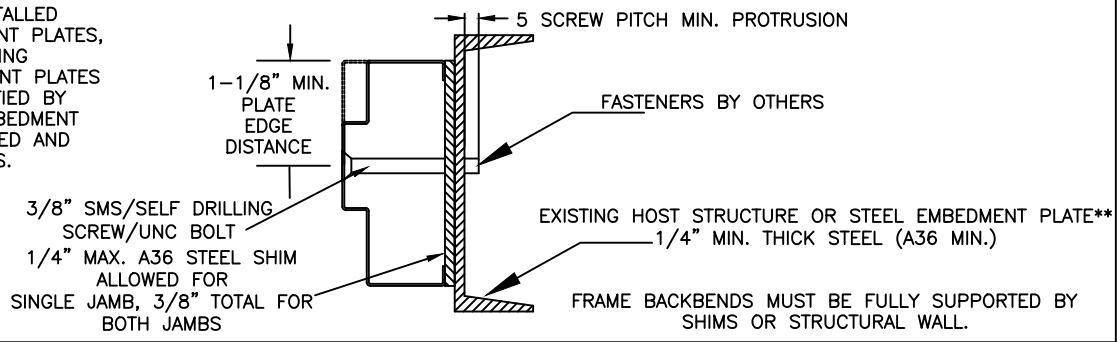
CENTER 3RD ANCHOR IN FRAME HEAD AND SILL.

* THE THROAT OF FRAME JAMBS MUST BE FULLY GROUTED WITH MIN. 1800 PSI GROUT WHEN INSTALLING WITH WIRE OR MASONRY T ANCHORS.

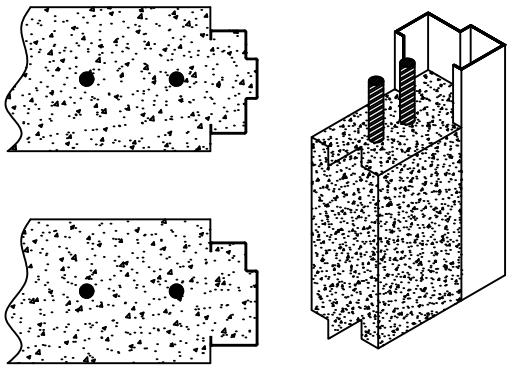
"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WELDED TO BUILDING STRUCTURE"



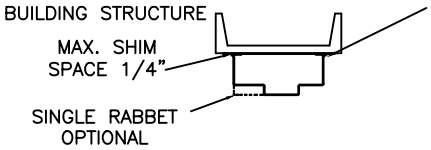
**ANCHORS MAY BE INSTALLED THROUGH EXISTING EMBEDMENT PLATES, PROVIDED THAT DRILLING THROUGH EXISTING EMBEDMENT PLATES IS PERMISSABLE AS VERIFIED BY OTHERS. ANY EXISTING EMBEDMENT PLATES SHALL BE DESIGNED AND VERIFIED BY OTHERS.



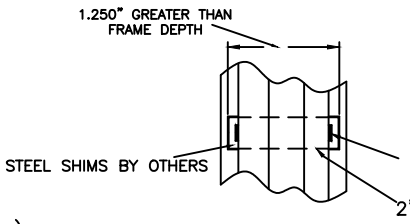
FRAME POURED IN PLACE WITH THE WALL DOES NOT REQUIRE ANCHORS



ANCHORING BY WELDING TO BUILDING STRUCTURE



18 GAGE MIN., 1/4" MAX. THICK A36 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)

10/06/22

D17A-6

ASSA ABLOY

1-3/4" StormPro® Shutter TORNADO RESISTANT PAIRS WITH CORBIN RUSSWIN FE6700 or SARGENT FM6100 CONCEALED MULTI POINT LOCK

SHUTTERS:
MIN. 5'–0" x 4'–0", MAX. 8'–0" x 6'–8" OPENING SIZE, 14 GA. (OPTIONAL 12 GA.) A60 GALVANNEALED OR COLD ROLLED FACE SHEETS WITH 10 GAGE LINER, STIFFENER & POLYSTYRENE CORE. PAIRS CAN BE INSWING OR OUTSWING.

LOCK:
CORBIN RUSSWIN FE6700 SERIES or SARGENT FM6100 SERIES

INACTIVE SHUTTER SURFACE BOLTS:
REINFORCED FOR CORBIN RUSSWIN 988CR, SARGENT 988, OR YALE 988Y

CLOSER:
APPROVED CLOSERS ARE SHOWN ON PAGE D17A–11.

HINGES:
APPROVED HINGES ARE SHOWN ON PAGE D17A–11.

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.

OPTIONAL HARDWARE & ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

FIRE RATING:
NOT AVAILABLE

REFERENCE STORMPRO 361 & 320 TORNADO RESISTANT DOOR AND FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 CONCEALED MULTI–POINT LOCK CONSTRUCTION (PAGES D17A–4 & D17A–4B FOR SIZES GREATER THAN 6'8" IN HEIGHT).

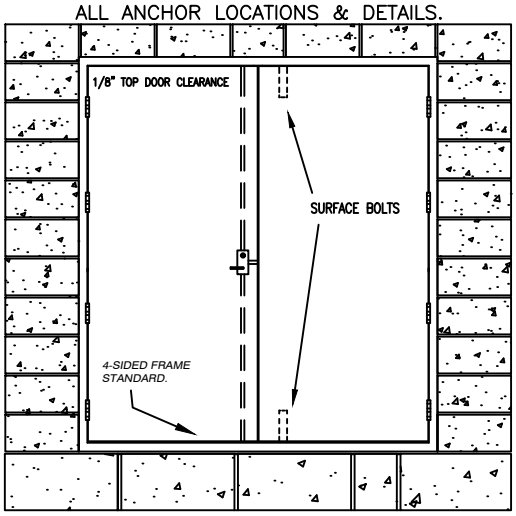
SUGGESTED USE:

DISASTER & TORNADO SHELTERS
STORM SHELTERS
COMMUNITY SHELTERS
SCHOOL SHELTERS
SCHOOL "SAFE" ROOMS
RESIDENTIAL "SAFE" ROOMS

UL CLASSIFIED TO:

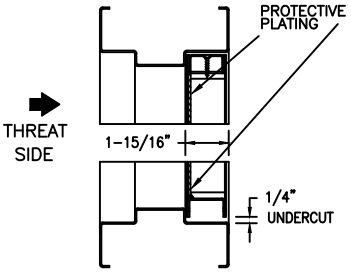
- **ICC 500(2014) "ICC/NSSA Standard for the Design and Construction of Storm Shelters"**
- **FEMA P-361(2015) "Safe Rooms for Tornados & Hurricanes: Guidance for Community and Residential Safe Rooms"**
- **FEMA P-320 (2014) "Taking Shelter from the storm: Building a Safe Room for Your Home or Small Buisness"**

SEE PAGES D17A–6B & D17A–8 FOR ALL ANCHOR LOCATIONS & DETAILS.

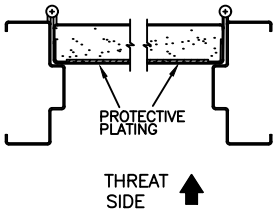


- 1/4" DOOR UNDERCUT. 1/4" MAX. FROM BOTTOM OF SHUTTER TO TOP OF LOCK STRIKE.
- FRAMES MUST BE INSTALLED SQUARE AND PLUMB TO ALLOW SHUTTERS TO FUNCTION PROPERLY.
- BOTTOM STRIKES MUST BE ATTACHED TO FRAME SILL AND ALLOW BOTTOM BOLTS TO PROPERLY ENGAGE STRIKES.
- SHUTTERS AND FRAMES MUST BE ORDERED AT THE SAME TIME.

VERTICAL SECTION



HORIZONTAL SECTION



OPTIONAL FLAT PLATE ASTRAGAL:
10 GAGE FLAT PLATE ASTRAGAL IS FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE ACTIVE OR INACTIVE SHUTTER, DEPENDING ON IN SWING OR OUT SWING APPLICATION.

GLASS MAY BE INSTALLED IN OPPOSITE FRAME RABBET AS AN OPTION. GLASS BY OTHERS, AND IS NOT REQUIRED TO BE IMPACT RESISTANT.

"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE"

STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC500/NSSA	INSWING OR OUTSWING	15–LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341
FEMA 320 & 361		15–LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	±284	±341

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGLUATIONS, 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 500-2014 STANDARD.

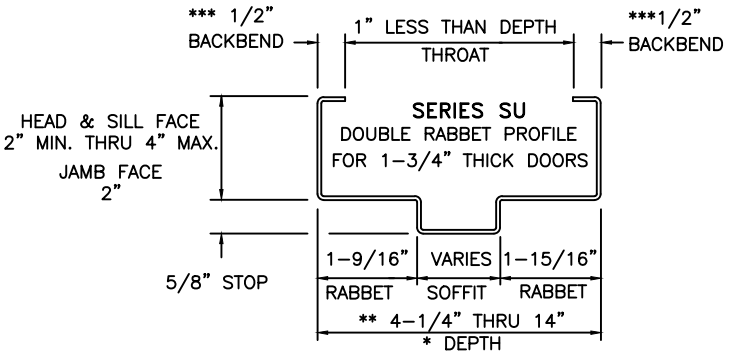
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

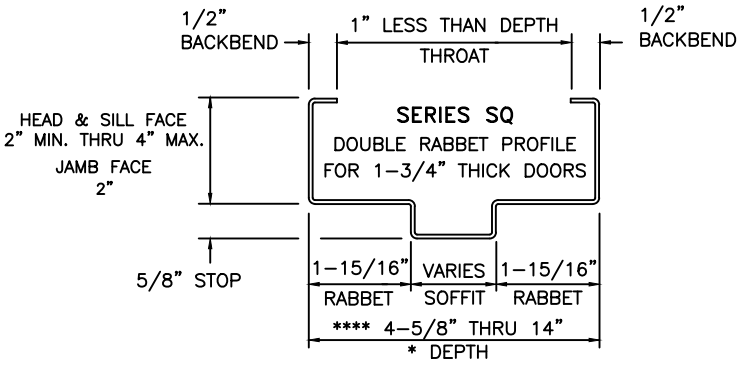
04/28/21

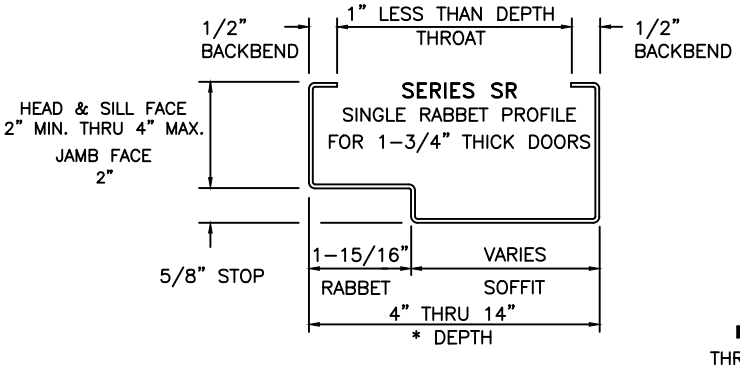
D17A-6A

ASSA ABLOY 1-3/4" StormPro® Shutter TORNADO RESISTANT PAIRS WITH CORBIN RUSSWIN FE6700 or SARGENT FM6100 CONCEALED MULTI POINT LOCK UL CLASSIFIED TO ICC 500(2014), FEMA P-361(2015) AND FEMA P-320(2014)

Frame Profile Options and Parameters







OPTIONAL FLAT PLATE ASTRAGAL:
10 GAGE FLAT PLATE ASTRAGAL IS FACTORY ATTACHED WITH SCREWS TO THE THREAT SIDE OF THE ACTIVE OR INACTIVE SHUTTER, DEPENDING ON IN SWING OR OUT SWING APPLICATION.

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 PAGES D17A-6B & D17A-8 FOR ALL ANCHOR LOCATIONS & DETAILS.

FRAMES ARE 14 GAGE (OPTIONAL 12 GA.) HOT-DIPPED A60 GALVANNEALED or COLD ROLLED STEEL.

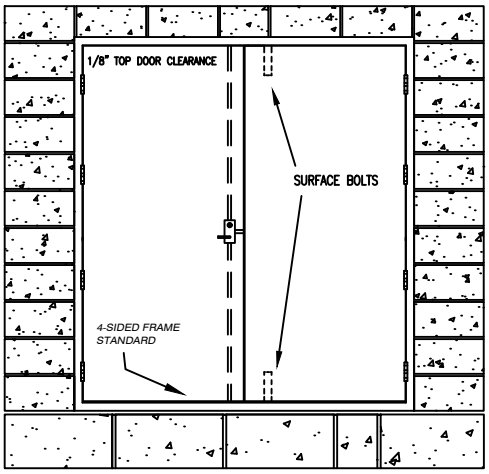
FRAMES WILL HAVE WELDED CORNERS.

HEIGHTS FROM 4'0" THRU 5'0 WILL HAVE (3) HINGE PREPS. HEIGHTS OVER 5'0 THRU 6'8" WILL HAVE (4) HINGE PREPS.

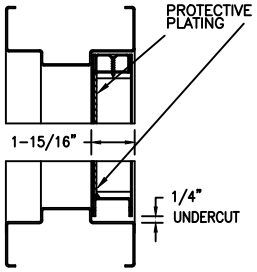
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A-10 AND D17A-11.

REFERENCE STORMPRO 361 & 320 TORNADO RESISTANT DOOR AND FRAME WITH CORBIN RUSSWIN FE6600 OR SARGENT FM7300 CONCEALED MULTI-POINT LOCK CONSTRUCTION (PAGES D17A-4 & D17A-4B FOR SIZES GREATER THAN 6'8" IN HEIGHT).

SEE PAGES D17A-6B & D17A-8 FOR ALL ANCHOR LOCATIONS & DETAILS.

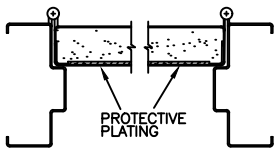


VERTICAL SECTION



THREAT SIDE

HORIZONTAL SECTION



THREAT SIDE

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

04/28/21

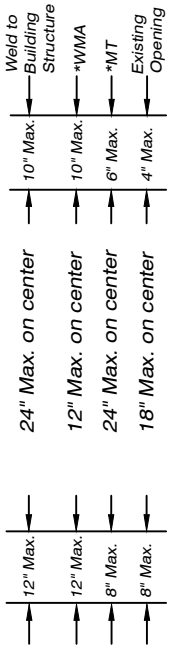
D17A-6B

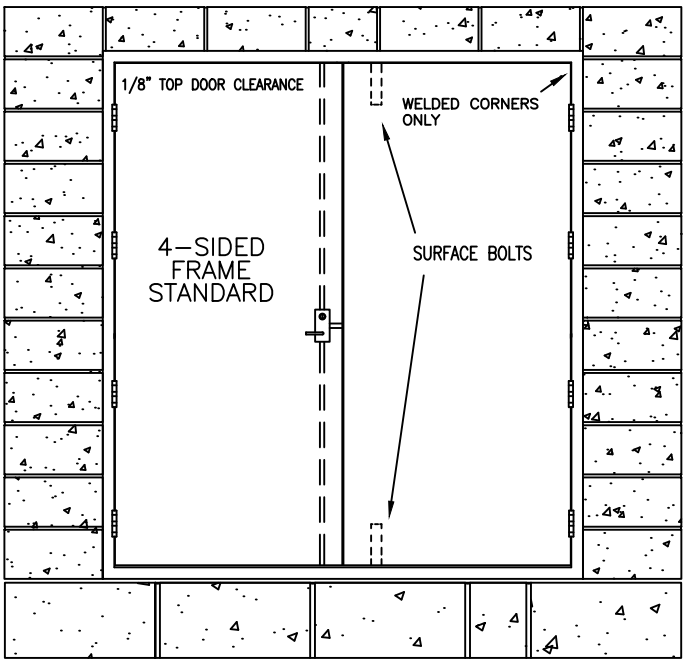
ASSA ABLOY 1-3/4" StormPro® Shutter TORNADO RESISTANT PAIRS WITH CORBIN RUSSWIN FE6700 or SARGENT FM6100 CONCEALED MULTI POINT LOCK

UL CLASSIFIED TO ICC 500 (2014), FEMA P-361 (2015) AND FEMA P-320 (2014)

FRAME ANCHORING

See page D17A-8 for other anchor details.





FRAME HEAD & SILL ANCHOR LOCATIONS:

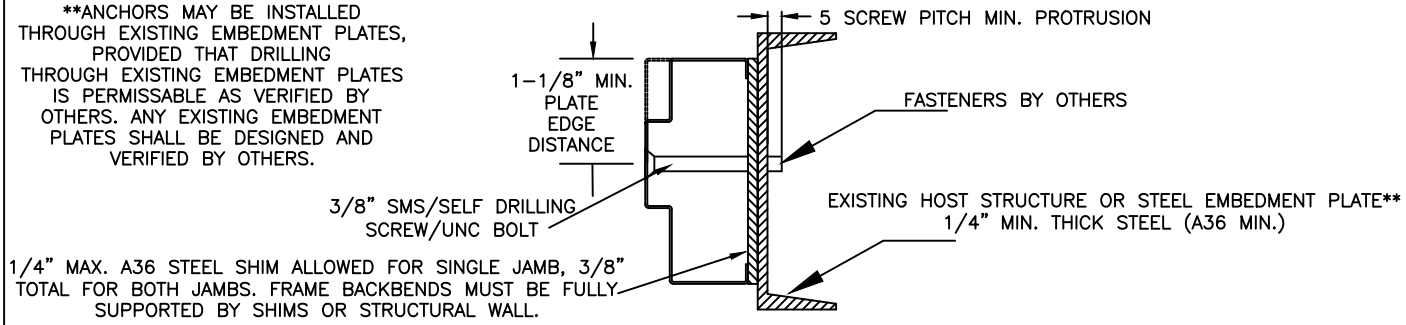
Existing opening dimples with bolts, screws, or weld to building structure.
Up to & including 6'0" wide:
Min. of (6) anchors located from center line of the door meeting edges both sides 8", 15" and 6" from door jamb rabbet.

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.

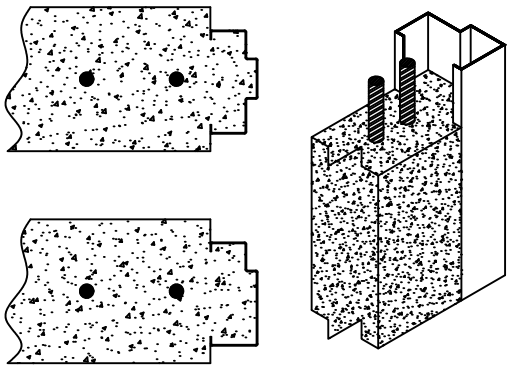
Greater than 7'0" thru 8'0" wide:
Min. of (8) anchors located from center line of the door meeting edges both sides 8", 15", 24" & 6" from door jamb rabbet.

Note: For unequal width pairs, head & sill anchor quantity/spacing for each side of the centerline of the door meeting edges shall be determined as though the leaf size was part of an equal width pair.

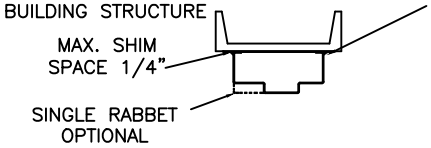
**ANCHORS MAY BE INSTALLED THROUGH EXISTING EMBEDMENT PLATES, PROVIDED THAT DRILLING THROUGH EXISTING EMBEDMENT PLATES IS PERMISSABLE AS VERIFIED BY OTHERS. ANY EXISTING EMBEDMENT PLATES SHALL BE DESIGNED AND VERIFIED BY OTHERS.



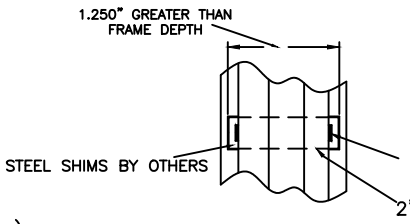
FRAME POURED IN PLACE WITH THE WALL DOES NOT REQUIRE ANCHORS



ANCHORING BY WELDING TO BUILDING STRUCTURE



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)

12/20/21

1-3/4" StormPro® 320 & 361

TORNADO RESISTANT FLUSH DOOR & FRAME

UL CERTIFIED TO ICC 500 (2020 & 2014), FEMA P-361 (2021) & FEMA P-320 (2021)

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 GAGE INTERMEDIATE STIFFENERS ARE SPACED A MAX. OF 6" APART. POLYSTYRENE FILLER IS USED BETWEEN THE STIFFENERS. DOORS HAVE SQAURE LOCK AND HINGE EDGES.

HARDWARE PROVIDED (SHIPPED LOOSE):

PASSAGE SET LOCK & DEADBOLTS
(1) SARGENT 10 LINE GRADE 1 PASSSAGE SET. 28–10U15XLLX26DLHR
(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 NOT PROVIDED:

CLOSER:
APPROVED CLOSERS ARE SHOWN ON PAGE D17A–11.

HINGES:
APPROVED HINGES ARE SHOWN ON PAGE D17A–11.

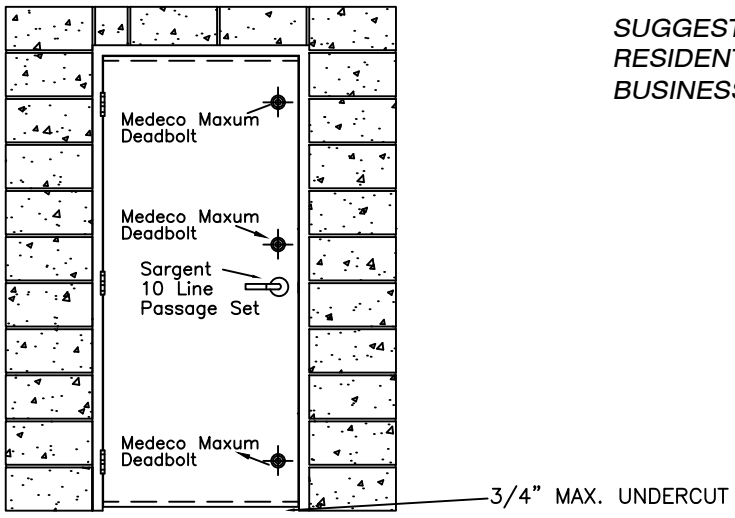
OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE SHOWN ON PAGES D17A–10 AND D17A–11.

UL 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"*

FIRE RATING:
NOT AVAILABLE

DOOR SWING:
INSWING OR OUTSWING



SUGGESTED USE:
RESIDENTIAL and SMALL BUSINESS "SAFE" ROOMS

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SAFE ROOMS OR SHELTERS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGLUATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

"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)

ASSA ABLOY

1-3/4" StormPro® 320 & 361 with Glass

TORNADO RESISTANT DOOR & FRAME

UL CERTIFIED TO ICC 500(2020 & 2014), FEMA P-361 (2021) and FEMA P-320 (2021)

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 GAGE 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. 28–10U15XLLX26DLHR
(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 NOT PROVIDED

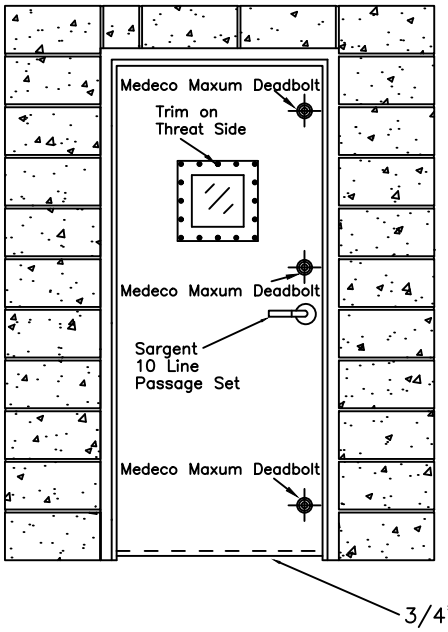
CLOSER:
APPROVED CLOSERS ARE LISTED ON PAGE D17A–11.

HINGES:
APPROVED HINGES ARE LISTED ON PAGE D17A–11.

OPTIONAL HARDWARE AND ACCESSORIES:
APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A–10 AND D17A–11.

FIRE RATING:
NOT AVAILABLE

DOOR SWING:
INSWING ONLY



SUGGESTED USE:
RESIDENTIAL and SMALL BUSINESS "SAFE" ROOMS

**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*
** DESIGN PATENT PENDING*
** INSWING ONLY*

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

DESIGNED TO ENDURE TORNADO FORCE WINDS AND FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SAFE ROOMS OR SHELTERS TO PROTECT OCCUPANTS FROM INJURY. SUCCESSFULLY TESTED AND COMPLIANT TO ICC 500-2020 & 2014 STANDARD.

ASSEMBLY MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGLUATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

"FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN USING EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE."

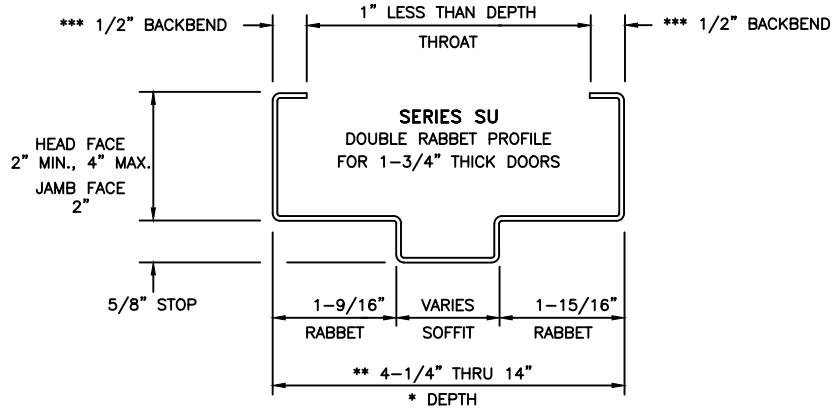
Experience a safer and more open world

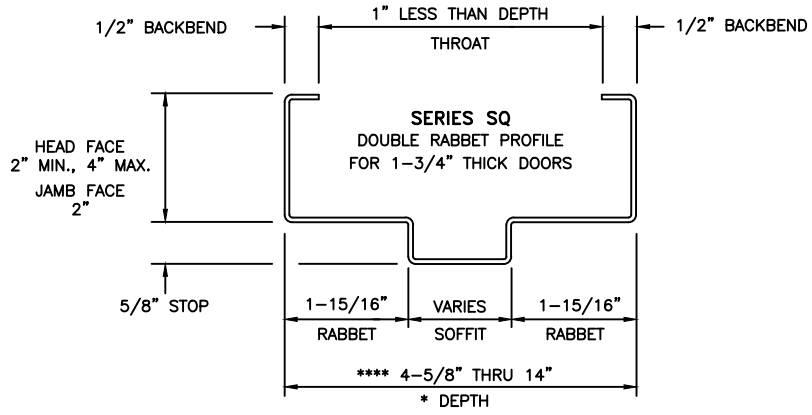
1-3/4" StormPro® 320 & 361

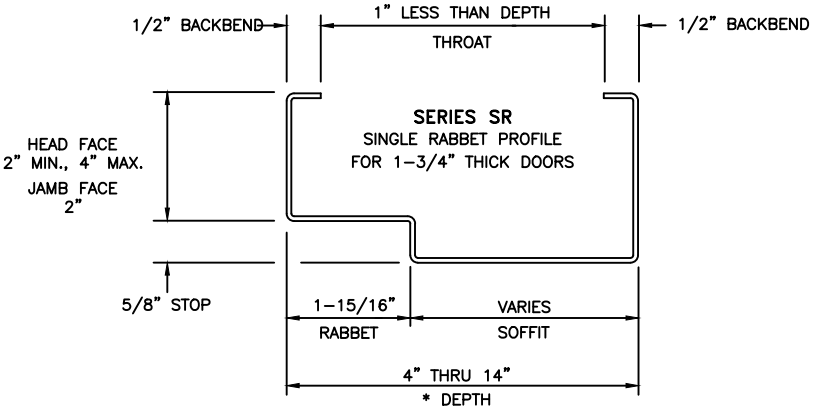
TORNADO RESISTANT DOOR & FRAME

UL 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 PAGES D17A-8 & D17A-9 FOR ALL ANCHOR QUANTITIES & LOCATIONS.

FRAMES ARE 16 GAGE HOT-DIPPED A60 GALVANNEALED or COLD ROLLED STEEL.

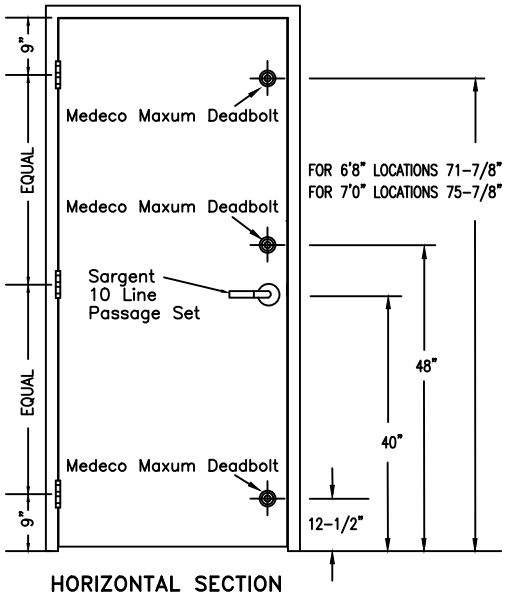
FRAMES MAY BE KNOCK DOWN or WELDED CORNERS.

(2) 12 GA. HIGH FREQUENCY HINGE STRAPS PER HINGE REINFORCEMENT.

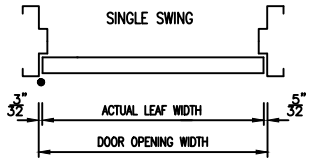
OPTIONAL (1) 10"X10" VISIBLE GLASS LOCATED 60" ABOVE DOOR BOTTOM WITH ¾" UNDERCUT TO CENTER OF GLASS, CENTERED IN DOOR WIDTH AVAILABLE. OPTIONAL DOOR WITH GLASS AVAILABLE AS INSWING ONLY.

APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON PAGES D17A-10 AND D17A-11.

SEE PAGES D17A-8 & D17A-9 FOR ALL ANCHOR QUANTITIES & LOCATIONS.



HORIZONTAL SECTION



STANDARD	SWING DIRECTION	RATING		
		IMPACT	DESIGN (PSF)	TEST (PSF)
ICC 500/NSSA	INSWING OR OUTSWING	15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-254	+/-305
FEMA 320/361		15-LB LUMBER 2X4 MISSILE IMPACT @ 100 MPH	+/-254	+/-305

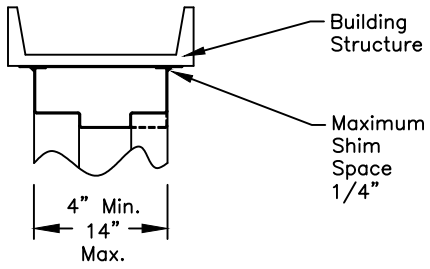
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

1-3/4" StormPro® 320 & 361 TORNADO RESISTANT DOOR & FRAME ANCHOR LOCATIONS

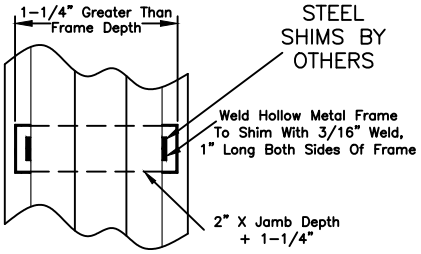
D17A-8

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.



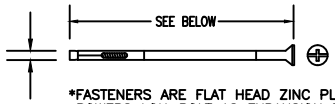
Frame Head (And Optional Frame Sill) Anchor Locations

	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.

Jamb Anchor Locations

	Opening Size	Anchor Type	Anchor Spacing
Singles and 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.

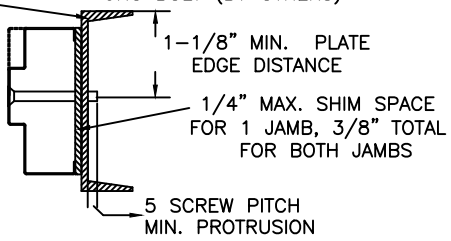


*FASTENERS ARE FLAT HEAD ZINC PLATED CARBON STEEL POWERS LOK–BOLT AS EXPANSION BOLTS FOR MASONRY. FASTENER LENGTH: 3/8" x 6" STEEL BOLT

1/4" MIN. STEEL (A36) EMBEDMENT PLATE or HOST STRUCTURE

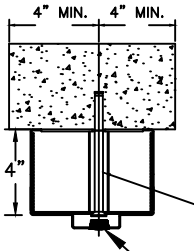
FRAME BACKBENDS MUST BE FULLY SUPPORTED BY SHIMS OR STRUCTURAL WALL

3/8" SMS/SELF DRILLING SCREW/ UNC BOLT (BY OTHERS)

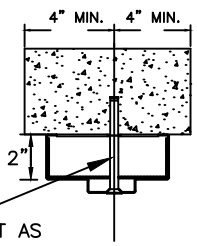


SCREW ATTACHMENT THROUGH EXISTING EMBEDMENT PLATE PROVIDED THAT DRILLING THROUGH PLATE IS PERMISSIBLE AS VERIFIED BY OTHERS.

4" FACE FRAME HEAD ANCHORING



2" FACE FRAME HEAD & JAMB ANCHORING



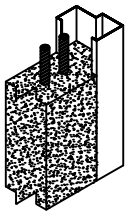
NOTE: MINIMUM PRECAST OR CMU WALL EDGE DISTANCE 4" TO CENTER OF BOLT HOLE @ HEAD OR HEAD & JAMBS.

NOTE: 1–1/4" MINIMUM BOLT EMBEDMENT

3/8" x 6" POWERS LOK–BOLT AS EXPANSION BOLT (SHIPS LOOSE FOR FIELD INSTALLATION)

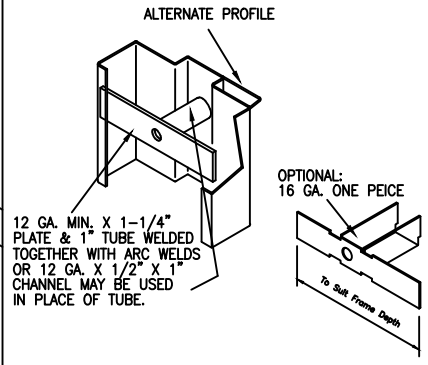
VINYL CAP PLUG

VINYL CAP PLUG (BAG OF 10) PART # 6111049
VINYL CAP PLUG (BAG OF 100) PART # 6111050
(SHIPS LOOSE FOR FIELD INSTALLATION)



POURED IN PLACE WALL

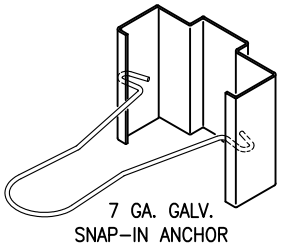
EXISTING OPENING –PIPE & PLATE
FRAME NOT REQUIRED TO BE GROUTED

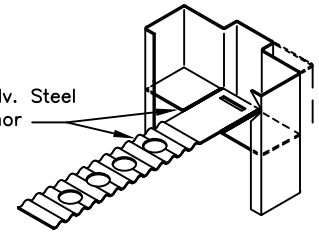


MASONRY – WIRE ANCHORS

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)

10/06/22

D17A-9

1-3/4" StormPro®320 & 361 TORNADO RESISTANT DOOR & FRAME ANCHOR LOCATIONS.

ASSA ABLOY

SEE INDIVIDUAL LATCHING HARDWARE PAGES FOR ICC 500 EDITION COMPLIANCE DATES.

HEAD (AND OPTIONAL SILL WHERE AVAILABLE) ANCHOR LOCATIONS FOR FM7300/FE6600, FM8700, FE5400S & (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 WIDTH PAIR.

	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.
Paired Opening	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.
Paired Opening	Greater than 7'0" x 7'0" and 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	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 jamb rabbet.
Single Opening	Approved min. opening size up to & 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	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 & (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.
Paired Opening	Greater than 6'0" x 7'0" 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	Maximum of 8" from the sill, maximum of 4" from the head rabbet, and 21" maximum on center.
Paired Opening	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.
Single Opening	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 Gage 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.
Single 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" and 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.
Single Opening	Approved min. opening size up to and including 3'0" x 7'0"	Wire Masonry Anchors	Maximum of 12" from the sill, maximum of 10" from the head rabbet, and 18" maximum on center.
Single Opening	Greater than 3'0" x 7"0" and up to and including 4'0" x 8'0"	Wire Masonry Anchors	Maximum of 12" from the sill, maximum of 10" from the head rabbet, and 12" maximum on center.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

10/06/22

D17A-10

ASSA ABLOY StormPro® OPTIONAL ACCESSORIES

OPTIONS FOR SARGENT FM7300 OR CORBIN RUSSWIN FE6600 ASSEMBLIES

PEMKO PERIMETER SEALS:
S773, 305 PERIMETER SEAL
S771 ASTRAGAL
S772 ASTRAGAL
305_N SPLIT ASTRAGAL (THREAT SIDE ONLY)
346 RAIN DRIP (THREAT SIDE MOUNTING ONLY)
345 DOOR BOTTOM (THREAT SIDE MOUNTING ONLY)
2715 THRESHOLD
ELECTRONIC POWER TRANSFER:
CEPT, HANCHETT ENTRY SYSTEMS, DBA SECURITRON MAGNALOCK CORP.
DOOR POSITION SWITCH:
DPS-M, SECURITRON MAGNALOCK CORP.
WIRE HARNESS:
QC-C1500P ELECTROLYNX WIRE HARNESS
DOOR VIEWERS:
ROCKWOOD 620 OR 622
KICK PLATE:
ROCKWOOD K1050 (MUST BE SCREW APPLIED FOR FIRE RATED ASSEMBLIES)

OPTIONS FOR SARGENT FM6100 OR CORBIN RUSSWIN FE6700 ASSEMBLIES

PEMKO PERIMETER SEALS:
S773, 305 PERIMETER SEAL
346 RAIN DRIP (THREAT SIDE MOUNTING ONLY)
345 DOOR BOTTOM (THREAT SIDE MOUNTING ONLY)
S771 ASTRAGAL OR S772 ASTRAGAL
305_N SPLIT ASTRAGAL (THREAT SIDE ONLY)
ELECTRONIC POWER TRANSFER:
CEPT, HANCHETT ENTRY SYSTEMS, DBA SECURITRON MAGNALOCK CORP.
DOOR POSITION SWITCH:
DPS-M, SECURITRON MAGNALOCK CORP.
DOOR VIEWERS:
ROCKWOOD 620 OR 622
KICK PLATE:
ROCKWOOD K1050 (MUST BE SCREW APPLIED FOR FIRE RATED ASSEMBLIES)
WIRE HARNESS:
QC-C1500P ELECTROLYNX WIRE HARNESS

OPTIONS FOR SARGENT FM8700 ASSEMBLIES

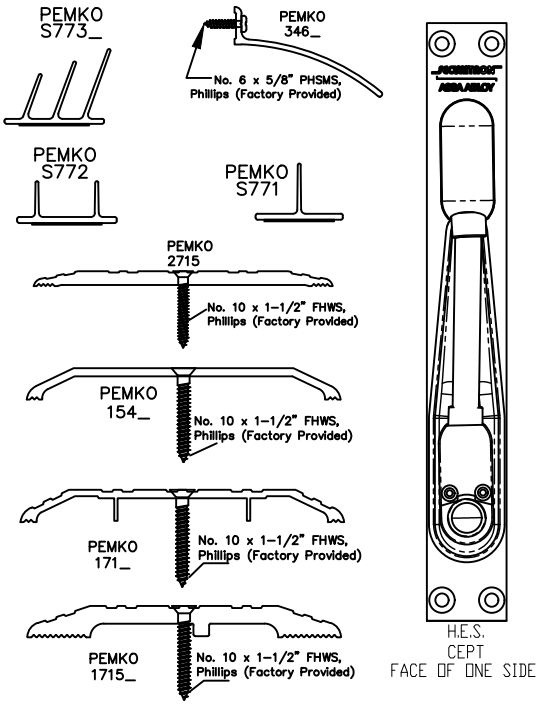
PEMKO PERIMETER SEALS:
S773, 305 PERIMETER SEAL, S771 ASTRAGAL OR S772 ASTRAGAL
346 RAIN DRIP (THREAT SIDE MOUNTING ONLY)
345 DOOR BOTTOM (THREAT SIDE MOUNTING ONLY)
1715 THRESHOLD
305_N SPLIT ASTRAGAL (THREAT SIDE ONLY)
ELECTRONIC POWER TRANSFER:
CEPT, HANCHETT ENTRY SYSTEMS, DBA SECURITRON MAGNALOCK CORP.
DOOR POSITION SWITCH:
DPS-M, SECURITRON MAGNALOCK CORP.
ROD GUARDS:
ROCKWOOD BFLG1050 (MUST BE SCREW APPLIED FOR FIRE RATED ASSEMBLIES)
DOOR VIEWERS:
ROCKWOOD 620 OR 622
KICK PLATE:
ROCKWOOD K1050 (MUST BE SCREW APPLIED FOR FIRE RATED ASSEMBLIES)
WIRE HARNESS:
QC-C1500P ELECTROLYNX WIRE HARNESS

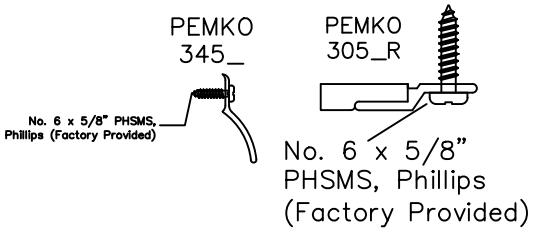
OPTIONS FOR CORBIN RUSSWIN FE5400S ASSEMBLIES

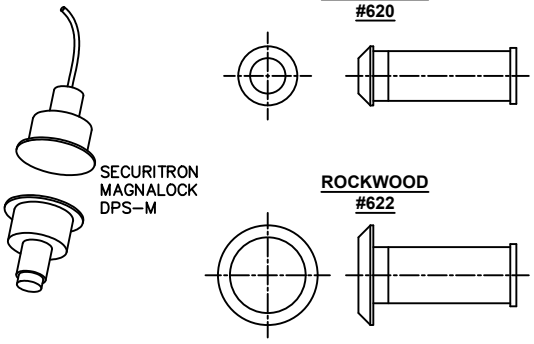
PEMKO PERIMETER SEALS:
S773, 305 PERIMETER SEAL, S771 ASTRAGAL OR S772 ASTRAGAL
346 RAIN DRIP (THREAT SIDE MOUNTING ONLY)
345 DOOR BOTTOM (THREAT SIDE MOUNTING ONLY)
1715 THRESHOLD
305_N SPLIT ASTRAGAL (THREAT SIDE ONLY)
ELECTRONIC POWER TRANSFER:
CEPT, HANCHETT ENTRY SYSTEMS, DBA SECURITRON MAGNALOCK CORP.
DOOR POSITION SWITCH:
DPS-M, SECURITRON MAGNALOCK CORP.
WIRE HARNESS:
QC-C1500P ELECTROLYNX WIRE HARNESS
ROD GUARDS:
ROCKWOOD BFLG1050 (MUST BE SCREW APPLIED FOR FIRE RATED ASSEMBLIES)
DOOR VIEWERS:
ROCKWOOD 620 OR 622
KICK PLATE:
ROCKWOOD K1050 (MUST BE SCREW APPLIED FOR FIRE RATED ASSEMBLIES)

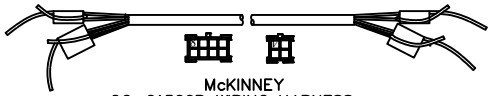
OPTIONS FOR (3) MEDECO MAXUM DEADBOLT ASSEMBLIES

PEMKO PERIMETER SEALS:
S773 OR 305 PERIMETER SEAL
346 RAIN DRIP (THREAT SIDE MOUNTING ONLY)
345 DOOR BOTTOM (THREAT SIDE MOUNTING ONLY)
154, 171, 1715 OR 2715 THRESHOLD
ELECTRONIC POWER TRANSFER:
CEPT, HANCHETT ENTRY SYSTEMS, DBA SECURITRON MAGNALOCK CORP.
DOOR POSITION SWITCH:
DPS-M, SECURITRON MAGNALOCK CORP.
DOOR VIEWERS:
ROCKWOOD 620 OR 622
KICK PLATE:
ROCKWOOD K1050 (MUST BE SCREW APPLIED FOR FIRE RATED ASSEMBLIES)
WIRE HARNESS:
QC-C1500P ELECTROLYNX WIRE HARNESS

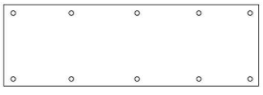








BFLG1050 ROD GUARD



K1050 KICK PLATE

12/18/20

ASSA ABLOY

1-3/4" StormPro® 320 & 361 APPROVED HINGES, CLOSERS, HOLDERS, STOP/HOLDERS AND HARDWARE MULLIONS

D17A-11

CONTINUOUS HINGES

- MARKAR HG305 CONTINUOUS HINGE
- MARKAR FM300 CONTINUOUS HINGE (OUTSWING 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 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

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, FE5400S, FE6600 AND FM7300 LATCHING HARDWARE, ON HEIGHTS 7'0" & ABOVE (4) HINGES ARE REQUIRED. BELOW 7'0" HEIGHT (3) HINGES ARE REQUIRED.

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)
- YALE 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)

MULLIONS

- SARGENT HC980 OR 12-HC980 MULLION AS AN OPTION WITH FM8700 ASSEMBLY ONLY

NOTES:

- THE SPECIFICATION WRITER SHOULD VERIFY THE CLOSER/HOLDER/STOP IS COMPATIBLE FOR USE WITH COMMUNICATING FRAMES/DOORS.
- PAIRS WITH HARDWARE MULLION, FRAME DEPTH WILL BE LIMITED BY THE MULLION. CONTACT THE HARDWARE MULLION MANUFACTURER FOR FRAME DEPTH LIMITATIONS.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

10/10/19

StormPro®Hurricane and Tornado Shelter Impact Protective System
UL 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 GAGE 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 ENGAGE 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 BOTOM BOLT TO TO PROPERLY ENGAGE 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 GAGE 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 ENGAGE 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 GAGE 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 PAGES D17A-3D & D17A-3G FOR SINGLE COMMUNICATING OPENINGS. REFERENCE STORMPRO SECTION PAGES D17A-4D & D17A-4G 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 D17A–11.

HINGES:
APPROVED HINGES ARE LISTED ON STORMPRO SECTION PAGE D17A–11. 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 PAGES D17A–10 AND D17A–11.

- 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.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252.

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

UL CLASSIFIED TO:

- *ICC 500 "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"*
- *FEMA P-361 "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.

ASSEMBLIES MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

DESIGNED TO ENDURE HURRICANE AND TORNADO FORCE WINDS WITH FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY.

Experience a safer
and more open world

StormPro Hurricane and Tornado Shelter Impact Protective System
UL Listed to ICC 500 and FBC Approved

FRAMES FOR 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

FRAMES FOR 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.

FRAMES FOR 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 THS 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 FRAME ASSEMBLIES."

- VERTICAL JAMBS ARE 2" FACE, FRAME HEADS ARE 2" FACE STANDARD THRU 4" FACE OPTIONAL.
- FRAMES ARE 14 GAGE (OPTIONAL 12 GAGE) 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 GAGE IS WELDED)
- APPROVED OPTIONAL HARDWARE AND ACCESSORIES ARE LISTED ON STORMPRO SECTION PAGES D17A-10 AND D17A-11.
- SEE STORMPRO SECTION PAGES D17A-8 AND D17A-9 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".

EXCLUDED FROM USE AS AN EXTERIOR ACCESS IN HVHZ WHEN STORM SHELTER IS CONSTRUCTED WITHIN A HOST BUILDING.

UL CLASSIFIED TO:

- *ICC 500 "ICC/NSSA Standard for the Design and Construction of "Storm Shelters"*
- *FEMA P-361 "Safe Rooms for Tornadoes & Hurricanes: Guidance for Community and Residential Safe Rooms"*

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

ASSEMBLIES MAY NOT COMPLY WITH DOMESTIC GOVERNMENT SOURCING REGULATIONS, TRADE AGREEMENTS OR ACQUISITION POLICIES.

DESIGNED TO ENDURE HURRICANE AND TORNADO FORCE WINDS WITH FLYING DEBRIS. DEVELOPED TO RESIST MISSILE PENETRATION FOR USE IN BUILDINGS DESIGNED AS SHELTERS OR SAFE ROOMS TO PROTECT OCCUPANTS FROM INJURY.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

Experience a safer
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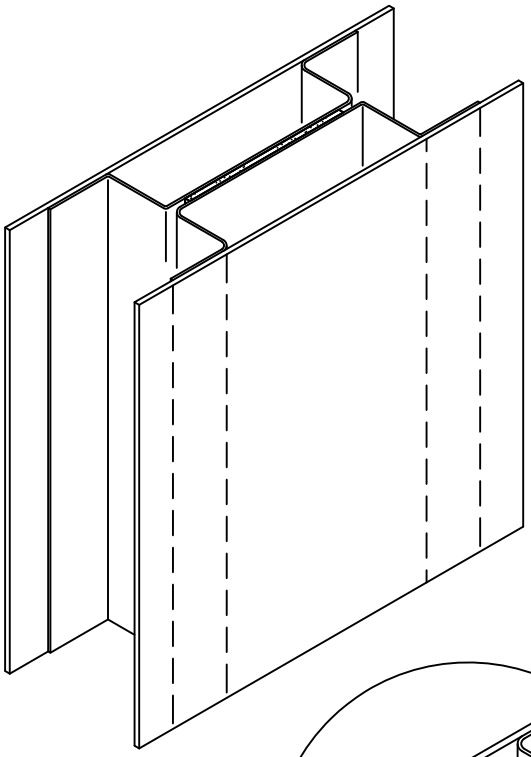
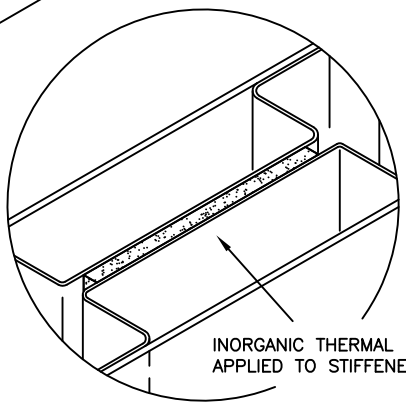
1-3/4" 450° MEDALLION

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...

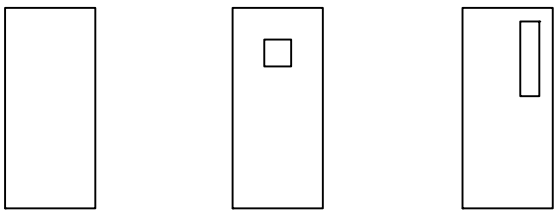
Complies with NAAMM Specifications. 22 gage steel stiffeners placed 6" apart and welded every 5" along their length. Center seam edges. Rock wool insulated. An inorganic thermal barrier bonded to stiffeners.

Suggested Use:

Stairwells...

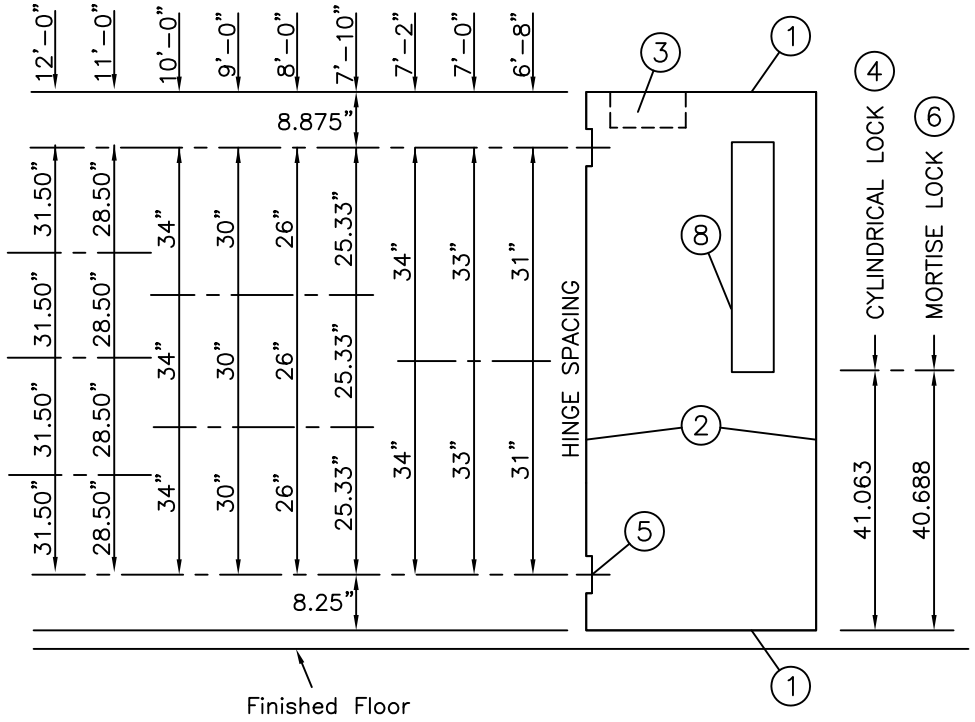
Schools/Training Centers
Institutional Facilities
Public Utility Stations
Government Buildings
Warehouses/Factories
Manufacturing Plants
Transportation Terminals
Vehicle Service Facilities

FLUSH DESIGNS

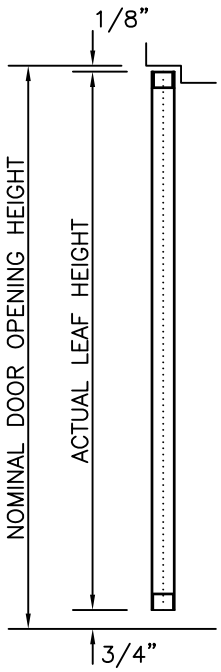


D5A-2

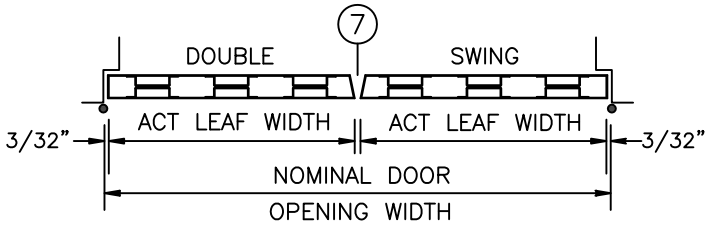
Hardware locations shown match Ceco standard frames.

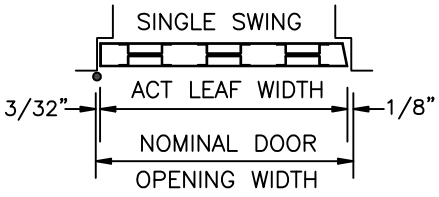


DOOR ELEVATION



VERTICAL SECTION



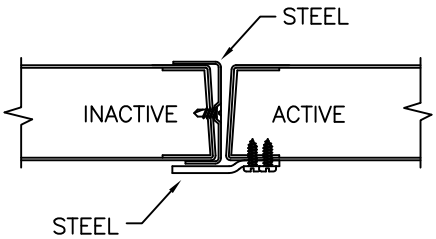


HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.4 mm)

OVERLAPPING ASTRAGAL **4441** ⑦

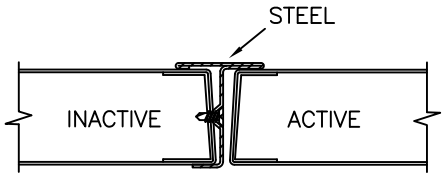
FOR 1-3/4" THICK DOORS



LISTED

OVERLAPPING ASTRAGAL **4471** ⑦

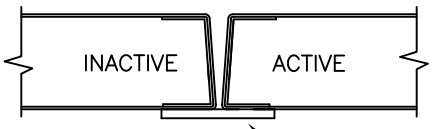
FOR 1-3/4" THICK DOORS



LISTED

OVERLAPPING ASTRAGAL **4491** (OPTIONAL) ⑦

FOR 1-3/4" THICK DOORS



LISTED

08/20/19

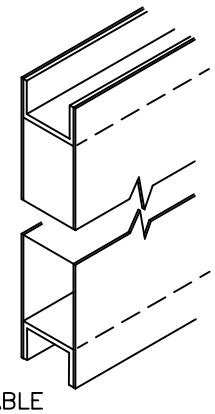
TECH-DATA

D5A-3

1 16 GAGE STEEL END CHANNELS

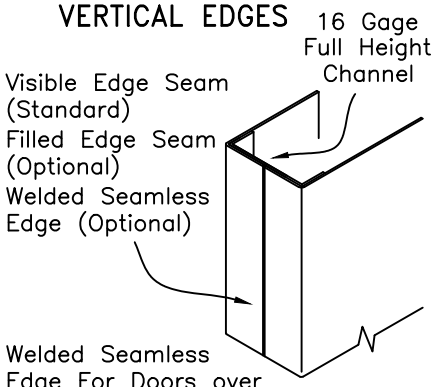
WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM



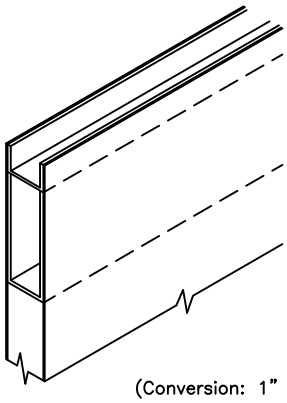
OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

2 VERTICAL EDGES



3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAGE STEEL CHANNEL 20" LONG

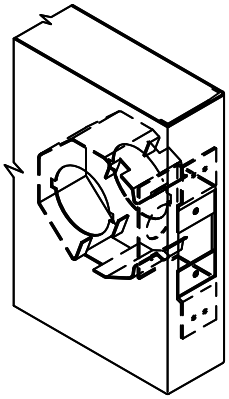


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4" BACKSET



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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

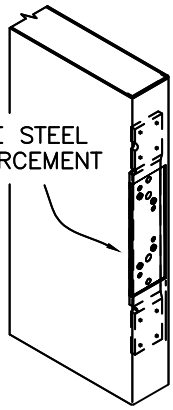
5 HINGE PREPARATION

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

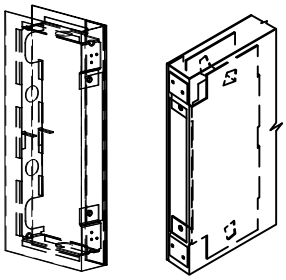
ANSI 156.7 TEMPLATE

HINGE EDGE IS HANDED AND SQUARE

14 GA. DOORS REQUIRE HEAVY WEIGHT FULL MORTISE HINGES



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

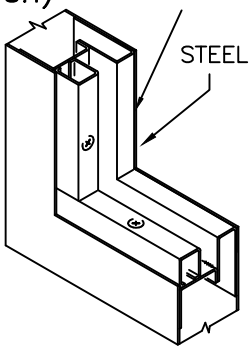


(LM0)

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

8 STANDARD GLAZING TRIM

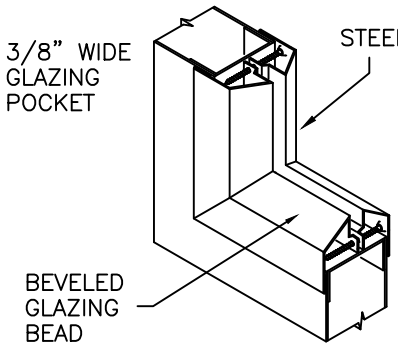
4884 (FLUSH)



Notes:
1. Field applied caulk is recommended on this seam to improve esthetics and resist water intrusion.
2. Drawing Not to Scale

8 OPTIONAL GLAZING TRIM

SlimTrim



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.

07/15/20

CecoDoor

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 gage steel vertical stiffeners (other gages 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 gage 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 gage 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 gage 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.

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'–0"	4'–0"	6'–8"
2'–4"	4'–8"	7'–0"
2'–6"	5'–0"	7'–2"
2'–8"	5'–4"	7'–10"
2'–10"	5'–8"	8'–0"
3'–0"	6'–0"	9'–0"
3'–4"	6'–8"	10'–0"
3'–6"	7'–0"	11'–0"
3'–8"	7'–4"	12'–0"
3'–10"	7'–8"	
4'–0"	8'–0"	
5'–0"	10'–0"	

FIRE DOORS

LABELING AGENCIES:

- UNDERWRITERS LABORATORY
- 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.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
18 Gage Steel	Heavy Duty	STD	OPT	N/A	16 Gage Steel
16 Gage Steel	Extra heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel
14 Gage Steel (MAXIM)	Maximum Duty	STD	OPT	OPT	16 or 14 Gage Steel

Doors over 4'0" wide and/or over 10'0" tall are available only in 16 or 14 gage A60 steel.

PERFORMANCE

Sound Transmission	STC 41 (F Design, 16 Gage Face Sheets, ASTM E90 & E413 [Fully Operable])
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)

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RETURN TO TOP

CecoDoor

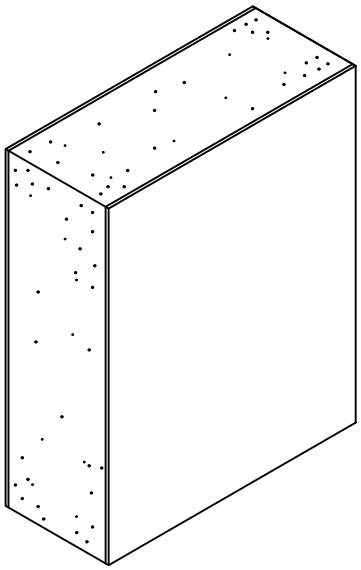
ASSA ABLOY

Return to Index

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.

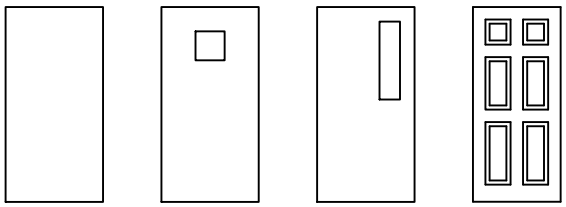


UL Listed, solid mineral fiber, rigid slab bonded to both face sheets with waterproof contact adhesive. Tensile strength: 150 psi

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

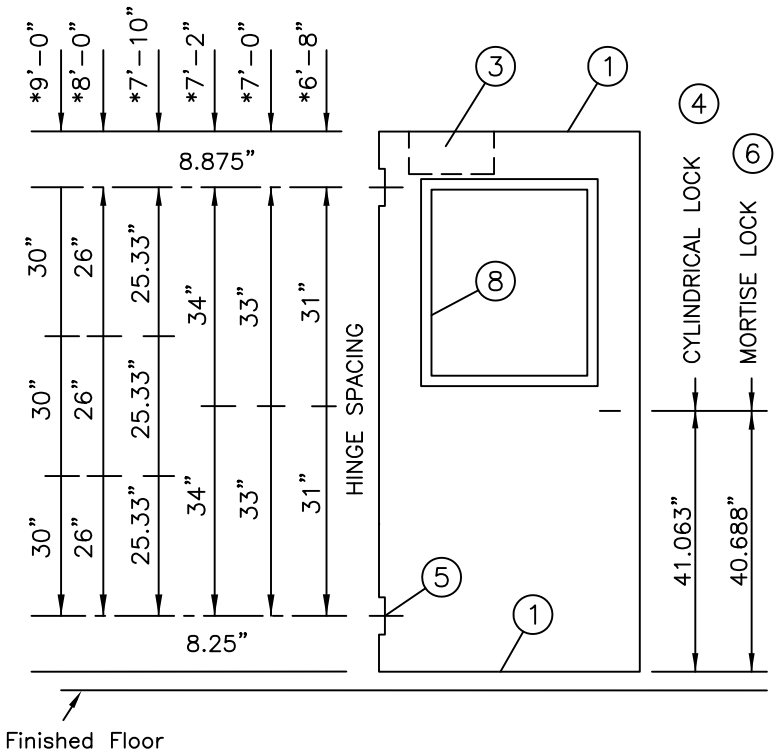
** 6 PANEL EMBOSSED ONE SIDE – 250°F(121°C) TEMP. RISE
EMBOSSED BOTH SIDES – 450°F(232°C) TEMP. RISE

ALL FUEGO DOOR DESIGNS WILL HAVE CENTER EDGE SEAM CONSTRUCTION.

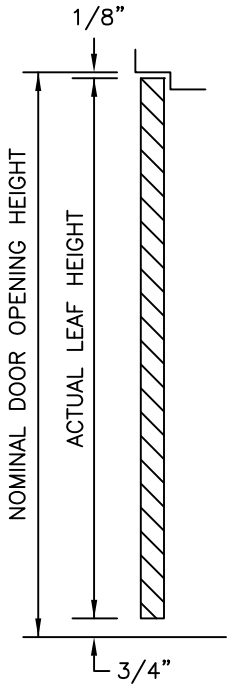
NOTES: 1. 100² IN. MAX. GLAZED AREA PER DOOR WITH FIRE PROTECTIVE GLASS.
2. OTHER DOOR DESIGNS AVAILABLE NON TEMPERATURE RISE RATED.

6 PANEL	
MAX. SIZE	3'0"x7'0"
MIN. SIZE	2'6"x6'8"

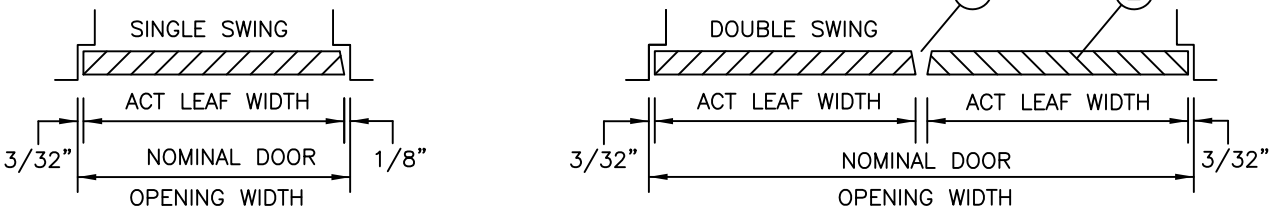
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



VERTICAL SECTION

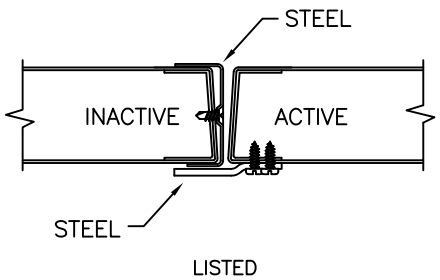


HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.4 mm)

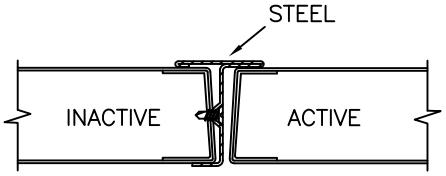
*See all embossed designs and size limitations on page D6–1.

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



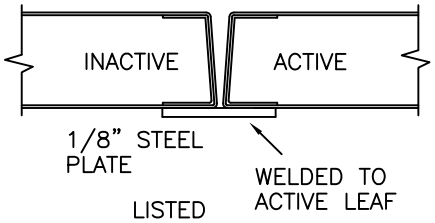
LISTED

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



LISTED

OVERLAPPING ASTRAGAL (7)
4491 (OPTIONAL)
FOR 1–3/4" THICK DOORS



LISTED

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CecoDoor

ASSA ABLOY

RETURN TO TOP

TECH-DATA

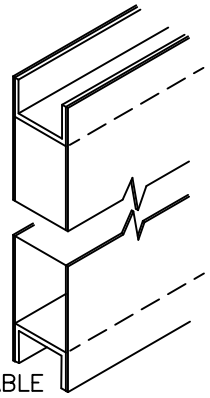
D6-3

1 16 GAGE STEEL END CHANNELS

WELDED TO BOTH FACE SHEETS

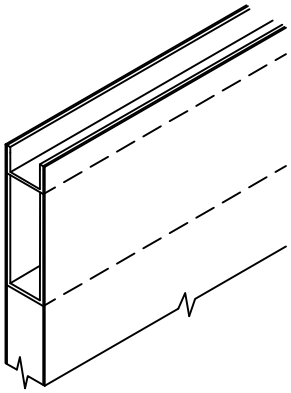
INVERTED TOP AND BOTTOM

OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE



2 CLOSER REINFORCEMENT (OPTIONAL)

14 GAGE STEEL CHANNEL 20" LONG

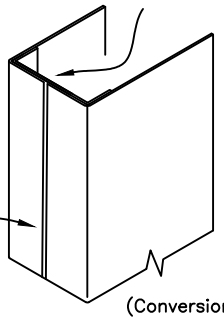


3 VERTICAL EDGES

16 Gage Full Height Channel

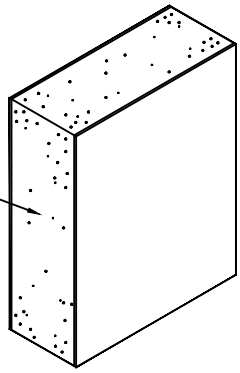
CENTER EDGE SEAM CONSTRUCTION (Standard)

OPTIONAL: WELDED SEAMLESS OR BONDO SEAMLESS



4 CORE

SOLID MINERAL FIBER CORE BONDED TO BOTH FACE SHEETS



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

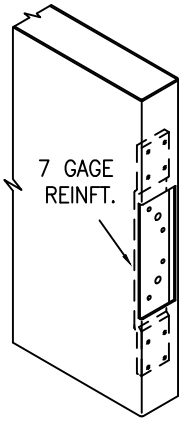
5 HINGE PREPARATION

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

HINGE EDGE IS HANDED

7 GAGE REINFT.

ANSI A156.7 TEMPLATE



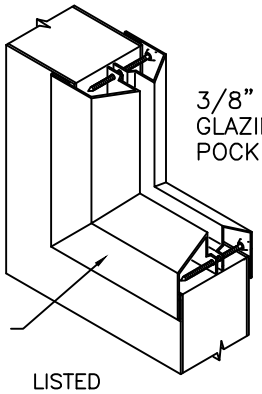
6 GLAZING TRIM SlimTrim

FOR ALL FIRE DOORS

3/8" WIDE GLAZING POCKET

STEEL

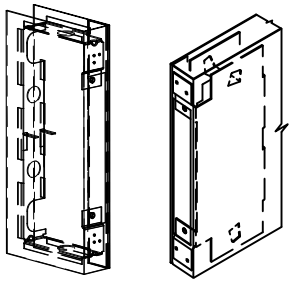
LISTED



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.

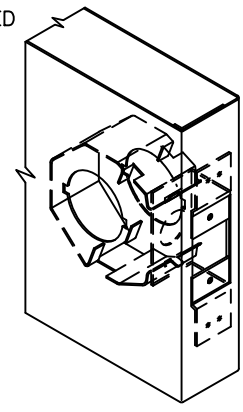
GOV. 160/161 CYLINDRICAL TYPE

LOCK EDGE IS BEVELED

(LC1)

(ANSI A115.2)

2-3/4" BACKSET



Notes:

Glazing

Only labeld, 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.

07/14/20

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RETURN TO TOP

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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.

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 gage 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 gage 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 gage 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.

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
  7'4" x 9'0" PAIR (3 HR)
  8'0" x 9'0" PAIR (1–1/2 HR)

Not all ratings are available in all sizes, designs and materials.
Size guidelines for a specific rating apply also to a lesser rating.

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
18 Gage Steel	Heavy Duty	STD	OPT	N/A	16 Gage Steel
16 Gage Steel	Extra heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel
14 Gage Steel	Maximum Duty	STD	OPT	OPT	14 or 12 Gage Steel

PERFORMANCE

Sound Transmission Class:	STC 33 (F Design, 18 Gage Face Sheets, ASTM E90 & E413, Fully Operable)
Physical Endurance	Meets ANSI A250.4 Performance Test, 18,16 and 14 Gage: Level A (1,000,000 Cycles)

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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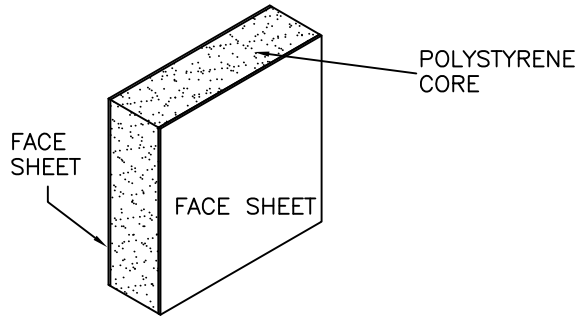
Return to Index

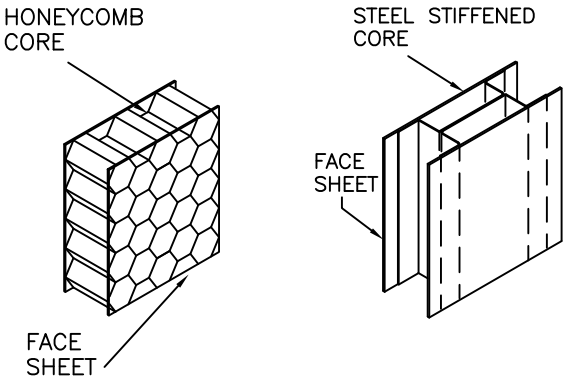
1-3/4" ARMORSHIELD (AP) POLYSTYRENE FOAM CORE

(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



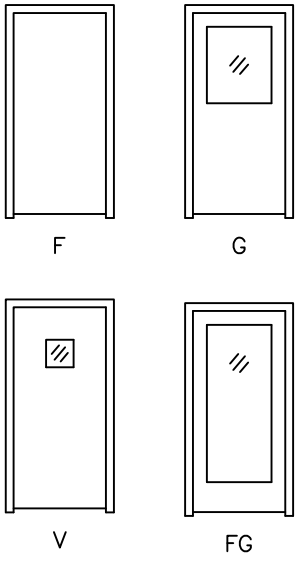


The ArmorShield system is rated for super power small arms (SPSA) and is intended for architectural environments with equivalent bullet resistance. The system has not been tested for resistance to forced entry. Field assembly is required as is preparation for surface applied hardware. System must be 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

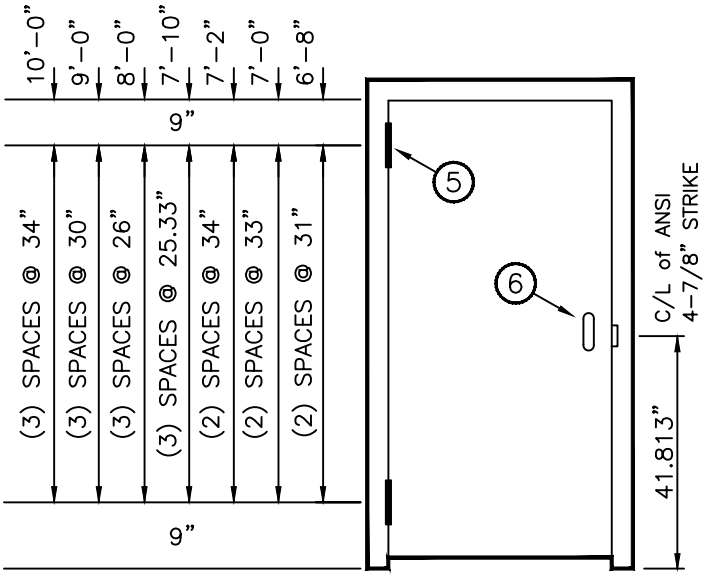


BALLISTIC LEVEL	WEAPON TYPE	BULLET TYPE	BULLET VELOCITY	MUZZLE ENERGY
I	9mm	FULL METAL JACKET 124gr	1234 ft/s	380-460 ft/lbs
II	.357 Mag.	JACKETED LEAD POINT 158gr	1312 ft/s	743-889 ft/lbs
III	.44 Mag.	LEAD SOFT POINT 240gr	1417 ft/s	1370-1593 ft/lbs

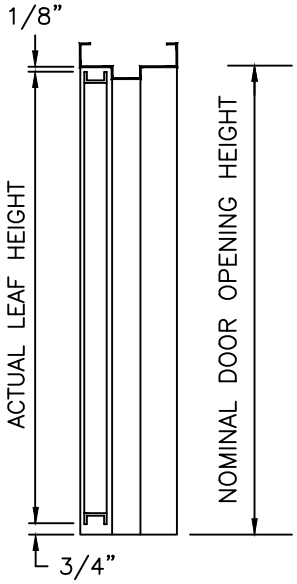
Return to Top

D7-2

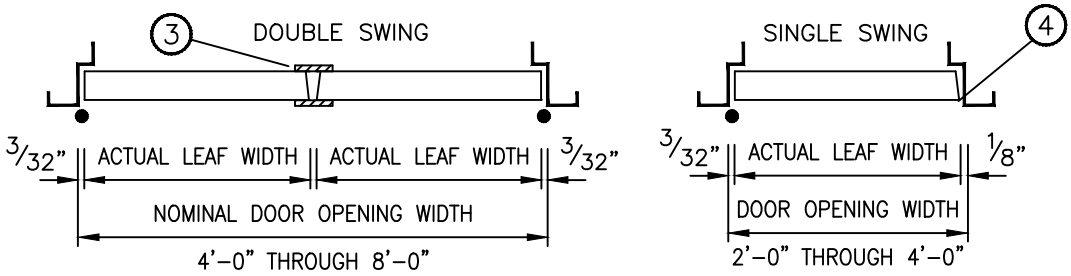
Hardware locations shown match Ceco standard frames.



ELEVATION



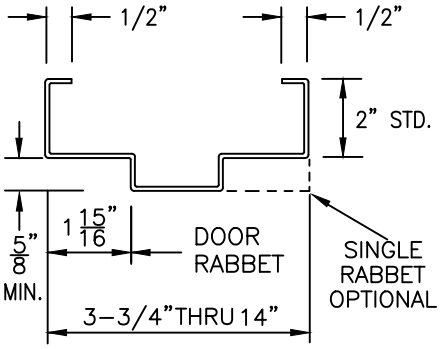
VERTICAL SECTION



HORIZONTAL SECTIONS

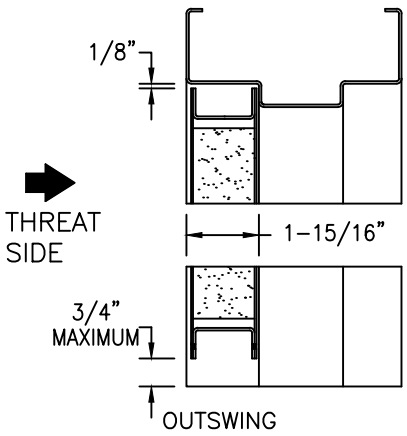
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

TYPICAL PROFILE
Double rabbet shown, single available
(Frame corners are welded)

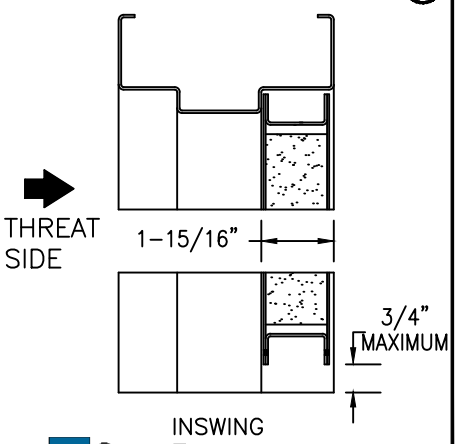


4" FACE FRAME HEAD OPTIONAL

VERTICAL SECTION



VERTICAL SECTION 7



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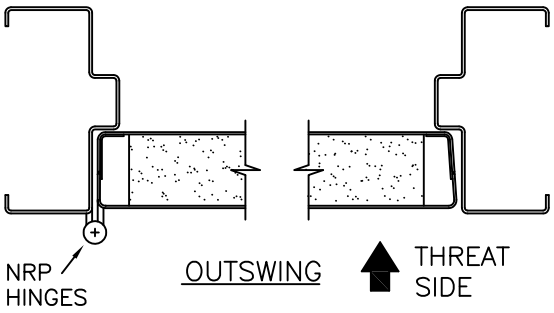
Return to Top

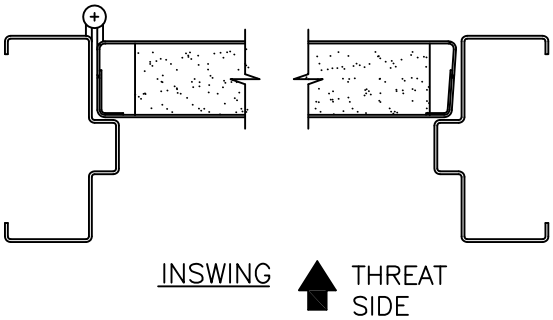
ARMORSHIELD LEVEL 1-3 DOOR SYSTEM

D7-3

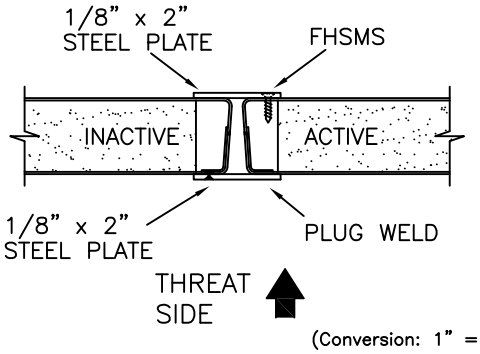
HORIZONTAL SECTION ①



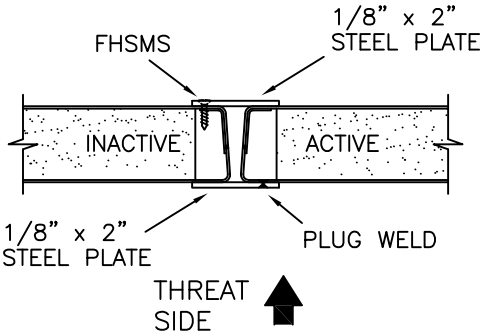
HORIZONTAL SECTION ②



ASTRAGAL FOR MEETING STILES—INSWING (STANDARD) ③

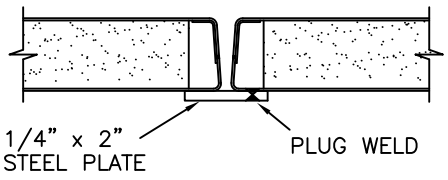


ASTRAGAL FOR MEETING STILES—OUTSWING (STANDARD) ③

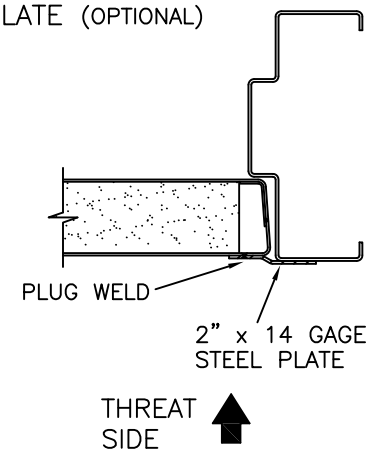


(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

OUTSWING PAIR PROTECTION PLATE (OPTIONAL) ③

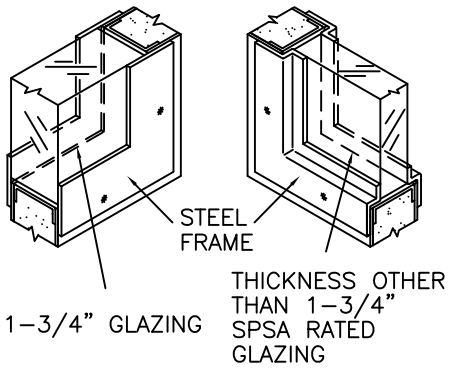


LOCK JAMB PROTECTION PLATE (OPTIONAL) ④



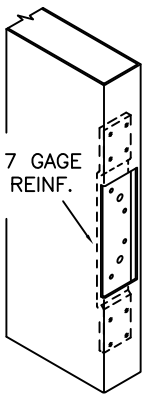
GLAZING TRIM ⑨

UL LISTED, SPSA RATED
MIN. SIZE: 12" x 12"



HINGE PREPARATION ⑤

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



ANSI A156.7 TEMPLATE

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

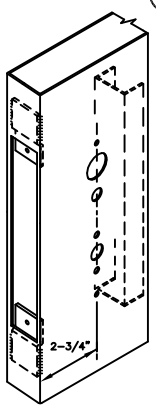
DOORS OVER 3070 REQUIRE 5" x .190 HINGES.

LOCK PREPARATION GOV. 86-4 MORTISE TYPE ⑥

OPTIONAL LOCK
- CYLINDRICAL
- RIM EXIT
- MORTISE EXIT

(LM2) (ANSI A115.1) 2-3/4" BACKSET

(LM0) SIMILAR TO DETAIL LESS FACE CUTOUT



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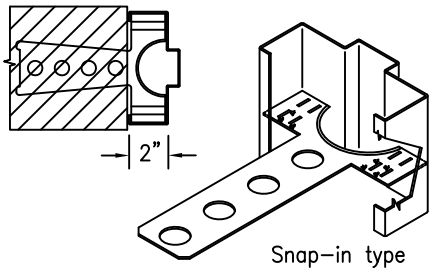
D7-4

MASONRY "T" ANCHOR (ADJUSTABLE) MT

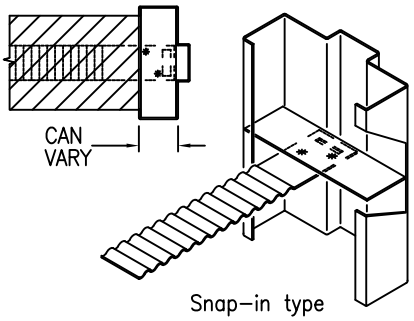
FOR STANDARD DEPTHS SHOWN BELOW.



3-3/4", 4-1/4", 4-3/4", 5-1/4" AND 5-3/4" DEPTHS

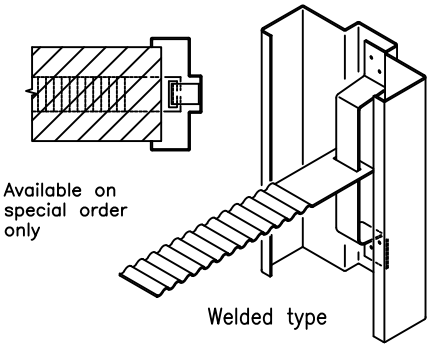
MASONRY "T" ANCHOR MT

FOR SPECIAL DEPTHS AND OVERSIZE FRAMES



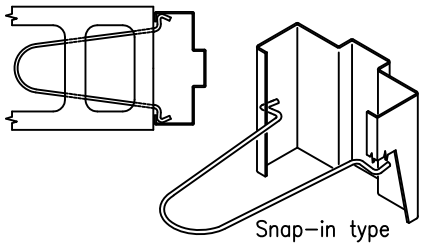
FOR DEPTHS OTHER THAN STANDARD

YOKE AND STRAP MASONRY ANCHOR YS



WIRE MASONRY ANCHOR WMA

FOR STANDARD AND SPECIAL DEPTH FRAMES



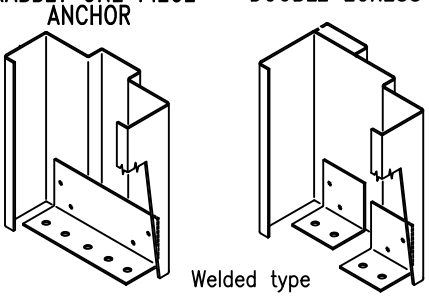
(For 3" thru 8-3/4" Depths)

FLOOR ANCHOR SA

STANDARD ANCHOR

STANDARD DOUBLE RABBET ONE PIECE ANCHOR

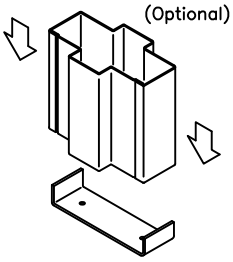
SINGLE RABBET DOUBLE EGRESS



SLFA

(Optional)

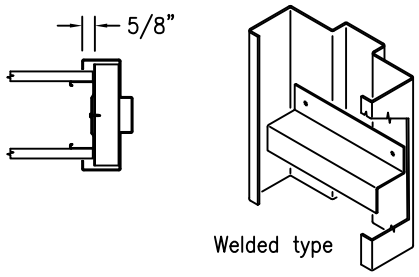
IN-FIELD: FASTEN ANCHOR TO FLOOR. SLIP-FIT FRAME OVER ANCHOR



SIDELITE FLOOR ANCHOR

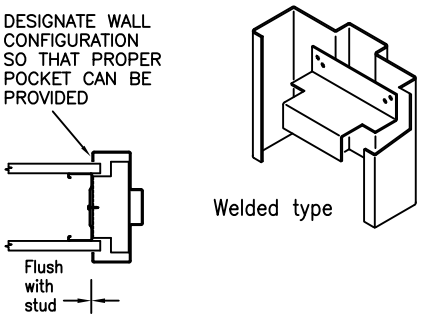
METAL STUD "Z" ANCHOR MSZ1

FOR STANDARD AND SPECIAL DEPTH FRAMES



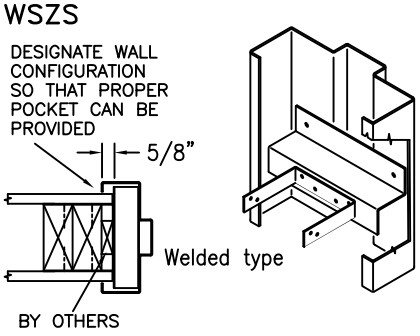
METAL STUD "Z" ANCHOR MSZ2

FOR STANDARD AND SPECIAL DEPTH FRAMES



WOOD STUD "Z" STRAP ANCHOR WSZS

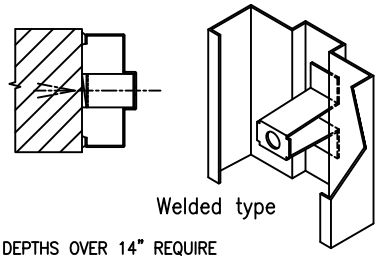
FOR STANDARD AND SPECIAL DEPTH FRAMES



(Used also for METAL STUD Walls)

EXISTING OPENING ANCHOR EO/N

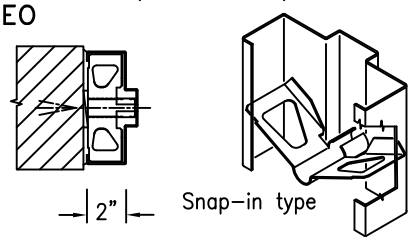
FOR STANDARD AND SPECIAL DEPTH FRAMES



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

EXISTING OPENING ANCHOR (STANDARD) EO

FOR STANDARD AND SPECIAL DEPTH FRAMES

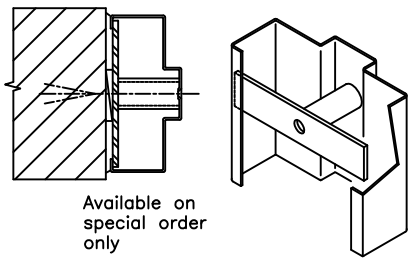


SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

EXISTING OPENING ANCHOR EO

FOR STANDARD AND SPECIAL DEPTH FRAMES



08/20/19

D7-5

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 gage 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 coat is a preparatory base for necessary finish painting. Colorstyle paint is not available applied to the door from the factory. Colorstyle paint is available with armorshield frames up to 4'0" x 8'0".

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 AGENCY:
UNDERWRITERS LABORATORY

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

- GLASS LITES & LOUVERS NOT AVAILABLE

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)

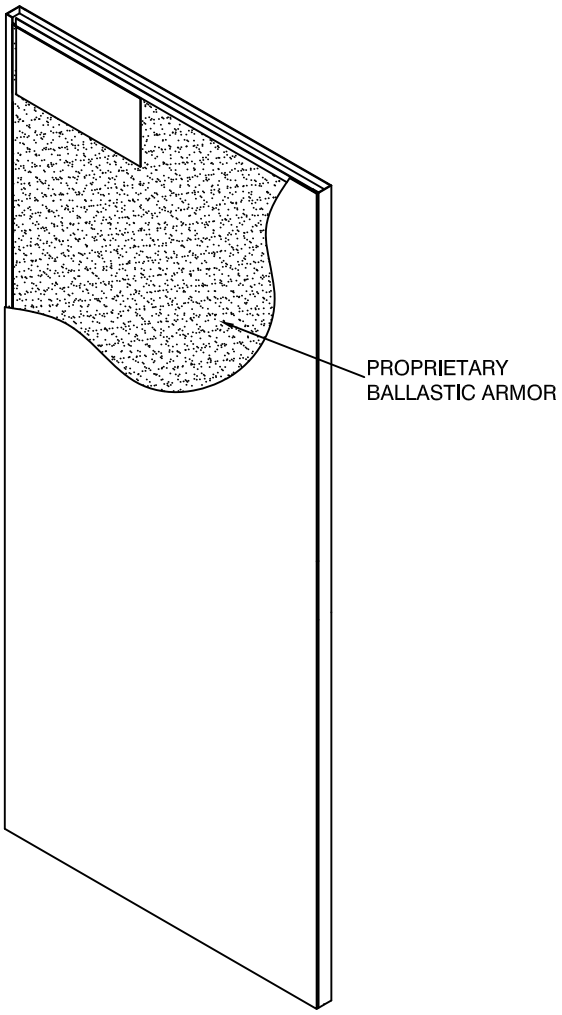
01/29/21

Experience a safer and more open world

CecoDoor ASSA ABLOY

1-3/4" ARMORSHIELD LEVEL 4 THRU 8 BULLET RESISTANT DOOR AND FRAME SYSTEM

TESTED IN ACCORDANCE WITH STANDARD FOR SAFETY
BULLET RESISTANT EQUIPMENT TEST: UL 752



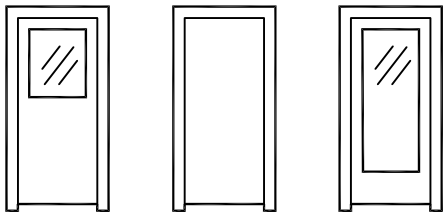
Vertical stiffeners placed to support the bullet resistant armor.
Conforms to UL 752

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

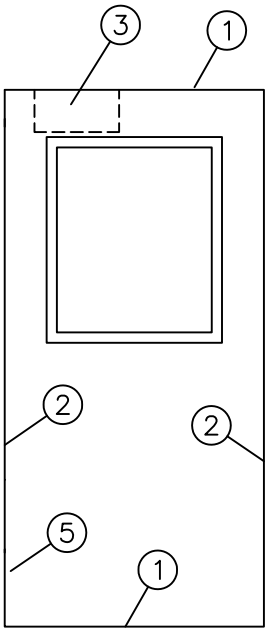
12" x 12" MIN.
VISIBLE GLASS



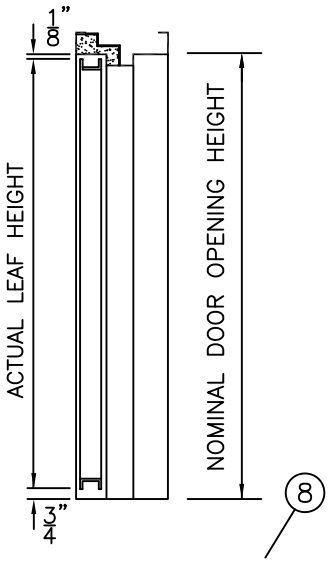
G F FG

UL 752 RATINGS of BULLET RESISTANT MATERIALS

RRatings	*Ammunition*	*Grains*	*Weight*	*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 Rifle Lead Core Full Metal Copper Jacket, Military Ball	150	9.7	2750	3025	1
LEVEL 6	9mm Full Metal Copper Jacket with with Lead Core	124	8.0	1400	1540	5
LEVEL 7	5.56mm Rifle Full Metal Copper Jacket with Lead Core	55	3.56	3080	3383	5
LEVEL 8	7.62mm Rifle Lead Core Full Metal Copper Jacket, Military Ball	150	9.7	2750	3025	5

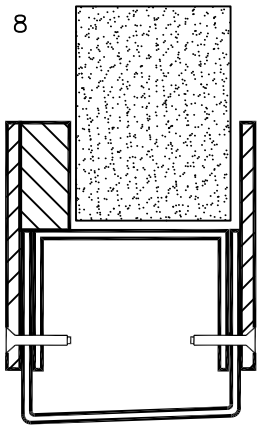


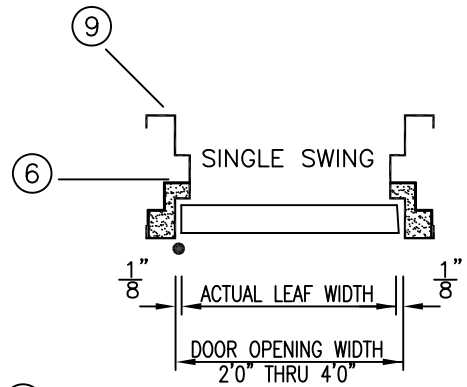
ELEVATION



VERTICAL SECTION

OPTIONAL:
LEVEL 4 THRU 8
GLASS KIT





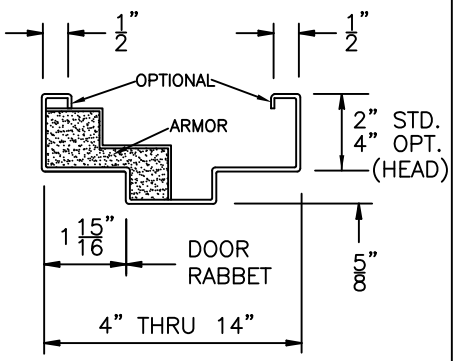
4

HORIZONTAL SECTION

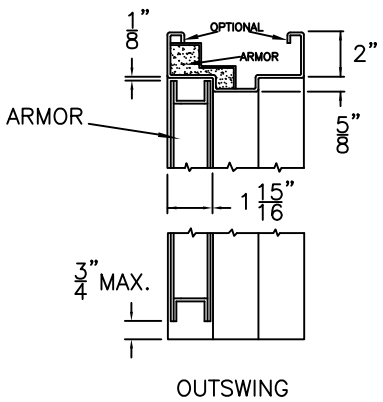
GLASS KIT DESIGN MAY VARY WITH GLASS THICKNESS.
GLASS KIT AND GLASS ARE FACTORY INSTALLED.

Horizontal and vertical sections shown above depict outswing armor conditions.

TYPICAL EQUAL RABBET PROFILE (9)

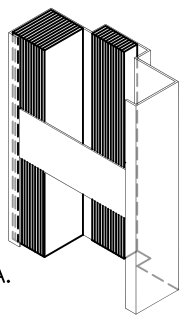


VERTICAL SECTION (8)



OUTSWING

METAL STUD ANCHOR (6)



2" WIDE, 14 GA.
WELDED STRAP

MAY BE USED NEAR SILL IN LIEU OF A FLOOR ANCHOR

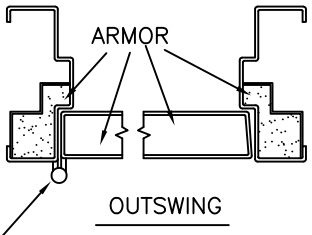
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

TECH-DATA

ARMORSHIELD LEVEL 4 THRU 8 DOOR SYSTEM

D8-3

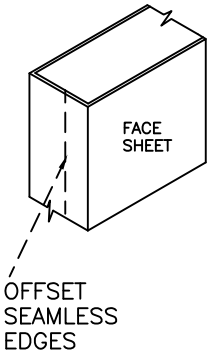
HORIZONTAL SECTION (4)



CONTINUOUS HINGES BY OTHERS

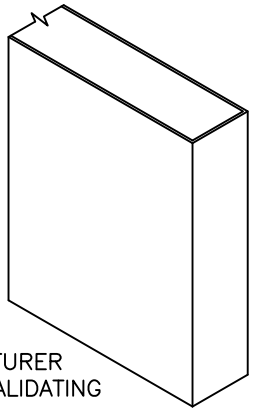
MUTE HOLES NOT PROVIDED

DOOR CONSTRUCTION (2)



HARDWARE PREPARATION STANDARD (2)

SURFACE MOUNTED ONLY
RIM EXIT
VERTICAL ROD EXIT

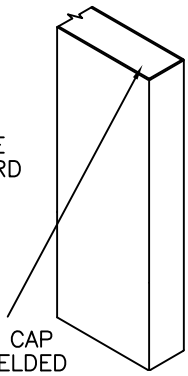


HARDWARE MANUFACTURER RESPONSIBLE FOR VALIDATING BULLET RESISTANCE

STANDARD HINGE PREPARATION (5)

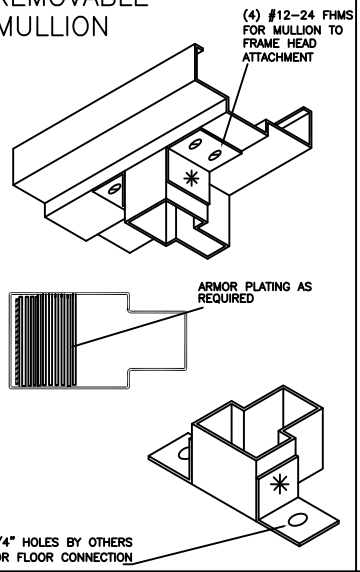
CONTINUOUS HINGE

SQUARE HINGE EDGE STANDARD



16 GAGE TOP CAP SEALED OR WELDED OPTIONAL

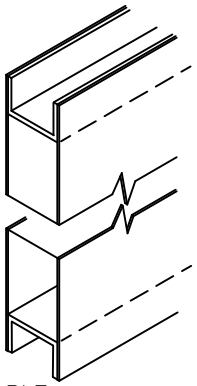
REMOVABLE MULLION



16 GAGE STEEL END CHANNELS (1)

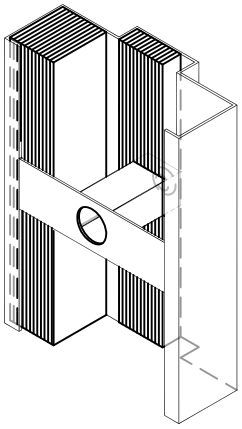
WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM



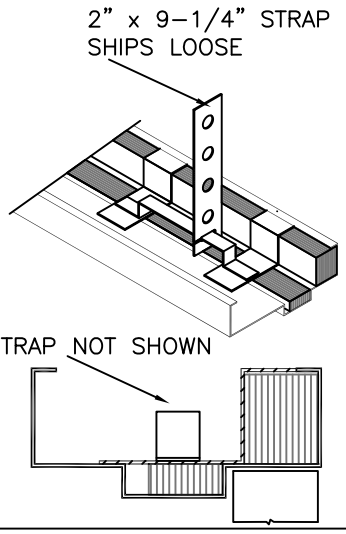
OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

EXISTING OPENING ANCHOR (6)

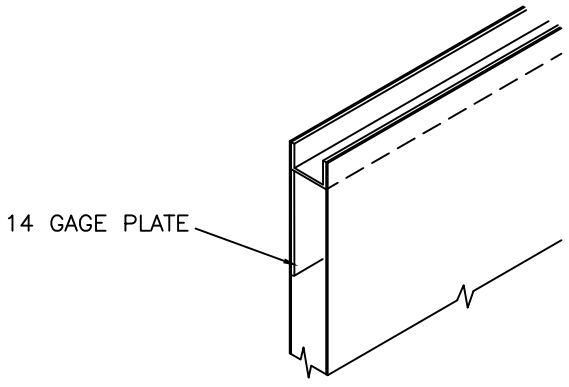


PUNCHED AND DIMPLED FOR 3/8" BOLT. BOLTS BY OTHERS.

WELDED YOKE & STRAP ANCHOR (6)



CLOSER REINFORCEMENT (OPTIONAL) (3)



NOTE: ANCHORS MAY VARY IN APPEARANCE BASED ON THE PLACEMENT OF ARMOR. WIRE MASONRY AND STUD ANCHORS ARE AVAILABLE (NOT SHOWN).

08/20/19

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ASSA ABLOY

RETURN TO TOP

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 gage 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 gage 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.

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
2'–0" 2'–4" 2'–6" 2'–8" 2'–10" 3'–0" 3'–4" 3'–6" 3'–8" 3'–10" 4'–0"	6'–8" 7'–0" 7'–2" 7'–10" 8'–0" 9'–0"

FOR FIRE RATED PRODUCTS
CONTACT THE FACTORY
PHONE: 218–828–6256

CLASSIFIED BULLET
RESISTANT LABELS
NOT AVAILABLE

MATERIAL

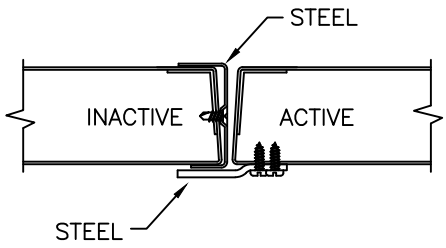
DOOR FACE SHEETS	BULLET RESISTANCE LEVEL	DOOR & FRAME A60 GALVANIZED	DOOR & FRAME G90 GALVANIZED	FRAME MATERIAL
14 GAGE STEEL	4 THRU 8	STD	OPT	14 GAGE

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

DOOR ACCESSORIES
ASTRAGALS AND LOUVERS

OVERLAPPING ASTRAGAL
4441

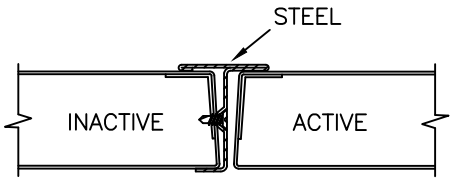
FOR 1-3/4" THICK DOORS



LISTED

OVERLAPPING ASTRAGAL
4471

FOR 1-3/4" THICK DOORS

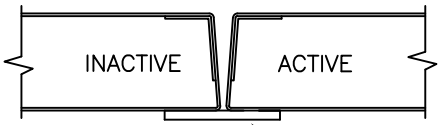


LISTED

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

OVERLAPPING ASTRAGAL
OPTIONAL:**(4491)**
1/8" X 1-1/2" STEEL

OPTIONAL:**(4481)**
(STAINLESS STEEL)
14 GAGE X 1-3/4" WIDE



FOR 1-3/4" THICK DOORS

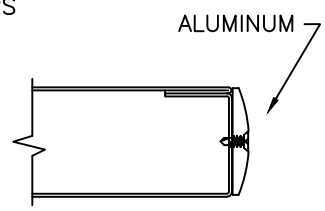
WELDED TO ACTIVE LEAF

STAINLESS STEEL ASTRAGAL SCREW APPLIED IN FIELD

BULLNOSE
4783

FOR DOUBLE ACTING OPENINGS

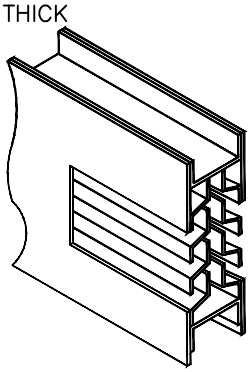
FOR 1-3/4" THICK DOORS



1/4" ALUMINUM PLATE

FIXED TYPE FLUSH WELDED LOUVER
4634 (STAINLESS STEEL)

FOR 1-3/4" THICK DOORS



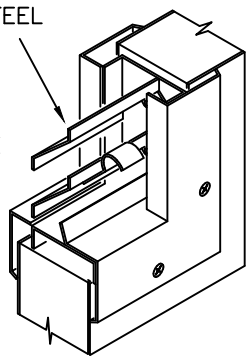
18 GA. BLADES
50% FREE AIR

OPTIONAL:
INSECT SCREEN

(FOR STAINLESS STEEL DOORS ONLY)

ADJUSTABLE LOUVER
FLDL

FOR 1-3/4" THICK DOORS

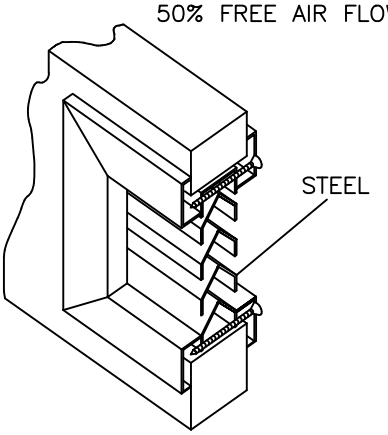


FLDL
IS UL LISTED
130° FUSIBLE
LINK TYPE

FIXED SLAT TYPE LOUVER
4634

FOR 1-3/4" THICK DOORS

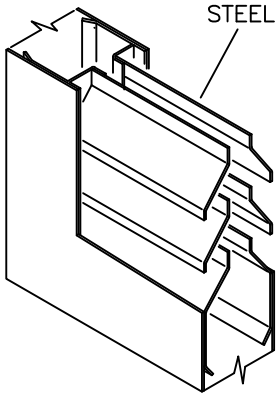
50% FREE AIR FLOW



FLUSH TYPE WELDED LOUVER
4684

FOR 1-3/4" THICK DOORS

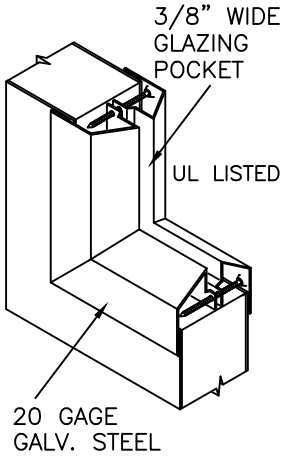
FLUSH TYPE



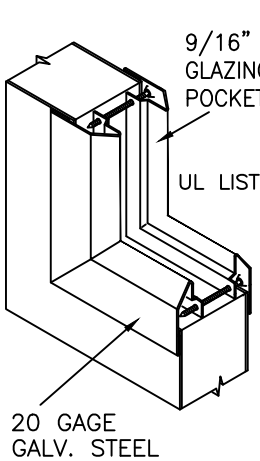
DOOR ACCESSORIES
GLASS LITE AND VISION LITE TRIM KITS

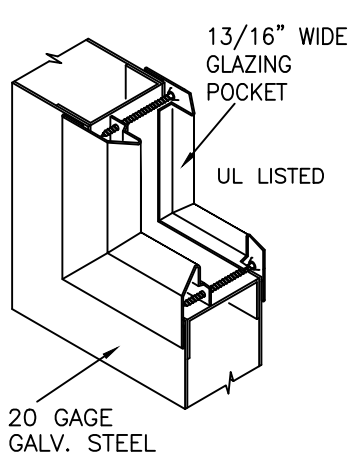
(Unless otherwise indicated, glass and glazing are not included)

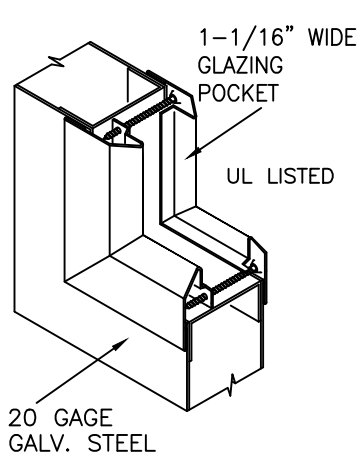
GLAZING TRIM
SlimTrim



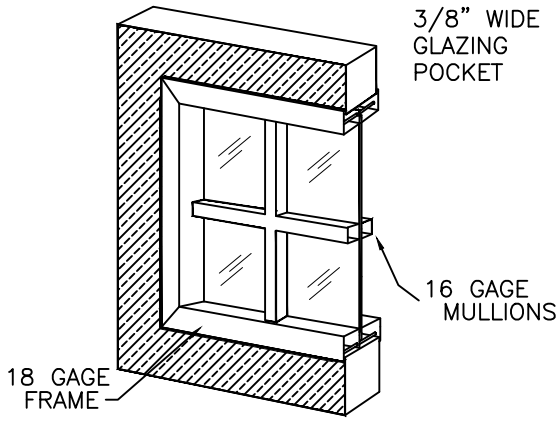
GLAZING TRIM (THICK GLASS)
SlimTrim





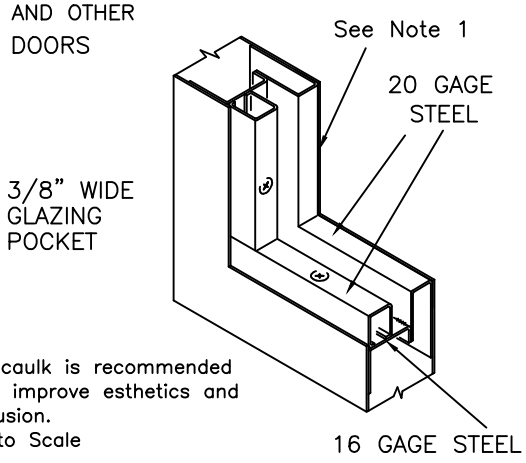


GLAZING TRIM
Steel Multi–Lite



GLAZING TRIM
4884

FOR MEDALLION AND OTHER CENTER SEAM DOORS

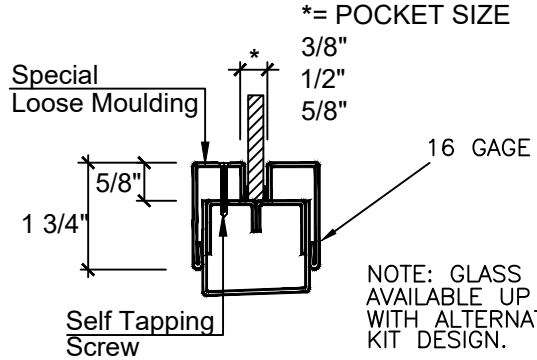


Notes:
1. Field applied caulk is recommended on this seam to improve esthetics and resist water intrusion.
2. Drawing Not to Scale

GLAZING TRIM
Stainless Steel

FOR STAINLESS STEEL DOORS ONLY

304 OR 316
STAINLESS STEEL
#4 FINISH

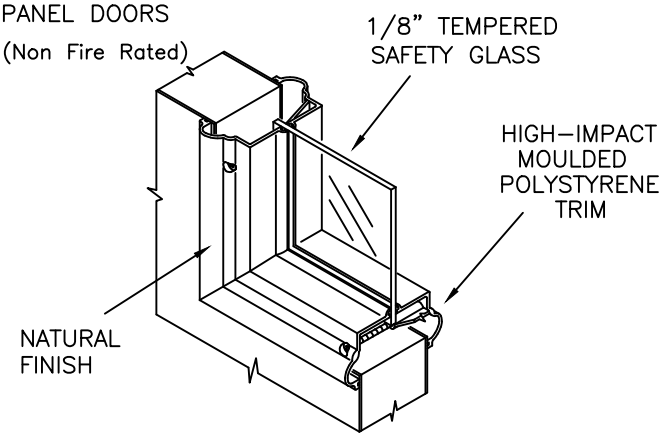


NOTE: GLASS POCKETS AVAILABLE UP TO 1–1/8" WITH ALTERNATE GLASS KIT DESIGN.

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)

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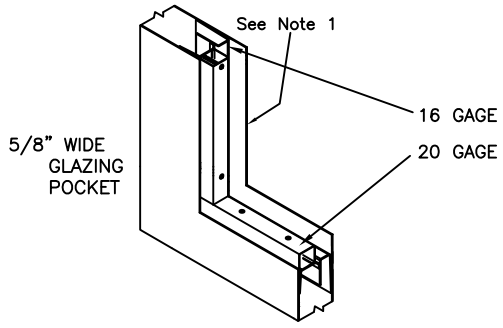
RETURN TO TOP

CecoDoor
ASSA ABLOY

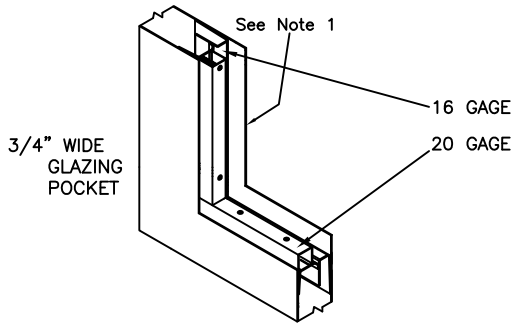
DOOR ACCESSORIES
GLASS LITE TRIM KITS

(Unless otherwise indicated, glass and glazing are not included)

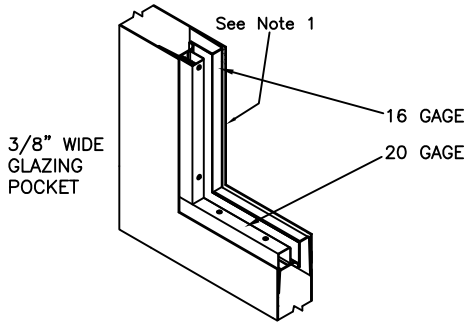
GLAZING TRIM
4881 (FLUSH)



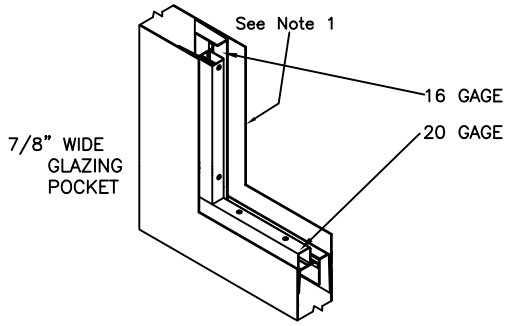
GLAZING TRIM
4883 (FLUSH)



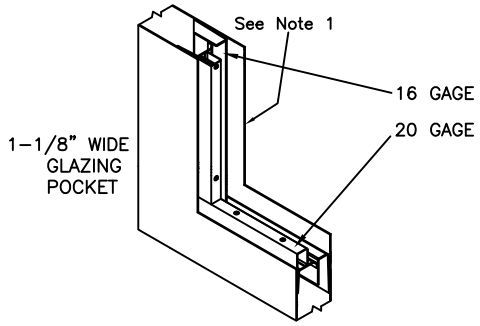
GLAZING TRIM
4885 (FLUSH)



GLAZING TRIM
4887 (FLUSH)



GLAZING TRIM
4889 (FLUSH)



Notes:
1. Field applied caulk is recommended on this seam to improve esthetics 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)

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RETURN TO TOP

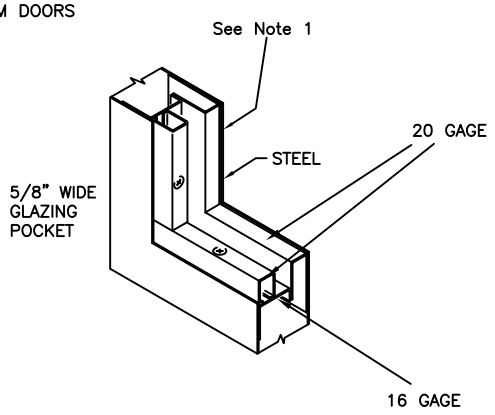
CecoDoor
ASSA ABLOY

D9–2B

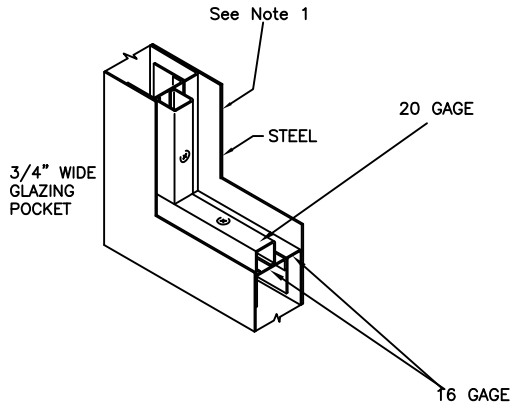
DOOR ACCESSORIES
GLASS LITE TRIM KITS

(Unless otherwise indicated, glass and glazing are not included)

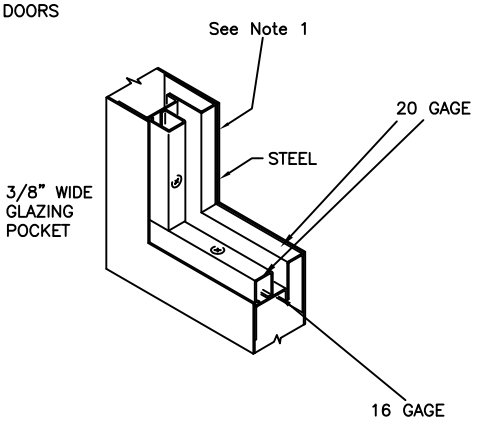
GLAZING TRIM
4880 (FLUSH)
FOR MEDALLION AND OTHER CENTER SEAM DOORS



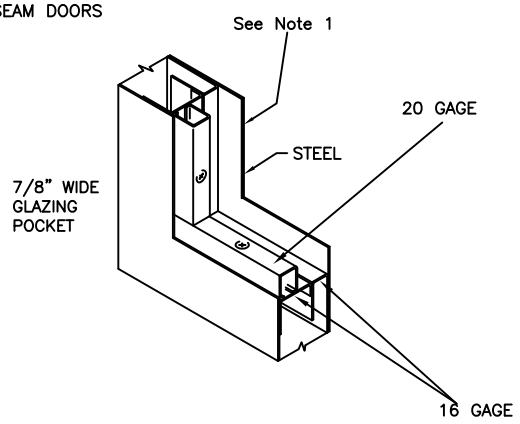
GLAZING TRIM
4882 (FLUSH)
FOR MEDALLION AND OTHER CENTER SEAM DOORS



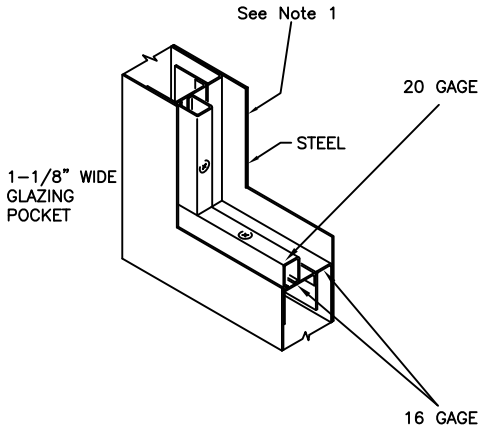
GLAZING TRIM
4884 (FLUSH)
FOR MEDALLION AND OTHER CENTER SEAM DOORS



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 esthetics and resist water intrusion.
2. Drawing Not to Scale

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

09/20/19

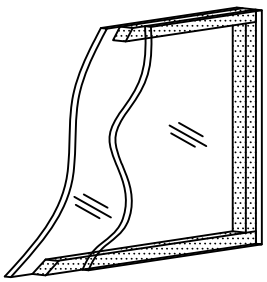
TECH-DATA

Factory Installed Glass-Doors

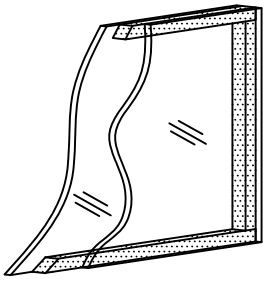
D9-3

INSULATED GLASS (NON-FIRE RATED)

DESCRIPTION: 5/8" THICKNESS (NOMINAL)
LoE2 TEMPERED, GAS FILLED
WARRANTY:10 YEARS (GLASS ONLY)
CLOSED CELL FOAM GLAZING TAPE OR OTHER APPROVED MATERIAL
IMPACT SAFETY RATING: CAT II, CPSC 16CFR1201
CANNOT BE USED IN FIRE RATED DOORS
INSULATING PERFORMANCE:
CENTER OF GLASS U FACTOR: .25 BTU/hr*FT$^{2^\circ}$ F
SHADING COEFFICIENT (SC): .42
SOLAR HEAT GAIN (SHGC): .37
UV TRANSMITTANCE: 14%

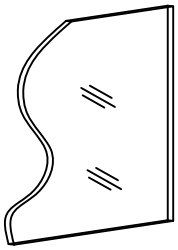


DESCRIPTION: 1" THICKNESS (NOMINAL)
LoE2 TEMPERED, GAS FILLED
WARRANTY:10 YEARS (GLASS ONLY)
CLOSED CELL FOAM GLAZING TAPE OR OTHER APPROVED MATERIAL
IMPACT SAFETY RATING: CAT II, CPSC 16CFR1201
CANNOT BE USED IN FIRE RATED DOORS
INSULATING PERFORMANCE:
CENTER OF GLASS U FACTOR: .25 BTU/hr*FT$^{2^\circ}$ F
SHADING COEFFICIENT (SC): .41
SOLAR HEAT GAIN (SHGC): .36
UV TRANSMITTANCE: 13%



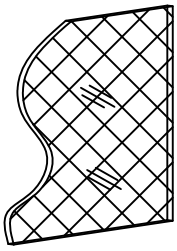
1/4" TEMPERED GLASS (NON-FIRE RATED)

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	1296 sq. IN	34"	84"
PEMKO FG300090			
60	552 sq. IN	12"	46"
90	552 sq. IN	12"	46"

NOT APPROVED FOR TEMPERATURE RISE
NOTE: SIZE LIMITATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

08/20/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

TECH-DATA

Factory Installed Glass-Doors

D9-4

KERALITE® FILMED GLASS (FIRE RATED)

DESCRIPTION: 3/16" THICK (NOMINAL)

CERAMIC, FILMED FIRE AND IMPACT
SAFETY RATED GLASS
LIMITED WARRANTY:3 YEARS
FIRE RATED GLAZING TAPE ONLY
IMPACT SAFETY RATING:
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	3627 sq. IN	46-1/2"	78"
90	3627 sq. IN	46-1/2"	76"
60 & 90 TR*	100 sq. IN	10"	33"
180 TR*	100 sq. 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

KERALITE® LAMINATED GLASS (FIRE RATED)

DESCRIPTION: 5/16" THICK (NOMINAL)

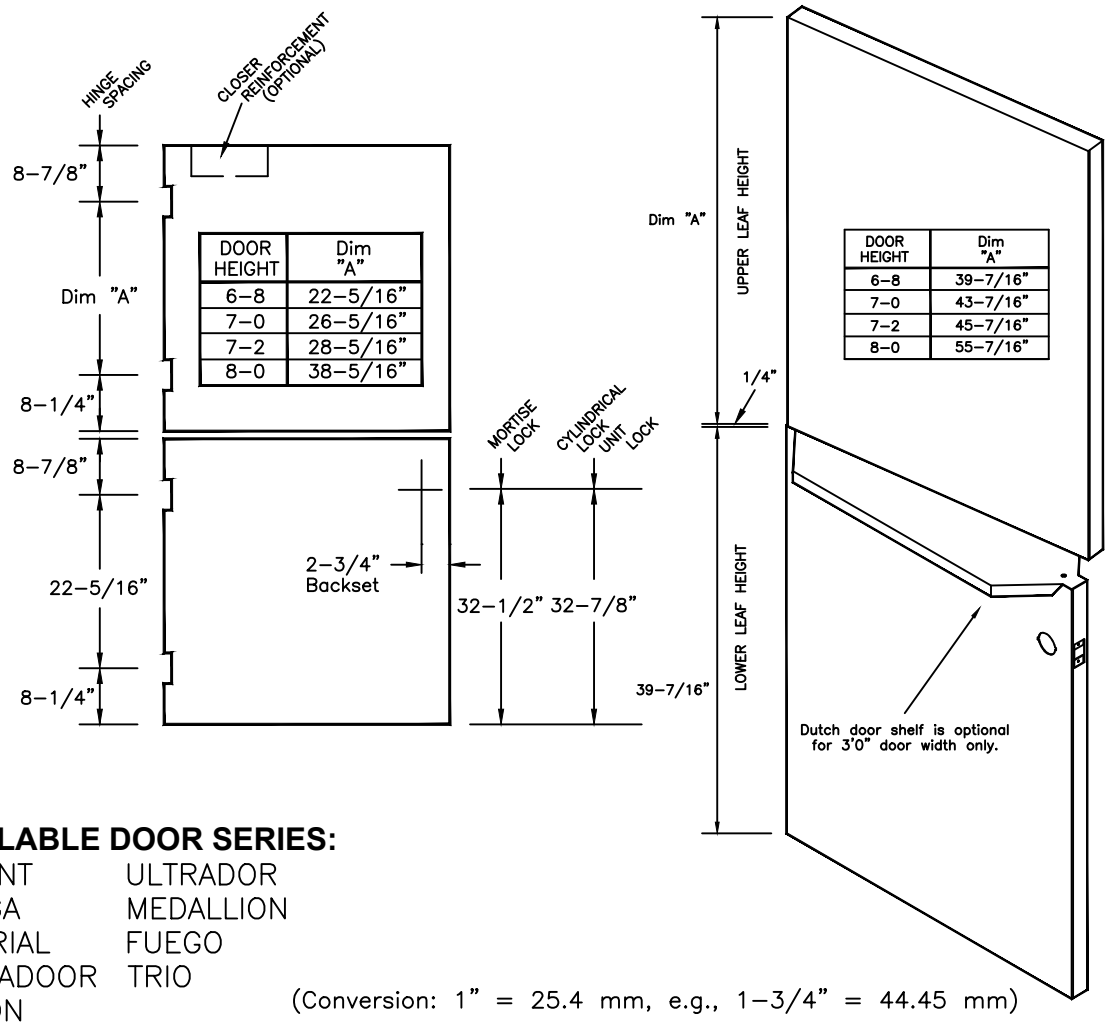
CERAMIC, LAMINATED FIRE AND IMPACT
SAFETY RATED GLASS
LIMITED WARRANTY:5 YEARS
FIRE RATED GLAZING TAPE ONLY
IMPACT SAFETY RATING:
CAT 1, CAT II, CPSC 16CFR1201, ANSI Z97.1
UL APPROVED, POSITIVE PRESSURE.
GLASS IS MARKED IN ACCORDANCE
WITH INTERNATIONAL BUILDING CODE

RATING	MAXIMUM EXPOSED AREA	MAXIMUM WIDTH	MAXIMUM HEIGHT
FOAM TAPE			
20, 45, 60	3627 sq. IN	46-1/2"	78"
90	3627 sq. IN	46-1/2"	76"
60 & 90 TR*	100 sq. IN	10"	33"
180 TR*	100 sq. 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

08/20/19

DOOR ACCESSORIES & PREPS
DUTCH DOORS & ACCESSORIES



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"

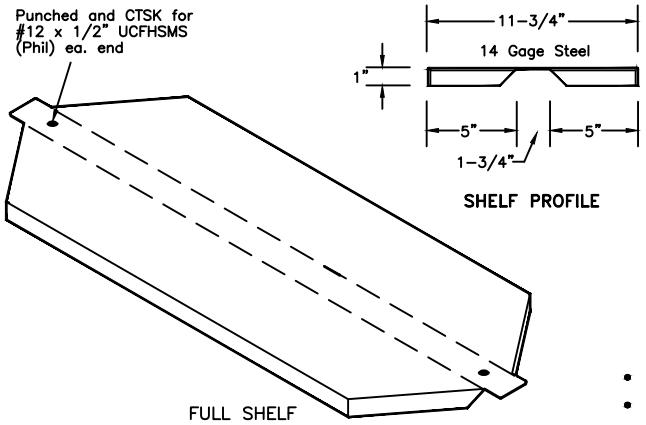
AVAILABLE DOOR SERIES:

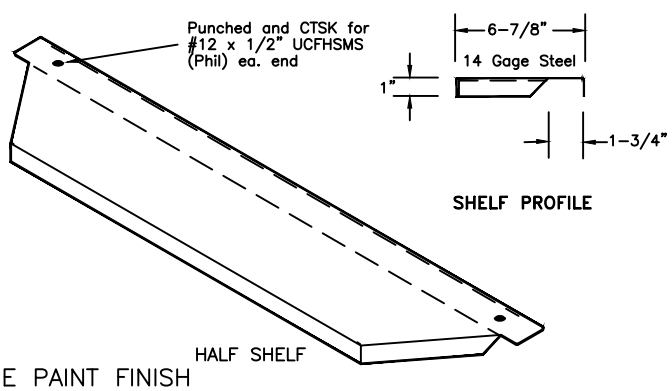
REGENT
OMEGA
IMPERIAL
VERSADOOR
LEGION
ULTRADOR
MEDALLION
FUEGO
TRIO

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

DUTCH SHELF OPTIONS

AVAILABLE FOR DOOR WIDTH:
3'0"





- PRIME PAINT FINISH
- SHELF, GUSSETS, AND FASTENERS SHIPPED LOOSE

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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RETURN TO TOP

CecoDoor
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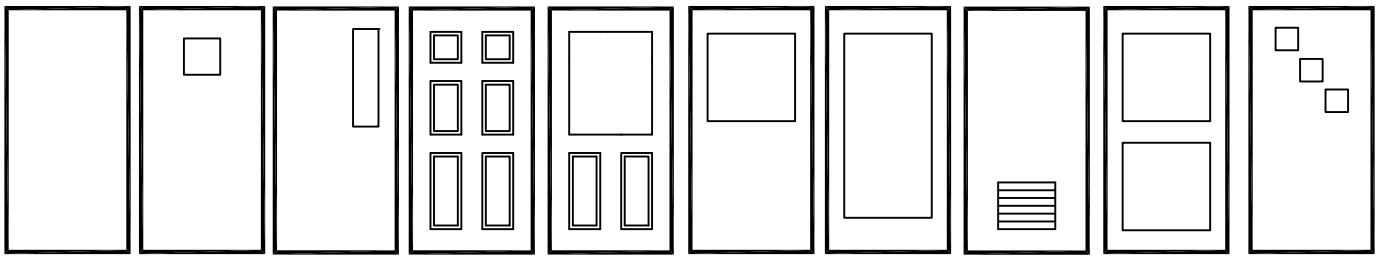
LABELED FIRE DOORS

1-3/4" REGENT AND OMEGA FIRE DOORS
HONEYCOMB CORE

FIRE DOOR DESIGNS



HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL 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 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, 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 gage 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 gage 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.

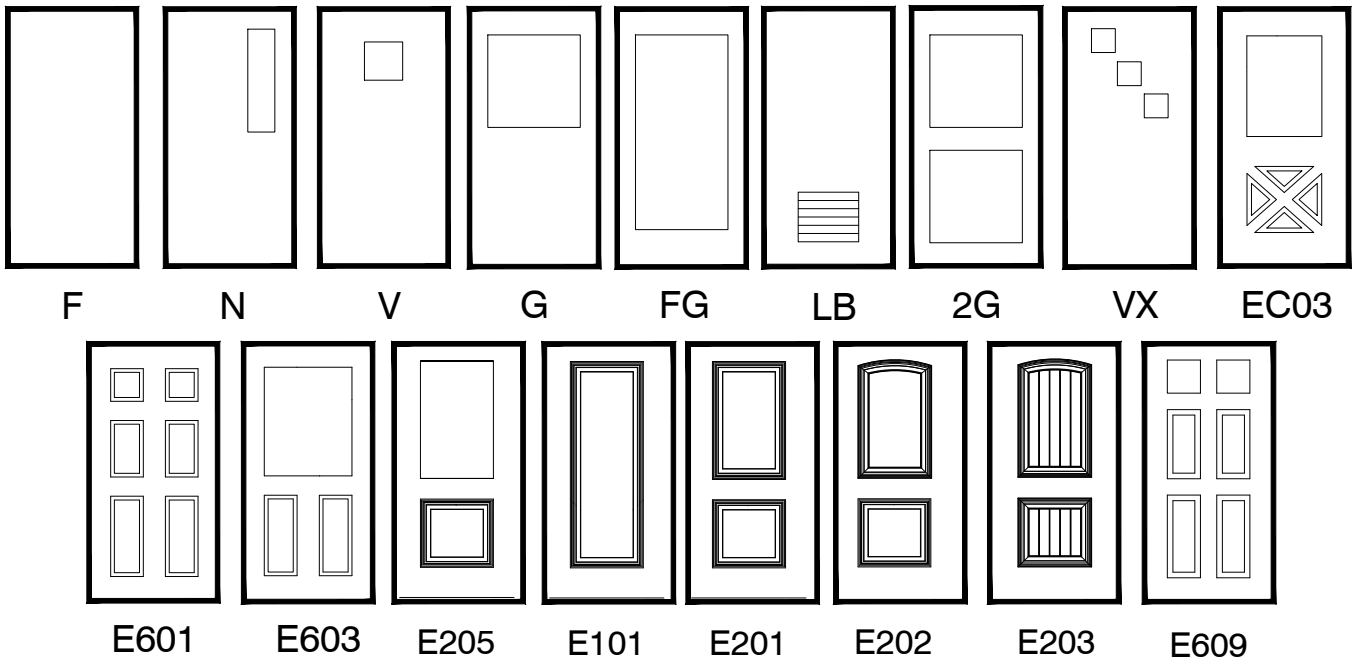
- Latchset: UL listed, 1/2" minimum throw.
- Test: UL10B, UL10C, NFPA252 & UL1784

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

LABELED FIRE DOORS

1-3/4" IMPERIAL & VERSADOOR FIRE DOORS
FOAMED IN PLACE POLYURETHANE CORE

FIRE DOOR DESIGNS



HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL LISTED FUSIBLE LINK * LOUVER
3 HOURS	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.	None
1–1/2 HOUR		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 ADDTIONAL DATA ON VERSADOOR OR IMPERIAL DOORS, SEE SECTIONS D3 & D4.

IMPERIAL & VERSADOOR MAXIMUM SIZE, UL & 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 & 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

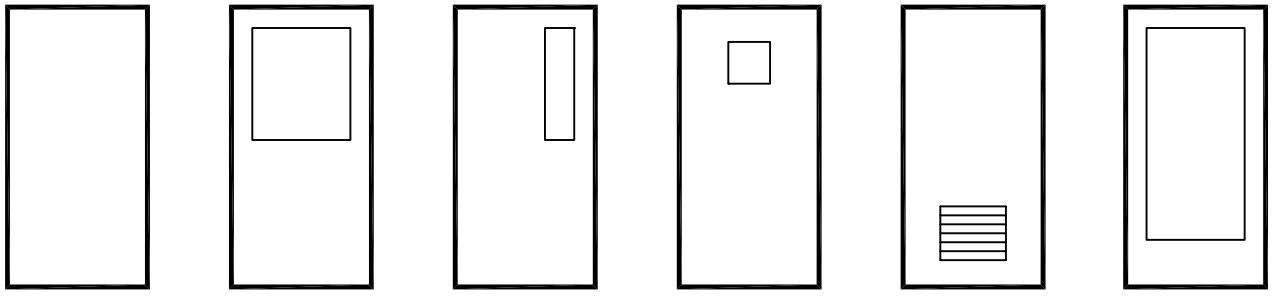
- Astragal is required for 3 hour rated pairs, and is optional for other pairs.
- Latchset: UL listed, 1/2" minimum throw.
- Note: Some hardware and/or glass lite combinations may not be available in sizes listed. Consult customer service for detailed information.
- Classified for use with all types of labeled fire exit hardware.
- Test: UL10B, UL10C, NFPA252 & UL1784
- 14 gage doors will be weld seamless.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

LABELED FIRE DOORS

1-3/4" MEDALLION FIRE DOORS
VERTICALLY STEEL STIFFENED

Fire Door Designs



F G N V LB FG

HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL LISTED FUSIBLE LINK * LOUVER
3 HOURS	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.	None
1–1/2 HOUR		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.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

- Medallion doors are handed. Vertically Steel Stiffened-Steel GLazing Trim, UL, WH or FM label ...classified for openings rated from 20 minute up to and including 3 hours. (12 gage 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 listed, 1/2" minimum throw (single) [12 gage doors are limited to mortise locks], and (pairs) thru 1-1/2 hours. 5/8" minimium throw 3 hour (pairs).
- See page D5A for construction features of temperature rise door.
- For additional data on Medallion doors, see pages D5.

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 gage 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

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RETURN TO TOP

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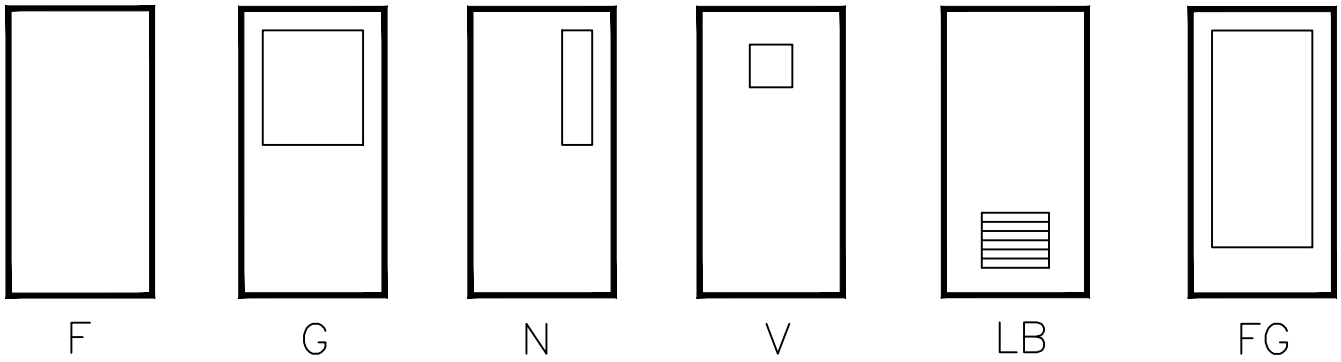
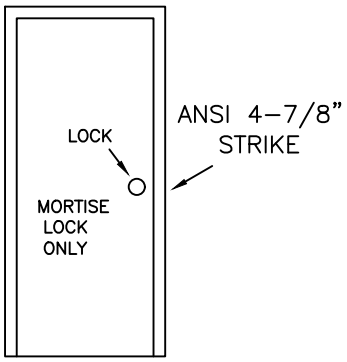
LABELED FIRE DOORS

1-3/4" MEDALLION FIRE DOORS VERTICALLY STEEL STIFFENED OVERSIZED DOORS (OVER 4'0" WIDE AND/OR OVER 10'0" TALL)

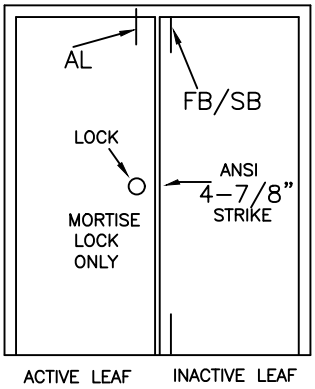
Fire Door Designs





HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL LISTED FUSIBLE LINK * LOUVER
1-1/2 HOUR	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.	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 must be UL or WH label classified for openings rated from 20 minutes up to and including 1-1/2 hours.
- 30 min. temperature rise rating of 450° F may be achieved with 20 min. thru 1-1/2 hour fire ratings and special construction.
- 100 sq. inches of glass available with 450° F temperature rise.
- Classified in accordance with UL10B, UL10C, NFPA252 & UL1784.
- Standard swing same direction pairs only.
- Minimum 3/4" latch throw for mortise lock, surface or flush bolts.

Maximum size:
5'0" x 12'0" singles and 10'0" x 12'0" pairs
16 or 14 ga. face sheets
22 ga. min., 20 ga. max. stiffener thickness.
14 ga. end channels
16 ga. steel top cap tackwelded to end channel

HARDWARE:

1.) UL listed Mortised fusible link popper (auxiliary latch) required. To be located no more than 6" to centerline from lock edge, at top of active leaf of pair. Auxiliary latch is to be installed in door & strike in frame head.
2.) UL listed closer required.
3.) 3/4" overlapping astragal strip required on active or inactive leaf of pair, supplied by Ceco.
4.) Mortise locks are required with singles and pairs. Locks are to be UL listed for use on 4'0" x 10'0", 1-1/2 hour hollow metal doors minimum.
5.) Flush or surface bolts required for inactive leaf. Bolts with extensions up to 60" in length permitted. Bolts are to be UL listed for use on 4'0" x 10'0", 1-1/2 hour hollow metal doors minimum.
6.) Hinges: Full mortise (butt type only) hinges meeting the requirements of BHMA A156.1 are the only hinging option.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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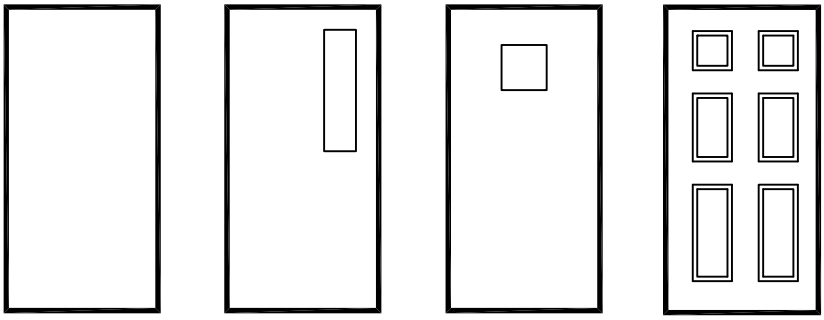
RETURN TO TOP

CecoDoor
ASSA ABLOY

LABELED FIRE DOORS

1-3/4" FUEGO FIRE DOORS
SOLID MINERAL FIBER CORE
250°F (121°C) MAX. TEMP. RISE

Fire Door 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 HOUR	
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, WH or FM label: classified for openings rated from 20 minute up to & including 3 hours. For additional data on Fuego doors, see page D6.
- Latchset: UL 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 gage 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)

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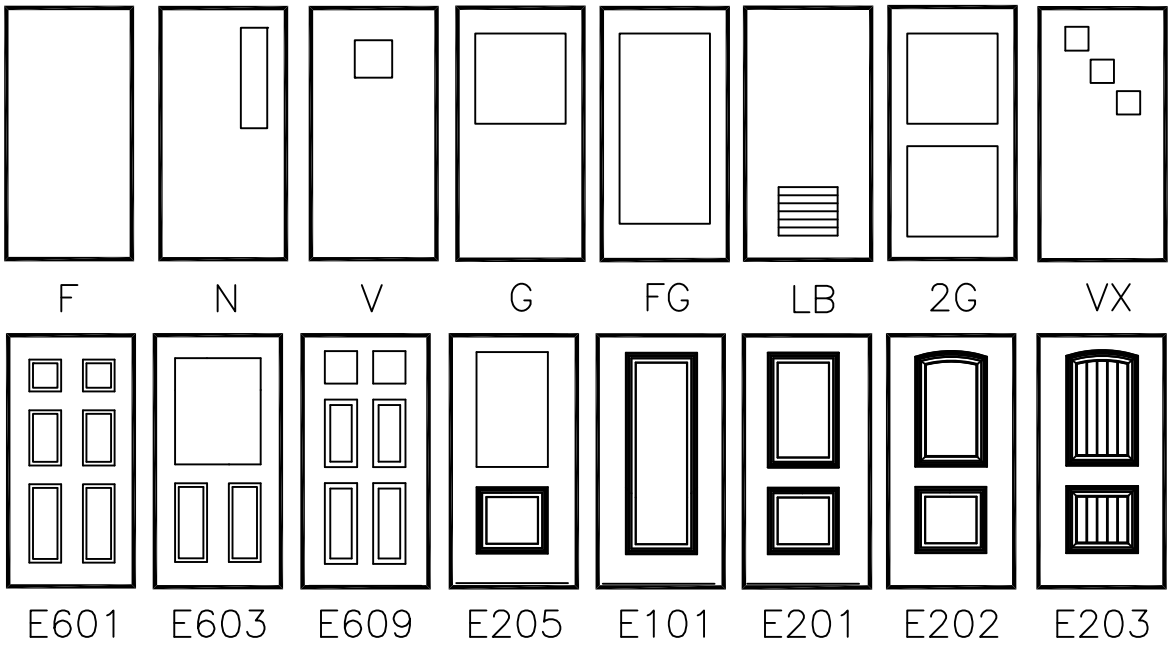
RETURN TO TOP

CecoDoor
ASSA ABLOY

LABELED FIRE DOORS

1-3/4" LEGION AND ULTRADOR FIRE DOORS
POLYSTYRENE CORE

Fire Door Designs



HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL LISTED FUSIBLE LINK * LOUVER
3 HOURS	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.	None
1-1/2 HOUR		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, 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 pages D4A and D4B.

*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 gage doors will be weld seamless.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

**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.)

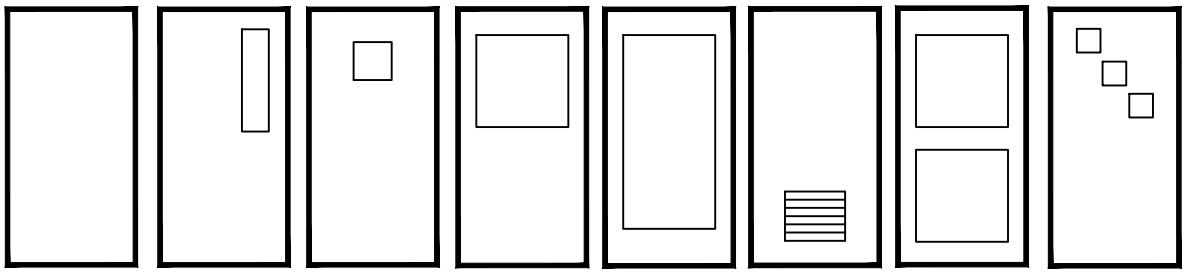
**Note: Some hardware and/or glass lite combinations may not be available in sizes listed. Consult customer service for detailed information.

- Astragal is required for 3 hour rated and 20 gage pairs, and is optional for other pairs.
- Classified for use with all types of labeled fire exit hardware.
- Latchset: UL listed, 1/2" minimum throw.
- Test: UL10B, UL10C, NFPA 252 & UL1784

LABELED FIRE DOORS

1-3/4" TRIO FIRE DOORS
VERTICALLY STEEL STIFFENED

FIRE DOOR DESIGNS



HOURLY RATING	MAX. EXPOSED WIDTH, HEIGHT AND AREA	UL LISTED FUSIBLE LINK * LOUVER
3 HOURS	SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.	None
1–1/2 HOUR		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 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.

For additional data on Trio doors, see pages D19 & D19A.

*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 listed, 1/2" minimum throw (singles), and thru 1-1/2 hour (pairs)
- Latchset: UL 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 avaialble in sizes listed. Consult customer service for detailed information.
- Test: UL10B, UL10C, NFPA252 & UL1784

* * Concealed Vertical Rods, UL 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.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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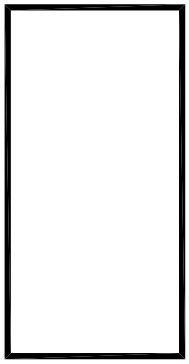
RETURN TO TOP

CecoDoor
ASSA ABLOY

LABELED FIRE DOORS

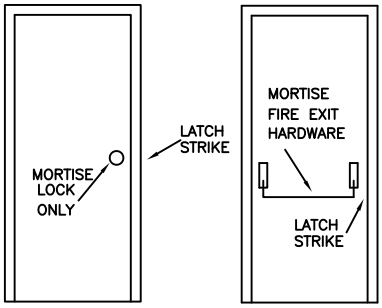
1-3/4" ARMORSHIELD FIRE DOORS
STEEL STIFFENED CORE (UL 752 LEVELS 1, 2, 3)

Fire Door Design



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	.357 Mag.	JACKETED LEAD POINT 158gr	1312 ft/s	743-889 ft/lbs
III	.44 Mag.	LEAD SOFT POINT 240gr	1417 ft/s	1370-1593 ft/lbs



HOURLY RATING	FACE GAUGE	UL10B UL10C MAX WIDTH	UL10B UL10C MAX HEIGHT
1/3, 3/4, 1, 1-1/2	12	4'-0"	8'-0"

1/3 HOUR DOORS ARE FOR USE WHERE SMOKE & DRAFT IS A PRIMARY CONSIDERATION.

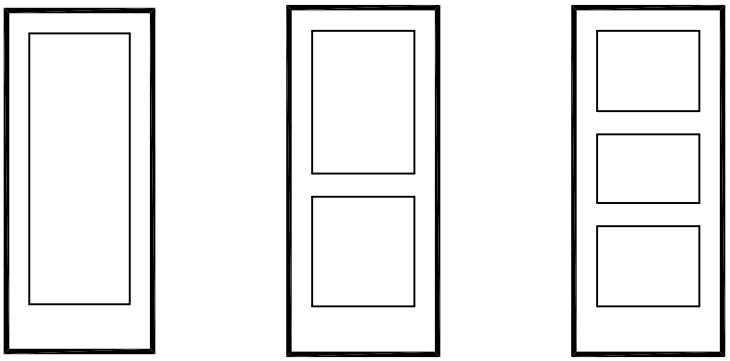
- Armorshield doors are handed with 12 gage face sheets.
- Doors are center seam construction with welded edge seams.
- Vertical stiffeners are 22 gage.
- Vertical stiffeners are placed no more than 6" apart and welded no more than 5" on center along their length.
- 4-1/2" heavy weight hinges are used 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.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

LABELED FIRE DOORS

1-3/4" THRULITE
STILE AND RAIL FIRE DOORS

DOOR DESIGNS



FG 2G 3G

	HOURLY RATING	FACE GAUGE	UL10B, UL10C MAX WIDTH	UL10B, UL10C MAX HEIGHT
SINGLES	1/3, 3/4	16	4'–0"	8'–0"
PAIRS	1/3, 3/4	16	8'–0"	8'–0"

HOURLY RATING	*MAX. EXPOSED WIDTH, HEIGHT AND AREA
3/4 HOUR	**SEE GLASS MANUFACTURERS CLASSIFICATION LISTING FOR THESE LIMITS.
1/3 HOUR	

- 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 D18.

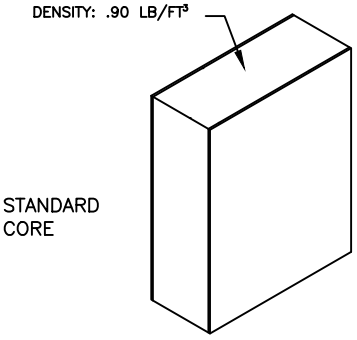
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

Return to Index

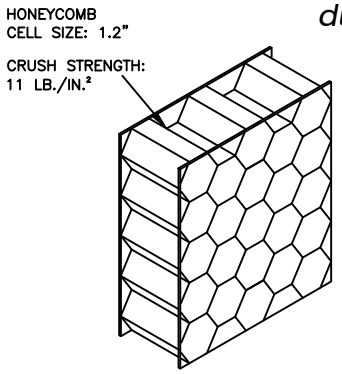
1-3/4" STAINLESS STEEL DOOR

FULL FLUSH STEEL DOORS
BEVELED LOCK AND HINGE EDGE, HANDED

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 ...

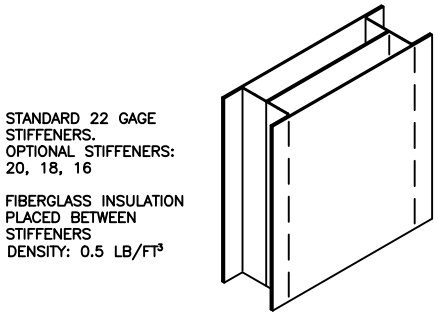


POLYSTYRENE CORE (SP)

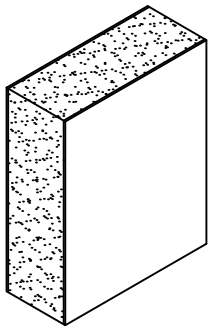


HONEYCOMB CORE (SI)
AVAILABLE AT 3 HOUR FIRE RATING ONLY

Suggested Use:
- *Interior or Exterior ...*
- *Refineries*
- *Food Processing*
- *Salt Mines*
- *Water Treatment*
- *Sanitation*
- *Pharmaceutical Plants*
- *Swimming Pools*
- *Coastal Areas*
- *Research Laboratories*
- *Chemical Plants*



STEEL STIFFENED CORE (SS)



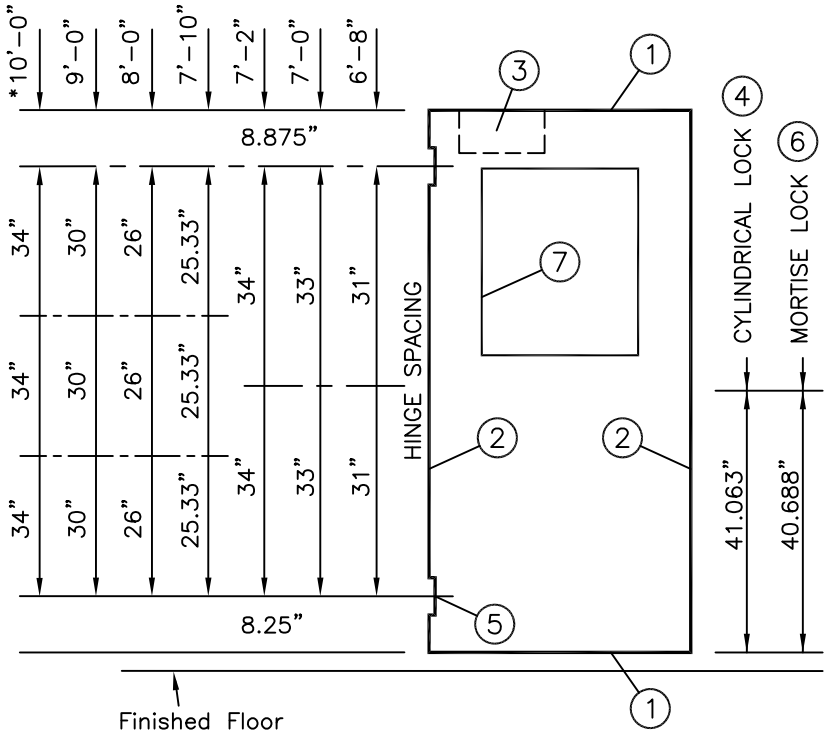
POLYURETHANE SLAB CORE (SU)

FINISH	304 STAINLESS STEEL			316 STAINLESS STEEL		
	CECO STEEL FINISH CODE			CECO STEEL FINISH CODE		
STEEL GAGE	12 GAGE	14 GAGE	16 GAGE	12 GAGE	14 GAGE	16 GAGE
#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

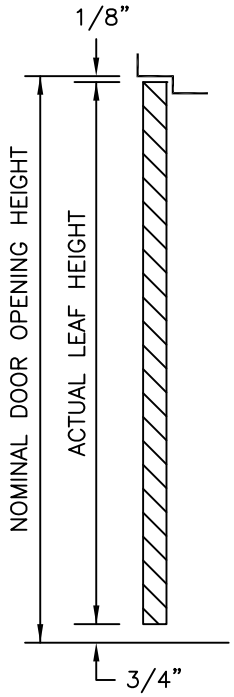
SPECIAL NOTE: AT 304 ALLOY, INTERNAL REINFORCEMENTS AND PARTS FOR STAINLESS STEEL DOORS TO BE PROVIDED AS GALVANIZED STEEL.

SPECIAL NOTE: AT 316 ALLOY, INTERNAL REINFORCEMENTS AND PARTS FOR STAINLESS STEEL DOORS TO BE PROVIDED AS STAINLESS STEEL.

Hardware locations shown match Ceco stainless steel frames.

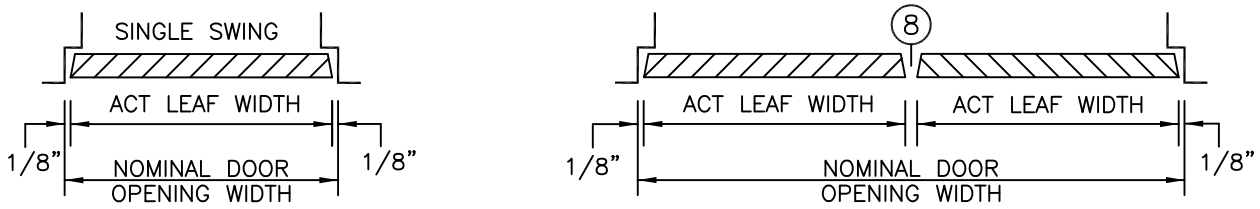


DOOR ELEVATION



VERTICAL SECTION

*9'0" MAX. HEIGHT IN 18 GAGE



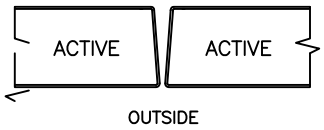
HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

⑧

STAINLESS STEEL

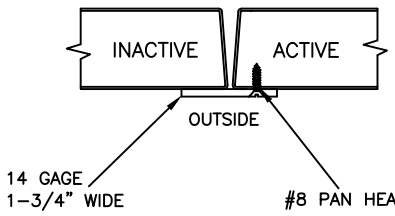
BOTH HANDS REVERSE ACTIVE



⑧

STAINLESS STEEL
ASTRAGAL FULL HEIGHT
4481

RHR(SHOWN)
LHR OPPOSITE

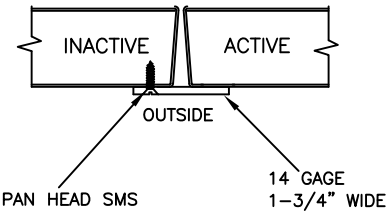


ASTRAGAL SHIPPED LOOSE
FIELD APPLIED WITH SCREWS

⑧

STAINLESS STEEL
ASTRAGAL FULL HEIGHT
4481

RHA(SHOWN)
LHA OPPOSITE



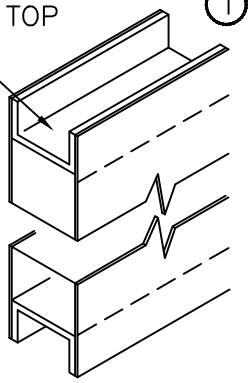
ASTRAGAL SHIPPED LOOSE
FIELD APPLIED WITH SCREWS

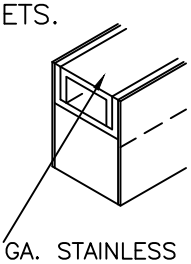
TECH-DATA

D11-3

1

16 GA. STAINLESS STEEL TOP AND BOTTOM CHANNELS WELDED TO BOTH FACE SHEETS.





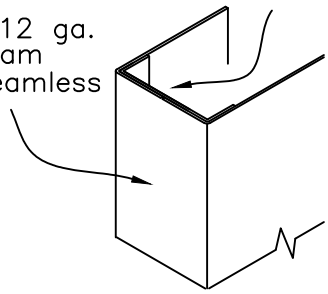
16 GA. STAINLESS STEEL FLUSH CAP OPTIONAL FOR TOP AND BOTTOM CHANNEL, SCREW APPLIED.

2

VERTICAL EDGES

16 Gage Full Height Channel

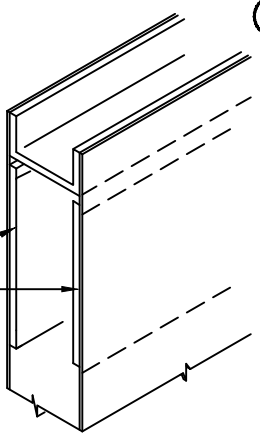
16,14 & 12 ga. Center Seam Welded Seamless Edge



3

OPTIONAL CLOSER REINFORCEMENT

14 GAGE



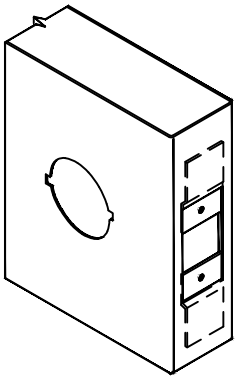
4

LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

BEVELED LOCK EDGE

2-3/4" BACKSET

12 GAGE LOCK REINFORCEMENT



LOCK EDGE IS BEVELED

5

HINGE PREPARATION

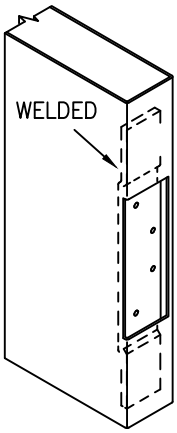
4-1/2" OR 5" HIGH STANDARD OR HEAVYWEIGHT FULL MORTISE HINGES

ANSI A.156.7 TEMPLATE

HINGE EDGE IS BEVELED

HINGE BACKSET 1/4"

7 GAGE HINGE REINFORCEMENT



6

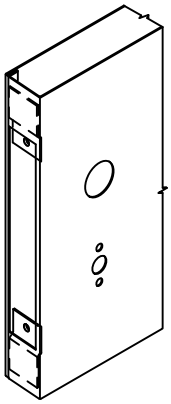
LOCK PREPARATION GOV. 86-4 MORTISE TYPE

BEVELED LOCK EDGE

2-3/4" BACKSET

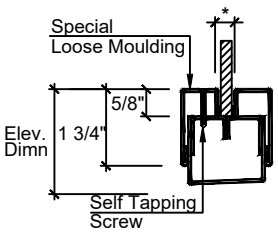
FACE OF DOOR PREPARED PER LOCK TEMPLATE

12 GAGE LOCK REINFORCEMENT



7

STAINLESS STEEL LOW PROFILE GLAZING TRIM

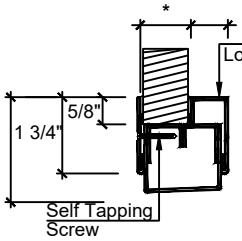


***POCKET SIZE**
3/8"
1/2"
5/8"

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.

08/08/22

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)

D11-4

PRODUCT SPECIFICATIONS:

1-3/4" thick stainless steel doors shall be as provided by Ceco Door Products.

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"	

Stainless steel doors are made as full-flush 16, 14 and 12 gage center seam style. 16, 14 & 12 gage 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 gage channels are inverted. A 16 gage 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 gage 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 gage 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	GAGE	RATING	MAX. SIZE
HONEYCOMB	16	20 MIN. – 3 HOUR	4'0" X 8'0" SINGLE
HONEYCOMB	16	20 MIN. – 90 MIN.	8'0" X 8'0" PAIR
POLYURETHANE SLAB	16	20 MIN. – 90 MIN.	4'0" X 8'0" SINGLE
POLYURETHANE SLAB	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 Gage Stainless Steel	STD	Optional – See Available Finish Below
14 Gage Stainless Steel	STD	
12 Gage 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)

08/04/22

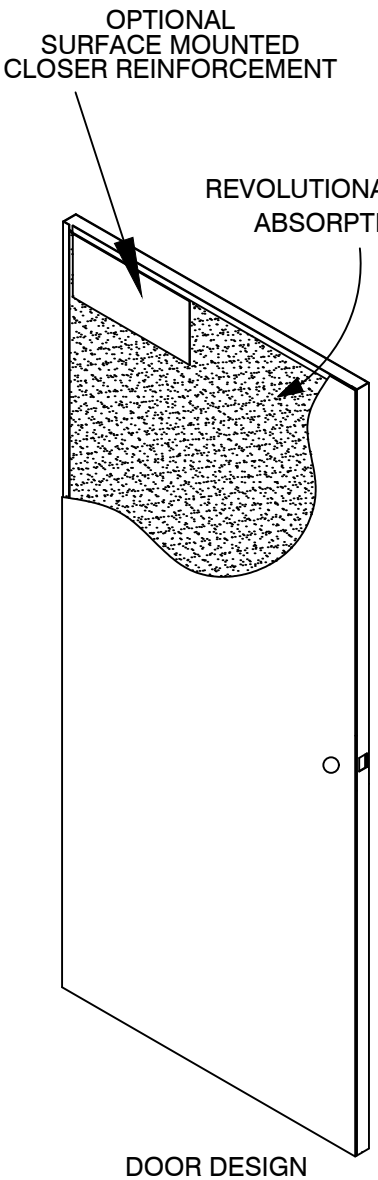
D12L–1

1-3/4" Sound-Tech Xpress

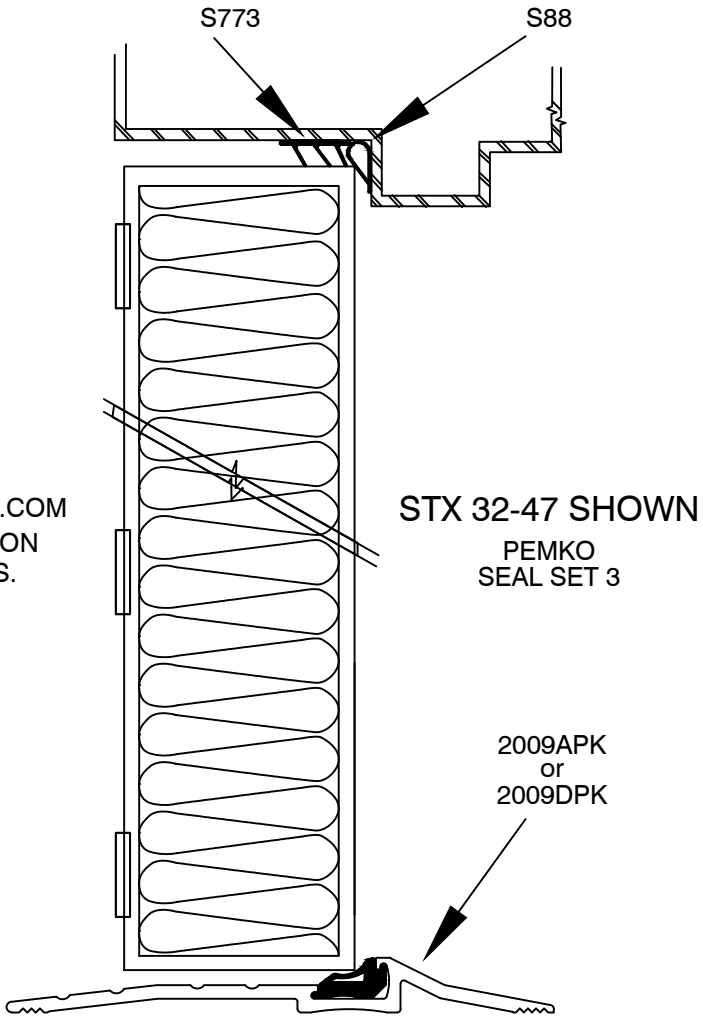
STC32 thru STC47 (Fire Rated or Non-Fire Rated Flush Pairs)

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.

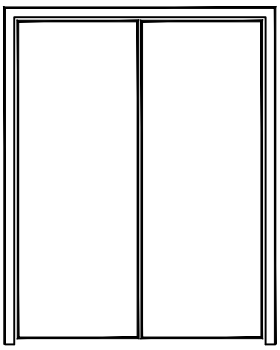


REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.



STX 32-47 SHOWN
PEMKO
SEAL SET 3

DOOR DESIGN

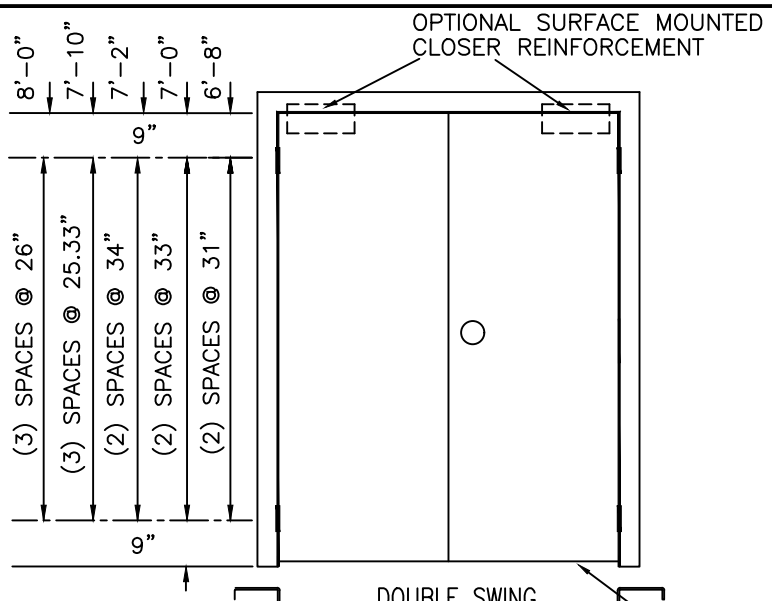


DOUBLE SWING DOORS
F
(ELEVATION)

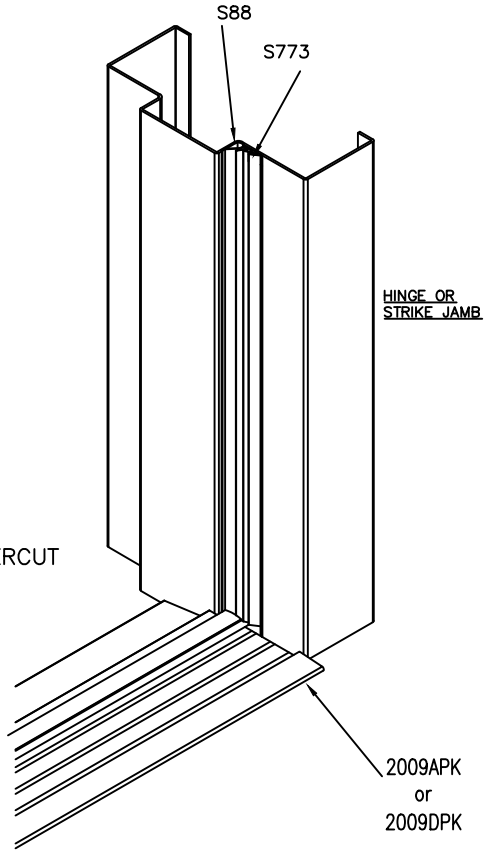
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/18/20

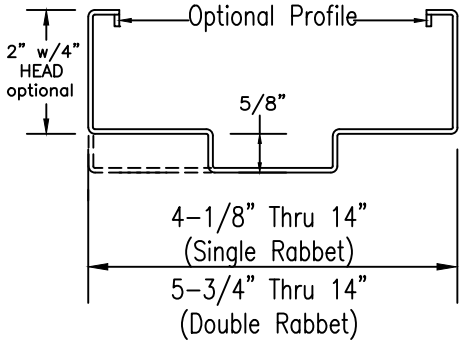
D12L-2

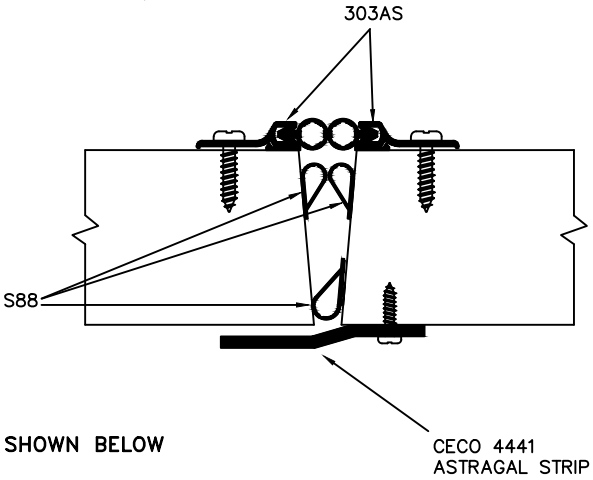


HORIZONTAL SECTION

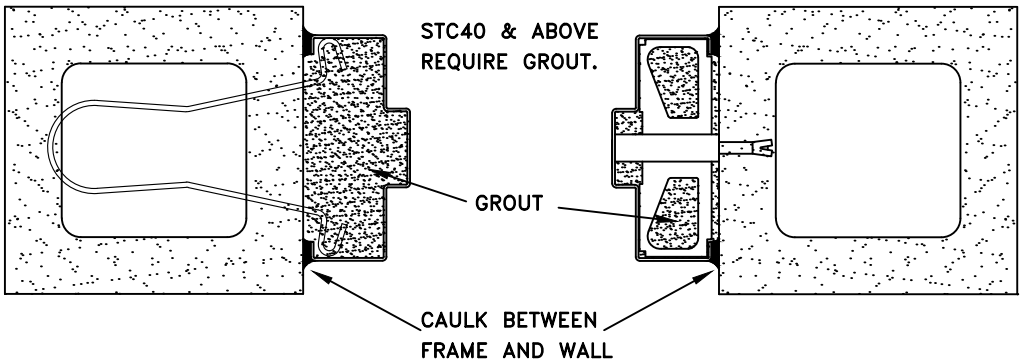


TYPICAL PROFILE





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.

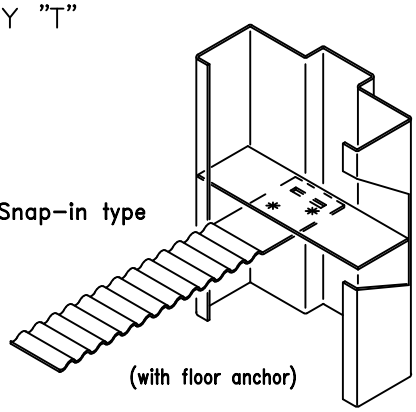
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/18/20

TECH-DATA

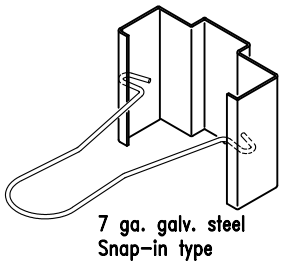
D12L-3

MASONRY "T" ANCHOR



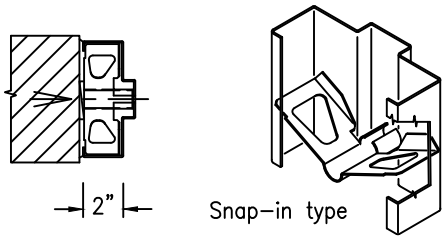
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

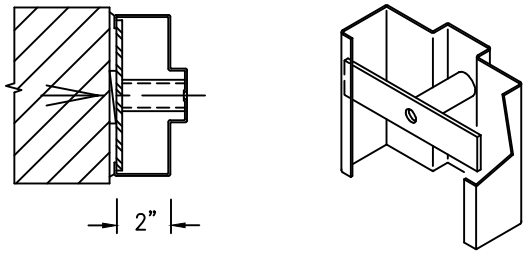
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



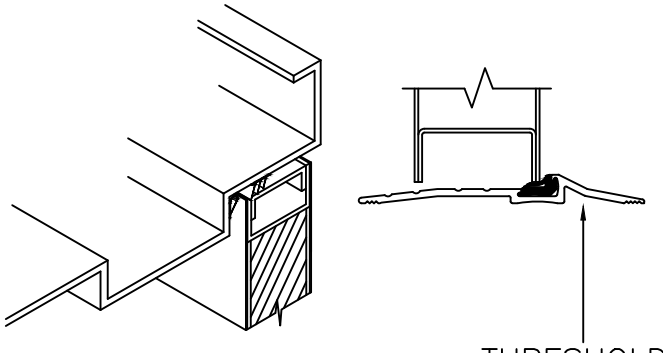
SU PROFILE	EO/S6:	4-3/4" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6:	5-1/8" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS

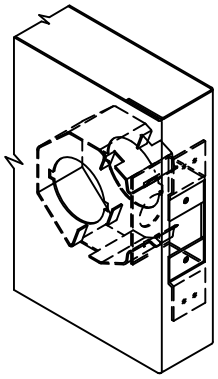


DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

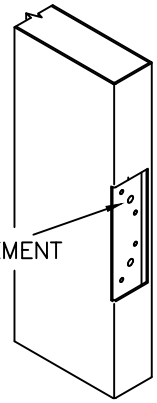


LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

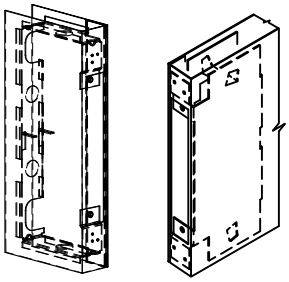
HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



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)

03/18/20

CecoDoor

ASSA ABLOY

Experience a safer and more open world

BACK TO TOP

D12L-4

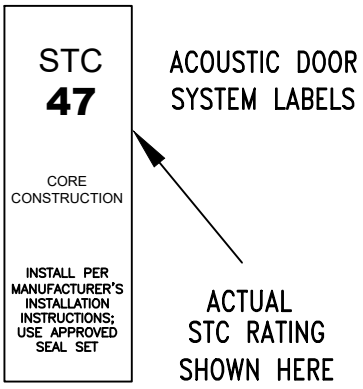
STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH DOUBLE	HEIGHT
4'–0" 5'–0" 5'–4" 6'–0" 7'–0" 8'–0"	6'–8" 7'–0" 7'–2" 7'–10" 8'–0"

ACOUSTICAL FIRE DOORS

LABELING AGENCIES:
- UL
- WARNOCK HERSEY

TEST: UL 10B, UL 10C, UL 1784, & NFPA 252
RATING:
- 20 MIN. THRU 3 HRS. (STX 32–47) FLUSH PAIRS 8'0" x 8'0" MAX.
- DESIGNS: FLUSH ONLY



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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	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)

BACK TO TOP

Experience a safer and more open world
CecoDoor
ASSA ABLOY

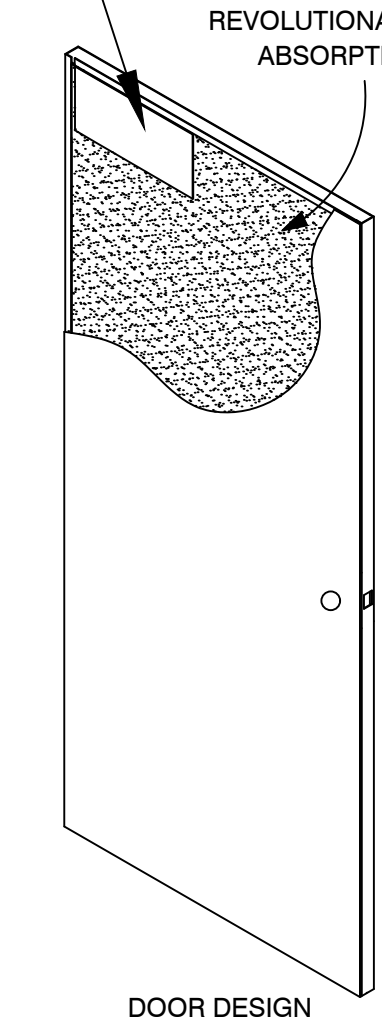
D12M-1

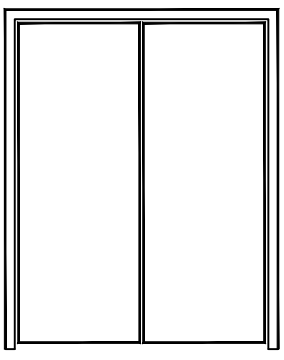
1-3/4" Sound-Tech Xpress

STC48 thru STC49 (Fire Rated or Non-Fire Rated, Flush Pairs)

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.

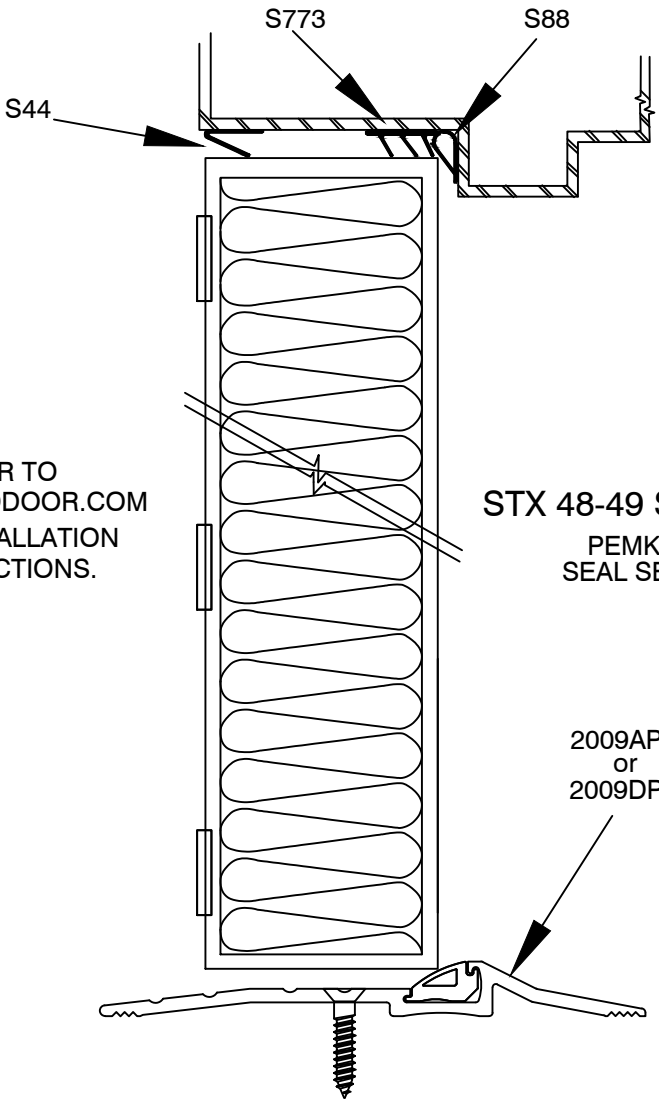




DOOR DESIGN

DOUBLE SWING DOORS
F
(ELEVATION)

REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.



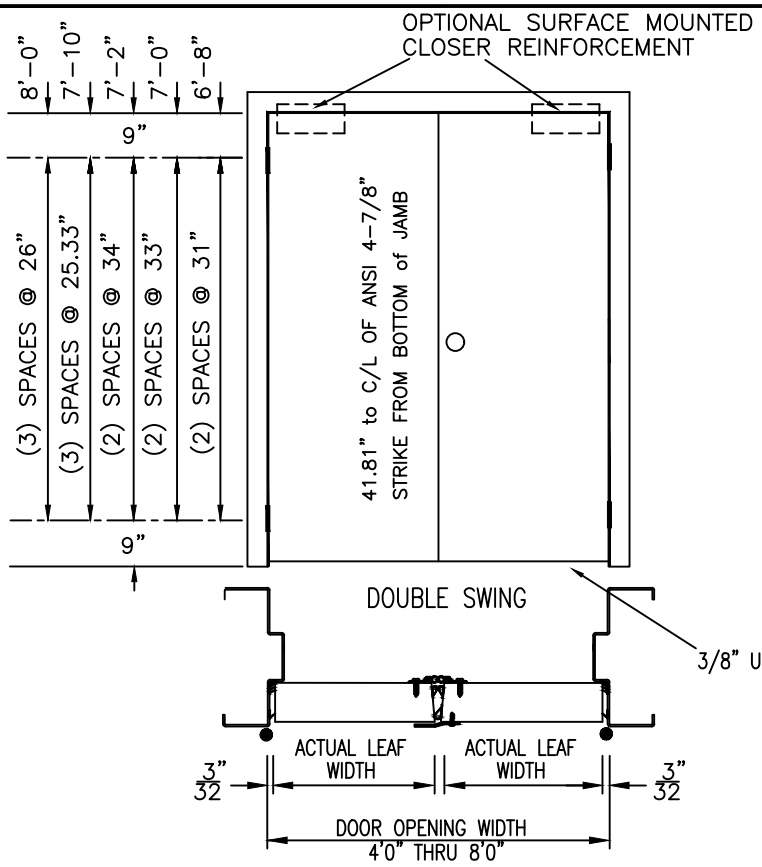
STX 48-49 SHOWN

PEMKO
SEAL SET 4

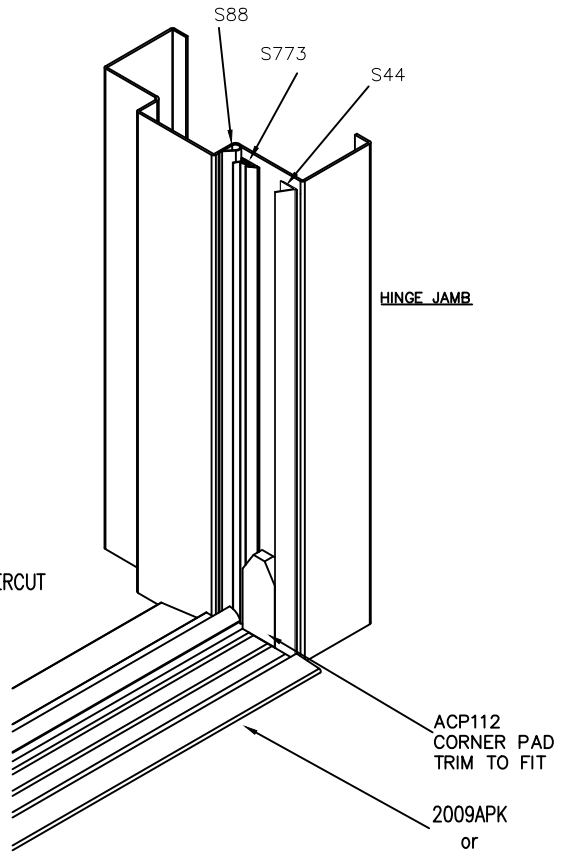
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/22/20

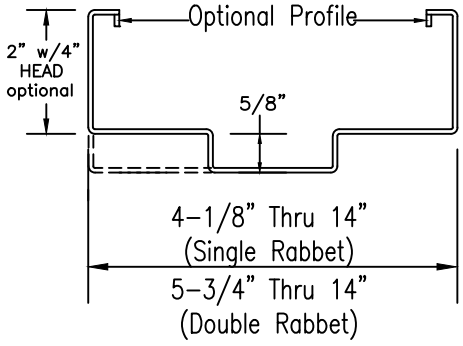
D12M-2

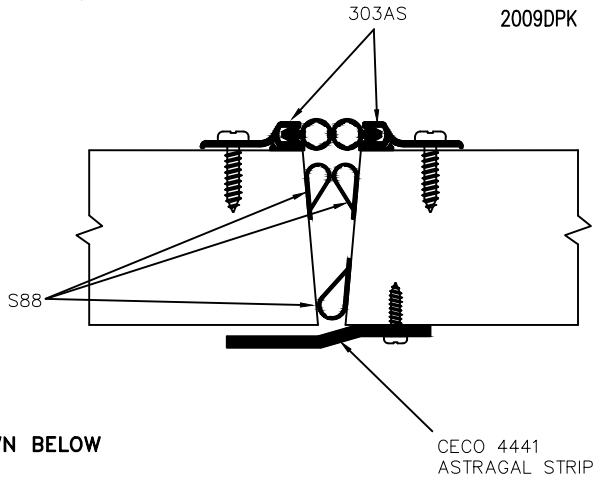


HORIZONTAL SECTION

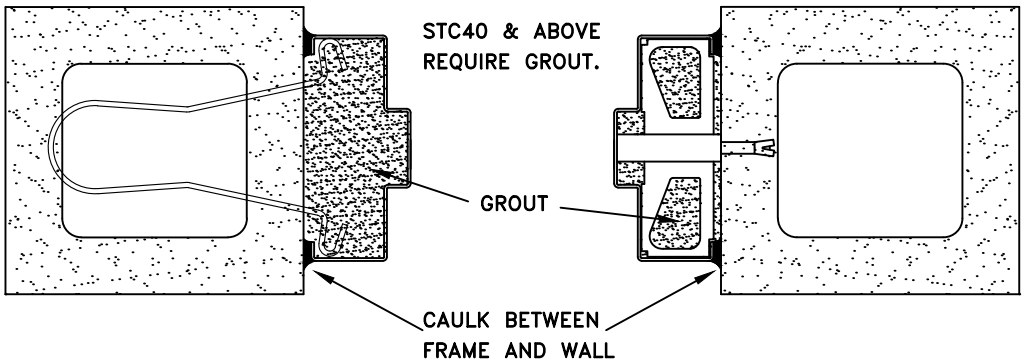


TYPICAL PROFILE





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.

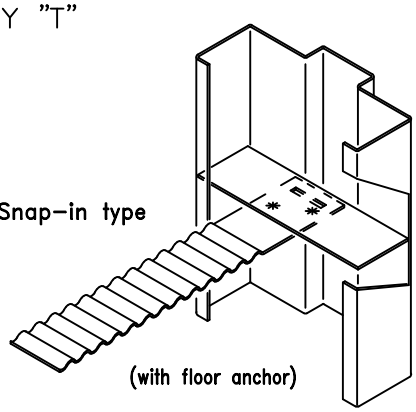
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/22/20

TECH-DATA

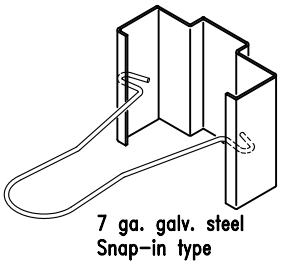
D12M-3

MASONRY "T" ANCHOR



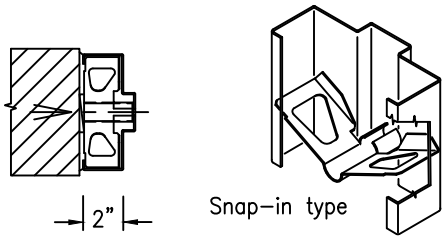
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

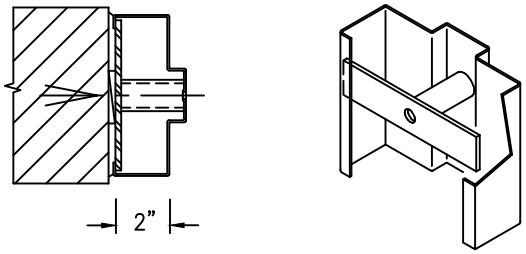
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



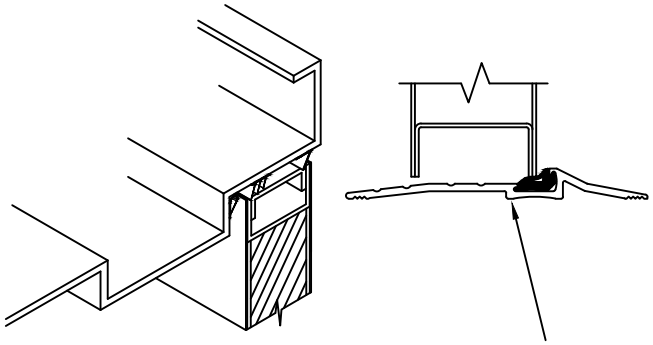
SU PROFILE	EO/S6: 4-3/4" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6: 5-1/8" thru 6-3/4" depth EO/S8: 6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS

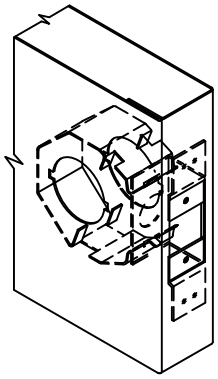


DOOR CONSTRUCTION TOP AND BOTTOM



LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

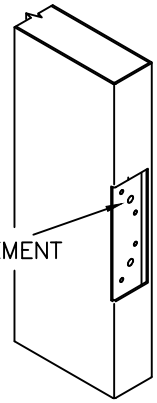


LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

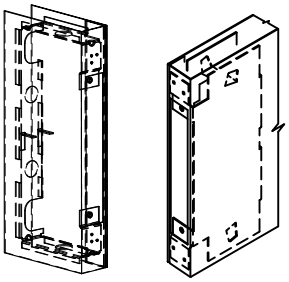
HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



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.

03/22/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

D12M-4

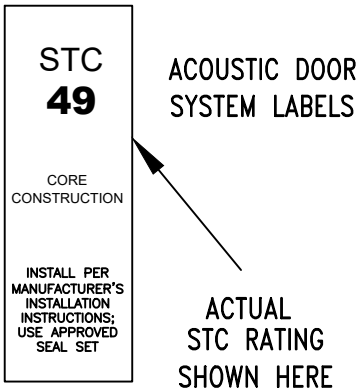
STANDARD SIZES
NOMINAL DOOR OPENING

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

ACOUSTICAL FIRE DOORS

LABELING AGENCIES
- UL
- WH

TEST: UL 10B, UL 10C, UL 1784 & NFPA 252
FIRE RATING:
- 20 MIN. THRU 3 HRS. (STX 48-49) FLUSH PAIRS 8'0" x 8'0" MAX.
- DESIGNS: FLUSH ONLY
- SEAL SET 4



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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	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.

03/22/20

(Conversion: 1" = 25.4 mm e.g. 1-3/4" = 44.45 mm)

BACK TO TOP

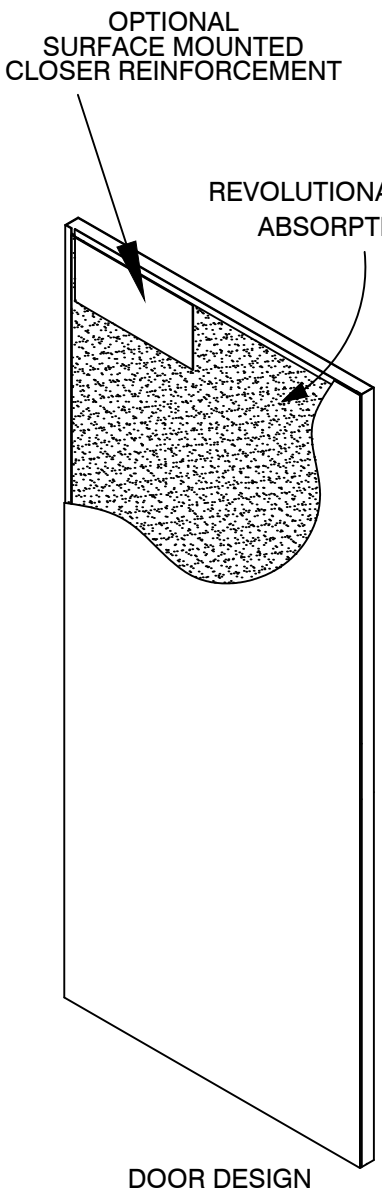
D12N-1

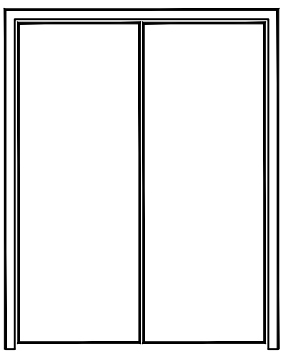
1-3/4" Sound-Tech Xpress

STC32 thru STC47 (Non-Fire Rated Flush Pairs)

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.

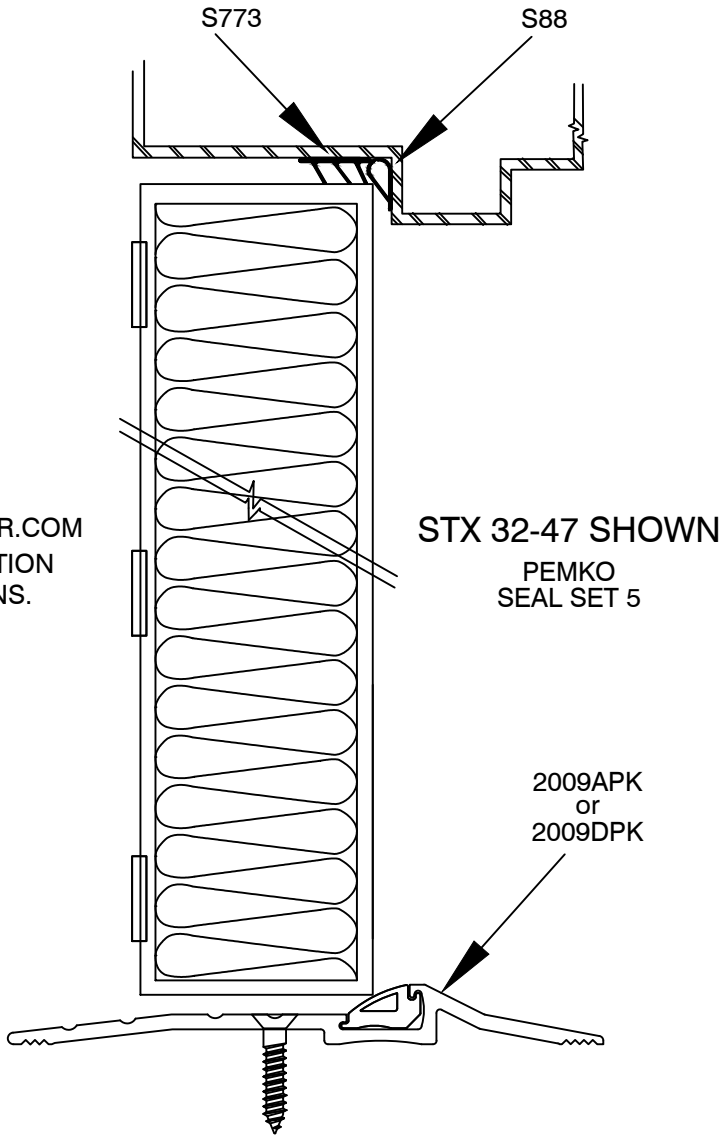




DOOR DESIGN

DOUBLE SWING DOORS
F
(ELEVATION)

REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.



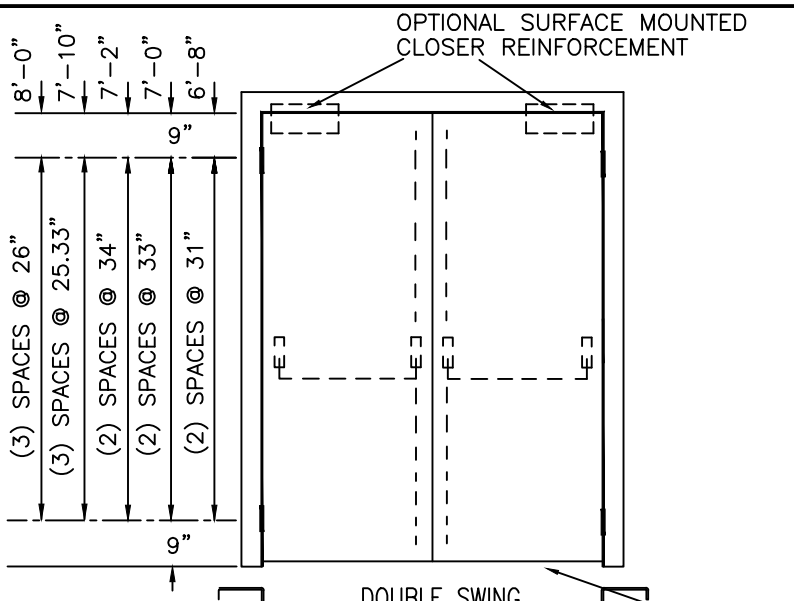
STX 32-47 SHOWN

PEMKO
SEAL SET 5

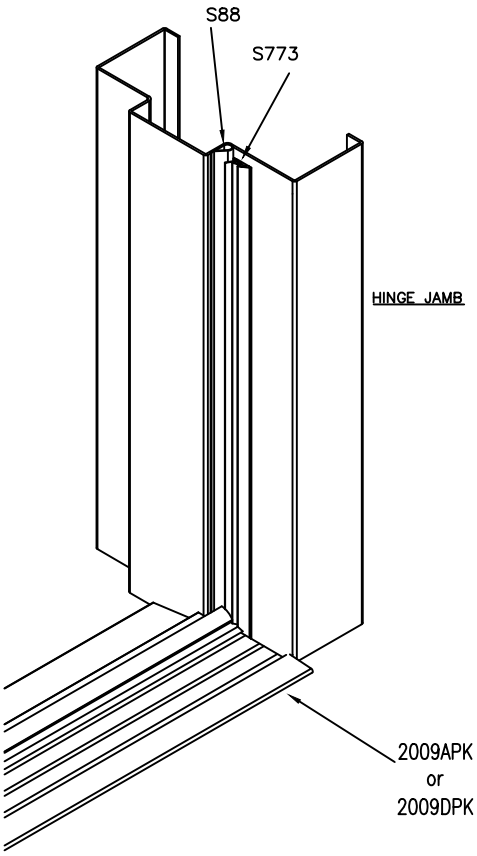
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/22/20

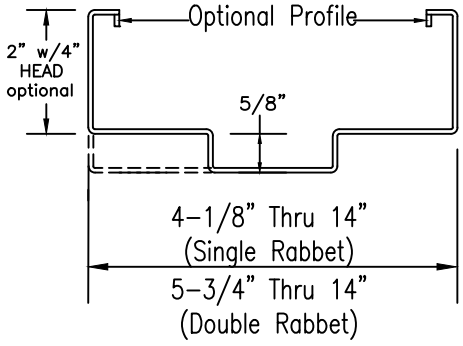
D12N-2

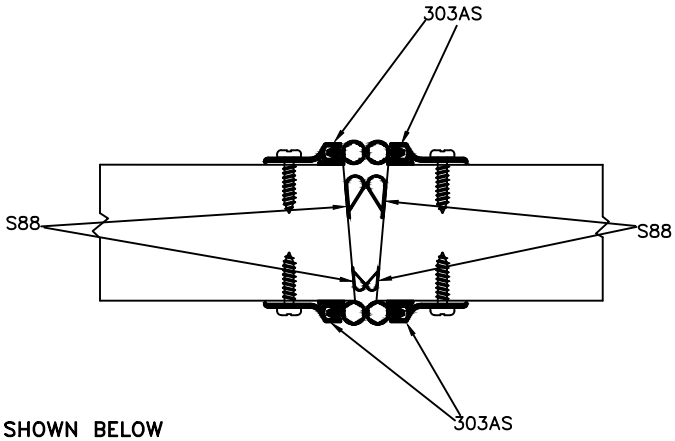


HORIZONTAL SECTION

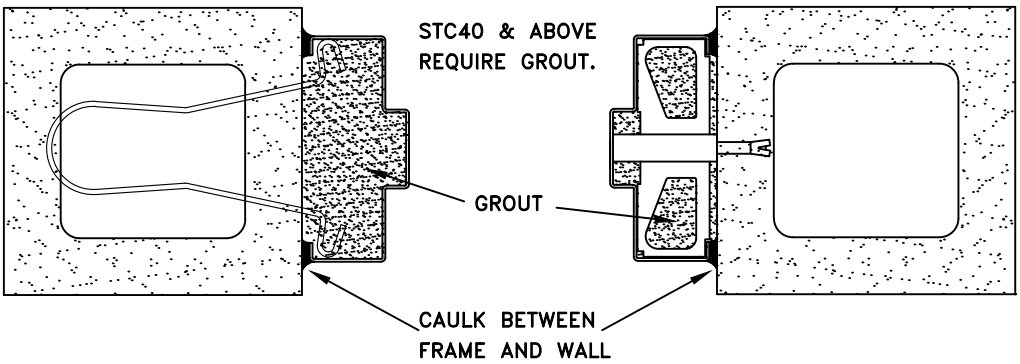


TYPICAL PROFILE





SOME COMMON MASONARY APPLICATIONS SHOWN BELOW



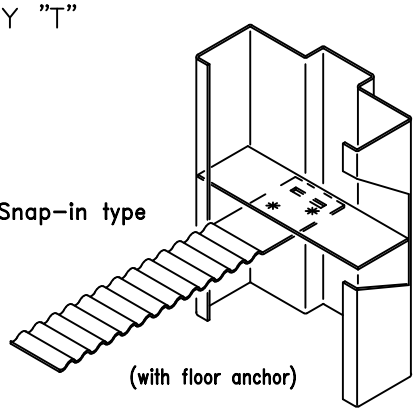
It is important that acoustic door systems be properly installed and sealed into the wall to prevent "flanking noise". Acoustical systems are furnished with detailed installation instructions.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

TECH-DATA

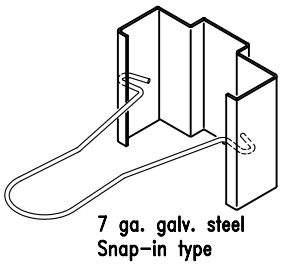
D12N-3

MASONRY "T" ANCHOR



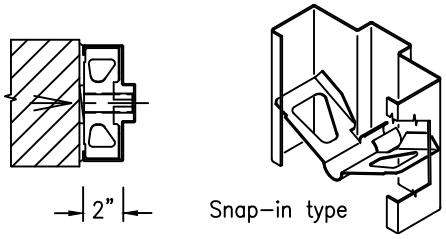
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

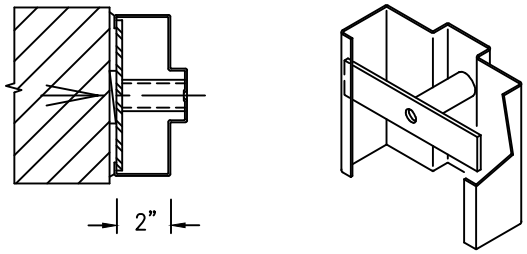
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



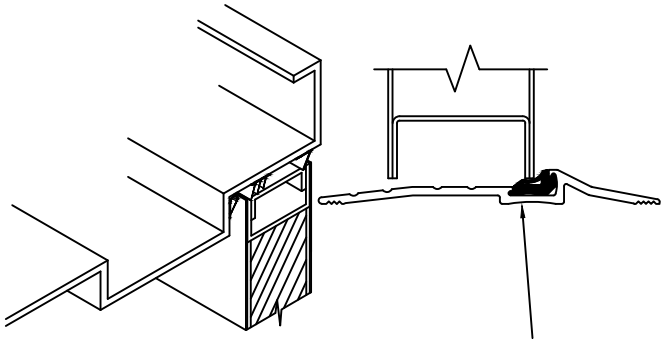
SU PROFILE	EO/S6:	4-3/4" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6:	5-1/8" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS

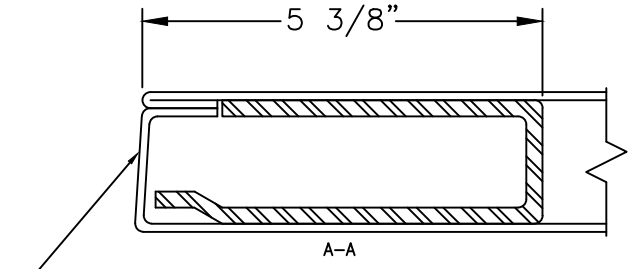


DOOR CONSTRUCTION TOP AND BOTTOM



HARDWARE PREPARATIONS

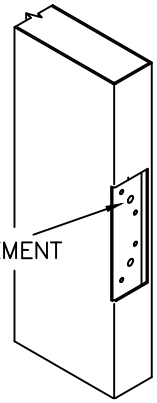
SURFACE VERTICAL ROD



LOCK EDGE IS BEVELED 1/8" in 2"

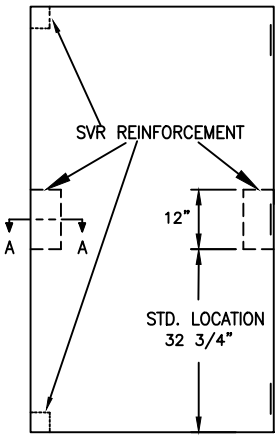
HINGE PREPARATION

HINGE PREP IS HANDED



7 GAGE REINFORCEMENT

4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7



03/22/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

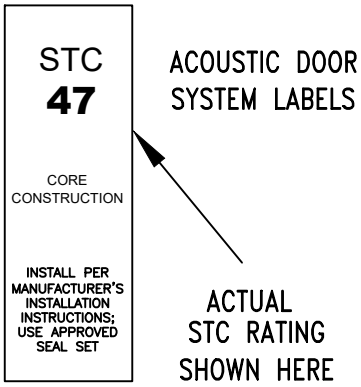
D12N–4

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH DOUBLE	HEIGHT
4'–0" 5'–0" 5'–4" 6'–0" 7'–0" 8'–0"	6'–8" 7'–0" 7'–2" 7'–10" 8'–0"

ACOUSTICAL DOORS

- FIRE RATING:
  NOT AVAILABLE



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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	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.

03/22/20

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

BACK TO TOP

CecoDoor
ASSA ABLOY

Return to Index

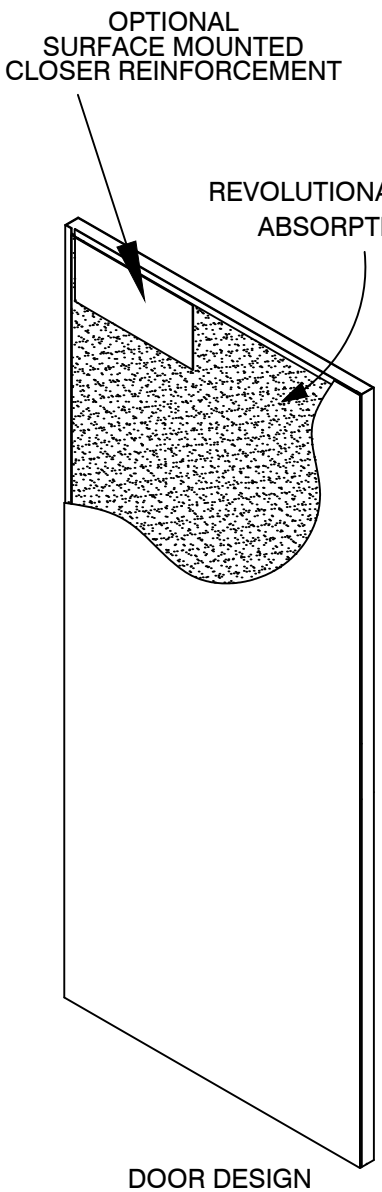
D120-1

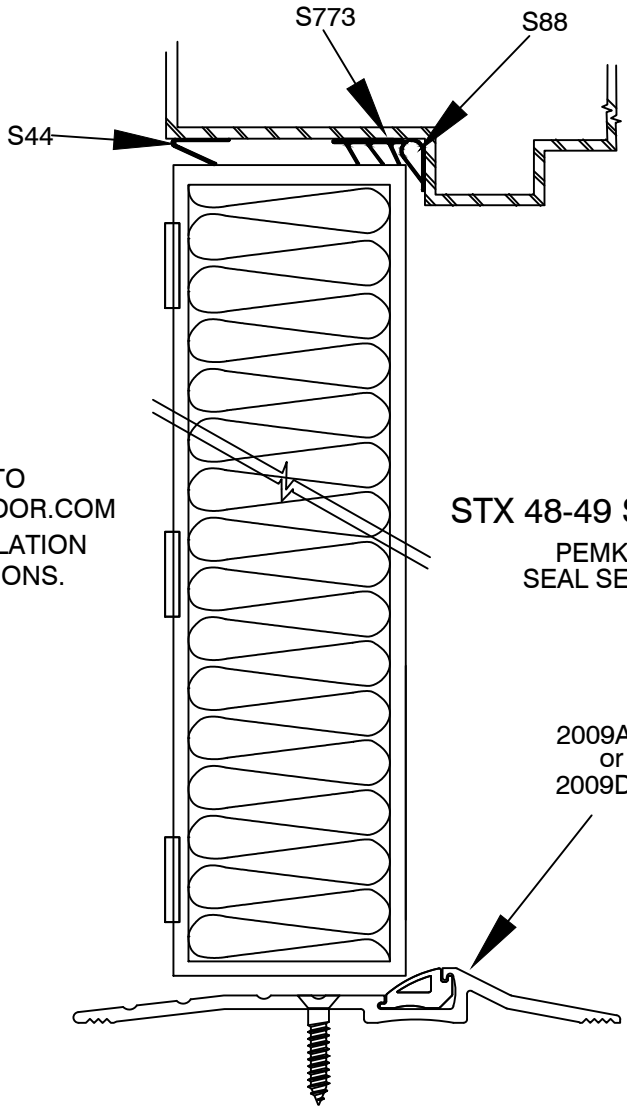
1-3/4" Sound-Tech Xpress

STC48 thru STC49 (Non-Fire Rated, Flush Pairs)

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.



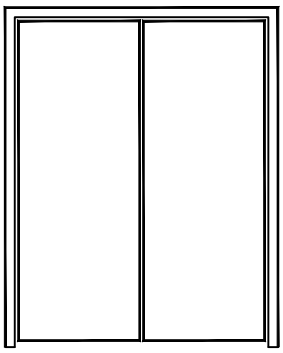


REFER TO
WWW.CECODOOR.COM
FOR INSTALLATION
INSTRUCTIONS.

STX 48-49 SHOWN

PEMKO
SEAL SET 13

DOOR DESIGN

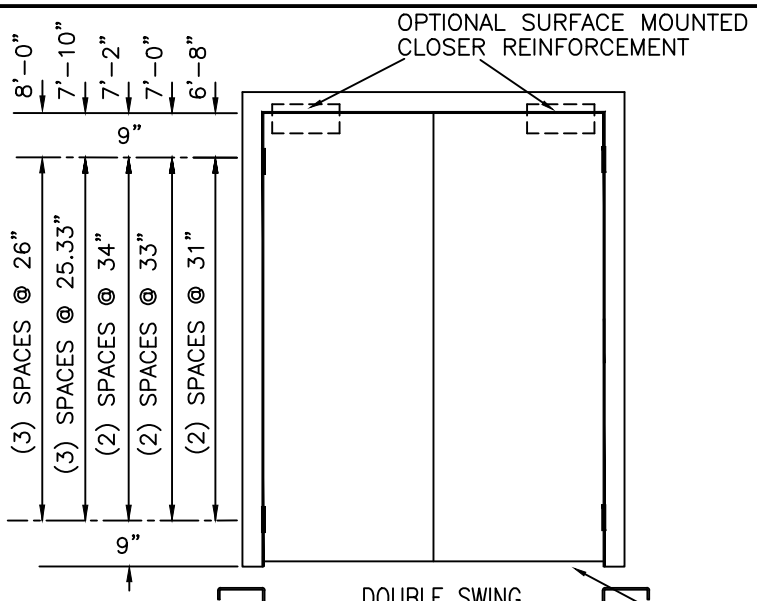


DOUBLE SWING DOORS
F
(ELEVATION)

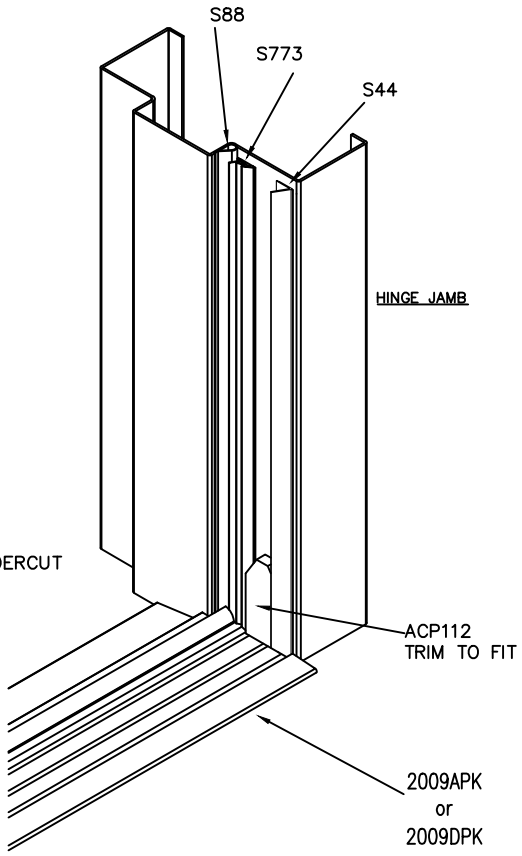
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/23/20

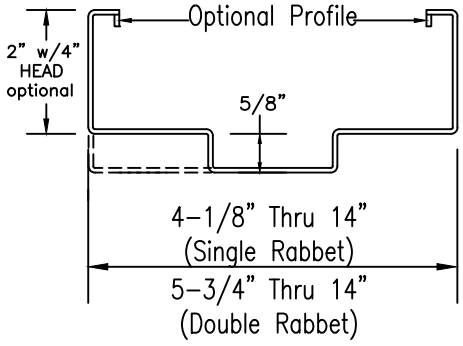
D120-2

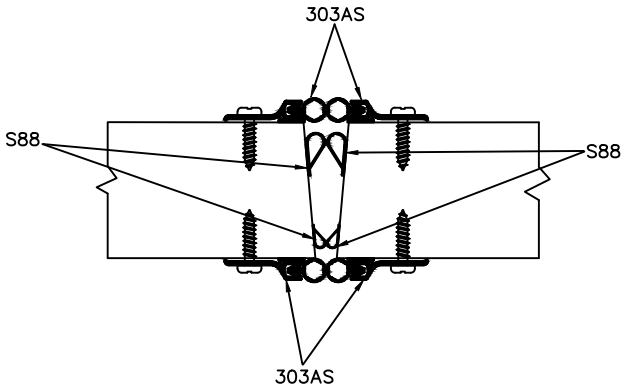


HORIZONTAL SECTION

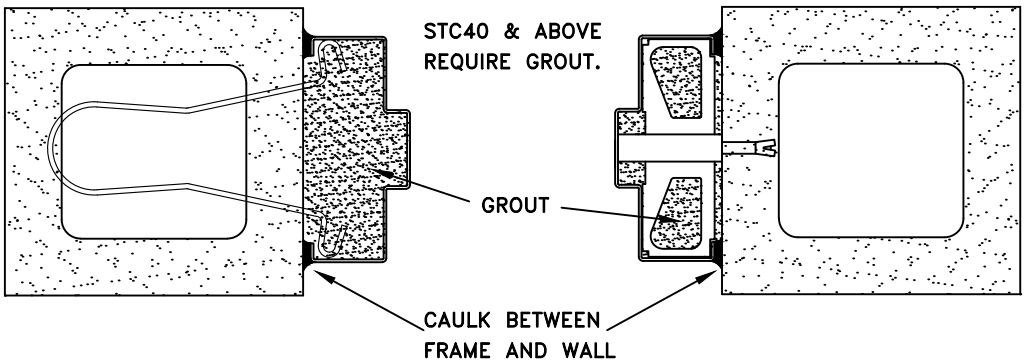


TYPICAL PROFILE





SOME COMMON MASONARY APPLICATIONS SHOWN BELOW

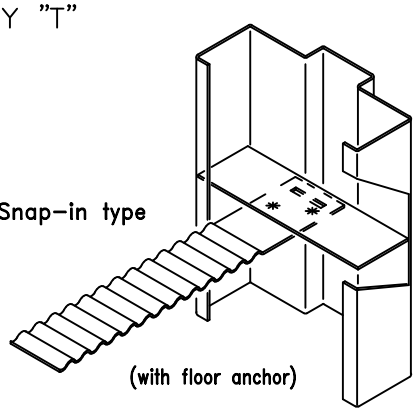


It is important that acoustic door systems be properly installed and sealed into the wall to prevent "flanking noise". Acoustical systems are furnished with detailed installation instructions.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

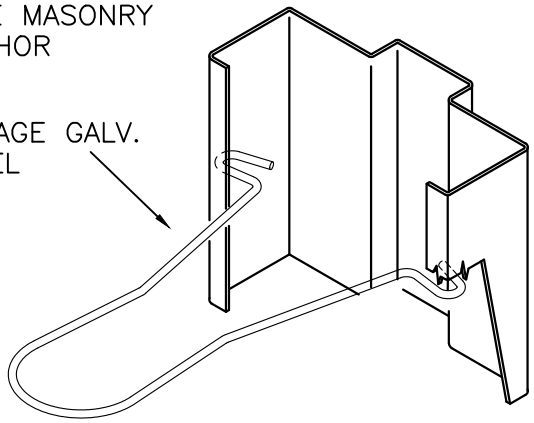
D120-3

MASONRY "T" ANCHOR



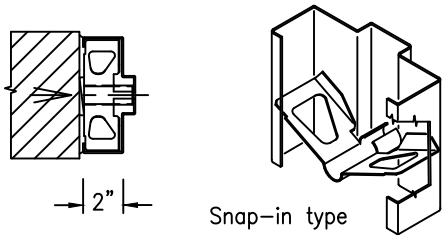
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

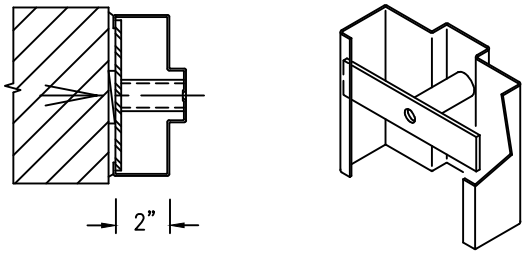
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



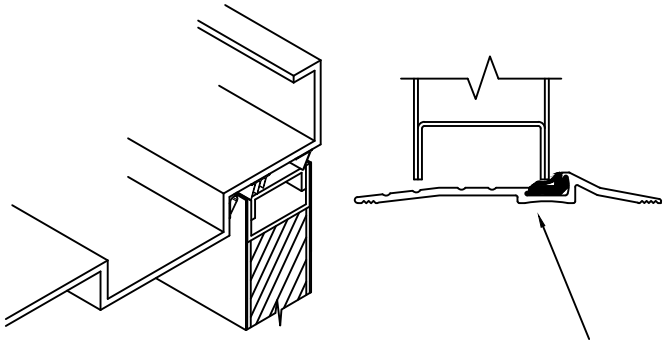
SU PROFILE	EO/S6:	4-3/4" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6:	5-1/8" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS

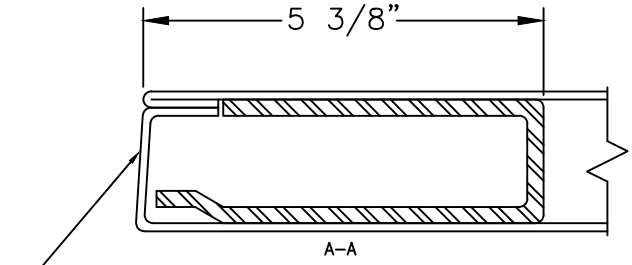


DOOR CONSTRUCTION TOP AND BOTTOM



HARDWARE PREPARATIONS

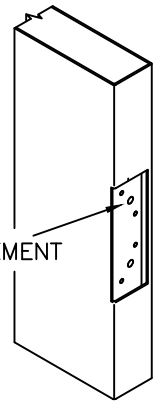
SURFACE VERTICAL ROD



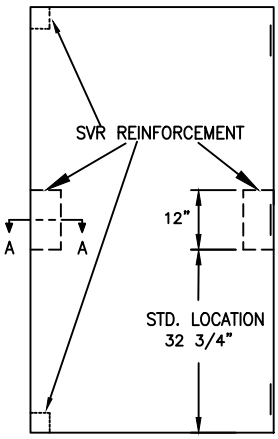
LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

HINGE PREP IS HANDED



4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7



03/23/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

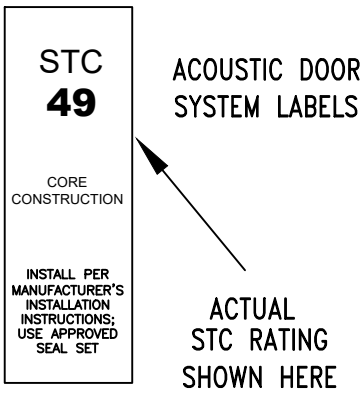
D120-4

STANDARD SIZES
NOMINAL DOOR OPENING

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

ACOUSTICAL DOORS

- FIRE RATING:
  NOT AVAILABLE



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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	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.

03/23/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

CecoDoor
ASSA ABLOY

Return to Index

D12P–1

1-3/4" Sound-Tech Xpress

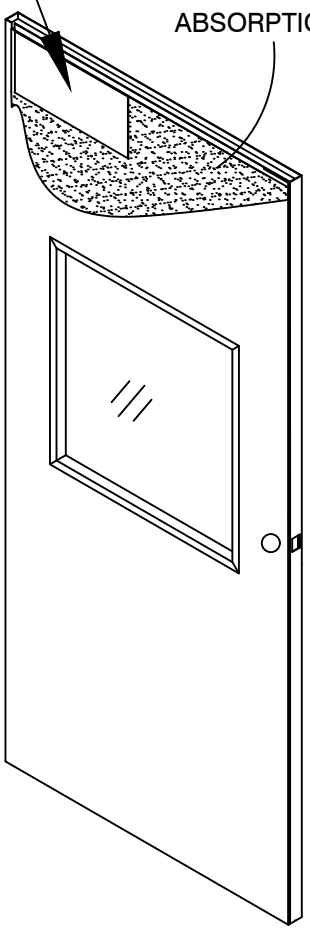
STC32 thru STC44 (Fire Rated or Non-Fire Rated Pairs with Glass)

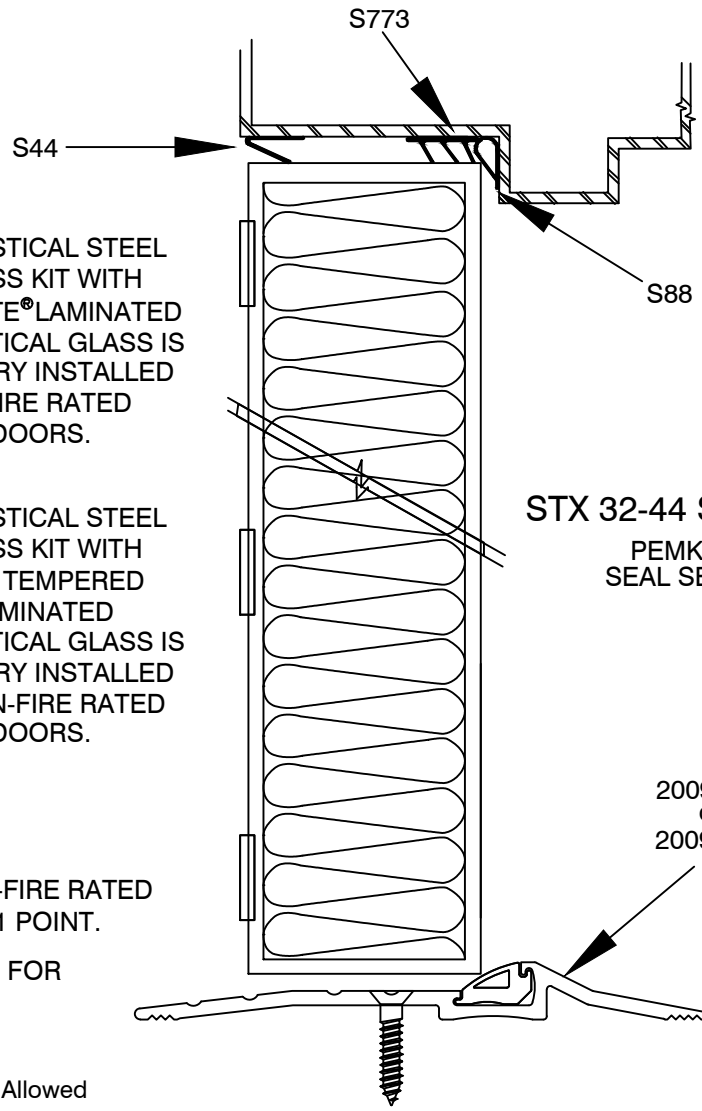
TESTED AND IN COMPLIANCE WITH ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235.
DOOR SYSTEMS ARE IN COMPLIANCE WITH HMMA 865 & SDI-128 SPECIFICATIONS.
COMPLETE WITH PERIMETER SOUND SEALS AND THRESHOLD AS REQUIRED FOR RATING.

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated Assembly.

OPTIONAL SURFACE MOUNTED CLOSER REINFORCEMENT

REVOLUTIONARY SOUND ABSORPTION CORE





ACOUSTICAL STEEL GLASS KIT WITH KERALITE®LAMINATED ACOUSTICAL GLASS IS FACTORY INSTALLED IN FIRE RATED DOORS.

ACOUSTICAL STEEL GLASS KIT WITH 5/16" TEMPERED LAMINATED ACOUSTICAL GLASS IS FACTORY INSTALLED IN NON-FIRE RATED DOORS.

STX 32-44 SHOWN

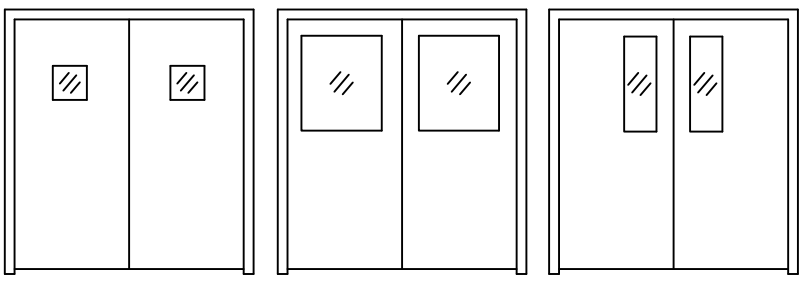
PEMKO
SEAL SET 4

5/16" TEMPERED LAMINATED NON-FIRE RATED GLASS REDUCES STC RATING BY 1 POINT.

REFER TO WWW.CECODOOR.COM FOR INSTALLATION INSTRUCTIONS.

DOOR DESIGN

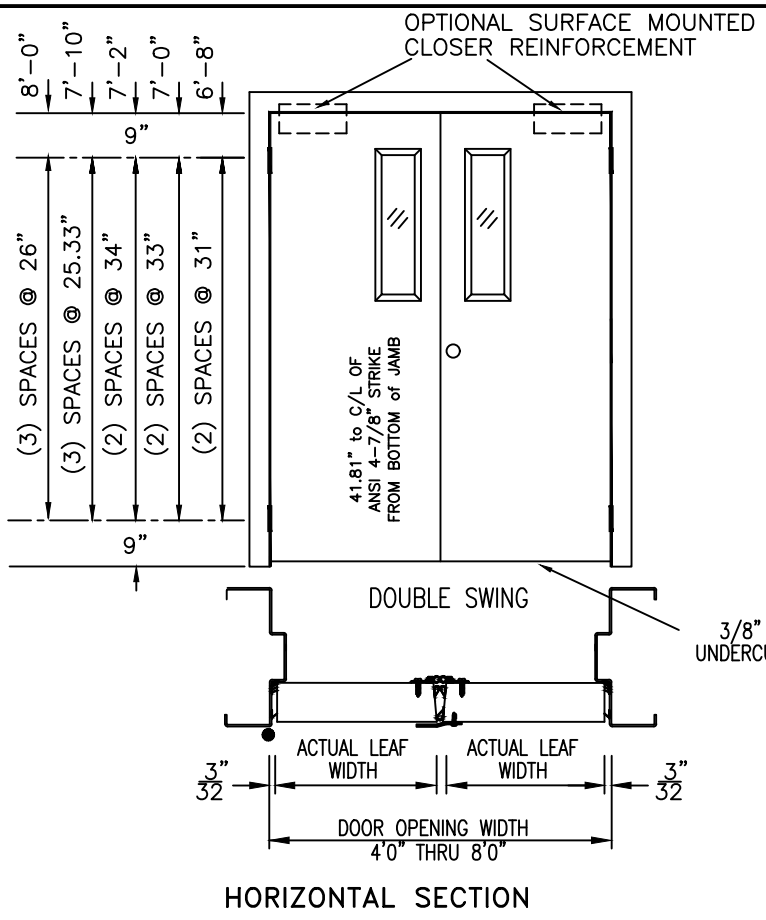
Note: One Glass Lite per Door Allowed



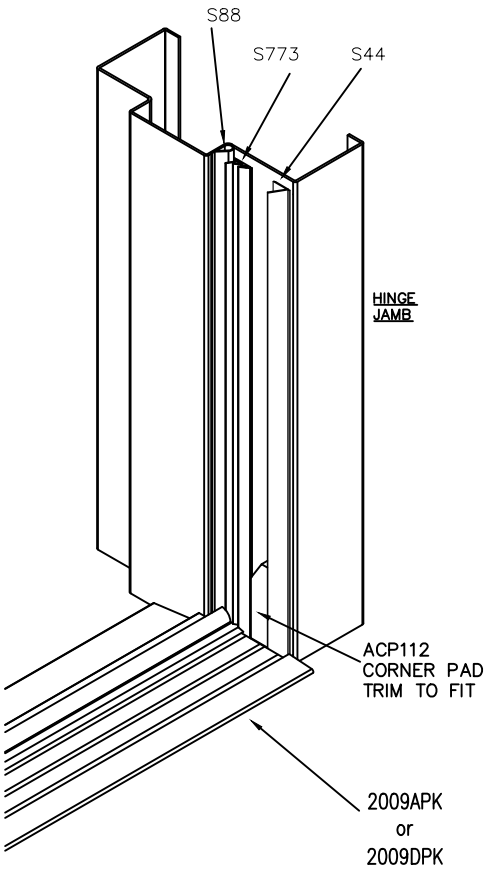
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/23/20

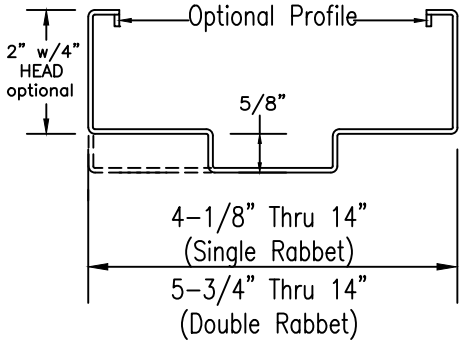
D12P-2

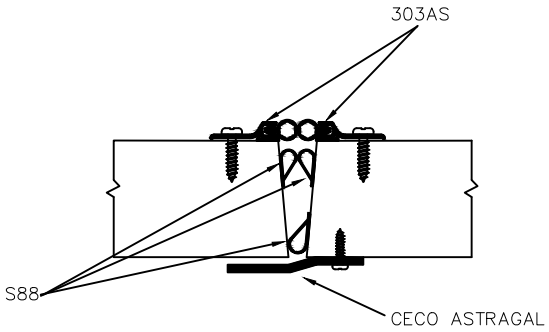


HORIZONTAL SECTION

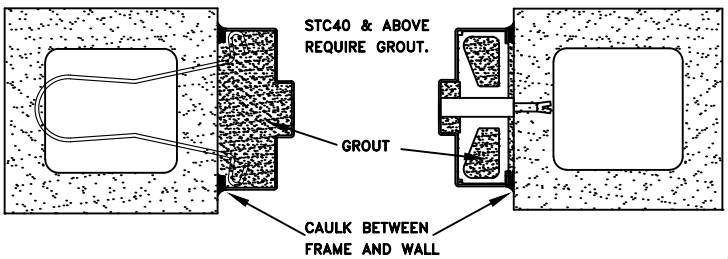


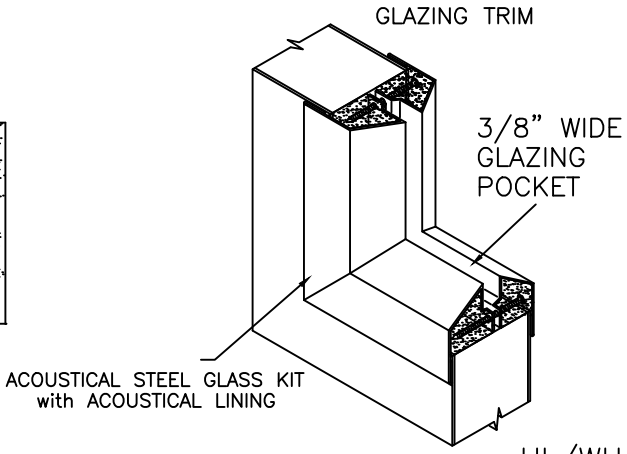
TYPICAL PROFILE





SOME COMMON MASONARY APPLICATIONS SHOWN BELOW





UL/WH
LISTED

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.

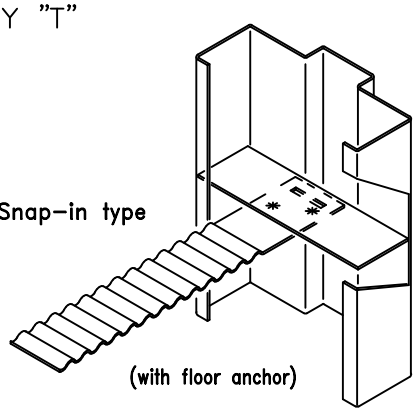
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/23/20

TECH-DATA

D12P-3

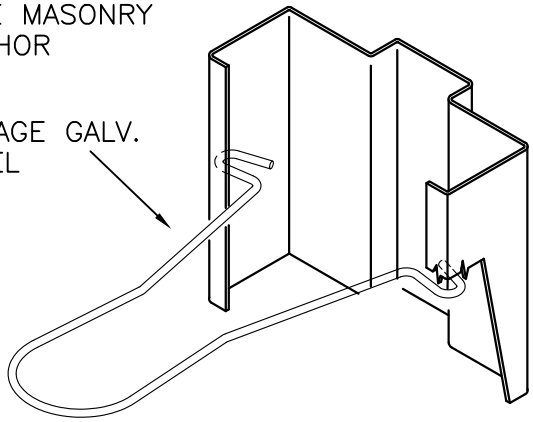
MASONRY "T" ANCHOR



(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

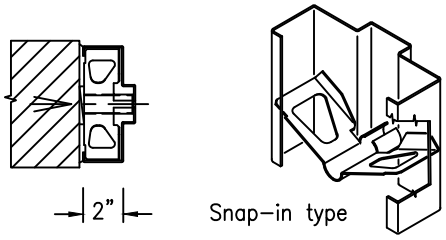
WIRE MASONRY ANCHOR

7 GAGE GALV. STEEL



EXISTING OPENING ANCHOR EO

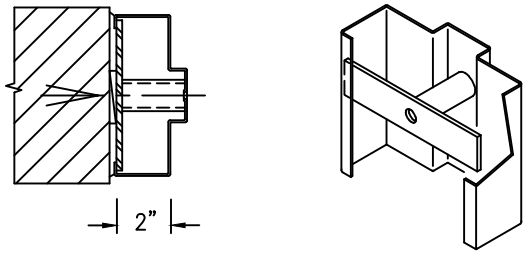
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



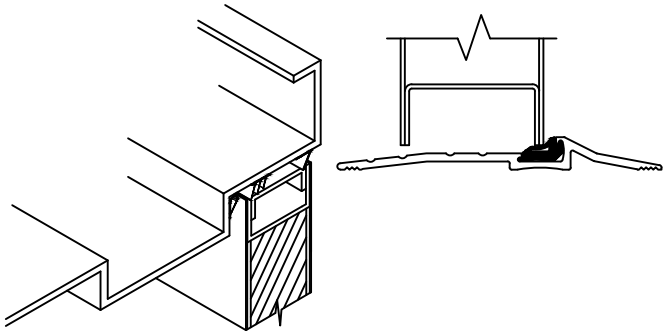
SU PROFILE	EO/S6:	4-3/4" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6:	5-1/8" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS



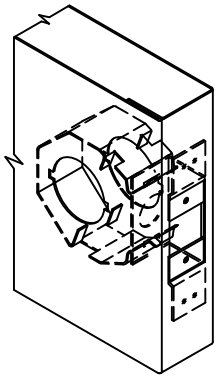
DOOR CONSTRUCTION TOP AND BOTTOM



THRESHOLD

LOCK PREPARATIONS

CYLINDRICAL
ANSI A115.2
BACKSET
2-3/4" (STD)*
3-3/4" (OPT)

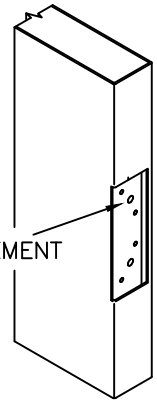


LOCK EDGE IS BEVELED 1/8" in 2"

HINGE PREPARATION

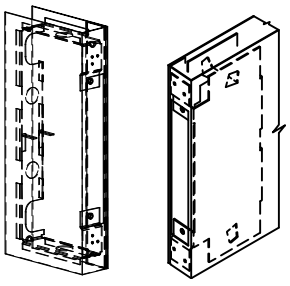
HINGE PREP IS HANDED

7 GAGE REINFORCEMENT



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)

03/23/20

CecoDoor

D12P–4

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH	HEIGHT
DOUBLE	
4'–0" 5'–0" 5'–4" 6'–0" 7'–0" 8'–0"	6'–8" 7'–0" 7'–2" 7'–10" 8'–0"

ACOUSTICAL FIRE DOORS

LABELING AGENCIES
- UL
- WH

TEST: UL 10B, UL 10C, UL 1784 & NFPA 252
FIRE RATING:
- 20 MIN. THRU 3 HRS. (STX 32–44 GLAZED PAIRS) 8'0" x 8'0" MAX.
- DESIGNS: GLAZED PAIRS

STC
44

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 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 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 156.3 mortise panic 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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	Max. Fire Rating	Max. Lite Visible Area	Seal Set Description
Pairs	32-44	*Cyl	3/8"	3 Hr.	100²	Pemko seals: S88, S44, S773, 303AS, ACP112 & 2009_PK Threshold-Set 4
Pairs	32-43	*Cyl or Mortise	3/8"	3 Hr.	100²	Pemko seals: S88, S44, S773, 303AS, ACP112 & 2009_PK Threshold-Set 4
Pairs	32-42	**Mortise Panic	3/8"	3 Hr.	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)

30/23/20

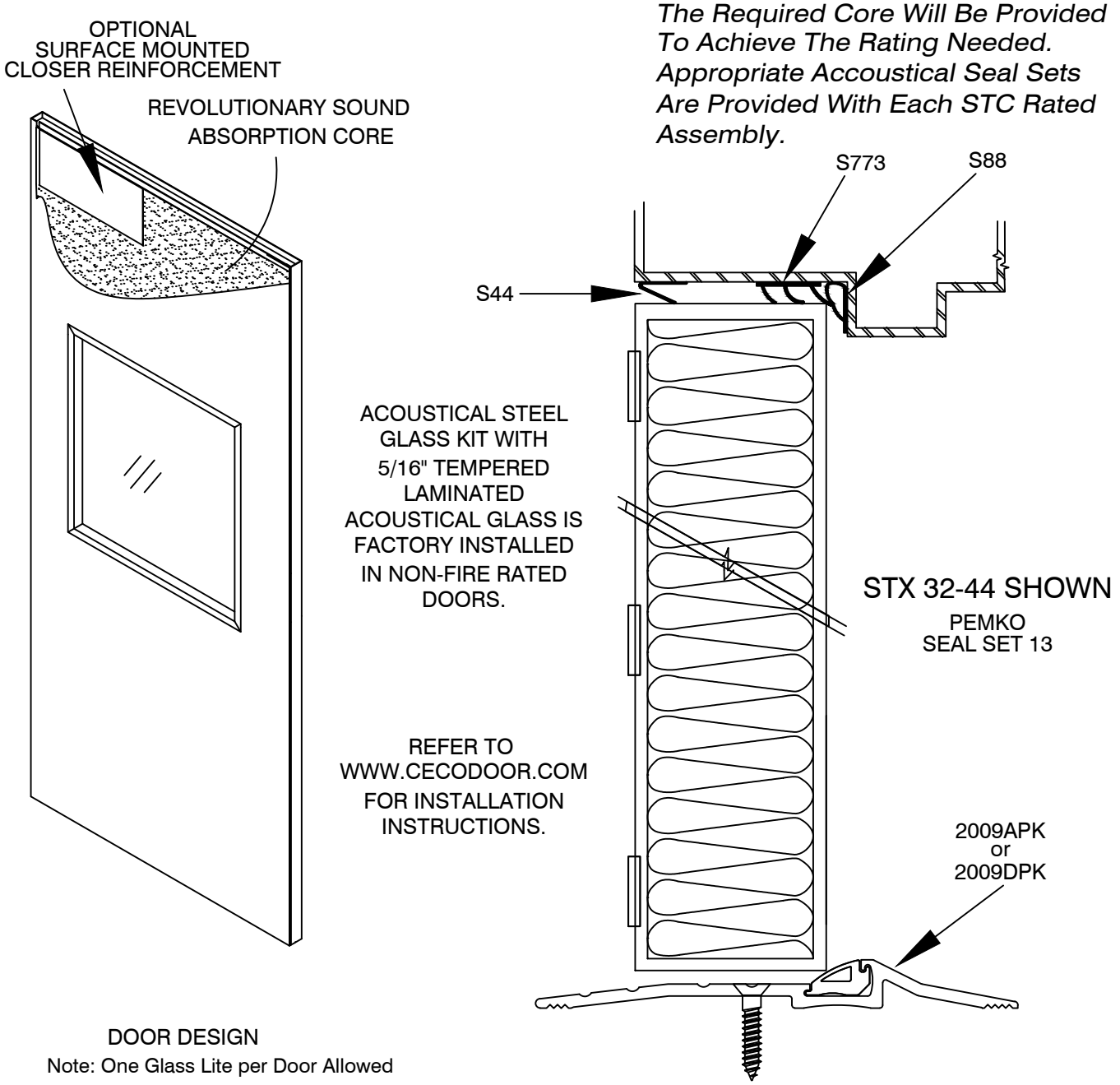
D12Q-1

1-3/4" Sound-Tech Xpress

STC32 thru STC44 (Non-Fire Rated Pairs with Glass)

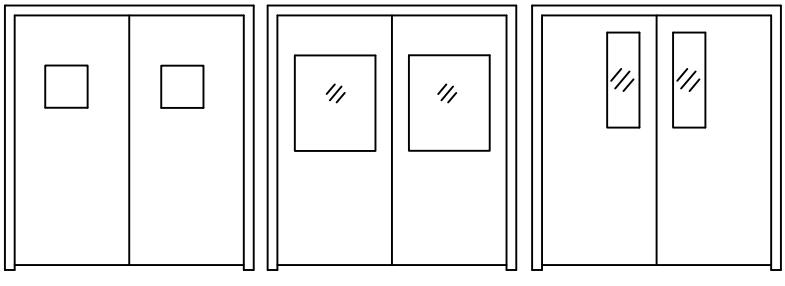
TESTED AND IN COMPLIANCE WITH ASTM E90, ASTM E413, ASTM E1332, & ASTM E2235.
DOOR SYSTEMS ARE IN COMPLIANCE WITH HMMA 865 & SDI-128 SPECIFICATIONS.
COMPLETE WITH PERIMETER SOUND SEALS AND THRESHOLD AS REQUIRED FOR RATING.

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Accoustical Seal Sets Are Provided With Each STC Rated Assembly.



DOOR DESIGN

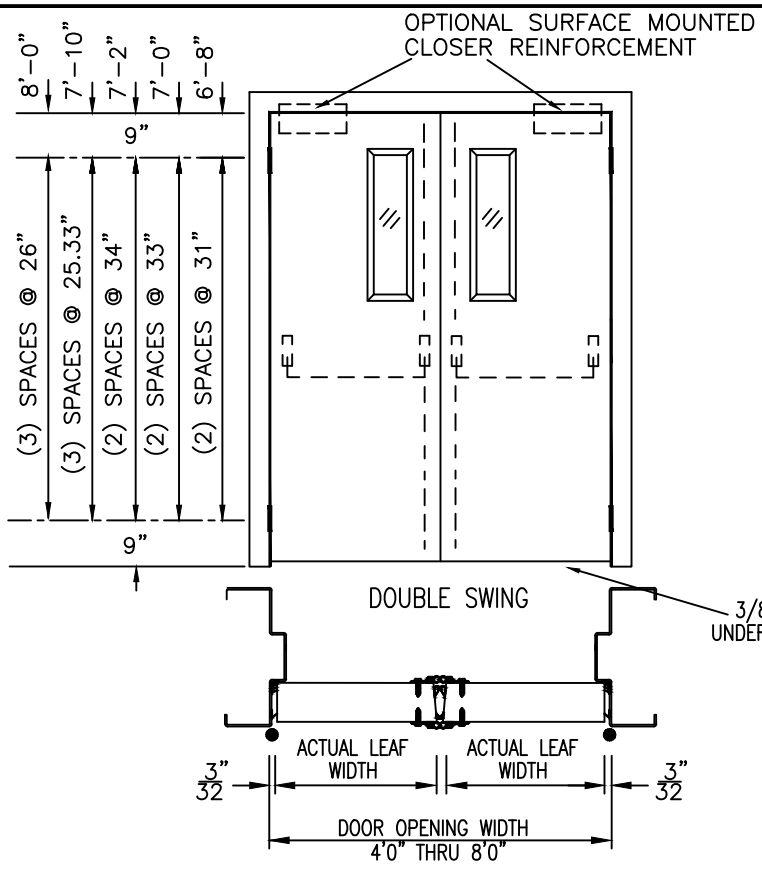
Note: One Glass Lite per Door Allowed



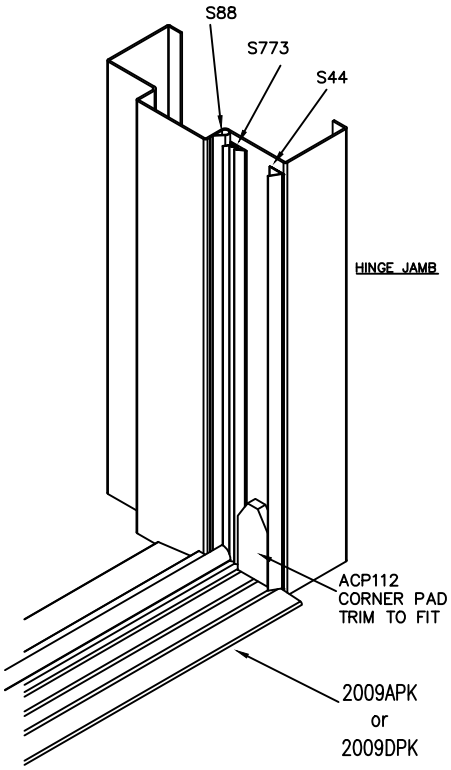
Suggested Uses:
Conference Rooms, Clinical Offices, Courtrooms, Legal Offices, Broadcast Studios, Boardrooms, Libraries, Music Rooms, and Performing Arts Studios, Hotel/Motel, and Military Barracks.

03/23/20

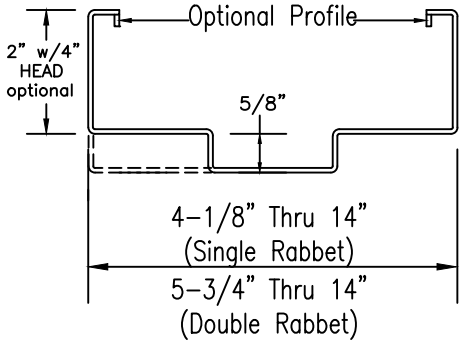
D12Q-2

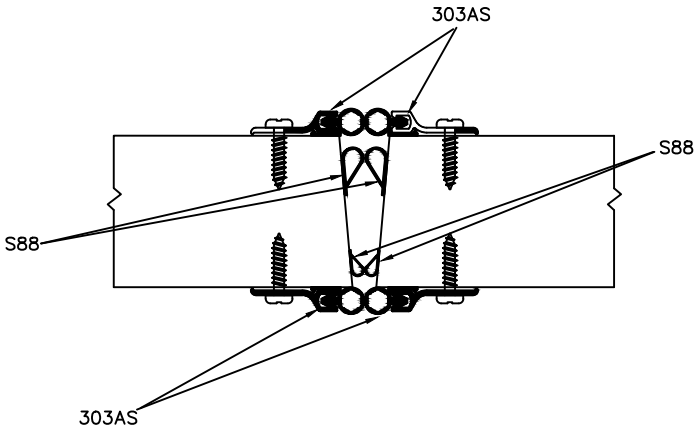


HORIZONTAL SECTION

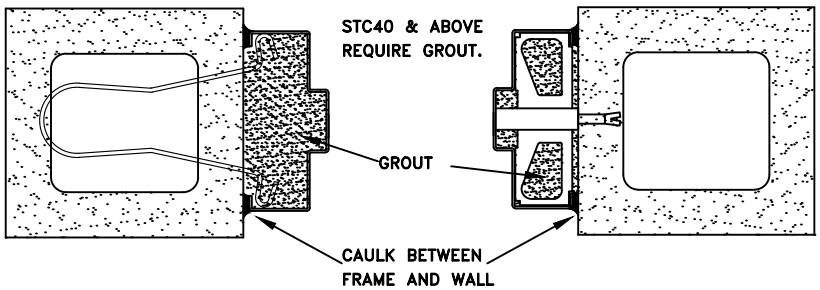


TYPICAL PROFILE

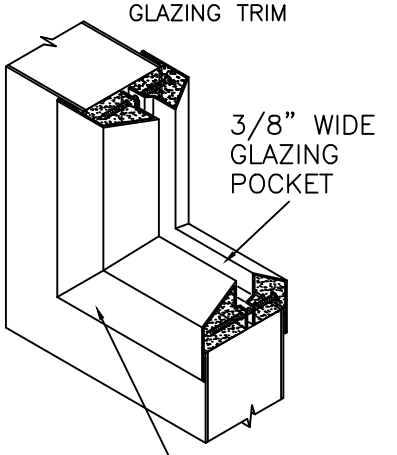




SOME COMMON MASONARY APPLICATIONS SHOWN BELOW



GLAZING TRIM



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.

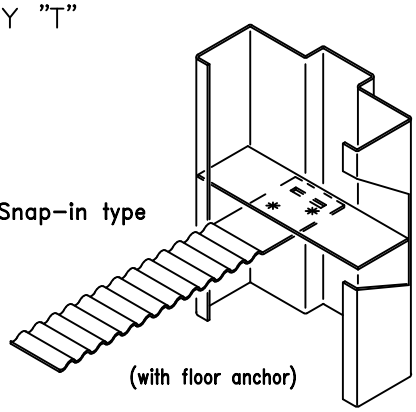
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

03/23/20

TECH-DATA

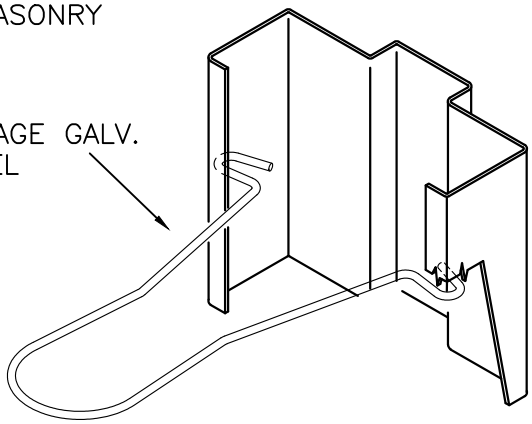
D120-3

MASONRY "T" ANCHOR



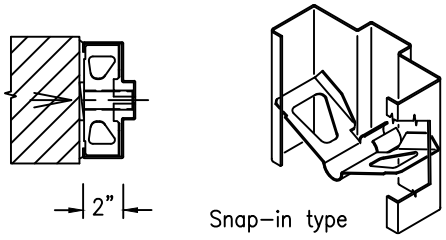
(ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH & PROFILE)

WIRE MASONRY ANCHOR



EXISTING OPENING ANCHOR EO

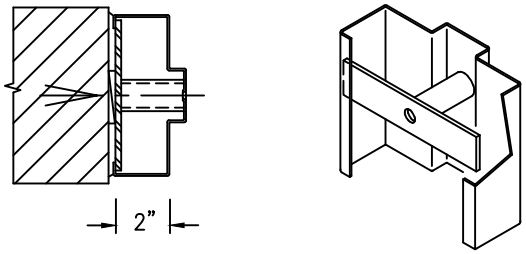
ANCHOR FITS VARIOUS DEPTH FRAMES (SEE BELOW)



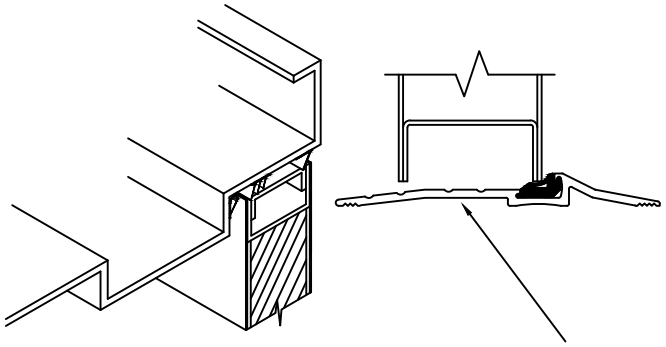
SU PROFILE	EO/S6:	4-3/4" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth
SQ PROFILE	EO/S6:	5-1/8" thru 6-3/4" depth
	EO/S8:	6-7/8" thru 8-3/4" depth

EXISTING OPENING ANCHOR EO/P&S

ANCHOR FITS VARIOUS DEPTHS

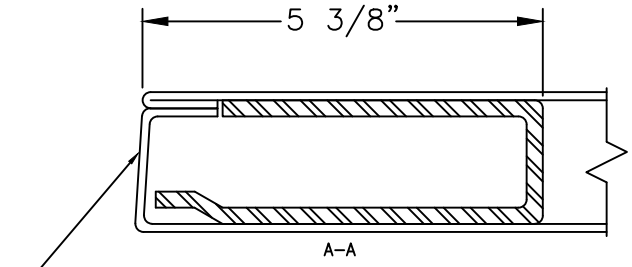


DOOR CONSTRUCTION TOP AND BOTTOM

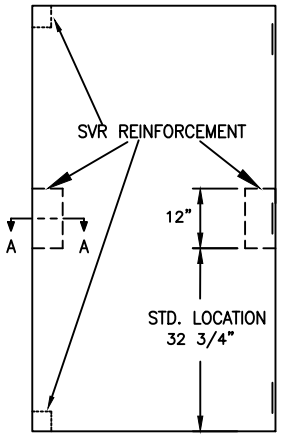


HARDWARE PREPARATIONS

SURFACE VERTICAL ROD

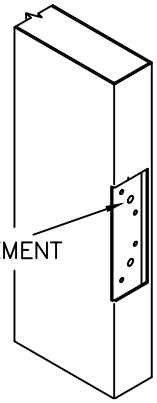


LOCK EDGE IS BEVELED 1/8" in 2"



HINGE PREPARATION

HINGE PREP IS HANDED



4-1/2" OR 5" REGULAR OR HEAVY WEIGHT HINGES ANSI A156.7

03/23/20

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

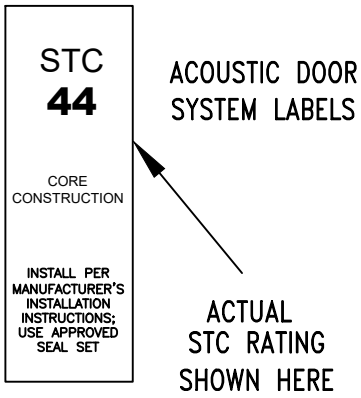
D12Q-4

STANDARD SIZES
NOMINAL DOOR OPENING

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

ACOUSTICAL DOORS

NO FIRE RATINGS AVAILABLE
- (STX 32-44 GLAZED PAIRS 8'0" x 8'0" MAX.)
- DESIGNS: GLAZED PAIRS



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.

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 a field test versus lab test.

Sound-Tech Xpress Door Systems

	STC Rating	Lock Type	Under-cut	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.

03/23/20

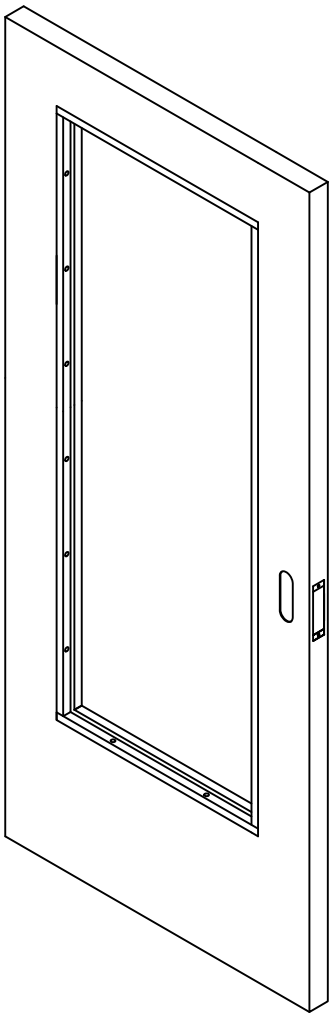
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

BACK TO TOP

Return to Index

1-3/4" THRULITE (TX) STILE AND RAIL DOOR

BEVELED LOCK AND HINGE EDGE, HANDED



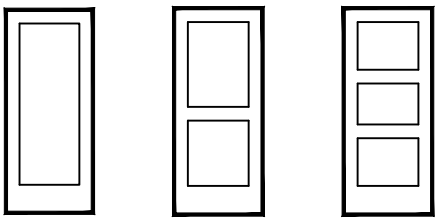
Exceptionally strong tubular stile and rail construction with an aesthetically attractive design for entrance/exit with full vision. 16 gage steel seamless design. Flush glazing, corners continuously welded and ground smooth.

Suggested Use:

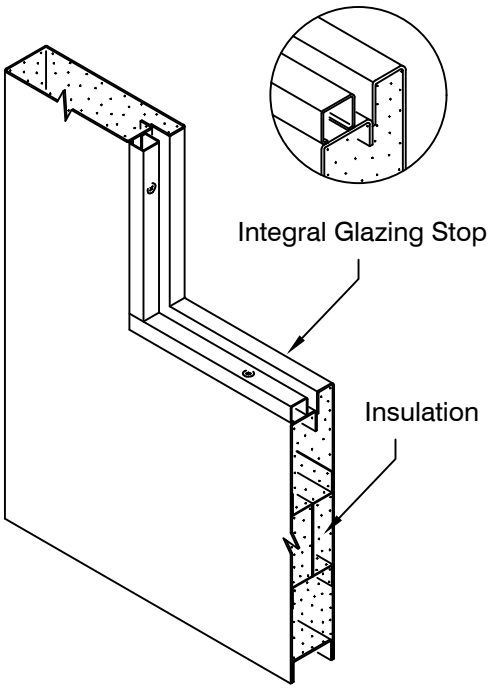
Entrances, Vestibules, Cross-Corridors...

Schools
Office Buildings
Hotels/Motels
Shopping Malls
Theaters
Sports Stadiums
Hospitals
Apartments

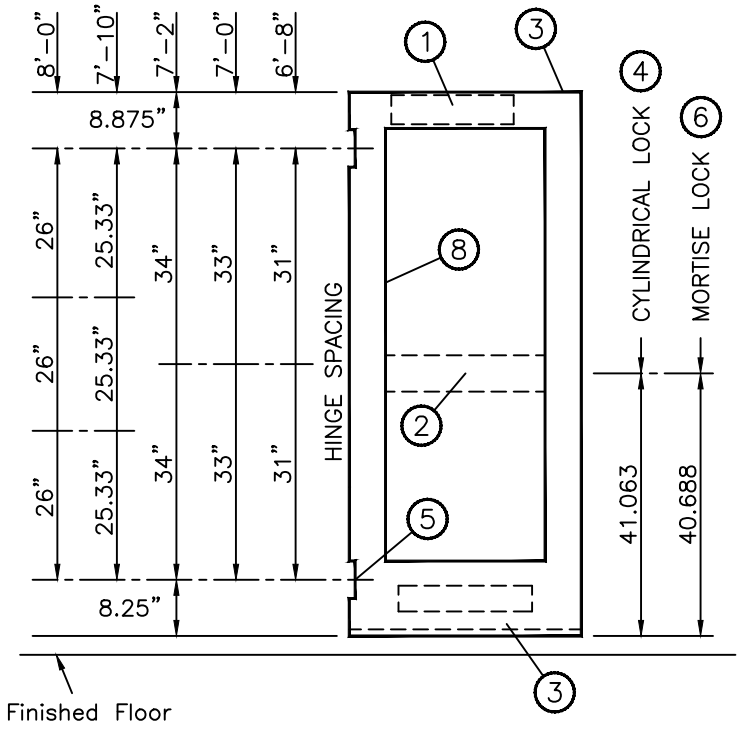
DOOR DESIGNS



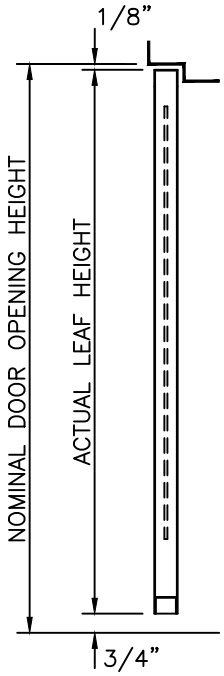
FG 2G 3G



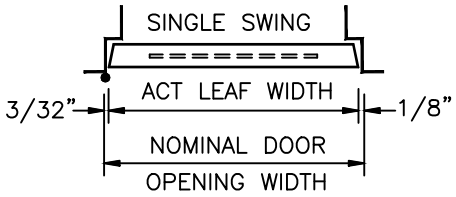
Hardware locations shown match Ceco standard frames.

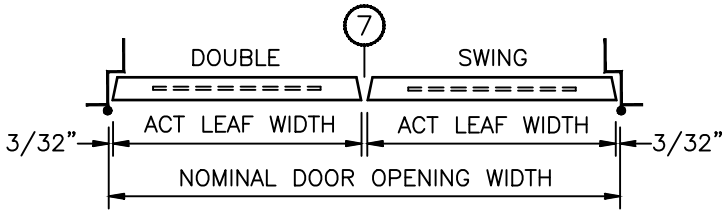


DOOR ELEVATION



VERTICAL SECTION

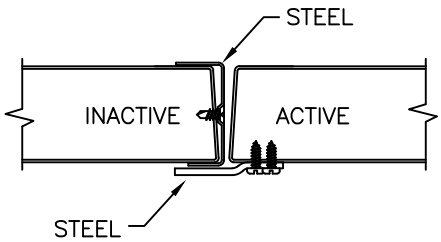




HORIZONTAL SECTIONS

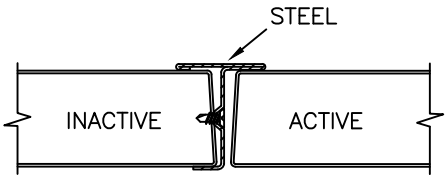
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.4 mm)

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



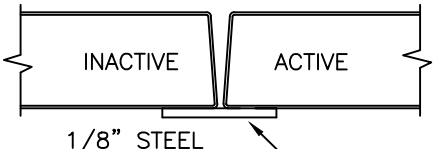
LISTED

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



LISTED

OVERLAPPING ASTRAGAL 7
4491 (OPTIONAL)
FOR 1-3/4" THICK DOORS



LISTED

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BACK TO TOP

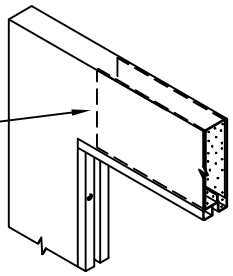
CecoDoor

ASSA ABLOY

TECH-DATA

D18–3

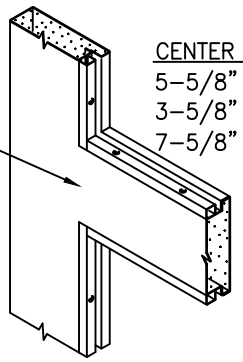
1 CLOSER REINFORCEMENT OPTIONAL



12 GA. GALV. STEEL
19" x 4–1/2" PLATE
SPOT WELDED

STILE AND RAIL SIZES:
5–5/8" STD.
3–5/8" OPT.
7–5/8" OPT.

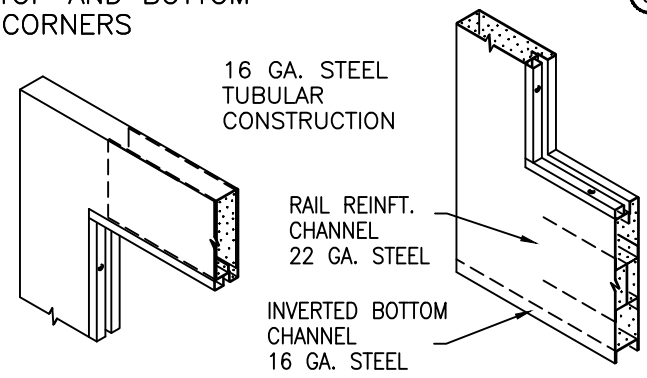
2 OPTIONAL CENTER RAIL



CENTER RAIL WELDED TO STILE

CENTER RAIL SIZES:
5–5/8" STD.
3–5/8" OPT.
7–5/8" OPT.

3 TOP AND BOTTOM CORNERS

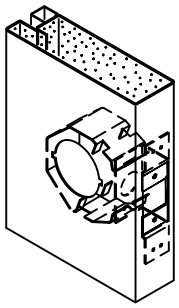


16 GA. STEEL TUBULAR CONSTRUCTION

RAIL REINFT. CHANNEL 22 GA. STEEL

INVERTED BOTTOM CHANNEL 16 GA. STEEL

4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE



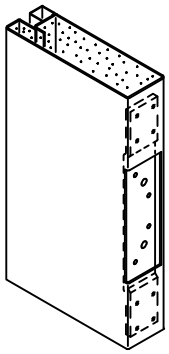
(5–5/8" MIN. STILE FOR 2–3/4" BACKSET)

(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

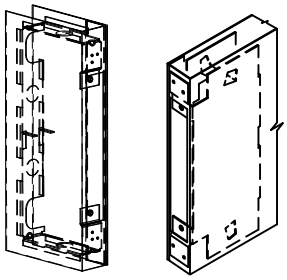


4–1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

ANSI 156.7 TEMPLATE

HINGE EDGE IS HANDED AND BEVELED

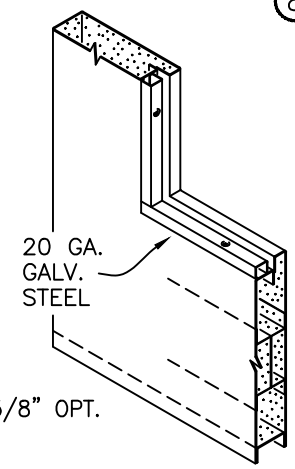
6 LOCK PREPARATION GOV. 86, ANSI/BHMA A115.1 MORTISE TYPE



(LM0)

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

8 STANDARD GLAZING TRIM



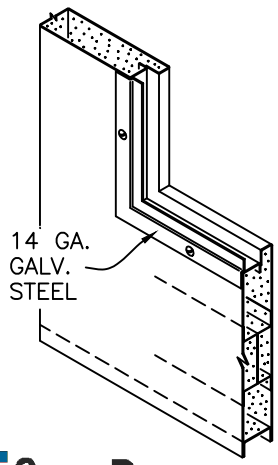
3/8" WIDE GLAZING POCKET

20 GA. GALV. STEEL

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
1–1/16" WIDE GLAZING POCKET

14 GA. GALV. STEEL

10/17/19

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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BACK TO TOP

CecoDoor
ASSA ABLOY

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 gage 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 gage inverted bottom channel welded to both door faces. Fiberglass batting (0.5 lbs/cf) 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 gage 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 gage 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.

STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
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"	
3'–8"	7'–4"	
3'–10"	7'–8"	
4'–0"	8'–0"	

FIRE DOORS

LABELING AGENCIES:

- UNDERWRITERS LABORATORY
- 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 –

MATERIAL

DOOR FACE SHEETS	LEVEL 3	C.R.	GALV. A60	RECOMMENDED DOOR FRAME MATERIAL
16 Gage Steel	MODEL 3, EXTRA HEAVY–DUTY	STD	OPT	16 or 14 Gage Steel

PERFORMANCE

FG Design, 1/4" tempered glass, Tests ASTM E90 and E413		
Sound Transmission Class:	Sealed	Operable
	STC 30	STC 29

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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CecoDoor
ASSA ABLOY

ASSA ABLOY

D19–1

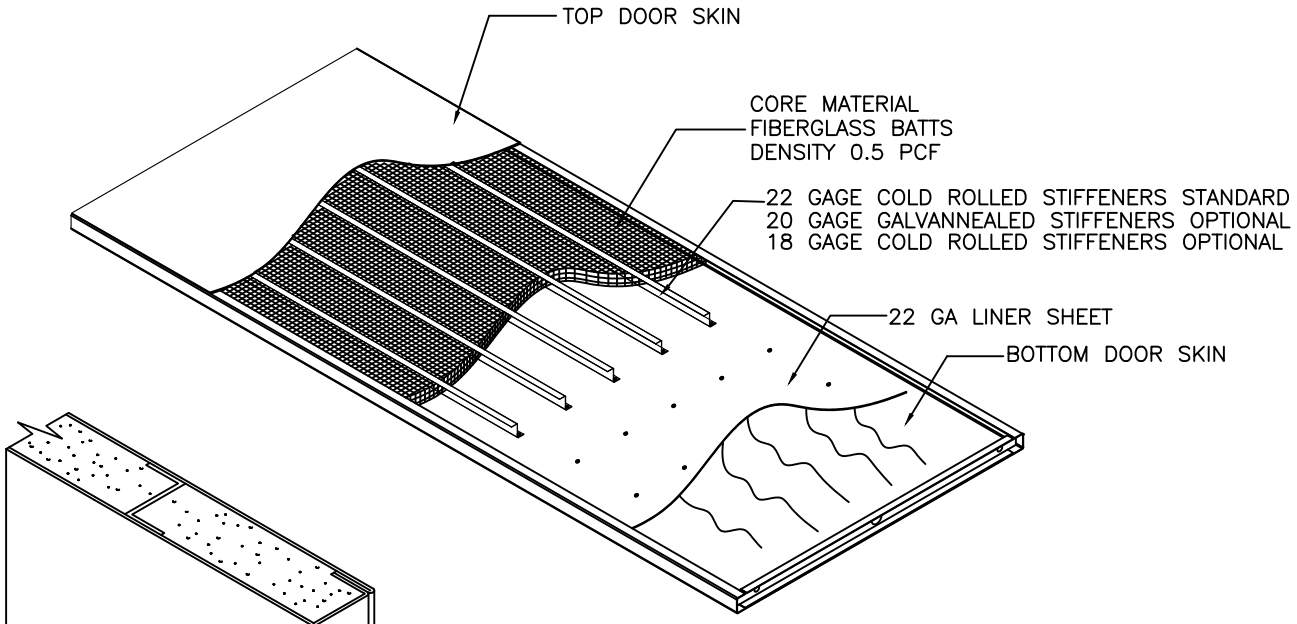
1-3/4" TRIO DOOR

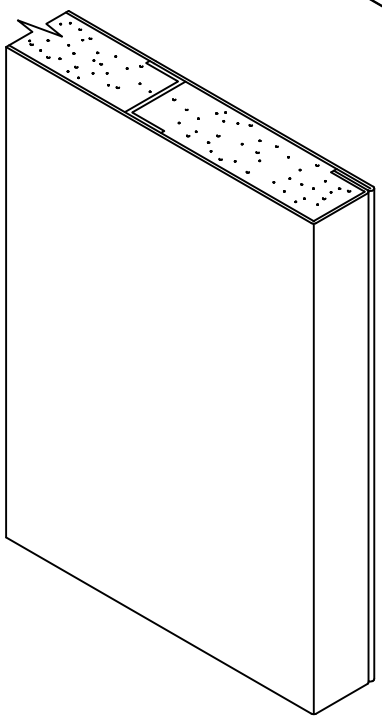
VERTICALLY STEEL STIFFENED
LAMINATED CORE, WITH
FIBERGLASS BETWEEN STIFFENERS

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 gage steel stiffeners are placed 6" apart and welded every 5" along their length.



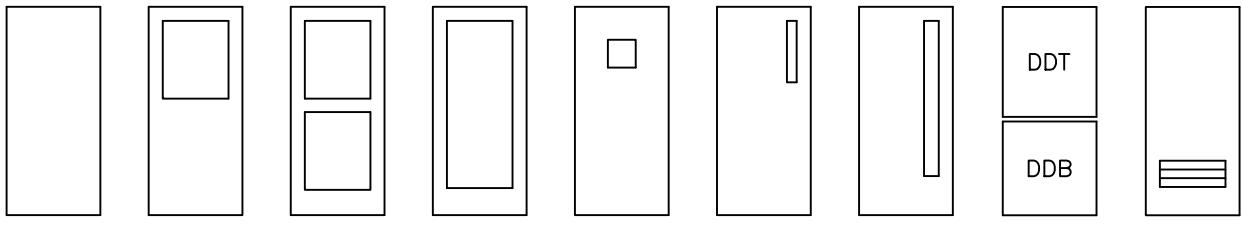


Suggested Use:

Interior or Exterior ...
Motels/Hotels
Office Buildings
Urban Renewal
Health Care
Institutional
Data Processing
Mercantile
Food Processing
Schools/Training Centers
Institutional Facilities
Public Utility Stations
Government Buildings
Warehouses/Factories
Manufacturing Plants
Transportation Terminals
Vehicle Service Facilities

PATENTED

DESIGNS

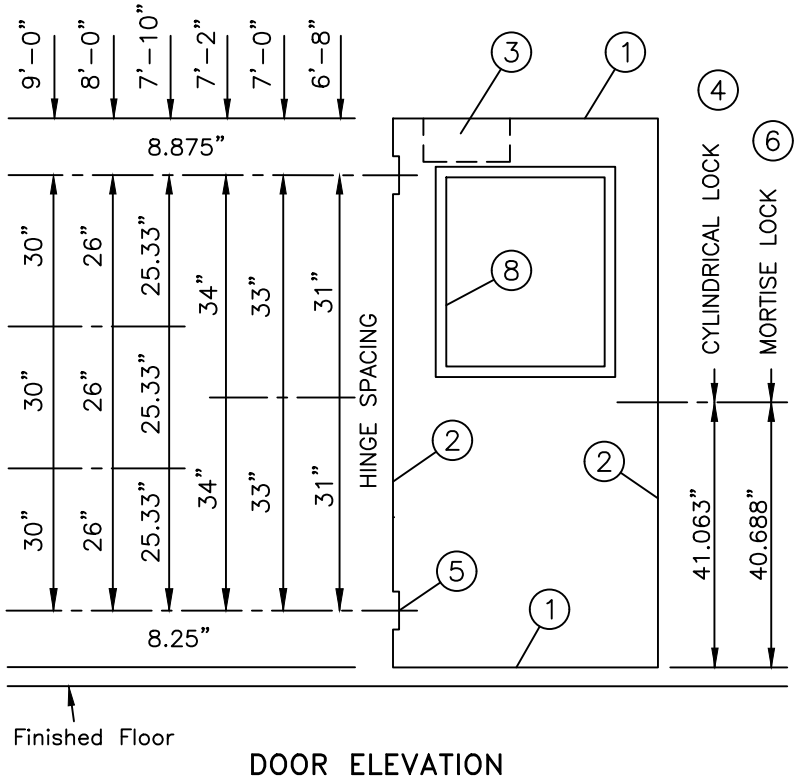


F G G2 FG V N___ N___ DUTCH LB

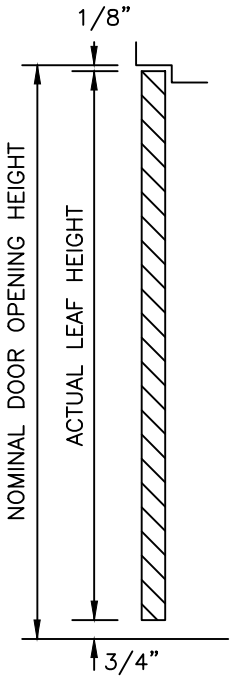
V, G, & N DESIGNS AVAILABLE

03/16/21

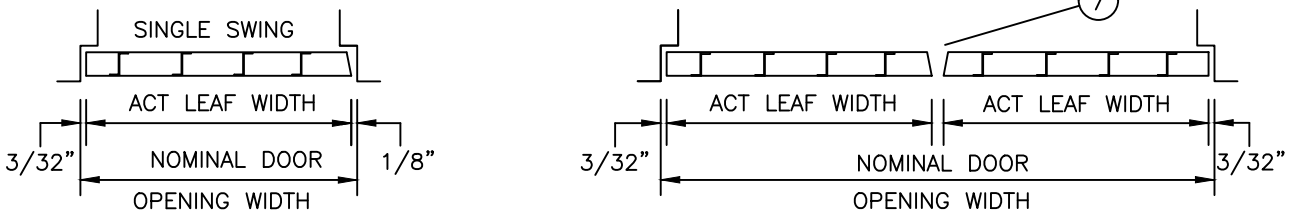
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



VERTICAL SECTION

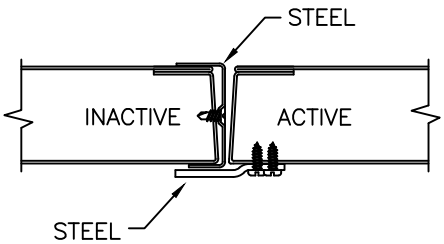


HORIZONTAL SECTIONS

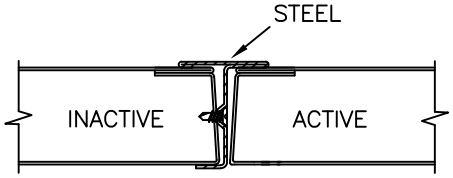
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

PATENTED

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



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



TECH-DATA

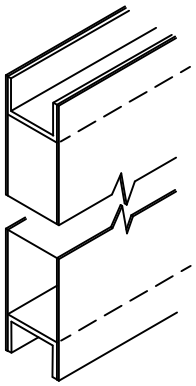
D19-3

1 16 GAGE STEEL END CHANNELS

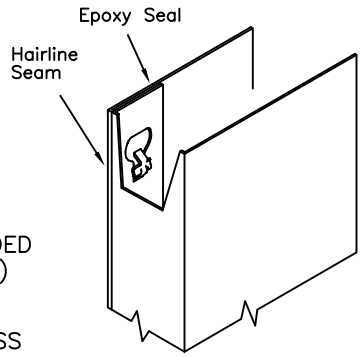
WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

OPTIONAL STEEL TOP AND/OR BOTTOM CLOSING CAPS



2 VERTICAL EDGES



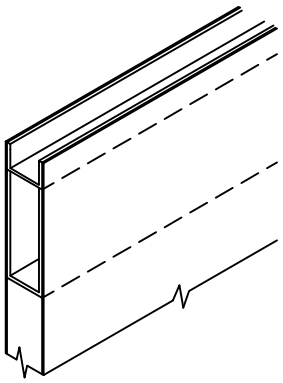
MECHANICALLY INTERLOCKED HEMMED EDGES

ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)

14 GAGE STEEL WELDED SEAMLESS (ONLY)

3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAGE STEEL CHANNEL 20" LONG

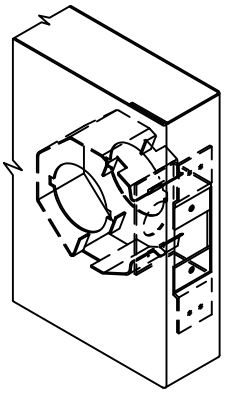


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4" BACKSET

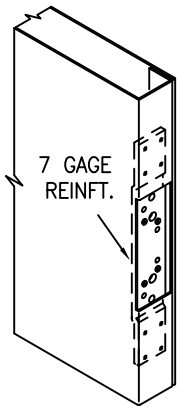


LOCK EDGE IS BEVELED 1/8" in 2" (1:16)

5 HINGE PREPARATION

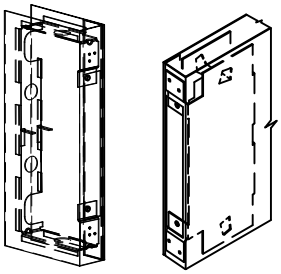
4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

HINGE EDGE IS HANDED AND NOT BEVELED.



ANSI A156.7 TEMPLATE

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

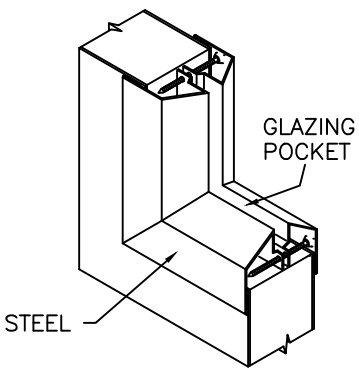


(LM0)

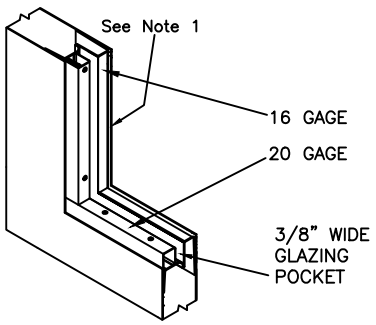
NOTE: EITHER OF THE LOCK REINFORCEMENTS/ GUARDS SHOWN MAY BE INSTALLED WITH ANY MORTISE LOCK PREPARATION.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

8 GLAZING TRIM SlimTrim



GLAZING TRIM 4885 (FLUSH)

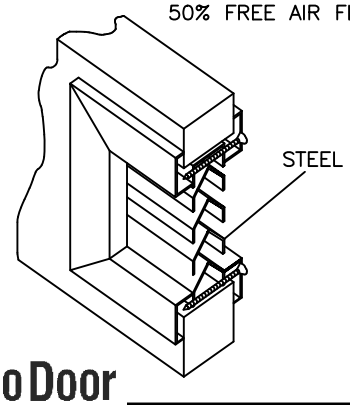


Notes:
1. Field applied caulk is recommended on this seam to improve esthetics and resist water intrusion.
2. Drawing Not to Scale

FIXED SLAT TYPE LOUVER 4634

FOR 1-3/4" THICK DOORS

50% FREE AIR FLOW



10/17/19

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 AGENCY: UL & WH

TEST: UL10C, UL10B, UL1784 & NFPA252
- DESIGNS: F, G, N, V
- RATING:

UL MAX. SIZE: 4'0" x 8'0" SINGLE
8'0" x 8'0" PAIR*
20 MIN. THRU 3 HOUR

*ADDITIONAL 12 GAGE INTERNAL LOCK SIDE REINFORCEMENT REQ'D. (FOR PAIRS ONLY)
*NO ASTRAGAL REQUIRED

14 OR 16 GAGE
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 GAGE 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 GAGE INTERNAL LOCK SIDE REINFORCEMENT REQ'D.
*NO ASTRAGAL REQUIRED

14,16 OR 18 GAGE
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 gage cold rolled stiffeners are placed no more than 6" apart and welded no more than 5" O.C. along their length to a 22 gage liner plate. 20 gage galvannealed stiffeners and 18 gage cold rolled stiffeners are optional. Fiberglass batting provides sound deadening and insulation between stiffeners. The top and bottom door edges are closed with 16 gage 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 gage 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 gage 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.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

MATERIAL

DOOR FACE SHEETS	LEVEL	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
18 Gage Steel	Heavy Duty	STD	OPT	OPT	16 Gage Steel
16 Gage Steel	Extra heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel
14 Gage Steel	Maximum Duty	STD	OPT	OPT	14 or 12 Gage Steel

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test 18, 16, and 14 Gage: 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 Gage Face Sheets (4'0" X 8'0", Max. Size) ASTM E90 & E413 [STC 43 INOPERABLE & EVALUATED TO STC 41 OPERABLE])		

Experience a safer and more open world

RETURN TO TOP

CecoDoor
ASSA ABLOY

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 gage cold rolled steel stiffeners are placed 6" apart and welded every 5" along their length. Optional 20 gage galvannealed and 18 gage cold rolled stiffeners are available.

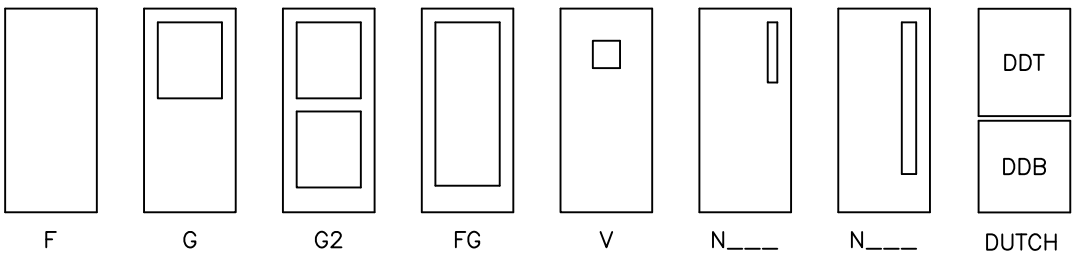
Suggested Use:

Interior or Exterior ...
Motels/Hotels
Office Buildings
Urban Renewal
Health Care
Institutional
Data Processing
Mercantile
Food Processing

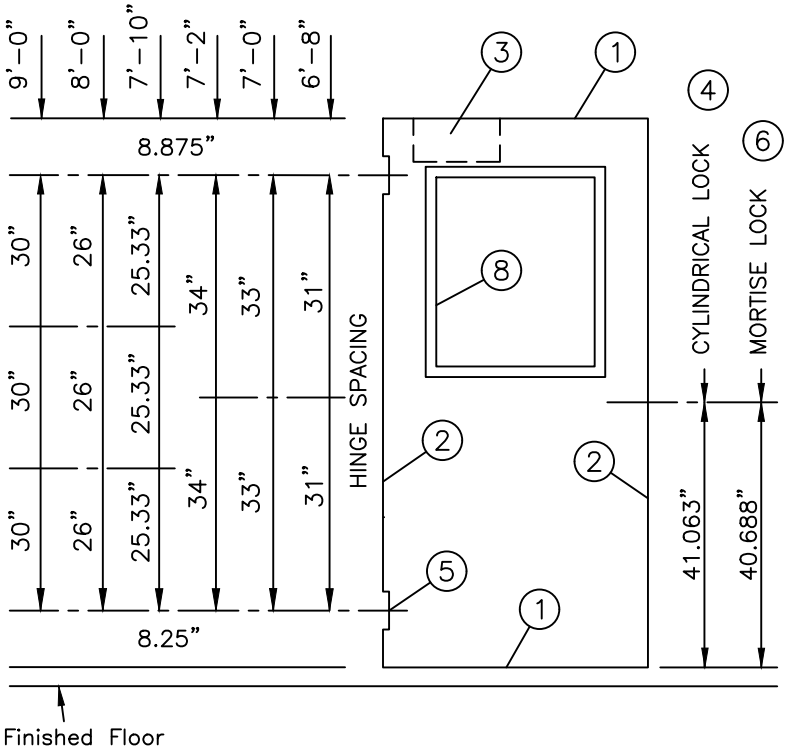
Schools/Training Centers
Institutional Facilities
Public Utility Stations
Government Buildings
Warehouses/Factories
Manufacturing Plants
Transportation Terminals
Vehicle Service Facilities

PATENTED

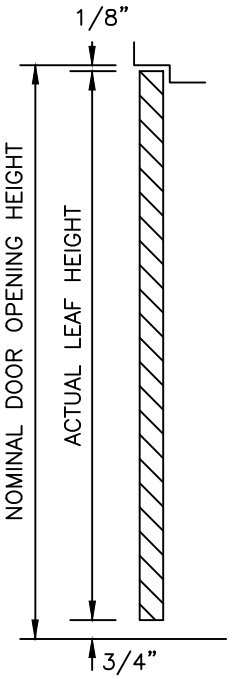
DESIGNS



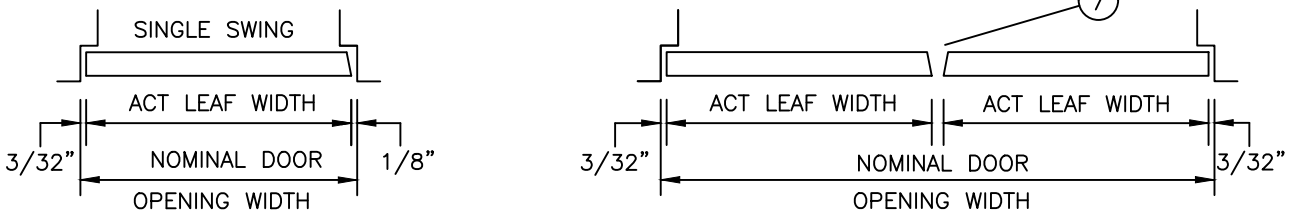
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



VERTICAL SECTION

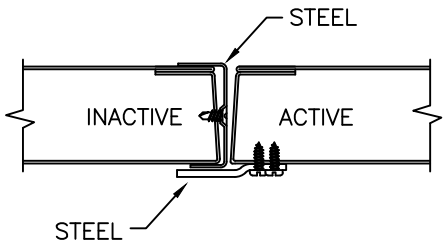


HORIZONTAL SECTIONS

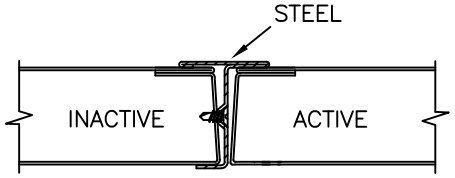
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

PATENTED

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



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



TECH-DATA

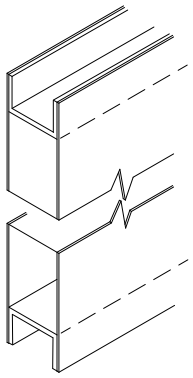
D19A-3

1 16 GAGE STEEL END CHANNELS

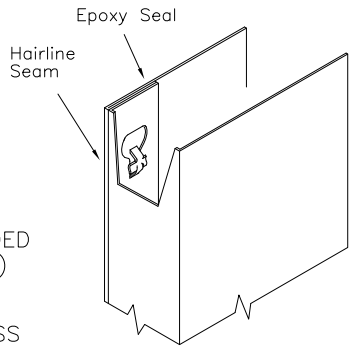
WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

OPTIONAL TOP AND BOTTOM CAPS



2 VERTICAL EDGES



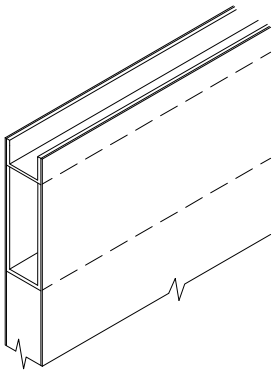
MECHANICALLY INTERLOCKED HEMMED EDGES

ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)

14 GAGE STEEL WELDED SEAMLESS (ONLY)

3 CLOSER REINFORCEMENT (OPTIONAL)

14 GAGE STEEL CHANNEL 20" LONG

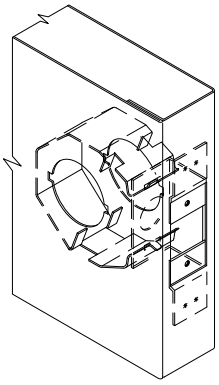


4 LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

(LC1)

(ANSI A115.2)

2-3/4" BACKSET

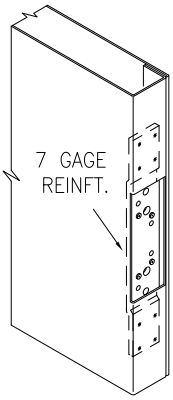


LOCK EDGE IS BEVELED 1/8" in 2" (1:16)

5 HINGE PREPARATION

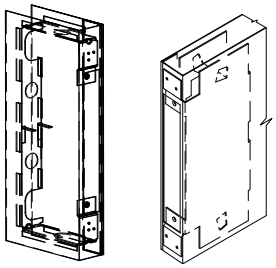
4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

HINGE EDGE IS HANDED AND NOT BEVELED.



ANSI A156.7 TEMPLATE

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

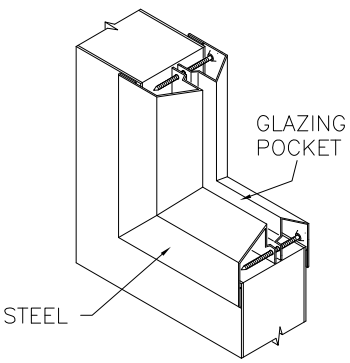


(LM0)

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

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

8 GLAZING TRIM SlimTrim



04/11/17

CecoDoor
ASSA ABLOY

BACK TO TOP

D19A-4

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"	

PATENTED

FIRE DOORS

LABELING AGENCY: UL & WH

TEST: UL10C, UL10B, UL1784 & NFPA252
- DESIGNS: F, G, N, V
- RATING:

UL
20 min to 3 HR
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 A1008 ...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 gage cold rolled stiffeners are placed no more than 6" apart and welded no more than 5" O.C. along their length to a 22 gage liner plate. 20 gage galvannealed and 18 gage 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 pcf and it has a crush strength of 3600 psf. The top and bottom door edges are closed with 16 gage 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 gage 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 gage 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 Gage Steel	Heavy Duty	STD	OPT	OPT	16 Gage Steel
16 Gage Steel	Extra heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel
14 Gage Steel	Maximum Duty	STD	OPT	OPT	14 or 12 Gage 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 Gage

Thermal Characteristic Value:	CORE CALCULATED (ASTM C518)	R = 11.01	U = 0.091
	*NFRC 102–2014 & ASTM FLUSH DOOR WITH MERCURY FRAME	R = 2.78	U = 0.36
	*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 = 2.44	U = 0.41

*NFRC102–2014: The general requirements of testing shall be as defined in NFRC 102, ASTM C1199 and ASTM C1363.

Air Infiltration	NFRC400 RESISTANCE TO AIR INFILTRATION & ASTM TEST METHODS: MERCURY TQB FRAME & TRIO–E DOOR NFRC 400 (0.1 CFM SQ.FT.)

05/06/21

CecoDoor
ASSA ABLOY

TECH-DATA

Multi-Solution Opening: Blast and Hurricane Resistant Single Flush Openings

Blast and Hurricane Resistant:

- Blast Up To 6.16 psi Category I (12 gage door and frame construction)
- Blast Up To 9.74 psi Category II (14 gage 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 gage, 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 stiffener 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 gage A60 face sheets or 12 gage A60 face sheets depending on what blast psi and category level is required.

Glass Lights, Viewer or Louvers: Not available.

Windstorm Classification Label: Each wind-resistant building assembly shall bear a classification mark of Underwriters Laboratories, LLC.

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 gage A60 standard and 12 gage 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

For Further information: Call 218-828-6256

TECH-DATA

Multi-Solution Opening: Blast and Hurricane Resistant Single Openings

Return to Top

DOOR: MIN. 2'8" X 6'8", MAX. 4'0" X 8'0" LEAF SIZE, 14 or 12 GAGE A60 GALVANNEALED FACE SHEETS, WITH STEEL STIFFENED AND FIBERGLASS CORE. 14 GAGE TOP AND BOTTOM CHANNELS, WELDED TOP CAP.

SUGGESTED USE FOR COMBINATION HURRICANE & BLAST PRODUCTS:
CRITICAL INFRASTRUCTURE, GOVERNMENT/MILITARY, PETRO CHEMICAL PLANTS, MUSEUMS, HURRICANE ENVIRONMENTS

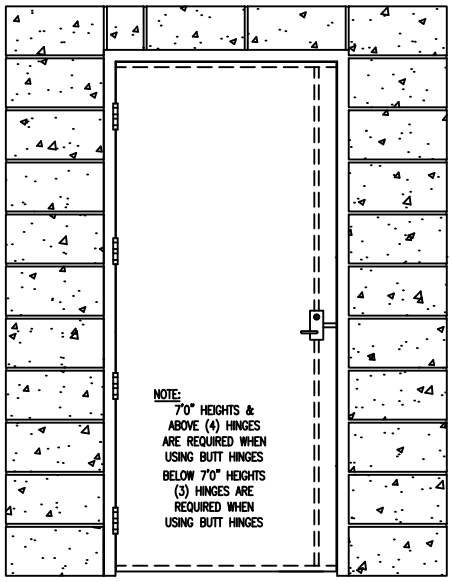
OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252.

LOCK:
CORBIN RUSSWIN BL6600 SERIES OR SARGENT BL7300 SERIES

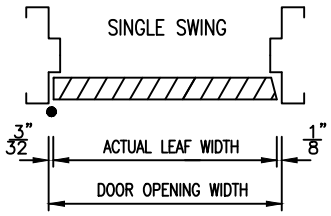
HINGES:
SEE PAGE D20-10

CLOSER:
SEE PAGE D20-10

OPTIONAL HARDWARE & ACCESSORIES NOT PROVIDED BY CECO:
SEE PAGE D20-11



HORIZONTAL SECTION



- **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.**

- 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 ENGAGE STRIKE.
- 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.

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.

For Further information: Call 218-828-6256

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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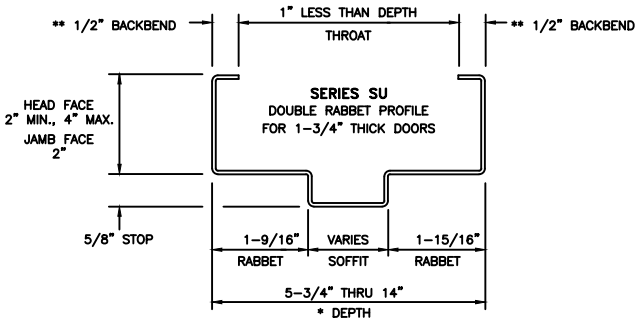
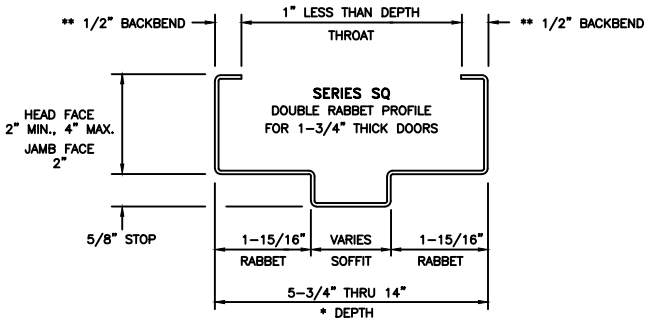
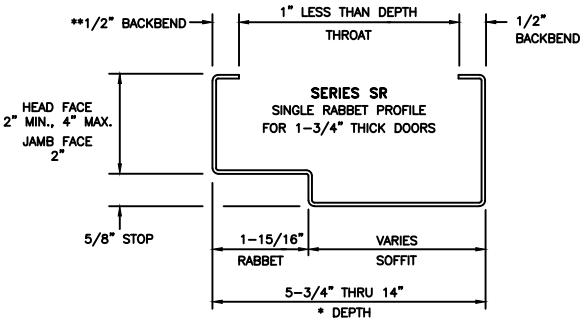
Multi-Solution Opening: Blast and Hurricane Resistant Single Openings







*FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS

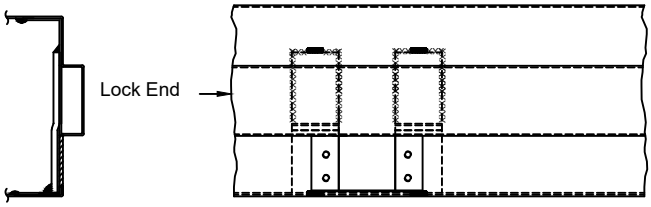
**BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".

FRAMES REQUIRE FACTORY WELDED CORNERS.

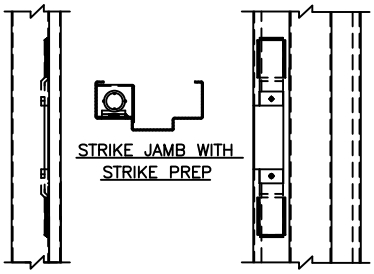
FRAMES ARE CONSTRUCTED OF 14 GAGE A60 FOR BLAST Up To 9.74 PSI Category II.
FRAMES ARE CONSTRUCTED OF 12 GAGE A60 FOR BLAST Up To 6.16 CATEGORY I.

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



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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Return to Top

Multi-Solution Opening: Blast and Hurricane Resistant Paired Flush Openings

Blast and Hurricane Resistant:

- Blast Up To 6.84 psi Category II (14 gage 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 gage, 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 stiffener 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 gage A60 galvannealed steel face sheets.

Glass Lights, Viewer or Louvers: Not available.

Windstorm Classification Label: Each wind-resistant building assembly shall bear a classification mark of Underwriters Laboratories, LLC.

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 gage 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

Return to Top

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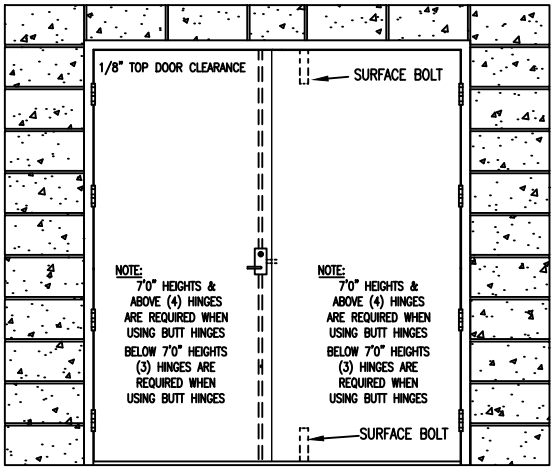
Multi-Solution Opening: Blast and Hurricane Resistant

DOOR: MIN. 5'4" X 6'8", MAX. 8'0" X 8'0" LEAF SIZE, 14 GAGE A60 GALVANNEALED FACE SHEETS, WITH STEEL STIFFENED AND FIBERGLASS CORE. 14 GAGE TOP AND BOTTOM CHANNELS, AND WELDED STEEL TOP CAP.

SUGGESTED USE FOR COMBINATION HURRICANE & BLAST PRODUCTS:
CRITICAL INFRASTRUCTURE, GOVERNMENT/MILITARY, PETRO CHEMICAL PLANTS, MUSEUMS, HURRICANE ENVIRONMENTS



- 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 ENGAGE 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.

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.

OPTIONAL FIRE RATING:
UP TO AND INCLUDING 3 HRS IN ACCORDANCE WITH UL 10B, UL 10C, UL 1784, & NFPA 252.

LOCK:
CORBIN RUSSWIN BL6600 SERIES OR SARGENT BL7300 SERIES

SURFACE BOLTS:
CORBIN RUSSWIN 988CR OR SARGENT 988

HINGES:
SEE PAGE D20–10

CLOSER:
SEE PAGE D20–10

OPTIONAL HARDWARE & ACCESSORIES NOT PROVIDED BY CECO:
SEE PAGE D20–11

- **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.**

For Further information: Call 218-828-6256

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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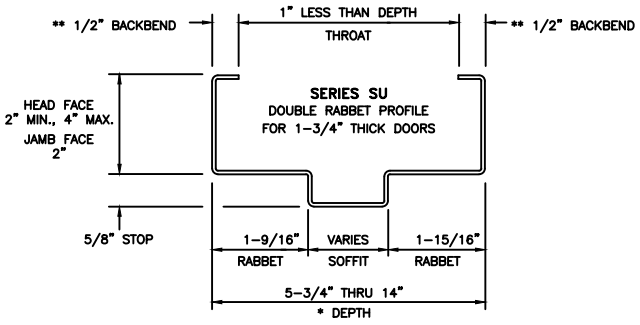
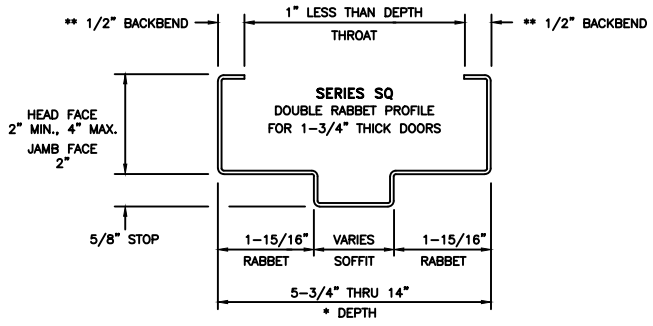
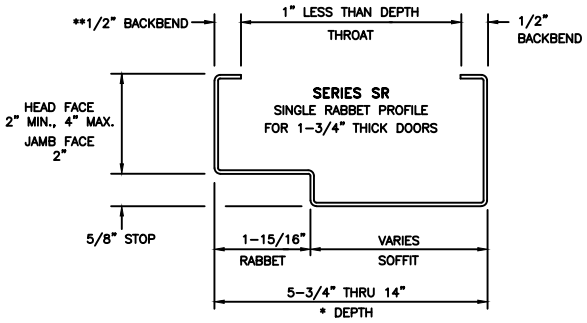






FRAME DEPTHS AVAILABLE IN 1/8" INCREMENTS

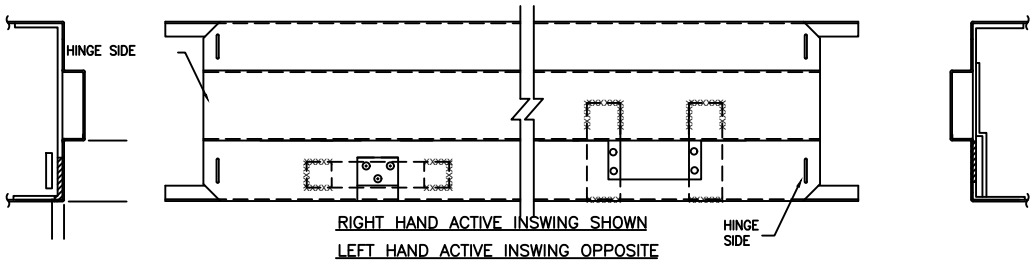
* BACKBENDS FOR 5-3/4" DEPTH MAY BE 7/16", WHICH MEANS THE THROAT WOULD BE 4-7/8".

** FRAMES REQUIRE FACTORY WELDED CORNERS.

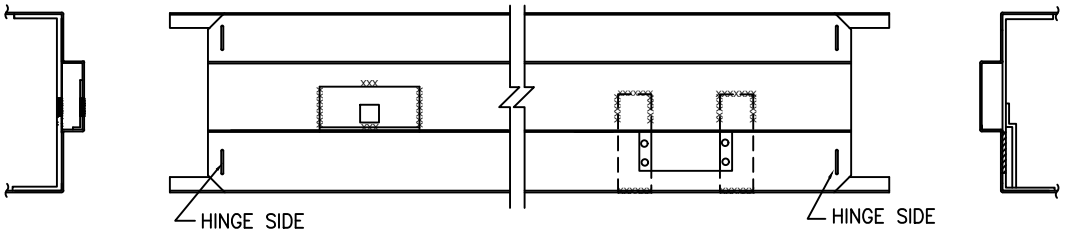
FRAMES ARE CONSTRUCTED OF 14 GAGE A60 GALVANNEALED STEEL FOR BLAST UP TO 7.0 PSI Category II.

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



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 EXISTING WALL JAMB ANCHORS OR WHEN WELDED TO BUILDING STRUCTURE."

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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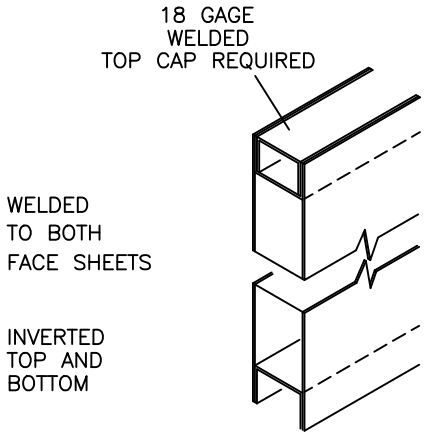
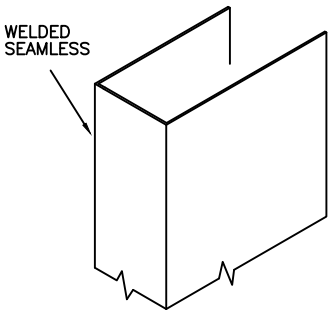
Multi-Solution Opening: Blast and Hurricane Resistant
Single and Paired Openings

Return to Top

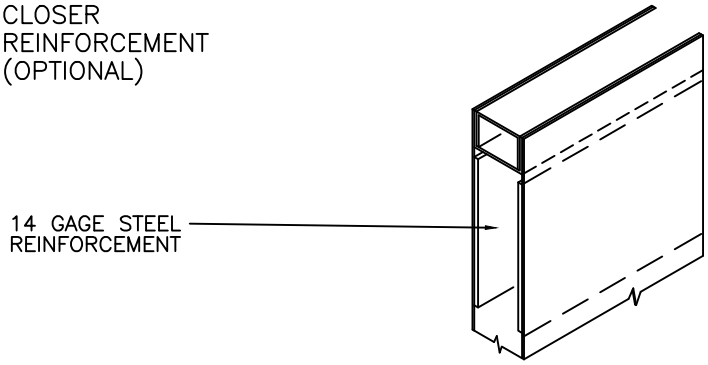
14 GAGE STEEL END CHANNELS



VERTICAL EDGES



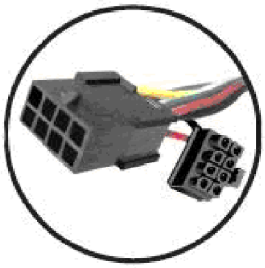
CLOSER REINFORCEMENT (OPTIONAL)



(THRU–BOLT MOUNTING OF BODY TO DOOR ONLY)

OPTIONAL WIRING HARNESS

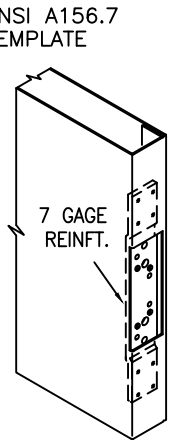
ELECTROLYNX CABLE PROVIDED IN DOOR FOR PLUG & PLAY APPLICATION



HINGE PREPARATION

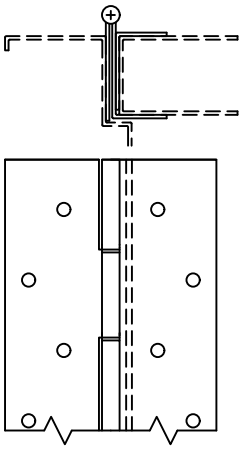
HINGE EDGE IS HANDED AND SQUARE

7'0" HEIGHTS & ABOVE (4) HINGES ARE REQUIRED WHEN USING BUTT HINGES. BELOW 7'0" HEIGHTS (3) HINGES ARE REQUIRED WHEN USING BUTT HINGES.



OPTIONAL CONTINUOUS HINGE PREPARATION

NOTE: A CONTINUOUS HINGE REQUIRES A CONTINUOUS HINGE REINFORCEMENT IN DOOR AND FRAME.



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Multi-Solution Opening: Blast and Hurricane Resistant Single and Paired Openings

Return to Top

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 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 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.

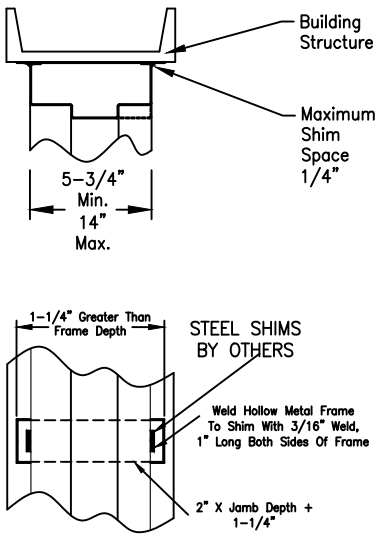
Paired Openings Frame Head Anchor Locations

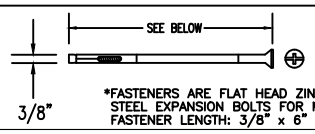
	Opening Size	Anchor Type	Anchor Spacing
Pairs	Approved min. opening size up to and including max. opening size	Welded to the Building Structure	Minimum of 5 weld locations & must weld on both faces of the frame head & sill at each Location; One location at the centerline of the door meeting edges. 2 are located 6" from the centerline of the door meeting edges & 2 welds are located 6" from each door jamb rabbet.

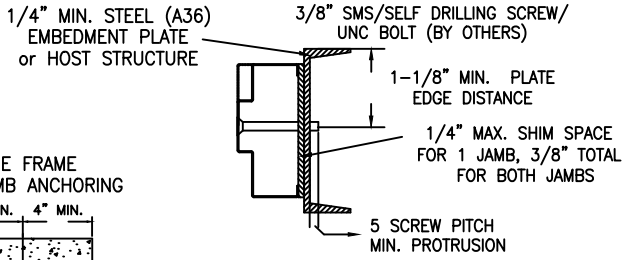
Paired Openings Jamb Anchor Locations

	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 24" max. on center. Must weld on both faces of the frame at each location.

FRAMES ARE NOT REQUIRED TO BE GROUTED WHEN WELDED TO BUILDING STRUCTURE

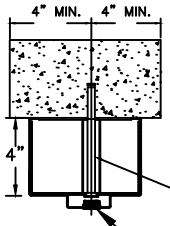






SCREW ATTACHMENT THROUGH EXISTING EMBEDMENT PLATE PROVIDED THAT DRILLING THROUGH PLATE IS PERMISSIBLE AS VERIFIED BY OTHERS.

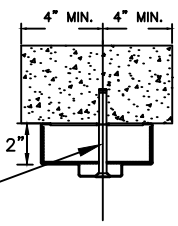
4" FACE FRAME HEAD ANCHORING



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

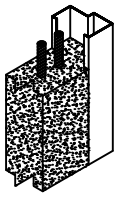
2" FACE FRAME HEAD & JAMB ANCHORING



3/8" EXPANSION BOLT (SHIPS LOOSE FOR FIELD INSTALLATION)

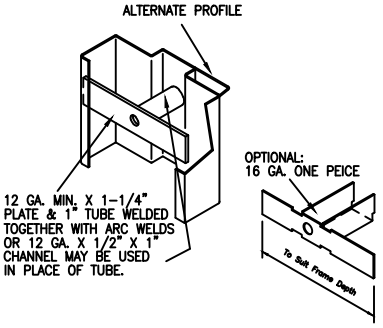
VINYL CAP PLUG

VINYL CAP PLUG (BAG OF 10) PART # 6111049
VINYL CAP PLUG (BAG OF 100) PART # 6111050
(SHIPS LOOSE FOR FIELD INSTALLATION)



POURED IN PLACE WALL

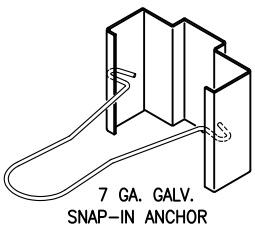
EXISTING OPENING –PIPE & PLATE FRAME NOT REQUIRED TO BE GROUTED

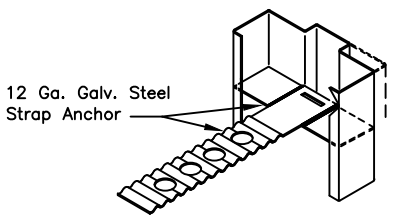


MASONRY – WIRE ANCHORS

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)

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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.
Single Opening	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 Gage 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 Anchor	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 Gage 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.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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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)
- YALE 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)

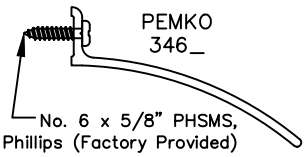
PEMKO PERIMETER SEALS:
S773 OR 305 PERIMETER SEAL
346 RAIN DRIP (THREAT SIDE MOUNTING ONLY)
345 DOOR BOTTOM (THREAT SIDE MOUNTING ONLY)
S771 OR S772 ASTRAGALS
2715 THRESHOLD

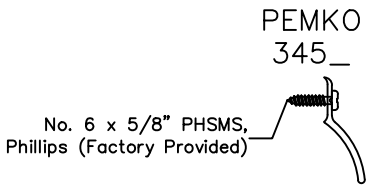
ELECTRONIC POWER TRANSFER:
CEPT, HANCHETT ENTRY SYSTEMS, DBA SECURITRON MAGNALOCK CORP.

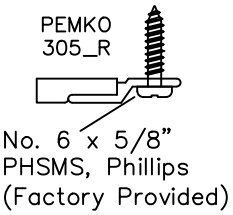
DOOR POSITION SWITCH:
DPS–M, SECURITRON MAGNALOCK CORP.

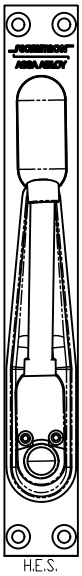
KICK PLATE:
ROCKWOOD K1050 (MUST BE SCREW APPLIED FOR FIRE RATED ASSEMBLIES)
NOTE: KICK PLATES MUST BE INSTALLED ON THE THREAT SIDE OF THE OPENING.

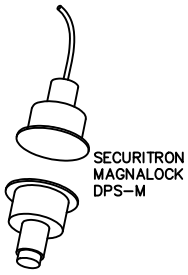
WIRE HARNESS:
QC–C1500P ELECTROLYNX WIRE HARNESS

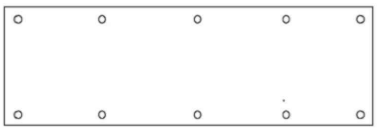


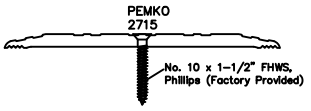


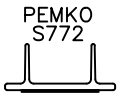


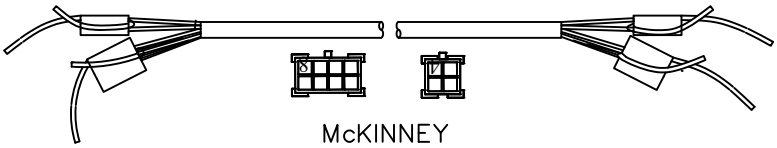












McKINNEY
QC–C1500P WIRING HARNESS

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

Experience a safer
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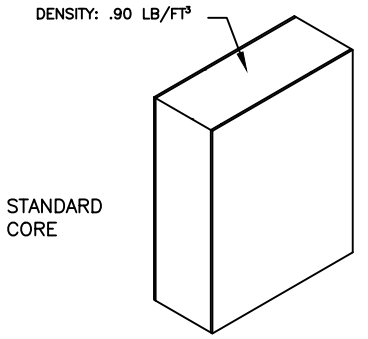
1-3/4" WATER RESISTANT STEEL DOORS

FULL FLUSH STEEL DOORS
BEVELED LOCK AND SQUARE HINGE EDGE, HANDED

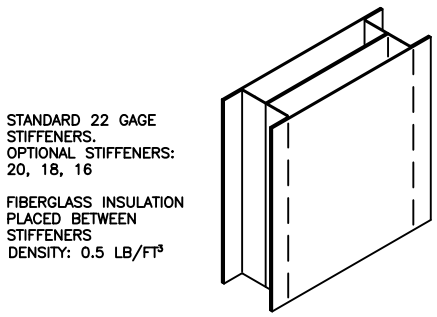
Available in polystyrene, steel stiffened or polyurethane slab core. Ideally suited for applications where food, sanitation, health or corrosive environments require a luxurious durable finish ...

Suggested Use:

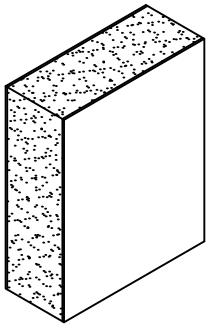
Interior or Exterior ... Medical Laboratory, Food Processing, Sanitary Wash Down applications, Pharmaceutical Plants, Research Laboratories, Chemical Plants, etc.



POLYSTYRENE CORE (WP)

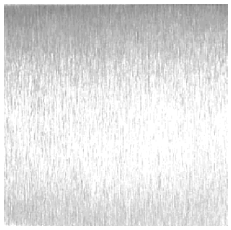


STEEL STIFFENED CORE
WELDED STEEL STIFFENERS (WS)
OR
PERMANENTLY BONDED STEEL STIFFENERS (WSB)



POLYURETHANE SLAB CORE (WU)

STAINLESS STEEL OPTIONS



304

316

AVAILABLE FINISHES

A60 GALVANIZED (STANDARD)

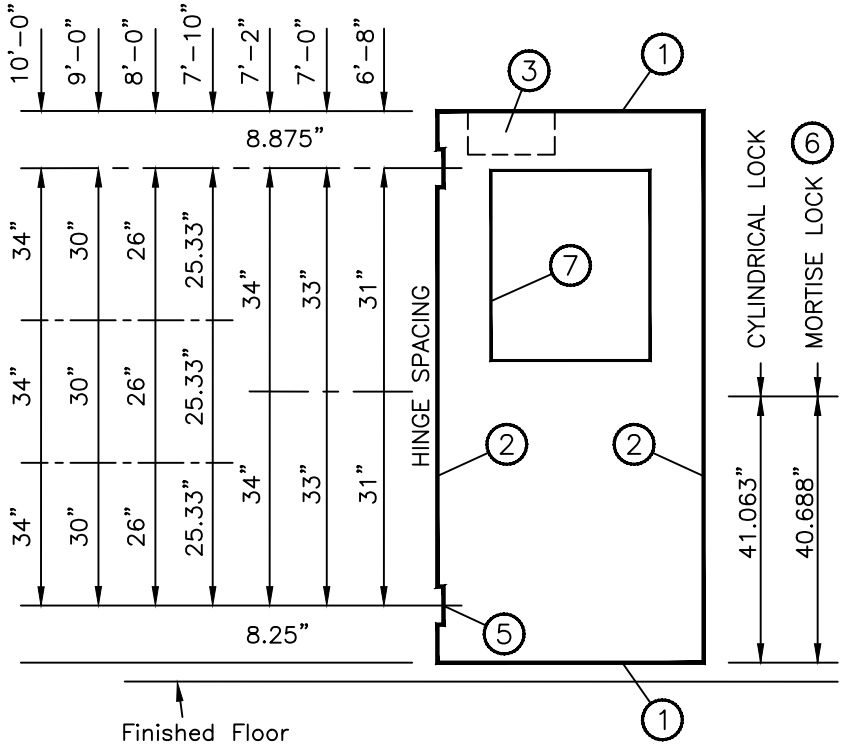
G90 GALVANIZED

*STAINLESS STEEL

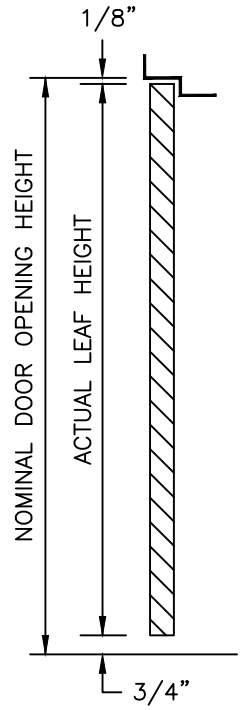
*AVAILABLE FINISHES:

*#4 BRUSH, #6 SATIN, #8 MIRROR, *#2B PAINT GRADE & XL BELND

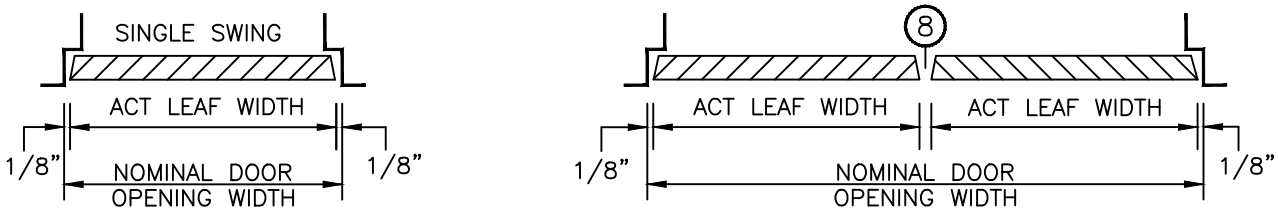
Hardware locations shown match Ceco steel frames.



DOOR ELEVATION



VERTICAL SECTION

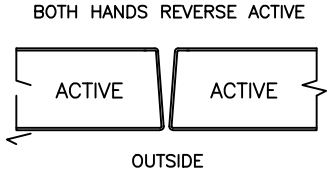


HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

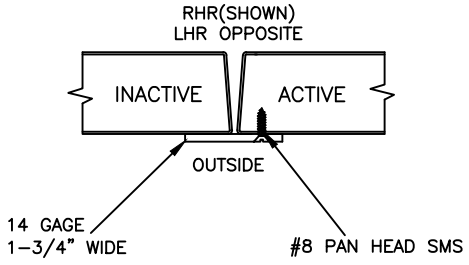
WATER RESISTANT
HANDING

8



WATER RESISTANT
ASTRAGAL FULL HEIGHT
4481

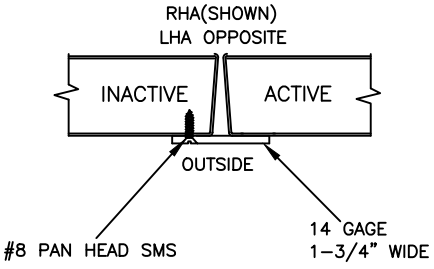
8



ASTRAGAL SHIPPED LOOSE
FIELD APPLIED WITH SCREWS

WATER RESISTANT
ASTRAGAL FULL HEIGHT
4481

8



ASTRAGAL SHIPPED LOOSE
FIELD APPLIED WITH SCREWS

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BACK TO TOP

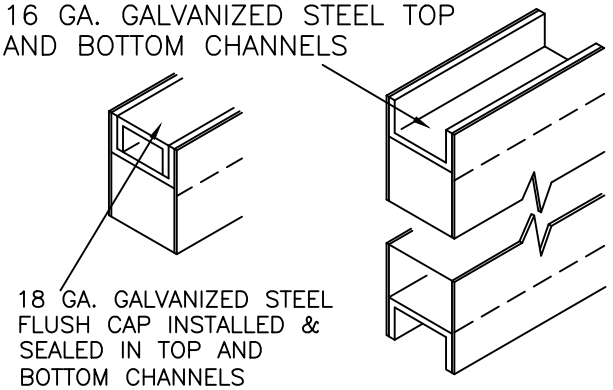
Ceco Door
ASSA ABLOY

TECH-DATA

WATER RESISTANT DOORS & FRAMES

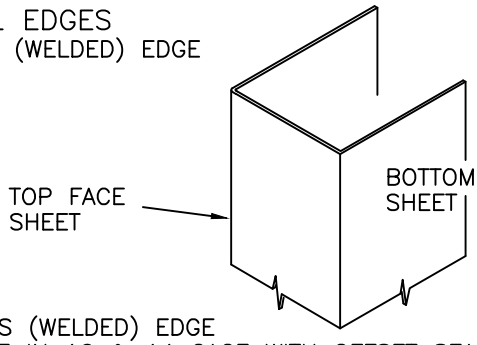
D21-3

1 — 16 GA. GALVANIZED STEEL TOP AND BOTTOM CHANNELS



2 — VERTICAL EDGES

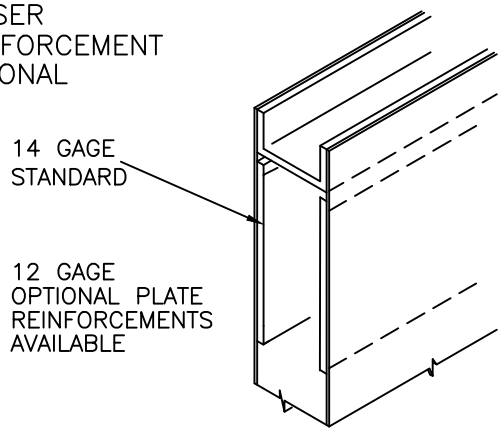
SEAMLESS (WELDED) EDGE



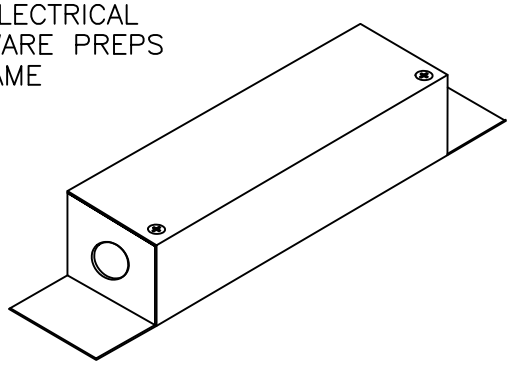
SEAMLESS (WELDED) EDGE AVAILABLE IN 16 & 14 GAGE WITH OFFSET SEAM

OPTIONAL 12 GAGE WELDED SEAMLESS CONSTRUCTED WITH CENTER SEAM

3 — CLOSER REINFORCEMENT OPTIONAL

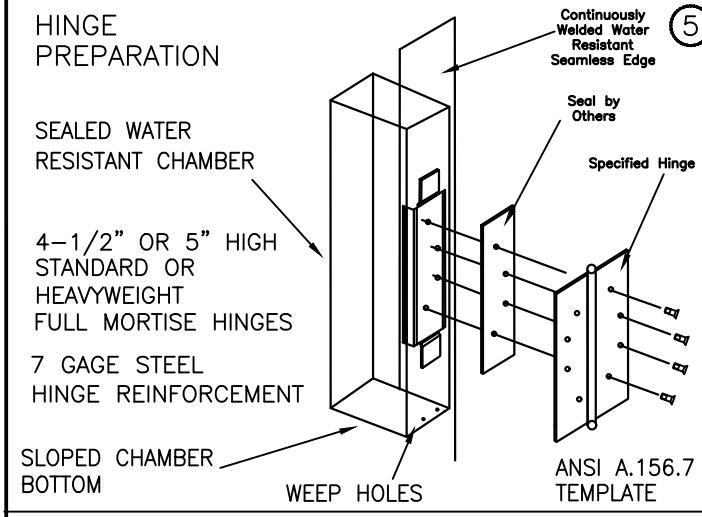


ELECTRICAL COVERBOX FOR ELECTRICAL HARDWARE PREPS IN FRAME

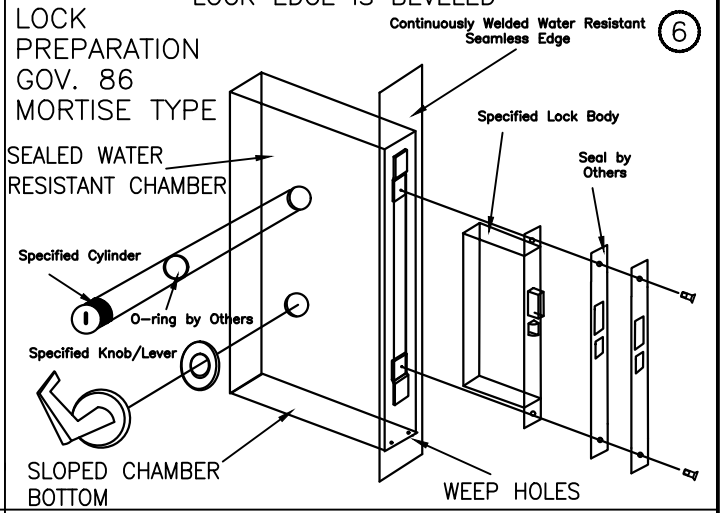


LOCK EDGE IS BEVELED

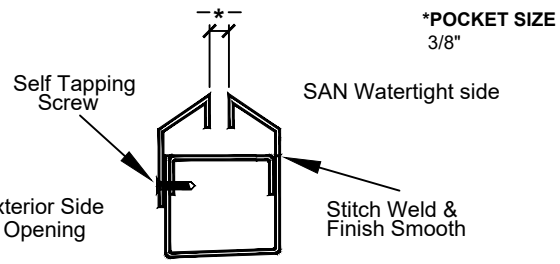
5 — HINGE PREPARATION



6 — LOCK PREPARATION GOV. 86 MORTISE TYPE

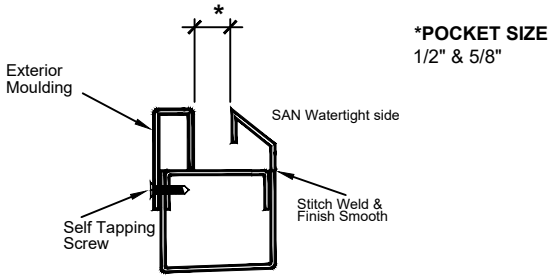


7 — OPTIONAL: SANITARY GLAZING MAX. SIZE "G" DESIGN



OPTIONAL FACTORY GLASS INSTALLATION AVAILABLE

7 — OPTIONAL: SANITARY GLAZING THICK GLASS TRIM MAX. SIZE "G" DESIGN



OPTIONAL FACTORY GLASS INSTALLATION AVAILABLE

10/17/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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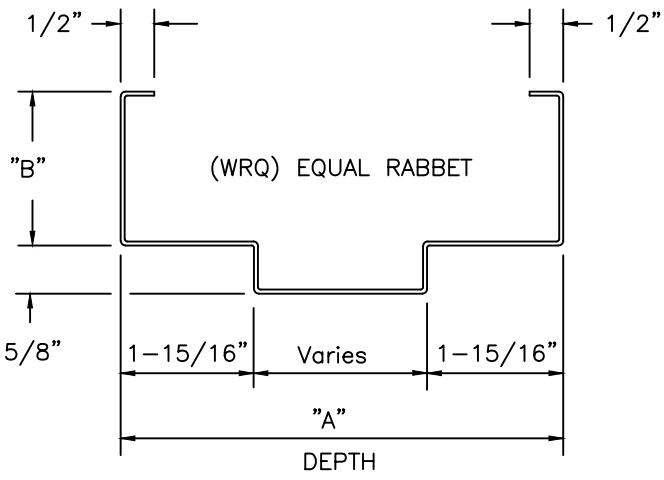
BACK TO TOP

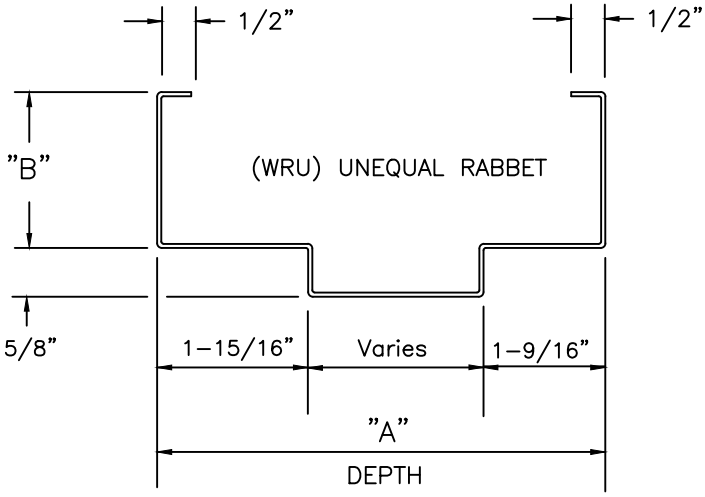
CecoDoor
ASSA ABLOY

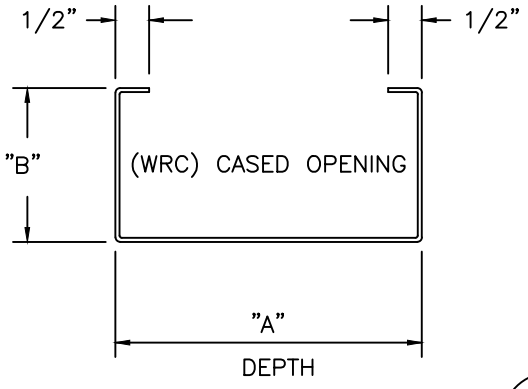
Ceco Door
ASSA ABLOY

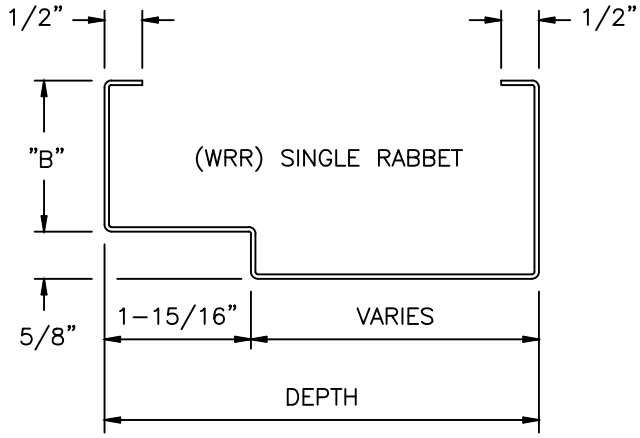
WATER RESISTANT SERIES WRQ, WRU, WRR and WRC STEEL FRAMES

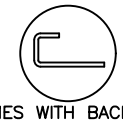
FOR 1-3/4" THICK DOORS
STANDARD WALL APPLICATION, HANDED











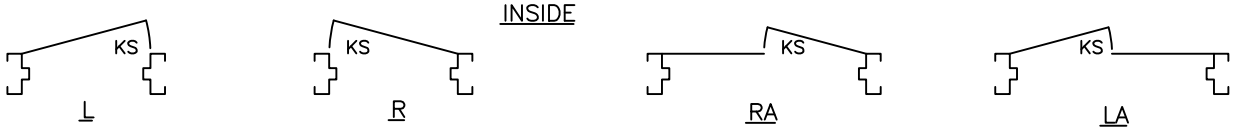
FRAMES WITH BACKBEND RETURNS SHOULD BE CONSIDERED FOR FINISHED WALL PROTECTION.

DEPTH RANGE	Dim A
	3-1/2" THRU 14"

MINIMUM DEPTHS WILL BE LIMITED BY FORMING 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)

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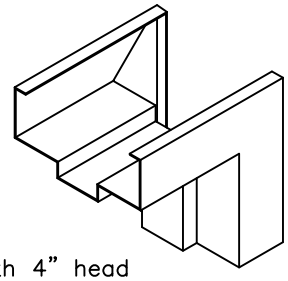
BACK TO TOP

TECH-DATA

D21-5

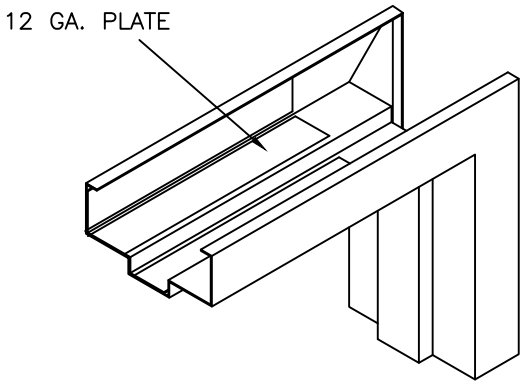
WELDED CORNERS – STANDARD ①

CORNER JOINTS ARE MITERED, WELDED AND GROUND SMOOTH.



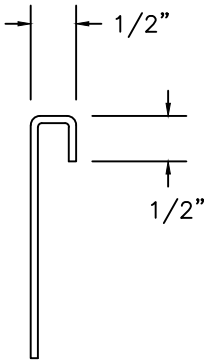
Available with 4" head

CLOSER REINFORCEMENTS (OPTIONAL) ②

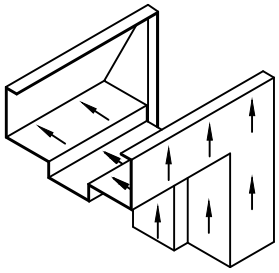


OPTIONAL BACKBEND RETURN ③

FRAMES WITH BACKBEND RETURNS SHOULD BE CONSIDERED FOR WALL PROTECTION.



OPTIONAL: STAINLESS STEEL DIRECTION OF STANDARD GRAIN



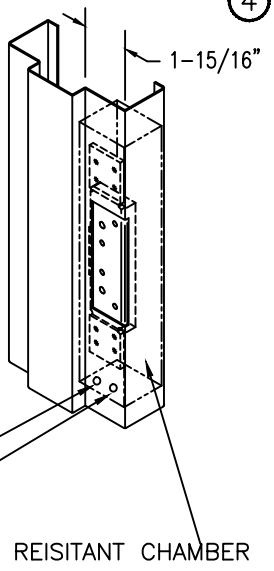
STANDARD GRAIN RUNS VERTICALLY ON FRAME FACES AND JAMB FACE, RABBETS & SOFFITS, BUT PERPENDICULAR TO THE HEAD RABBETS & SOFFIT.

HINGE PREPARATION ④

4–1/2" x .134 or .180
5" x .146 or .190

ANSI A156.7 TEMPLATE

7 GAGE STEEL REINFORCING



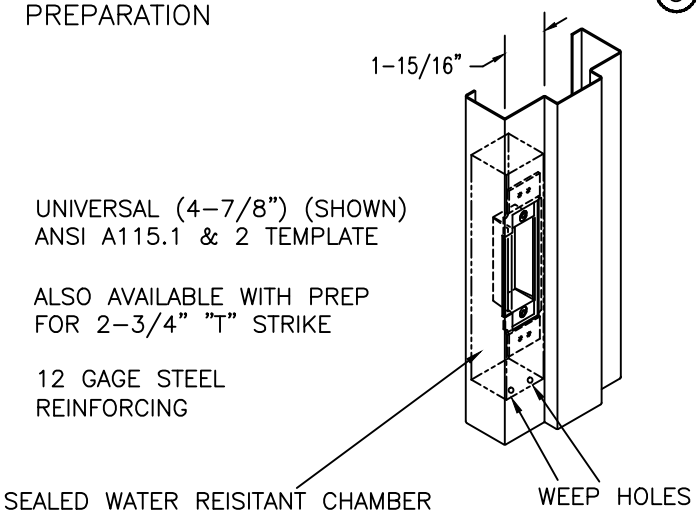
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

LOCK STRIKE PREPARATION ⑤

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

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

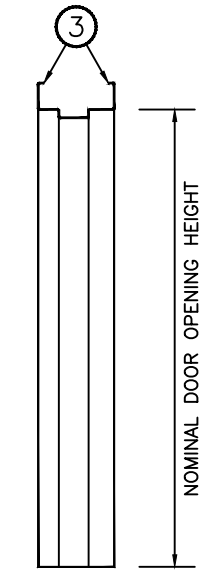
12 GAGE STEEL REINFORCING



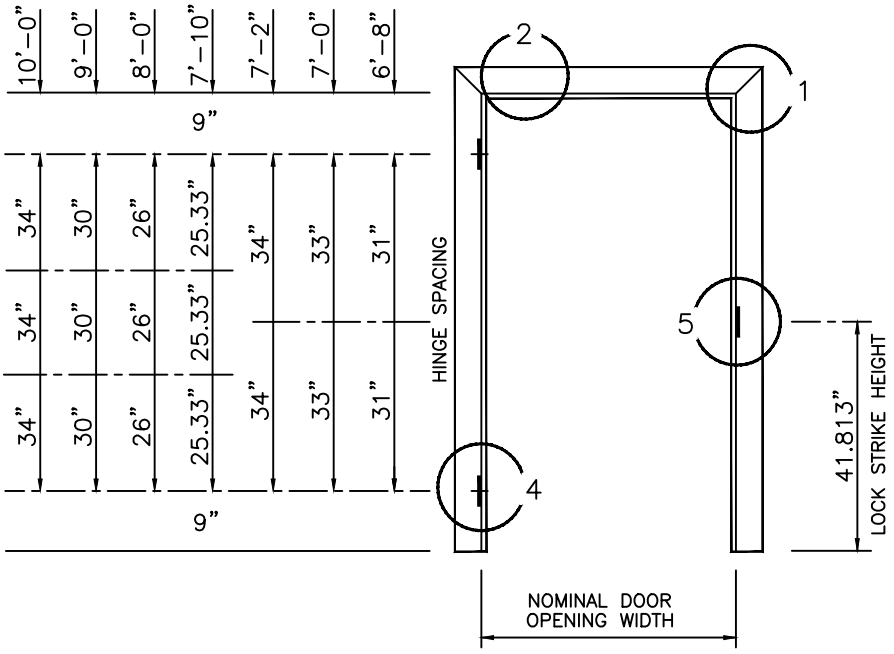
10/17/19

D21-6

Hardware locations shown match Ceco standard doors.



VERTICAL SECTION

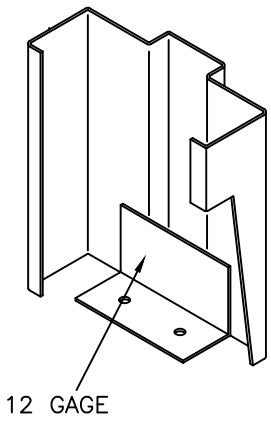


TYPICAL ELEVATION

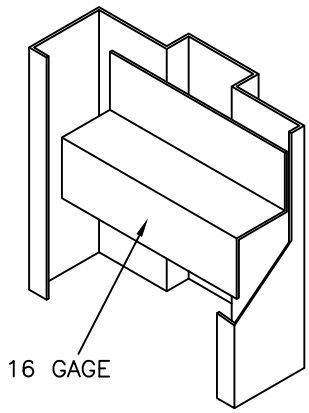
HORIZONTAL SECTION

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

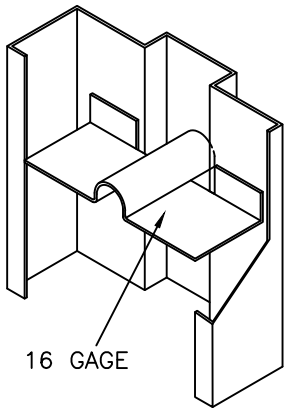
STANDARD STEEL FLOOR ANCHOR (6)



METAL STUD ANCHOR (6)



EXISTING OPENING ANCHOR (6)



3/8" PUNCH & DIMPLED HOLE
BOLTS BY OTHERS

CecoDoor

10/17/19

D21-7

PRODUCT SPECIFICATIONS:

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.

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 gage galvanized steel. 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 gage offset seamed edge or 12 gage 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 gage galv. channels are inverted and welded to both face skins. An 18 gage 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 gage 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 gage door closer reinforcements or 12 gage 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 AND FRAME MATERIAL	
16 Gage A60 Galv. Steel	STD.
16 Gage G90 Galv.	OPT.
14 Gage A60, G90 Galv.	OPT.
12 Gage A60, G90 Galv.	OPT.
16, 14 or 12 Gage Stainless Steel	*OPT.

*OPTIONAL:
STAINLESS STEEL ALLOY

Type 304
Standard

Type 316
High Corrosive Resistance

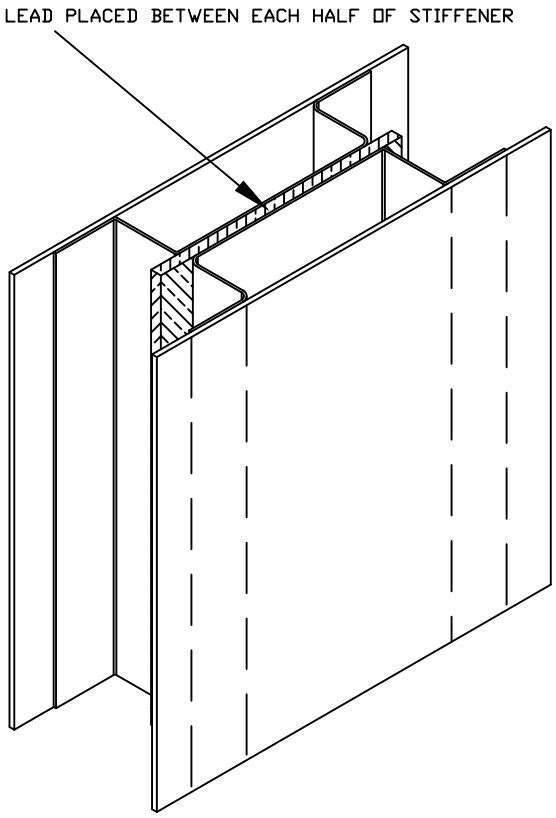
*STAINLESS STEEL FINISH FOR 304 AND 316

#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



MODEL	LEAD THICKNESS
LL32	1/32"
LL16	1/16"
LL08	1/8"
LL04	1/4"
LLXX	CUSTOM

Designed to restrict radiation transmission.

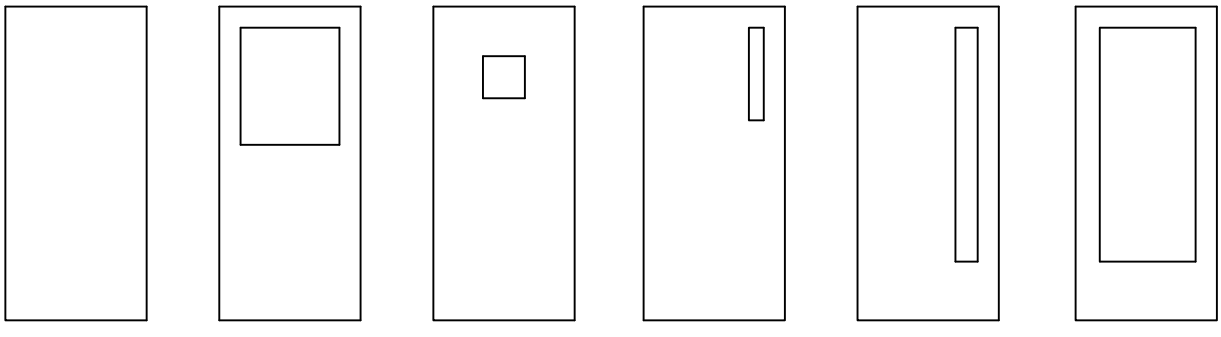
Complies with NAAMM Specifications 22 gage steel stiffeners placed 6" apart and welded every 5" along their length. Seamless edges. Fiberglass, sound deadening insulation between stiffeners.

Suggested Use:

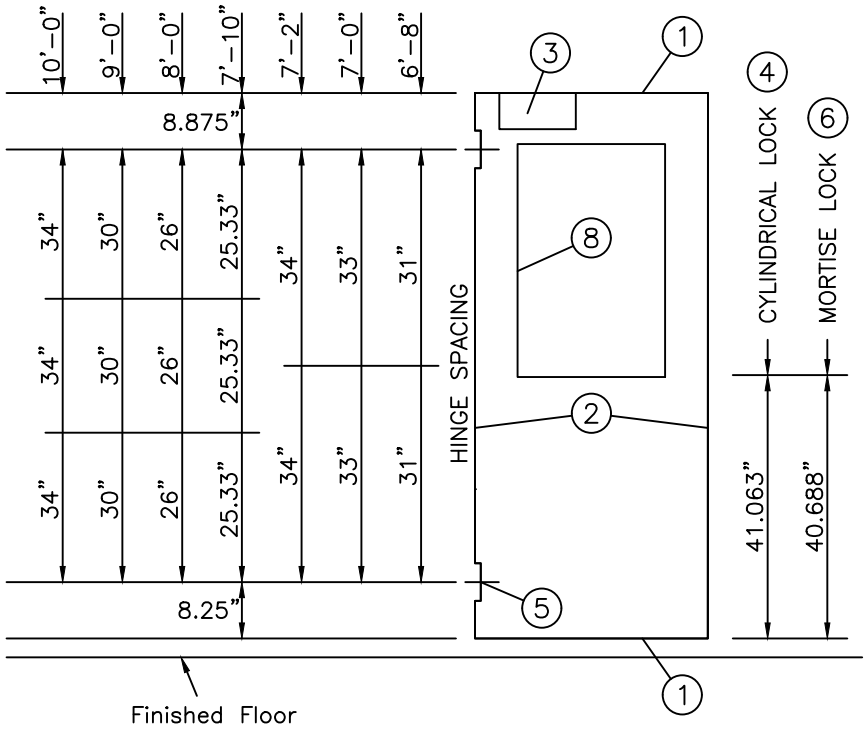
Interior or Exterior...

Medical X-Ray Labs
Nuclear Medicine Storage
Industrial Applications
Cancer Treatment Facilities
Produce Irradiation Areas
Reasearch Facilities
Inspection Departments

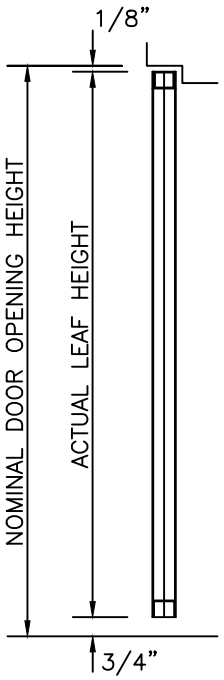
DOOR DESIGNS



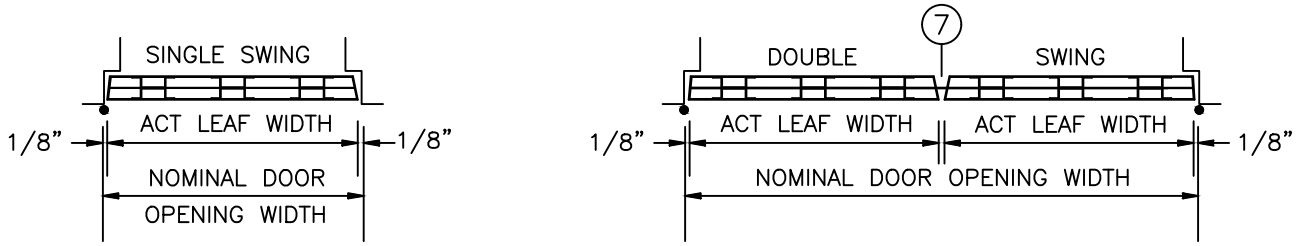
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



VERTICAL SECTION

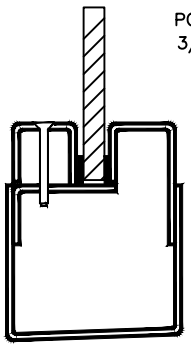


HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.4 mm)

OPTIONAL: GLASS KIT

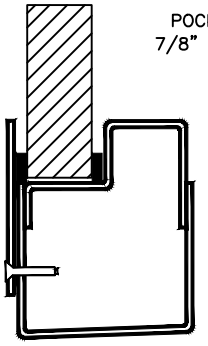
POCKET SIZE 3/8" -3/4"



GLASS KIT DESIGN MAY VARY WITH GLASS THICKNESS
GLASS KIT FACTORY INSTALLED.
GLASS & GLAZING NOT FACTORY INSTALLED.

OPTIONAL: GLASS KIT

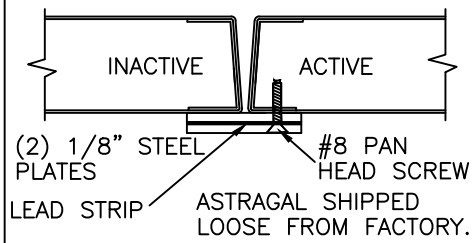
POCKET SIZE 7/8" - 1-3/8"



GLASS KIT DESIGN MAY VARY WITH GLASS THICKNESS
GLASS KIT FACTORY INSTALLED.
GLASS & GLAZING NOT FACTORY INSTALLED.

OVERLAPPING ASTRAGAL (OPTIONAL) 7

FOR 1-3/4" THICK DOORS

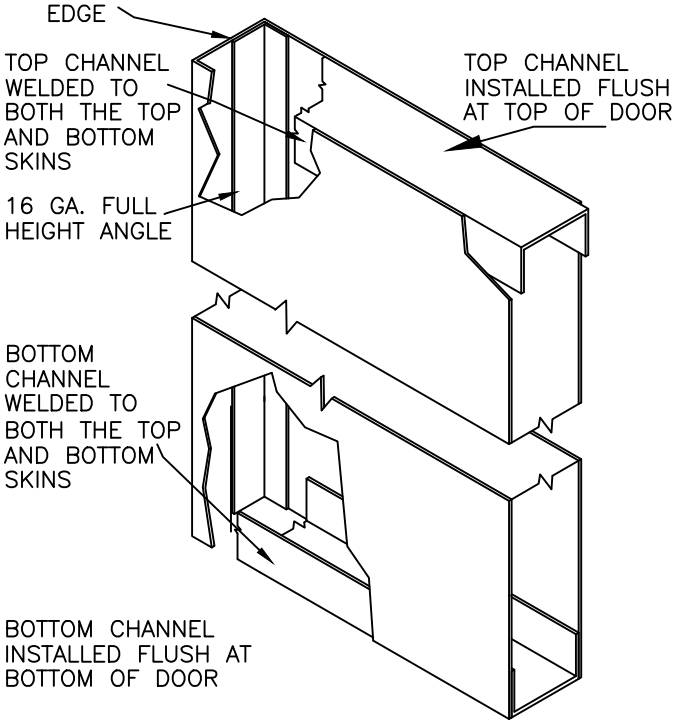


TECH-DATA

D22-3

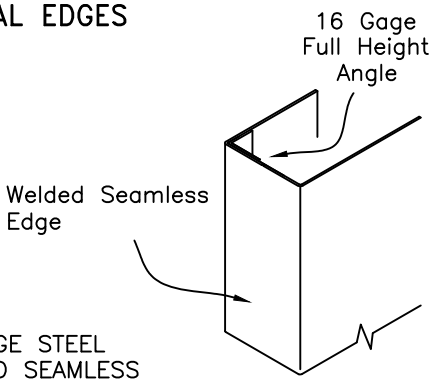
END CHANNEL PREPARATION

1



VERTICAL EDGES

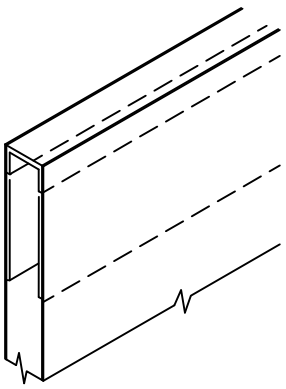
2



14 GAGE STEEL WELDED SEAMLESS (ONLY)

CLOSER REINFORCEMENT (OPTIONAL)

3



14 GAGE STEEL PLATES 20" LONG

LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

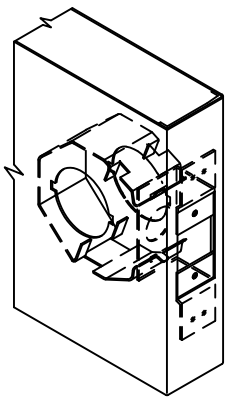
4

LEAD SHIELDED HARDWARE BY OTHERS

(LC1)

(ANSI A115.2)

2-3/4" BACKSET



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

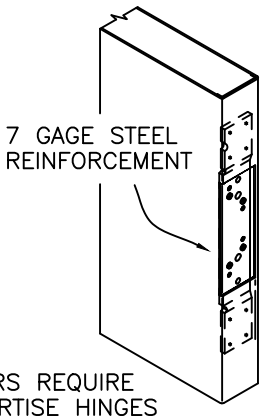
HINGE PREPARATION

5

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

ANSI 156.7 TEMPLATE

HINGE EDGE IS HANDED AND SQUARE

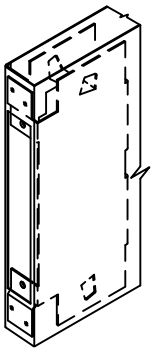


14 GA AND 12 GA DOORS REQUIRE HEAVY WEIGHT, FULL MORTISE HINGES

LOCK PREPARATION GOV. 86-4 MORTISE TYPE

6

LEAD SHIELDED HARDWARE BY OTHERS



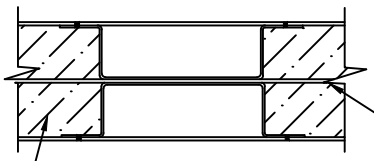
(LM0) SIMILAR TO DETAIL LESS FACE CUTOUT

(LP0) SIMILAR TO DETAIL LESS ALL CUTOUTS AND REINFORCEMENT

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

CORE

22 GAGE MINIMUM STIFFENERS SPACED NOT MORE THAN 6" APART



(HORIZONTAL SECTION)

LEAD SHEET BETWEEN STIFFENER SURFACE

FIBERGLASS INSULATION BETWEEN STIFFENERS

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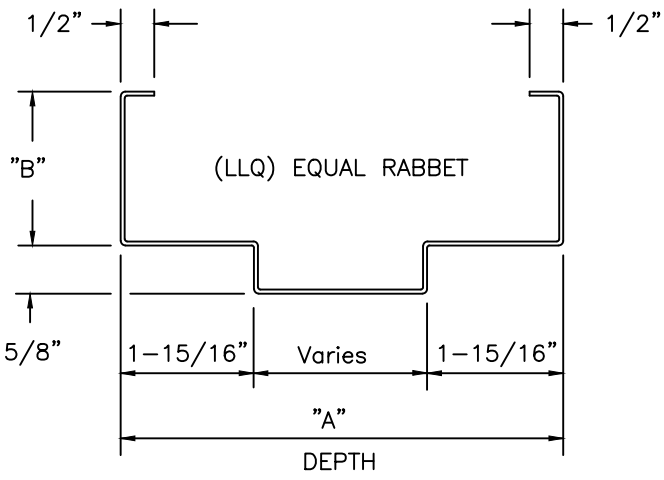
ASSA ABLOY

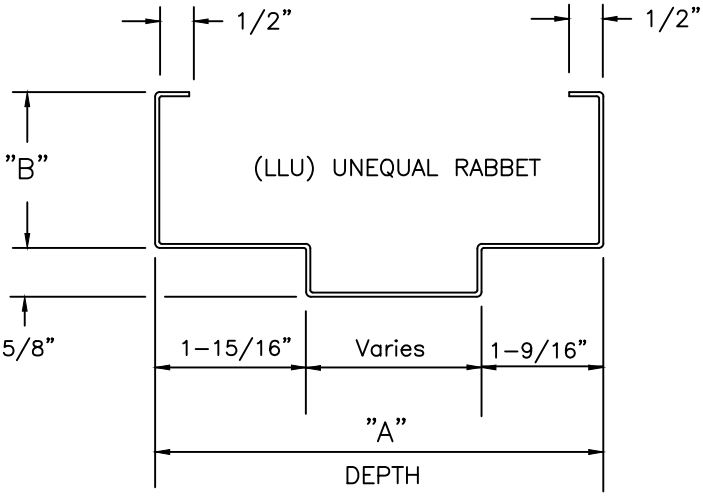
Experience a safer and more open world

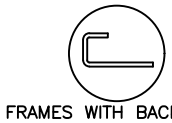
RETURN TO TOP

SERIES LLQ, LLU, LLR LEAD LINED STEEL FRAMES

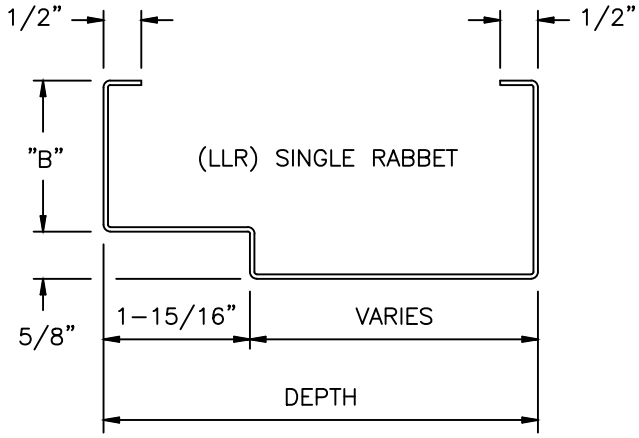
FOR 1-3/4" THICK DOORS
STANDARD WALL APPLICATION, HANDED







FRAMES WITH BACKBEND RETURNS SHOULD BE CONSIDERED FOR FINISHED WALL PROTECTION.



DEPTHS	Dim A
	3-1/2" THRU 14"

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

MINIMUM DEPTHS WILL BE LIMITED BY FORMING, LEAD THICKNESS AND HARDWARE.

INSIDE

OUTSIDE

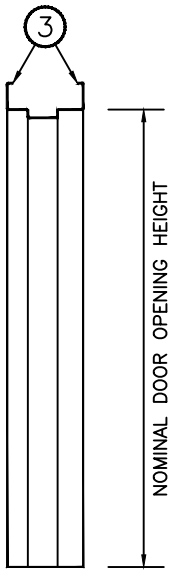
"KS" = KEY SIDE

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

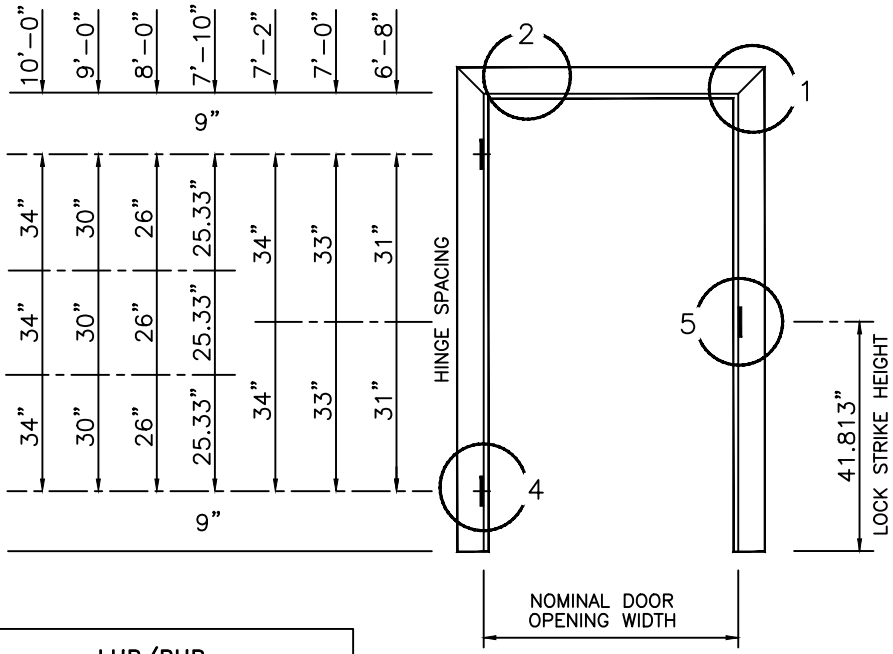
TECH-DATA

D22-5

Hardware locations shown match Ceco standard doors.

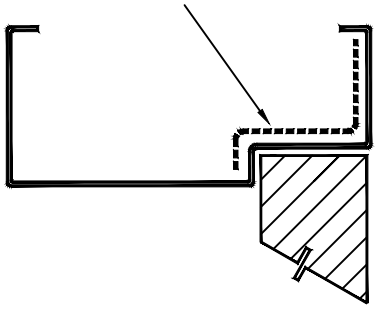


VERTICAL SECTION

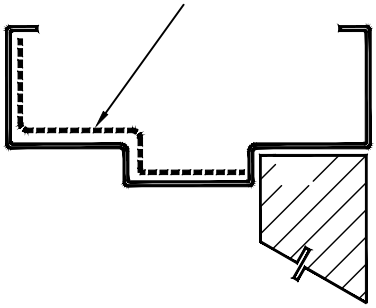


TYPICAL ELEVATION

LH/RH
STANDARD SWING
STANDARD LEAD PLACEMENT



LHR/RHR
REVERSE SWING
STANDARD LEAD PLACEMENT

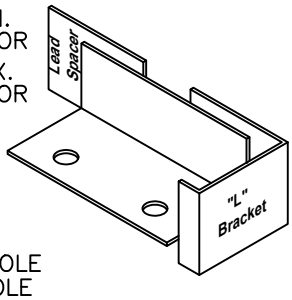


AS A STANDARD, DOOR HAND WILL DETERMINE IF LEAD IS INSTALLED ON DOOR SIDE (DS) OR OPPOSITE DOOR SIDE OF FRAME. IF LEFT OR RIGHT HAND, LEAD WILL BE PLACED ON DOOR SIDE OF FRAME. IF REVERSE HANDED LEAD WILL BE PLACED ON OPPOSITE DOOR SIDE (ODS) OF FRAME.

HORIZONTAL SECTION

STANDARD LEAD LINED STEEL FLOOR ANCHOR (6)

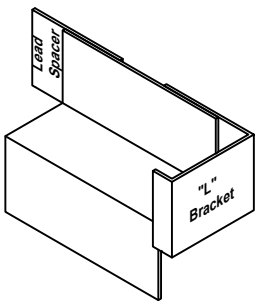
14 GAGE MIN. WELDED ANCHOR
12 GAGE MAX. WELDED ANCHOR



5/16" MIN. HOLE
3/8" MAX. HOLE

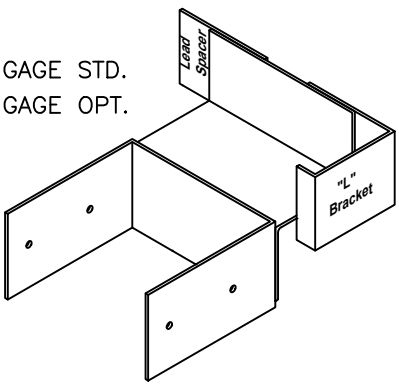
LEAD LINED STEEL METAL STUD ANCHOR (6)

16 GAGE STD.
14 GAGE OPT.



LEAD LINED STEEL WOOD/METAL STUD ANCHOR (6)

16 GAGE STD.
14 GAGE OPT.



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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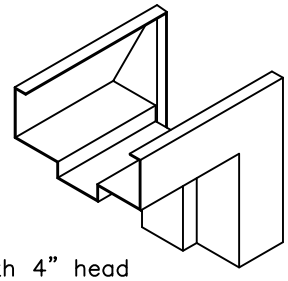
TECH-DATA

D22-6

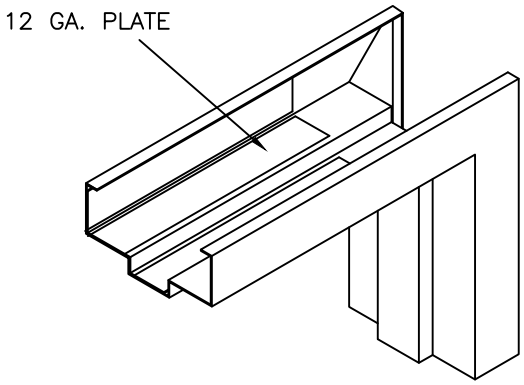
1 WELDED CORNERS – STANDARD

CORNER JOINTS ARE MITERED, WELDED AND GROUND SMOOTH.



Available with 4" head

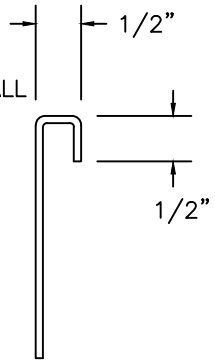
2 CLOSER REINFORCMENTS



3 OPTIONAL BACKBEND

FRAMES WITH BACKBEND RETURNS, BEFORE DRYWALL APPLICATION

16 or 14 GAGE ONLY

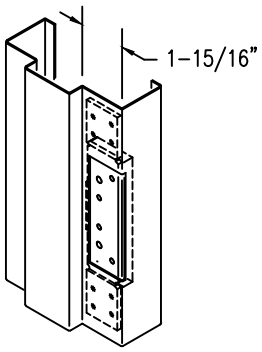


4 HINGE PREPARATION

4–1/2" x .134 or .180
5" x .146 or .190

ANSI A156.7 TEMPLATE

STEEL 7 GAGE REINFORCING

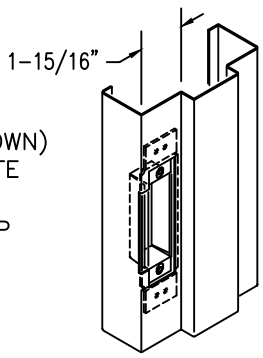


5 LOCK STRIKE PREPARATION

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

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

STEEL 12 GAGE REINFORCING



10/17/19

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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RETURN TO TOP

CecoDoor
ASSA ABLOY

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 gage steel vertical stiffeners (other gages 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 gage 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 gage 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 gage steel and 12 gage 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.

STANDARD SIZES
NOMINAL DOOR OPENING

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

FIRE DOORS

LABELING AGENCIES:
- UNDERWRITERS LABORATORY

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.

LEAD THICKNESS OPTIONS:
1/32", 1/16", 1/8", 1/4"

CONSULT FACTORY
FOR THICKER OPTIONS OR FOR SIZES WIDER THAN 4' OR GREATER THAN 10' IN HEIGHT.

PERFORMANCE

Physical Endurance Level:
Meets ANSI A250.4 Performance Test,
Level A (1,000,000 Cycles) (4'0" x 10'0" max. size)

MATERIAL

DOOR FACE SHEETS	GALV		RECOMMENDED DOOR FRAME MATERIAL
	A60	G90	
18 Gage Steel	STD	OPT	16 Gage Steel
16 Gage Steel	STD	OPT	16 or 14 Gage Steel
14 Gage Steel	STD	OPT	14 or 12 Gage Steel
12 Gage Steel	STD	–	12 Gage Steel

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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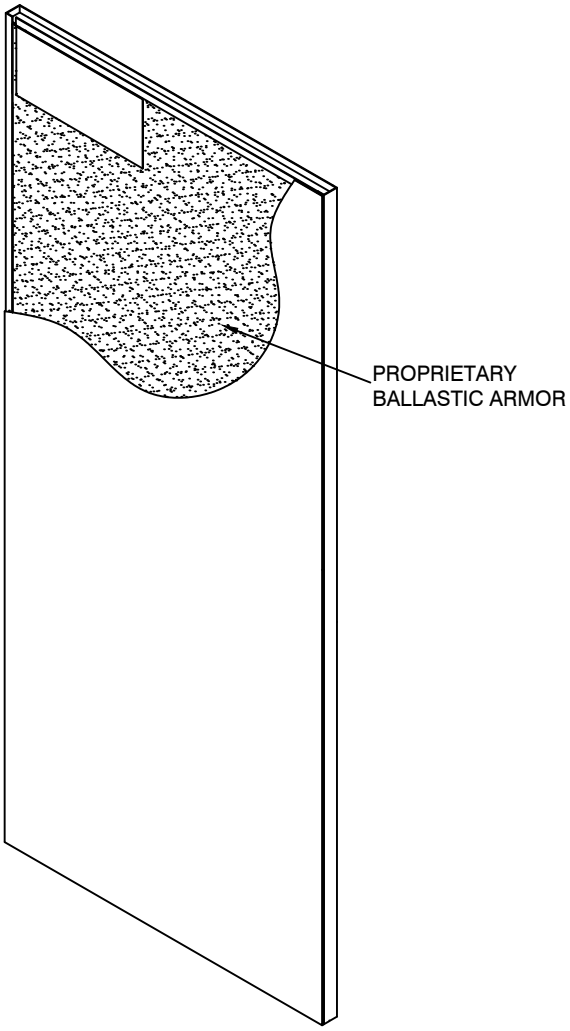
1-3/4" FORCED ENTRY / LEVEL 8 BULLET RESISTANT DOOR (FE8) AND FRAME SYSTEM

DOOR IS SEAMLESS WITH BEVELED EDGES & HANDED
5 YEAR WARRANTY



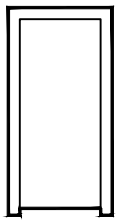
Vertical stiffeners placed to support the bullet resistant armor.

Suggested Use:
Interior or Exterior ...

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.

Forced entry resistant exit device with multi-point deadbolt system, Pemko HG3505 stainless steel continuous hinge with security studs and fire pins, and 12 gage stainless steel forced entry threshold provided with assembly.
Exit device, continuous hinge, and threshold will be installed.

DOOR DESIGNS



F

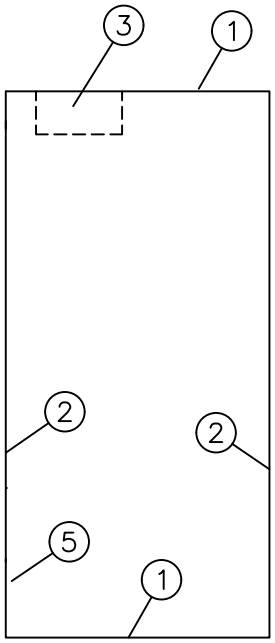
TEST METHODS AND QUALIFICATIONS

- Forced Entry and Ballistic Resistance of Structural Systems-Doors were tested per DoS ST-STD.01.01 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) as tested by OBL Lab
- Complies with the following portions only of HMMA 862-13: 1) Bullet Resistance Tests, 5) Forced Entry Test and Security Rating Classifications 1, 2, and 3 (15 minute forced entry portion and bullet resistance Level 8)

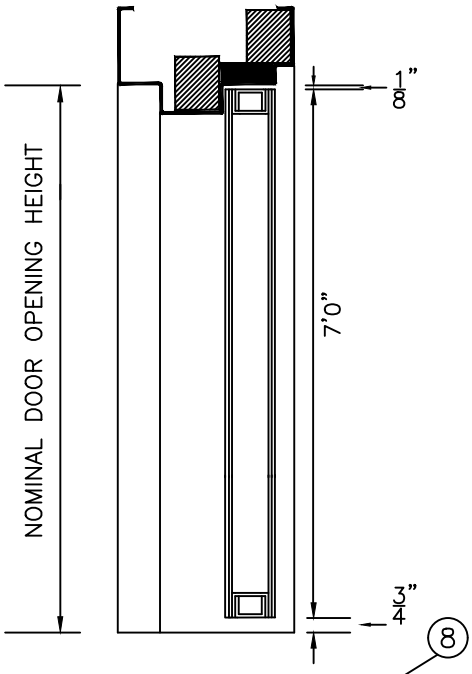
TECH-DATA

FORCED ENTRY / LEVEL 8 BULLET RESISTANT ASEMBLY

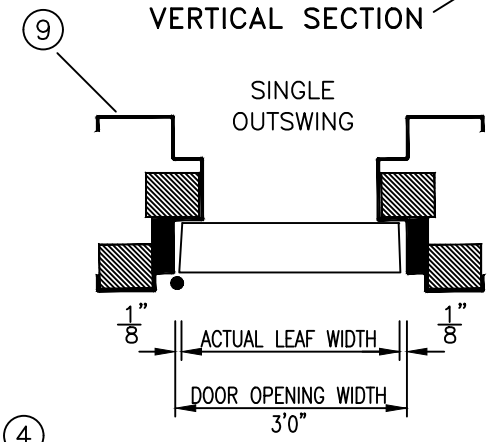
D23-2



ELEVATION



VERTICAL SECTION

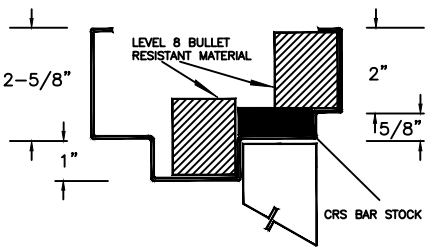


4

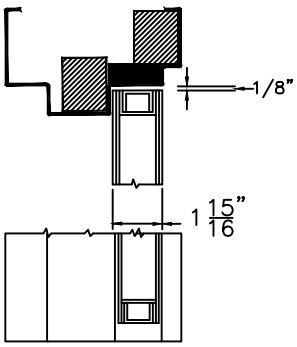
HORIZONTAL SECTION

Horizontal and vertical sections shown above depict outswing armor conditions.

TYPICAL FORCED ENTRY FRAME PROFILE (9)

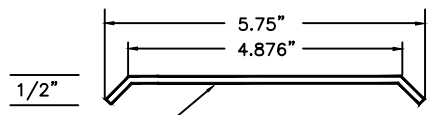


VERTICAL SECTION (8)



OUTSWING

SILL DETAIL



12 GAGE STAINLESS STEEL FORCED ENTRY THRESHOLD PROVIDED AND INSTALLED

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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Return to Top

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TECH-DATA

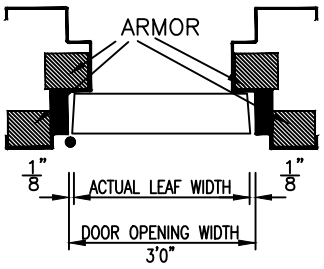
FORCED ENTRY / LEVEL 8 BULLET RESISTANT ASSEMBLY

D23-3

HORIZONTAL SECTION

④

SINGLE OUTSWING

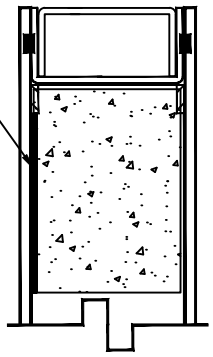


PEMKO HG3505 STAINLESS STEEL CONTINUOUS HINGE WITH SECURITY STUDS AND FIRE PINS PROVIDED & INSTALLED.

CLOSER REINFORCEMENT

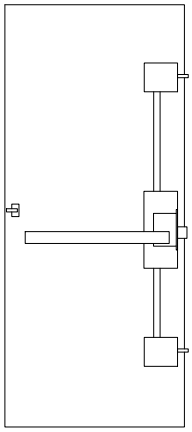
③

12 GAGE PLATE



LATCHING HARDWARE PREPARATION

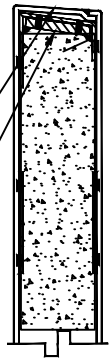
FORCED ENTRY RESISTANT EXIT DEVICE WITH MULTI-POINT DEADBOLT PROVIDED AND INSTALLED.



STANDARD HINGE PREPARATION FOR

⑤

PEMKO HG3505 STAINLESS STEEL CONTINUOUS HINGE WITH SECURITY STUDS & FIRE PINS



BEVELED HINGE EDGE

3/16" HINGE REINFORCEMENT PLUG WELDED TO EDGE CHANNEL

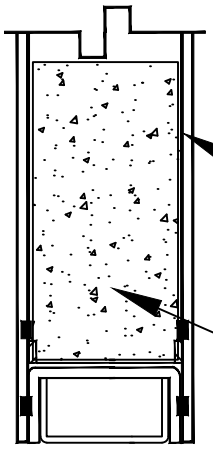
12 GAGE STEEL END CHANNELS

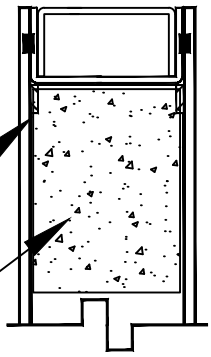
①

INVERTED TOP & BOTTOM CHANNELS WELDED TO BOTH FACE SHEETS

12 GAGE TOP & BOTTOM CAPS WELDED INTO END CHANNEL WITH 1" STITCH WELDS 2" ON CENTER.

12 GAGE CONTINUOUS LOCK EDGE CHANNEL SPOT WELDED TO DOOR SKIN

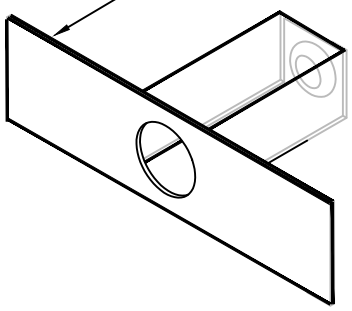




LEVEL 8 BALLISTIC ARMOR

EXISTING OPENING ANCHOR

12 GAGE



PUNCHED AND DIMPLED FOR 3/8" BOLT. BOLTS BY OTHERS.

ASTRAGAL STRIP

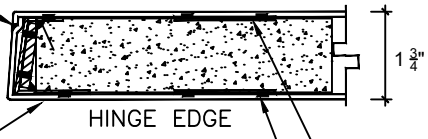
ATTACHED TO EXTERIOR LOCK SIDE FACE

1-1/2" X FULL HEIGHT 16 GAGE ASTRAGAL CONTINUOUSLY WELDED FULL HEIGHT OF DOOR

DOOR CONSTRUCTION

②

BOTH EDGE SEAMS CONTINUOUSLY WELDED

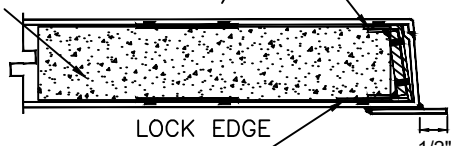


12 GA. FACE SHEETS

14 GA. FULL HEIGHT VERTICAL STEEL STRIPS WELDED TO FACE SHEETS

BOTH EDGES HAVE 12 GA. CONTINUOUS EDGE CHANNELS SPOT WELDED TO FACE SHEETS.

LEVEL 8 BALLISTIC ARMOR/CORE



ADDITIONAL 14 GA. CHANNEL WELDED ABOVE & BELOW LOCK CUTOUT.

NOTE: ANCHORS MAY VARY IN APPEARANCE BASED ON THE PLACEMENT OF ARMOR.

10/17/19

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Return to Top

TECH-DATA FORCED ENTRY / LEVEL 8 BULLET RESISTANT ASSEMBLY

D23-4

PRODUCT SPECIFICATIONS:

1-3/4" thick Forced Entry Level 8 bullet resistant doors and frames shall be provided by Ceco Door Products. Doors & frames shall provide bullet resistance in accordance with UL 752. Assemblies are compliant to Department of State Standard SD-STD-01.01 Rev. G (amended). Assembly is tested to withstand 15 minutes of simulated "mob" attack and resistant to 5.56 M193, 5.56 M855 and 7.62 M80 ballistic rounds. Assembly is equipped with hollow metal door, frame, noted hardware, and crated for shipment. Door weight only is 24 pounds per square foot.

STANDARD SIZE
NOMINAL DOOR OPENING

WIDTH	HEIGHT
SINGLE	
3'–0"	7'–0"

Forced Entry Bullet Resistant Level 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 12 gage steel conforming to ASTM A1008 or optional hot-dipped galvannealed or galvanized steel (conforming to ASTM A924 and A653) - see chart below. 3'0" x 7'0" only.

Forced Entry Bullet Resistant Level 8 frames are custom double rabbet profile 12 gage steel. Frame depths vary from 5-3/4" through 14" of continuous welded construction. Mute holes are not provided. Adhesive silencers should be applied by others. Frames are punched and dimpled for existing wall anchors. Anchor bolts by others.

FIRE RATING
NOT AVAILABLE

Hardware Provisions: Pemko HG3505 stainless steel continuous hinge with security studs and fire pins. The door hinge & lock edge has a standard bevel (1/8" in 2") and is prepared for a forced entry multi-point exit device with deadbolt system. Aformentioned hardware to be provided and installed at service center.

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.

CLASSIFIED FORCED ENTRY AND
BULLET RESISTANT LABELS
NOT AVAILABLE

Warranty: 5 YEARS

MATERIAL

DOOR FACE SHEETS	BULLET RESISTANCE LEVEL	DOOR & FRAME A40 GALVANNEAL	DOOR & FRAME A60 & G90 GALVANIZED	FRAME MATERIAL
12 GAGE STEEL	8	STD	OPT	12 GAGE

10/17/19

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

Return to Top

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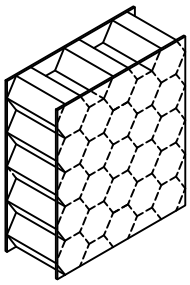
ASSA ABLOY

ASSA ABLOY

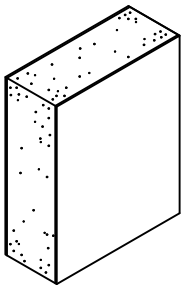
1-3/4" ATTACK RESISTANT REGENT, LEGION or IMPERIAL NON-FIRE RATED DOORS

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.



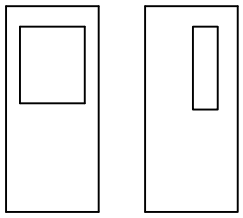
GLAZED STEEL DOORS ONLY
BEVELED LOCK EDGE , HANDED - INSWING OR OUTSWING

Suggested Use: Interior or Exterior ...
Classrooms K-12, Executive Office, Guard Houses, Control Rooms, Mission Critical Buildings, University, Healthcare, Government & Municipality.



DOOR DESIGNS

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



G N

(see glass limits below)

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.

SCHOOL GUARD NON–FIRE RATED GLASS SG5™ IS A SCRATCH RESISTANT LAMINATED PRODUCT CONSISTING OF GLASS WITH A CUSTOM SECURITY HEAT STRENGTHENED, CHEMICALLY BONDED CORE.

SGG™ School Guard Glass

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 gage doors only, with minimum 16 gage 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.
- *Yale 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 gage minimum top & bottom caps are optional.

*Equivalent hardware not tested

NOTE: SEE PAGES D24–7 THRU D24–12 FOR FIRE RATED ATTACK RESISTANT DOORS AND FRAMES.

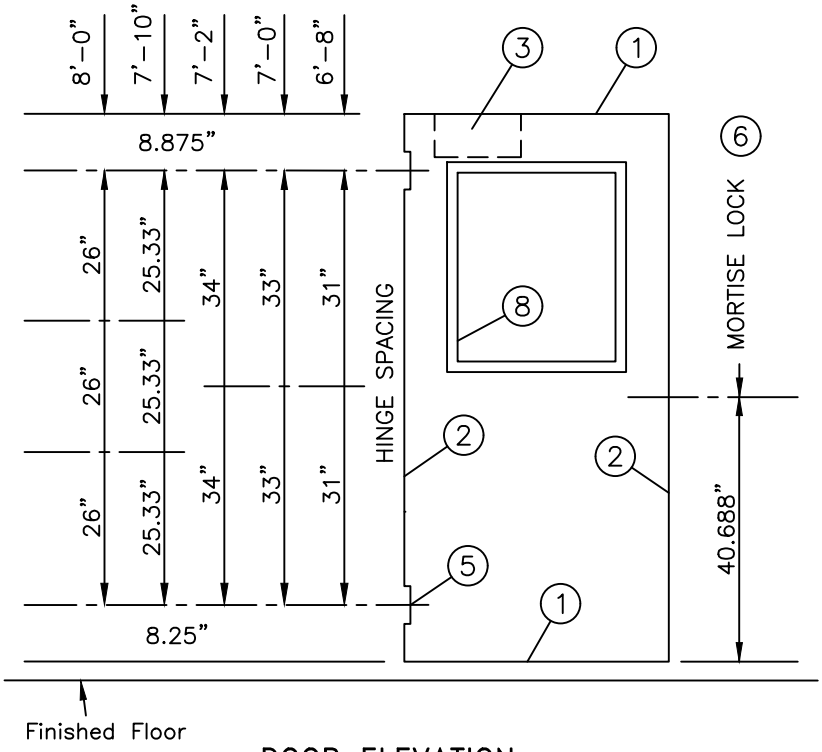
TECH-DATA

Return to Top

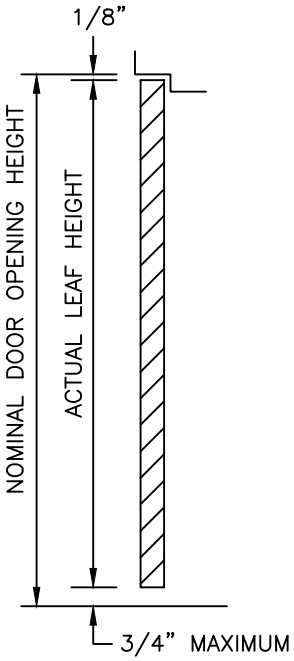
NON-FIRE RATED ATTACK RESISTANT

D24-2

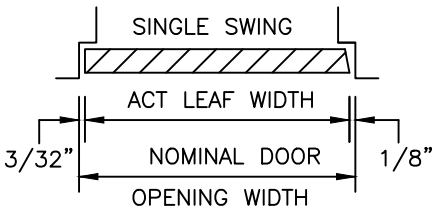
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION

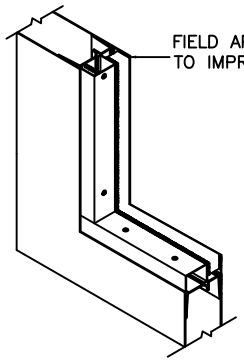


VERTICAL SECTION



HORIZONTAL SECTION

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)



FIELD APPLIED CAULK IS RECOMMENDED ON THIS SEAM TO IMPROVE ESTHETICS AND RESIST WATER INSTRUSION.

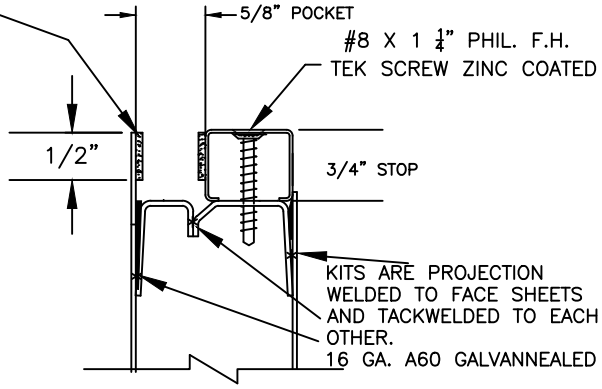
SGG™ School Guard Glass

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.

⑧ 4881 FLUSH KIT
FOR REGENT & LEGION DOORS



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TECH-DATA

Return to Top

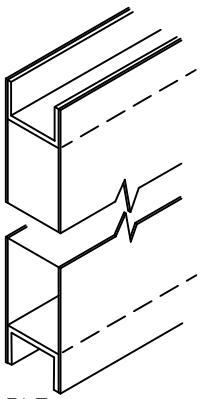
NON-FIRE RATED ATTACK RESISTANT

D24-3

1 16 GAGE STEEL END CHANNELS

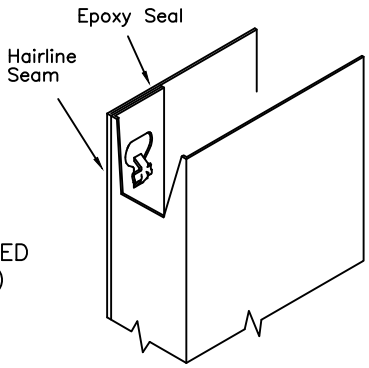
WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM



OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE

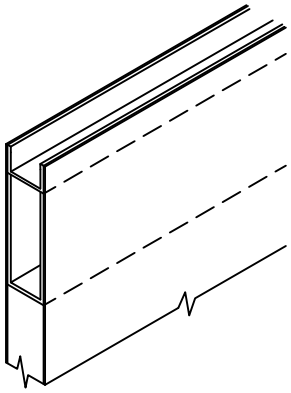
2 VERTICAL EDGES



MECHANICALLY INTERLOCKED HEMMED EDGES

ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)

3 CLOSER REINFORCEMENT (OPTIONAL)



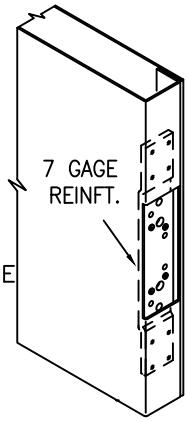
14 GAGE STEEL CHANNEL 20" LONG

5 HINGE PREPARATION

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

OPTIONAL:
STEEL CONTINUOUS HINGE

HINGE EDGE IS HANDED AND NOT BEVELED.

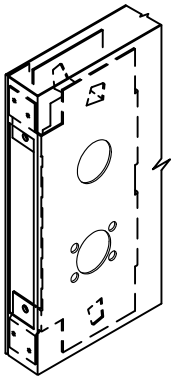


ANSI A156.7 TEMPLATE

6 LOCK PREPARATION ANSI/BHMA A115.1 MORTISE TYPE

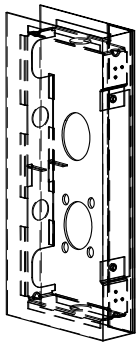
LOCK EDGE IS BEVELED 1/8" in 2" (1:16)

(LM2) 2-3/4" BACKSET FOR SARGENT 8200 SERIES WITH LATCH BOLT, DEAD BOLT & LS ESCUTCHEON

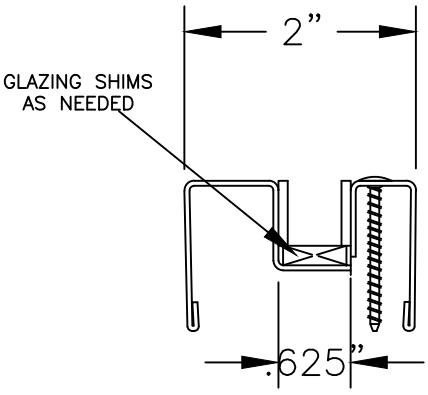


(LM2) 2-3/4" BACKSET FOR SARGENT 8200 SERIES WITH LATCH BOLT, DEAD BOLT & LS ESCUTCHEON

LOCK FUNCTION HOLES ARE PREPARED AT THE FACTORY.



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



- 18 GA. (.043) MIN. TYPE 2 VISION LIGHT KIT
- FOR USE IN IMPERIAL DOORS

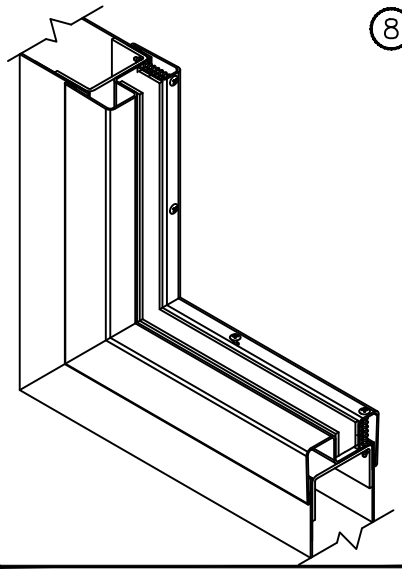
SGG™ School Guard Glass

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.

8



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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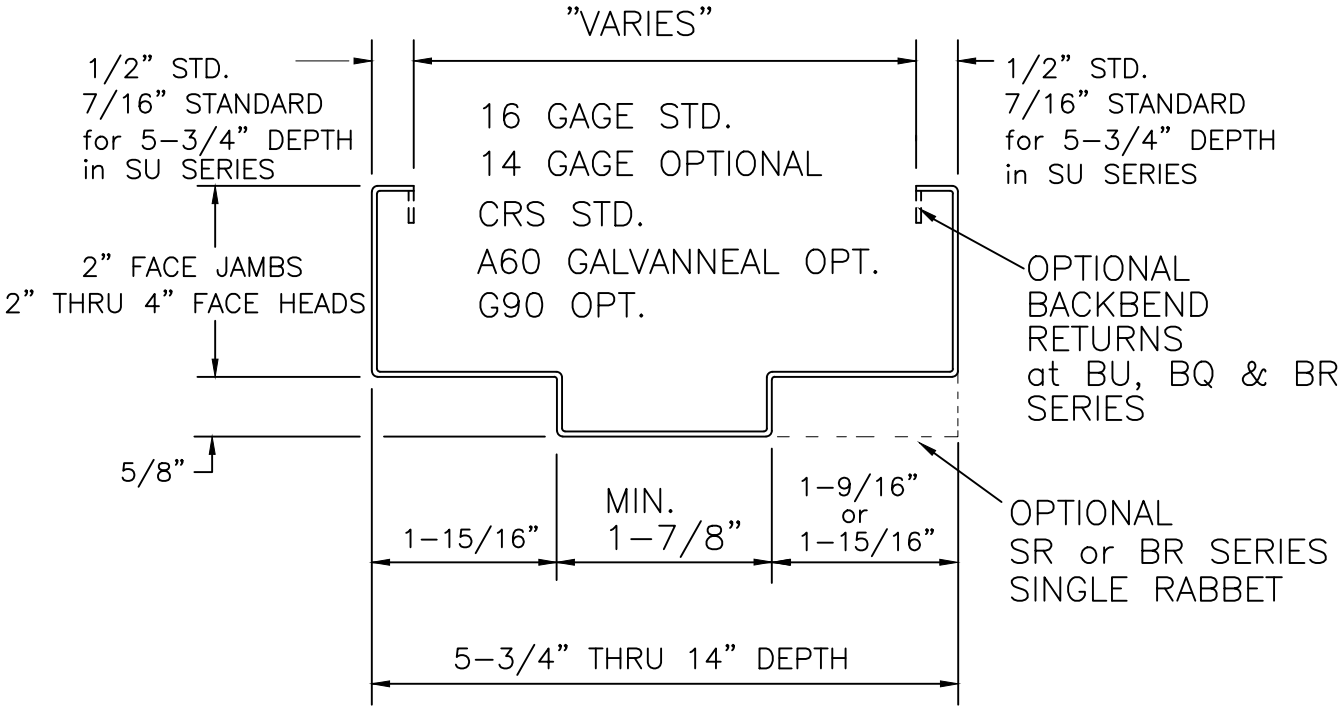
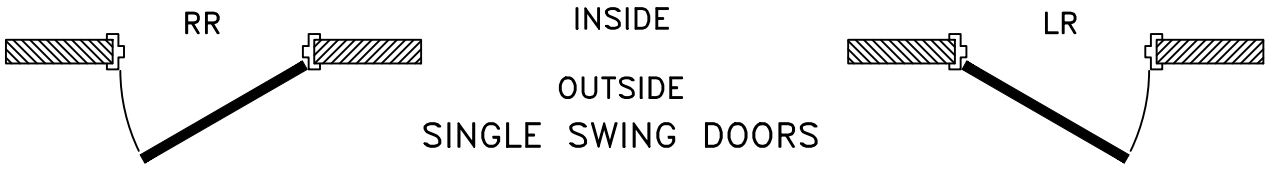
SERIES SU, SQ, SR, BU, BQ & BR STEEL FRAMES

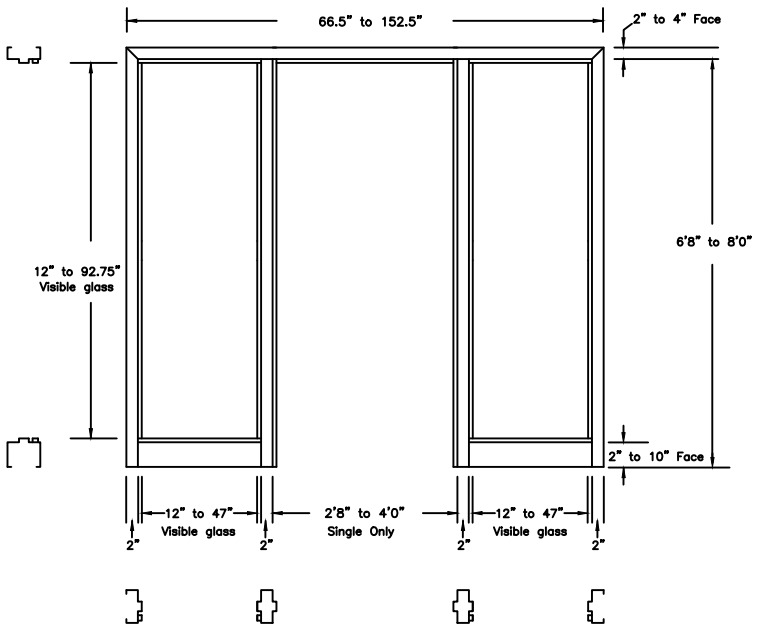
FOR 1-3/4" THICK DOORS
STANDARD WALL APPLICATION, HANDED
INSWING OR OUTSWING

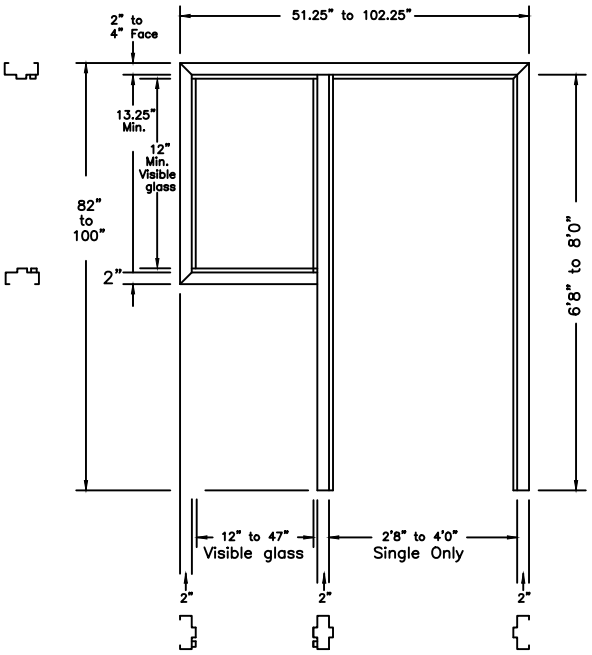


- KD or WELDED CORNERS 3 SIDED DOOR FRAMES, WELDED SIDELITES & BORROWED LITES.
- 4-1/2" X 4-1/2" OR 5" STANDARD OR HEAVY WEIGHT MORTISED BUTT HINGES
- STEEL CONTINUOUS HINGES ARE OPTIONAL
- STD. ANSI 4-7/8" STRIKE ONLY.
- HOSPITAL STOPS NOT AVAILABLE
- WELDED WOOD STUD, STEEL STUD, EXISTING OPENING, 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





SIDELITE FRAMES:

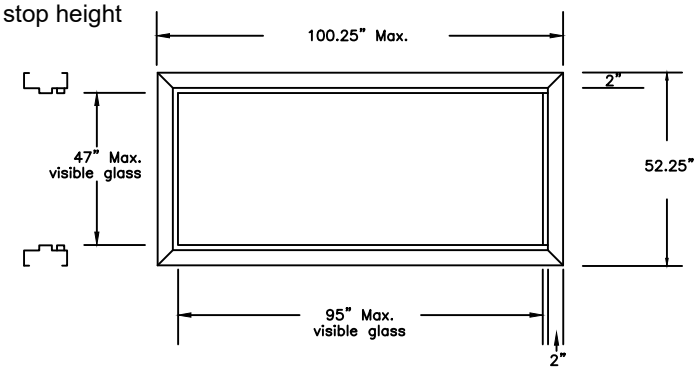
- Welded units only available in SQ, SU, SR, BQ, BU or BR frame profiles.
- Frame depths range from 5-3/4" minimum to 14" maximum
- Minimum overall width of a single door & double sidelite is 66-1/2"
- 2" face horizontal and/or vertical mullions are optional.
- 5/8" minimum stop height
- 12 gage x 2" 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 gage 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.

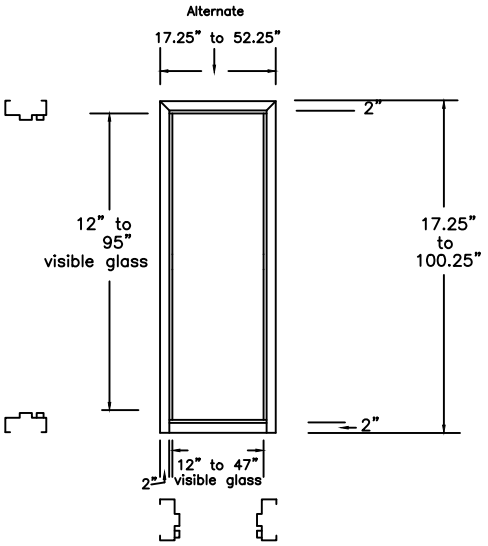
SGG™ School Guard Glass

NON-FIRE RATED SG5™

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





GLASS AND GLAZING NOTES:

- School Guard non-fire rated 1/2" nominal thick SG5™ 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 SG5™ 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

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.D.I. 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 gage 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 (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. 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 gage 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 Yale 8800 series mortise lock with latch bolt, deadbolt function and SL escutcheon. Optional surface mounted closer reinforcement is 14 gage 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

STANDARD SIZES NOMINAL DOOR OPENING

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

PAIRS

NOT AVAILABLE

FIRE DOORS

SEE PAGES D24-7 THRU D24-12 FOR FIRE RATED DOORS AND FRAMES

MATERIAL

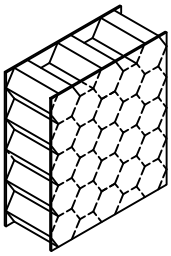
DOOR FACE SHEETS	LEVEL	C.R.	GALV A60	GALV G90	RECOMMENDED DOOR FRAME MATERIAL
16 Gage Steel	Extra Heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel
DOOR FRAME MATERIAL	**LEVEL**				
16 Gage Steel	Extra Heavy Duty	STD	OPT	OPT	
14 Gage Steel	Maximum Duty	STD	OPT	OPT	

PERFORMANCE

Physical Endurance /Level:	Meets ANSI A250.4 Performance Test, 16 Gage Doors, 16 & 14 Gage Frames: Level A (1,000,000 Cycles)

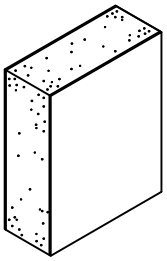
1-3/4" WARNOCK HERSEY FIRE RATED ATTACK RESISTANT POLYSTYRENE, HONEYCOMB OR POLYURETHANE SLAB CORE DOORS

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.

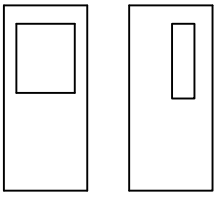


GLAZED STEEL DOORS ONLY
BEVELED LOCK EDGE , HANDED - INSWING OR OUTSWING

Suggested Use: Interior or Exterior ...
Classrooms K-12, Executive Office, Guard Houses, Control Rooms, Mission Critical Buildings, University, Healthcare, Government & Municipality.



DOOR DESIGNS



(see glass limits below)

Polystyrene, Honeycomb or Polyurethane slab, bonded to the inside of both face sheets with a waterproof, contact adhesive.

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 gage doors (14 gage optional), with minimum 16 gage 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.
- *Yale 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 gage minimum top & bottom caps are optional.

*Equivalent hardware not tested

NOTE: SEE PAGES D24–7 THRU D24–11 FOR FIRE RATED ATTACK RESISTANT DOORS AND FRAMES.

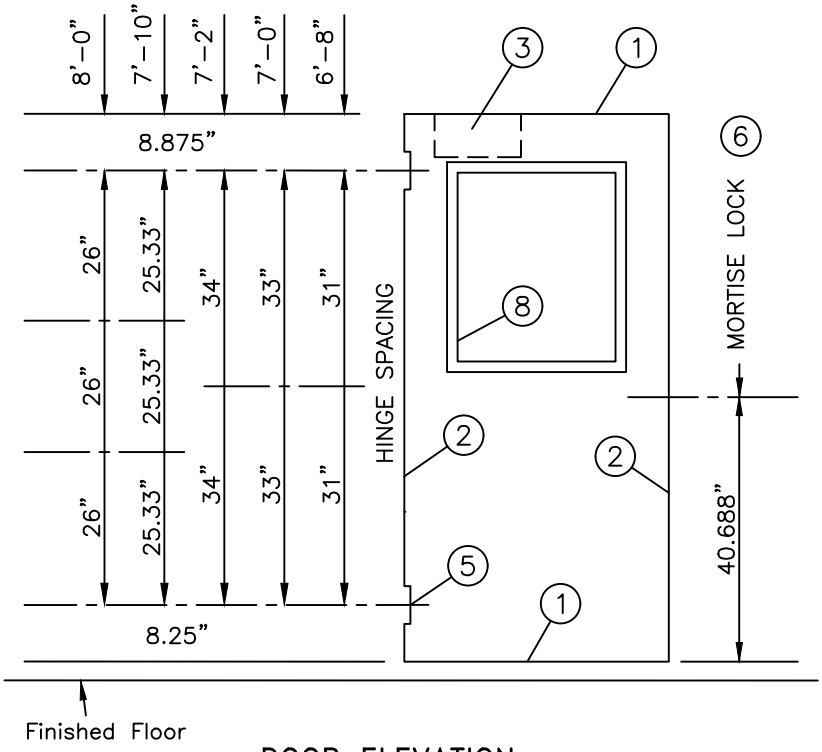
TECH-DATA

Return to Top

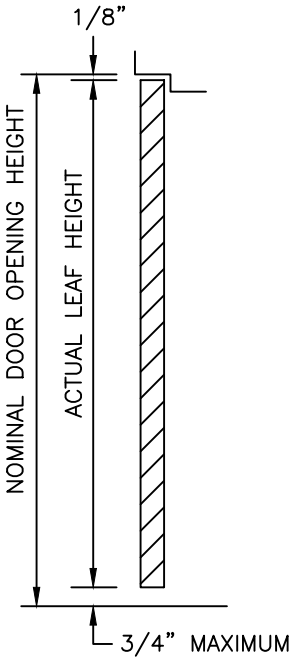
WARNOCK HERSEY FIRE RATED ATTACK RESISTANT

D24-8

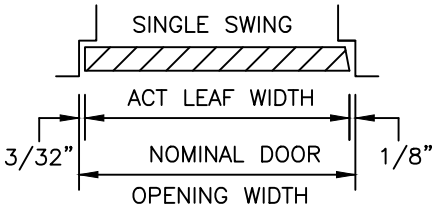
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



VERTICAL SECTION



HORIZONTAL SECTION

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

10/17/19

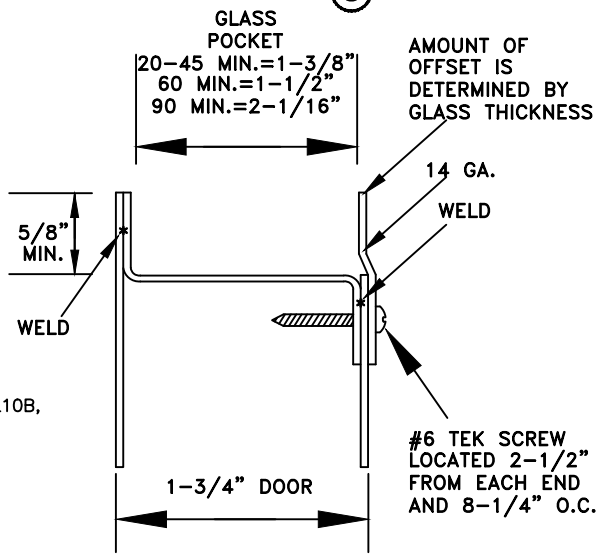
SGG™ School Guard Glass

FIRE RATED SG5FR GLASS

GLASS COMPLIES WITH: UL 972, UL10C & UL10B, ANSI Z97.1

FIRE RATED ATTACK RESISTANT GLASS IS INSTALLED AT THE FACTORY.

8 TYPE 8 KIT



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Return to Top

WARNOCK HERSEY FIRE RATED ATTACK RESISTANT

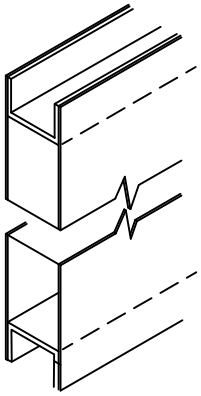
16 GAGE STEEL END CHANNELS

1

WELDED TO BOTH FACE SHEETS 3" FROM EACH END & 6" ON CENTER

INVERTED TOP AND BOTTOM CHANNELS

OPTIONAL 18 GA. MIN. TOP & BOTTOM CAPS ARE AVAILABLE

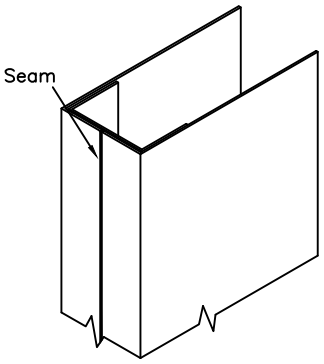


VERTICAL EDGES

2

VISIBLE EDGE SEAM WITH WITH INTERMITTENT SPOT WELDS.

SPOT WELDS ARE FILLED AND GROUND SMOOTH.

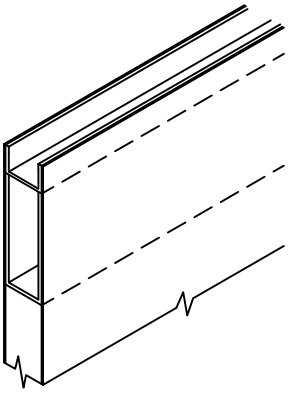


OPTIONAL SEAMLESS EDGES AVAILABLE

CLOSER REINFORCEMENT (OPTIONAL)

3

14 GAGE STEEL CHANNEL WELDED TO END CHANNEL



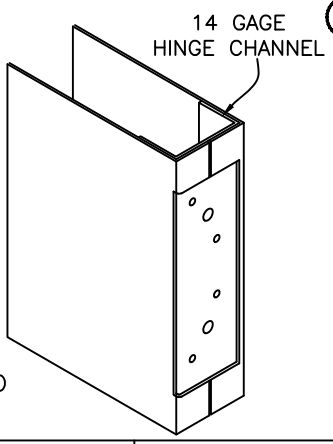
HINGE PREPARATION

5

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.



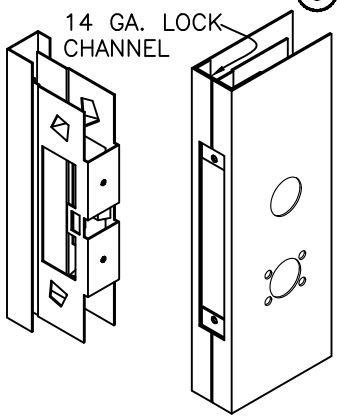
LOCK EDGE IS BEVELED 1/8" in 2" (1:16)

LOCK PREPARATION MORTISE TYPE

6

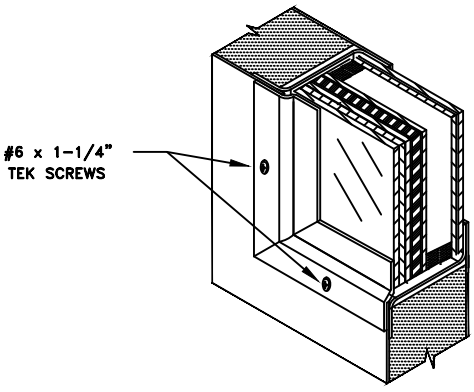
(LM2)

(ANSI/BHMA A115.1) 2–3/4" BACKSET FOR LOCKS SHOWN ON PAGE D24–7.



TYPE 8 GLAZING KIT

8



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)

CecoDoor

ASSA ABLOY

Experience a safer and more open world

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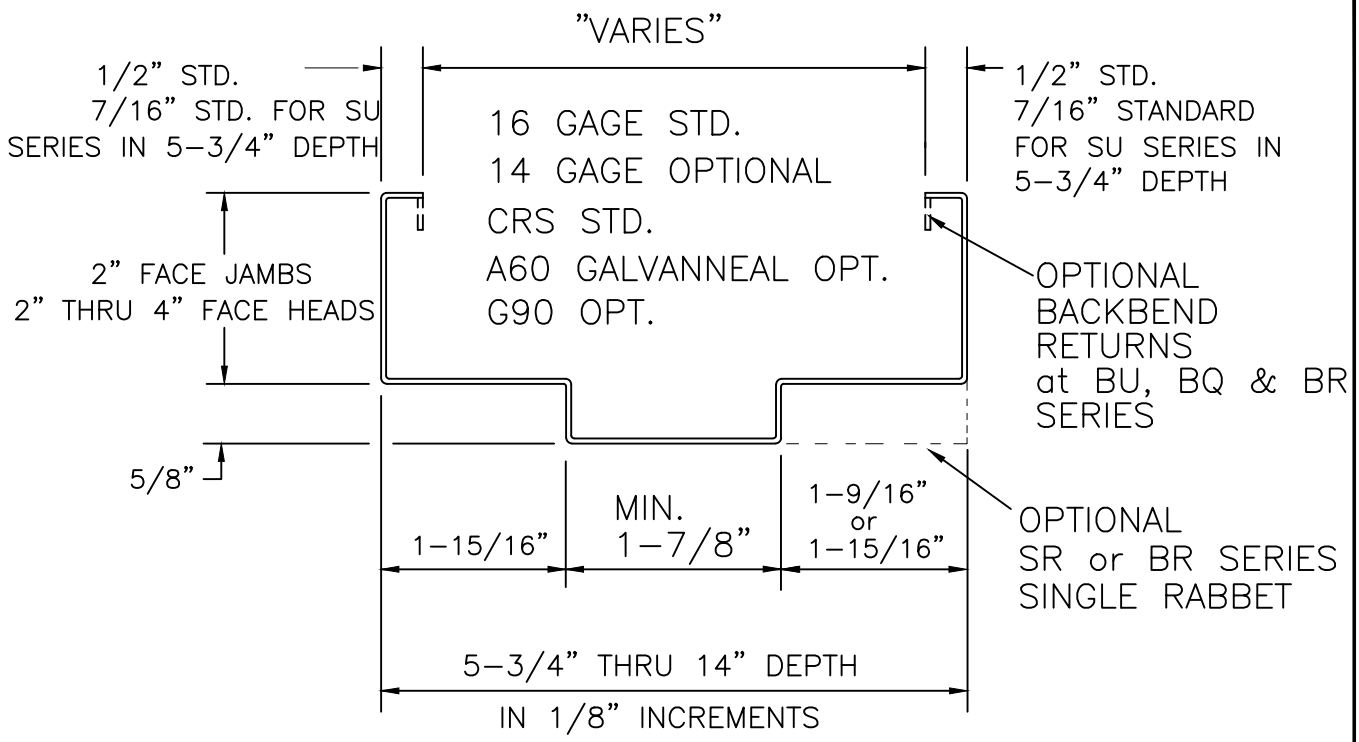
ASSA ABLOY

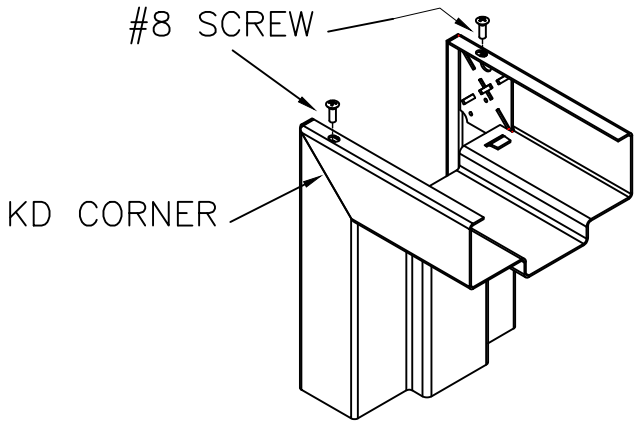
Return to Top

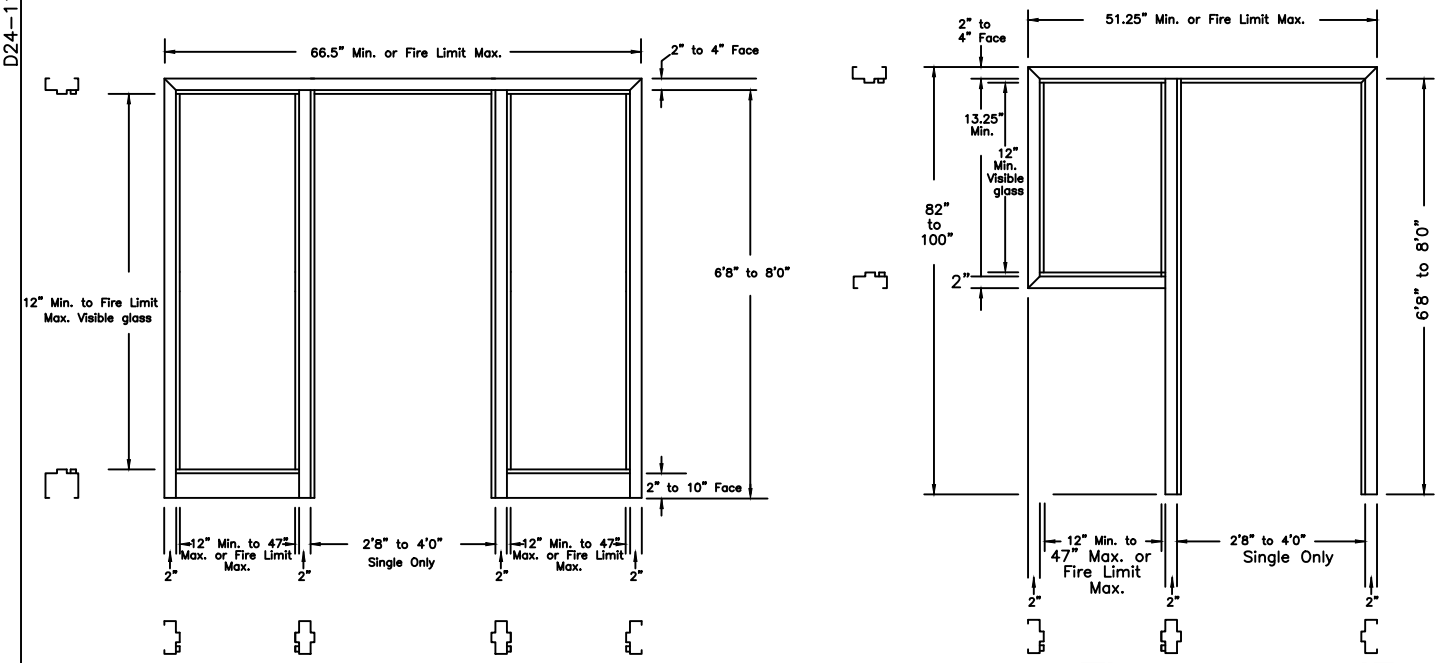
SERIES SU, SQ, SR, BU, BQ & BR STEEL FRAMES

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.





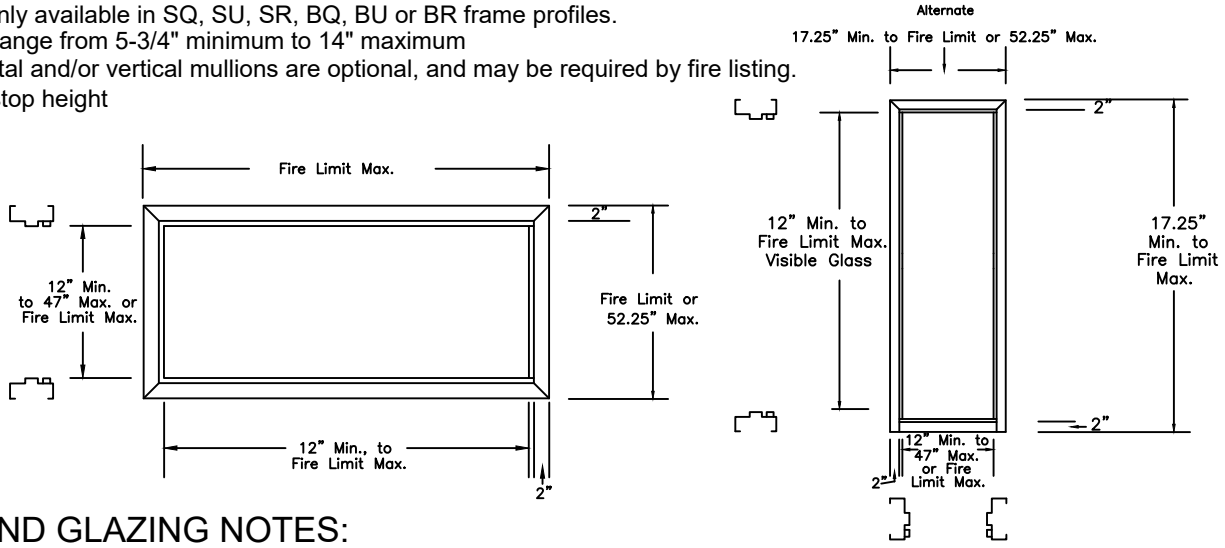
SIDELITE FRAMES: 20 MIN. THRU 90 MIN. FIRE PROTECTIVE

- 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

SGG™ School Guard Glass

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

CecoDoor
ASSA ABLOY

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 A1008 ...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 gage 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 gage steel hinge channels are welded inside the door edge with extruded screw holes to provide thread depth equal to 10 gage plate. 7 gage 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 D24-7. Optional surface mounted closer reinforcement is a 14 gage 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 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 for doors and KD 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.

STANDARD SIZES NOMINAL DOOR OPENING

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

PAIRS

NOT AVAILABLE

FIRE DOORS & FRAMES

LABELLING AGENCY:
- WARNOCK HERSEY

TEST: UL10C, UL10B, UL9, & NFPA 252
- RATING: 20 MIN. THRU 90 MIN.

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

MATERIAL

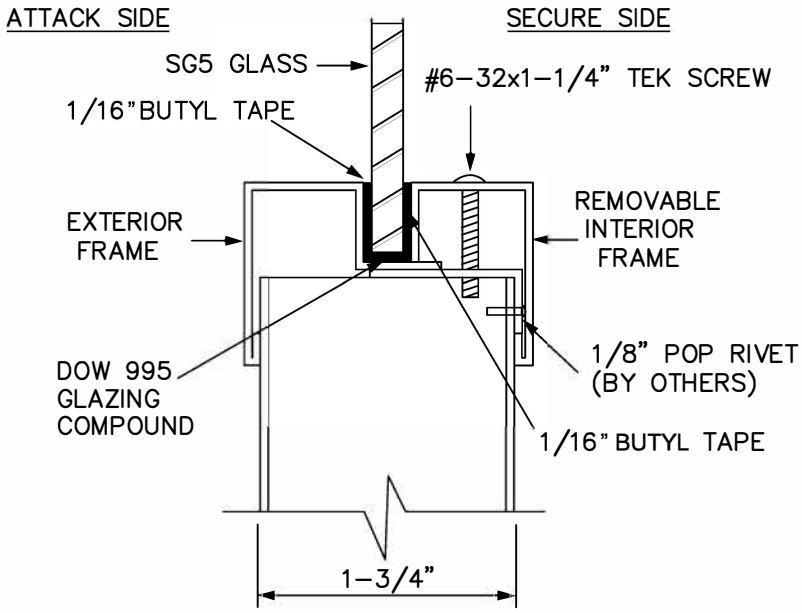
DOOR FACE SHEETS	LEVEL	C.R.	GALV A60	GALV G90	RECOMMENDED DOOR FRAME MATERIAL
16 Gage Steel	Extra Heavy Duty	STD	OPT	OPT	16 or 14 Gage Steel
DOOR FRAME MATERIAL	**LEVEL**				
16 Gage Steel	Extra Heavy Duty	STD	OPT	OPT	
14 Gage Steel	Maximum Duty	STD	OPT	OPT	

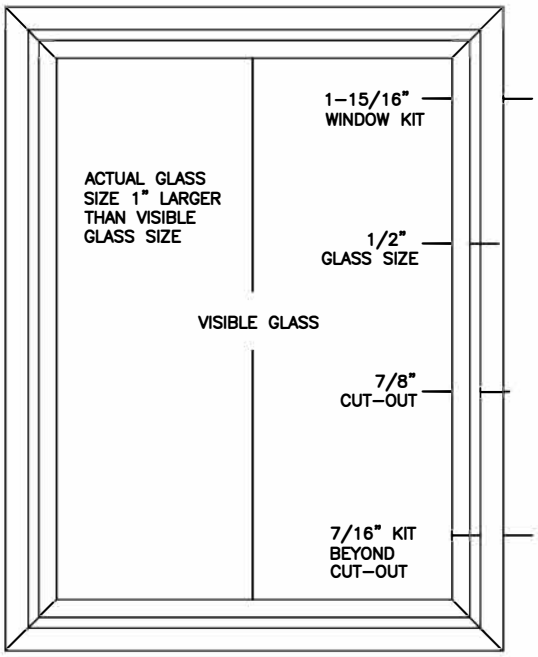
PERFORMANCE

Physical Endurance /Level:	Meets ANSI A250.4 Performance Test, 16 Gage Doors, 16 & 14 Gage Frames: Level A (1,000,000 Cycles)

D24A-1

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.

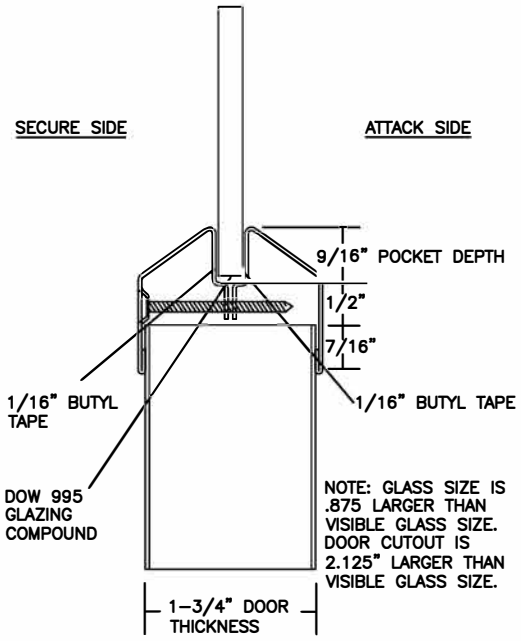
TYPE 2 KIT	VISIBLE GLASS	CUTOUT SIZE	PART NUMBER
ARKMV	10" x 10"	11-3/4" x 1-3/4"	CD149692
ARKMV1212	12" x 12"	13-3/4" x 13-3/4"	CD150402
ARKMN616	6" x 16"	7-3/4" x 17-3/4"	CD151232
ARKMN636	6" x 36"	7-3/4" x 37-3/4"	CD152062
ARKMN333	3" x 33"	4-3/4" x 34-3/4"	CD154462
ARKMN424	4" x 24"	5-3/4" x 25-3/4"	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.)		

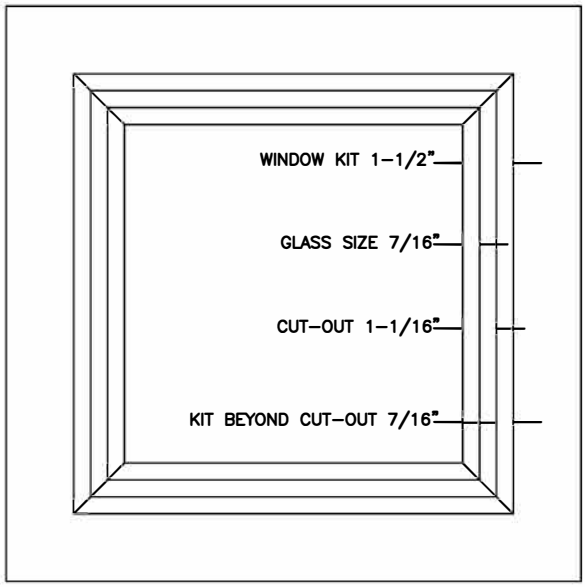
ATTACK RESISTANT RETRO-FIT KITS MUST BE USED WITH THE ATTACK RESISTANT COMPONENT MATERIALS AS SUPPLIED: CECO DOOR KITS, SG5 GLASS, APPROVED AND TESTED INSTALLATION COMPONENTS ONLY – NO SUBSTITUTIONS.

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.

08/01/18

ATTACK RESISTANT RETRO-FIT TYPE 10 KIT FOR WOOD DOORS





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.

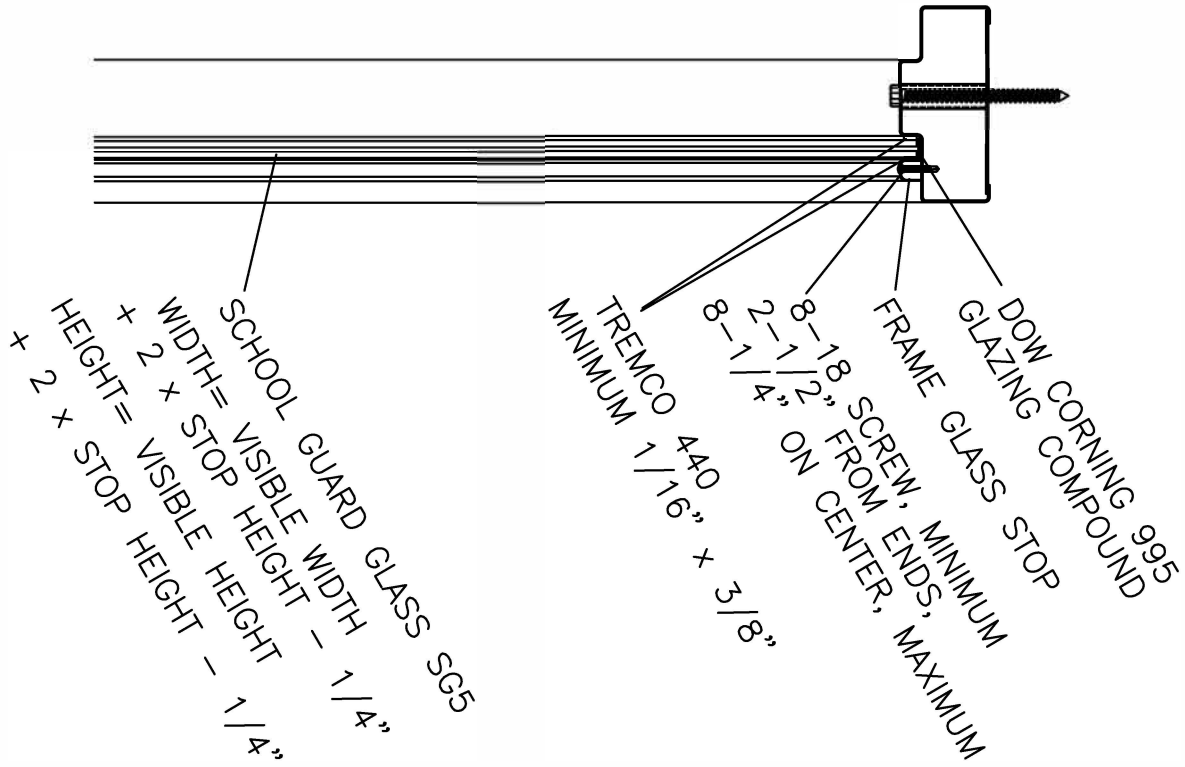
TYPE 10 KIT	VISIBLE GLASS	CUTOUT SIZE	PART NUMBER
ARKWV	10" x 10"	12-1/8" x 12-1/8"	CD137632
ARKWV1212	12" x 12"	14-1/8" x 14-1/8"	CD138472
ARKWN616	6" x 16"	8-1/8" x 18-1/8"	CD139202
ARKWN654	6" x 54"	8-1/8" x 56-1/8"	CD141672
ARKWN333	3" x 33"	5-1/8" x 35-1/8"	CD142412
ARKWN424	4" x 24"	6-1/8" x 26-1/8"	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 Reto-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.

ATTACK RESISTANT RETRO-FIT SIDELIGHT & BORROWED LIGHT DETAILS

- **ATTACK RESISTANT SG5 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.

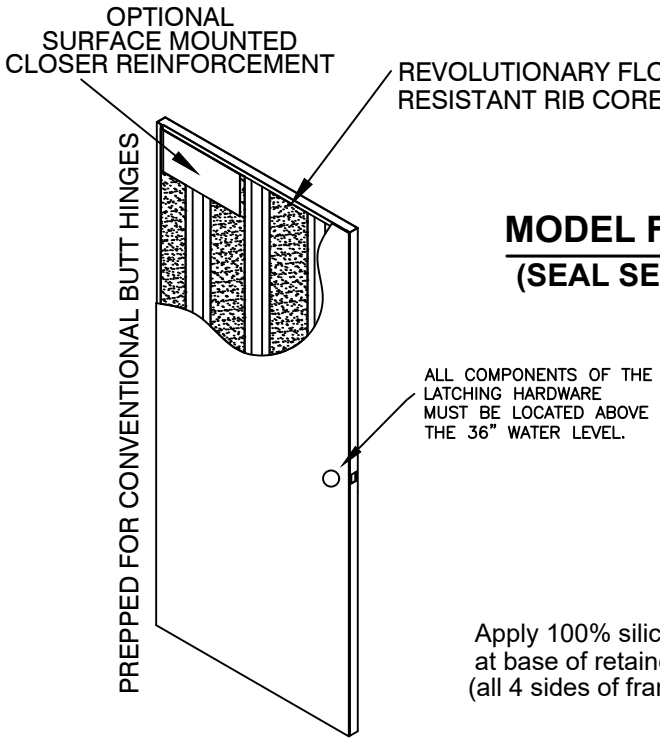
CECO AND SCHOOL GUARD GLASS ARE COMMITTED TO PROVIDING THE SAFEST AND MOST ROBUST MEANS AND METHODS FOR ATTACHMENT INTO COMPLETE FACTORY INSTALLED OEM ATTACK RESISTANT ASSEMBLIES AS WELL AS THE REPAIR, PARTIAL REPLACEMENT OR ENHANCEMENT OF EXISTING DOORS AND FRAMES. WE HAVE INDEPENDENT TESTING PARTIES 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.

D25–1

1-3/4" Flood Resistant Assembly

FD (Flush Singles)

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.

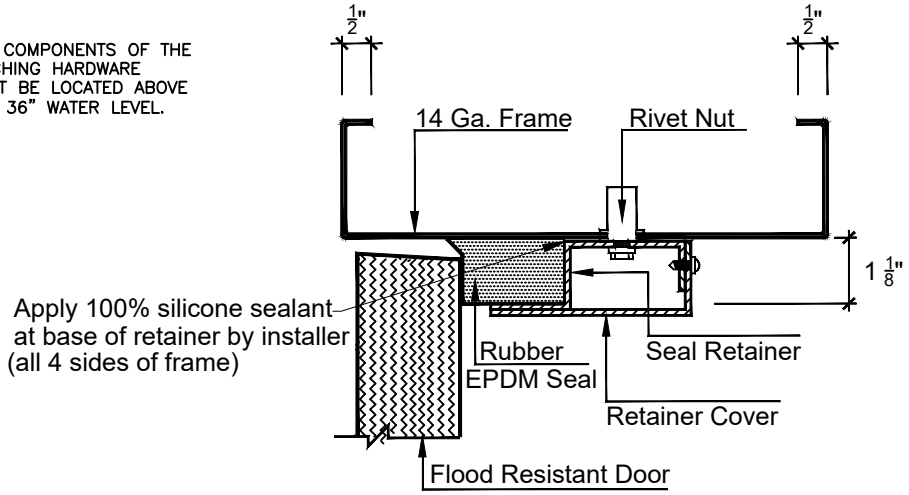


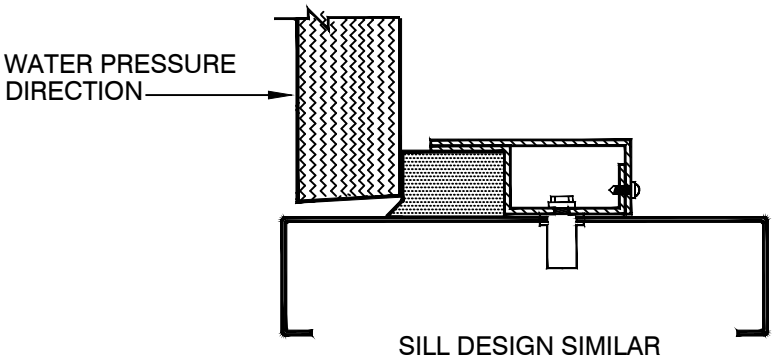
FLOOD RESISTANT DOOR DESIGN

The Required Core Will Be Provided To Achieve The Rating Needed. Appropriate Flood Resistant Seal Sets Are Provided With Each Rated Assembly.

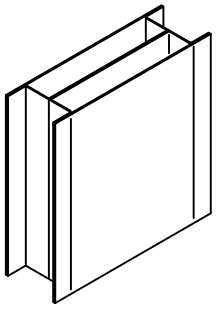
MODEL FD DOOR UTILIZES "FC" PROFILE FRAME

(SEAL SET FLD4 FOR SINGLES (STANDARD FRAME NOT AVAILABLE)





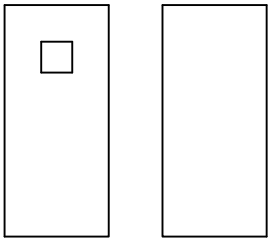
SILL DESIGN SIMILAR



REVOLUTIONARY FLOOD RESISTANT RIB CORE

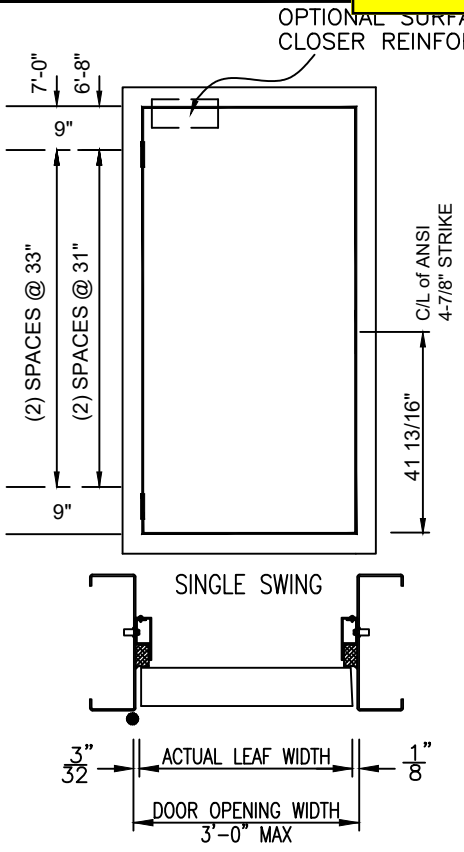
DOOR DESIGNS

10" X 10" MAX. VISION LITE WILL BE LOCATED 60" CENTERLINE ABOVE DOOR BOTTOM UNLESS NOTED OTHERWISE.



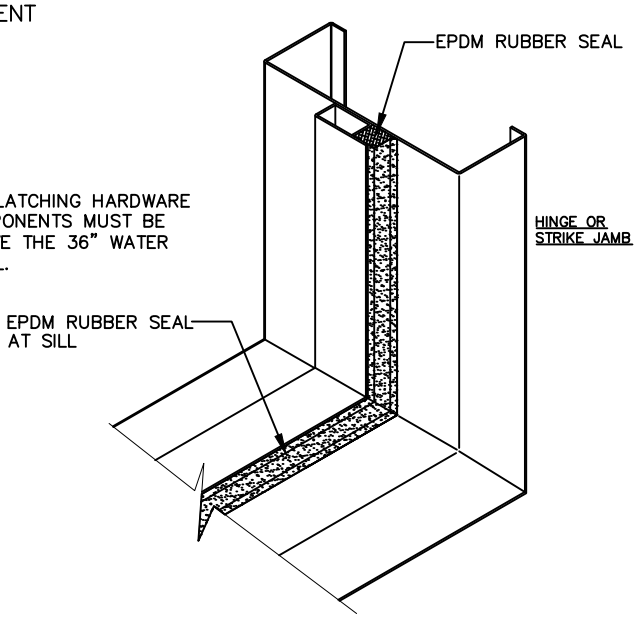
Suggested Uses:
Sump rooms
Below ground mechanical rooms

10/17/19



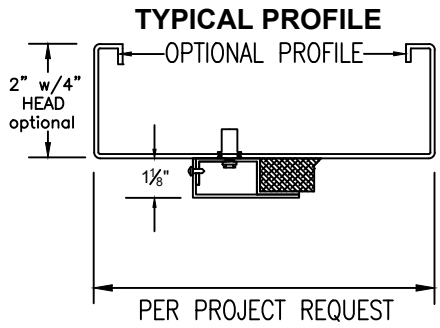
HORIZONTAL SECTION

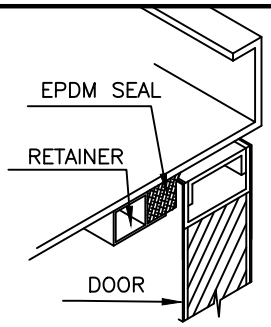
ALL LATCHING HARDWARE COMPONENTS MUST BE ABOVE THE 36" WATER LEVEL.



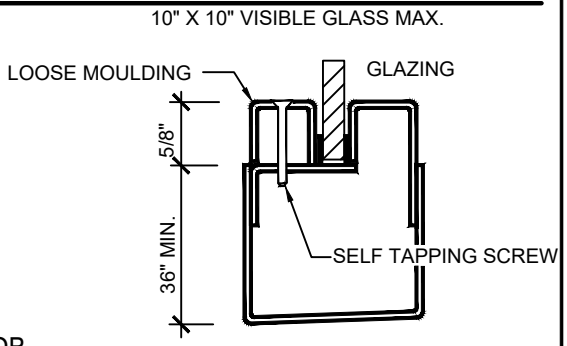
SEALS FOR MODEL FD DOOR and "FC" FRAME PROFILE

(SEAL SET FLD4)



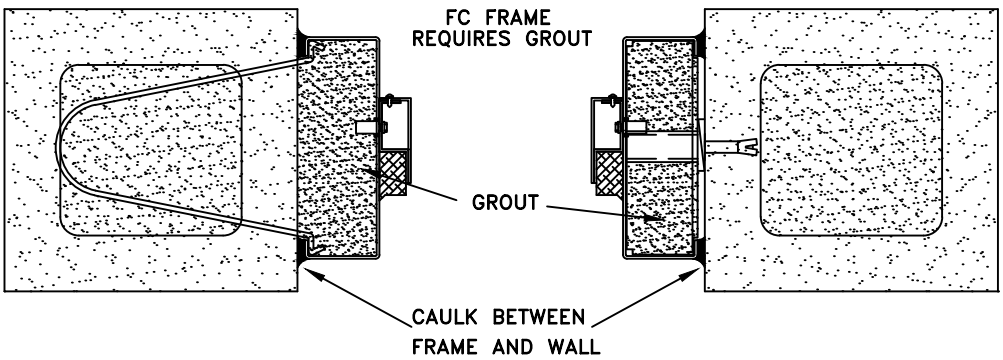


DOOR, FRAME AND SEAL -TOP (BOTTOM SIMILAR)



DOOR FRAME & GLAZING DETAIL

SOME COMMON MASONRY APPLICATIONS SHOWN BELOW.

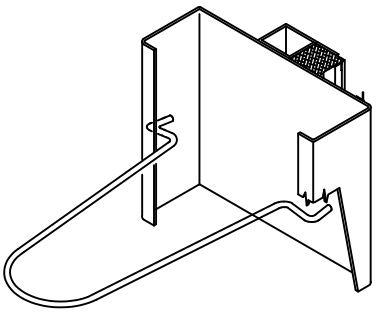


It is important that flood door systems be properly installed and sealed into the wall to prevent leakage. Flood Resistant systems are furnished with specific detailed seal installation instructions.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

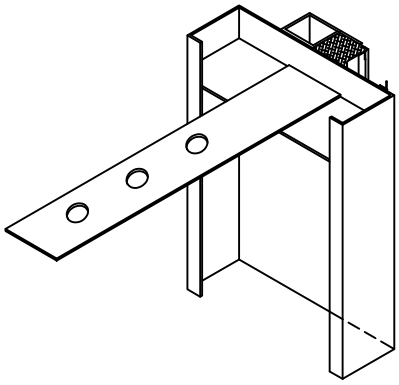
D25-3

MASONRY WIRE ANCHOR 100

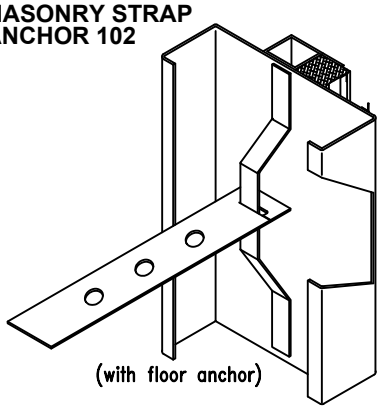


(with floor anchor)

MASONRY "T" ANCHOR 101



MASONRY STRAP ANCHOR 102



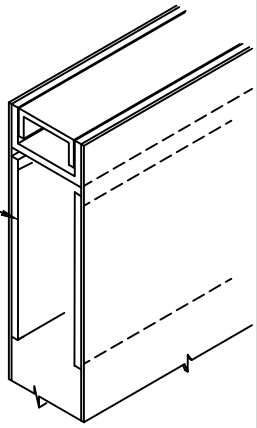
(with floor anchor)

ANCHOR DESIGN MAY VARY DEPENDING ON DEPTH AND PROFILE

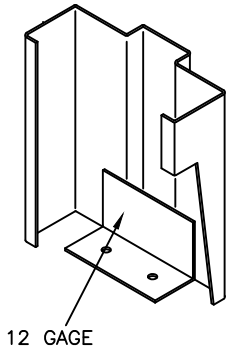
CLOSER REINFORCEMENT OPTIONAL

14 GAGE STANDARD

12 GAGE OPTIONAL PLATE REINFORCEMENTS AVAILABLE

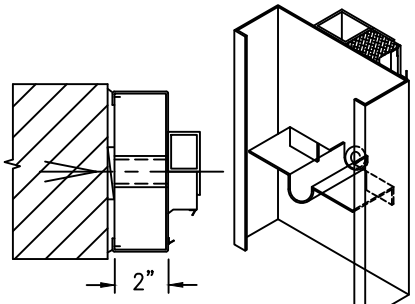


STANDARD STEEL FLOOR ANCHOR



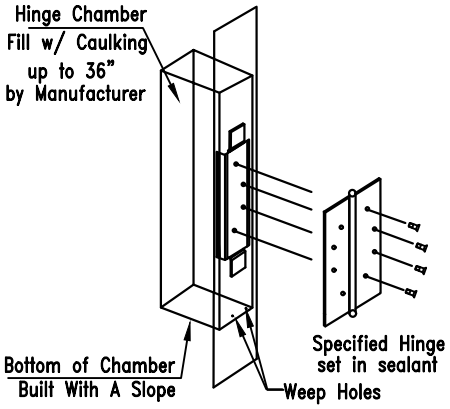
12 GAGE

EXISTING WALL ANCHOR 301



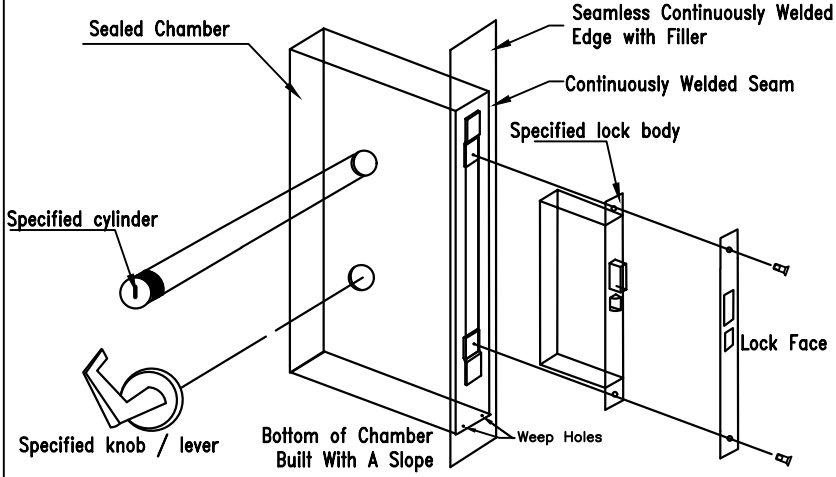
2"

FLOOD RESISTANT DOOR HINGE PREP.

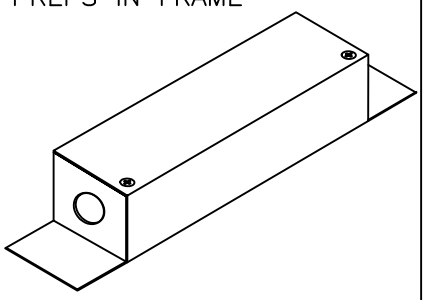


FLOOD RESISTANT DOOR LOCK PREP.

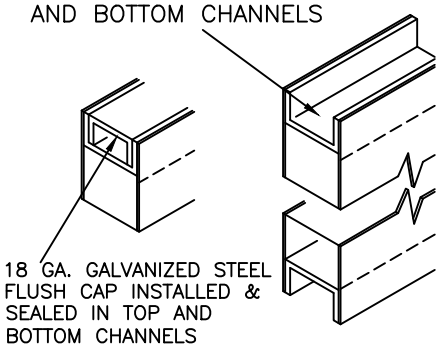
All Components of the Latching Hardware Must be Above the 36" Water Level.



ELECTRICAL COVERBOX FOR ELECTRICAL HARDWARE PREPS IN FRAME

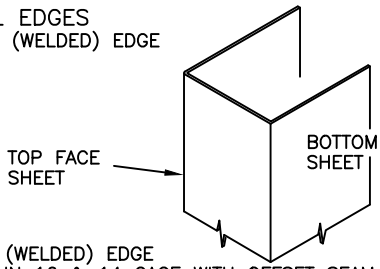


16 GA. GALVANIZED STEEL TOP AND BOTTOM CHANNELS



18 GA. GALVANIZED STEEL FLUSH CAP INSTALLED & SEALED IN TOP AND BOTTOM CHANNELS

VERTICAL EDGES SEAMLESS (WELDED) EDGE



SEAMLESS (WELDED) EDGE AVAILABLE IN 16 & 14 GAGE WITH OFFSET SEAM
OPTIONAL 12 GAGE WELDED SEAMLESS CONSTRUCTED WITH CENTER SEAM

CecoDoor

10/17/19

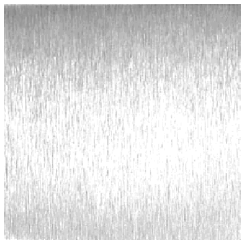
STANDARD SIZES
NOMINAL DOOR OPENING

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 seepage.
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.

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.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

1-3/4" EMI-RFI SHIELDING DOOR & FRAME ASSEMBLIES

FULL FLUSH STEEL DOORS BEVELED LOCK AND HINGE EDGE, HANDED

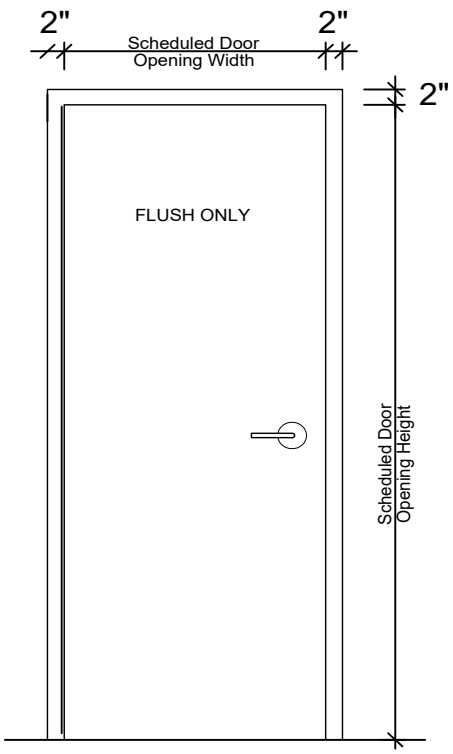
ADDITIONAL OPTIONS:

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

TYPICAL ELEVATION



FINISH	304 STAINLESS STEEL			316 STAINLESS STEEL		
	CECO STEEL FINISH CODE			CECO STEEL FINISH CODE		
	12 GAGE	14 GAGE	16 GAGE	12 GAGE	14 GAGE	16 GAGE
#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.

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 gage 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 Enclosures for Effectiveness, from 9 kHz to 18 GHz.
8. This assembly meets ADA requirements.

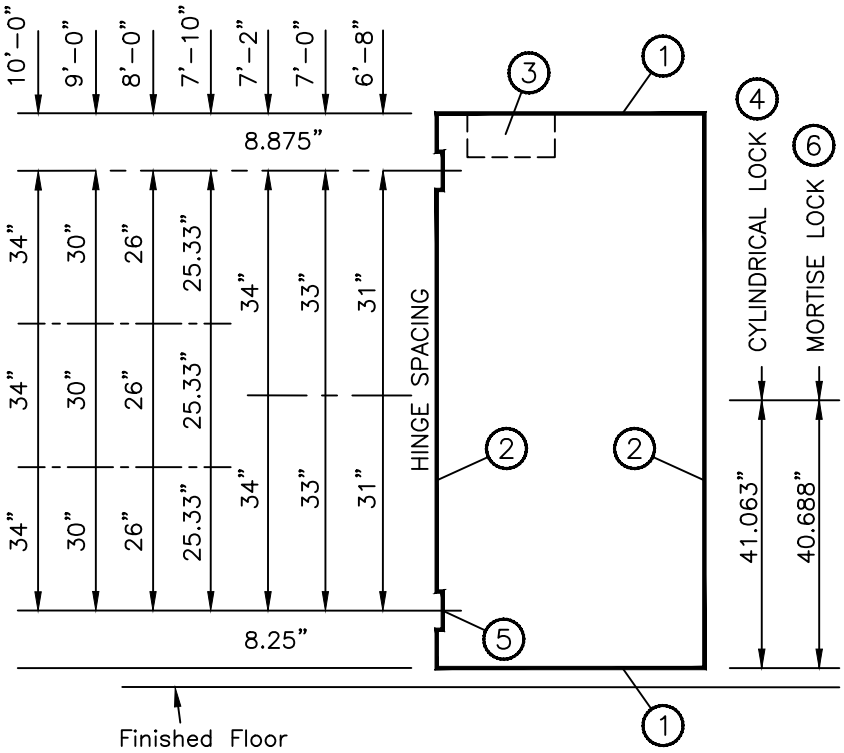
EMI–RFI Shielding Assemblies may be used in specific TEMPEST applications dependent on customer requirements.

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

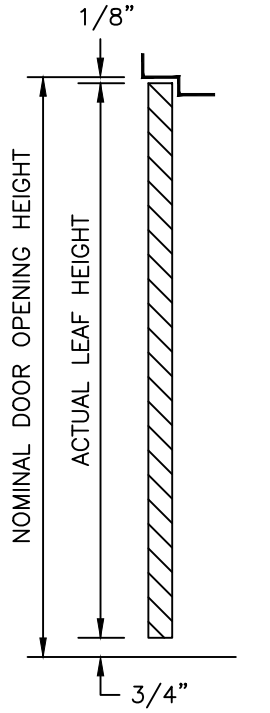
Please contact Specialty Tech Support Team for more information: specialtyproducts.techsupport@assaabloy.com
Telephone: 218–828–6256

D26-2

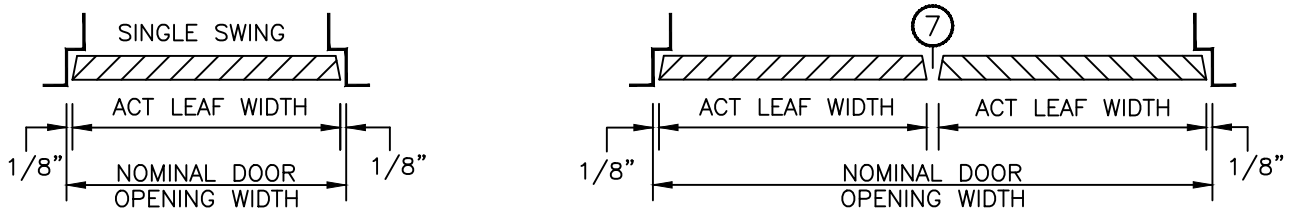
Hardware locations shown match Ceco stainless steel frames.



DOOR ELEVATION



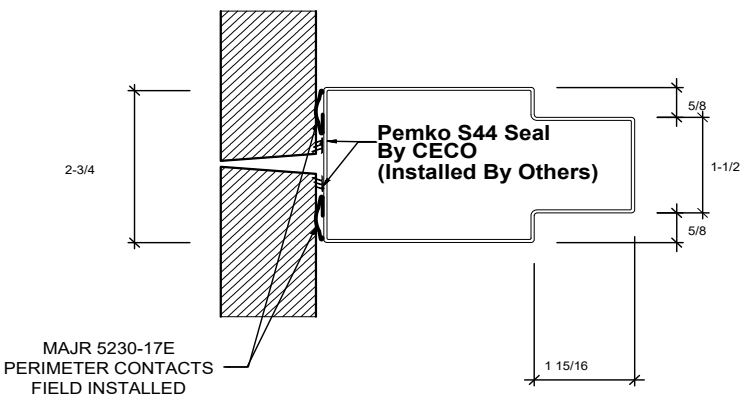
VERTICAL SECTION



HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

7 FIXED OR REMOVABLE MULLION FOR PAIR OPENINGS



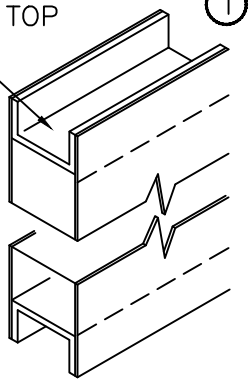
08/19/22

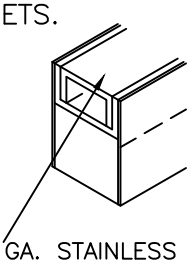
TECH-DATA

D11-3

1

16 GA. STAINLESS STEEL TOP AND BOTTOM CHANNELS WELDED TO BOTH FACE SHEETS.





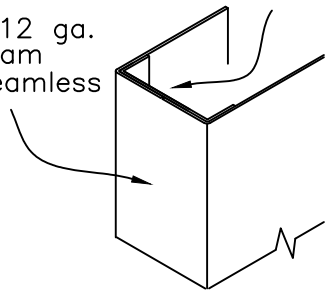
16 GA. STAINLESS STEEL FLUSH CAP OPTIONAL FOR TOP AND BOTTOM CHANNEL, SCREW APPLIED.

2

VERTICAL EDGES

16 Gage Full Height Channel

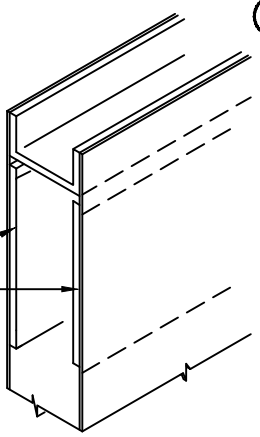
16,14 & 12 ga. Center Seam Welded Seamless Edge



3

OPTIONAL CLOSER REINFORCEMENT

14 GAGE



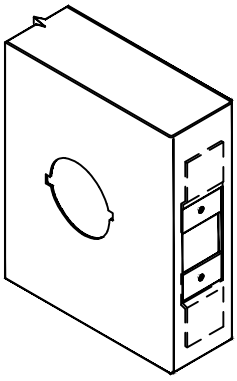
4

LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

BEVELED LOCK EDGE

2-3/4" BACKSET

12 GAGE LOCK REINFORCEMENT



LOCK EDGE IS BEVELED

5

HINGE PREPARATION

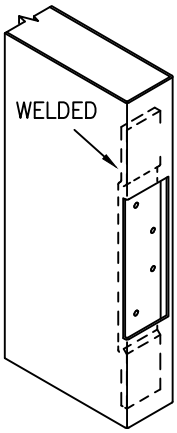
4-1/2" OR 5" HIGH STANDARD OR HEAVYWEIGHT FULL MORTISE HINGES

ANSI A.156.7 TEMPLATE

HINGE EDGE IS BEVELED

HINGE BACKSET 1/4"

7 GAGE HINGE REINFORCEMENT



6

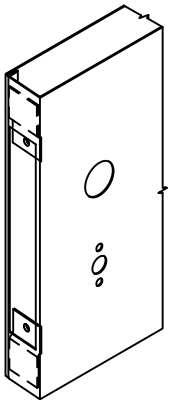
LOCK PREPARATION GOV. 86-4 MORTISE TYPE

BEVELED LOCK EDGE

2-3/4" BACKSET

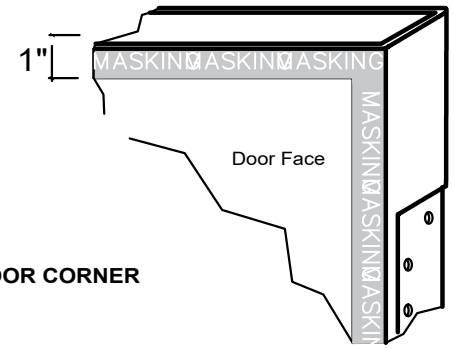
FACE OF DOOR PREPARED PER LOCK TEMPLATE

12 GAGE LOCK REINFORCEMENT



STAINLESS STEEL Factory finishes only. Field finishing by others

No masking required at top, bottom or edges of the door. Narrow Face only



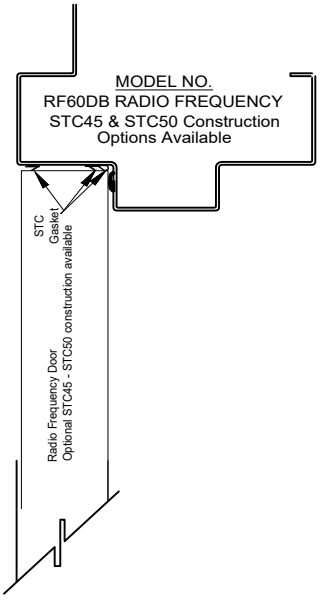
DOOR CORNER

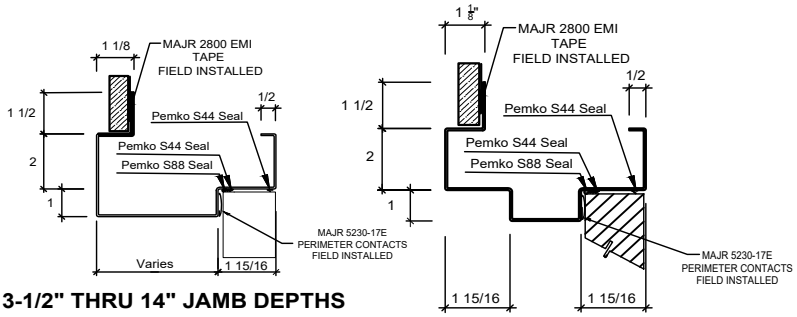
Mask off 1" perimeter of the narrow or push side of the door. Door Face only (Masking is for protection of stainless steel during finish painting by others)

08/19/22

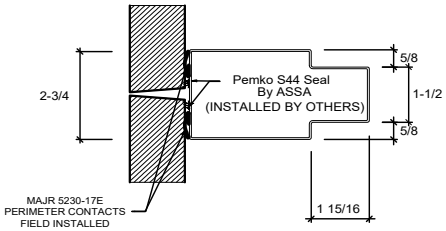
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

1-3/4" EMI-RFI SHIELDING DOOR & FRAME ASSEMBLIES

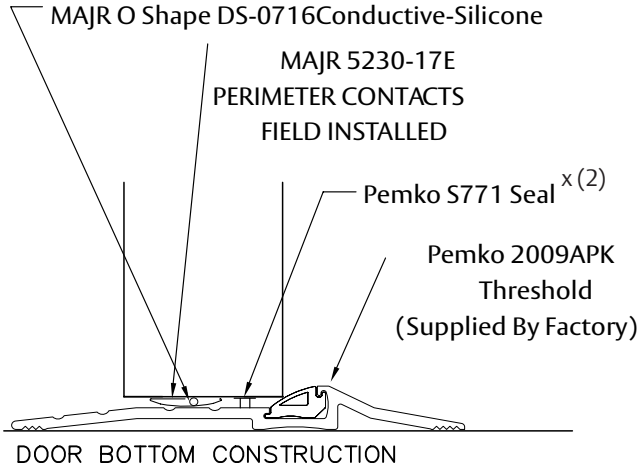




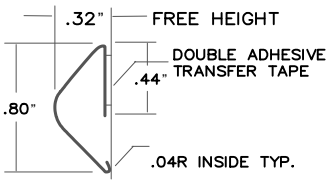
3-1/2" THRU 14" JAMB DEPTHS
TYPICAL FRAME PROFILES
WELDED CORNER CONSTRUCTION



FIXED OR REMOVABLE MULLION FOR PAIR OPENINGS



DOOR BOTTOM CONSTRUCTION



MAJR 5230–17E
PERIMETER CONTACTS

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.

D26-5

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 gage center seam style. 16, 14 & 12 gage 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 gage channels are inverted. A 16 gage 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 gage 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 gage 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.

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 AGENCY: UL		TEST: UL10C, UL10B
DOOR CORE	GAGE	RATING	MAX. SIZE
HONEYCOMB	16	20 MIN. – 3 HOUR	4'0" X 8'0" SINGLE
HONEYCOMB	16	20 MIN. – 90 MIN.	8'0" X 8'0" PAIR
POLYURETHANE SLAB	16	20 MIN. – 90 MIN.	4'0" X 8'0" SINGLE
POLYURETHANE SLAB	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 Gage Stainless Steel	STD	Optional – See Available Finish Below
14 Gage Stainless Steel	STD	
12 Gage 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

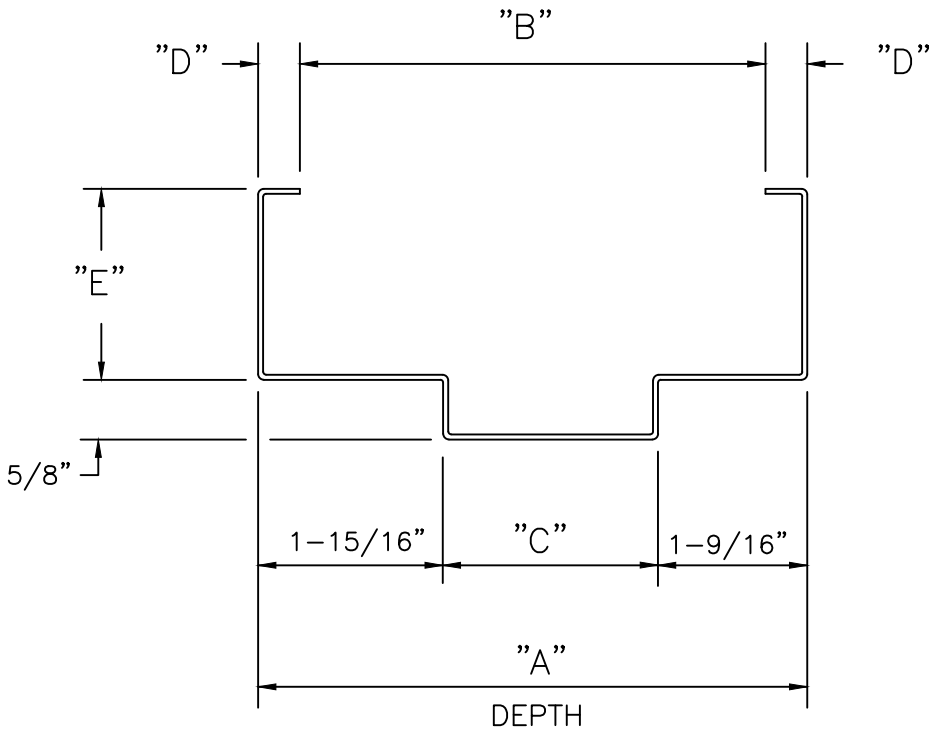
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

08/19/22

Return to Index

SERIES SU STEEL FRAMES (UNEQUAL RABBET)

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

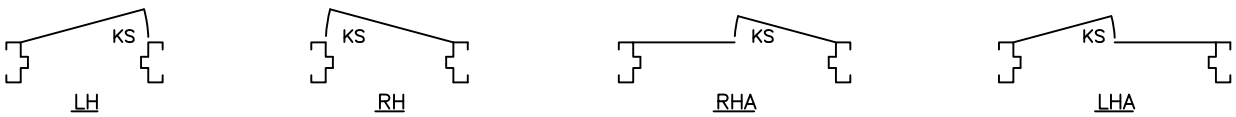


(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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

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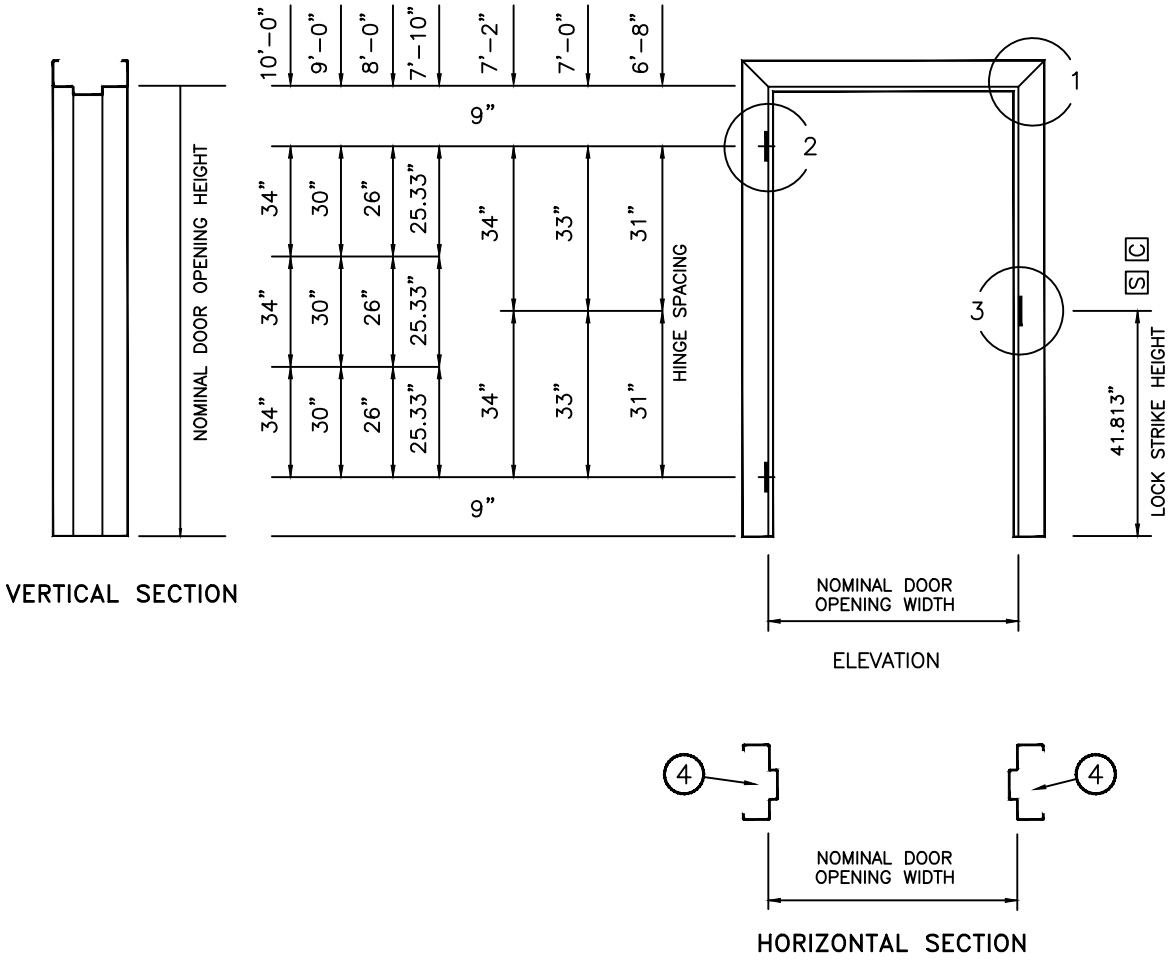
F1-2

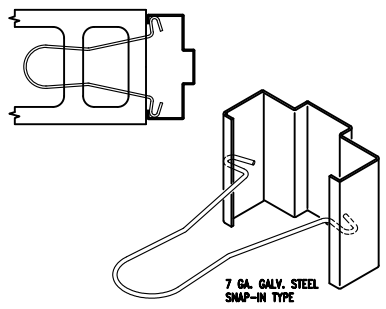
Hardware locations shown match Ceco standard doors.



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

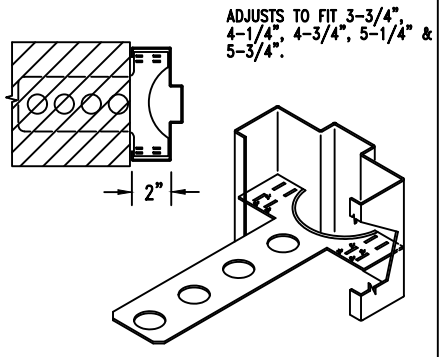
JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS 3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS >5'0" thru 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS >7'2" thru 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS >7'6" THRU 10'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL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

WIRE MASONRY ANCHOR (4)
WMA



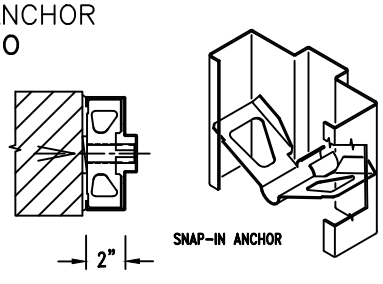
(For 3" THRU 8-3/4" DEPTHS)

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



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

EXISTING OPENING ANCHOR (4)
EO



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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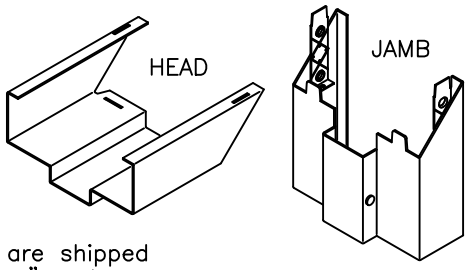
TECH-DATA

F1–3

KNOCKED DOWN (KD) CORNER CONSTRUCTION

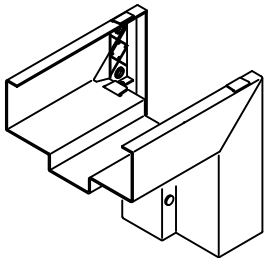
1



Components are shipped "knocked down" and assembled at the job site

WELDED CORNERS

1



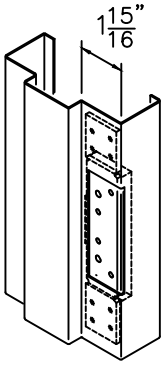
Die–cut corner with corner tab and face weld shown. Also available without tab and welded or mitre sawed and welded. Alternative weld options are also available.

HINGE PREPARATION

2

4–1/2" x .134" OR
4–1/2" x .180"
ANSI A156.7 TEMPLATE
7 GAGE STEEL
REINFORCING

BACKSET: 5/16"

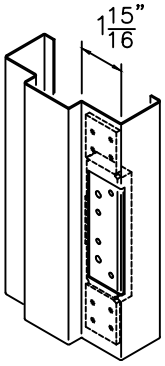


HINGE PREPARATION

2

5" x .146" OR
5" x .190"
ANSI A156.7 TEMPLATE
7 GAGE STEEL
REINFORCING

BACKSET: 5/16"



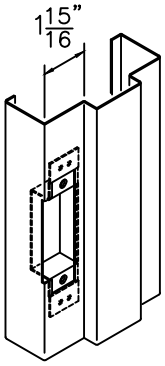
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

LOCK STRIKE PREPARATION

3

S

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



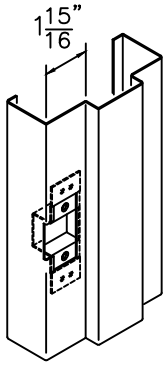
LOCK STRIKE PREPARATION

3

C

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

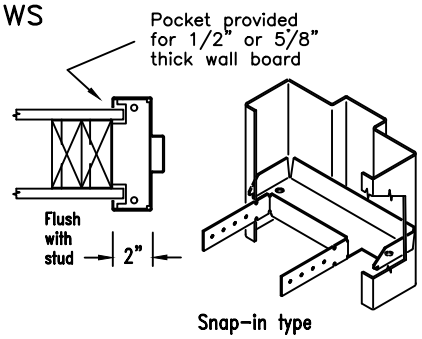
ALSO AVAILABLE WITHOUT LIP
NOTCH FOR DEADBOLTS.



WOOD STUD ANCHOR

WS

4

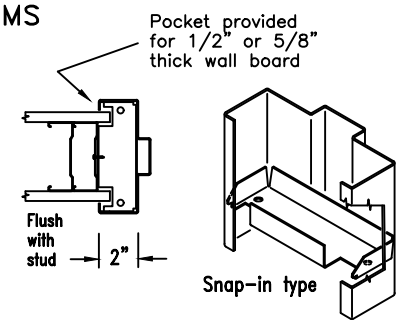


(Used also for METAL STUD Walls)

METAL STUD ANCHOR

MS

4

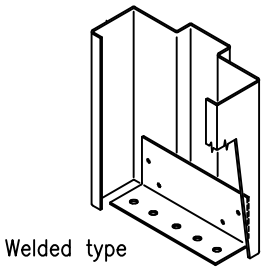


4–3/4" and 5–3/4" Depth Only
For other depths use WS type.

FIXED FLOOR ANCHOR

SA

4



ONE PIECE

10/18/19

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ASSA ABLOY

BACK TO TOP

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 gage 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 provided. Optional closer reinforcement is a 14 gage steel formed steel sleeve (12 gage 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.

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:

- UNDERWRITERS LABORATORY
- WARNOCK HERSEY
- FACTORY MUTUAL

TEST: UL10B, UL10C, UI1784 & 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.

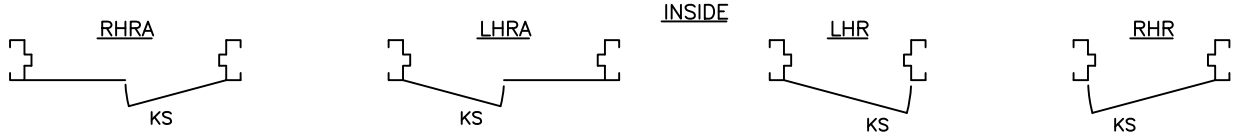
MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
16 Gage Steel	Heavy or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximun Duty	STD	OPT	OPT

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test –– 16 & 14 gage steel: Level A (1,000,000 Cycles)



"SUFFIX"A" = ACTIVE LEAF OF PAIRS

"KS" = KEY SIDE

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RETURN TO TOP

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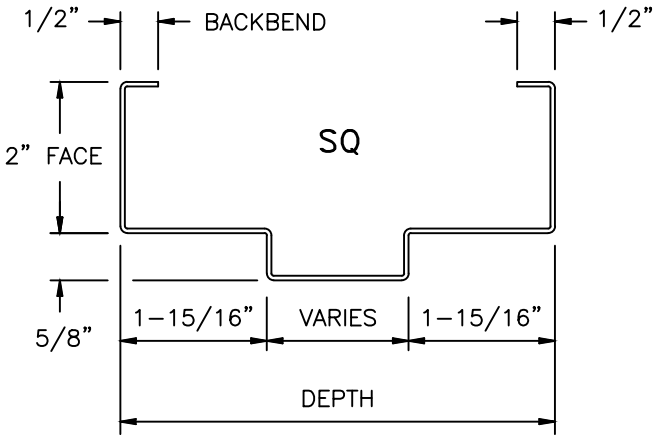
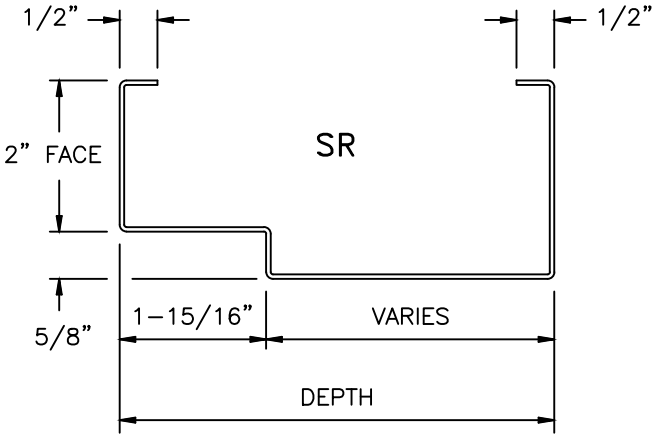
Return to Index

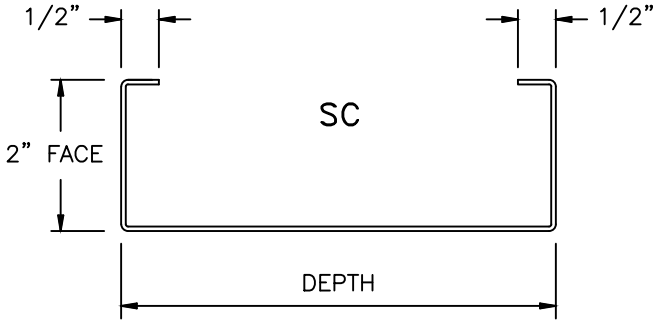
SERIES SQ, SR, AND SC STEEL FRAMES

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

* BASIC PROFILES

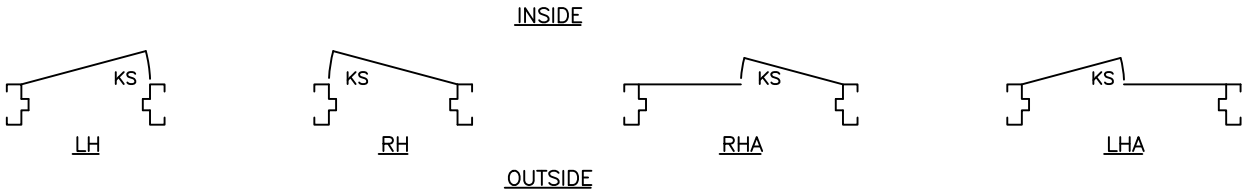






(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

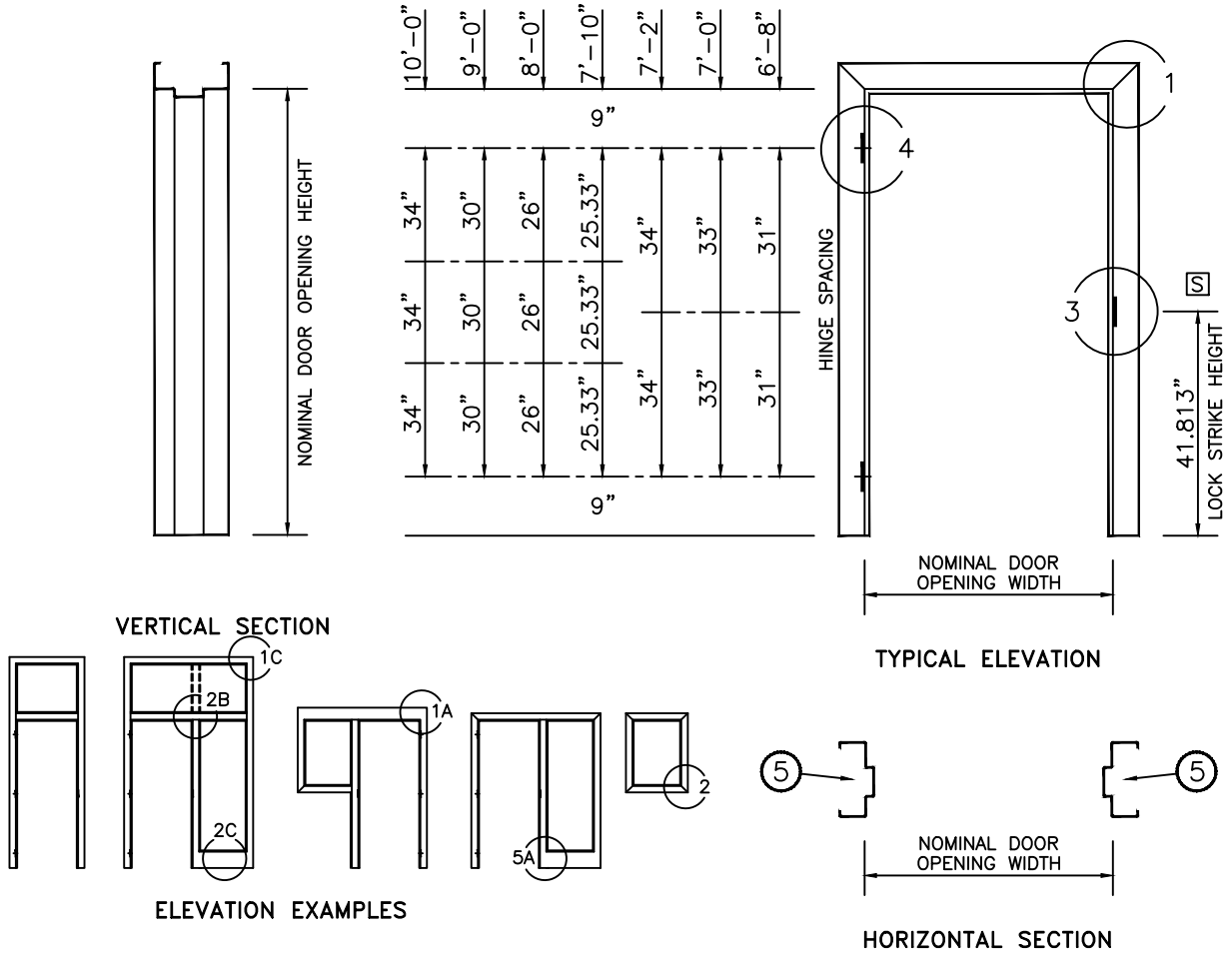
* Depth, face, soffit, and backbend dimensions are variable (made to order) within limits of material and tooling. Hardware preparations are for 1–3/4" thick doors. Rabbet dimensions and hardware preparations to suit other door thicknesses are also available. Backbends need not be the same on opposite faces of basic profile, but limits of material and/or tooling may restrict certain combinations of backbends and other profile variations. Profiles are not limited to those shown ...many other designs and combinations are available.



"KS" = KEY SIDE

TECH-DATA

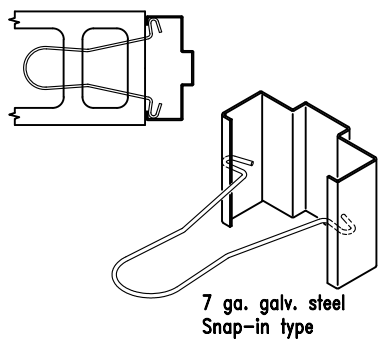
Hardware locations shown match Ceco satandard doors. Basic double rabbet profile shown ...profile variations similar.



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

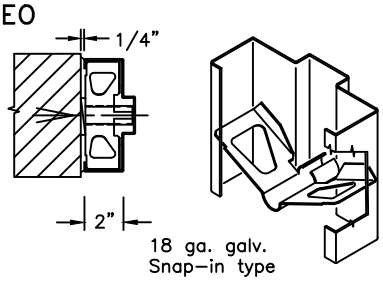
JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS >3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS >7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS >7'6" THRU 10'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL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

WIRE MASONRY ANCHOR (5)
WMA



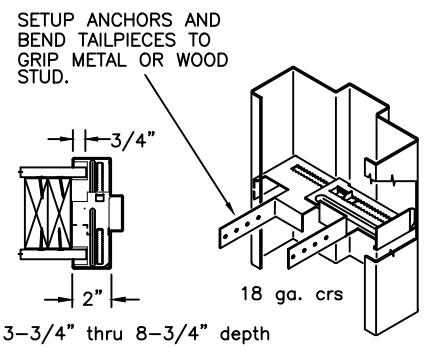
(For 3" thru 8-3/4" Depths)

EXISTING OPENING ANCHOR (5)
EO



SQ PROFILE
EO/S6: 5-1/8" thru 6-3/4" depth
EO/S8: 6-7/8" thru 8-3/4" depth

ADJUSTABLE ANCHOR FOR STUD WALLS (5)
ADJ/STUD



3-3/4" thru 8-3/4" depth

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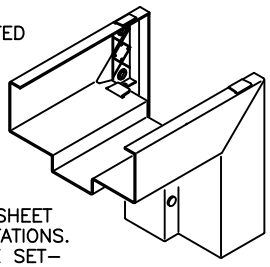
TECH-DATA

SERIES SQ, SR, AND SC STEEL FRAMES

F2-3

KNOCKED DOWN (KD) CORNERS (1)

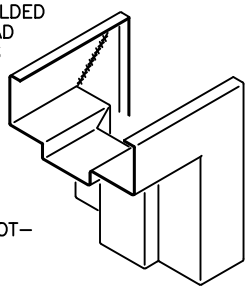
NORMALLY LIMITED TO 3 PIECE FRAMES. CORNERS ARE DIECUT. HEAD AND 2 JAMBS ARE SHIPPED KD FOR FIELD ASSEMBLY. SEE BACK OF SHEET FOR FACE LIMITATIONS. ALSO AVAILABLE SET-UP AND WELDED.



WELDED CORNERS (1C)

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

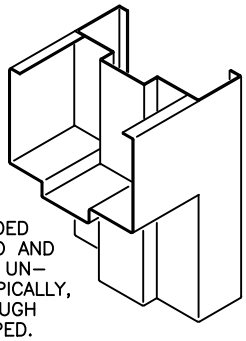
MITER SEAM IS WELDED AND FACE IS GROUND SMOOTH AND SPOT-PRIMERED.



WELDED CORNERS (1A)

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

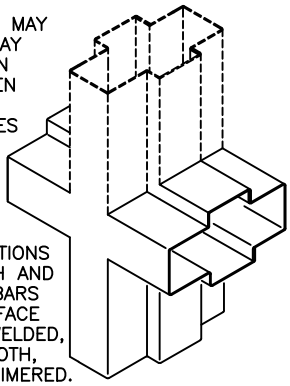
BUTTED AND WELDED CORNER -- HEAD AND JAMBS MAY HAVE UN-EQUAL FACES. TYPICALLY, JAMB RUNS THROUGH AND HEAD IS COPED.



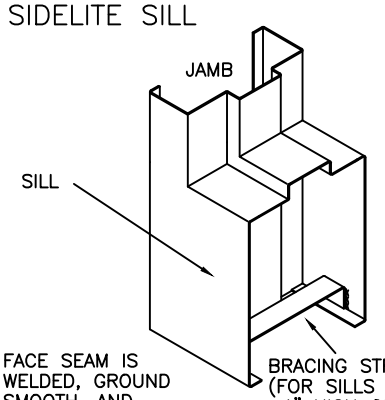
INTERSECTIONS (2B)

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.



SIDELITE SILL (2C)



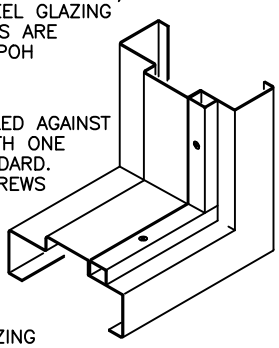
FACE SEAM IS WELDED, GROUND SMOOTH, AND SPOT PRIMERED.

BRACING STRAP (FOR SILLS OVER 4" HIGH ONLY)

GLAZING PROVISIONS (2)

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.



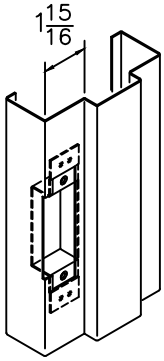
GLASS AND GLAZING ARE BY GLAZING CONTRACTOR

LOCK STRIKE PREPARATION (3)

[S]

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

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

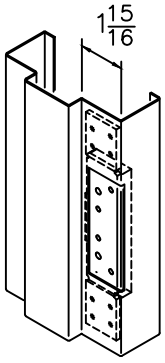


HINGE PREPARATION (4)

4-1/2" x .134" or
4-1/2" x .180"
ANSI A156.7
TEMPLATE.
7 GAGE STEEL
REINFORCMENT.

PLASTER GUARD IS 26 GAGE STEEL.

BACKSET: 5/16"

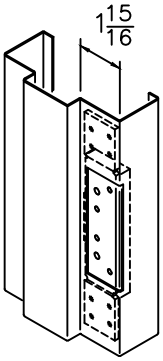


HINGE PREPARATION (4)

5" x .146" or
5" x .190"
ANSI A156.7
TEMPLATE.
7 GAGE STEEL
REINFORCMENT.

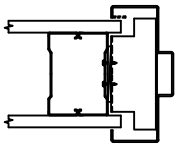
PLASTER GUARD IS 26 GAGE STEEL.

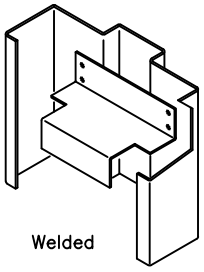
BACKSET: 5/16"



METAL STUD "Z" ANCHOR (5)

MSZ2

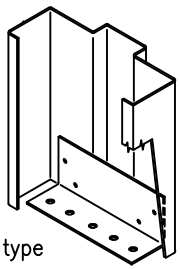




Welded

SPECIAL SIZE FLOOR ANCHOR (5)

SA



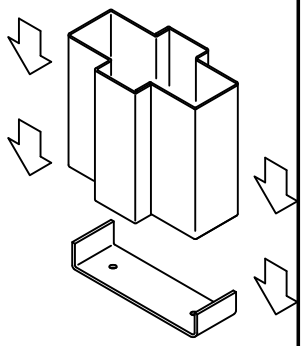
Welded type

ONE PIECE

SIDELITE FLOOR ANCHOR (5A)

SLFA

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



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

10/18/19

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BACK TO TOP

CecoDoor

ASSA ABLOY

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 gage 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 A 115.1 & 2. Plaster guards are 26 gage steel. Preparations for various other mechanical and electronic locks and strikes are also available. Optional hardware reinforcement (e.g. closer/holder) is 14 gage 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.

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 DOOR 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, elevations, and materials.
Hourly ratings are not shown on label unless rating is less than 3 hours.

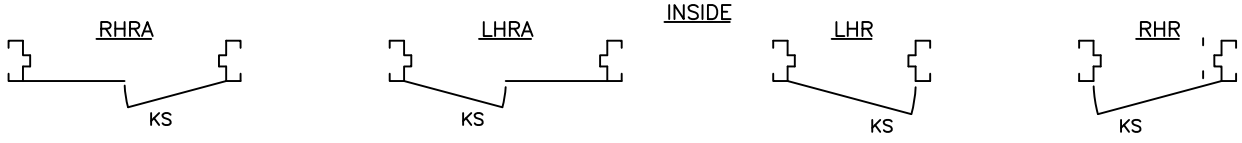
MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
16 Gage Steel	Heavy or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximum Duty	STD	OPT	OPT

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test –– 16 & 14 gage steel: Level A (1,000,000 Cycles)



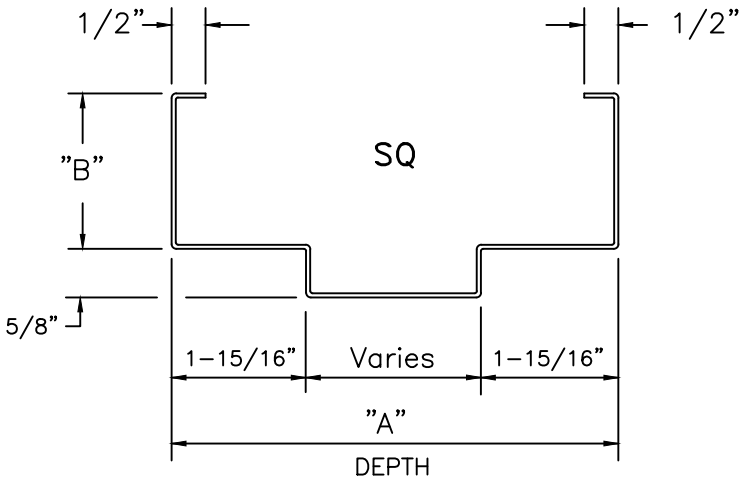
"SUFFIX"A" = ACTIVE LEAF OF PAIRS

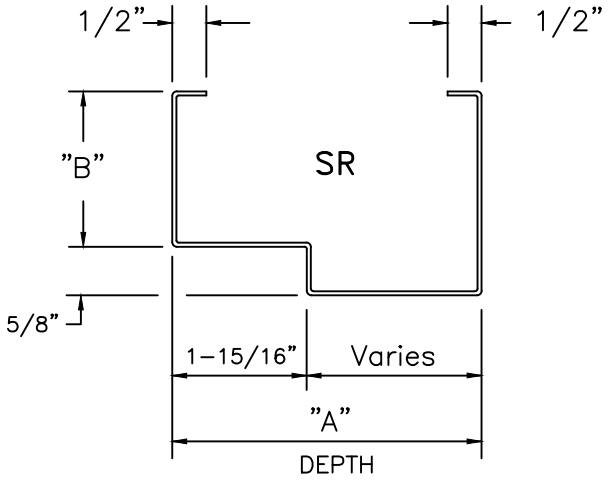
"KS" = KEY SIDE

Return to Index

SERIES SQ, 12 GAGE STEEL FRAMES

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



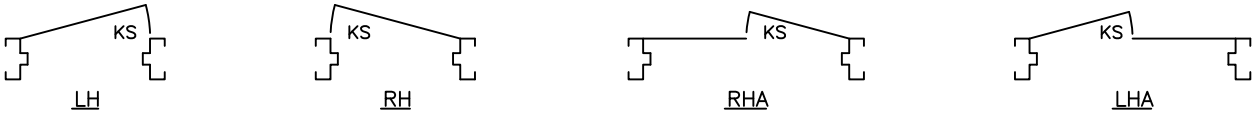


(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

DEPTHS	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

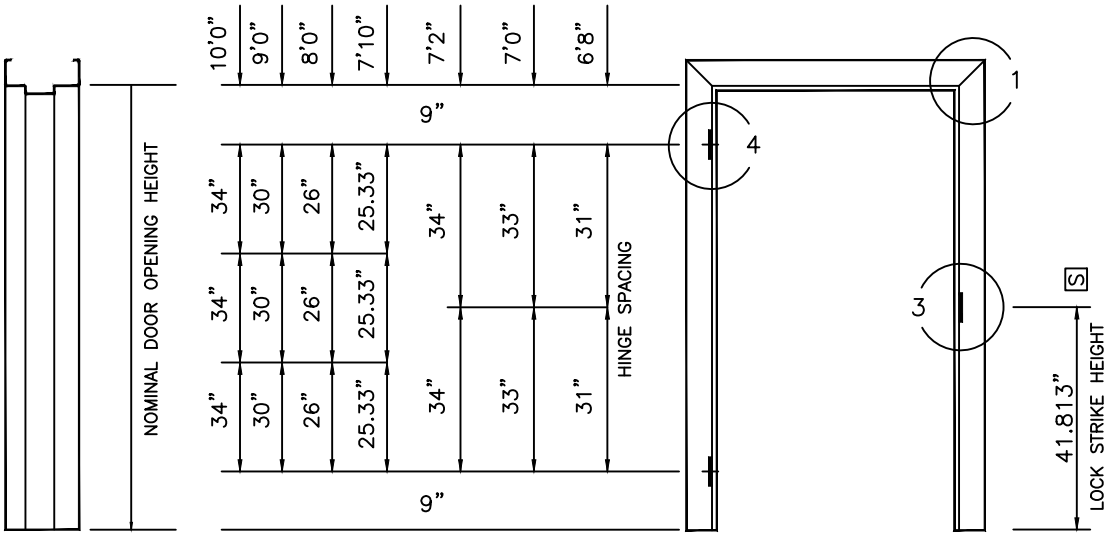


OUTSIDE

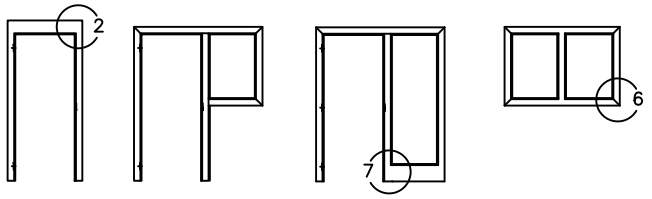
"KS" = KEY SIDE

F3-2

Hardware locations shown match Ceco standard doors.



VERTICAL SECTION



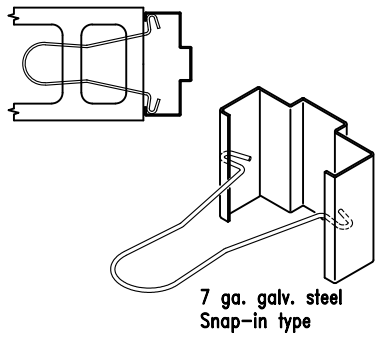
ELEVATION EXAMPLES

HORIZONTAL SECTION

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

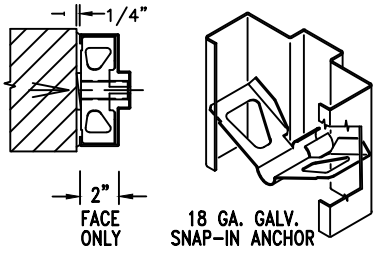
JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS >3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS >7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS >7'6" THRU 10'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL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

WIRE MASONRY ANCHOR
WMA (5)



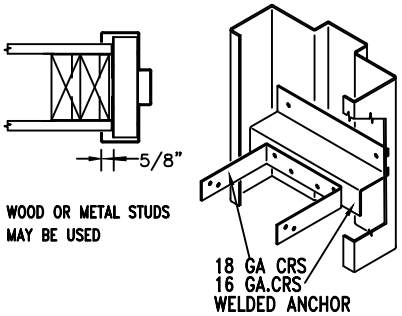
(FOR 3-3/4" THRU 8-3/4" DEPTHS)

EXISTING OPENING ANCHOR
EO (5)



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

WOOD STUD "Z" STRAP ANCHOR
WSZS (5)



10/18/19

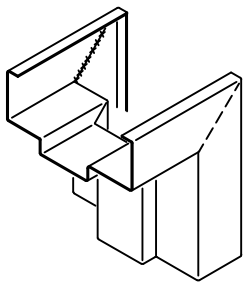
TECH-DATA

SERIES SQ 12 GAGE STEEL FRAMES

F3–3

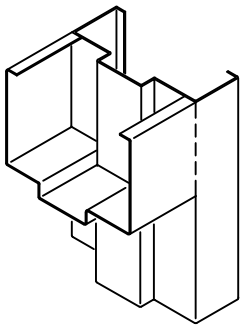
WELDED CORNERS
TYPE V5 ①

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



WELDED CORNERS
TYPE V6 ②

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

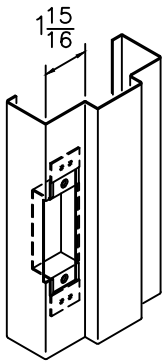


LOCK STRIKE PREPARATION ③

S

UNIVERSAL (4–7/8")
ANSI A115.1 & 2 TEMPLATE
16 GAGE STEEL REINFORCING
WITH EXTRUDED THREADS
EQUIAL TO 14 GAGE.

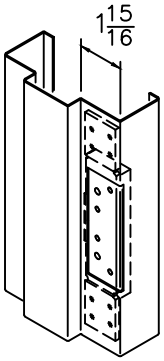
PREPARATIONS FOR VARIOUS MECHANICAL AND ELECTRONIC SECURITY DEVICES ARE ALSO AVAILABLE. ASK FOR DETAILS.



HINGE PREPARATION ④

5" x .190"
ANSI A156.7 TEMPLATE
7 GAGE STEEL
REINFORCING

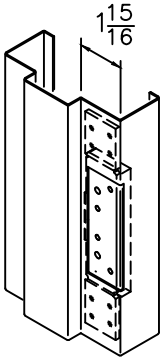
BACKSET: 5/16"



HINGE PREPARATION ④

4–1/2" x .180"
ANSI A156.7 TEMPLATE
7 GAGE STEEL
REINFORCING

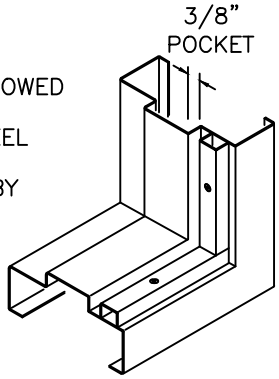
BACKSET: 5/16"



GLAZING PROVISIONS ⑥

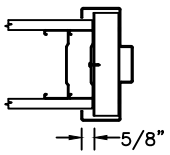
SIDELITES AND BORROWED LITES ARE PROVIDED WITH 5/8" HIGH STEEL GLAZING BEAD. BEAD IS ATTACHED BY #10 FHSMS.

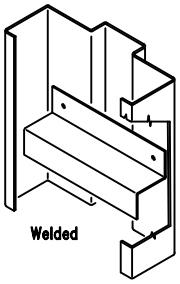
GLASS AND GLAZING IS BY GLAZING CONTRACTOR.



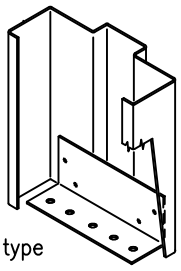
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

METAL STUD "Z" ANCHOR ⑤
MSZ1





FIXED FLOOR ANCHOR ⑤
SA

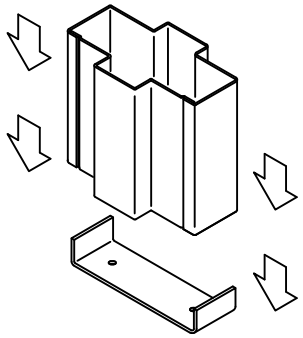


Welded type

ONE PIECE

SIDELITE FLOOR ANCHOR ⑦
SLFA

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



10/21/19

CecoDoor

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BACK TO TOP

TECH-DATA

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:

- 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 12 gage 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 gage 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 A 115.1 & 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 gage 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.

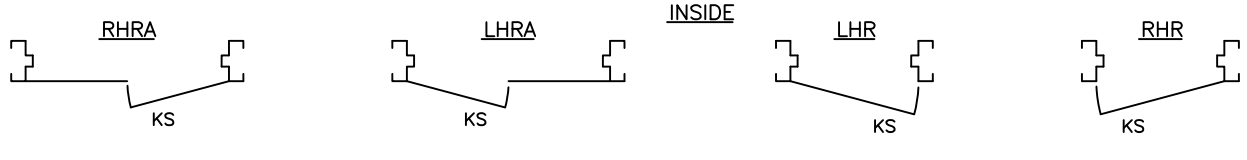
MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV A60
12 Gage Steel	ANSI / NAAMM	STD	OPT

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test, Level A (1,000,000 Cycles)



"SUFFIX"A" = ACTIVE LEAF OF PAIRS

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RETURN TO TOP

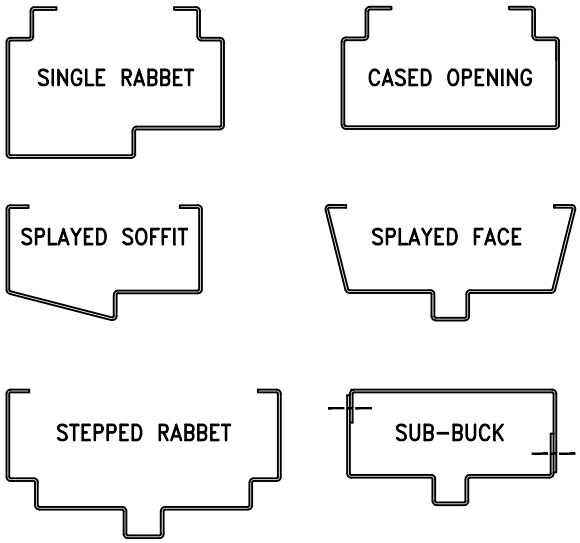
CecoDoor
ASSA ABLOY

Return to Index

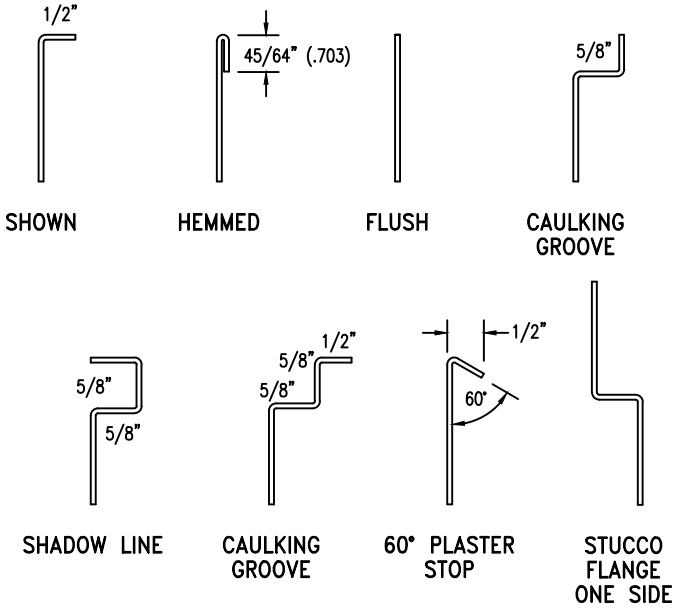
SERIES C CUSTOM FRAME PROFILES

FOR 1-3/4" THICK DOORS
STANDARD AND DRYWALL FRAME APPLICATIONS

PROFILE VARIATIONS



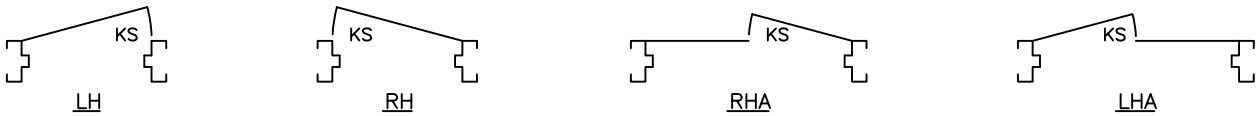
BACKBEND VARIATIONS



SEE PAGE F4-3 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

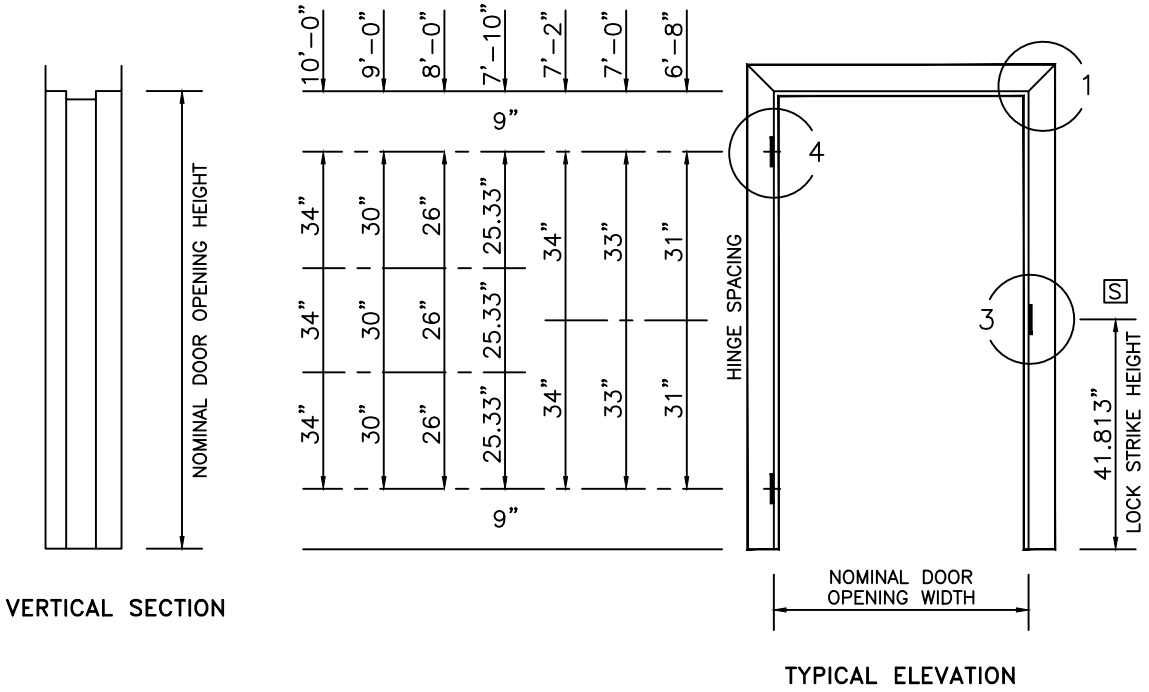
"KS" = KEY SIDE

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

F4–2

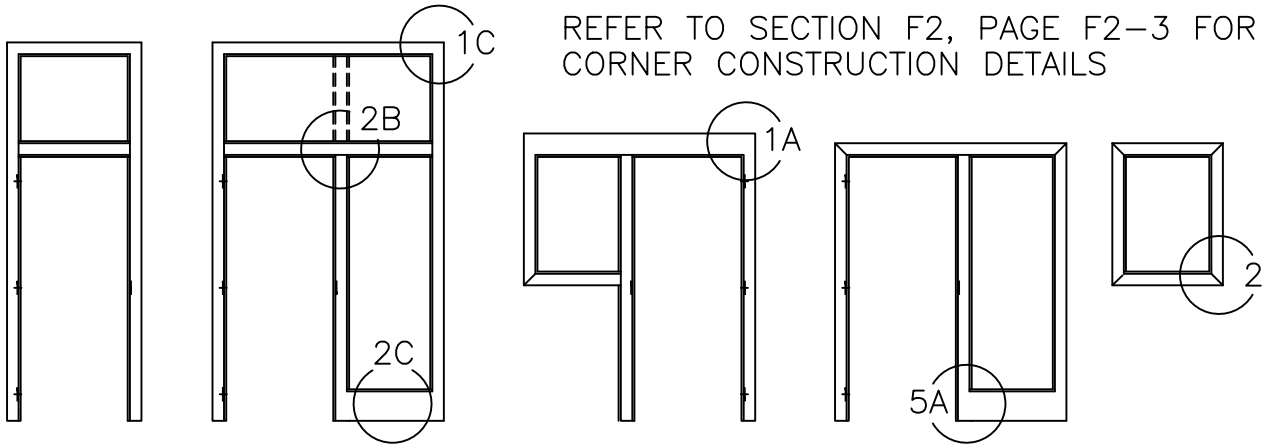
Hardware locations shown match Ceco standard doors.

REFER TO SECTION F2, PAGE F2–3 FOR CONSTRUCTION DETAILS OF ITEMS 1,3,4 & 5.



(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

REFER TO SECTION F2, PAGE F2–3 FOR CORNER CONSTRUCTION DETAILS



ELEVATION EXAMPLES

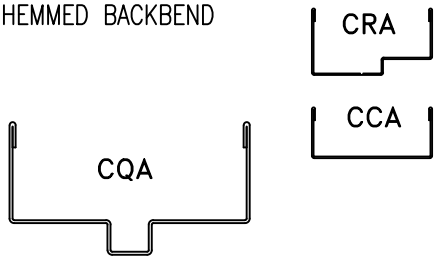
10/21/19

TECH-DATA

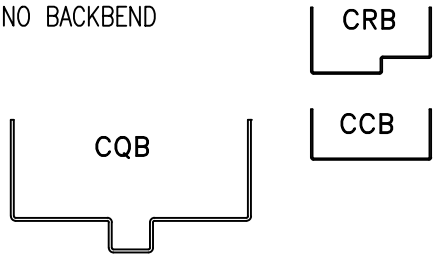
SERIES C CUSTOM PROFILES

F4-3

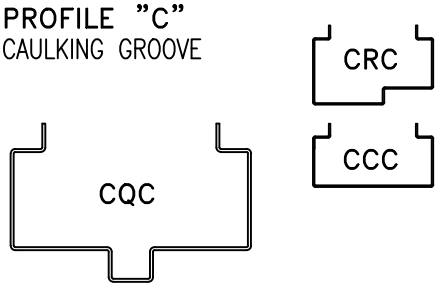
PROFILE "A"
HEMMED BACKBEND



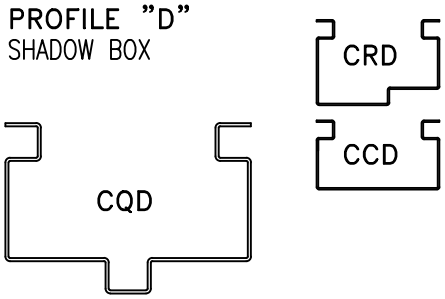
PROFILE "B"
NO BACKBEND



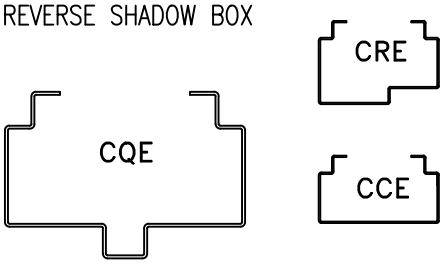
PROFILE "C"
CAULKING GROOVE



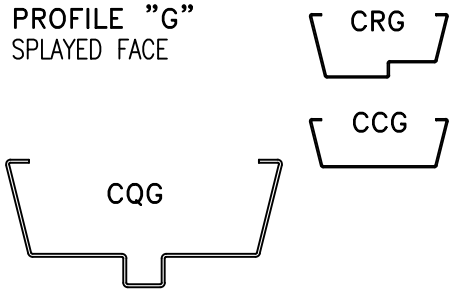
PROFILE "D"
SHADOW BOX



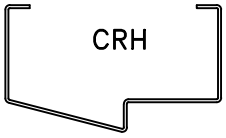
PROFILE "E"
REVERSE SHADOW BOX



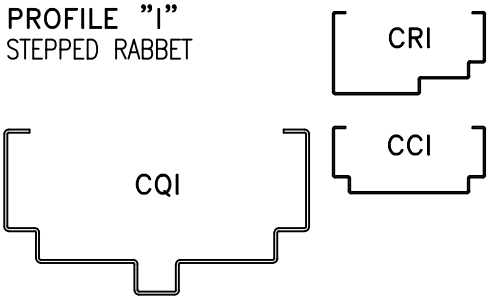
PROFILE "G"
SPLAYED FACE



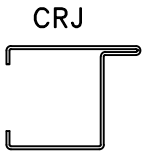
PROFILE "H"
SPLAYED SOFFIT



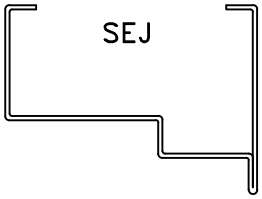
PROFILE "I"
STEPPED RABBET



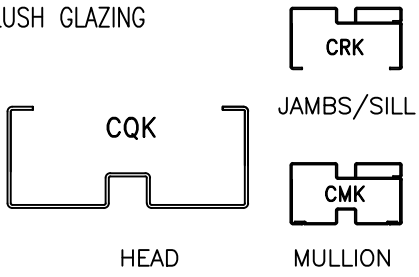
PROFILE "J"
HEMMED STOP



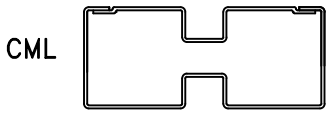
PROFILE "SEJ"
HEMMED STOP



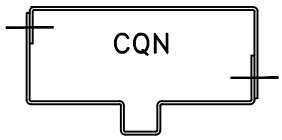
PROFILE "K"
FLUSH GLAZING



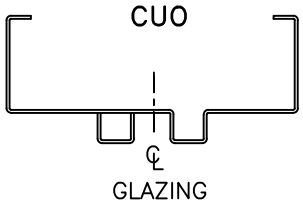
PROFILE "L"
FLUSH GLAZING – MULLION



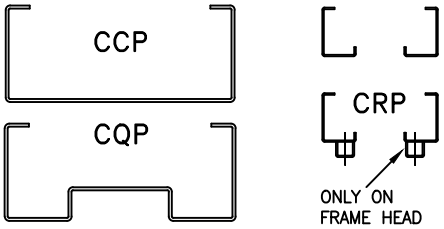
PROFILE "N"
ROUGH BUCK W/ SLIP JAMBS
SUB BUCK



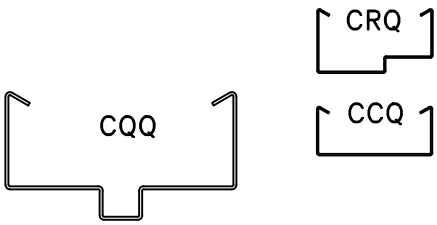
PROFILE "O"
CENTER GLAZED



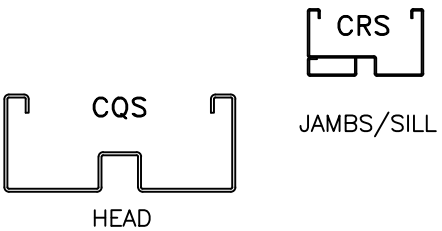
PROFILE "P"
POCKET SLIDE DOOR FRAME



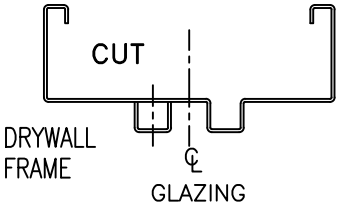
PROFILE "Q"
60° FLUSH PLASTER GROOVE



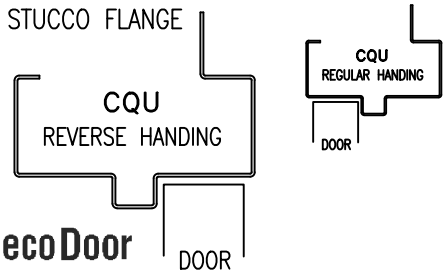
PROFILE "S"
FLUSHED GLAZED DRYWALL CONDITION



PROFILE "T"
CENTER GLAZED DRYWALL CONDITION



PROFILE "U"
STUCCO FLANGE



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PRODUCT SPECIFICATIONS:

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 DOOR FRAMES

LABELING AGENCIES:

- UNDERWRITERS LABORATORY
- 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.

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 gage 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 A 115.1 & 2. Plaster guards are 26 gage steel. Preparations for various other mechanical and electronic locks and strikes are also available. Optional hardware reinforcement (e.g. closer/holder) is 14 gage 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

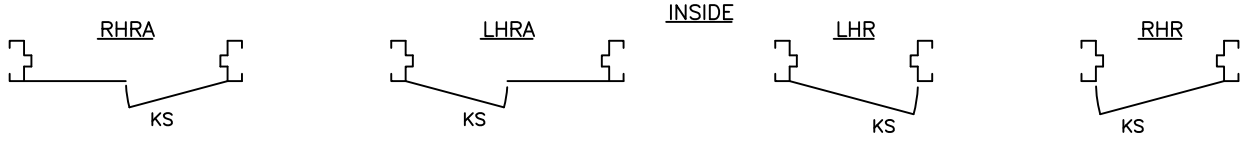
DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
16 Gage Steel	Heavy or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximum Duty	STD	OPT	OPT
12 Gage Steel *	ANSI/NAAMM	STD	OPT	–

*Profiles that are not available in 12 gage: A, H, J, L, & Q

PERFORMANCE

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

Physical Endurance Level:	Meets ANSI A250.4 Performance Test –– 16, 14, & 12 gage steel: Level A (1,000,000 Cycles)



"SUFFIX"A" = ACTIVE LEAF OF PAIRS

"KS" = KEY SIDE

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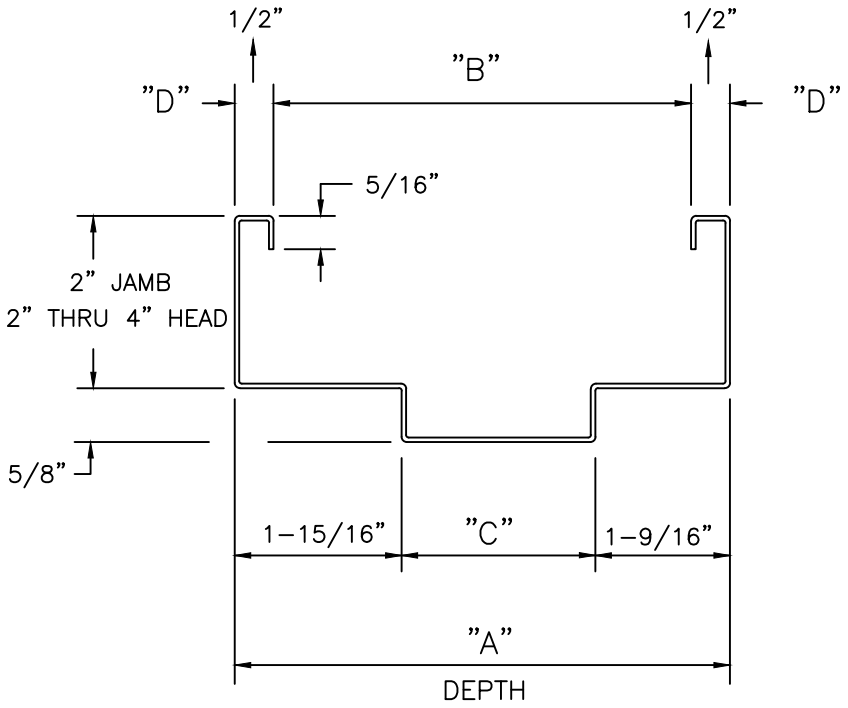
Return to Index

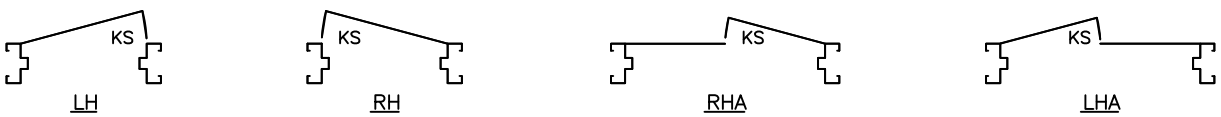
SERIES DU SLIP-ON DRYWALL FRAMES

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



OUTSIDE

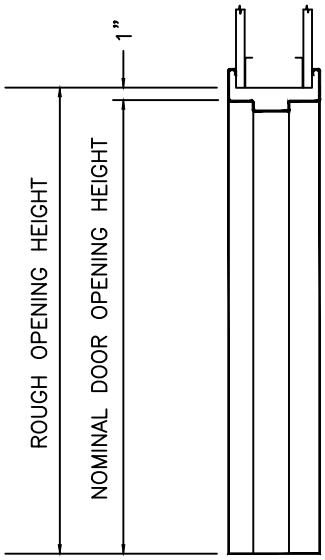
"KS" = KEY SIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

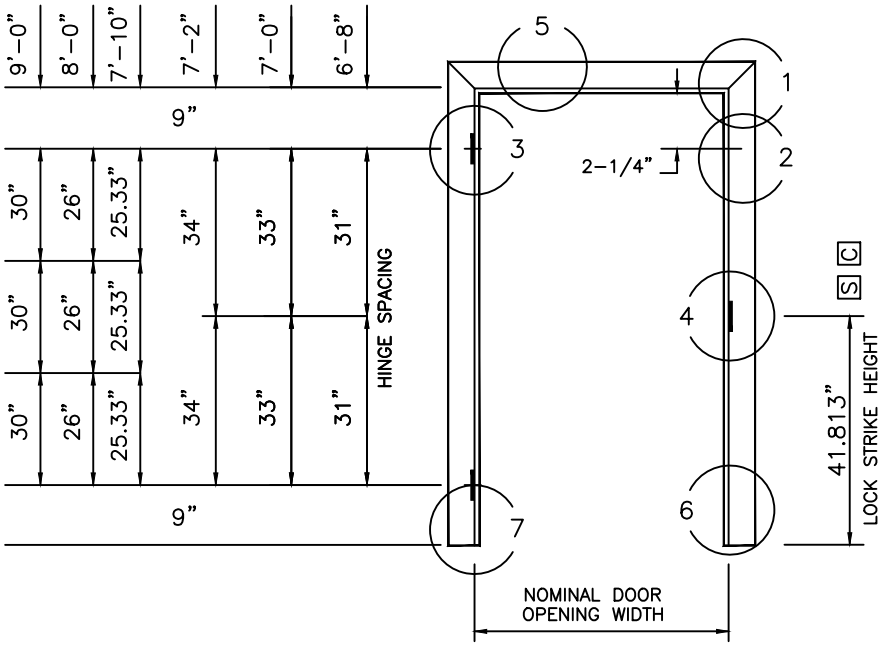
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

TECH-DATA

Hardware locations shown match Ceco standard doors.



VERTICAL SECTION



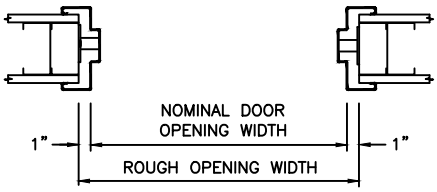
ELEVATION

NOTE #1:

STRIKE PLASTER GUARDS (SNAP-IN TYPE) ARE OPTIONAL.

☐ 1" DEEP

- 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 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.

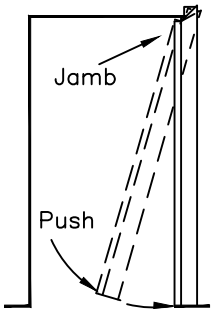


HORIZONTAL SECTION

INSTALLATION INSTRUCTIONS

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

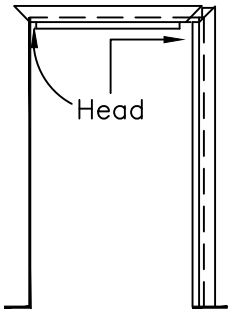
STEP 1



A. PUSH TOP OF ONE JAMB OVER THE WALL.

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

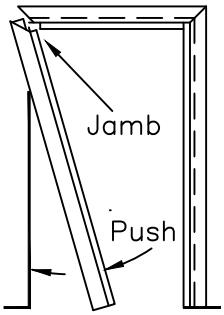
STEP 2



A. POSITION FRAME HEAD OVER THE WALL.

B. ALIGN HEAD TABS WITH JAMB SLOTS, THEN SLIDE HEAD TOWARD JAMB AND ENGAGE TABS IN SLOTS.

STEP 3

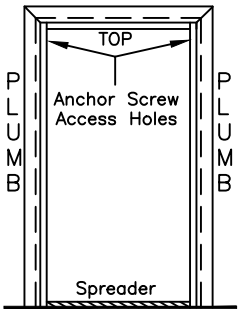


A. PUSH TOP OF REMAINING JAMB OVER WALL AND MATE TABS IN SLOTS.

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)

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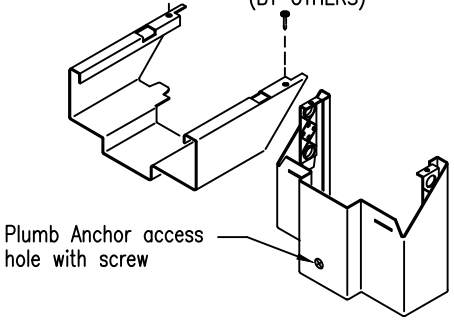
TECH-DATA

F5-3

KNOCKED DOWN CORNER CONSTRUCTION

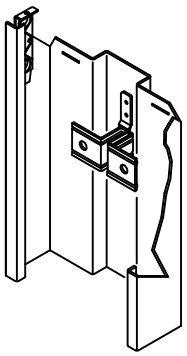
1

#8 x 1/2" PAN HEAD SMS (REQUIRED IF FIRE RATED) (RECOMMENDED IF NON-FIRE RATED) (BY OTHERS)



ADJUSTABLE PLUMB ANCHOR

2



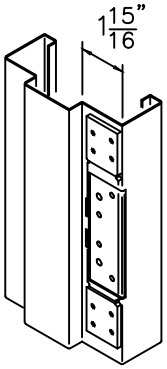
ONE EACH JAMB FOR OPENING HEIGHTS THRU 7'2". ONE ADDITIONAL FOR OPENING HEIGHTS > 7'2".

Adjust with screwdriver

Dual plumb anchors are applied in depths greater than 8-3/4".

HINGE PREPARATION

3



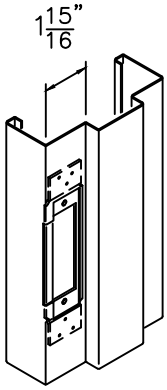
4-1/2" x .134" OR
4-1/2" x .180"
ANSI A156.7 TEMPLATE
7 GAGE STEEL REINFORCING

BACKSET: 5/16"

SEE NOTE #1

STRIKE PREPARATION

4



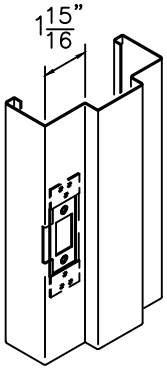
S

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

SEE NOTE #1

LOCK STRIKE PREPARATION

4



C

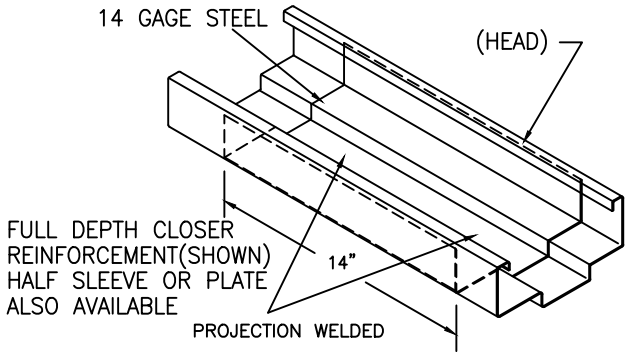
CYLINDRICAL (2-3/4")
ANSI A115.2 TEMPLATE
14 GAGE STEEL REINFORCING

ALSO AVAILABLE WITHOUT LIP CUTOUT FOR DEADLOCKS

SEE NOTE #1

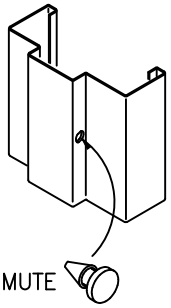
CLOSER REINFORCEMENT (OPTIONAL)

5



DOOR SILENCER (MUTE)

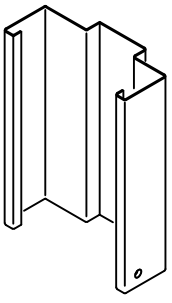
RUBBER MUTE
(3) / STRIKE JAMB
(2) / DOUBLE SWING HEAD



STANDARD SILL ANCHOR

6

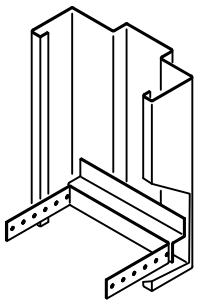
DIMPLED HOLE FOR #10 FH FASTENER. FASTENERS ARE BY CONTRACTOR AND MUST BE LONG ENOUGH TO ENGAGE STUD.



OPTIONAL SILL STRAP ANCHOR

7

FASTENERS ARE BY CONTRACTOR AND MUST ENGAGE STUD.



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(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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PRODUCT SPECIFICATIONS:

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"		

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 A250.8-1998. 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 gage 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 14 gage 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 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.

FIRE DOOR 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 OR 1-1/2 HR
- MAX. SIZE: 14 GAGE STEEL
  16 GAGE STEEL
  4'0" x 9'0" SINGLE
  8'0" x 9'0" PAIR
  18 GAGE STEEL
  4'0" x 7'0" SINGLE
  6'10" x 7'0" PAIR

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

MATERIAL

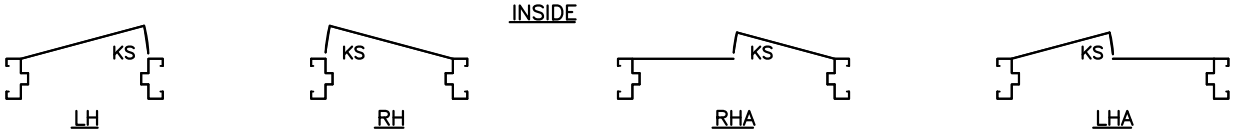
DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
18 Gage Steel	Standard Duty	STD	OPT	N/A
16 Gage Steel	Standard, Heavy, or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximum Duty	STD	OPT	OPT

18 gage steel for use with 1-3/4" wood doors.

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test -- 16 & 14 gage steel: Level A (1,000,000 Cycles)

INSIDE



LH RH RHA LHA

OUTSIDE

"KS" = KEY SIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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RETURN TO TOP

CecoDoor
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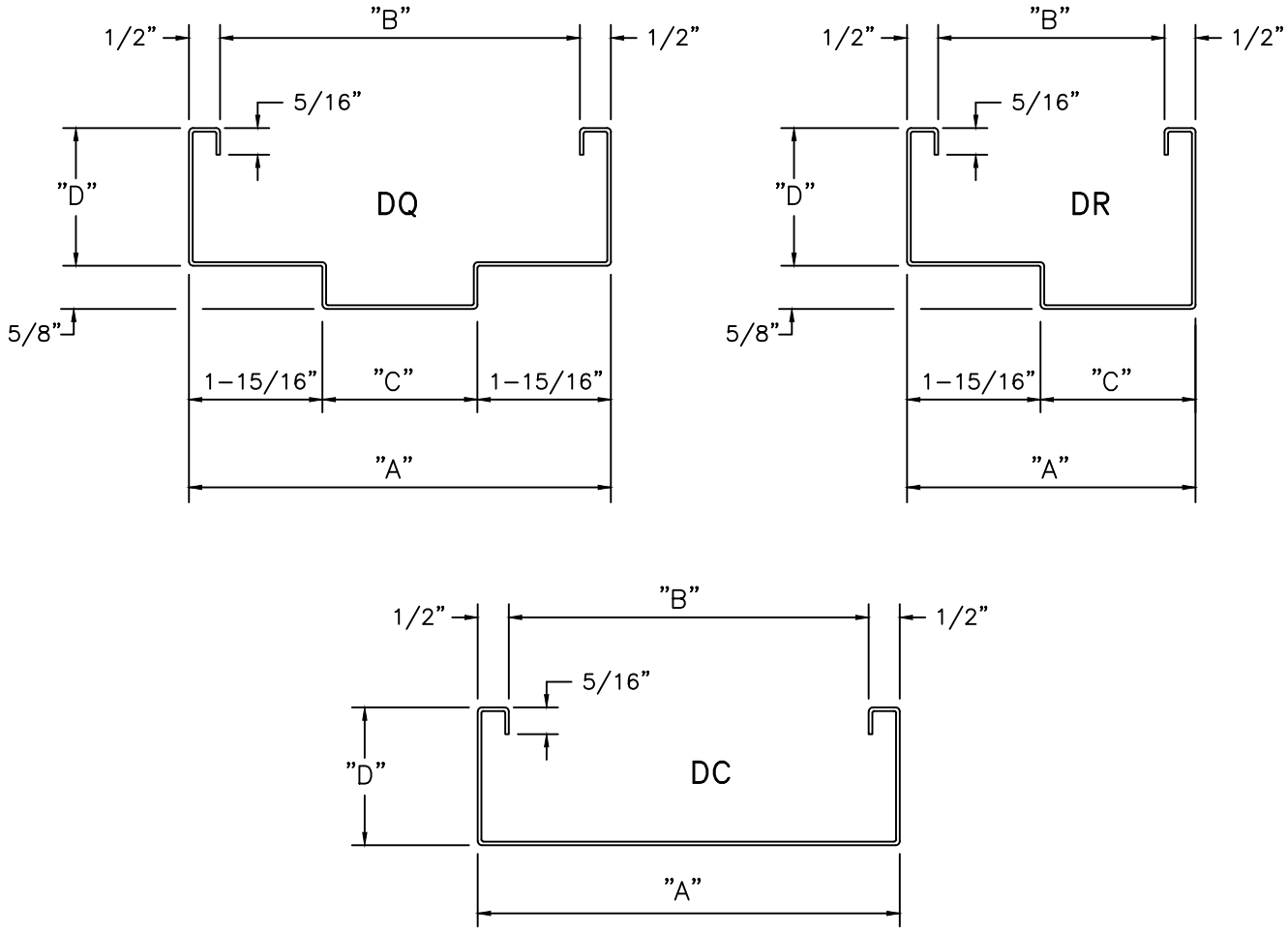
SERIES DQ, DR, AND DC SLIP-ON DRYWALL FRAMES

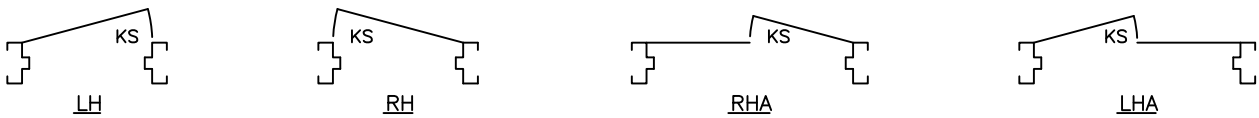
FOR 1-3/4" THICK DOORS
HANDED



(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

PROFILE	A (DEPTH)	B (THROAT)	C (SOFFIT WIDTH)	D (FACE)	
				JAMB	HEAD
SINGLE RABBET	3" thru 5–7/8"	2" thru 4–7/8"	"A" (–) 1–15/16	2"	2"
DOUBLE RABBET	4–7/8" thru 14"	3–7/8" thru 13"	"A" (–) 2(1–15/16)	2"	2" or 4"
CASED OPENING	3" thru 14"	2" thru 13"	OMIT	2"	2"

INSIDE



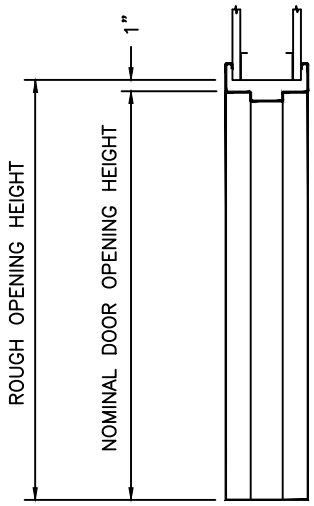
OUTSIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

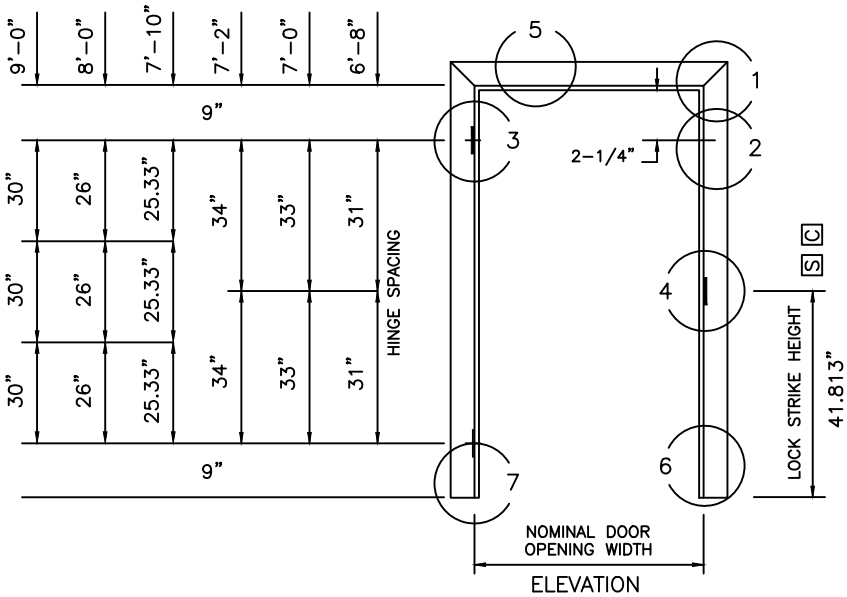
"KS" = KEY SIDE

F6-2

Hardware locations shown match Ceco standard doors. Double rabbet profiles are shown, single rabbet and cased opening profiles are similar.



VERTICAL SECTION



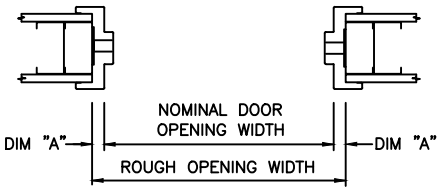
ELEVATION

NOTE #1:

STRIKE PLASTER GUARDS (SNAP-IN TYPE) ARE OPTIONAL.

☐ 1" DEEP

- 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 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.



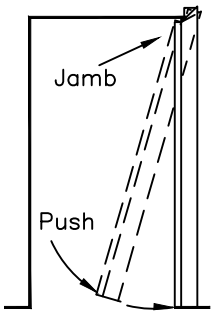
HORIZONTAL SECTION

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.

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

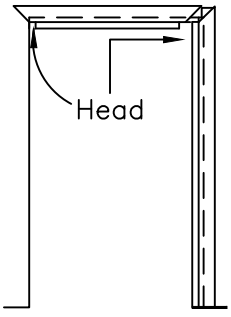
STEP 1



A. PUSH TOP OF ONE JAMB OVER THE WALL.

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

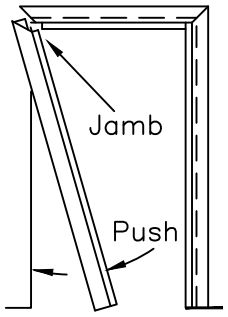
STEP 2



A. POSITION FRAME HEAD OVER THE WALL.

B. ALIGN HEAD TABS WITH JAMB SLOTS, THEN SLIDE HEAD TOWARD JAMB AND ENGAGE TABS IN SLOTS.

STEP 3

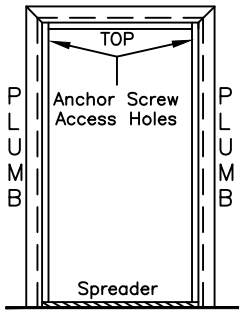


A. PUSH TOP OF REMAINING JAMB OVER WALL AND MATE TABS IN SLOTS.

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)

10/21/19

TECH-DATA

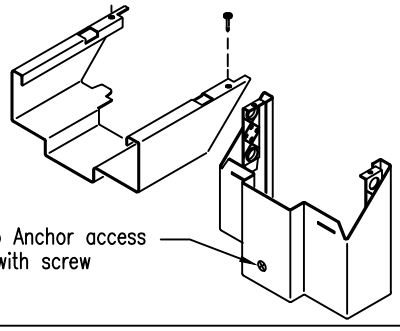
SERIES DQ, DR, AND DC DRYWALL FRAMES

F6-3

KNOCKED DOWN CORNER CONSTRUCTION

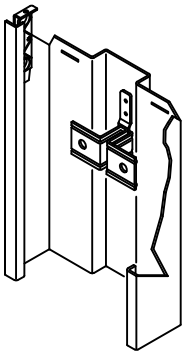
1

#8 x 1/2" PAN HEAD SMS (RECOMMENDED IF NON-FIRE RATED) (REQUIRED IF FIRE RATED) (BY OTHERS)



ADJUSTABLE PLUMB ANCHOR

2



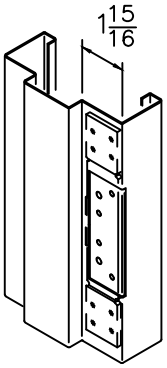
ONE EACH JAMB FOR OPENING HEIGHTS THRU 7'2". ONE ADDITIONAL FOR OPENING HEIGHTS > 7'2".

Adjust with screwdriver

Dual plumb anchors are applied in depths greater than 8-3/4".

HINGE PREPARATION

3



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

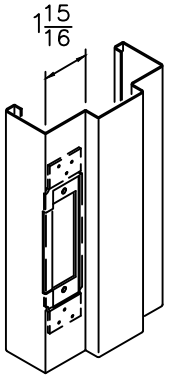
BACKSET: 5/16"

SEE NOTE #1

STRIKE PREPARATION

4

S



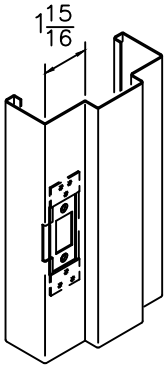
UNIVERSAL (4-7/8")
ANSI A115.1 & 2 TEMPLATE
12 GAGE STEEL REINFORCING
STANDARD FOR 1-3/4" DOORS

SEE NOTE #1

LOCK STRIKE PREPARATION

4

C



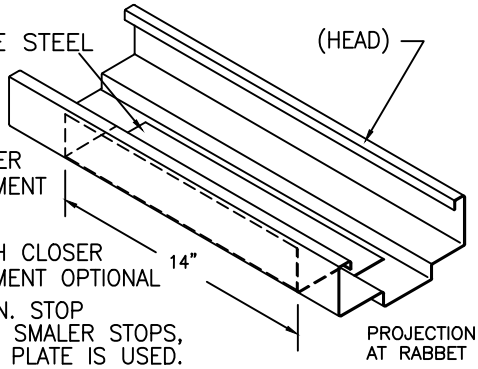
CYLINDRICAL (2-3/4")
ANSI A115.2 TEMPLATE
14 GAGE STEEL REINFORCING

ALSO AVAILABLE WITHOUT LIP CUTOUT FOR DEADLOCKS

SEE NOTE #1

CLOSER REINFORCEMENT (OPTIONAL)

5



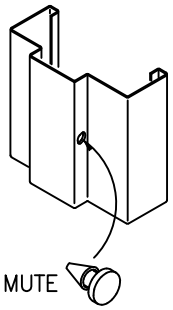
HALF CLOSER REINFORCEMENT (SHOWN)

FULL DEPTH CLOSER REINFORCEMENT OPTIONAL

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

PROJECTION WELDED AT RABBET

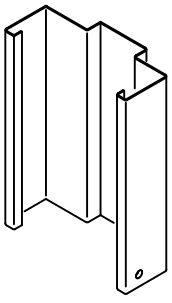
DOOR SILENCER (MUTE)



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

STANDARD SILL ANCHOR

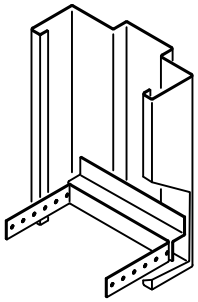
6



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

OPTIONAL SILL STRAP ANCHOR

7



FASTENERS ARE BY CONTRACTOR AND MUST ENGAGE STUD.

(Conversion: 1" = 25.4 mm, e.g. 1-3/4" = 44.45 mm)

10/21/19

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RETURN TO TOP

CecoDoor

ASSA ABLOY

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 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" 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 gage 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 14 gage 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.

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 DOOR 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. OR 1–1/2 HR
- MAX. SIZE: 14 GAGE STEEL
  16 GAGE STEEL
  4'0" x 9'0" SINGLE
  8'0" x 9'0" PAIR

  18 GAGE 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.

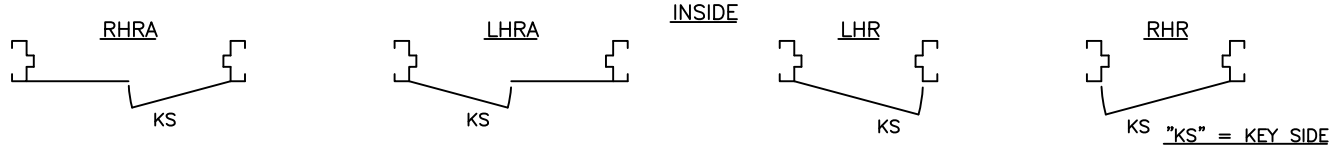
MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
18 Gage Steel	Standard Duty	STD	OPT	N/A
16 Gage Steel	Standard, Heavy, or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximum Duty	STD	OPT	OPT

18 gage steel for use with 1–3/4" wood doors.

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test –– 16 & 14 gage steel: Level A (1,000,000 cycles)



SUFFIX "A" = ACTIVE LEAF OF PAIRS

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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RETURN TO TOP

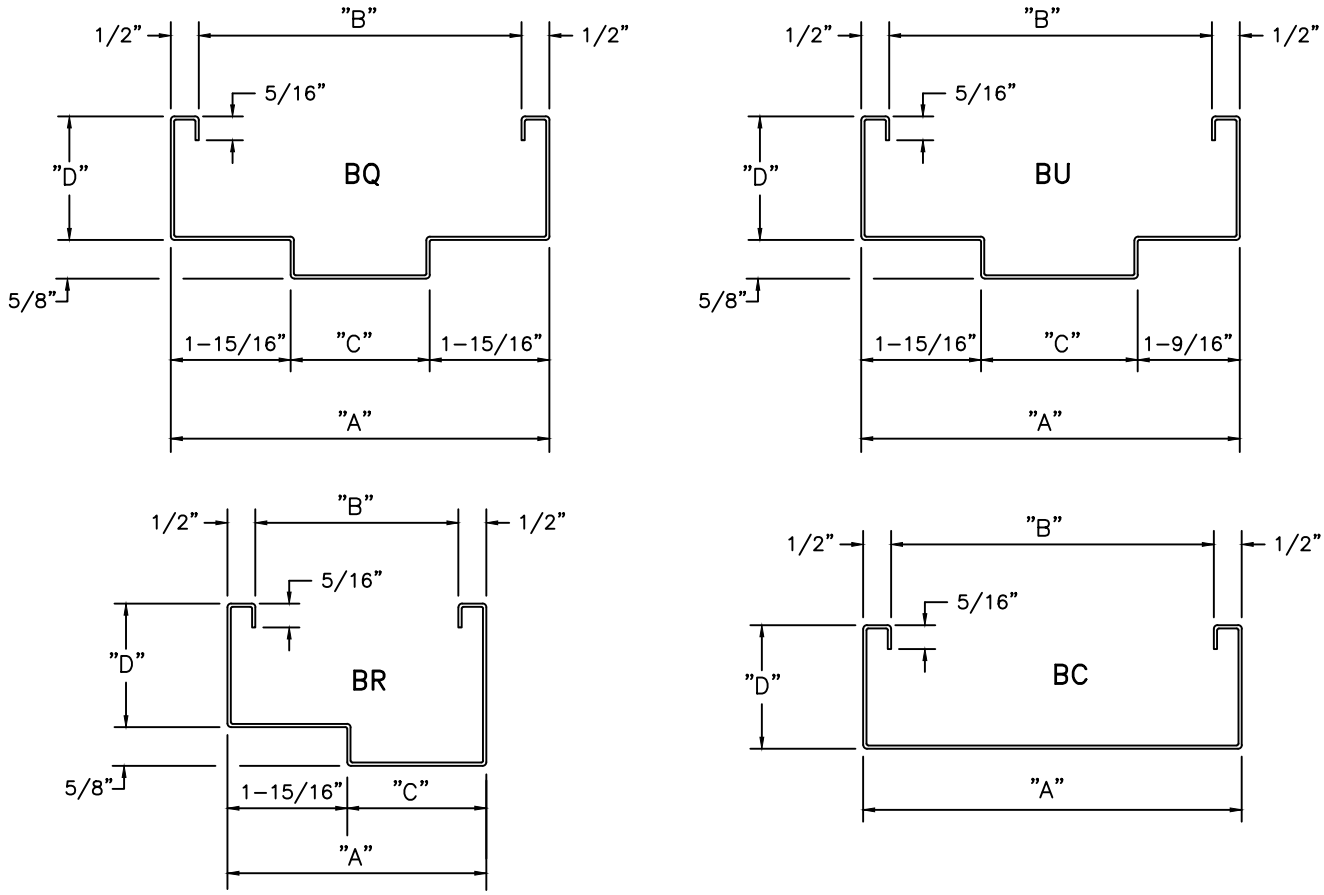
Ceco Door

ASSA ABLOY

Return to Index

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

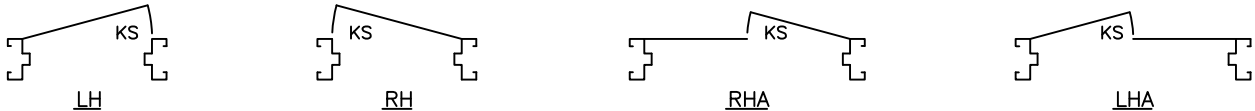
FOR 1-3/4" DOORS
HANDED



(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

PROFILE	A (DEPTH)	B (THROAT)	C (SOFFIT WIDTH)	D (FACE)	
				JAMB	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 17–7/8"	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"

INSIDE



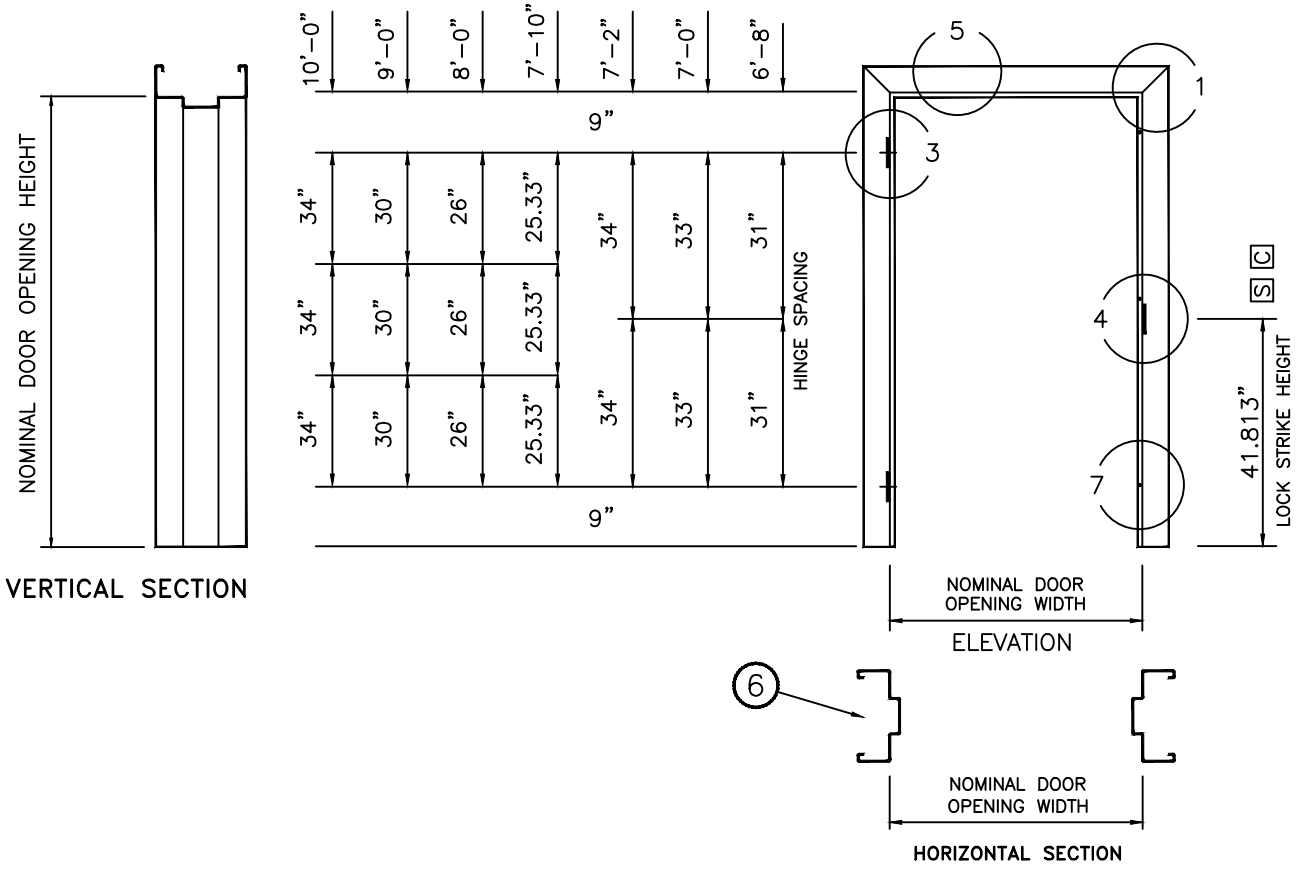
OUTSIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

"KS" = KEY SIDE

F7-2

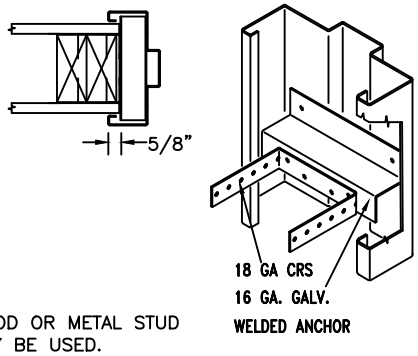
Hardware locations shown match Ceco standard doors. Double rabbet profiles are shown, single rabbet and cased opening profiles are similar.



(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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.

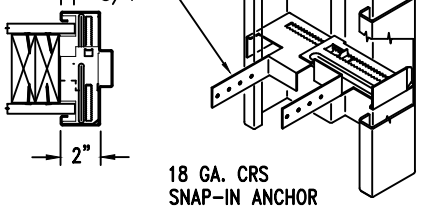
WOOD STUD "Z" STRAP ANCHOR **WSZS** (6)



WOOD OR METAL STUD MAY BE USED.

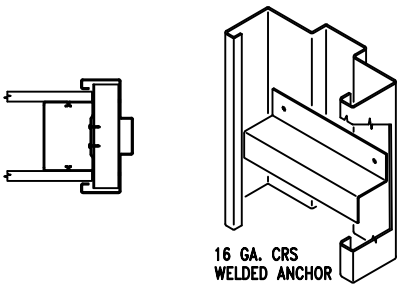
ADJUSTABLE ANCHOR FOR STUD WALLS **ADJ/STUD** (6)

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



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

METAL STUD "Z" ANCHOR **MSZ1** (6)



10/22/19

RETURN TO TOP

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ASSA ABLOY

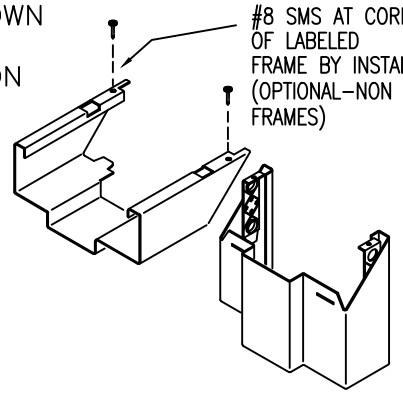
TECH-DATA

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

F7-3

KNOCKED DOWN CORNER CONSTRUCTION

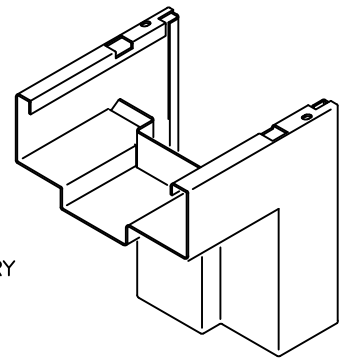
1



WELDED CORNERS

1

FRAME IS SETUP AND WELDED WITH TEMPORARY SPREADER AT SILL.



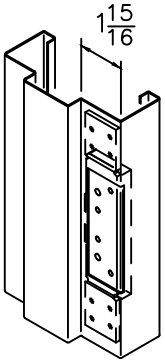
HINGE PREPARATION

3

4–1/2" x .134" OR
4–1/2" x .180"
ANSI A156.7 TEMPLATE

7 GAGE STEEL REIN–FORCEMENT AND 26 GAGE PLASTER GUARD

BACKSET: 5/16"

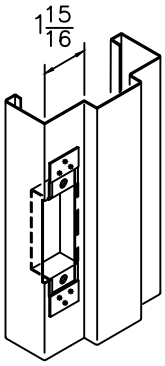


LOCK STRIKE PREPARATION

4

[S]

UNIVERSAL (4–7/8")
ANSI A115.1 & 2 TEMPLATE
16 GAGE STEEL REINFORCING WITH EXTRUDED SCREW HOLES PROVIDES EQUIVALENT THREAD ENGAGEMENT EQUAL TO 14 GAGE



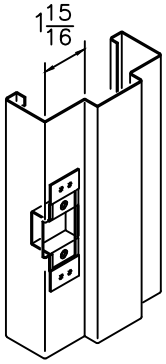
LOCK STRIKE PREPARATION

4

[C]

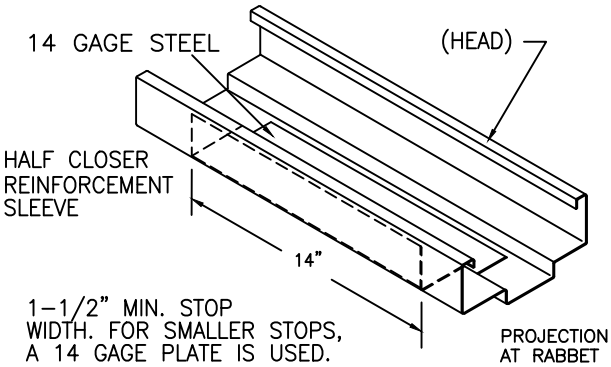
CYLINDRICAL (2–3/4")
ANSI A115.2 TEMPLATE
16 GAGE STEEL REINFORCING WITH EXTRUDED SCREW HOLES PROVIDES EQUIVALENT THREAD ENGAGEMENT EQUAL TO 14 GAGE

ALSO AVAILABLE WITHOUT LIP NOTCH FOR DEADBOLTS.



CLOSER REINFORCEMENT (OPTIONAL)

5

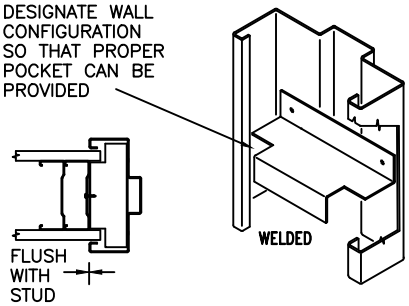


METAL STUD "Z" ANCHOR

MSZ2

6

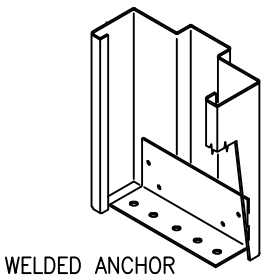
DESIGNATE WALL CONFIGURATION SO THAT PROPER POCKET CAN BE PROVIDED



SPECIAL SIZE FLOOR ANCHOR

SA

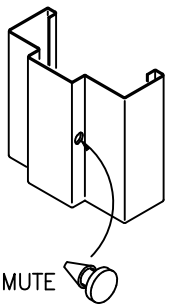
6



ONE PIECE

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)

10/22/19

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RETURN TO TOP

Ceco Door

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TECH-DATA

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 DOOR FRAMES

LABELING AGENCIES:

- UNDERWRITERS LABORATORY
- WARNOCK HERSEY
- FACTORY MUTUAL

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

- RATING: 20 MIN, 3/4 HR, 1–1/2 HR, OR 3 HR.
- MAX. SIZE: 14 GAGE STEEL
  16 GAGE STEEL
  4'0" x 9'0" SINGLE
  8'0" x 9'0" PAIR
  18 GAGE STEEL
  4'0" x 7'0" SINGLE
  6'10" x 7'0" PAIR

Single or double rabbet profiles. Not all sizes, gages, 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 gage 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 gage steel formed steel sleeve or 14 gage 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.

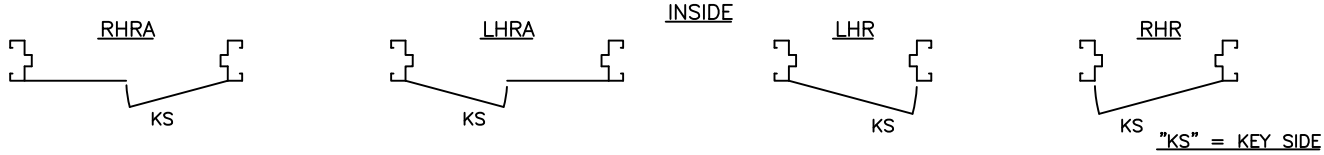
MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
18 Gage Steel	Standard Duty	STD	OPT	N/A
16 Gage Steel	Standard, Heavy, or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximum Duty	STD	OPT	OPT

18 gage steel for use with 1–3/4" wood doors.
Also available in 18 gage steel for 1–3/8" doors ...Ask for details

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test –– 16 & 14 gage steel: Level A (1,000,000 cycles)



SUFFIX "A" = ACTIVE LEAF OF PAIRS

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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RETURN TO TOP

Ceco Door
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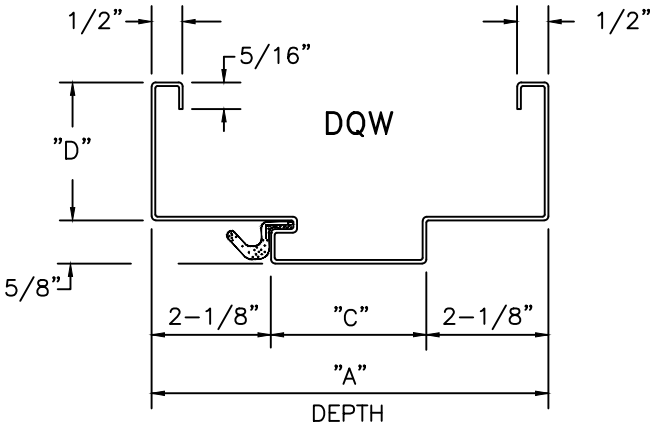
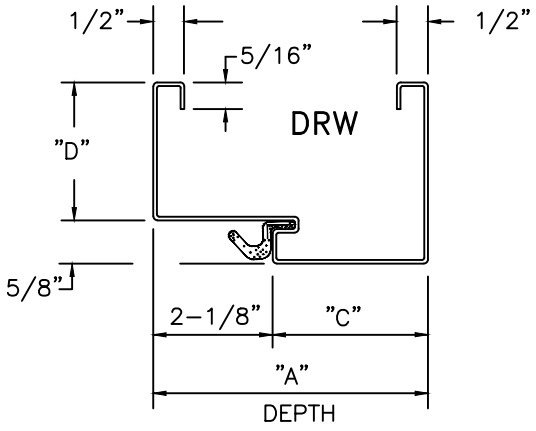
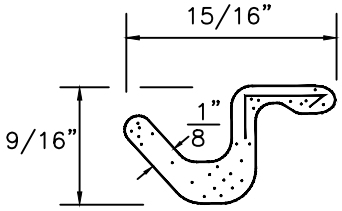
Return to Index

SERIES DQW AND DRW GASKETED STEEL FRAMES

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







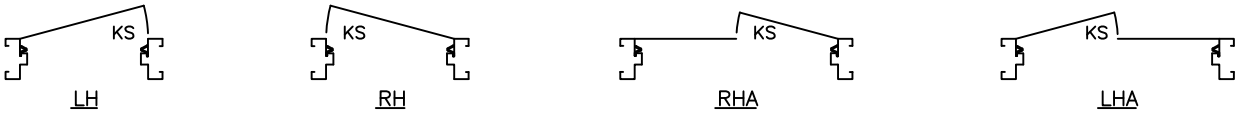
FOAM FILLED GASKET
COMPRESSION TYPE
FIRE RATED

NOTE: Gasket ships loose when frame is prime painted. do not install gasket until frame has been finish painted.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

PROFILE	A (DEPTH)	B (THROAT)	C (SOFFIT WIDTH)	D (FACE)	
				JAMB	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" thru 13"	"A" (–) 2(2–1/8")	2"	2" or 4"

INSIDE



OUTSIDE

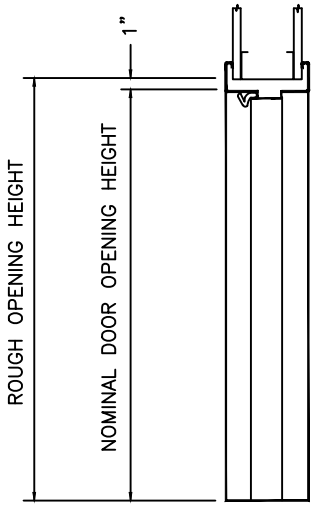
SUFFIX "A" = ACTIVE LEAF OF PAIRS

"KS" = KEY SIDE

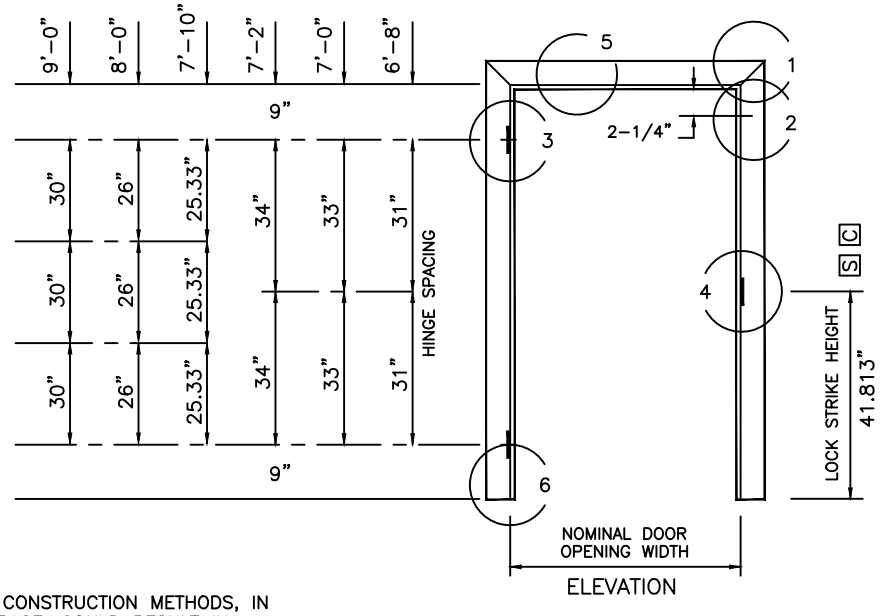
11/05/19

F8–2

Hardware locations shown match Ceco standard doors. Double rabbet profile is shown, single rabbet profile is similar.

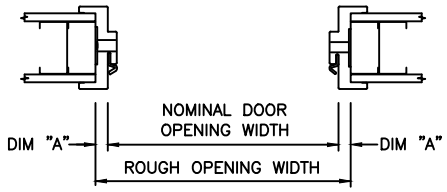


VERTICAL SECTION



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.



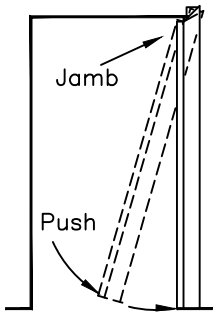
HORIZONTAL SECTION

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.

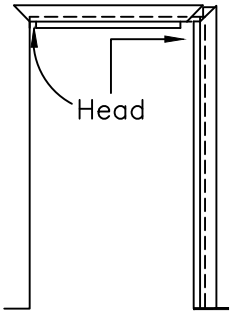
	DIM "A"
SINGLE RABBET	1" or *1–3/8"
DOUBLE RABBET	1"

STEP 1



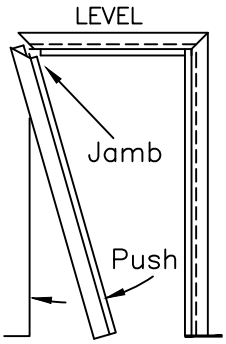
A. PUSH TOP OF ONE JAMB OVER THE WALL.
B. HOLD TOP OF JAMB IN PLACE, THEN PUSH BOTTOM IN TOWARDS AND OVER WALL.

STEP 2



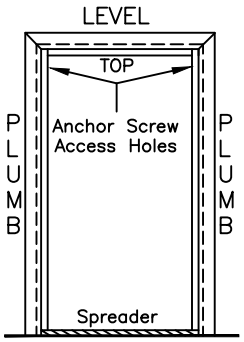
A. POSITION FRAME HEAD OVER THE WALL.
B. ALIGN HEAD TABS WITH JAMB SLOTS, THEN SLIDE HEAD TOWARD JAMB AND ENGAGE TABS IN SLOTS.

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.
D. INSTALL MUTES.

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(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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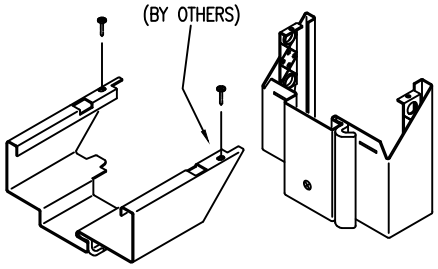
TECH-DATA

SERIES DQW AND DRW KERFED FRAMES

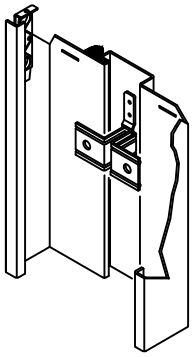
F8-3

1 KNOCKED DOWN CORNER CONSTRUCTION



Components are shipped "knocked down" and assembled at the job site

2 ADJUSTABLE PLUMB ANCHOR

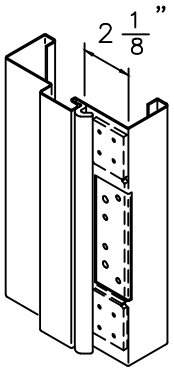


ONE EACH JAMB

Adjust with screwdriver

Dual plumb anchors are applied in depths greater than 8–3/4".

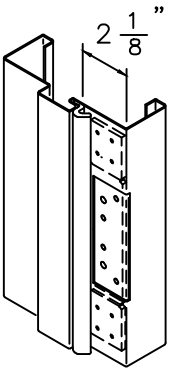
3 HINGE PREPARATION



4–1/2" x .134" OR
4–1/2" x .180"
ANSI A156.7 TEMPLATE
7 GAGE STEEL REINFORCEMENT

SEE NOTE #1

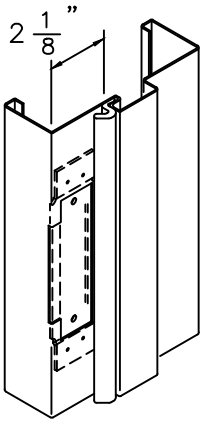
3 HINGE PREPARATION



5" x .146" OR
5" x .190"
ANSI A156.7 TEMPLATE
7 GAGE STEEL REINFORCEMENT

SEE NOTE #1

4 LOCK STRIKE PREPARATION

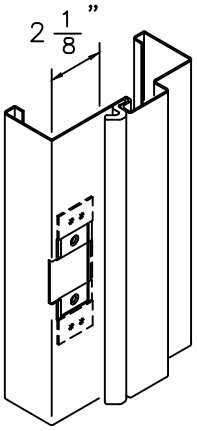


[S]

UNIVERSAL (4–7/8")
ANSI A115.1 & 2 TEMPLATE
12 GAGE STEEL REINFORCEMENT

SEE NOTE #1

4 LOCK STRIKE PREPARATION (OPTIONAL)



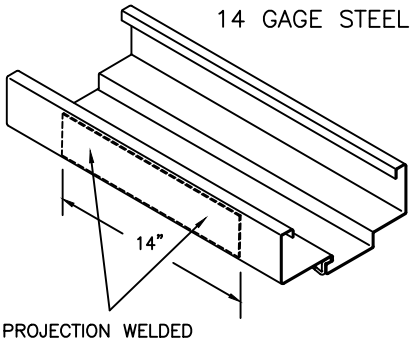
[C]

CYLINDRICAL (2–3/4")
ANSI A115.2 TEMPLATE
16 GAGE STEEL REINFORCEMENT
(Holes are drawn to provide 1/8" minimum thread depth)

ALSO AVAILABLE WITHOUT LIP NOTCH FOR DEADBOLTS.

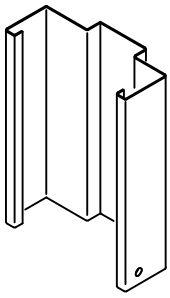
SEE NOTE #1

5 CLOSER REINFORCEMENT (OPTIONAL)



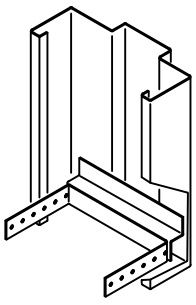
6 STANDARD SILL ANCHOR

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



6 OPTIONAL SILL STRAP ANCHOR

FASTENER IS BY CONTRACTOR AND MUST ENGAGE STUD.



(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

11/5/19

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BACK TO TOP

Ceco Door

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F8–4

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.

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"	

Series DQW and DRW 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 gage maximum size is 30x70 single & 60x70 double swing.

FIRE DOOR FRAMES

LABELING AGENCY:
- WARNOCK HERSEY
- UNDERWRITERS LABORATORY

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

- RATING: 20 MIN, 3/4 HR, OR 1–1/2 HR
- MAX. SIZE: 14 GAGE STEEL 16 GAGE STEEL 4'0" x 9'0" SINGLE 8'0" x 9'0" PAIR
  18 GAGE STEEL 3'0" x 7'0" SINGLE 6'0" x 7'0" PAIR

Single or double rabbet profiles. Not all sizes are available in all ratings.

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 gage 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 gage 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.

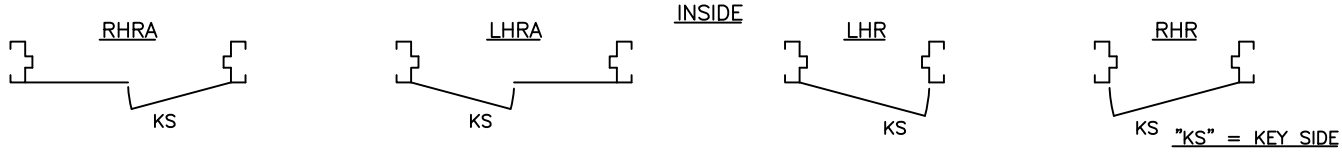
MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
18 Gage Steel	Standard Duty	STD	OPT	N/A
16 Gage Steel	Standard, Heavy, or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximum Duty	STD	OPT	OPT

18 gage steel for use with 1–3/4" wood doors.
Also available in 18 gage steel for 1–3/8" doors ...Ask for details

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test –– 16 & 14 gage steel: Level A (1,000,000 cycles)



SUFFIX "A" = ACTIVE LEAF OF PAIRS

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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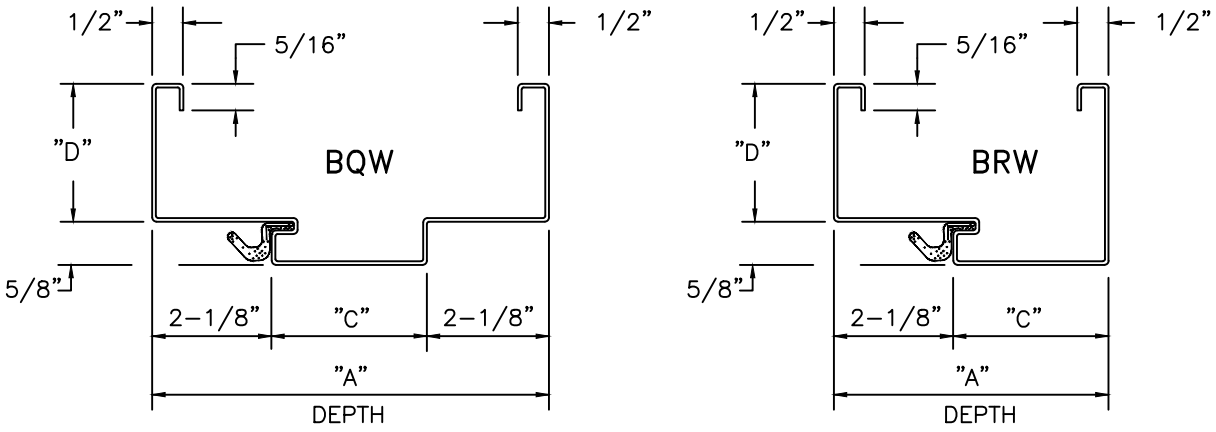
RETURN TO TOP

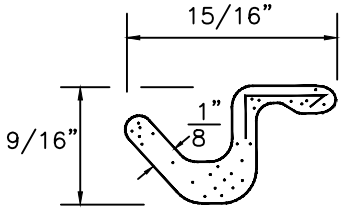
CecoDoor ASSA ABLOY

Return to Index

SERIES BQW AND BRW GASKETED STEEL FRAMES

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





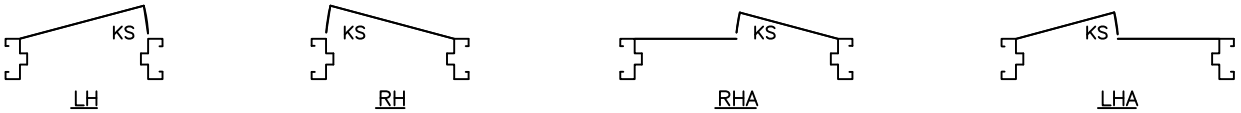
FOAM FILLED GASKET
COMPRESSION TYPE
FIRE RATED

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

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

PROFILE	A (DEPTH)	B (THROAT)	C (SOFFIT WIDTH)	DIMENSION "D" STD. FACE SIZES	
				JAMB	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



OUTSIDE

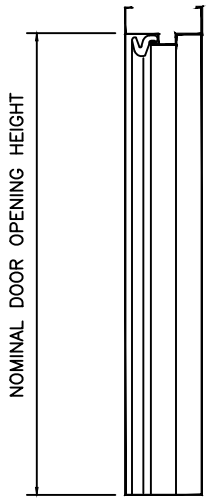
SUFFIX "A" = ACTIVE LEAF OF PAIRS

"KS" = KEY SIDE

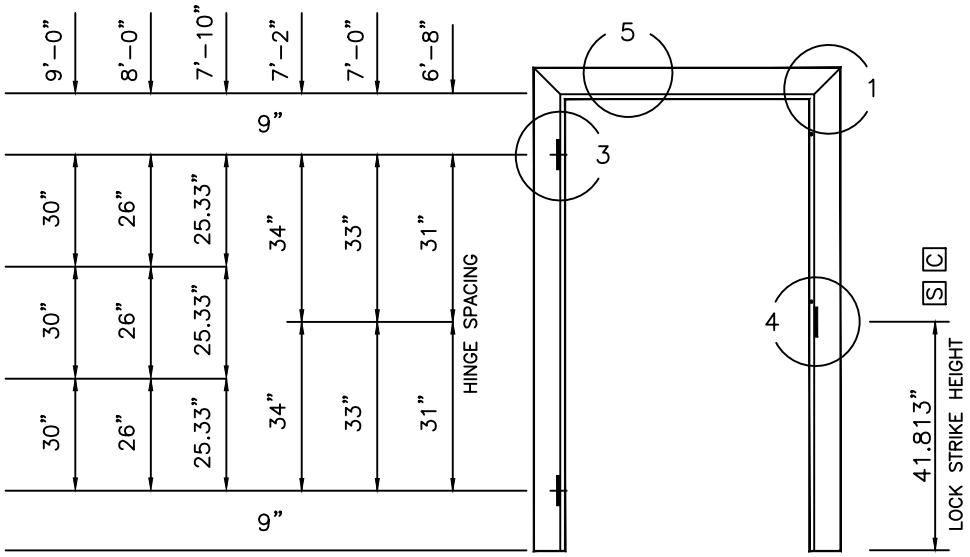
TECH-DATA

SERIES BQW AND BRW BEFORE DRYWALL FRAMES

Hardware locations shown match Ceco standard doors.
Double rabbet profile is shown, single rabbet is similar.



VERTICAL SECTION

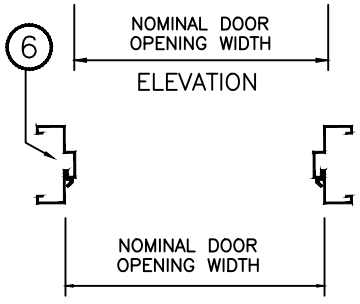


(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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 & QUANITY MAY VARY BY DEPTH AND PROFILE.
ADDITIONAL ANCHOR OPTIONS SHOWN IN SECTION F13.

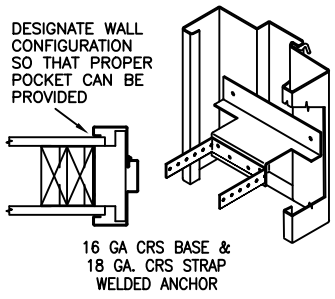


HORIZONTAL SECTION

WOOD STUD "Z" STRAP ANCHOR WSZS (FLUSH)

6

FOR STANDARD AND SPECIAL DEPTH FRAMES



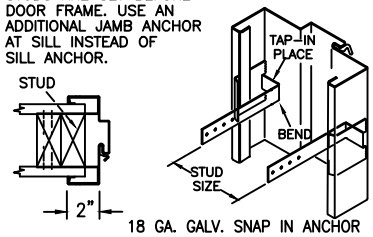
(USED ALSO FOR METAL STUD WALLS)

WOOD STUD ANCHOR XP/ANC

6

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

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.



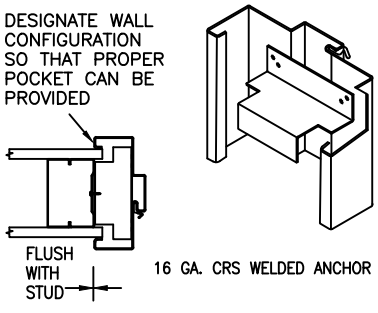
18 GA. GALV. SNAP IN ANCHOR

(Used also for METAL STUD Walls)

METAL STUD "Z" ANCHOR MSZ2

6

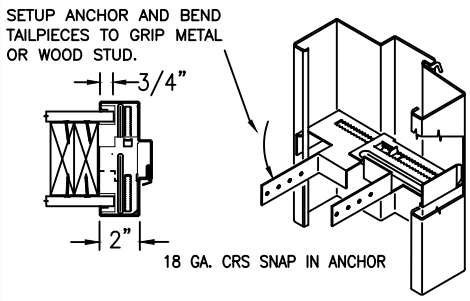
SPECIAL DEPTH OPTIONAL ANCHOR



ADJUSTABLE ANCHOR FOR STUD WALLS ADJ/STUD

6

FOR STANDARD AND SPECIAL DEPTH FRAMES

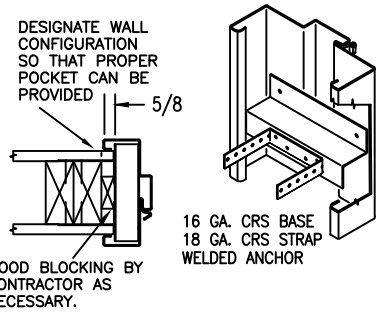


3-3/4" thru 8-3/4" depth

WOOD STUD "Z" STRAP ANCHOR WSZS (RECESSED)

6

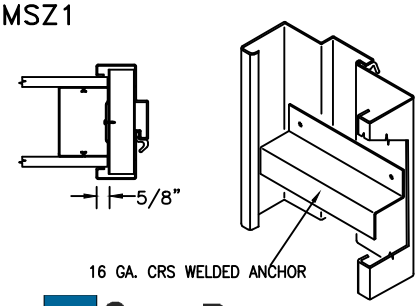
FOR STANDARD AND SPECIAL DEPTH FRAMES



(Used also for METAL STUD Walls)

METAL STUD "Z" ANCHOR MSZ1

6



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RETURN TO TOP

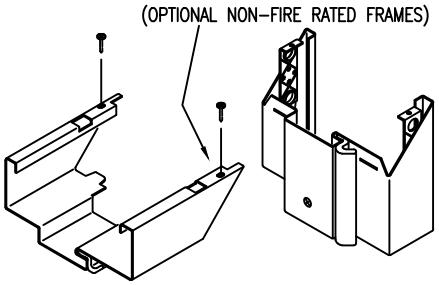
TECH-DATA

SERIES BQW AND BRW BEFORE DRYWALL FRAMES

F8A-3

KNOCKED DOWN CORNER CONSTRUCTION

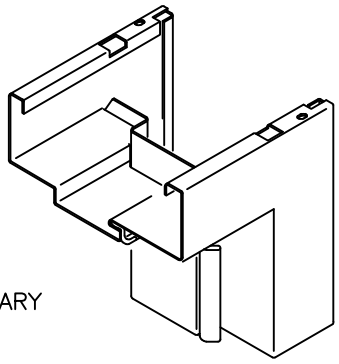
1



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

WELDED CORNERS

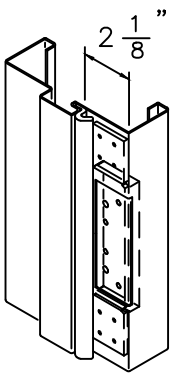
1



FRAME IS SETUP AND WELDED WITH TEMPORARY SPREADER AT SILL.

HINGE PREPARATION

3



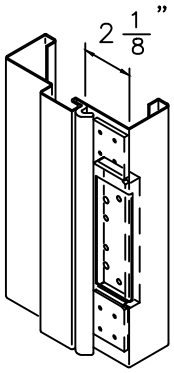
4-1/2" x .134" OR
4-1/2" x .180"
ANSI A156.7 TEMPLATE

7 GAGE STEEL REINFORCEMENT

HINGE PLASTER GUARDS ARE APPLIED.

HINGE PREPARATION

3



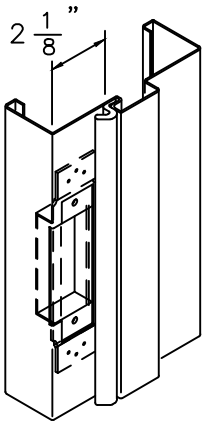
5" x .146" OR
5" x .190"
ANSI A156.7 TEMPLATE

7 GAGE STEEL REINFORCEMENT

HINGE PLASTER GUARDS ARE APPLIED.

LOCK STRIKE PREPARATION

4



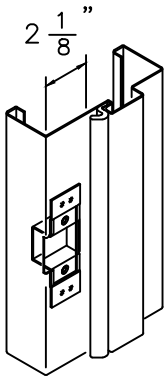
[S]

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

STRIKE PLASTER GUARDS ARE APPLIED.

LOCK STRIKE PREPARATION (OPTIONAL)

4



[C]

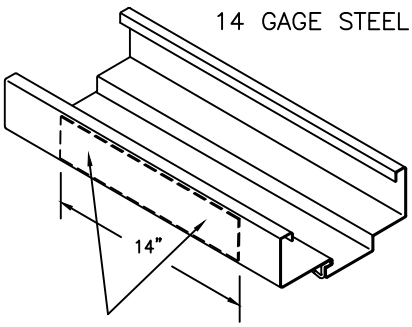
CYLINDRICAL (2-3/4")
ANSI A115.2 TEMPLATE
16 GAGE STEEL REINFORCEMENT
(Holes are drawn to provide 1/8" minimum thread depth)

ALSO AVAILABLE WITHOUT LIP NOTCH FOR DEADBOLTS.

STRIKE PLASTER GUARDS ARE APPLIED.

CLOSER REINFORCEMENT (OPTIONAL)

5

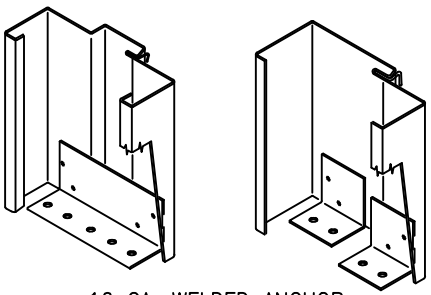


FLOOR ANCHOR SA

6

STANDARD DOUBLE RABBET ONE PIECE ANCHOR

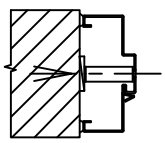
SINGLE RABBET



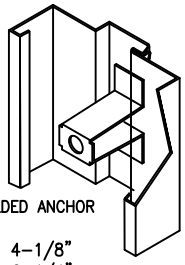
16 GA. WELDED ANCHOR

EXISTING OPENING ANCHOR EO/N

6



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 & QUANITY MAY VARY WITH DEPTH OR PROFILE

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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RETURN TO TOP

CecoDoor

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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 gage 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 gage steel formed sleeve or 14 gage 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.

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 DOOR FRAMES

LABELING AGENCIES:

- UNDERWRITERS LABORATORY
- 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 GAGE STEEL 4'0" x 9'0" SINGLE 8'0" x 9'0" PAIR
  16 GAGE STEEL

Single or double rabbet profiles. Not all sizes & gauges are available in all ratings.

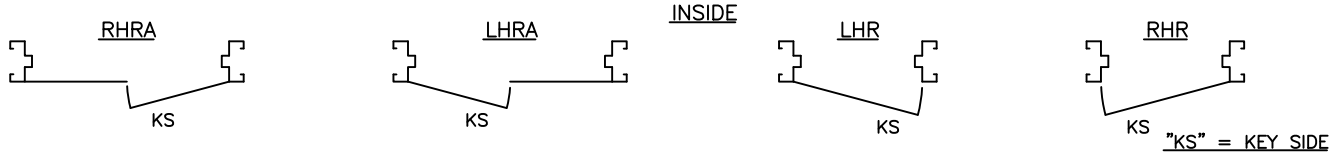
MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
18 Gage Steel	Standard Duty	STD	OPT	N/A
16 Gage Steel	Standard, Heavy, or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximum Duty	STD	OPT	OPT

18 gage steel for use with 1–3/4" wood doors.
Also available in 18 gage steel for 1–3/8" doors ...Ask for details

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test –– 16 & 14 gage steel: Level A (1,000,000 cycles)



SUFFIX "A" = ACTIVE LEAF OF PAIRS

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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RETURN TO TOP

Ceco Door

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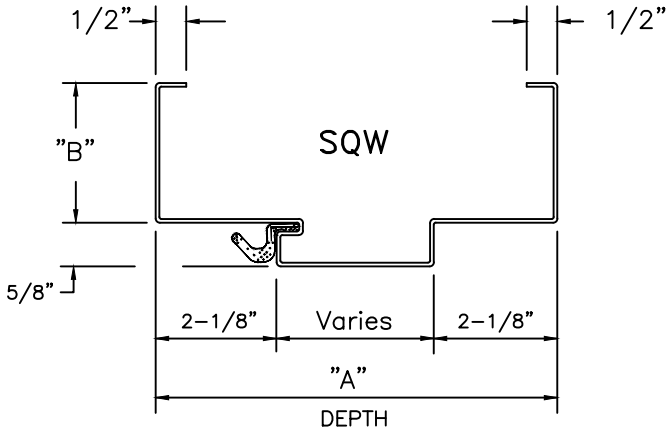
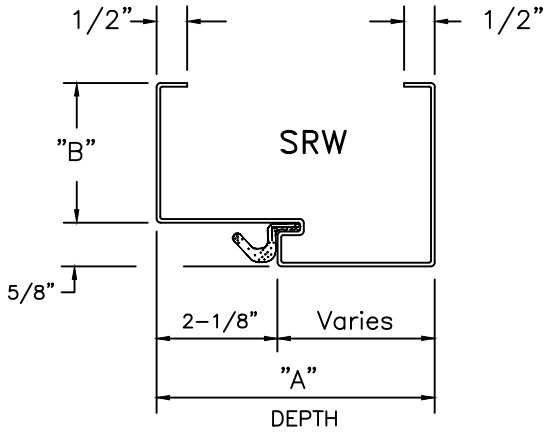
ASSA ABLOY

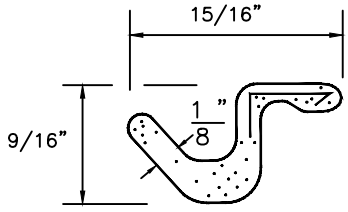
Return to Index

SERIES SQW AND SRW GASKETED STEEL FRAMES

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







FOAM FILLED GASKET
COMPRESSION TYPE
FIRE RATED

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

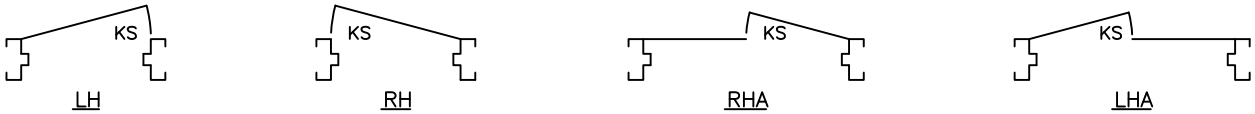
NOTE: DO NOT INSTALL GASKET PRIOR TO PAINTING FRAME.

PROFILE	Dim A (Depth)
DOUBLE RABBET	5–1/2" THRU 14"
SINGLE RABBET	3–5/8" THRU 6"

FACE	Dim B
HEAD	1" Thru 4"
JAMBS	1" Thru 4"
SILL	2" Thru 12"
TUBES	1" or 2"

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



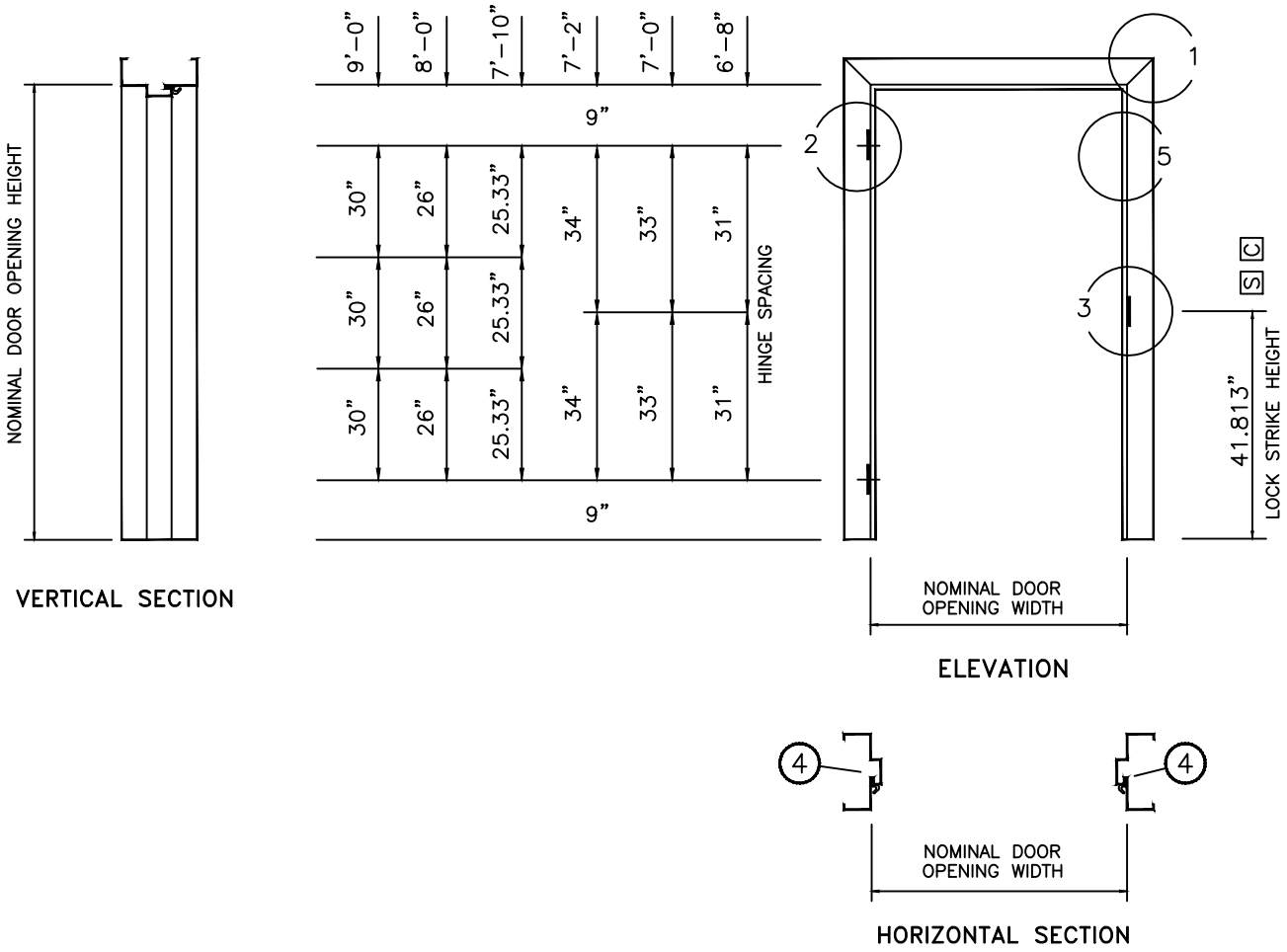
OUTSIDE

"KS" = KEY SIDE

TECH-DATA

SERIES SQW AND SRW KERFED FRAMES

Hardware locations shown match Ceco standard doors.



VERTICAL SECTION

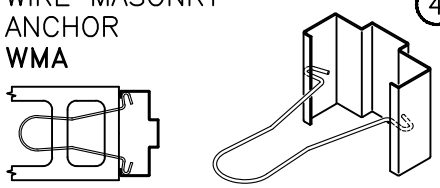
ELEVATION

HORIZONTAL SECTION

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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.

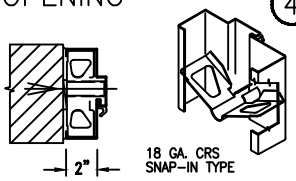
WIRE MASONRY ANCHOR
WMA



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

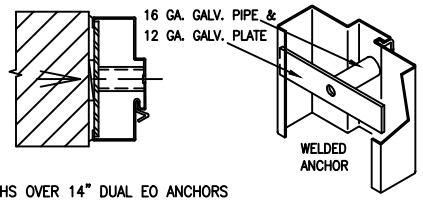
7 ga. galv. steel Snap-in type

EXISTING OPENING ANCHOR
EO



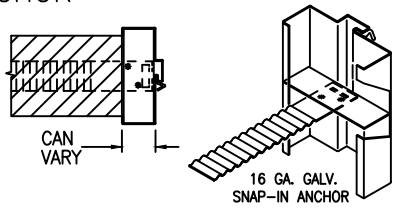
SQW PROFILE — EO/SF6: 6-1/4" THRU 6-3/4" DEPTH
EO/SF8: 6-7/8" THRU 8-3/4" DEPTH

EXISTING OPENING PIPE & PLATE ANCHOR
EO



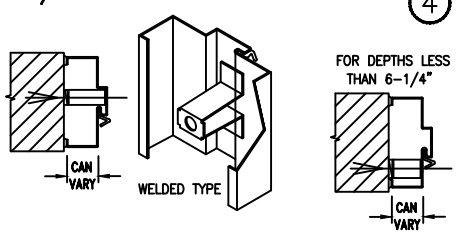
DEPTHS OVER 14" DUAL EO ANCHORS SIDE BY SIDE ACROSS SOFFIT, WILL BE APPLIED.

MASONRY "T" ANCHOR
MT



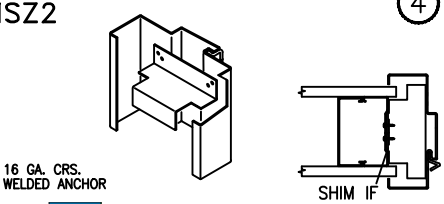
SUPPLIED FOR ALL DEPTHS OTHER THAN SHOWN FOR ADJUSTABLE MT ANCHOR

EO/N



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

METAL STUD "Z" ANCHOR
MSZ2



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RETURN TO TOP

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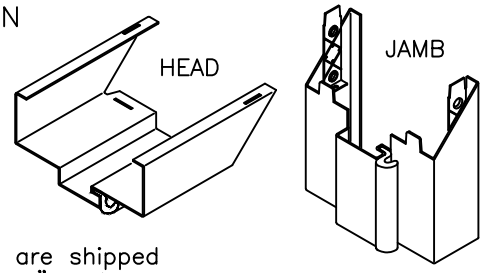
TECH-DATA

F9-3

KNOCKED DOWN CORNER CONSTRUCTION

1

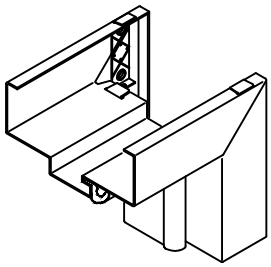


Components are shipped "knocked down" and assembled at the job site

WELDED CORNERS

1

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.

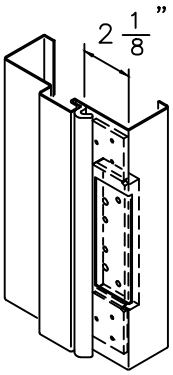


HINGE PREPARATION

2

4–1/2" x .134" OR
4–1/2" x .180"
ANSI A156.7 TEMPLATE

7 GAGE STEEL REINFORCEMENT & 26 GAGE STEEL PLASTER GUARD

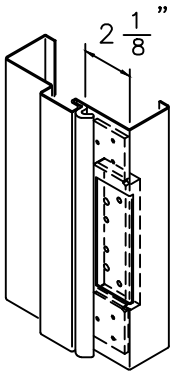


HINGE PREPARATION

2

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

7 GAGE STEEL REINFORCEMENT & 26 GAGE STEEL PLASTER GUARD

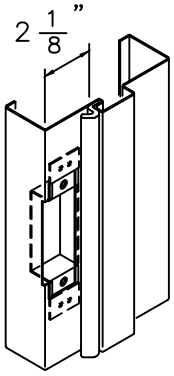


LOCK STRIKE PREPARATION

3

S

UNIVERSAL (4–7/8")
ANSI A115.1 & 2 TEMPLATE
16 GAGE STEEL REINFORCING WITH EXTRUDED SCREW HOLES PROVIDES EQUIVALENT THREAD ENGAGEMENT EQUAL TO 14 GAGE



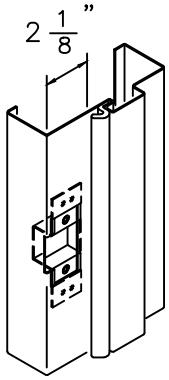
LOCK STRIKE PREPARATION (OPTIONAL)

3

C

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

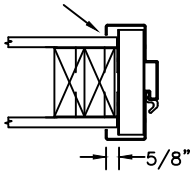
ALSO AVAILABLE WITHOUT LIP NOTCH FOR DEADBOLTS.

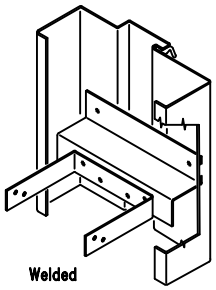


WOOD STUD "Z" STRAP ANCHOR WSZS

4

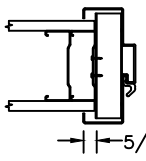
DESIGNATE WALL CONFIGURATION SO THAT PROPER POCKET CAN BE PROVIDED

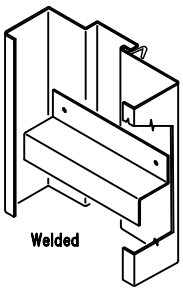




METAL STUD "Z" ANCHOR MSZ1

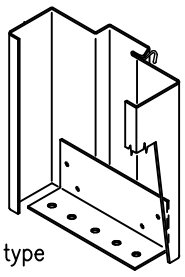
4





SPECIAL SIZE FLOOR ANCHOR SA

4



Welded type

ONE PIECE

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

11/05/19

RETURN TO TOP

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ASSA ABLOY

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 gage 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 gage steel. Optional hardware reinforcement (for O/H closer or holder) is 14 gage 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.

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 DOOR FRAMES

LABELING AGENCY:
- UNDERWRITERS LABORATORY
- 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 9'0" SINGLE 8'0" x 9'0" PAIR

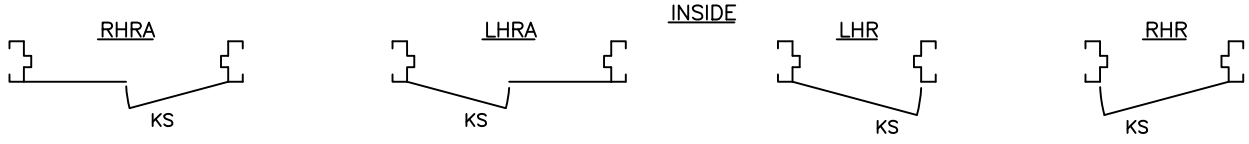
Not all ratings are available in all sizes, elevations, and materials.
Hourly ratings are not shown on label unless rating is less than 3 hours.

MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
16 Gage Steel	Standard, Heavy, or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximum Duty	STD	OPT	OPT

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test –– 16 & 14 gage steel: Level A (1,000,000 Cycles)



"KS" = KEY SIDE

OUTSIDE

"SUFFIX"A" = ACTIVE LEAF OF PAIRS

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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RETURN TO TOP

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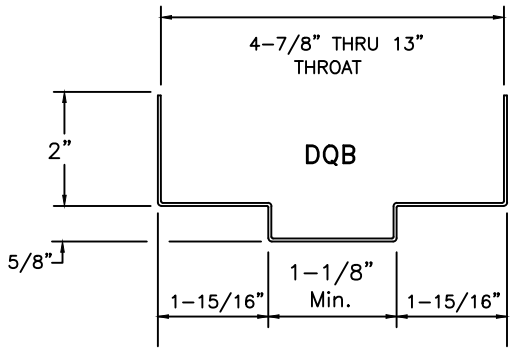
ASSA ABLOY

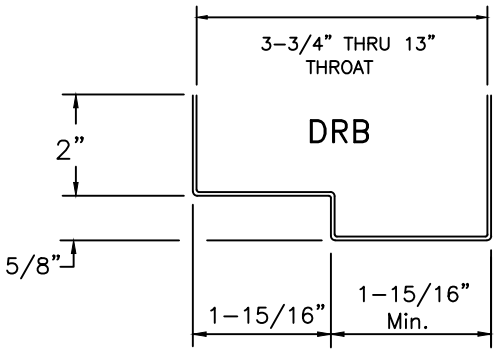
SERIES DQB, DUB, DRB & DCB
SLIP-ON DRYWALL NAILER FRAMES

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

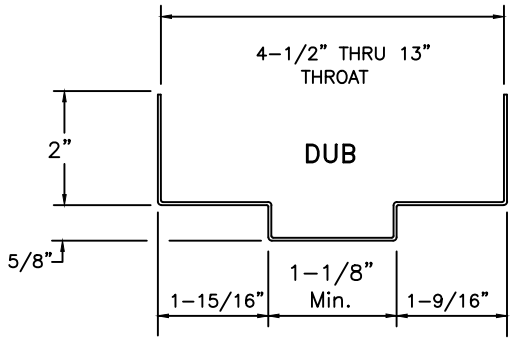
EQUAL RABBET



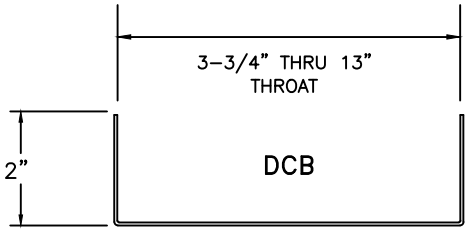
SINGLE RABBET



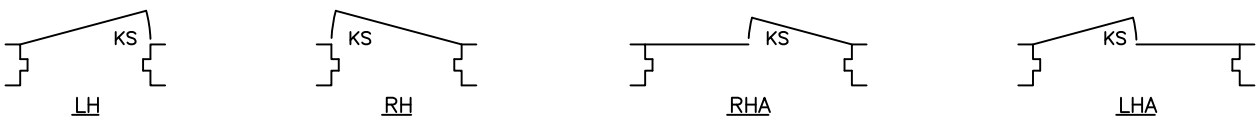
UNEQUAL RABBET



CASED OPEN



INSIDE



OUTSIDE

SUFFIX "A" = ACTIVE LEAF OF PAIRS

"KS" = KEY SIDE

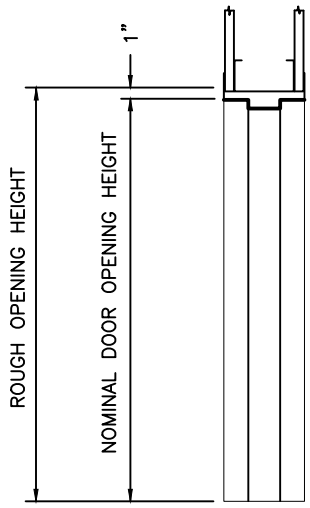
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

TECH-DATA

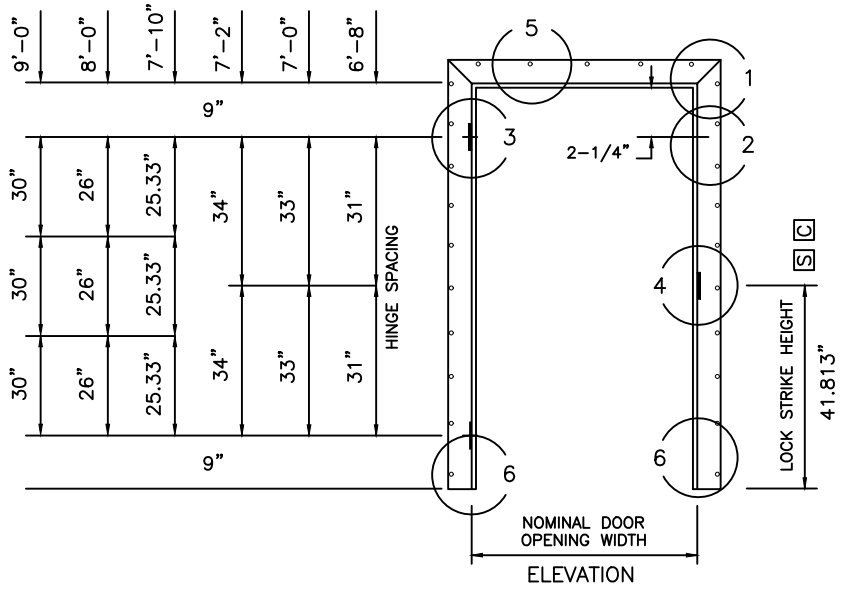
SERIES DQB, DUB, DRB & DCB DRYWALL NAILER FRAME

F10–2

Hardware locations shown match Ceco standard doors. Double rabbet profiles are shown, single rabbet and cased opening profiles are similar.



VERTICAL SECTION



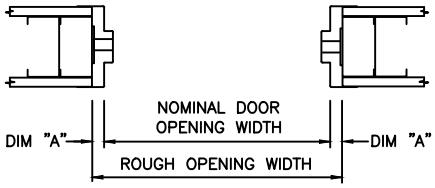
ELEVATION

NOTE #1:

STRIKE PLASTER GUARDS (SNAP–IN TYPE) ARE OPTIONAL.

☐ 1" DEEP

- 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 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.



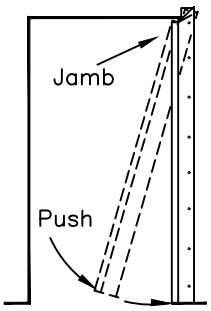
HORIZONTAL SECTION

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.

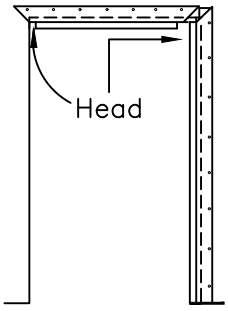
	DIM "A"
SINGLE RABBET	1" or * 1–3/8"
DOUBLE RABBET	1"
CASED OPENING	1–3/8"

STEP 1



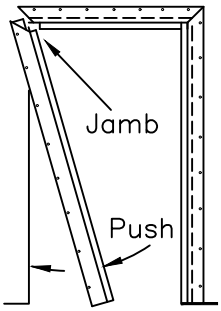
A. PUSH TOP OF ONE JAMB OVER THE WALL.
B. HOLD TOP OF JAMB IN PLACE, THEN PUSH BOTTOM IN TOWARDS AND OVER WALL.

STEP 2



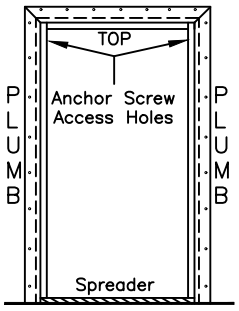
A. POSITION FRAME HEAD OVER THE WALL.
B. ALIGN HEAD TABS WITH JAMB SLOTS, THEN SLIDE HEAD TOWARD JAMB AND ENGAGE TABS IN SLOTS.

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.

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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Return to Top

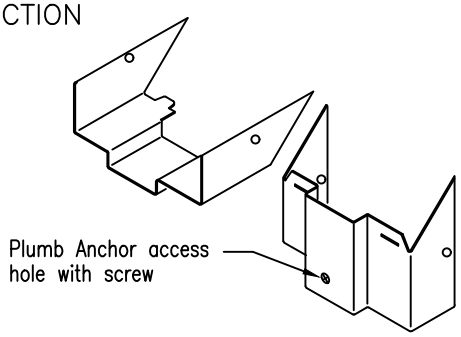
TECH-DATA

SERIES DQB, DUB, DRB, DCB DRYWALL FRAMES

F10-3

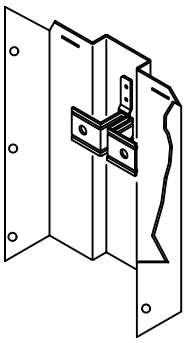
KNOCKED DOWN CORNER CONSTRUCTION

1



ADJUSTABLE PLUMB ANCHOR

2



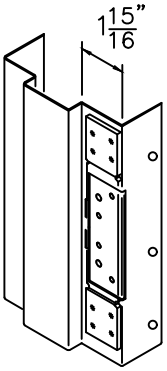
ONE EACH JAMB

Adjust with screwdriver

Dual plumb anchors are applied in depths greater than 8–3/4".

HINGE PREPARATION

3



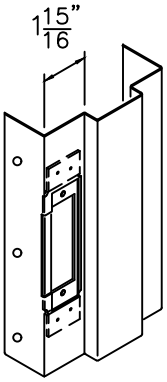
4–1/2" x .134" OR
4–1/2" x .180"
ANSI A156.7 TEMPLATE
7 GAGE STEEL
REINFORCING

BACKSET: 5/16"

SEE NOTE #1 ON PREVIOUS PAGE.

STRIKE PREPARATION

4



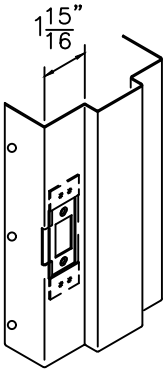
[S]

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

SEE NOTE #1 ON PREVIOUS PAGE.

LOCK STRIKE PREPARATION

4



[C]

CYLINDRICAL (2–3/4")
ANSI A115.2 TEMPLATE
14 GAGE STEEL REINFORCING

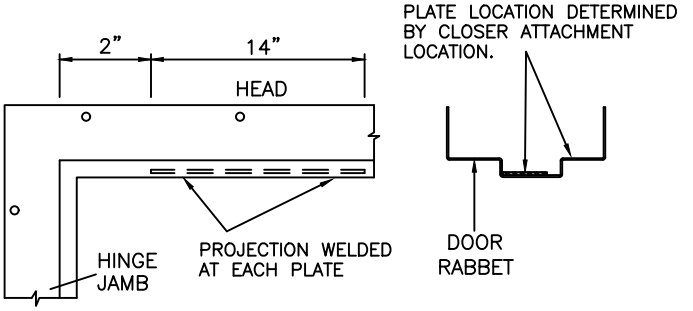
ALSO AVAILABLE WITHOUT LIP CUTOUT FOR DEADLOCKS

SEE NOTE #1 ON PREVIOUS PAGE.

CLOSER REINFORCEMENT (OPTIONAL)

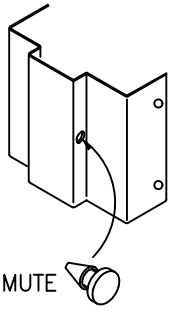
5

14 GAGE STEEL 1–3/4" X 14" REINFORCEMENT PLATE



CLOSER PLATE REINFORCEMENT NOT ALLOWED IN FRAME FACE.

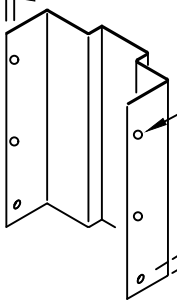
DOOR SILENCER (MUTE)



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

FACE ANCHORING

6



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"

2" MAX. FROM EACH END

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

Return to Top

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

11/05/19

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F10-4

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 gage 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 gage 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.

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 DOOR FRAMES

LABELING AGENCIES:

- UNDERWRITERS LABORATORY
- WARNOCK HERSEY

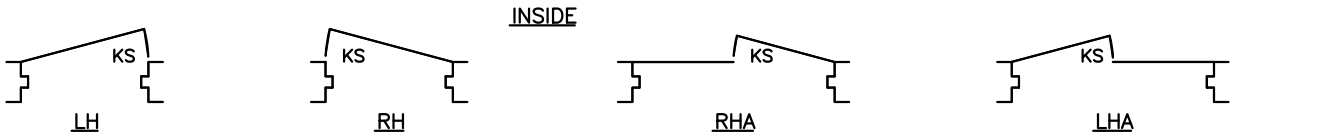
TEST: UL 10C, UL 10B, UL 1784, & NFPA 252

- RATING: 20 MIN, 3/4 HR, 1 HR OR 1–1/2 HR
- MAX. SIZE: 14 GAGE STEEL
  16 GAGE STEEL
  4'0" x 9'0" SINGLE
  8'0" x 9'0" PAIR
  18 GAGE STEEL
  4'0" x 7'0" SINGLE
  8'0" x 7'0" PAIR

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

MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
18 Gage Steel	Standard Duty	STD	OPT	N/A
16 Gage Steel	Standard, Heavy, or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximum Duty	STD	OPT	OPT



SUFFIX "A" = ACTIVE LEAF OF PAIRS

Return to Top

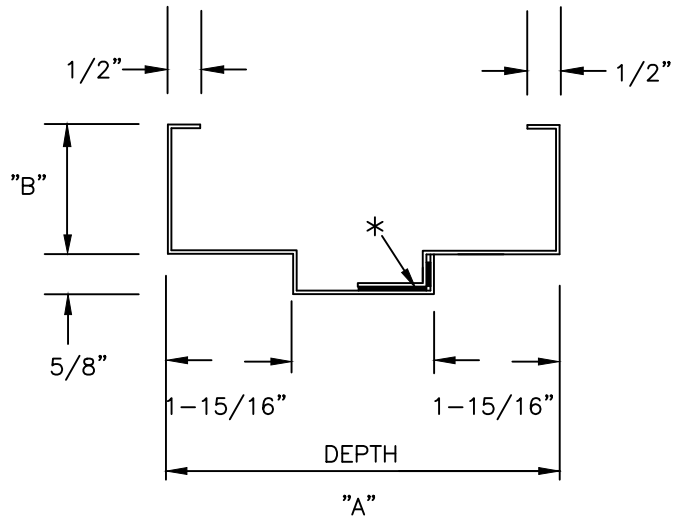
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

11/05/19

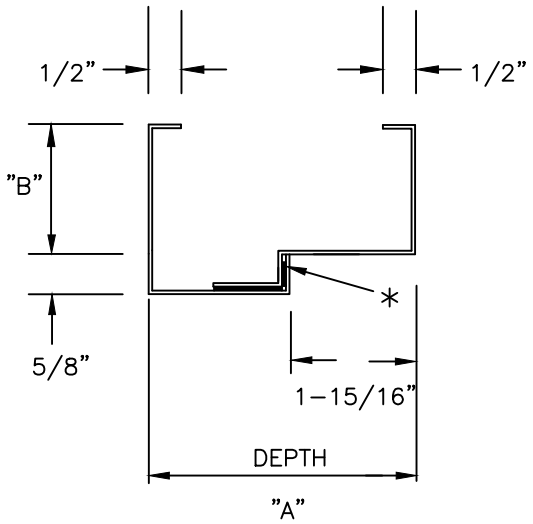
MERCURY SERIES TQB AND TRB THERMAL BREAK FRAMES

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

DOUBLE RABBET



SINGLE RABBET



* FACTORY INSTALLED 1/16" THICK THERMAL BARRIER.

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

FACE	Dim B
HEAD	1" Thru 4"
JAMBS	1" Thru 4"

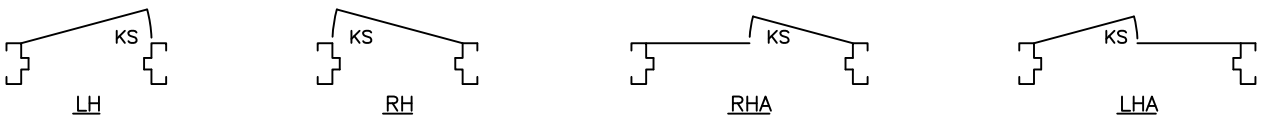
SIZE RANGES LISTED ABOVE ARE AVAILABLE IN 1/8" INCREMENTS.

PROFILE	Dim A (Depth)
DOUBLE RABBET	5-3/4" THRU 14"
SINGLE RABBET	3-7/8" THRU 5-5/8"

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

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

INSIDE



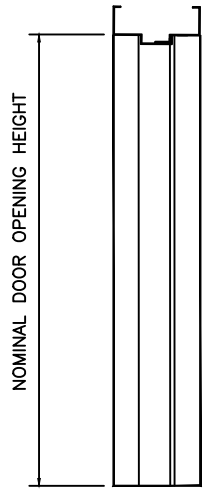
OUTSIDE

"KS" = KEY SIDE

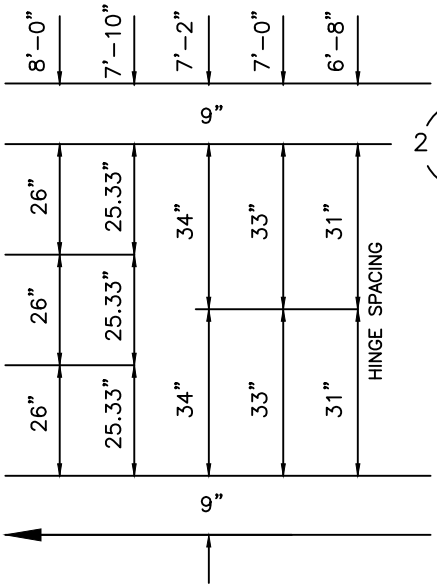
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

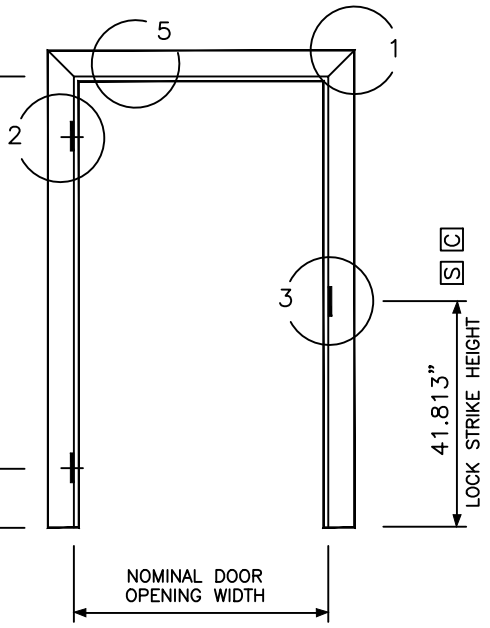
TECH-DATA MERCURY SERIES TQB AND TRB THERMAL BREAK FRAMES

Hardware locations shown match Ceco standard doors.



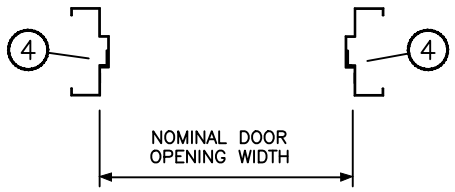
VERTICAL SECTION





ELEVATION

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.

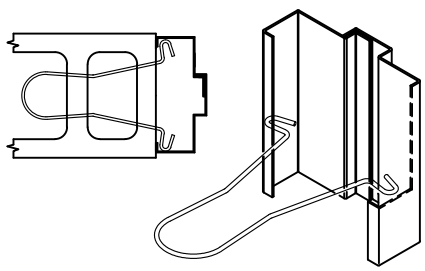


HORIZONTAL SECTION

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

JAMB ANCHOR QUANTITIES	3 PER JAMB FOR HEIGHTS >3'6" THRU 4'8" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS >4'8" THRU 6'10" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS >6'10" THRU 8'0" AND ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING STUDS AND/OR WALLS.

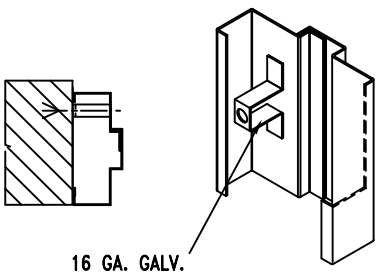
WIRE MASONRY ANCHOR WMA (4)



7 GA. GALV STEEL SNAP -IN ANCHOR

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

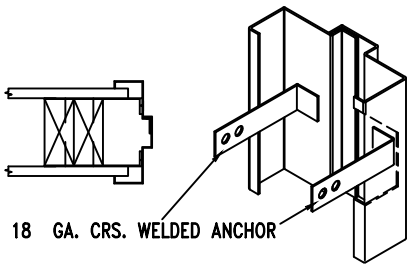
EXISTING OPENING ANCHOR EO/N (4)



16 GA. GALV. WELDED ANCHOR

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

WOOD STUD FLAT STRAP ANCHOR WSFS (4)



18 GA. CRS. WELDED ANCHOR

ALSO USED FOR METAL STUD WALLS.

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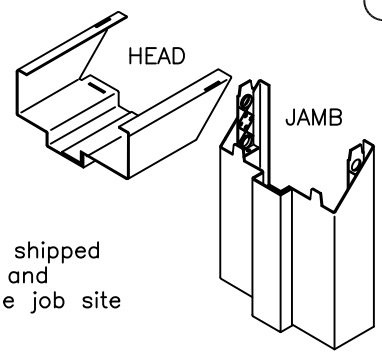
Return to Top

TECH-DATA MERCURY SERIES TQB AND TRB THERMAL BREAK FRAMES

F10A–3

KNOCKED DOWN CORNER CONSTRUCTION

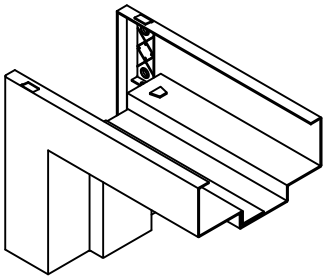
1



Components are shipped "knocked down" and assembled at the job site

WELDED CORNERS

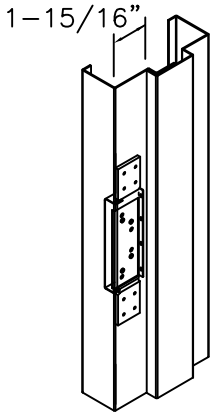
1



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.

HINGE PREPARATION

2

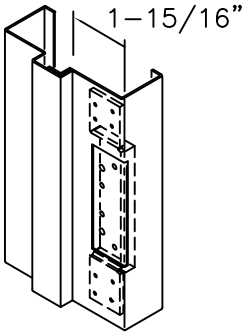


4–1/2" x .134" OR
4–1/2" x .180"
ANSI A156.7 TEMPLATE

7 GAGE STEEL REINFORCEMENT & 26 GAGE STEEL PLASTER GUARD

HINGE PREPARATION

2

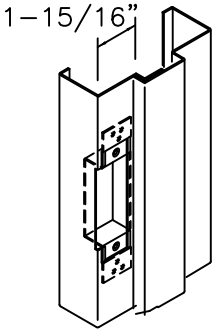


5" x .146" OR
5" x .190"
ANSI A156.7 TEMPLATE

7 GAGE STEEL REINFORCEMENT & 26 GAGE STEEL PLASTER GUARD

LOCK STRIKE PREPARATION

3

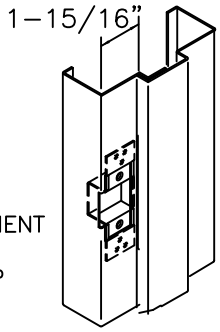


S

UNIVERSAL (4–7/8")
ANSI A115.1 & 2 TEMPLATE
16 GAGE STEEL REINFORCING WITH EXTRUDED THREADS EQUIAL TO 14 GAGE.

LOCK STRIKE PREPARATION (OPTIONAL)

3



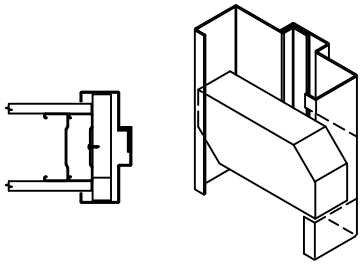
C

CYLINDRICAL (2–3/4")
ANSI A115.2 TEMPLATE
16 GAGE STEEL REINFORCEMENT & PLASTER GUARD.
ALSO AVAILABLE WITHOUT LIP NOTCH FOR DEADBOLTS.

WOOD BLOCK STUD ANCHOR (BY OTHERS)

4

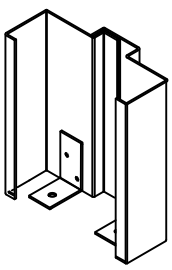
WBS



SPLIT FIXED FLOOR ANCHOR

4

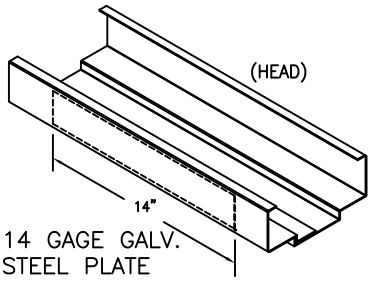
SFFA



16 GA. WELDED ANCHOR

CLOSER REINFORCEMENT (OPTIONAL)

5



14 GAGE GALV. STEEL PLATE WELDED IN PLACE

09/19/19

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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Return to Top

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TECH-DATA MERCURY SERIES TQB AND TRB THERMAL BREAK FRAMES

F10A–4

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"	
3'–8"	7'–4"	
3'–10"	7'–8"	
4'–0"	8'–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, ANSI A250.8. See chart below for performance classifications.

Series TQB and TRB 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.) field assembled 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 and heavy weight hinges (specify which). 7 gage 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 gage steel. Optional hardware reinforcement (for O/H closer or holder) is 14 gage 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 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 Colostyle chart.

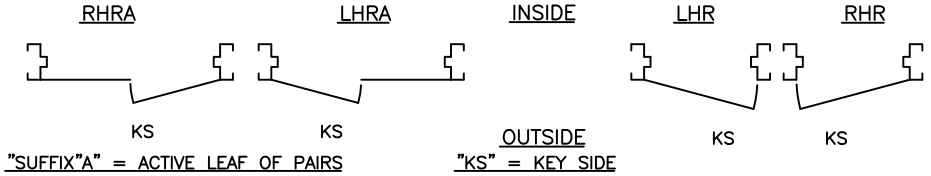
MATERIAL

DOOR FRAME MATERIAL	LEVEL	GALV	
		A60	G90
16 Gage Steel	Standard, Heavy, or Extra Heavy Duty	STD	OPT
14 Gage Steel	Maximum Duty	STD	OPT

PERFORMANCE

Physical Endurance Level:
Meets ANSI A250.4 Performance Test––16 & 14 gage steel:
Level A (1,000,000 Cycles)

NFRC 102 "U" VALUE STANDARDIZED THERMAL TRANSMITTANCE & ASTM TEST METHODS	NFRC 400–2014 RESISTANCE TO AIR INFILTRATION & ASTM TEST METHODS
MERCURY FRAME & TRIO–E FLUSH DOOR NFRC 102 "U" VALUE 0.36, "R" VALUE 2.78	MERCURY FRAME & TRIO–E FLUSH DOOR NFRC 400–2014 0.5 L/s/m² (0.1 cfm/ft²)
MERCURY FRAME & LEGION FLUSH DOOR NFRC 102 "U" VALUE 0.43, "R" VALUE 2.33	MERCURY FRAME & LEGION FLUSH DOOR NFRC 400–2014 0.5 L/s/m² (0.1 cfm/ft²)
MERCURY FRAME & IMPERIAL FLUSH DOOR NFRC 102 "U" VALUE 0.38, "R" VALUE 2.63	MERCURY FRAME & IMPERIAL FLUSH DOOR NFRC 400–2014 0.5 L/s/m² (0.1 cfm/ft²)
MERCURY FRAME & EMBOSSED PANEL IMPERIAL DOOR NFRC 102 "U" VALUE 0.39, "R" VALUE 2.56	MERCURY FRAME & EMBOSSED PANEL IMPERIAL DOOR NFRC 400–2014 0.5 L/s/m² (0.1 cfm/ft²)
MERCURY FRAME & MERCURY FLUSH DOOR NFRC 102 "U" VALUE 0.37, "R" VALUE 2.70	MERCURY FRAME & MERCURY FLUSH DOOR NFRC 400–2014 0.5 L/s/m² (0.1 cfm/ft²)



(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

09/19/19

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Return to Top

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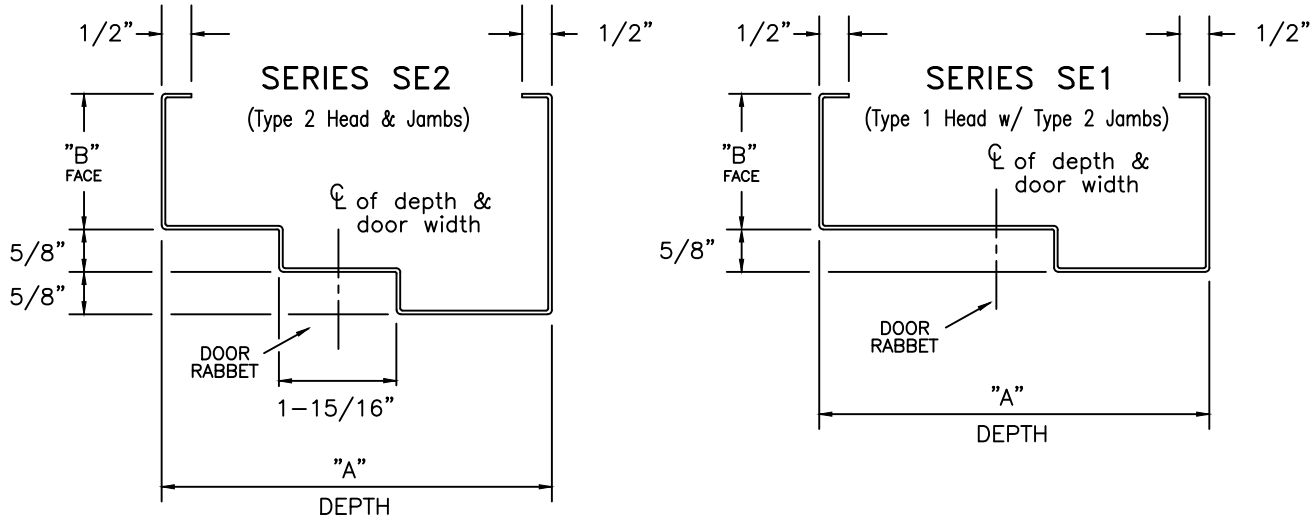
Return to Index

SERIES SE1 AND SE2 DOUBLE EGRESS FRAMES

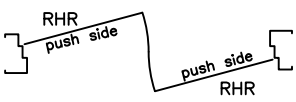
FOR 1-3/4" THICK DOORS
STANDARD WALL APPLICATION, HANDED

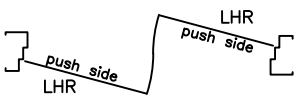


CECO Regent, Medallion, Legion or Imperial doors are recommended.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

PROFILE	Dim "A" (Depth)	Dim "B" (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.

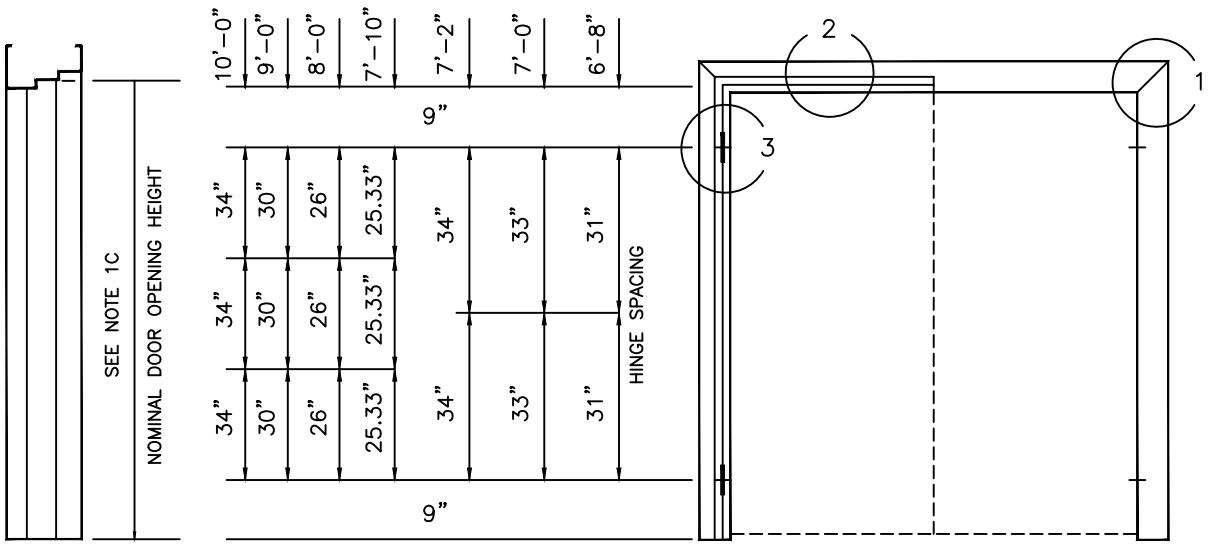
TECH-DATA

SERIES SE1 AND SE2 DOUBLE EGRESS FRAMES

F11-2

Hardware locations and opening sizes shown match CECO standard doors (see note 1C).

Series SE2 (Type 2 Head & Jambs)

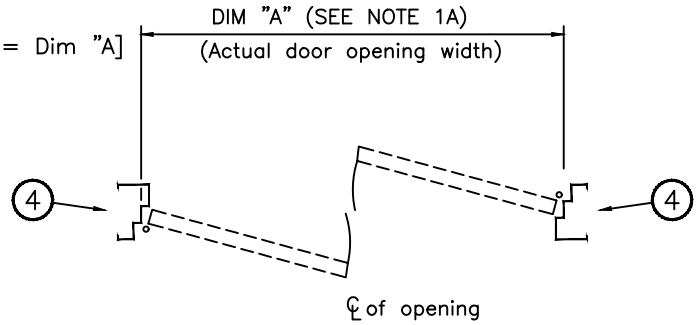


NOTE 1

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. 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.

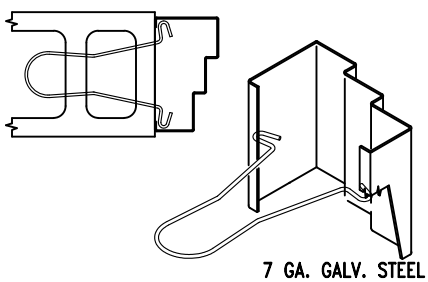


HORIZONTAL SECTION

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

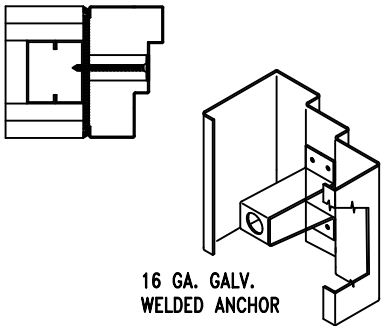
JAMB ANCHOR QUANTITIES	2 PER JAMB FOR HEIGHTS FROM >3'6" THRU 5'0" AND ONE FLOOR ANCHOR 3 PER JAMB FOR HEIGHTS FROM >5'0" THRU 7'2" AND ONE FLOOR ANCHOR 4 PER JAMB FOR HEIGHTS FROM >7'2" THRU 7'6" AND ONE FLOOR ANCHOR 5 PER JAMB FOR HEIGHTS FROM >7'6" THRU 10'0" ONE FLOOR ANCHOR ONE ADDITIONAL JAMB ANCHOR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

WIRE MASONRY ANCHOR
WMA
(4)

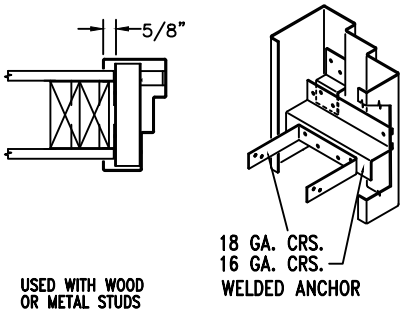


(For 5-1/4" THRU 8-3/4" DEPTHS)

EXISTING OPENING ANCHOR
EO/N
(4)



WOOD STUD "Z" STRAP ANCHOR
WSZS
(4)



09/21/20

RETURN TO TOP

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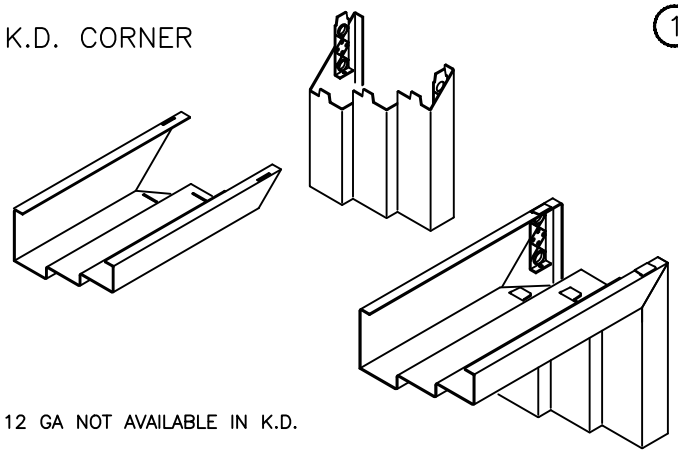
TECH-DATA

SERIES SE1 AND SE2 DOUBLE EGRESS FRAMES

F11-3

K.D. CORNER

1



12 GA NOT AVAILABLE IN K.D.

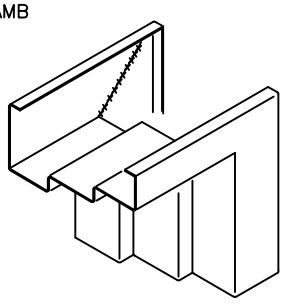
WELDED CORNER

1

SERIES SE2 HEAD AND JAMB WITH EQUAL FACES

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

RECOMMENDED FOR BUTTED OR WRAP AROUND APPLICATIONS



WELDED CORNER

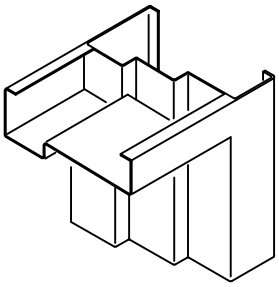
1

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

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

RECOMMENDED FOR BUTTED APPLICATIONS

TYPE 1 HEAD



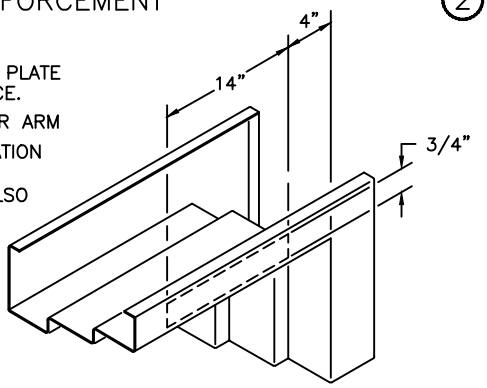
CLOSER REINFORCEMENT

2

12 GAGE STEEL PLATE WELDED IN PLACE.

TYPICAL REGULAR ARM

CLOSER APPLICATION SHOWN...OTHER APPLICATIONS ALSO AVAILABLE.



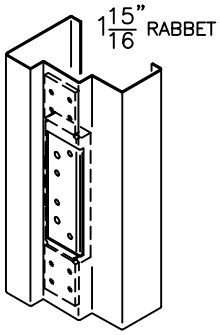
HINGE PREPARATION

3

4-1/2" x .134" or
4-1/2" x .180"
ANSI A156.7
TEMPLATE.
7 GAGE STEEL
REINFORCMENT.

PLASTER GUARD IS 26 GAGE STEEL.

BACKSET: 5/16"



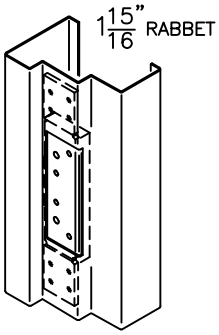
HINGE PREPARATION

3

5" x .146" or
5" x .190"
ANSI A156.7
TEMPLATE.
7 GAGE STEEL
REINFORCMENT.

PLASTER GUARD IS 26 GAGE STEEL.

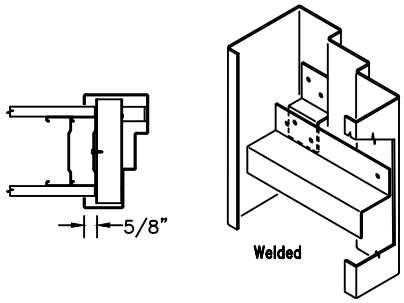
BACKSET: 5/16"



METAL STUD "Z" ANCHOR

MSZ1

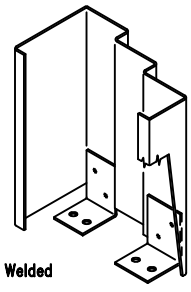
4



FLOOR ANCHOR

SA

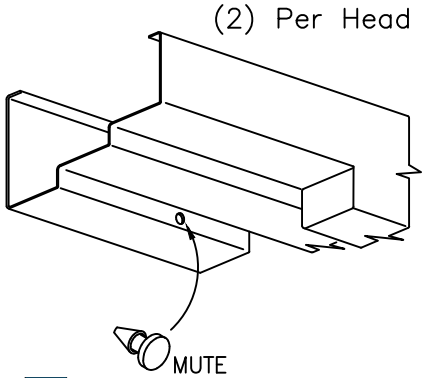
4



DOOR SILENCER (MUTE)

5

(2) Per Head



11/05/19

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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RETURN TO TOP

Ceco Door

ASSA ABLOY

F11-4

PRODUCT SPECIFICATIONS:

STANDARD DOUBLE EGRESS NOMINAL DOOR OPENING SIZES

WIDTH	HEIGHT
DOUBLE	
4'–0" 4'–8" 5'–0" 5'–4" 5'–8" 6'–0" 6'–8" 7'–0" 7'–4" 7'–8" 8'–0"	6'–8" 7'–0" 7'–2" 7'–10" 8'–0" 9'–0" 10'–0"

FIRE DOOR FRAMES

LABELING AGENCIES:

- UNDERWRITERS LABORATORY
- 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.

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 gage 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 gage 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 ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FRAME MATERIAL	LEVEL	C.R.	GALV	
			A60	G90
16 Gage Steel	Heavy or Extra Heavy Duty	STD	OPT	OPT
14 Gage Steel	Maximum Duty	STD	OPT	OPT
12 Gage Steel	ANSI/NAAMM	STD	OPT	–

PERFORMANCE

Physical Endurance Level:	Meets ANSI A250.4 Performance Test –– 16, 14, & 12 gage steel: Level A (1,000,000 Cycles)

06/12/19

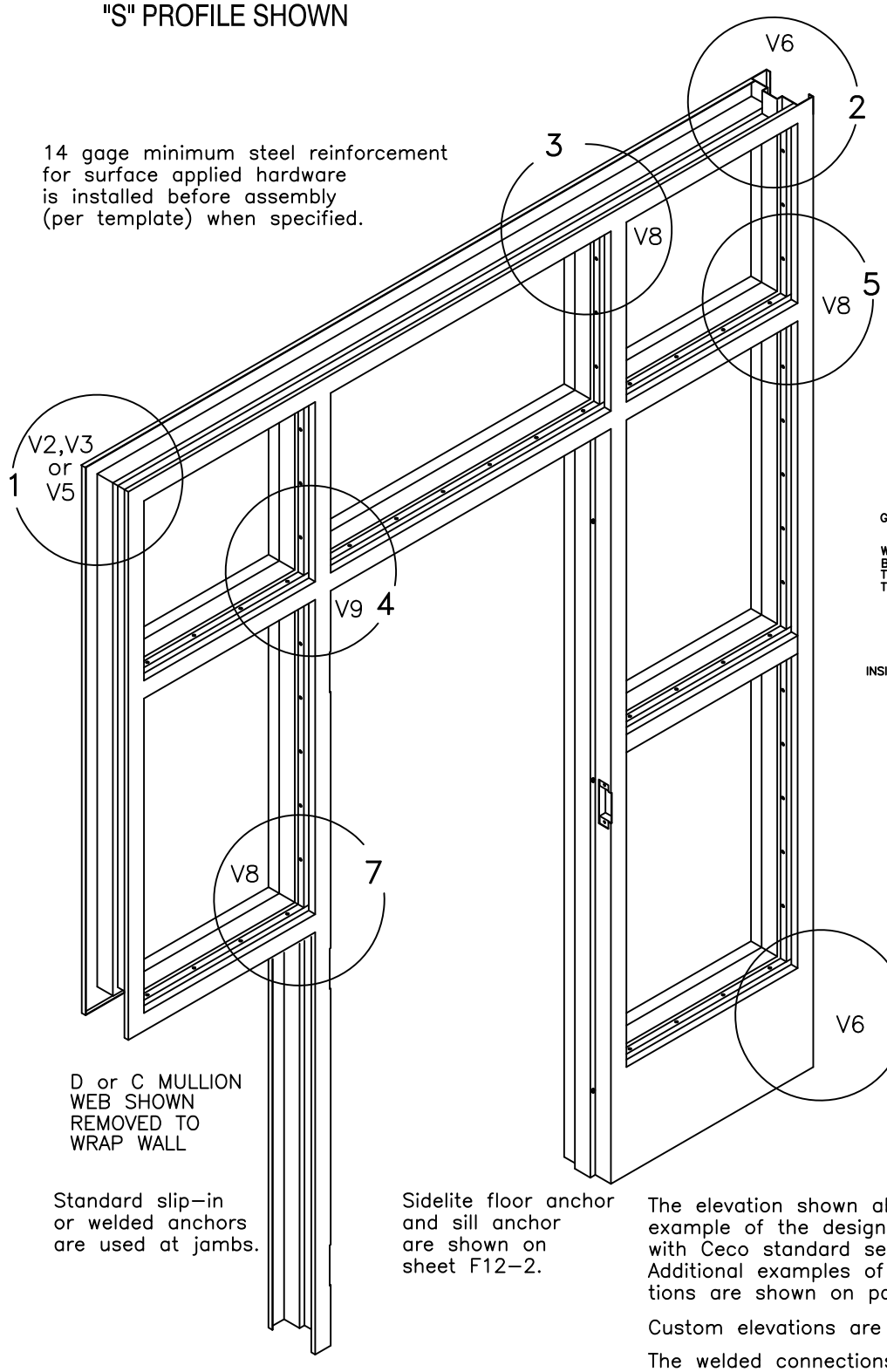
RETURN TO TOP

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

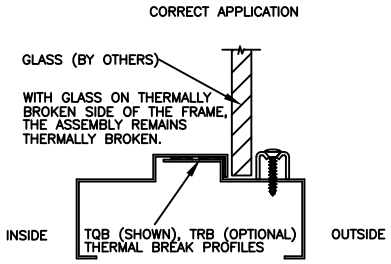
Return to Index

WELDED FRAMES

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



14 gage 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.

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 on page F12–4.

Custom elevations are also available.

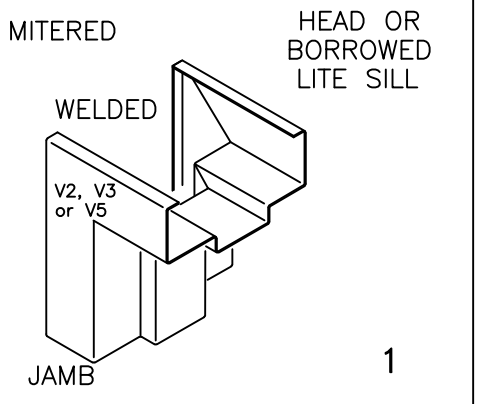
The welded connections above are illustrated on page F12–2.

For more on standard series frames see index sections F1, F2, F3, F7 and F10A.

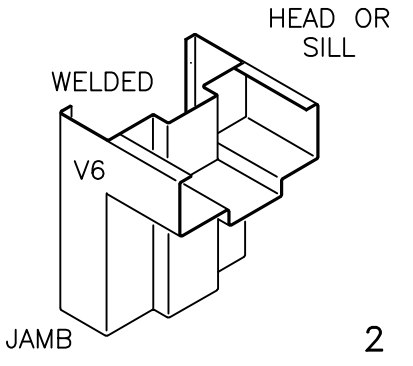
F12-2

FRAME CORNER AND INTERSECTION CONNECTIONS

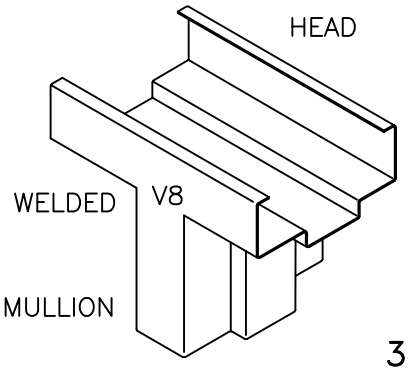
"S" PROFILE SHOWN
SU, SQ, SR, SC, BU, BQ, BR, BC, TQB & TRB PROFILES AVAILABLE



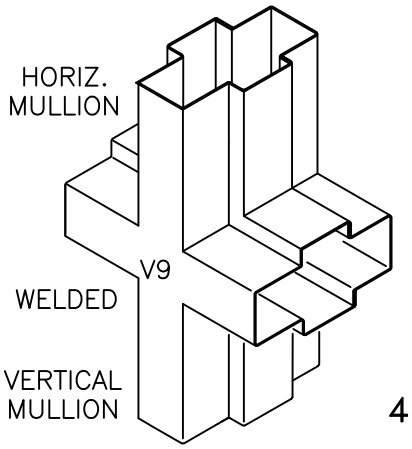
V2=FACE WELD ONLY (DIE MITER)
V3=FULL FACE & WEB WELD (DIE MITER)
V5=FULL FACE & WEB WELD (SAW MITER)



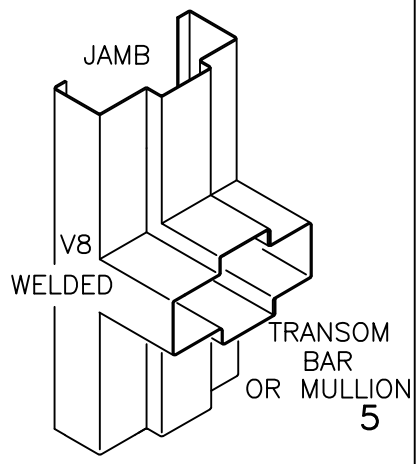
V6=FACE WELD ONLY (BUTTED CORNER)



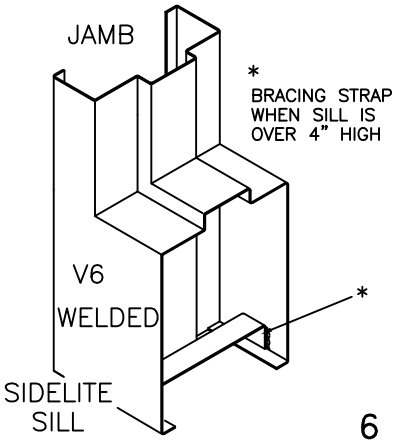
V8=FACE WELD ONLY



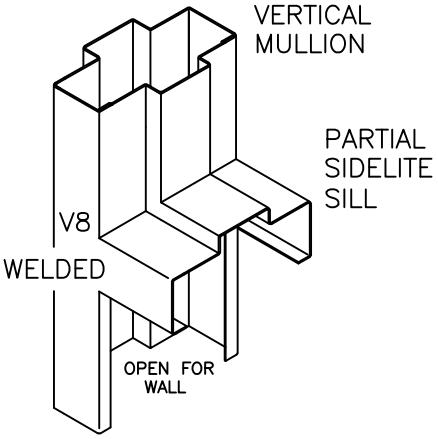
V9=FACE WELD BOTH SIDES



V8=FACE WELD ONLY



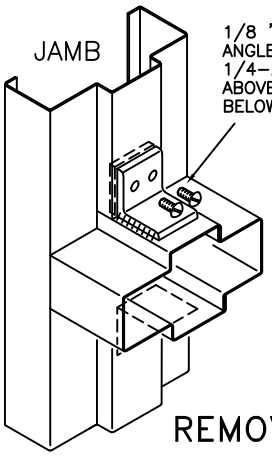
V6=FACE WELD ONLY (BUTTED SILL)



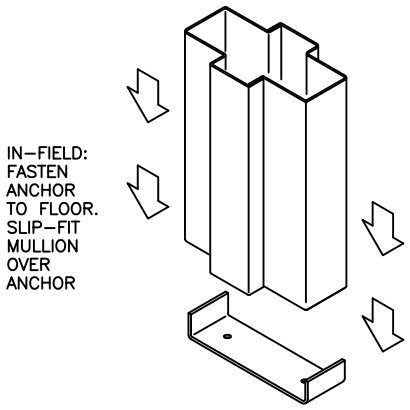
D or C mullion web shown removed to wrap wall

V8=FACE WELD ONLY

7



REMOVABLE TRANSOM BAR



SLFA SIDELITE FLOOR ANCHOR

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RETURN TO TOP

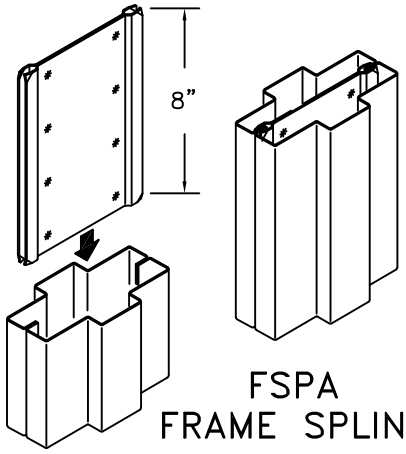
TECH-DATA

F12-3

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

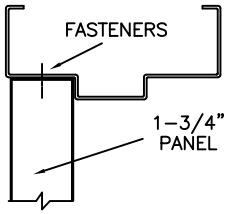
USED TO FIELD ASSEMBLE TWO FRAME SECTIONS ...16 GAGE STEEL.



FSPA FRAME SPLINE

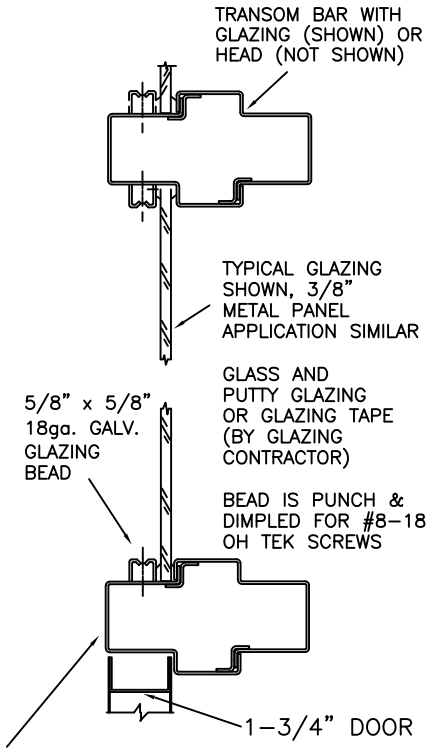
VERTICAL SECTION SHOWN
HORIZONTAL SECTION SIMILAR TO HEAD

Application shown is non-removable; applications which allow panel removal are also available.



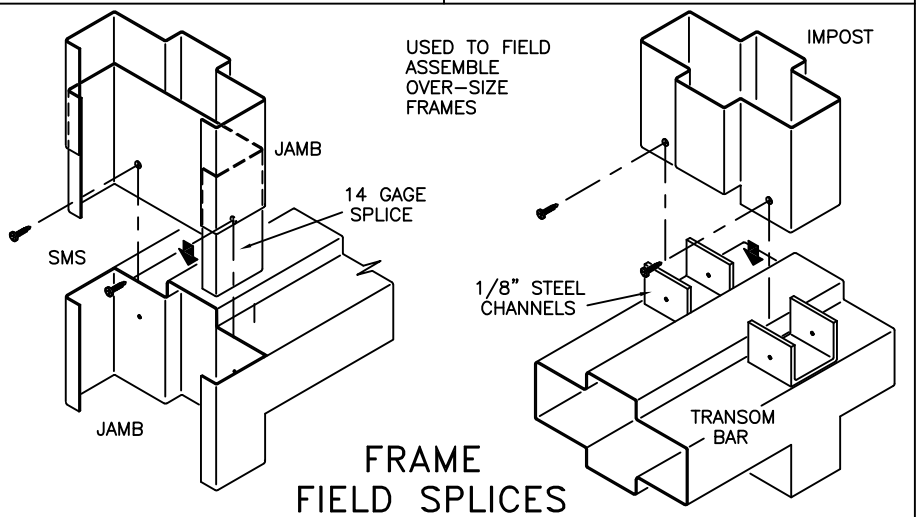
TYPICAL PANEL APPLICATION

VERTICAL SECTION SHOWN
HORIZONTAL SECTION SIMILAR

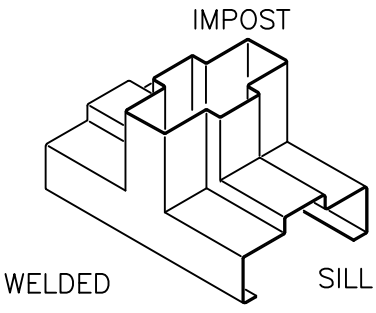


"D" mullion profile shown
Mullion profiles may vary

TYPICAL GLAZING DETAILS

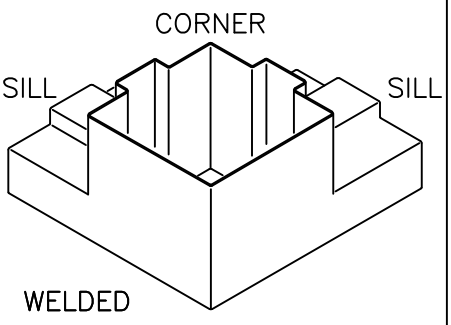


FRAME FIELD SPLICES



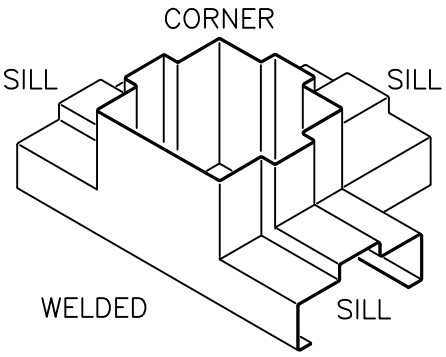
INTERSECTION

FIELD ASSEMBLY REQUIRED



90° CORNER

FIELD ASSEMBLY REQUIRED



"3 WAY" CORNER

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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RETURN TO TOP

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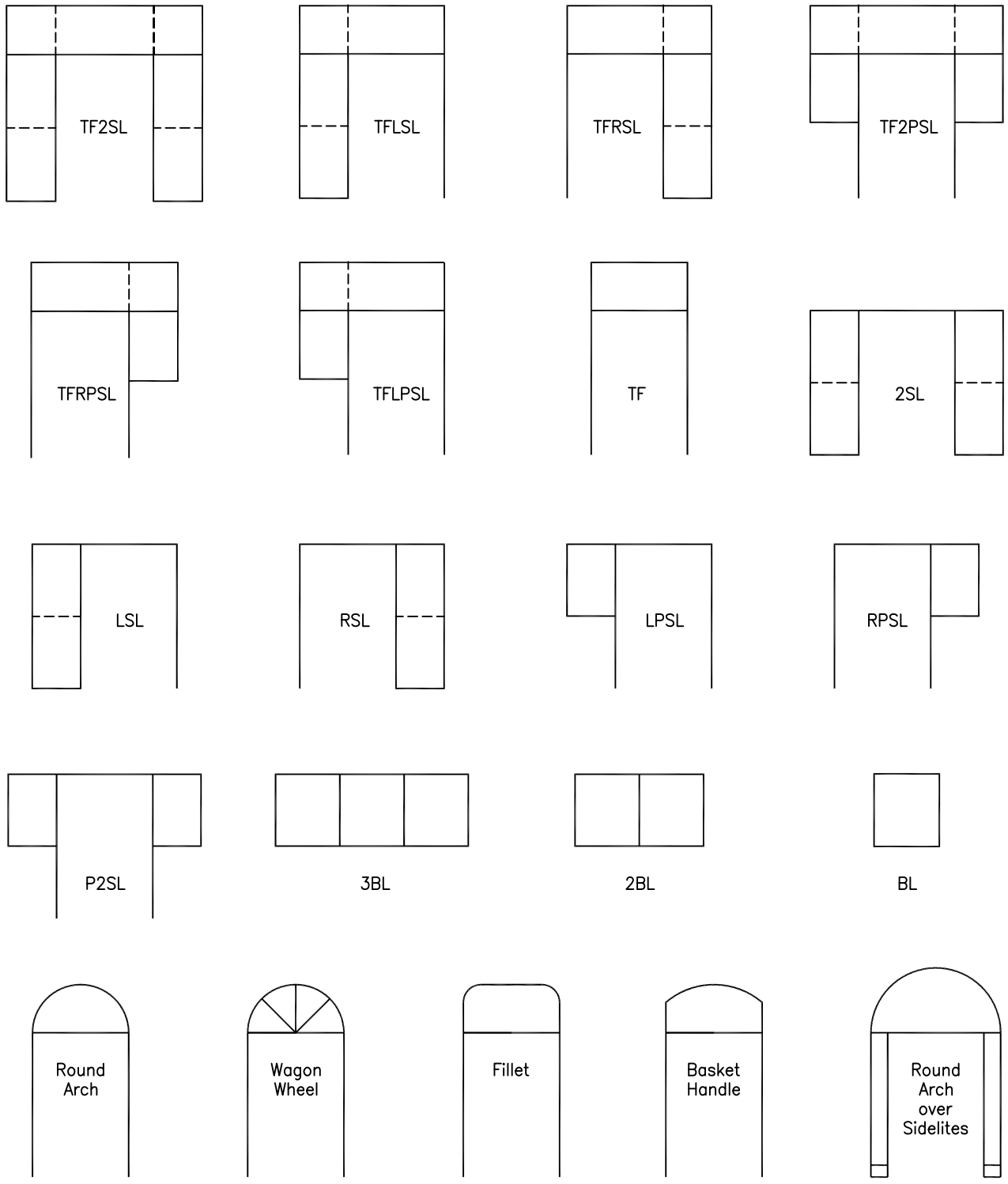
TECH-DATA

F12–4

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.

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RETURN TO TOP

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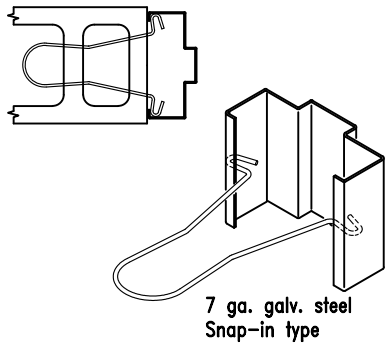
ASSA ABLOY

F13-1

DOOR FRAME ANCHORS

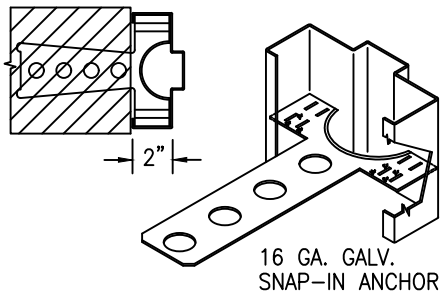
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

WIRE MASONRY ANCHOR
WMA



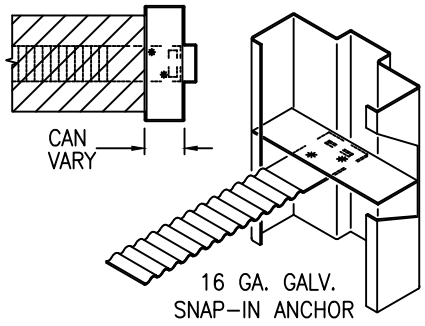
(FOR 3" THRU 8-3/4" DEPTHS)

MASONRY "T" ANCHOR (ADJUSTABLE)
MT



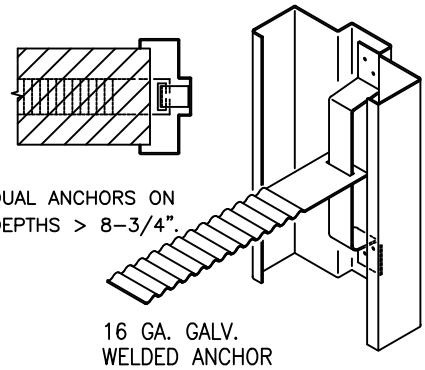
SUPPLIED FOR 3-3/4", 4-1/4", 4-3/4", 5-1/4", AND 5-3/4" DEPTHS & FACE SHOWN

MASONRY "T" ANCHOR
MT

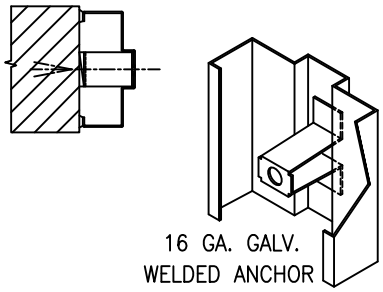


SUPPLIED FOR ALL DEPTHS OTHER THAN SHOWN FOR ADJUSTABLE MT ANCHOR

YOKE AND STRAP MASONRY ANCHOR
YS

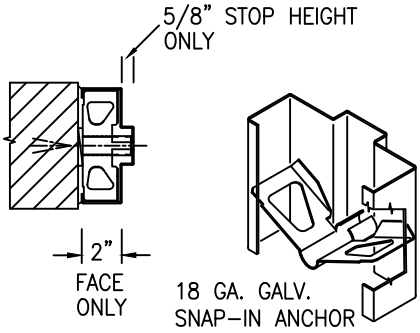


EXISTING OPENING ANCHOR
EO/N



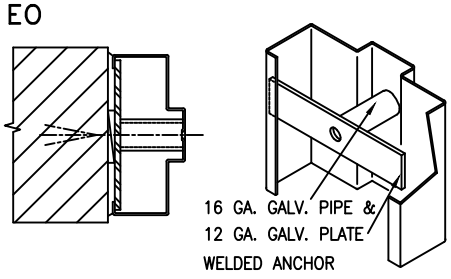
DEPTHS OVER 14" REQUIRE TWO EO/N ANCHORS, SIDE BY SIDE ACROSS SOFFIT, EXCLUDING SQT, B SERIES & DOUBLE EGRESS PROFILES.

EXISTING OPENING BUTTERFLY ANCHOR
EO



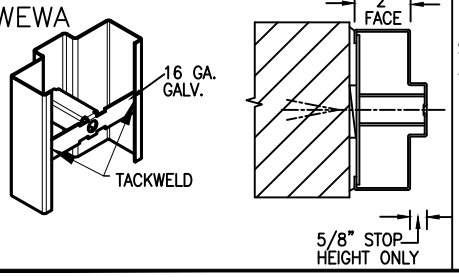
SU PROFILE	EO/SF6: 4-3/4" THRU 6-3/4" DEPTH	
	EO/SF8: 6-7/8" THRU 8-3/4" DEPTH	
SQ PROFILE	EO/SF6: 5-1/8" THRU 6-3/4" DEPTH	
	EO/SF8: 6-7/8" THRU 8-3/4" DEPTH	

EXISTING OPENING PIPE & PLATE ANCHOR
EO

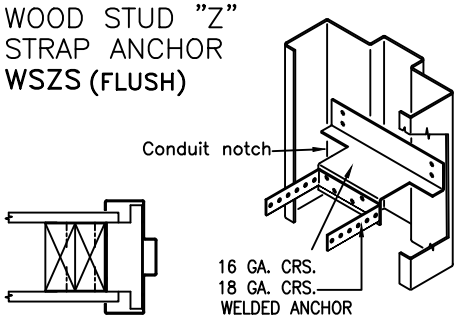


DEPTHS OVER 14" DUAL EO ANCHORS SIDE BY SIDE ACROSS SOFFIT, WILL BE APPLIED. EXCIUDING SQT, B SERIES & DOUBLE EGRESS PROFILES

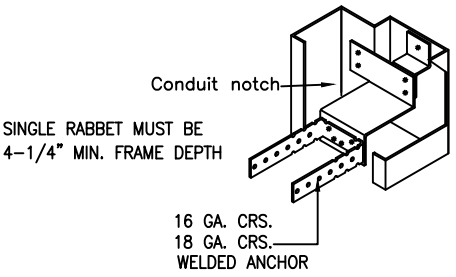
EXISTING OPENING WEWA



WOOD STUD "Z" STRAP ANCHOR
WSZS (FLUSH)



- For depth ranges of 5-1/2" to 12-1/2"

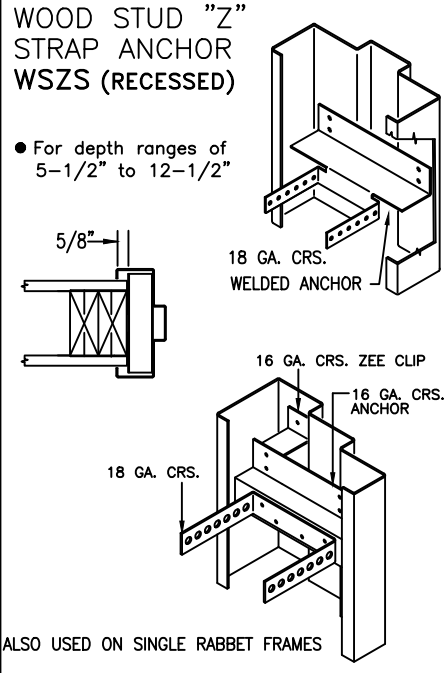


ALSO USED ON DOUBLE EGRESS FRAMES

(USED ALSO WITH METAL STUD WALLS)

WOOD STUD "Z" STRAP ANCHOR
WSZS (RECESSED)

- For depth ranges of 5-1/2" to 12-1/2"



ALSO USED ON SINGLE RABBET FRAMES

(USED ALSO WITH METAL STUD WALLS)

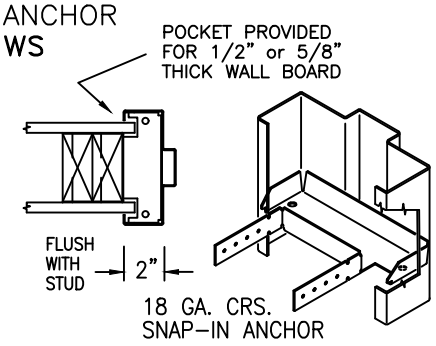
11/06/19

TECH-DATA

F13-2

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 24" IN HEIGHT OR FRACTION THEREOF ONE ADDITIONAL JAMB ANCHOR IN LIEU OF FLOOR ANCHOR FOR EXISTING STUDS AND/OR WALLS (Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

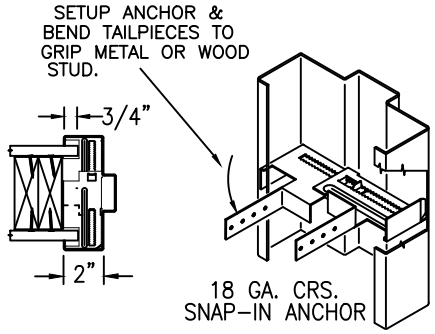
WOOD STUD ANCHOR
WS



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

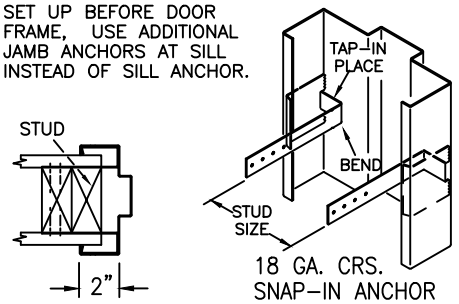


3-3/4" THRU 8-3/4" DEPTH

WOOD STUD ANCHOR
XP/ANC

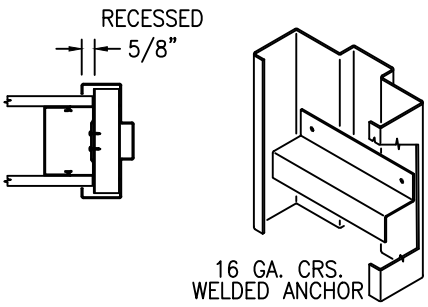
ANCHORS ARE BENT IN FIELD TO THICKNESS OF WALLBOARD. IF WALL FRAME WORK IS SET UP BEFORE DOOR FRAME, USE ADDITIONAL JAMB ANCHORS AT SILL INSTEAD OF SILL ANCHOR.

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

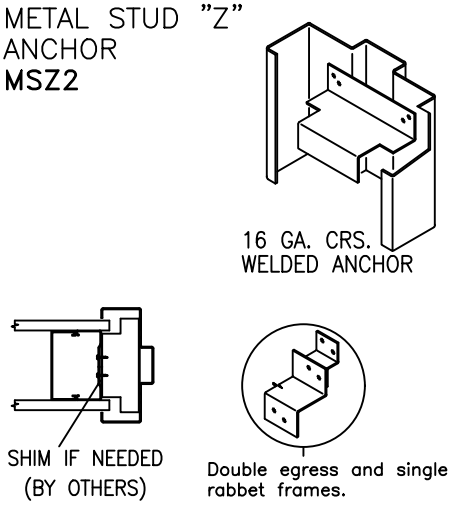


(USED ALSO WITH METAL STUD WALLS)

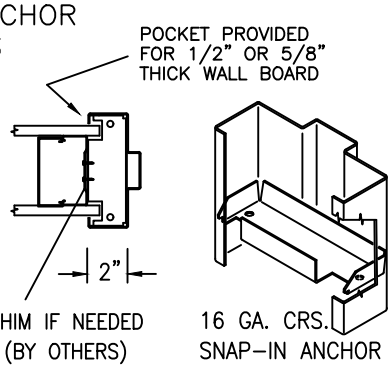
METAL STUD "Z" ANCHOR
MSZ1



METAL STUD "Z" ANCHOR
MSZ2



METAL STUD ANCHOR
MS

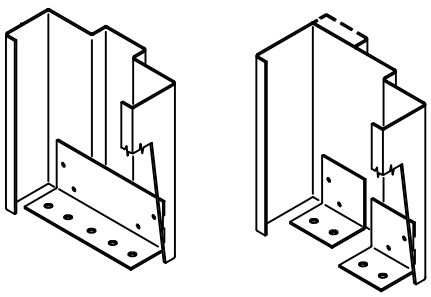


4-3/4" AND 5-3/4" DEPTH ONLY. FOR OTHER DEPTHS USE WS TYPE.

FLOOR ANCHOR
SA

STANDARD DOUBLE RABBET ONE PIECE ANCHOR

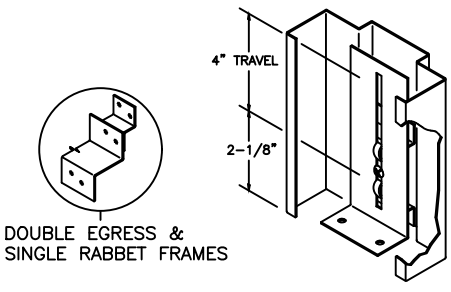
SINGLE RABBET OR DOUBLE RABBET DOUBLE EGRESS



16 GA. WELDED FLOOR ANCHOR

FLOOR ANCHOR
ADJFL

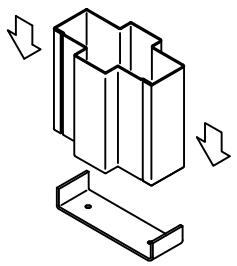
ANGLE:
1-1/2" x 6-3/4" @ 2-3/4" LONG
SCREW:
#10 x 3/8" PHIL THSMS
HAT:
1-5/8" WIDE x 3/4" LEGS x 9/16" OFFSET @ 3-1/4" LONG



16 GA. WELDED ADJUSTABLE FLOOR ANCHOR

SLFA

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



12 GA. GALV. SIDELITE FLOOR ANCHOR

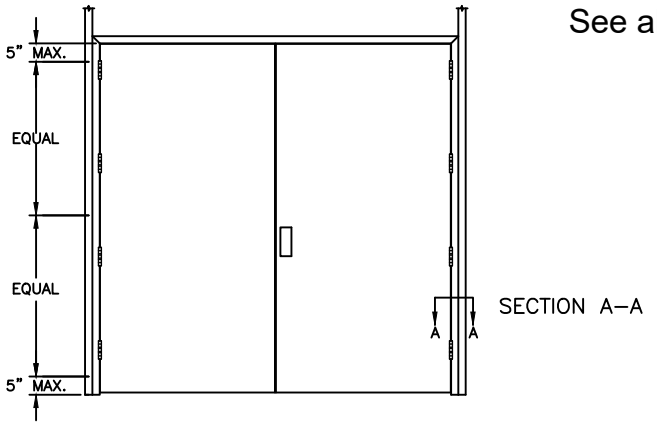
11/06/19

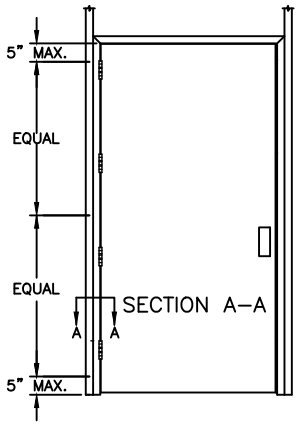
F13–3

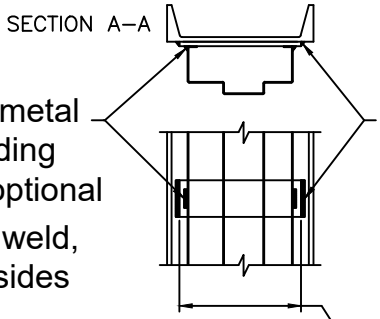
FRAME INSTALLATION

FIRE RATED WELD TO STEEL BUILDING STRUCTURE
WELDING INSTRUCTIONS AND LOCATIONS

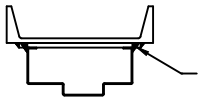
See all notes listed below







Weld hollow metal frame to building structure or optional shim with $\frac{3}{16}$" weld, 1" long both sides of frame.



Fill gaps with intumescent caulk as required.

Optional steel shims ($\frac{1}{4}$" max., $\frac{3}{16}$" 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 $\frac{1}{4}$" for one side of opening width. Max. rough opening is $\frac{3}{8}$" larger than overall frame width.

Shim is minimum of $\frac{3}{4}$" 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.

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ASSA ABLOY

Ceco Door
ASSA ABLOY

Return to Index

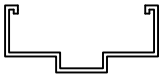
F14–1

LABELED FIRE DOOR FRAMES

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

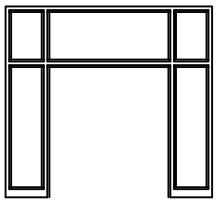
- Standard series SQ , SU and SR profiles and anchors for fire rated hollow metal or wood doors.
- Classified for swinging fire doors rated at up to 3 hours.
- UL, WH or FM:
  18 ga. steel 1-1/2 hours max.
  16, 14 or 12 ga. steel 3 hours max.
- Maximum door opening size:
  4'-0" x 7'-0" (single) 18 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, WH OR FM LABELED SERIES DU, DQ AND 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 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)

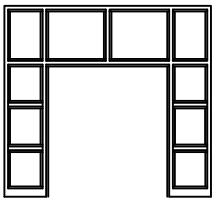
UL/WH FIRE-PROTECTIVE LABELED SERIES SU AND SQ TRANSOM/SIDELITE, 45 MINUTE RATED,



Intended for one hour rated walls or partitions as smoke barriers or for draft-control. TEST: UL 10C, NFPA 252

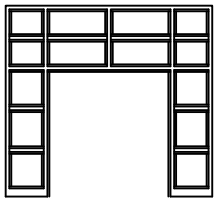
- Maximum area per lite:
  See glass manufacturer's classification
- Maximum lite dimensions:
  See glass manufacturer's classification
- Maximum Transom/Sidelite overall:
  (MSY) 13'-6" x 12'-0", (DW) 12'-10" x 11'-4"
- Maximum door opening:
  (single) 4'-0" x 10'-0",
  (pair) 8'-0" x 10'-0"
- Glazing: Classified material for 45 minute rating (by others).

UL/WH LABELED SERIES SU AND SQ TRANSOM/SIDELITE, 3/4 OR 1-1/2 HOUR RATED, WITH PANELS
Tested with hose stream.



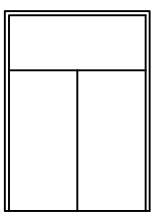
- Transom area requires 3/8" thick, insulated panels, (Maximum area per panel: transom 1066 sq. in., and shall not exceed 41" x 26")
- side panel area may have 3/8" thick panel, 1-3/4" wood, or 1-3/4" metal. (Maximum area per panel 1,296 sq. inches and not to exceed 30" x 54")
- Maximum Transom/Sidelite:
  (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/WH FIRE-PROTECTIVE LABELED SERIES SU AND SQ TRANSOM/SIDELITE,
MAX. RATING* 1-1/2 HOUR, Tested with hose stream. *Note: Check building code requirements for frames over 45 min.



- 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 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

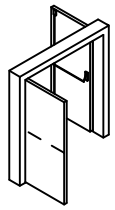
Transom bars are optional. Frame face: 1-1/4" to 4".

- 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)

11/06/19

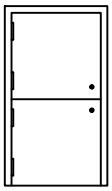
UL/WH LABELED DOUBLE EGRESS FIRE DOOR FRAMES



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.

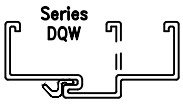
UL/WH LABELED DUTCH FIRE DOORS AND FRAMES



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.

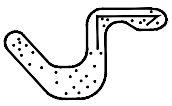
MATERIAL:
18 ga., 16 or 14 ga. steel

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.

ALLOWABLE AIR LEAKAGE

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)

RETURN TO TOP

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Ceco Door
ASSA ABLOY

CecoDoor
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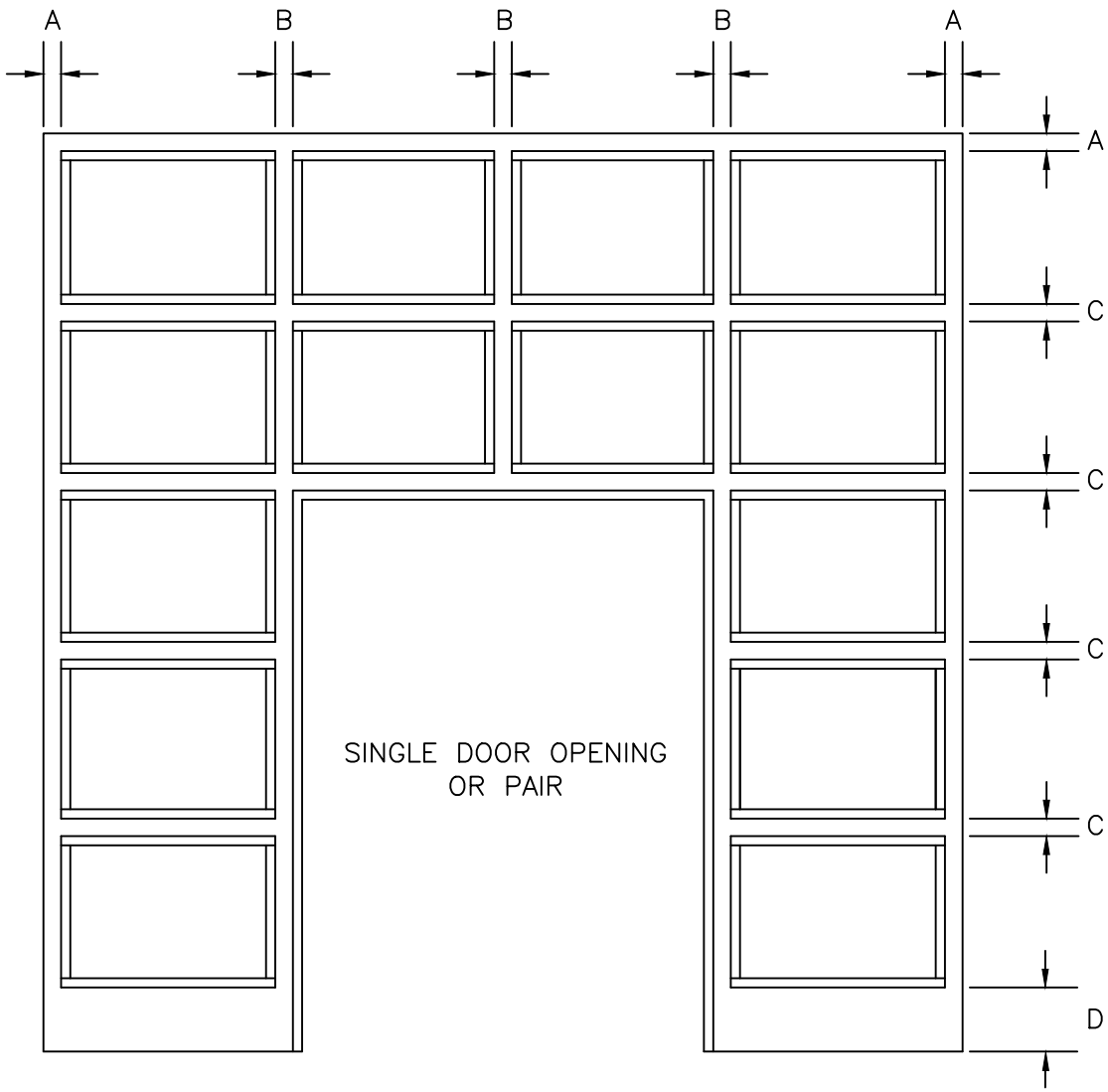
Return to Index

FIRE-PROTECTIVE FRAME GLAZING MATERIAL GUIDELINES

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



NOTES:

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 ...

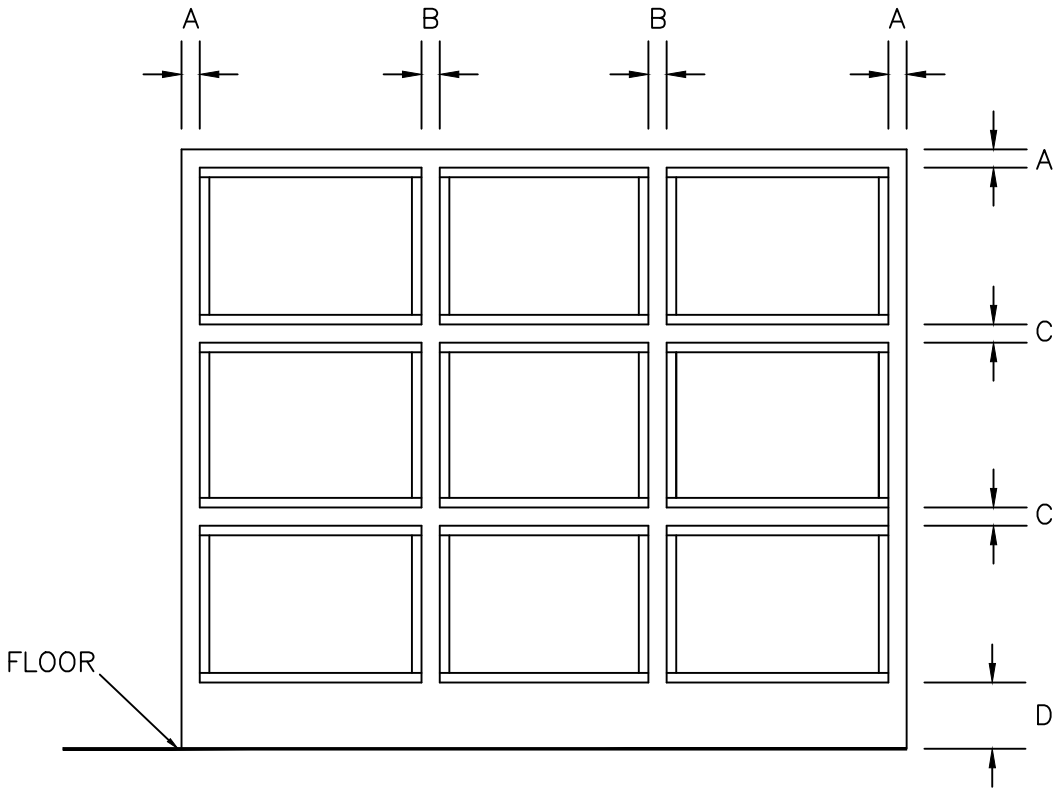
7.) Door size limits may be less than frame ...if you encounter this, consider alternate door series, alternate gage and/or latching hardware.

8.) Coverage for WH & UL are subject to variations.

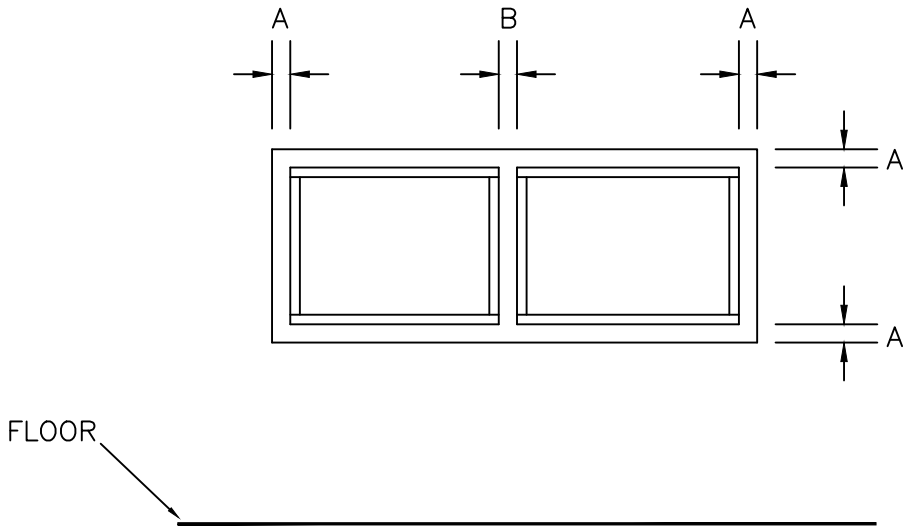
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

FIRE-PROTECTIVE FRAME GLAZING MATERIAL GUIDELINES

FIRE WINDOW FRAMES FIRE TESTED TO UL 9, NFPA 257



FRAME RESTING ON FLOOR



FRAME INSTALLED ABOVE FLOOR

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RETURN TO TOP

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TECH-DATA FIRE-PROTECTIVE FRAME GLAZING MATERIAL GUIDELINES

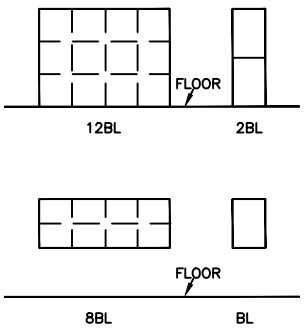
LABELED FIRE WINDOW FRAMES (BORROWED LITES) FIRE TESTED TO UL 9, NFPA 257

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

(CONTINUED FROM ABOVE)

GLAZING MATERIAL	FIRE PROTECTION RATING (HOURS)	FRAME FACES (IN.)								FRAME GAGE	
		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 floor or rest on wall above floor.

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 on page F18–2. 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 ...

* 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.

(Conversion: 1" = 25.4 mm, e.g. 1–3/4" = 44.45 mm)

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RETURN TO TOP

Ceco Door
ASSA ABLOY

TECH-DATA FIRE-PROTECTIVE FRAME GLAZING MATERIAL GUIDELINES

F18–4

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		MASONRY	
		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"

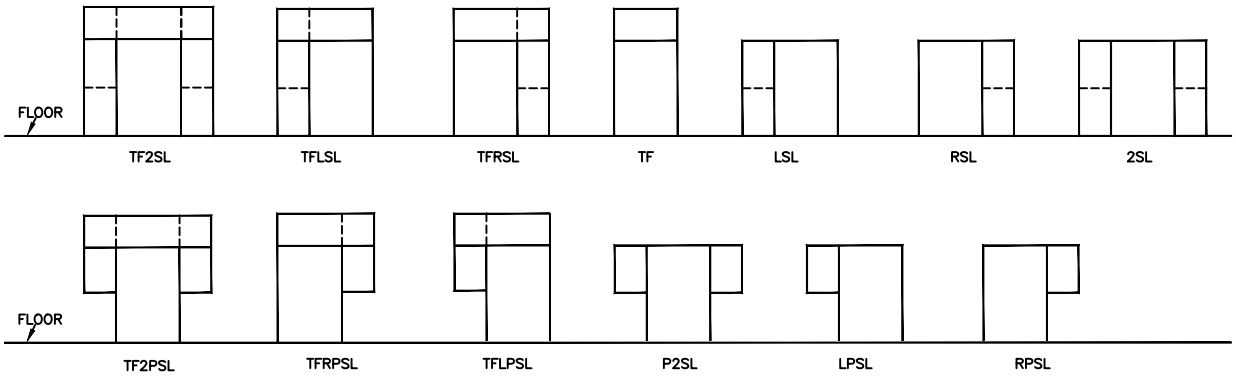
(CONTINUED FROM ABOVE)

(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 GAGE	
				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"	4"	1"	2"	1"	8"	1"	16"	16"	12"
	*1	8'–0"	10'–0"	1"	4"	1"	2"	1"	8"	1"	16"	16"	12"
	*1 1/2	8'–0"	**10'–0"**	1"	4"	1"	2"	1"	8"	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



03/31/22

RETURN TO TOP

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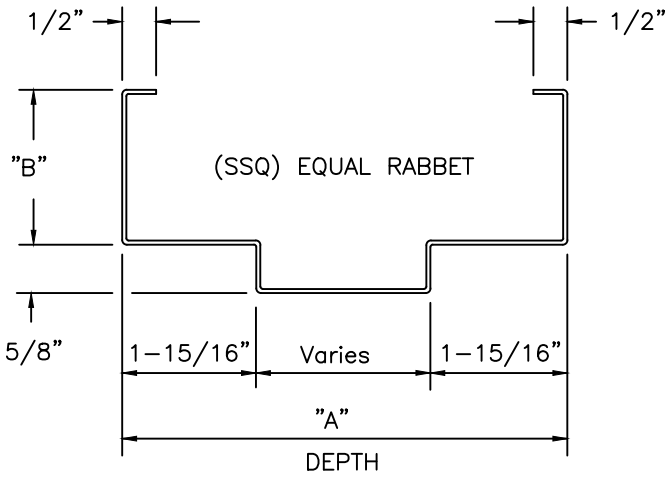
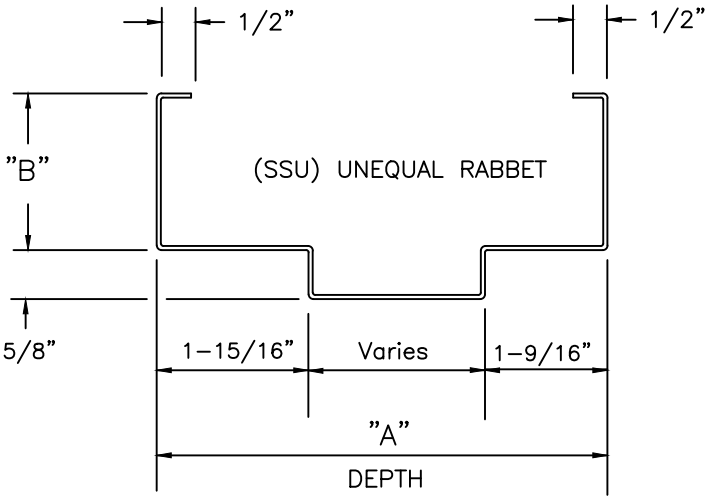
Ceco Door
ASSA ABLOY

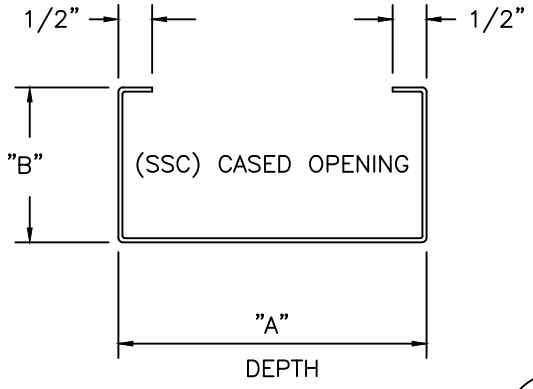
Return to Index

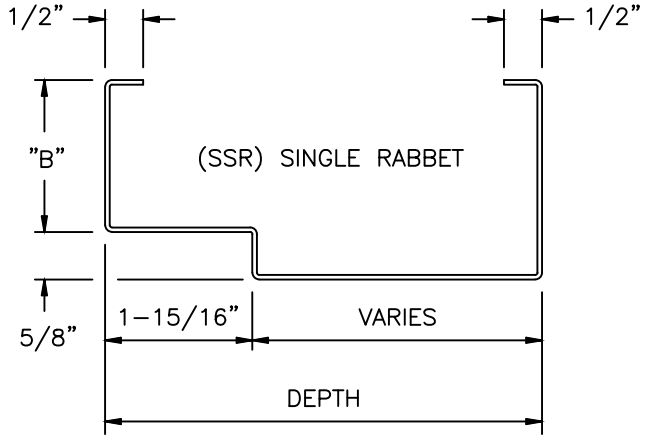
SERIES SSQ, SSU, SSR AND SSC STAINLESS STEEL FRAMES

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









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

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

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

INSIDE

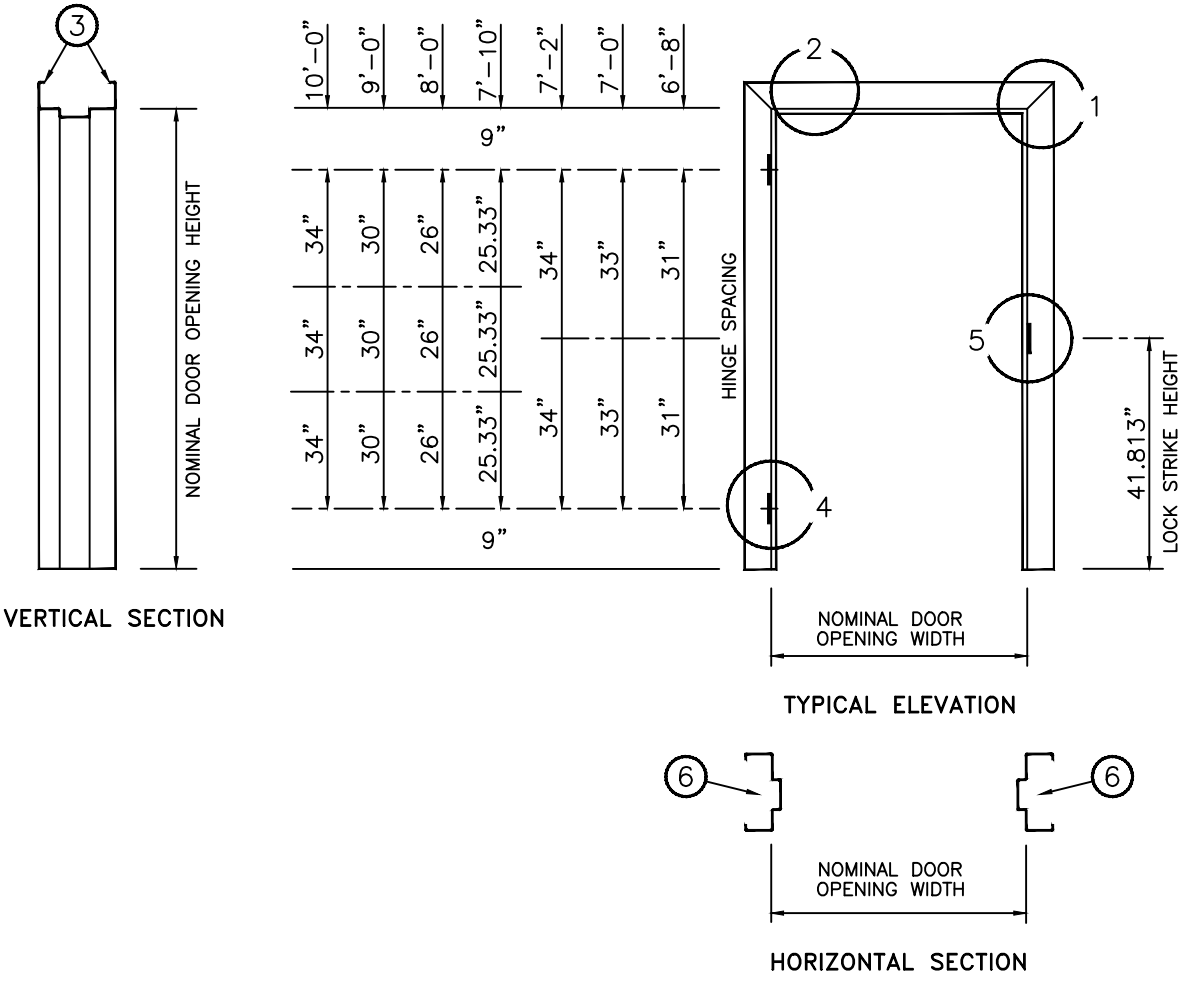
OUTSIDE

"KS" = KEY SIDE

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

F19-2

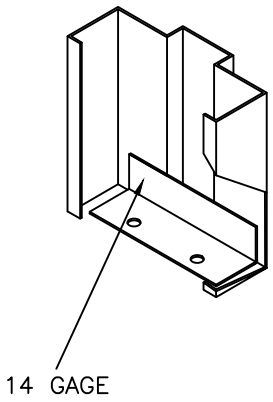
Hardware locations shown match Ceco standard doors.



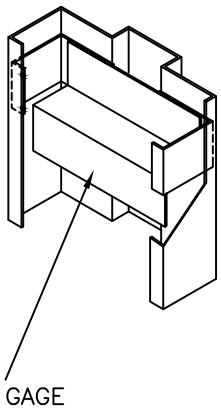
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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

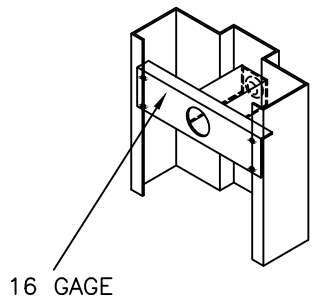
WELDED FLOOR ANCHOR (6)



WELDED METAL STUD ANCHOR (6)



WELDED EXISTING OPENING ANCHOR (6)



3/8" DIMPLED HOLE
BOLTS NOT INCLUDED

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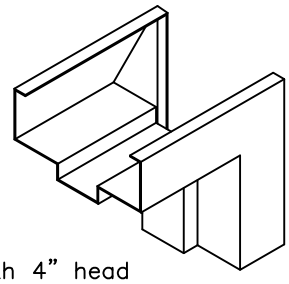
11/06/19

TECH-DATA

F19–3

FACE WELDED CORNERS – STANDARD ①

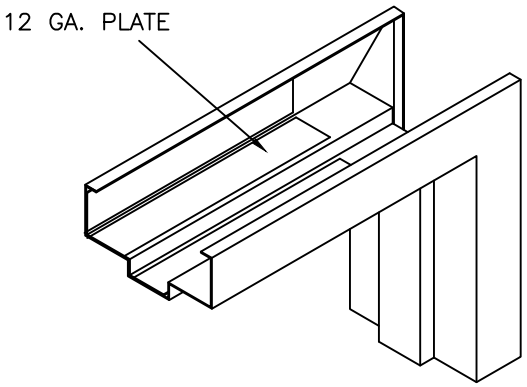
CORNER JOINTS ARE MITERED, STAINLESS FACE WELDED, AND GROUND SMOOTH.



Available with 4" head

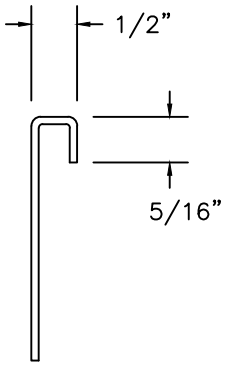
OPTIONAL FULL DEPTH/CONTINUOUS WELD AVAILABLE

OPTIONAL CLOSER REINFORCMENTS ②

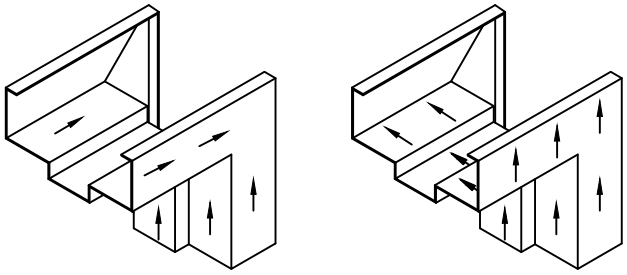


OPTIONAL BACKBEND RETURN ③

SBQ, SBU, SBR & SBC SERIES
BEFORE DRYWALL APPLICATION



DIRECTION OF GRAIN



OPTIONAL GRAIN DIRECTION

STNDARD GRAIN DIRECTION

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

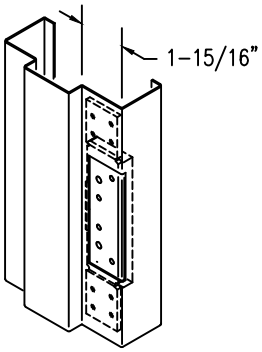
HINGE PREPARATION ④

4–1/2" x .134 or .180
5" x .146 or .190

ANSI A156.7 TEMPLATE

7 GAGE REINFORCING

HINGE BACKSET 3/8"

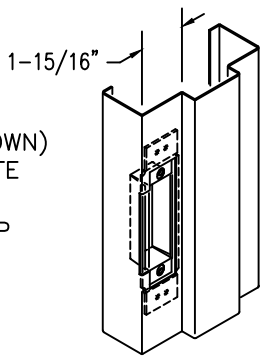


LOCK STRIKE PREPARATION ⑤

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

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

12 GAGE REINFORCING



08/08/22

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

PRODUCT SPECIFICATIONS:

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

Series SSQ, 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 gage 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 gage 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.

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 DOOR FRAMES

SINGLE
4'0" x 10'0" MAX.
20 MIN. THRU 3 HOUR
16, 14 AND 12 GAGE

PAIRS
8'0" x 10'0" MAX.
20 MIN. THRU 3 HOUR
16, 14 AND 12 GAGE

MATERIAL

DOOR/FRAME MATERIAL	LEVEL	STAINLESS STEEL TYPE	
		304–4	316
16 Gage Stainless Steel	Heavy or Extra Heavy–Duty	STD	Optional – See Available Finish Below
14 Gage Stainless Steel	Maximum Duty	STD	
12 Gage Stainless Steel	ANSI / NAAMM	STD	

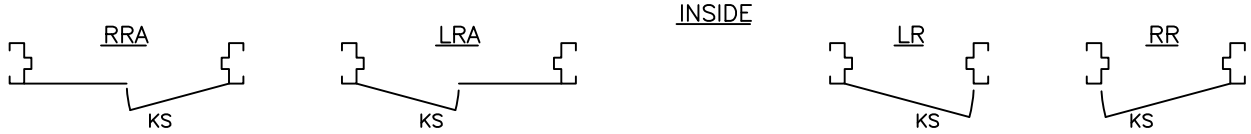
STAINLESS STEEL ALLOY

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

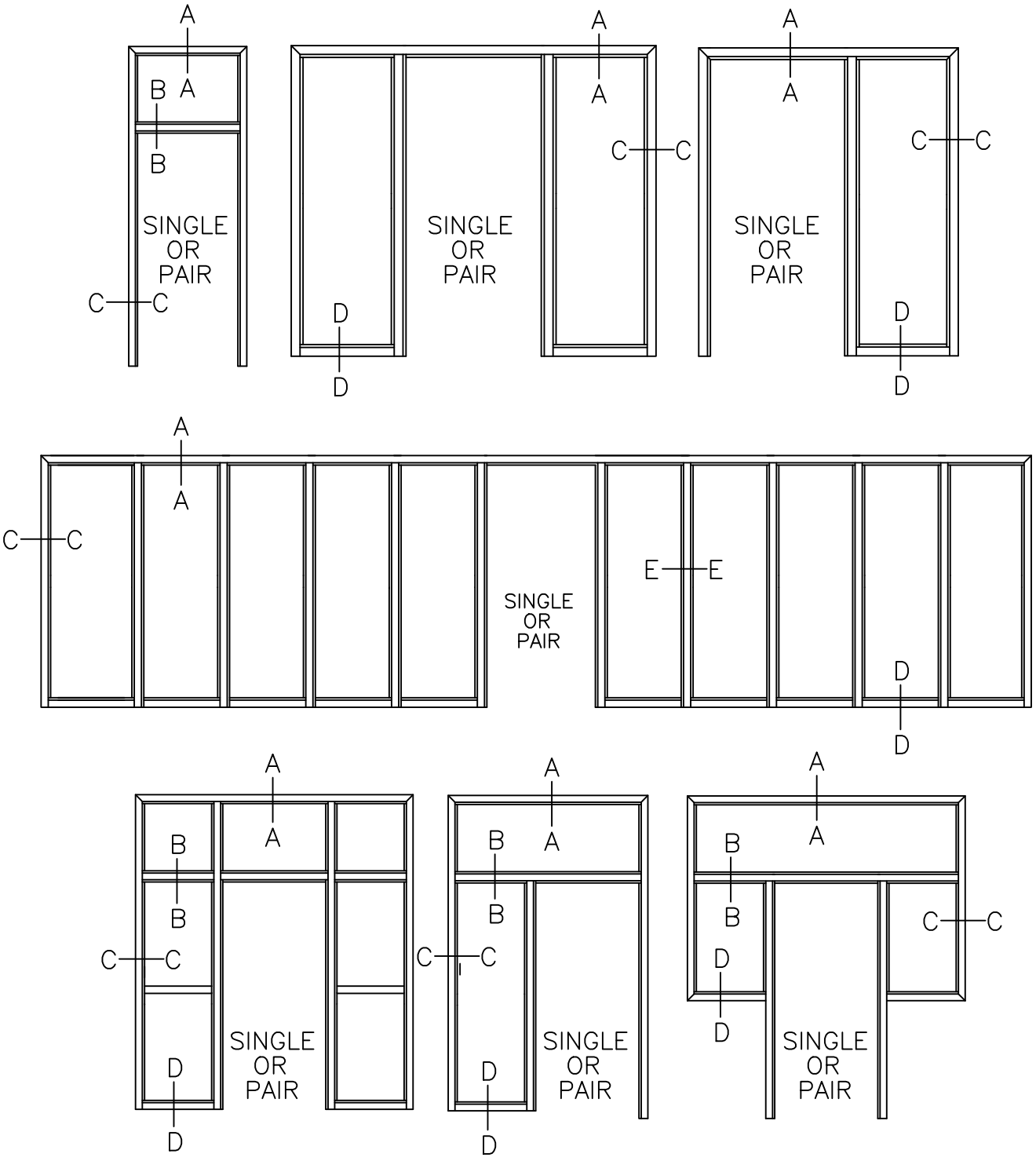


SUFFIX "A" = ACTIVE LEAF OF PAIRS

(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

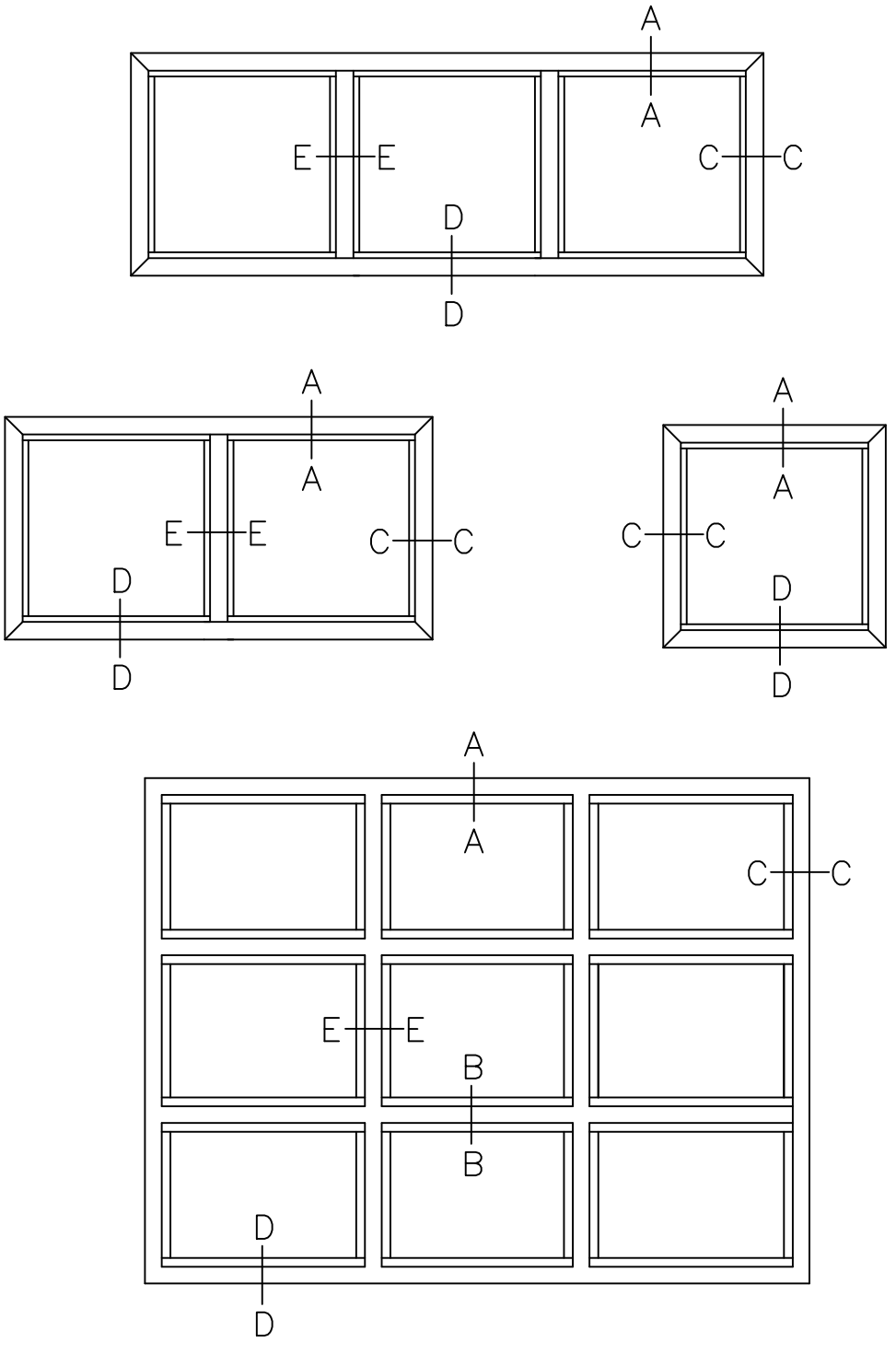
FRAMES ARE FIRE TESTED TO ASTM E119 OR UL 263 AND LIMIT THE TRANSFER OF RADIANT HEAT



Views shown apply to pages F20-3 thru F20-9

E119 FIRE-RESISTIVE WINDOW 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 pages F20-3 thru F20-9

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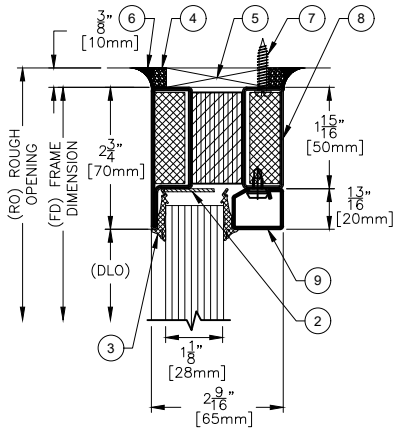
Return to Top

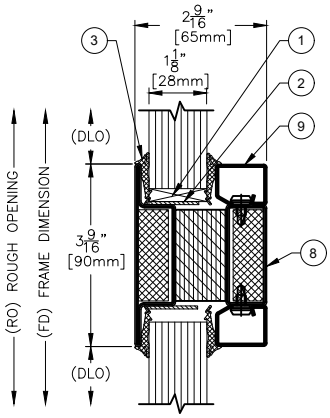
TECH-DATA

E119 FIRE-RESISTIVE 60 MINUTE FLUSH GLAZING

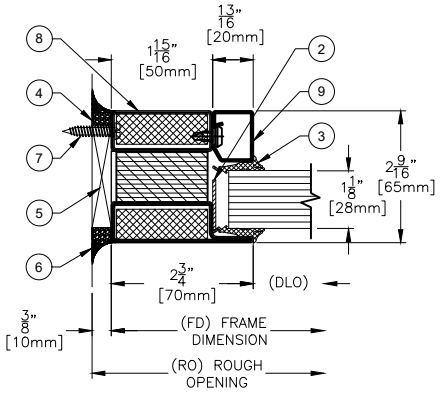
F20–3



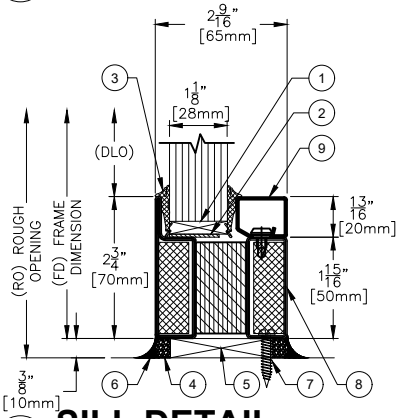
A HEAD DETAIL



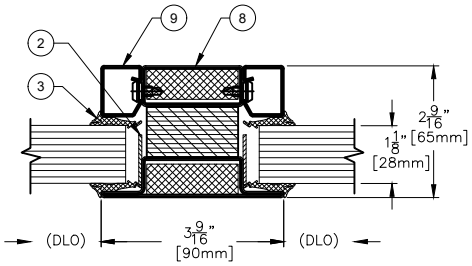
B HORIZ. MULLION



C JAMB DETAIL

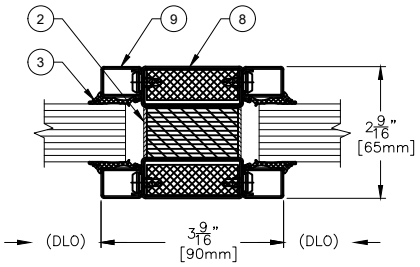


D SILL DETAIL



E VERT. MULLION

CENTER GLAZED OPTIONAL



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 GAGE FIRE RATED FRAME.
9. 16 GAGE 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)

- 60 MINUTE FLUSH GLAZING
- GLASS: VETROTECH vetrotech SAINT-GOBAIN 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".

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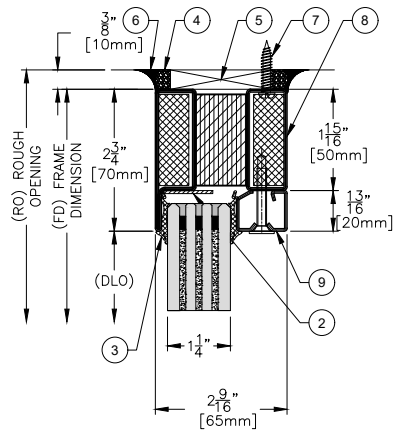
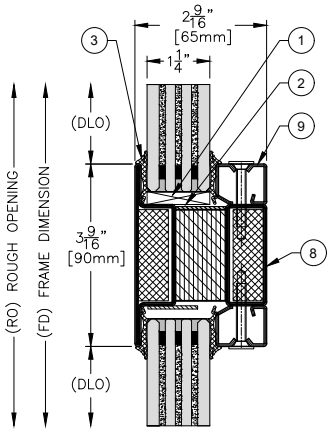
Return to Top

TECH-DATA E119 FIRE-RESISTIVE 60 MIN. FLUSH STRUCTURE GLAZING

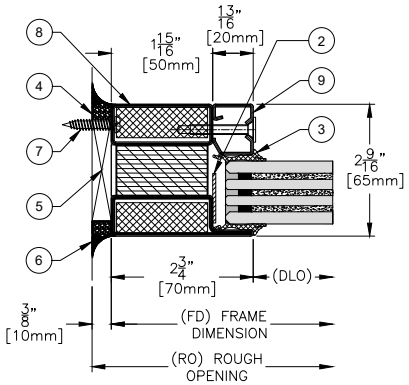
F20-4



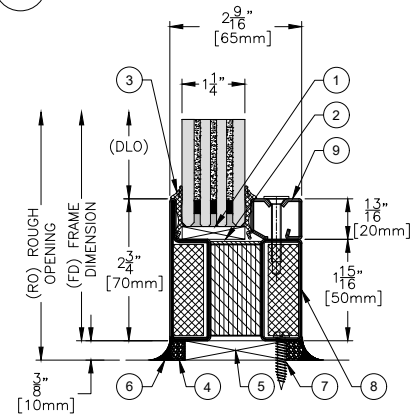
A HEAD DETAIL



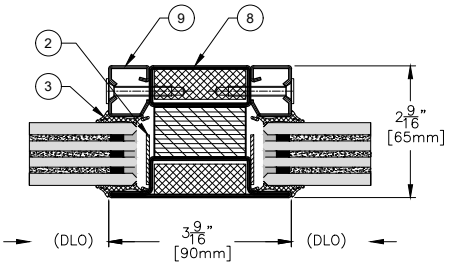
B HORIZ. MULLION



C JAMB DETAIL



D SILL DETAIL



E VERT. MULLION

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 GAGE FIRE RATED FRAME.
9. 16 GAGE 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)

- 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".

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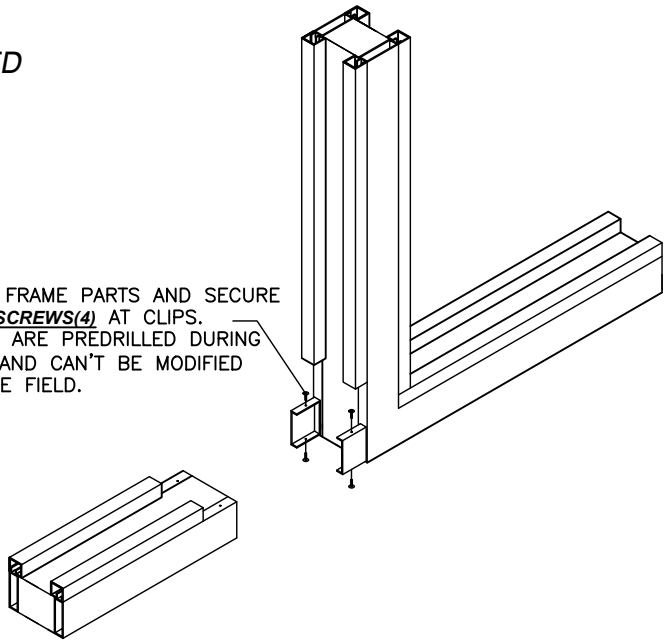
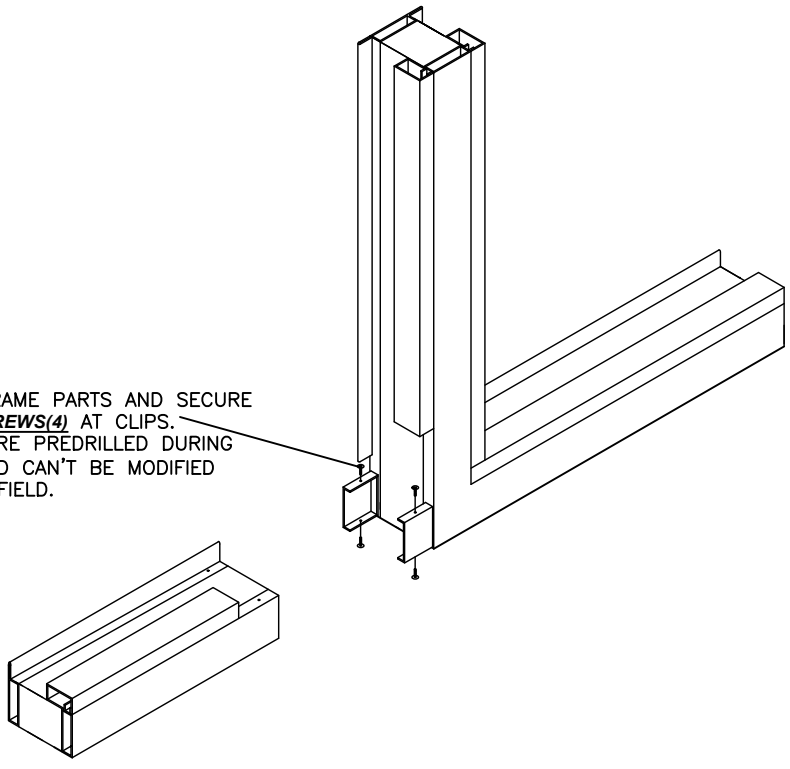
E119 FIRE-RESISTIVE DOOR FRAMES WITH LITES. MECHANICAL JOINT OF 60 MINUTE FRAME COMPONENTS.

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

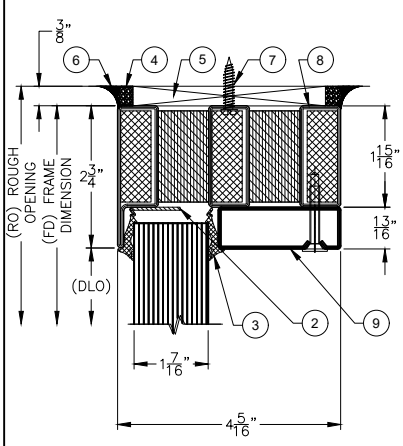


Return to Top

TECH-DATA

E119 FIRE-RESISTIVE 90 MINUTE FLUSH GLAZING

F20-5



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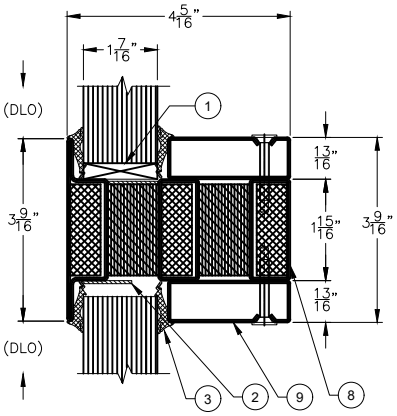
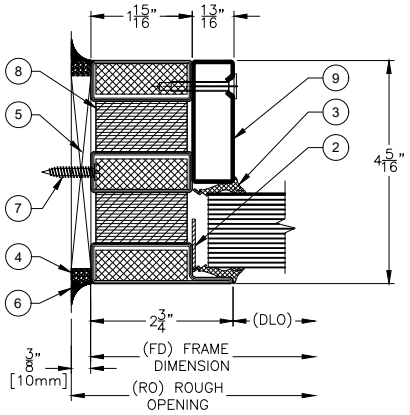
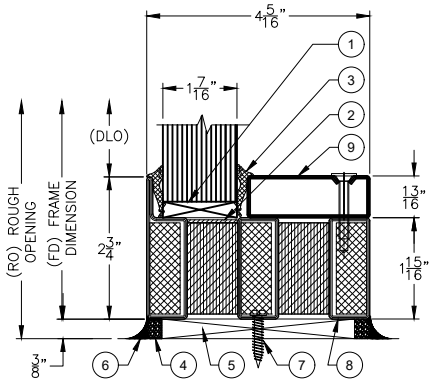


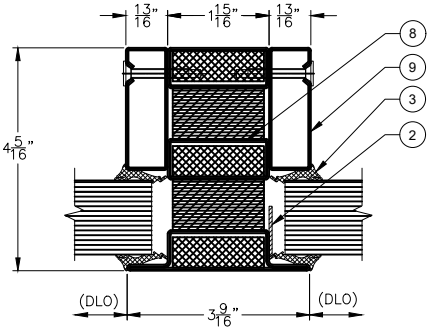
B HORIZ. MULLION



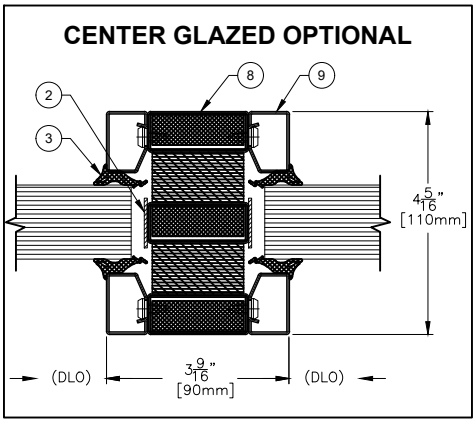
C JAMB DETAIL



D SILL DETAIL



E VERT. MULLION



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 GAGE FIRE RATED FRAME.
9. 16 GAGE 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)

- 90 MINUTE FLUSH GLAZING
- GLASS: VETROTECH vetrotech SAINT-GOBAIN 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".

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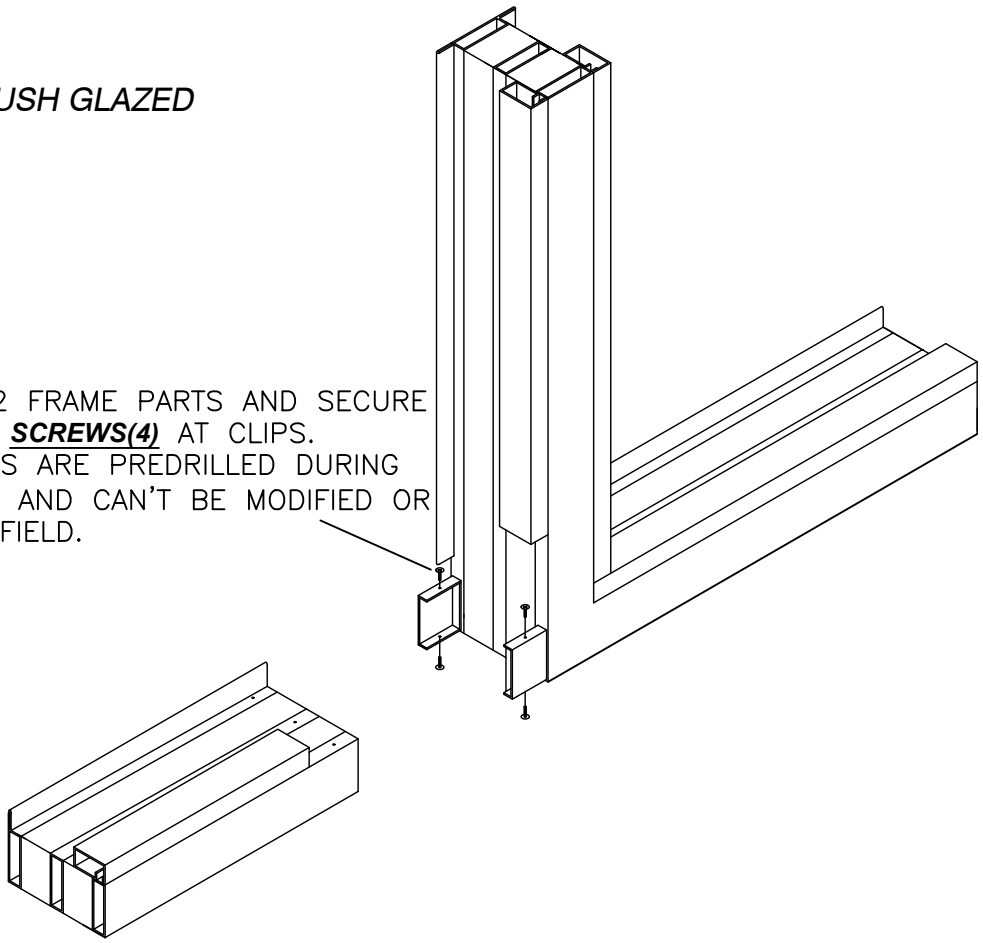
E119 FIRE-RESISTIVE DOOR FRAMES WITH LITES. MECHANICAL JOINT OF 90 MINUTE FRAME COMPONENTS.

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

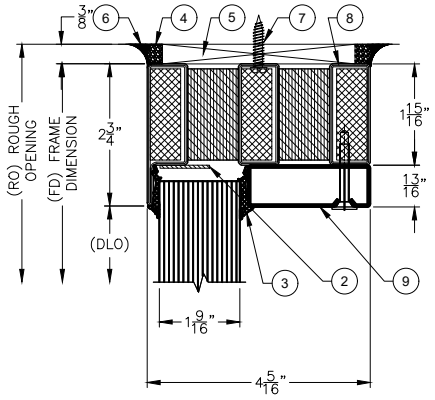


Return to Top

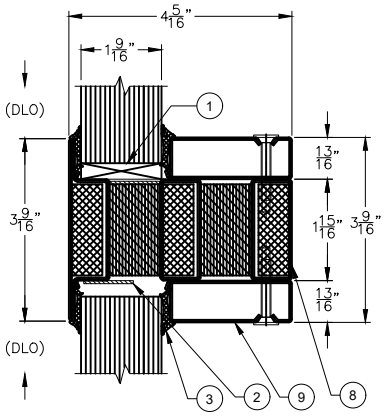
TECH-DATA

E119 FIRE-RESISTIVE 120 MINUTE FLUSH GLAZING

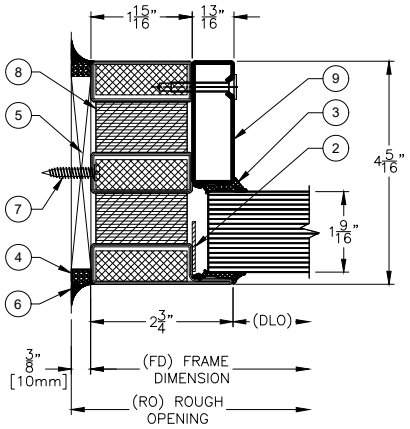
F20-6



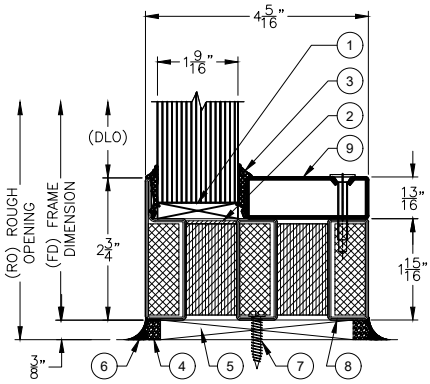
A HEAD DETAIL



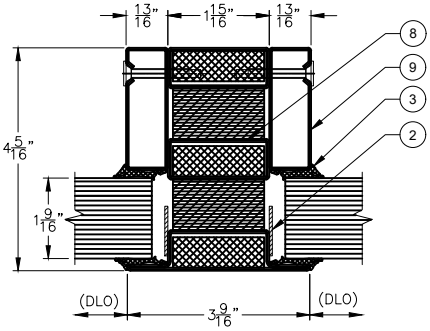
B HORIZ. MULLION



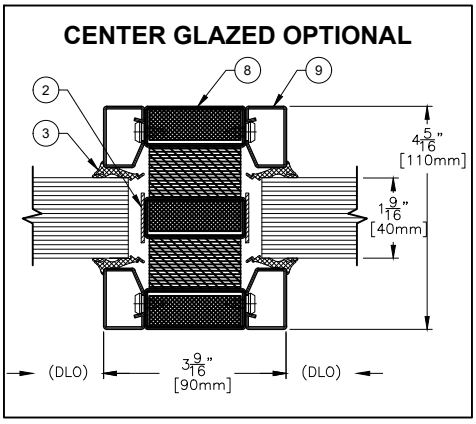
C JAMB DETAIL



D SILL DETAIL



E VERT. MULLION



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 GAGE FIRE RATED FRAME.
9. 16 GAGE 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)

- 120 MINUTE FLUSH GLAZING
- GLASS: VETROTECH CONTRAFLAM 120 Vetrotech_LOGO_BLACK.jpg
- 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".

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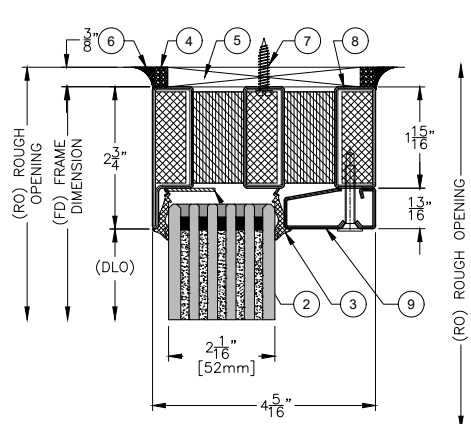
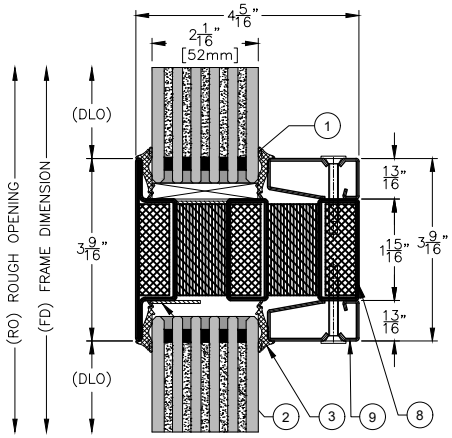
Return to Top

TECH-DATA E119 FIRE-RESISTIVE 120 MIN. FLUSH STRUCTURE GLAZING

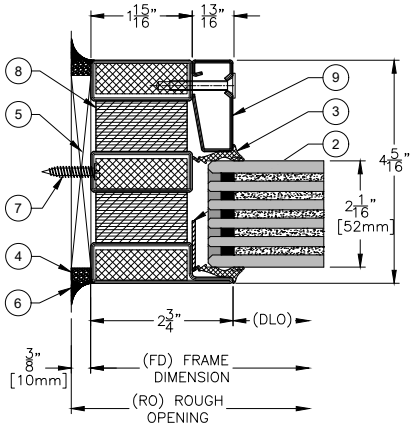
F20-7



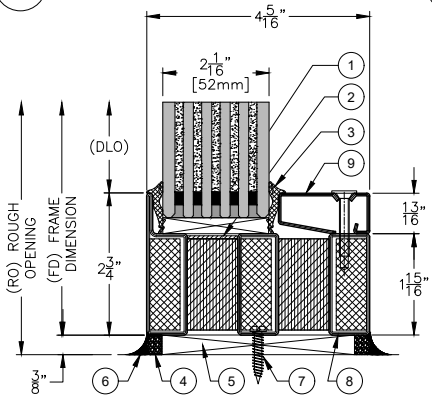
A HEAD DETAIL



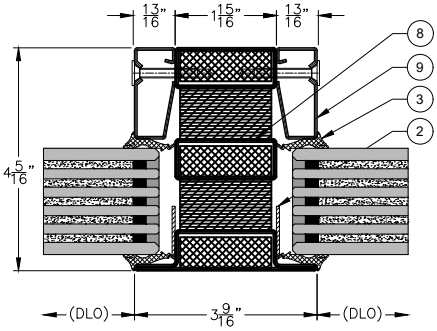
B HORIZ. MULLION



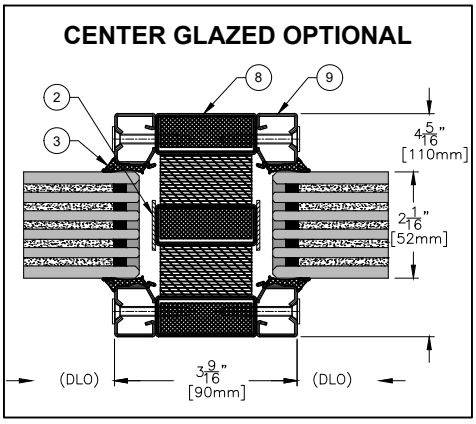
C JAMB DETAIL



D SILL DETAIL



E VERT. MULLION



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 GAGE FIRE RATED FRAME.
9. 16 GAGE 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)

- 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".

Vetrotech_LOGO_BLACK.jpg

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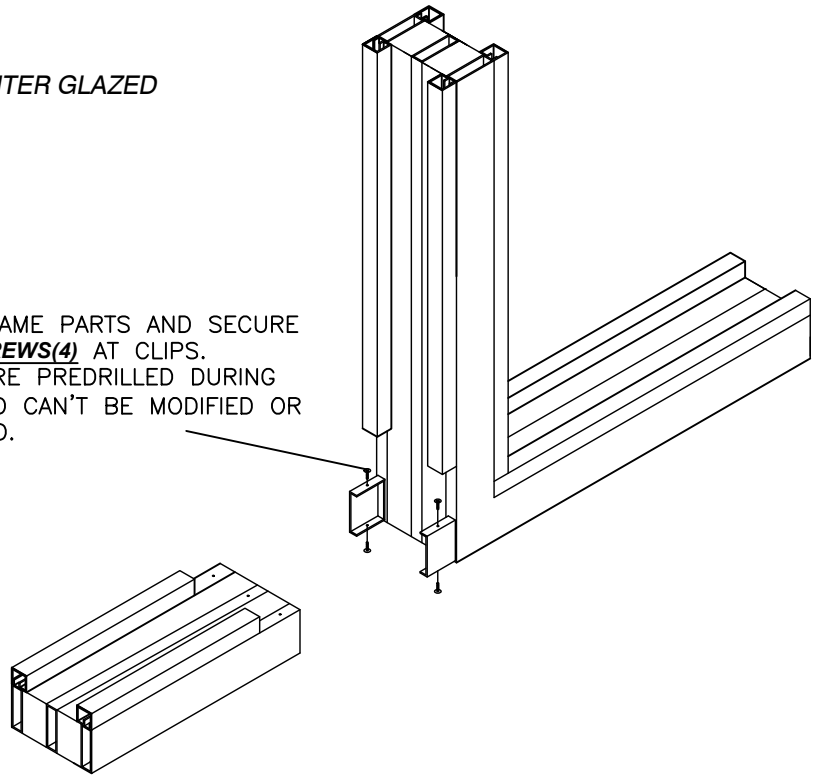
E119 FIRE-RESISTIVE DOOR FRAMES WITH LITES. MECHANICAL JOINT OF 120 MINUTE FRAME COMPONENTS.

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.

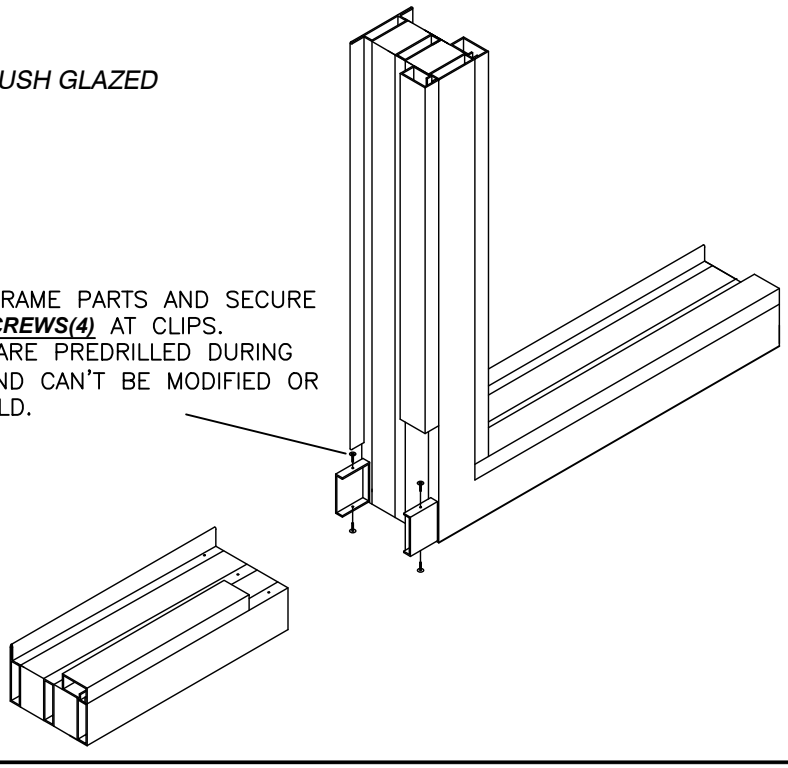
CENTER GLAZED

CONNECT THE 2 FRAME PARTS AND SECURE WITH PROVIDED ***SCREWS(4)*** AT CLIPS. FASTENER HOLES ARE PREDRILLED DURING MANUFACTURING AND CAN'T BE MODIFIED OR ADDED IN THE FIELD.



FLUSH GLAZED

CONNECT THE 2 FRAME PARTS AND SECURE WITH PROVIDED ***SCREWS(4)*** AT CLIPS. FASTENER HOLES ARE PREDRILLED DURING MANUFACTURING AND CAN'T BE MODIFIED OR ADDED IN THE FIELD.

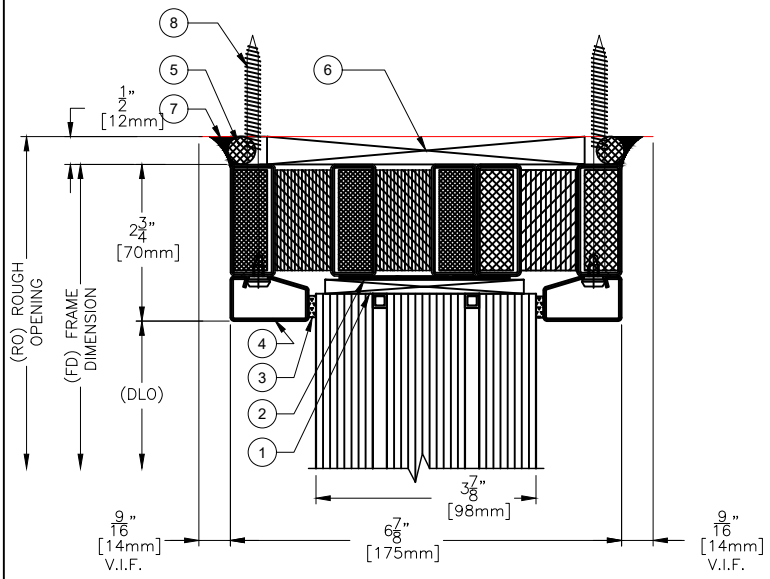


Return to Top

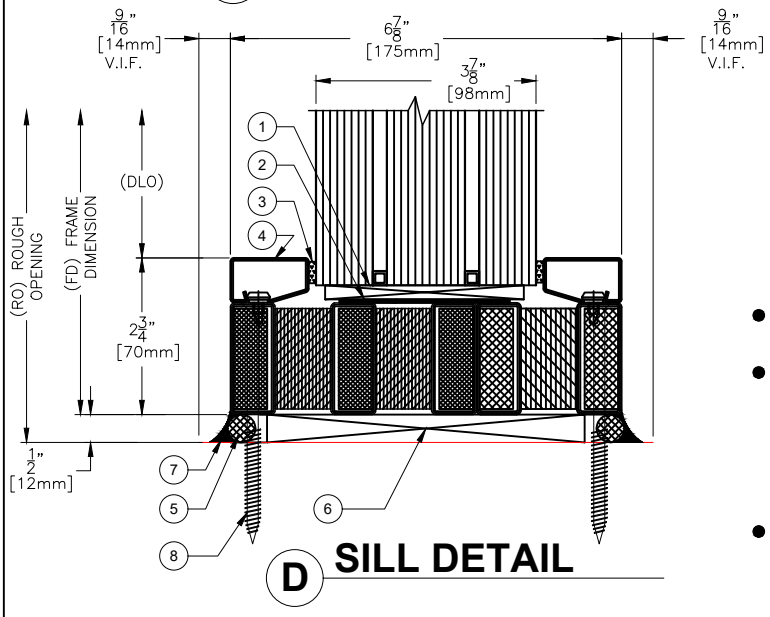
TECH-DATA

E119 FIRE-RESISTIVE 180 MINUTE CENTER GLAZING

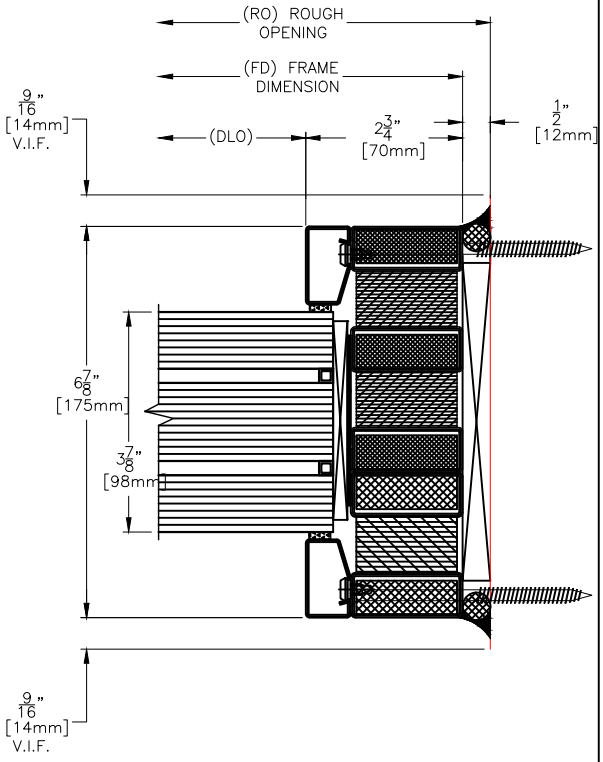
F20-8



A HEAD DETAIL



D SILL DETAIL



C JAMB DETAIL

- 180 MINUTE CENTER GLAZING
- GLASS: VETROTECH 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

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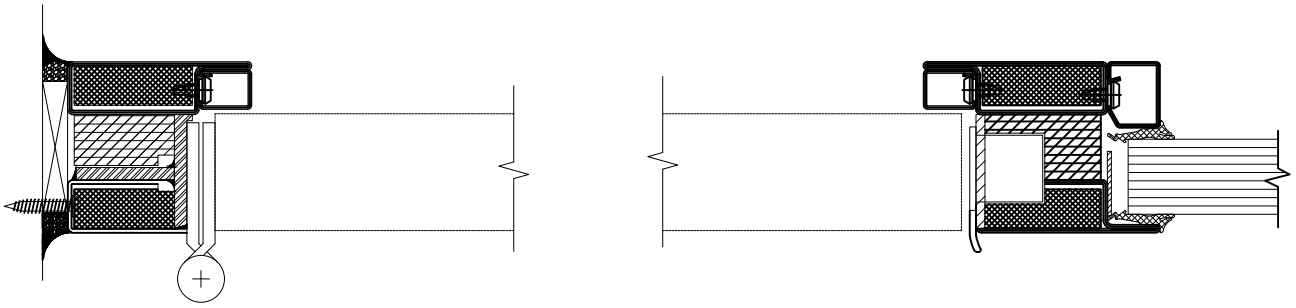
Return to Top

TECH-DATA

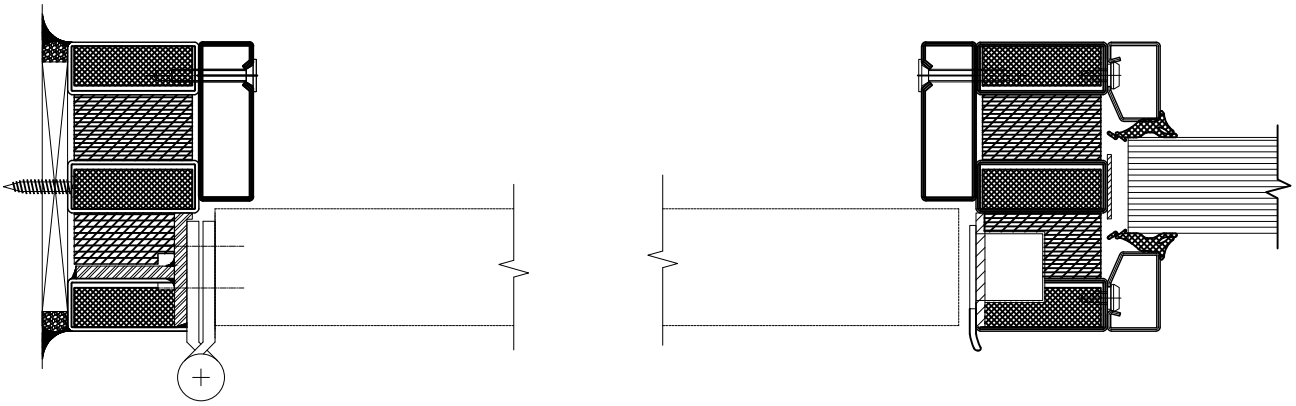
E119 FIRE-RESISTIVE 60, 90 & 120 MINUTE FRAME
WITH HOLLOW METAL DOOR

F20–9

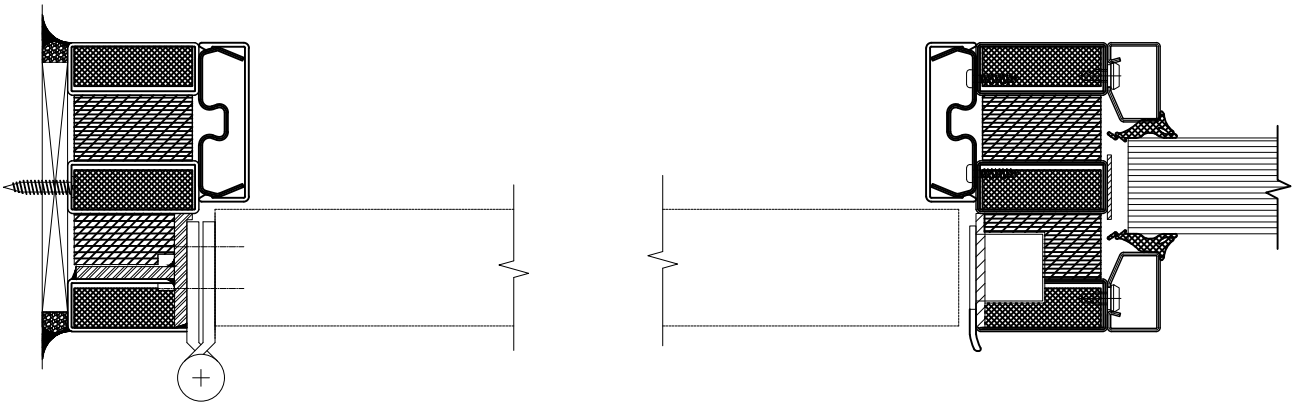
60 MINUTE FRAME FIRE RATING



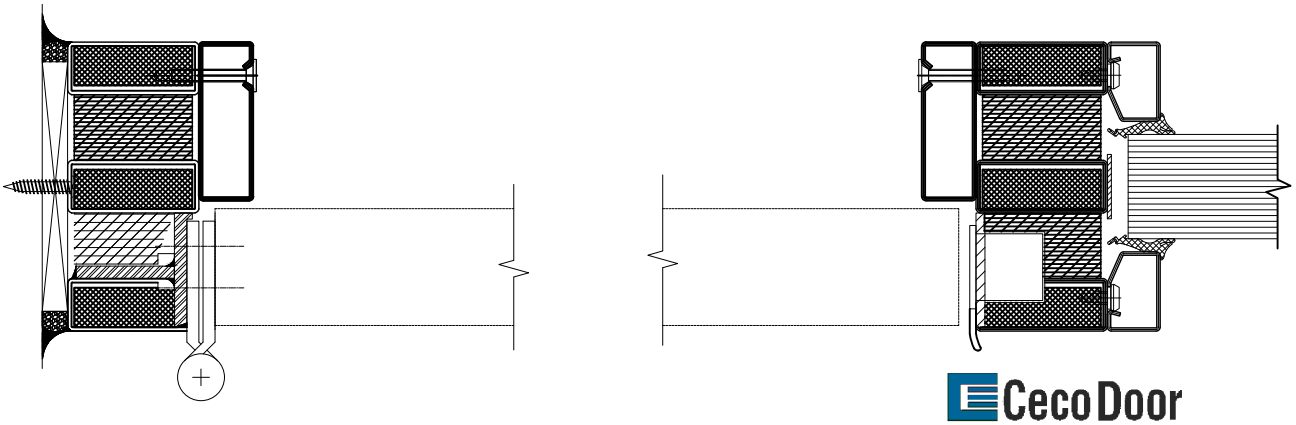
90 MINUTE FRAME FIRE RATING



90 MINUTE FRAME FIRE RATING



120 MINUTE FRAME FIRE RATING



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E119 60 Minute 90° Corner Frame

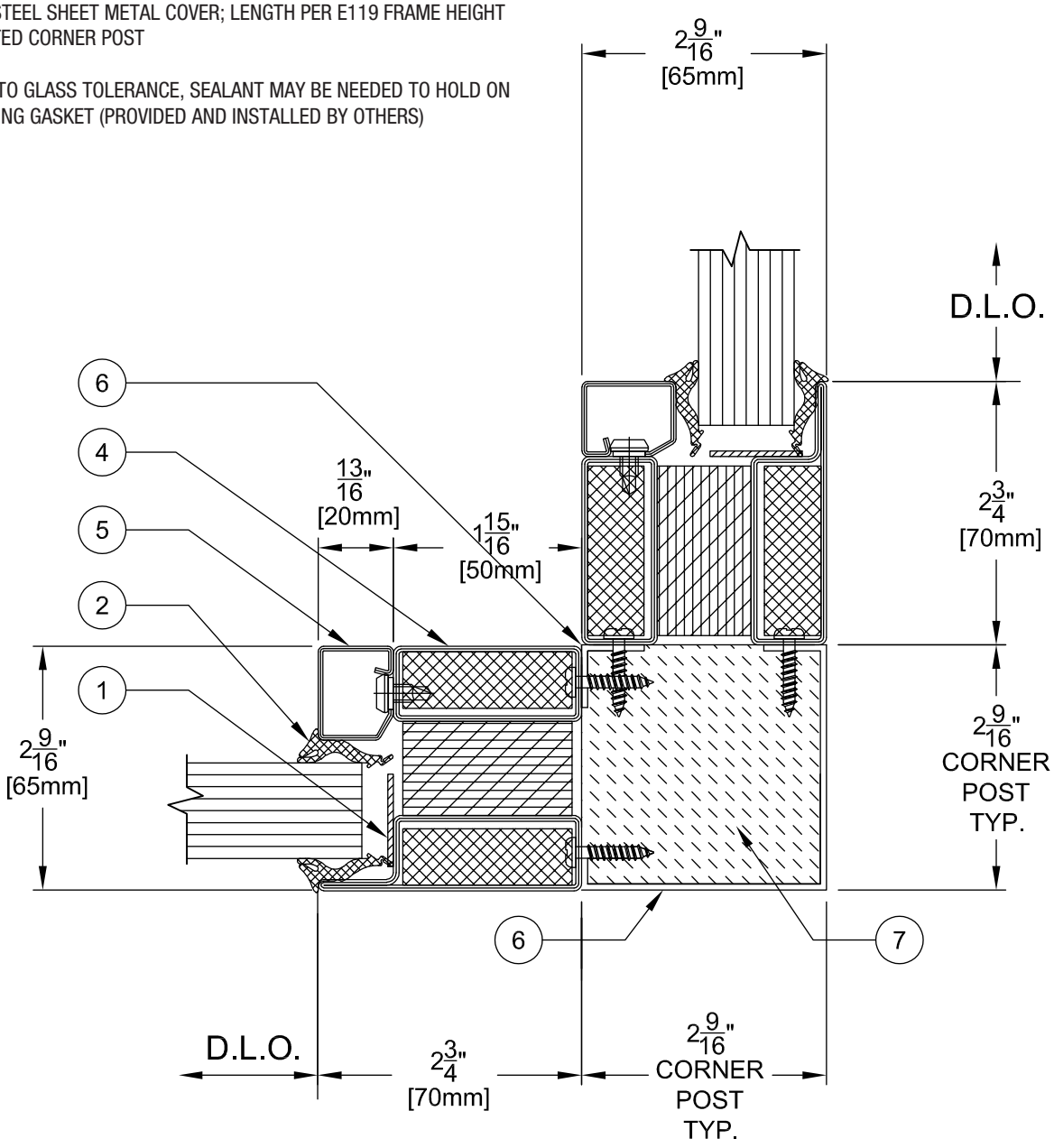
Fire Resistive Products

March, 2019

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)



E119 60 Minute Angled Frame

Return to Index

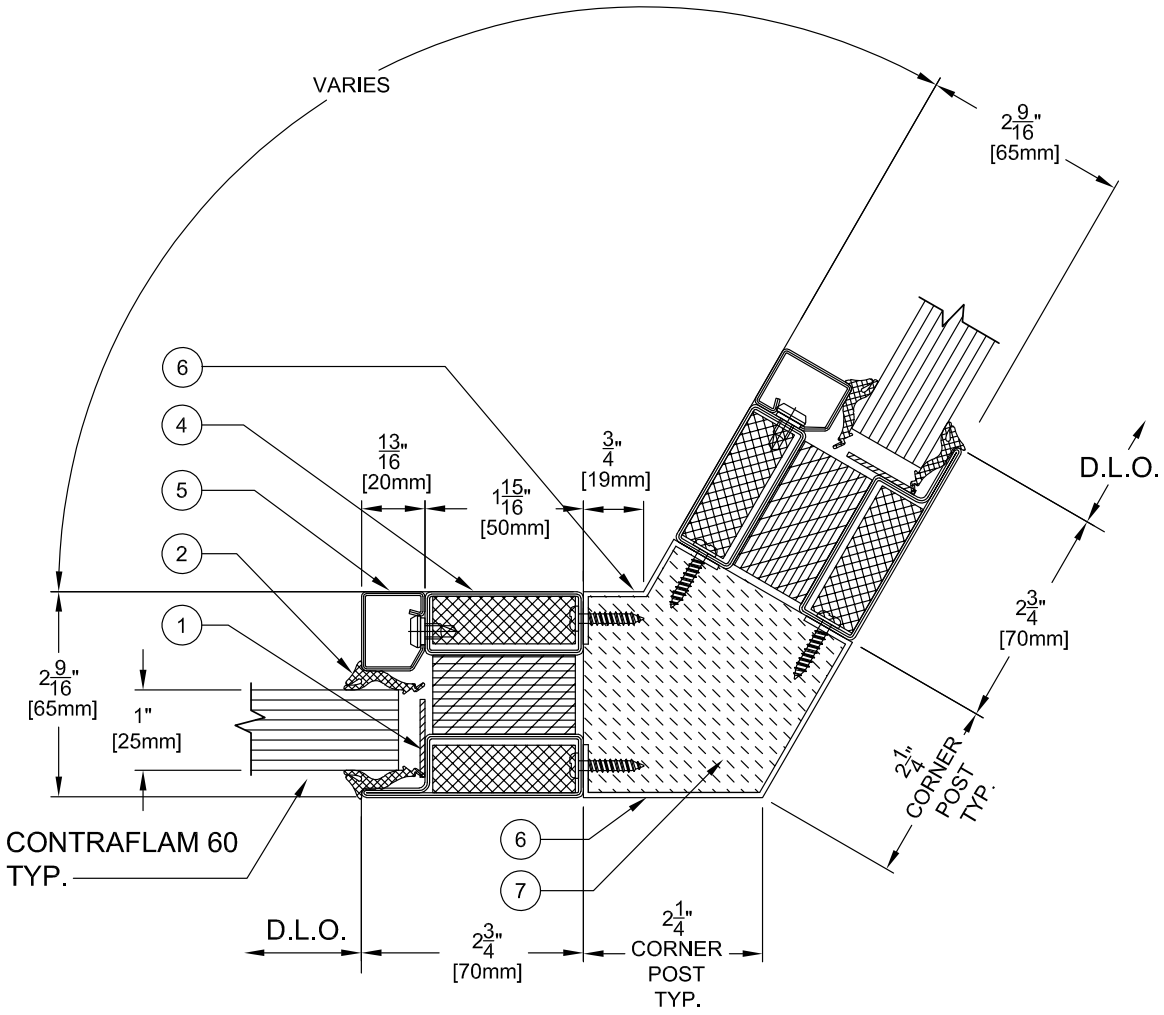
Fire Resistive Products

March, 2019

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)



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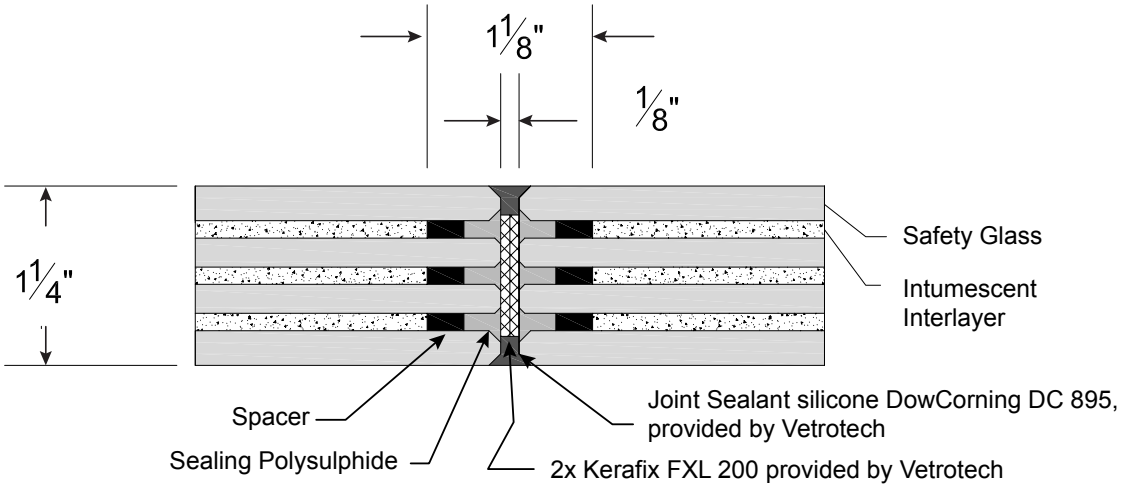
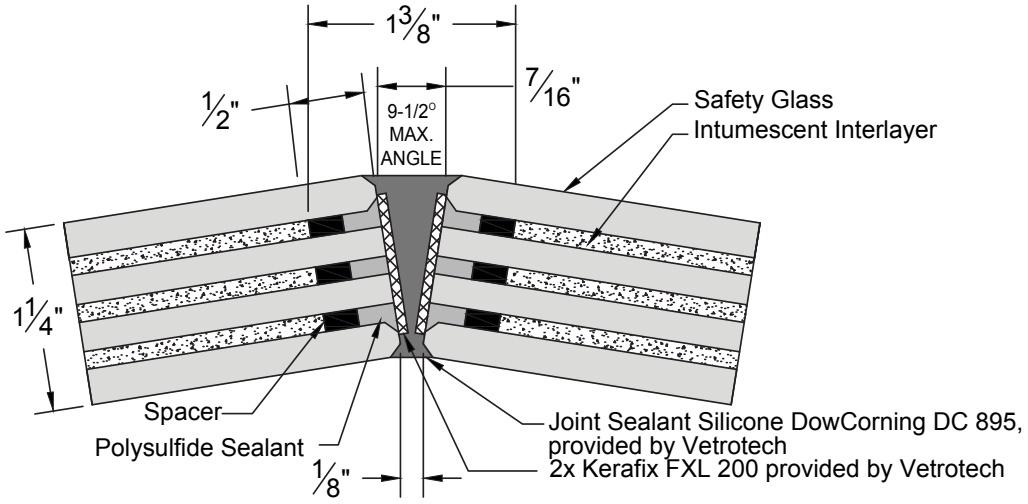


CONTRAFLAM 60 STRUCTURE JOINT



CONTRAFLAM 60 ANGLE STRUCTURE JOINT

E119 90 and 120 Minute 90° Frame Corner

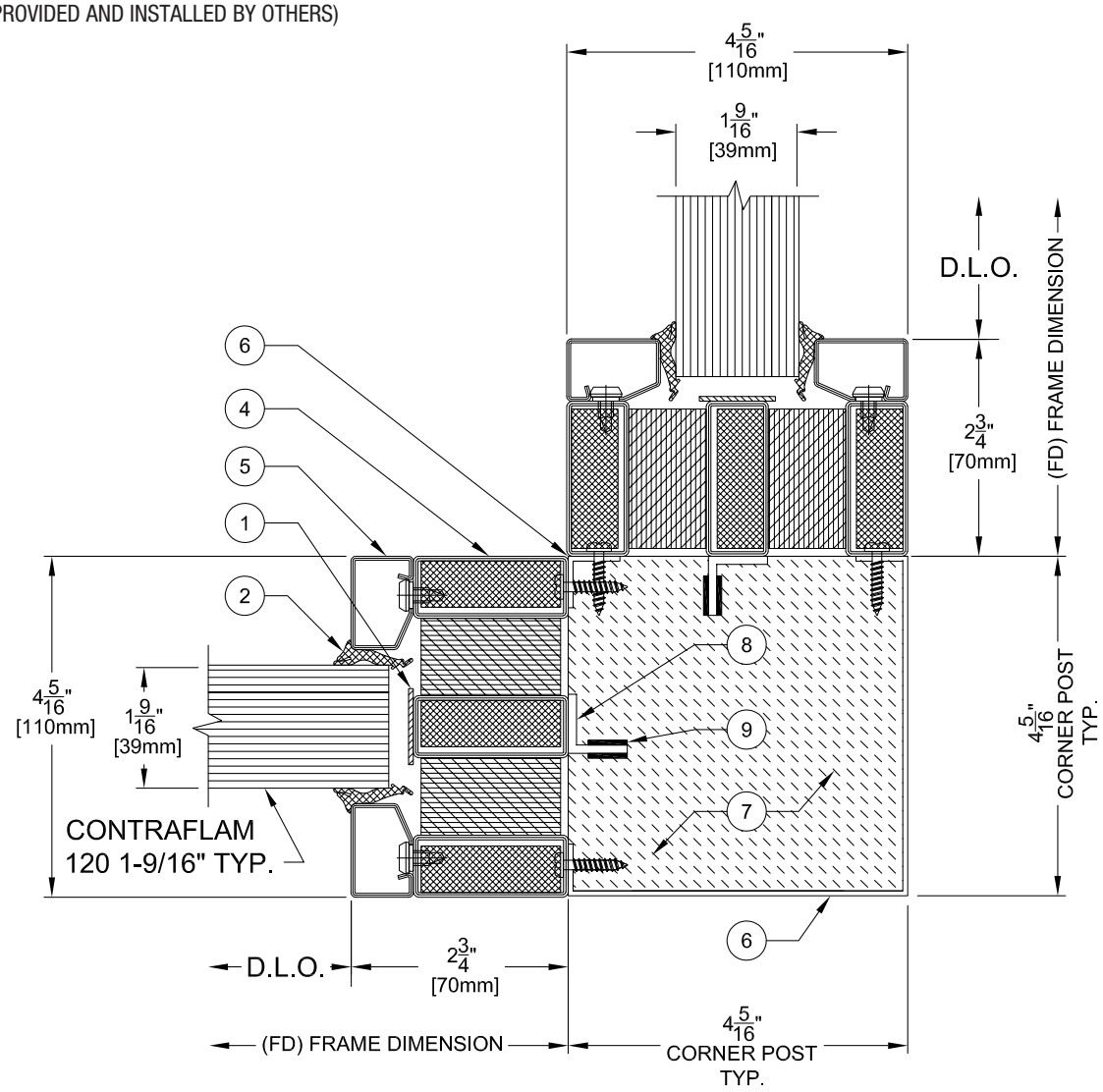
Fire Resistive Products

March, 2019

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)



E119 90 and 120 Minute Angled Frame

Return to Index

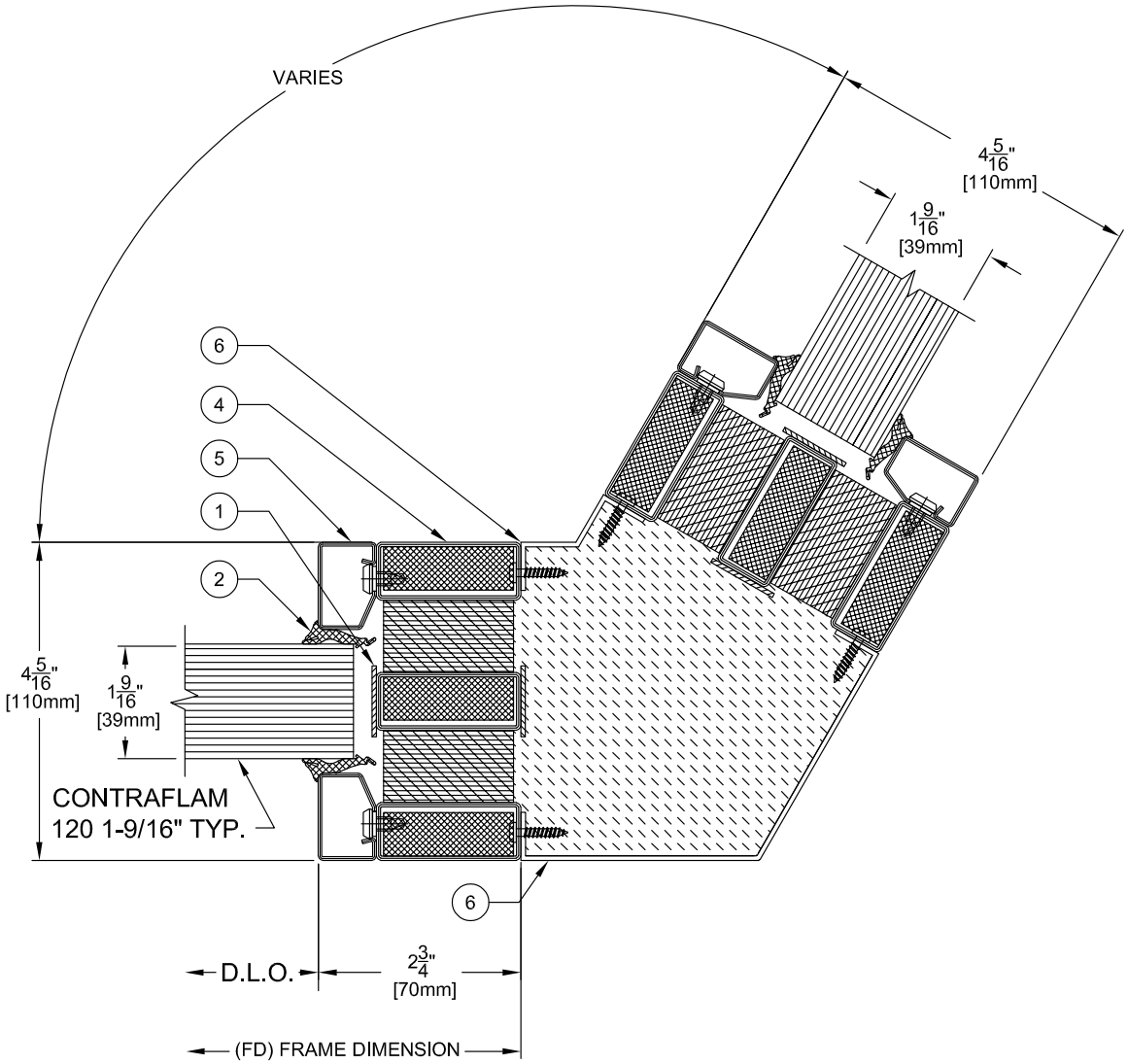
Fire Resistive Products

March, 2019

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)



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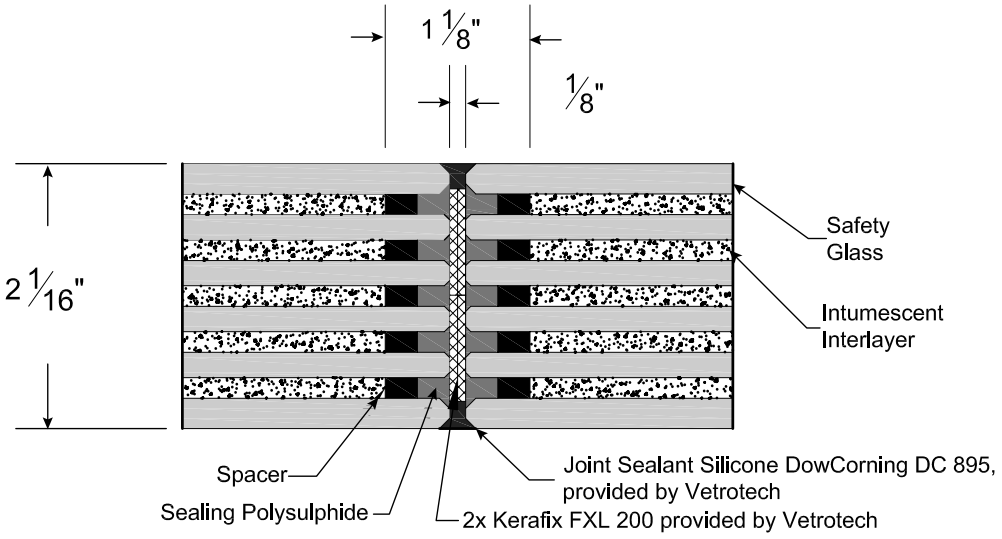
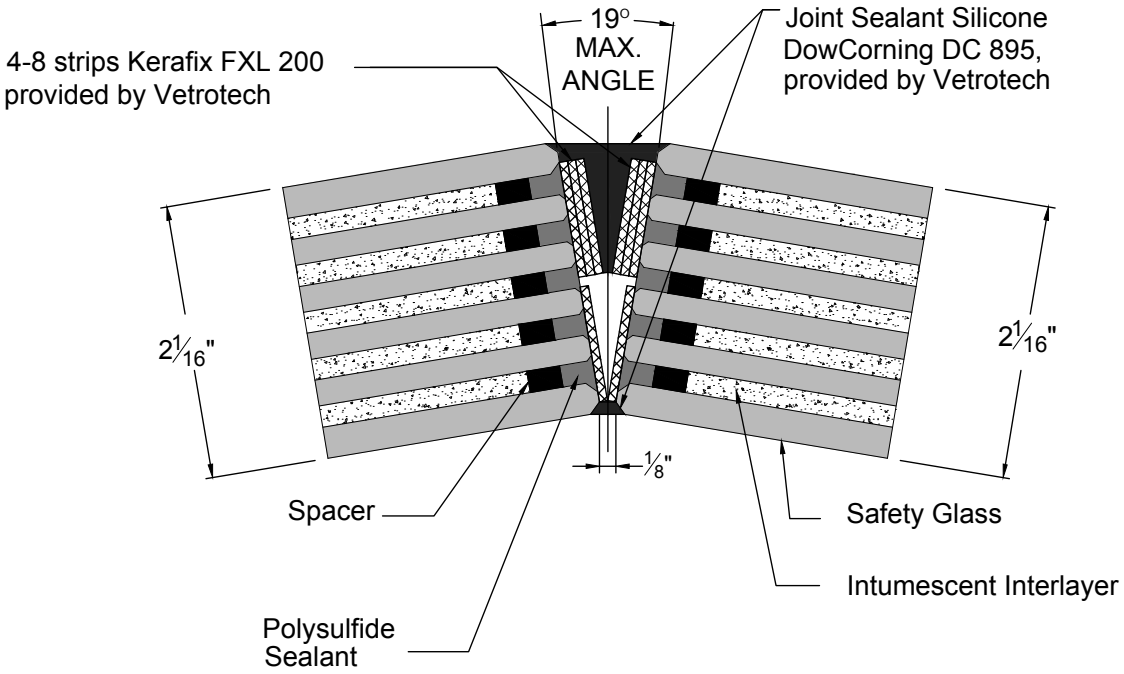


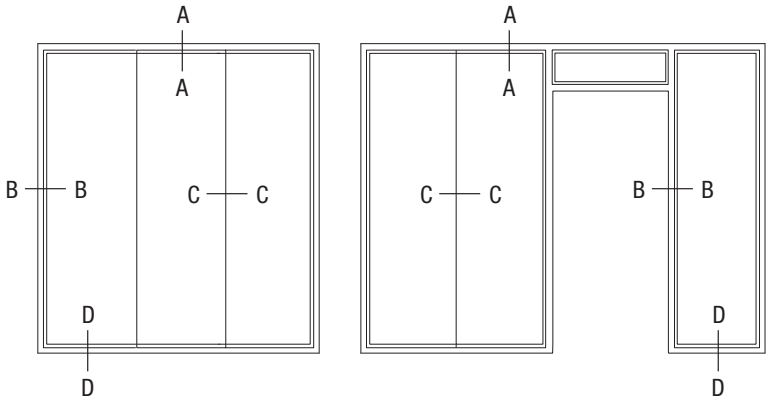
CONTRAFLAM 120 STRUCTURE JOINT



CONTRAFLAM 120 ANGLE STRUCTURE JOINT

March, 2019

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



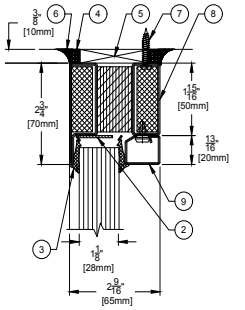
NOTES:

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.

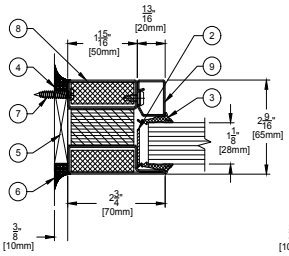
*NOTE: DUE TO GLASS TOLERANCE, SEALANT MAY BE NEEDED TO HOLD ON VINYL GLAZING GASKET (PROVIDED AND INSTALLED BY OTHERS).

MAY BE USED ON TRANSOMS AND SIDELIGHTS

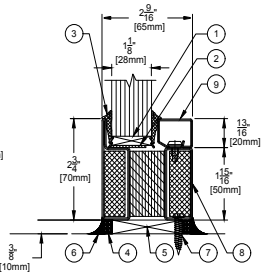
60 MINUTE RATING



A HEAD DETAIL 6"=1'-0"



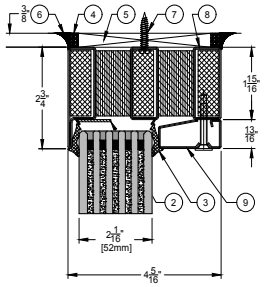
B JAMB DETAIL 6"=1'-0"



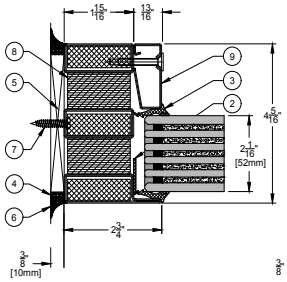
D SILL DETAIL 6"=1'-0"

C STRUCTURE JOINT 6"=1'-0"

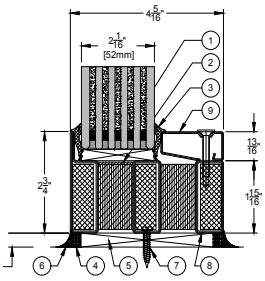
120 MINUTE RATING



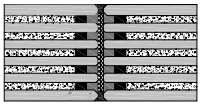
A HEAD DETAIL 6"=1'-0"



B JAMB DETAIL 6"=1'-0"



D SILL DETAIL 6"=1'-0"



C STRUCTURE JOINT 6"=1'-0"

Return to Index

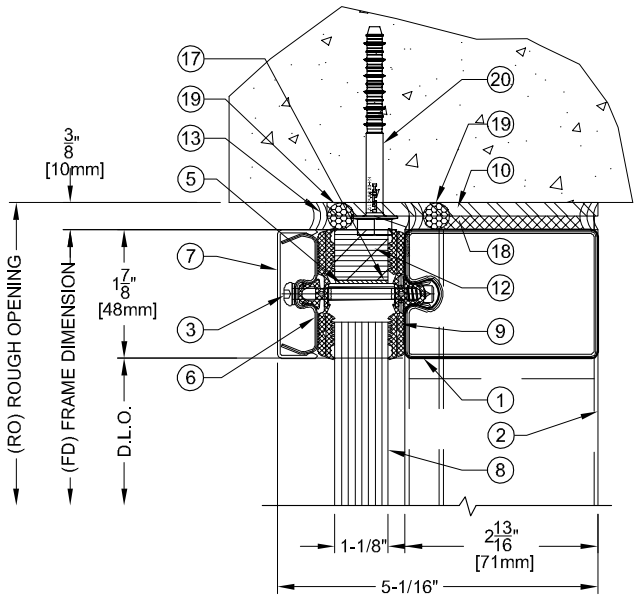
E119 60 Minute Interior Curtain Wall - Head and Sill Detail

Fire Resistive Products

March, 2019

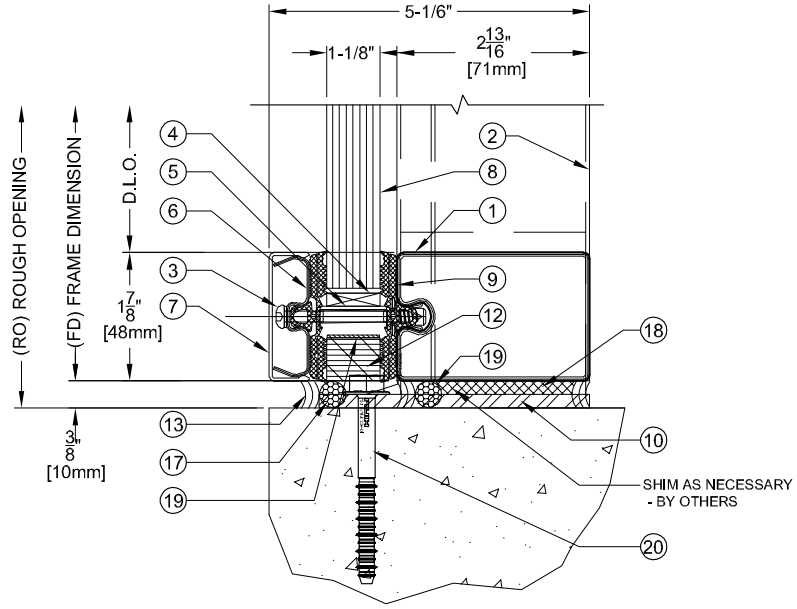
NOTES:

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)



HEAD DETAIL

SCALE: N.T.S.



SILL DETAIL

SCALE: N.T.S.

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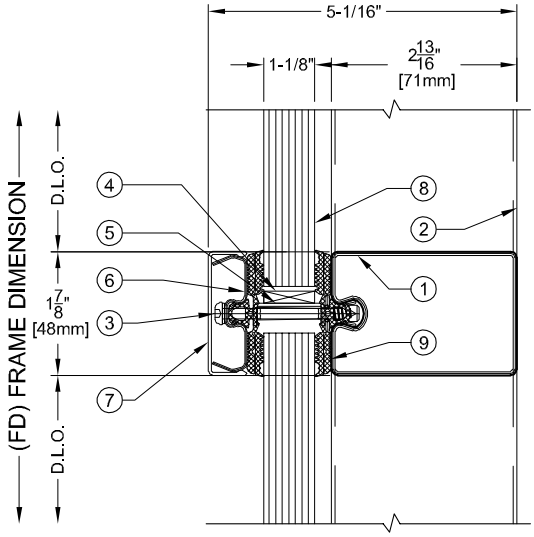
E119 60 Minute Interior Curtain Wall - Mullion Details

Fire Resistive Products

March, 2019

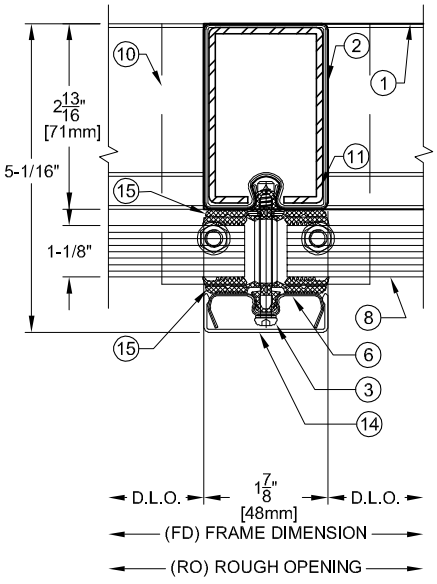
NOTES:

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)



HORIZ. MULLION DETAIL

SCALE: N.T.S.



VERTICAL MULLION

SCALE: N.T.S.

F20-18

Return to Index

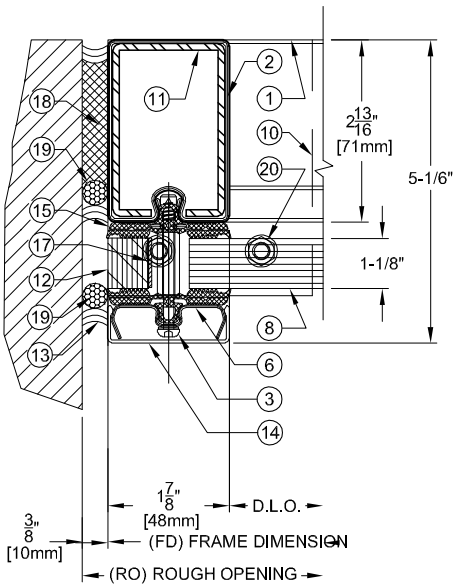
E119 60 Minute Interior Curtain Wall - Jamb Details

Fire Resistive Products

March, 2019

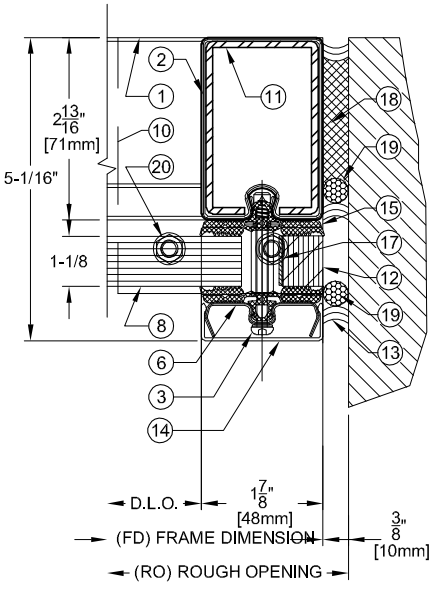
NOTES:

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)



JAMB DETAIL - LEFT

SCALE: N.T.S.



JAMB DETAIL - RIGHT

SCALE: N.T.S.

ASSA ABLOY, the global leader in door opening solutions

Ceco Door
ASSA ABLOY

Return to Index

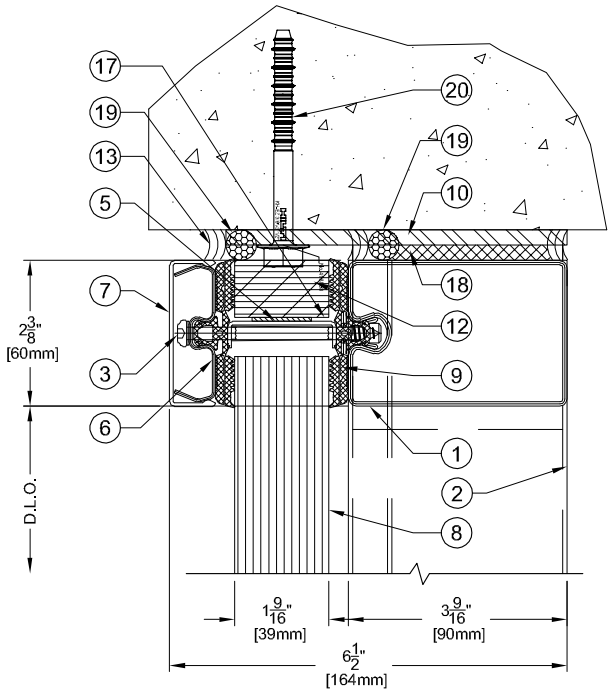
E119 120 Minute Interior Curtain Wall - Head and Sill Details

Fire Resistive Products

March, 2019

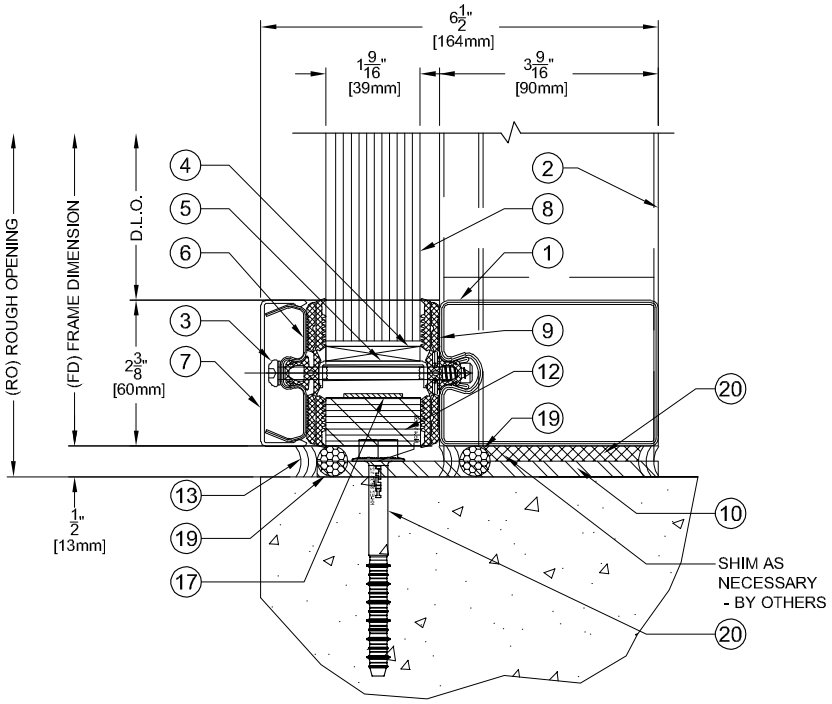
NOTES:

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)



HEAD DETAIL

SCALE: N.T.S.



E119 120 Minute Interior Curtain Wall - Mullion Details

Fire Resistive Products

March, 2019

NOTES:

1. E119 INTERIOR STEEL CURTAIN WALL HORIZONTAL MEMEBER
2. E119 INTERIOR STEEL CURTAIN WALL VERTICAL MEMBER
3. PRESSURE PLATE LOCKING SCREW W/SPACER
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5. SETTING BLOCK SHELF
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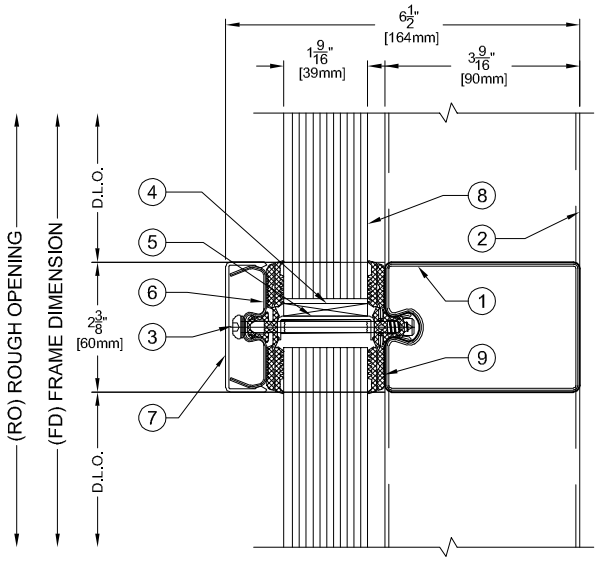
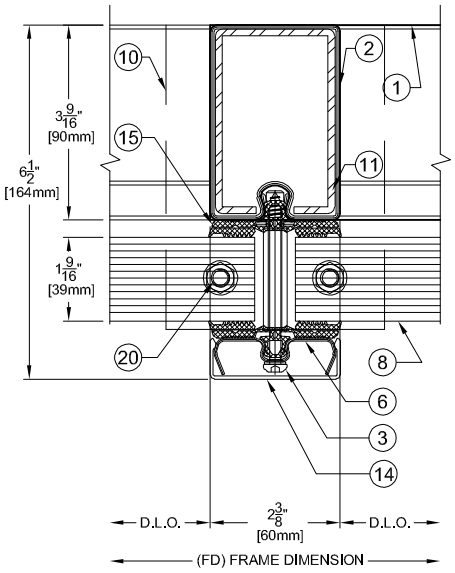
17. INTUMESENT TAPE
18. MINERAL WOOL (BY OTHERS)
19. FIRE STOP & SMOKE SEAL (BY OTHERS)
20. ANCHORS (BY OTHERS)



HORIZ. MULLION DETAIL

SCALE: N.T.S.



VERTICAL MULLION

SCALE: N.T.S.

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E119 120 Minute Interior Curtain Wall - Jamb Details

Fire Resistive Products

March, 2019

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7. HORIZONTAL COVER CAP
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12. HARDWOOD BLOCK
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14. VERTICAL COVER CAP
15. VERTICAL WEATHER STRIPPING
17. INTUMESENT TAPE
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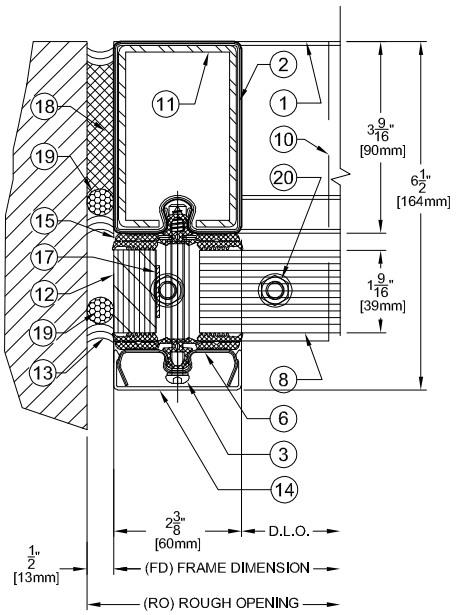
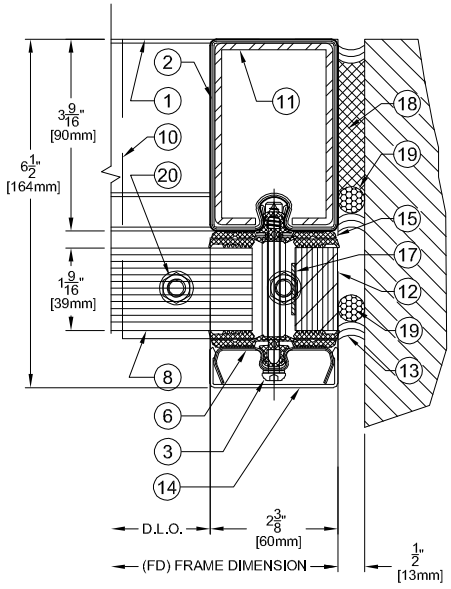
19. FIRE STOP & SMOKE SEAL (BY OTHERS)
20. ANCHORS (BY OTHERS)



JAMB DETAIL - LEFT

SCALE: N.T.S.



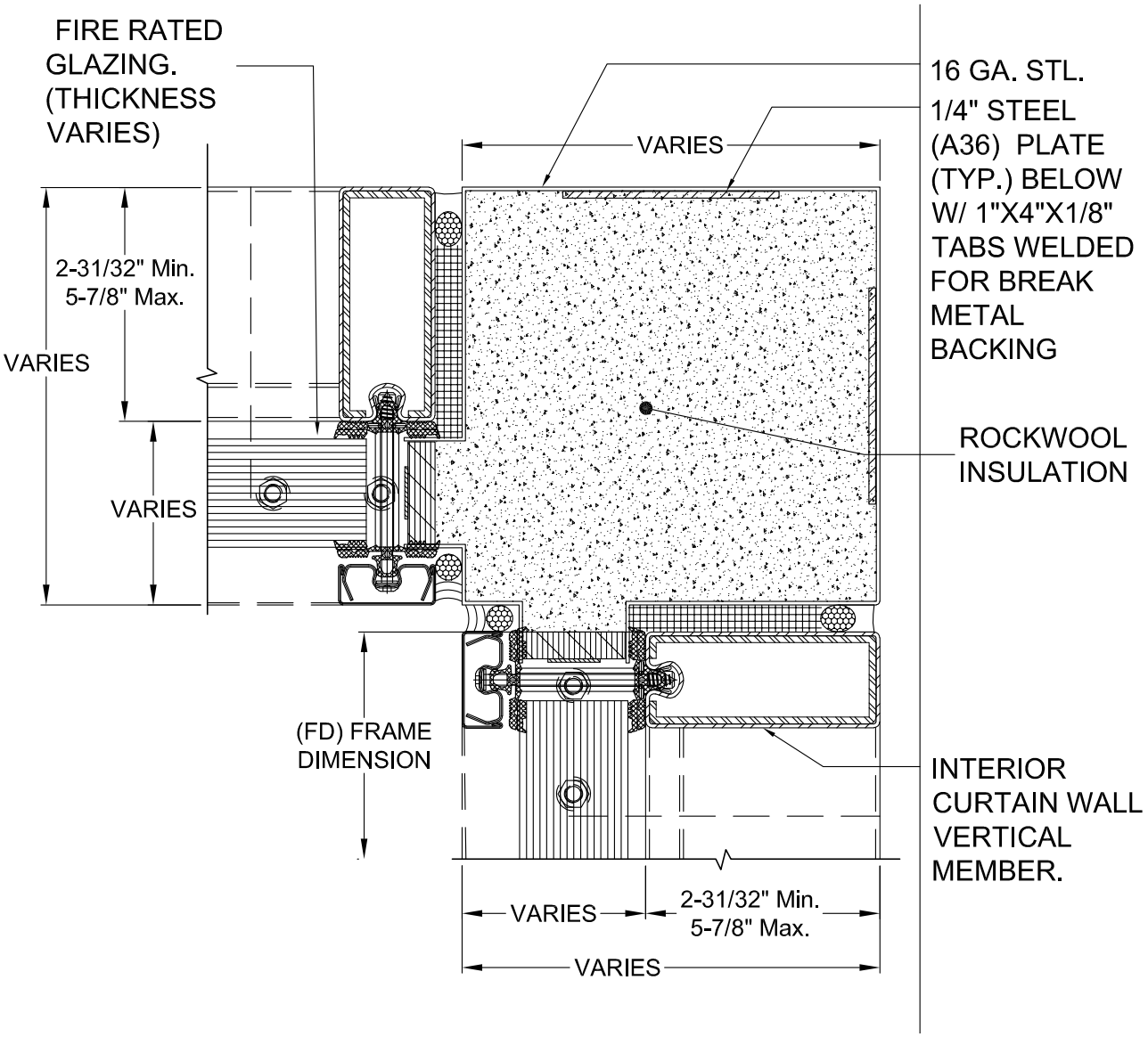
JAMB DETAIL - RIGHT

SCALE: N.T.S.

E119 Interior Curtain Wall 90⁰ Inside Corner

Fire Resistive Products

March, 2019



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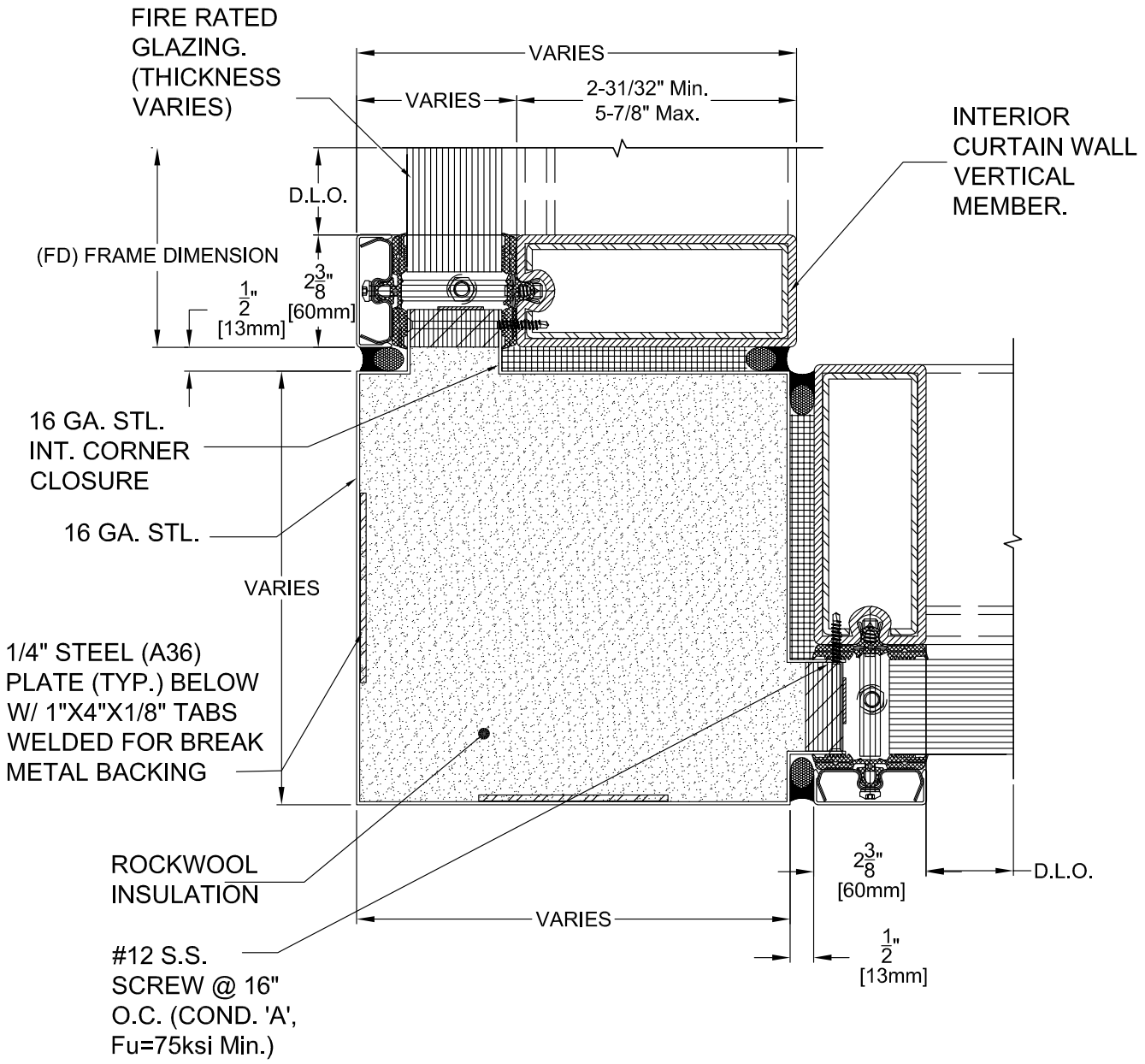
E119 Interior Curtain Wall 90º Outside Corner

Fire Resistive Products

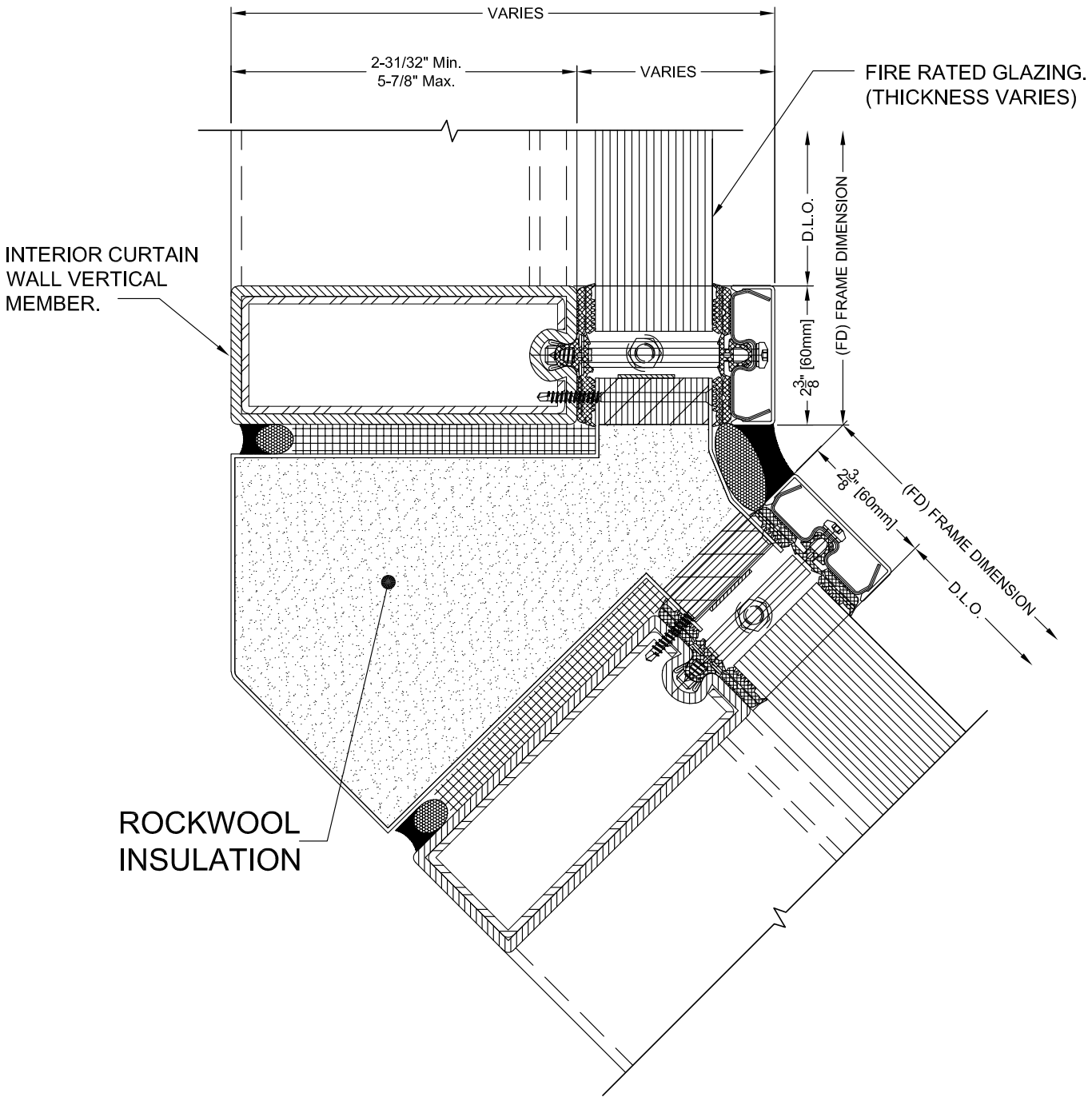
March, 2019



E119 Interior Curtain Wall Inside Angled Frame

Fire Resistive Products

March, 2019



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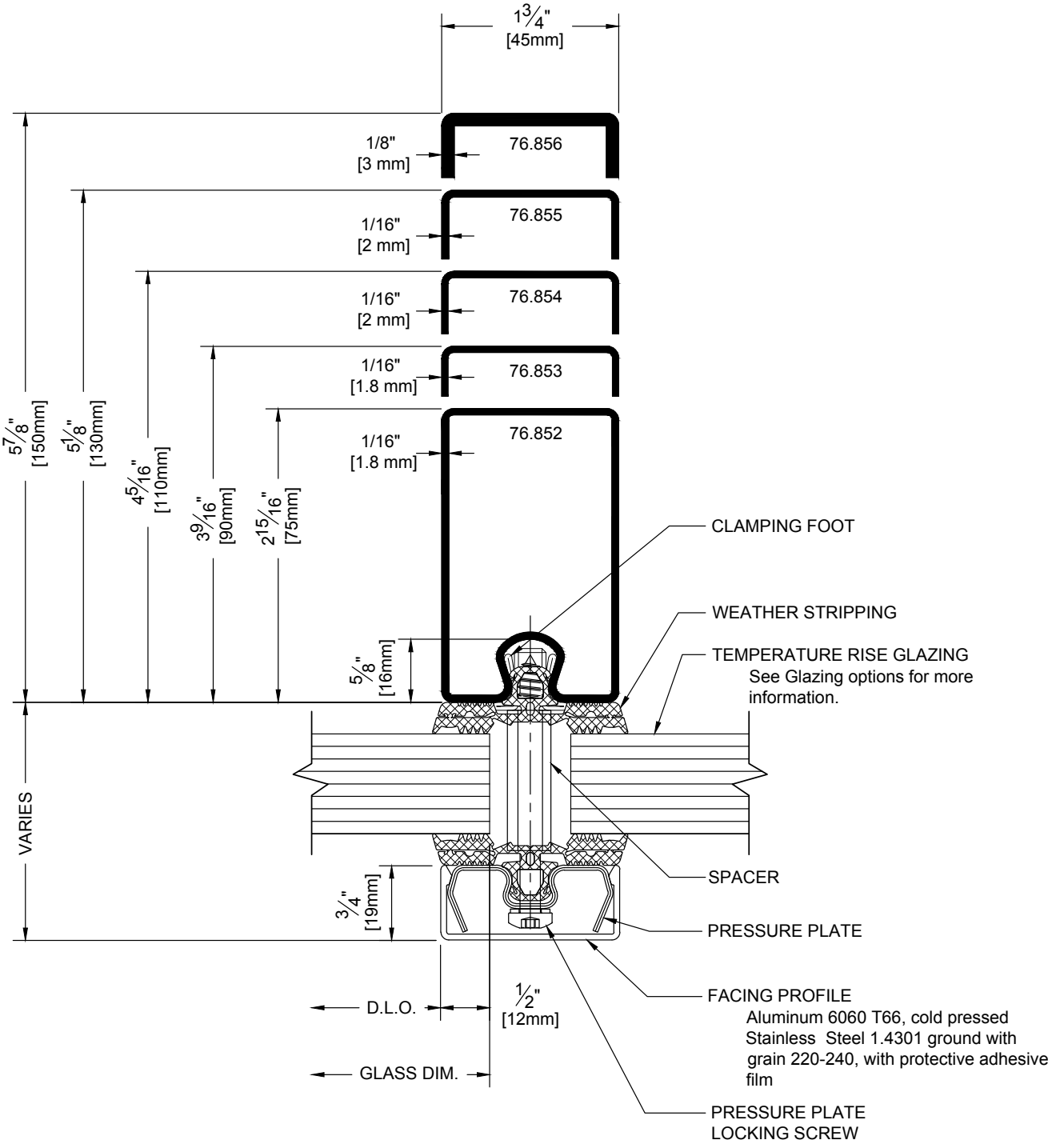
E119 Interior Curtain Wall Back Mullion Options - 1-3/4" Face

Fire Resistive Products

March, 2019



E119 Interior Curtain Wall Back Mullion Options - 2-3/8" Face

Fire Resistive Products

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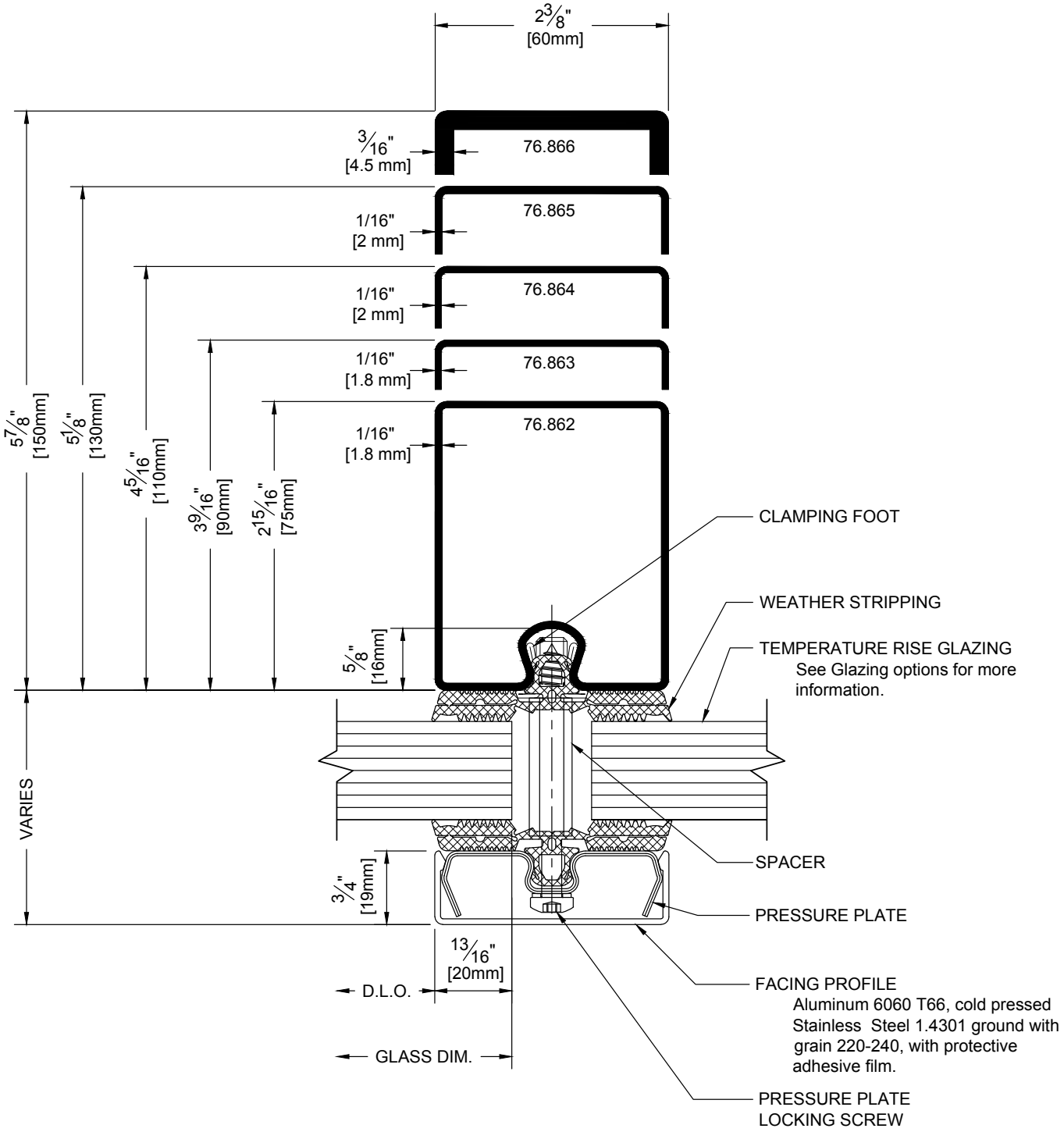
March, 2019



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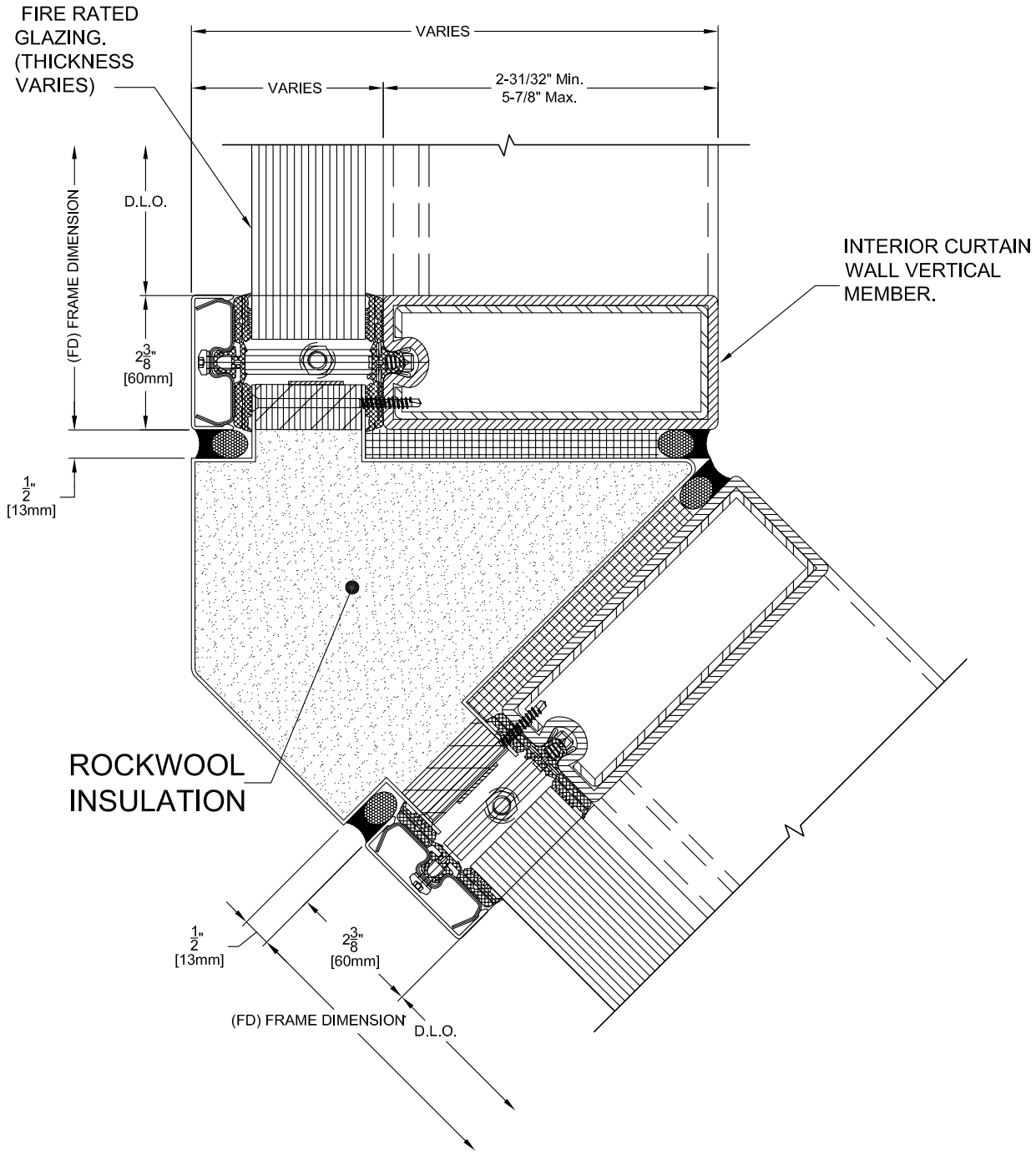
E119 Interior Curtain Wall Outside Angled Frame

Fire Resistive Products

March, 2019



Narrow Stile Door Jamb Detail/Jamb Detail with Sidelight

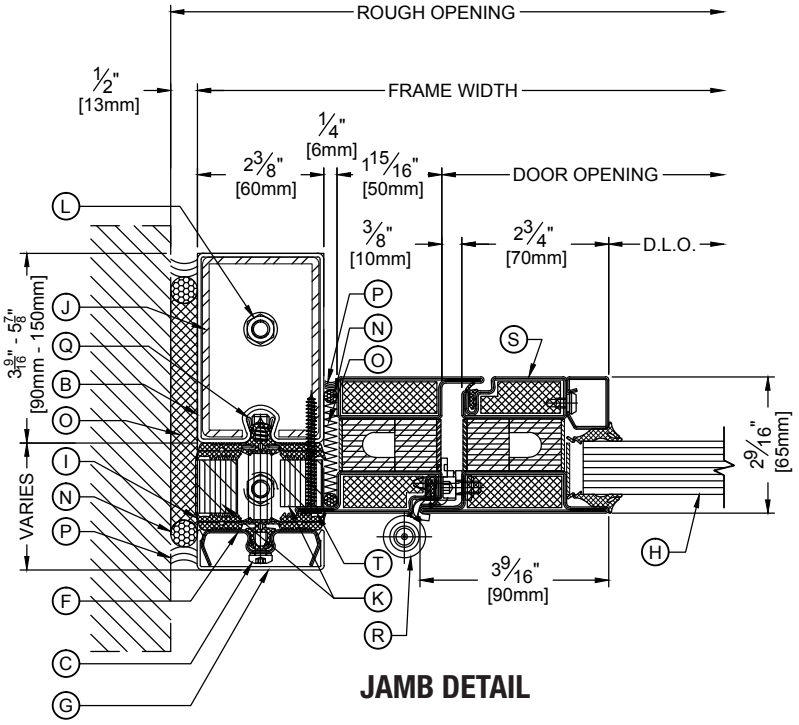
Ceco Door
ASSA ABLOY

March, 2019

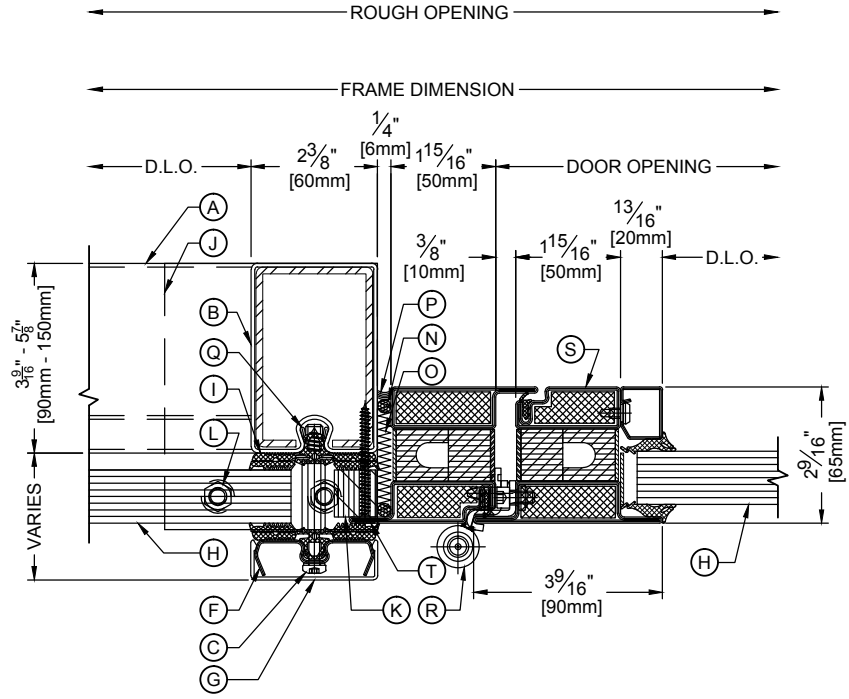
NOTES:

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.



JAMB DETAIL



JAMB DETAIL WITH SIDELIGHT

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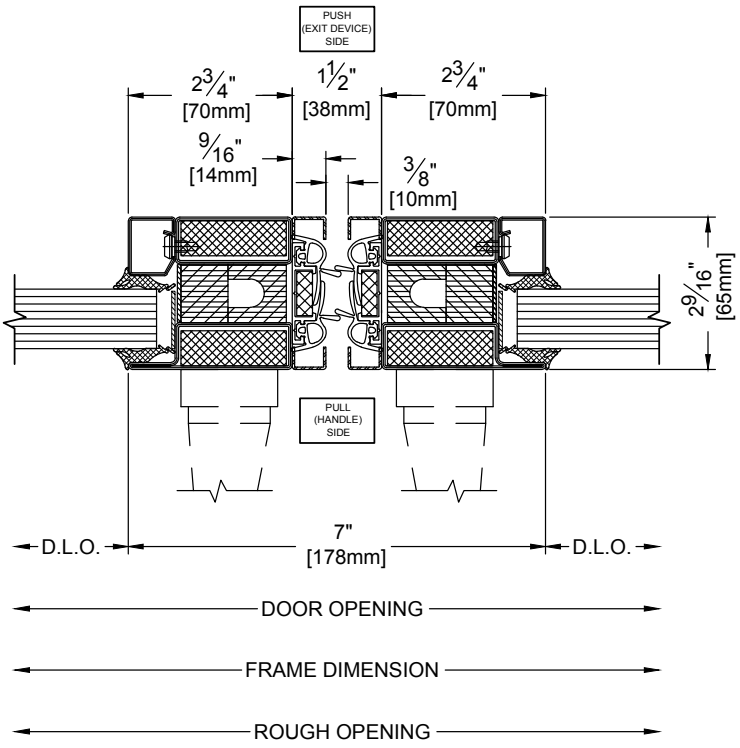
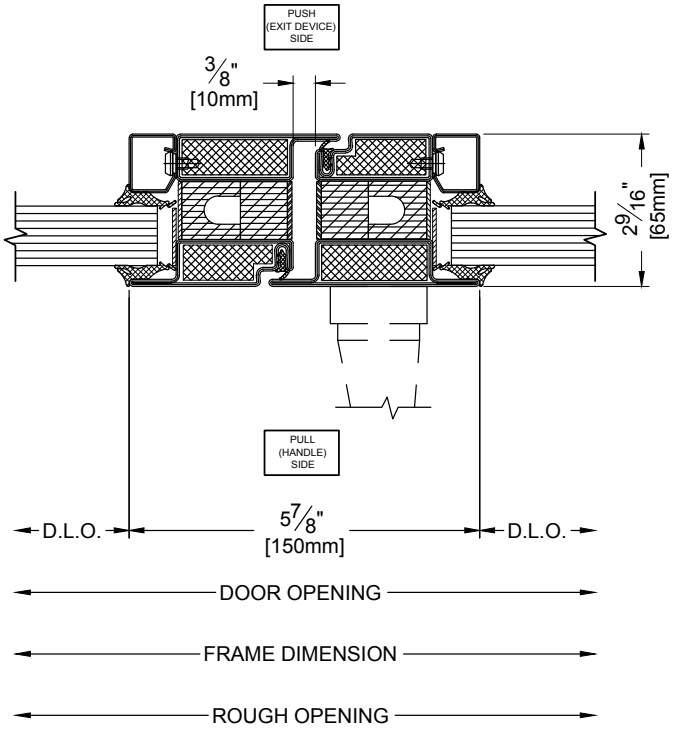
Narrow Stile Door Meeting Edge Options

March, 2019





Narrow Stile Door Vertical Cross-Section

Return to Index

March, 2019

Ceco Door
ASSA ABLOY

NOTES:

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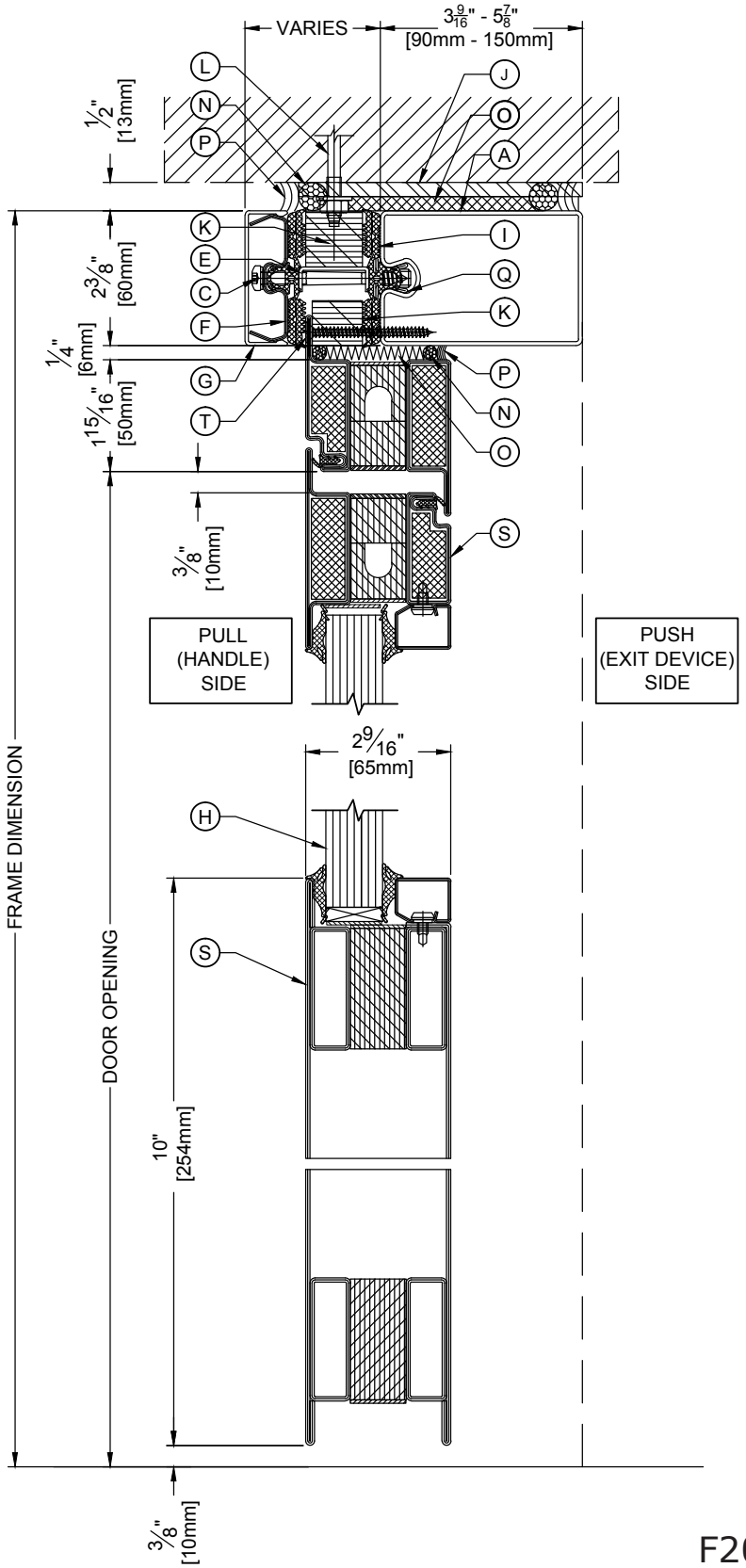
M. SHIM AS NECESSARY (BY OTHERS)
N. FIRE STOP AND SMOKE SEAL (BY OTHERS)
O. FIRE RESISTANT LOOSE INSULATION (BY OTHERS)
P. FINISH SEALANT (BY OTHERS)
Q. CLAMPING FOOT
R. HINGE PER HARDWARE SCHEDULE
S. NARROW STILE 60/90 DOOR
T. DOOR ASSEMBLY FASTENER TO CURTAIN WALL



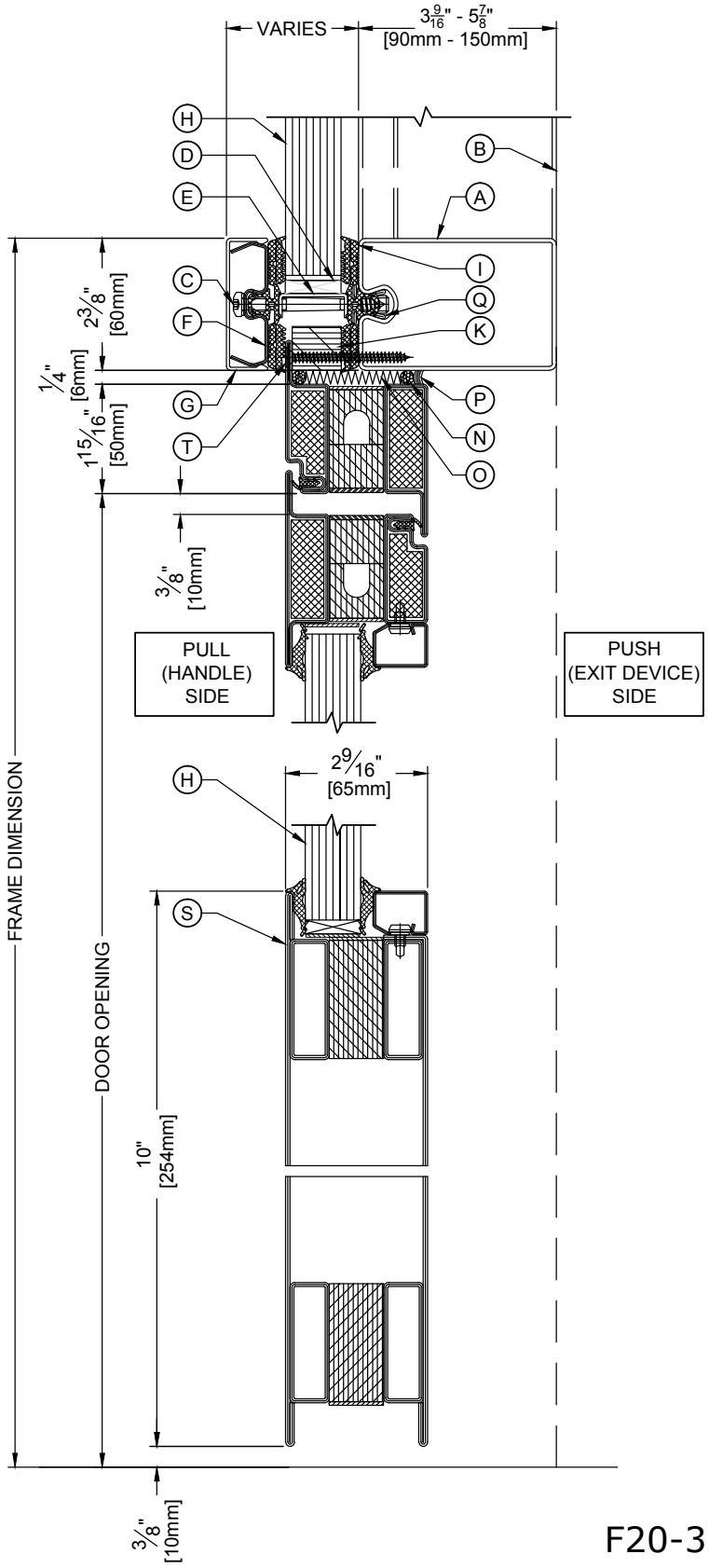
Ceco Door
ASSA ABLOY

Narrow Stile Door Vertical Cross-Section with Transom

March, 2019

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



F20-32

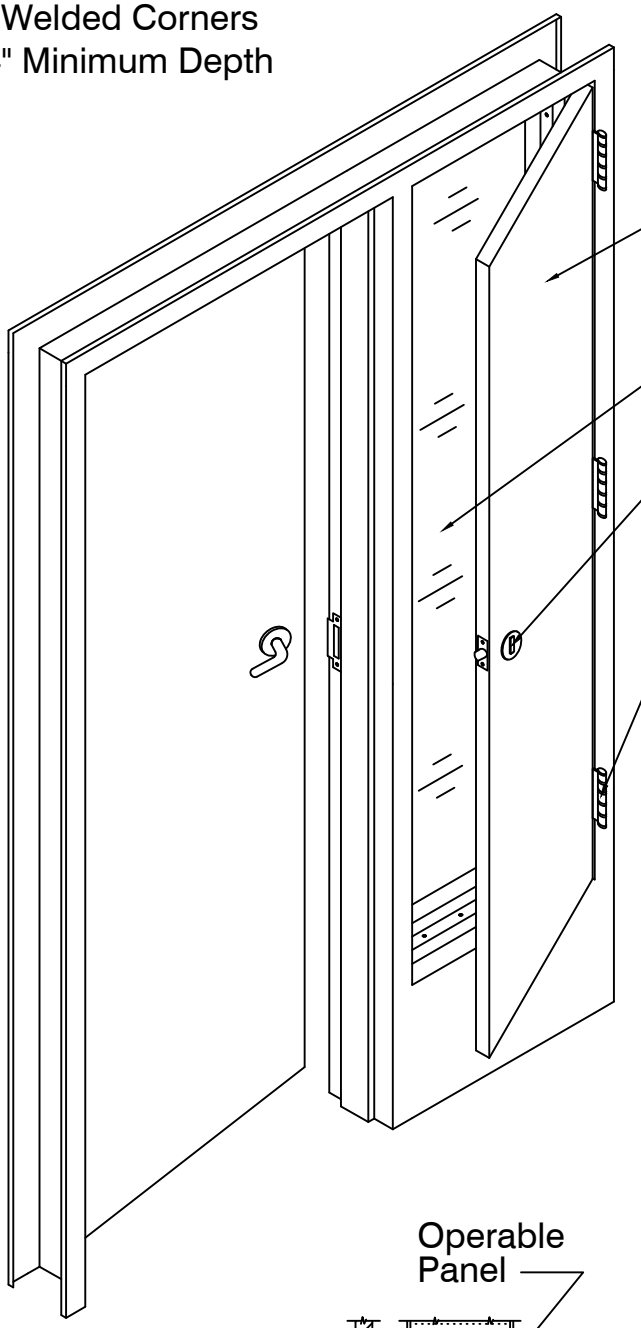
CecoDoor
ASSA ABLOY

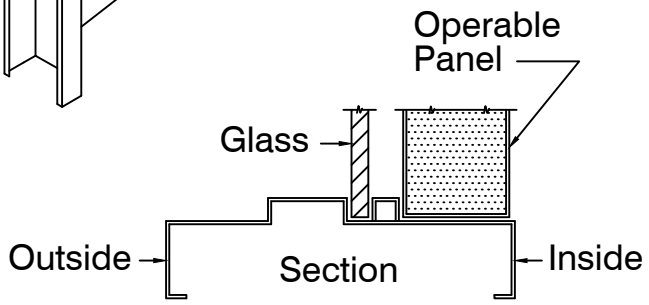
Return to Index

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 a Visual Barrier

Glass Pockets Available For Up To 1" Thick Glass

Prepared For Self Latching Deadlatch To Meet Project Requirements

Self-latching Deadlatch Sargent YSSL10 or Yale YSSL10, To Be Supplied By Hardware Company

Standard 4-1/2" x .134 Hinge Preparations

Options:

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

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

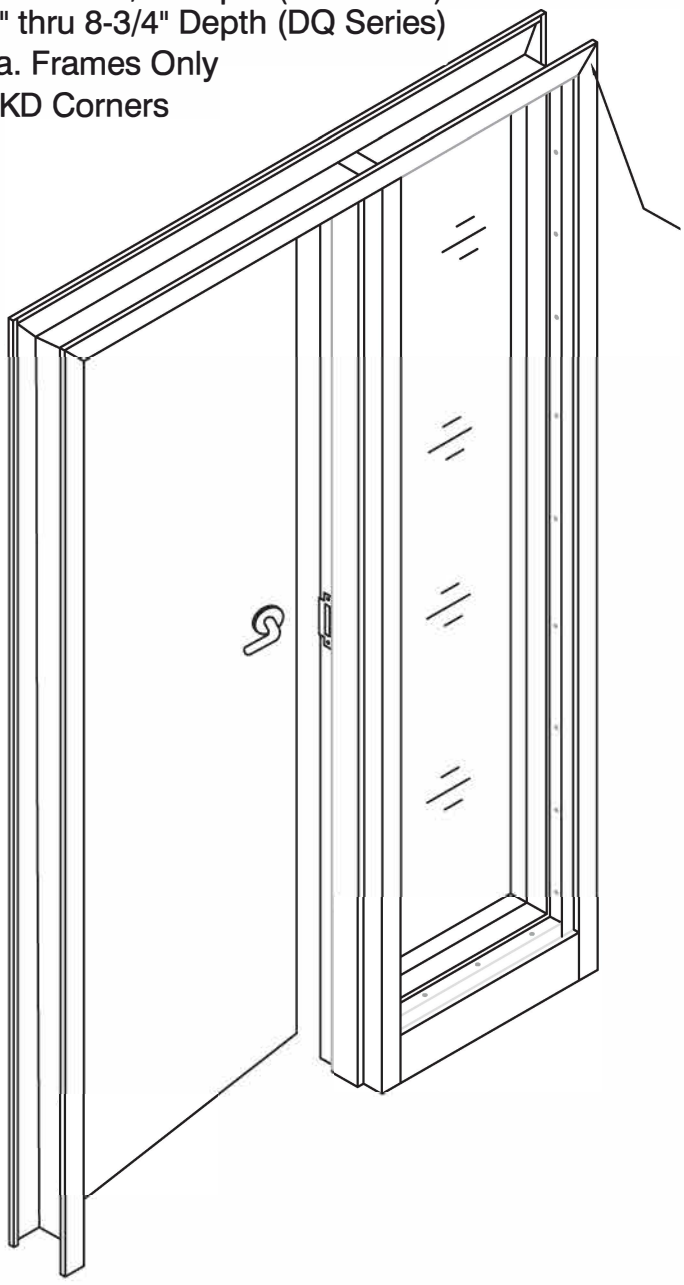
Experience a safer and more open world

RETURN TO TOP

DRYWALL KD SIDELIGHT

KNOCK-DOWN SIDELIGHT 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:

Able to assemble onsite without welding the frame.

Available with or without an additional vertical mullion 2-lite design.

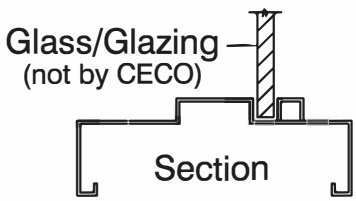
Standards:
Non-rated
2" Face
5/8" High Stops
Up to 4'0 x 8'0 door opening (single opening only)
Up to 8'4 x 8'2 overall
Maximum overalls assume a 2" face on all perimeter components except the sill. If the faces decrease, the overalls will decrease accordingly. 8'0 maximum between jambs.

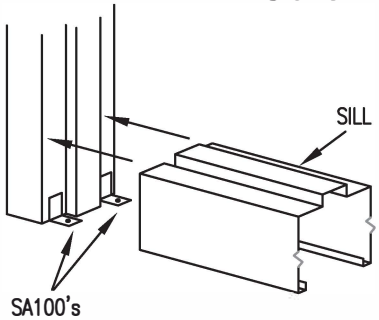
1-1/2"- 6" Face Sill
Compression anchors &
Dimpled sill holes.
Horizontal mullions not available

Options:

Available with sill strap anchors (required with 1-1/2" & 1-3/4" face)

Uses:
Insurance kiosks
Offices
Classrooms
Post Offices
Government Facilities





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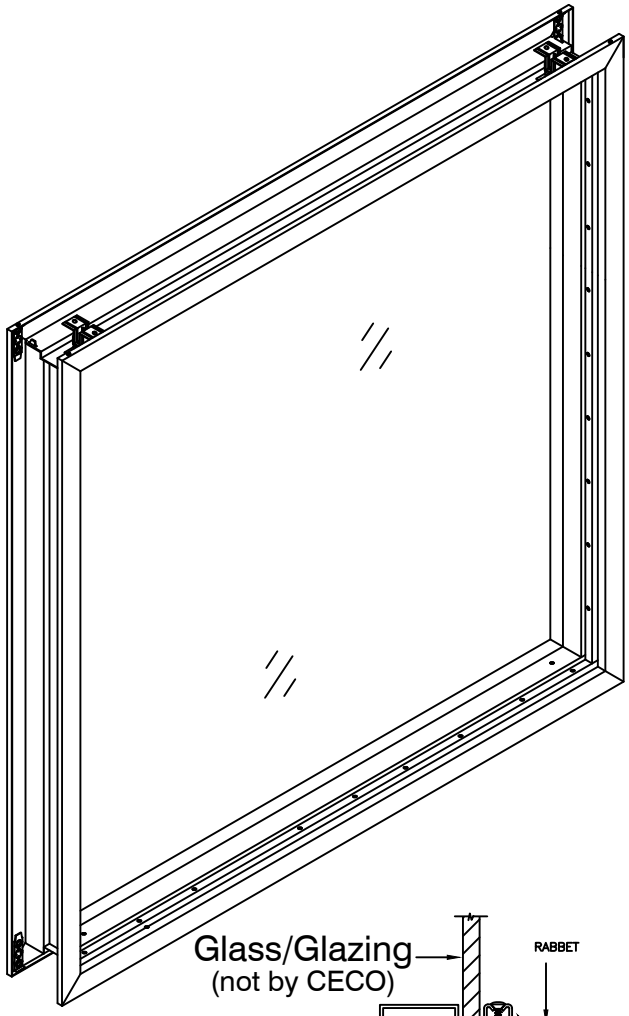
F24–1

DRYWALL KD BORROWED LITE

KNOCK-DOWN BORROWED LITE FRAME WITH COMPRESSION ANCHORS



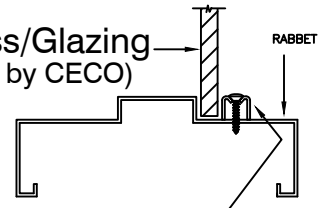
Features:
Saves time and expense as frame is assembled on site and installed after wall is completely finished.

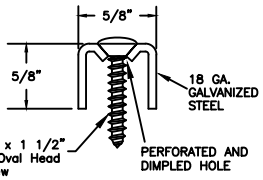
Standards:
2" Face only, 16 Ga. only
5/8" High Stops only
Up to 6'0" x 6'0" rabbet to rabbet opening.
Up to 6'4" x 6'4" overall
Compression anchors
Horizontal and vertical mullions not available

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.

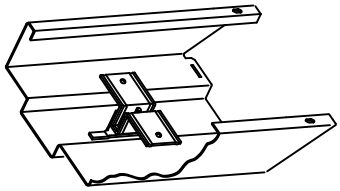
To determine DU, DQ or DR glass opening rabbet to rabbet size, use rough opening size and subtract 2-5/8" from width & 2-1/8" from rough opening height. DR profile 4" depth & less subtract 2-7/8" from height.

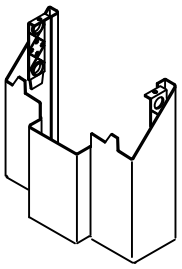
Note: Glass opening size is not actual glass size.





Glazing Bead (see left)
(Cut to length & shipped loose)





(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

FIRE–PROTECTIVE WINDOW FRAMES

LABELING AGENCIES:
- UNDERWRITERS LABORATORY
- WARNOCK HERSEY

TEST: UL9, NFPA 257

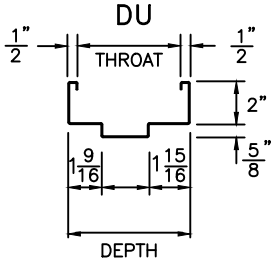
- RATING: 20 minute
  MAXIMUM SIZE:
  70–3/4" visible width or height (5268 max. visible sq. in.)
- RATING: 3/4 hour
  MAXIMUM SIZE:
  54"visible width or height (1296 max. visible sq. in.)
- RATING:* 1 hour
  MAXIMUM SIZE:
  54" visible width x 77–3/4" visible height (*2721 sq. in.)

(*GLAZING MAT'L. MUST BE FIRELITE)

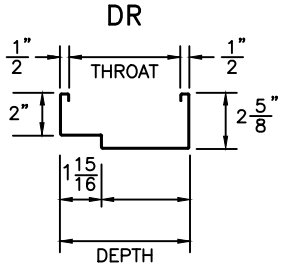
Not all ratings are available in all materials and sizes.

PROFILES

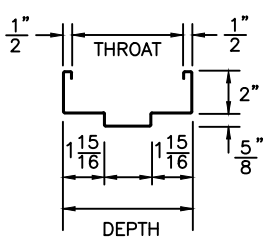
DU



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".

(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.

Uses: Corridors, Offices, Museums & Government Facilities

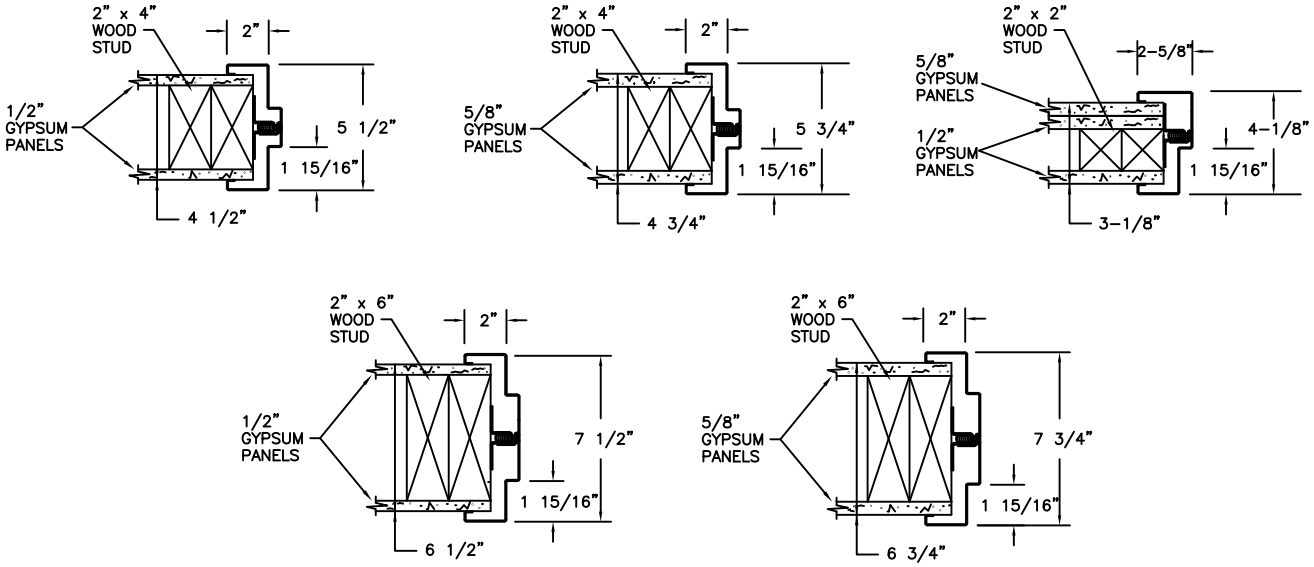
11/06/19

Return to Index

DOOR FRAME WALL APPLICATIONS

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

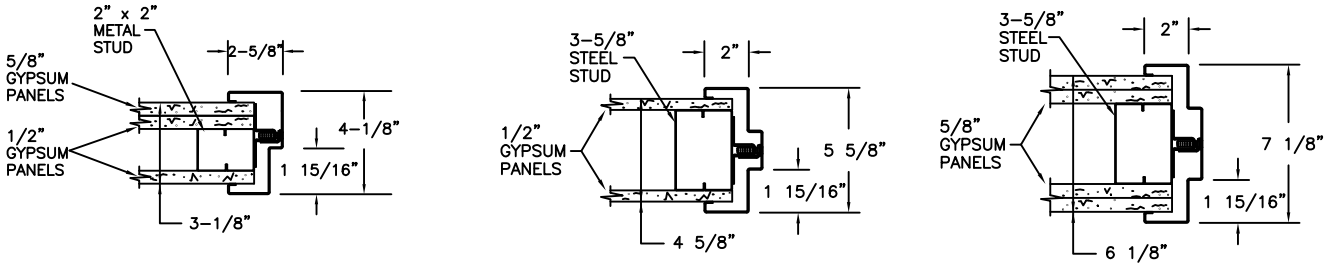
SLIP ON DRYWALL - WOOD STUD DETAILS
Installed AFTER the drywall



(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

See installation instructions for rough opening size ...

SLIP ON DRYWALL - METAL STUD DETAILS
Installed AFTER the drywall

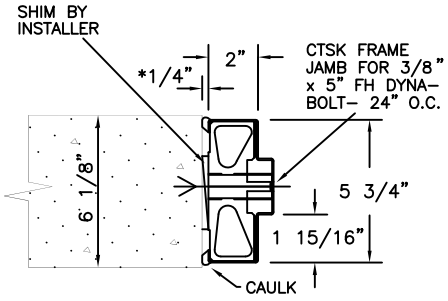


(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

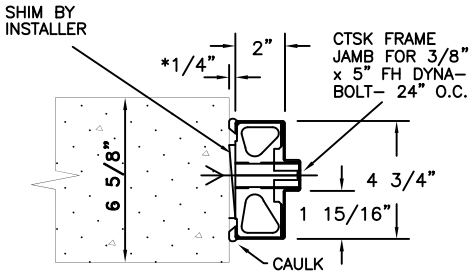
See installation instructions for rough opening size ...

A1–2

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

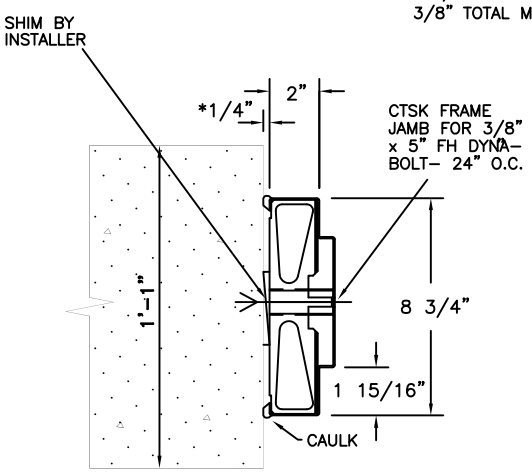


BUTTED Series SU or SQ

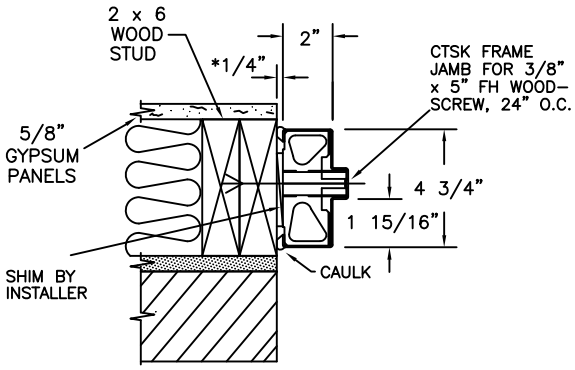


BUTTED Series SU or SQ

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



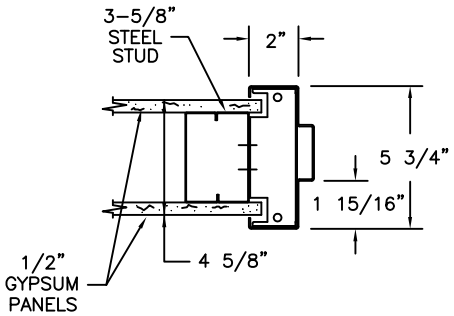
BUTTED Series SU or SQ



BUTTED Series SU or SQ

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

TYPICAL METAL STUD ANCHOR WALL DETAILS
Installed before the wall



WRAP AROUND – Series SU or SQ

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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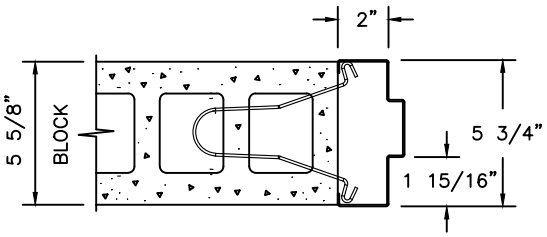
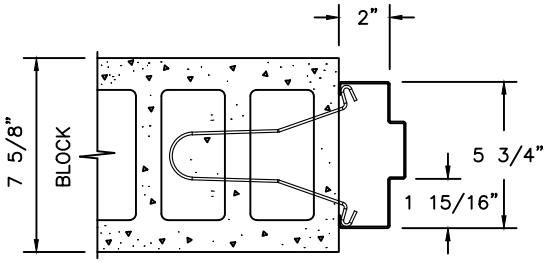
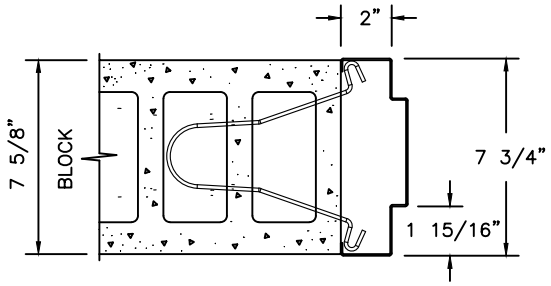
TYPICAL MASONRY BLOCK ANCHOR DETAILS



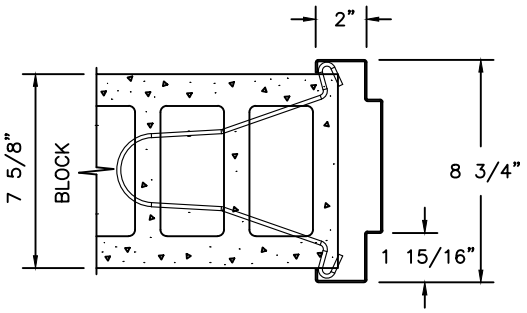
BUTTED Series SU or SQ



BUTTED Series SU or SQ



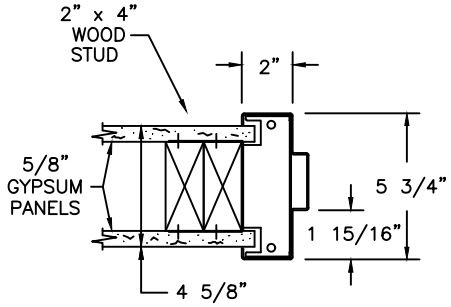
BUTTED Series SU or SQ



WRAP AROUND Series SU or SQ

(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

TYPICAL WOOD STUD WALL DETAILS
Installed before the drywall

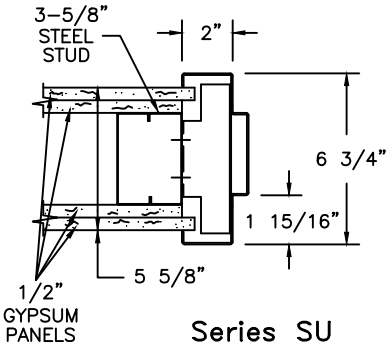


WRAP AROUND – Series SU or SQ

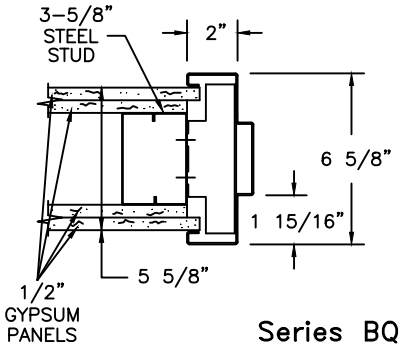
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

A1–4

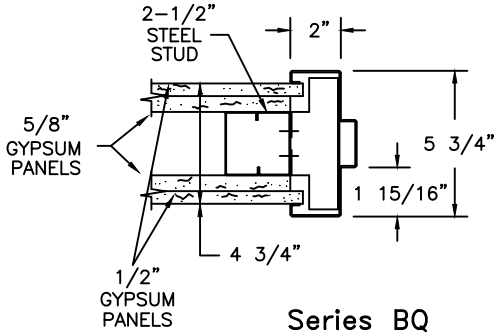
WELDED JAMB ANCHORS - METAL STUD WALL DETAILS
Installed BEFORE the drywall



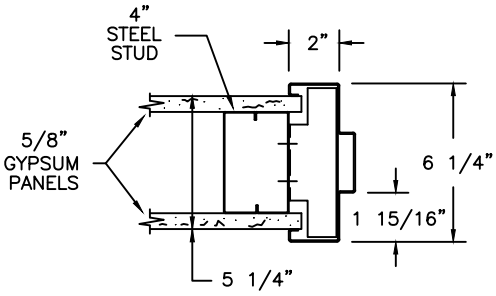
Series SU



Series BQ



Series BQ

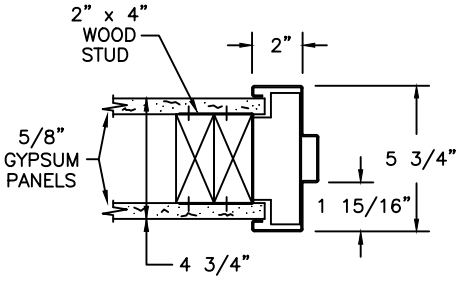


Series BQ

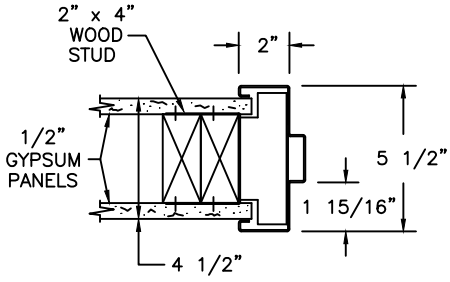
(Conversion: 1" = 25.4 mm, e.g., 1–3/4" = 44.45 mm)

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)

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A1-5

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)	4-1/2"	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"
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 soffit 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 soffit.

*** DR, DRW & DC frames with 4" depths or less plumb anchors are located in the rabbet.

RETURN TO TOP

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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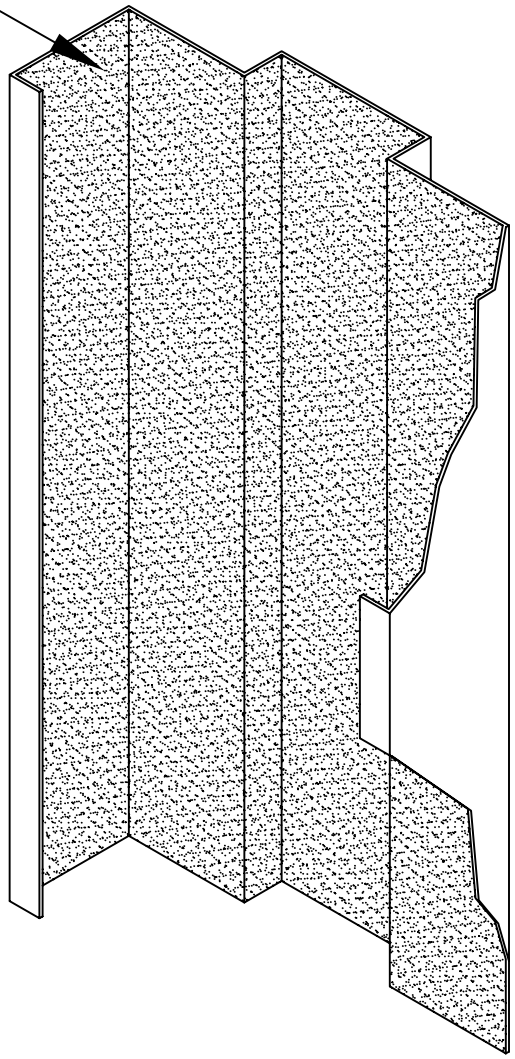
Asphaltic Frame Undercoating

Alternative to traditional hazardous bituminous coatings,



Features:

- *Applied to KD or welded frames*
- *Factory or Field applied*
- *UL & 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 - Aprroximately 10 min. @ 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)

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