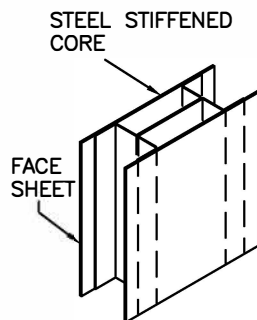
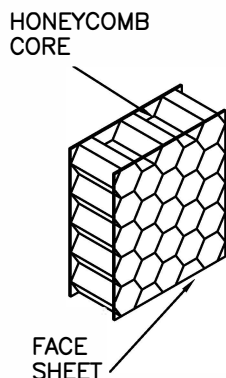
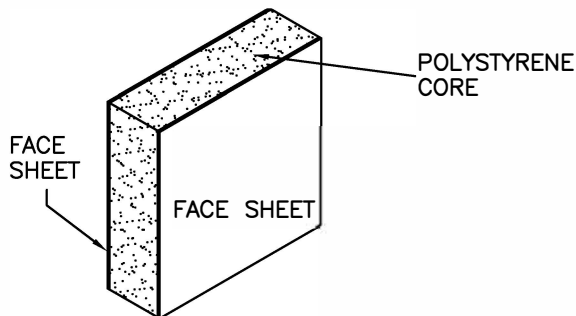


**ASSA ABLOY**

**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

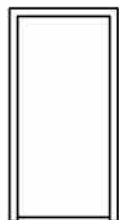


The ArmorShield system is rated for super power small arms (SPSA) and is intended for architectural environments with equivalent bullet resistance. The system has not been tested for resistance to forced entry. Field assembly is required as is preparation for surface applied hardware. System must be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

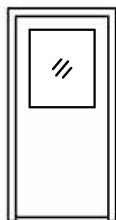
**Suggested Use:**  
*Interior or Exterior ...*

*Public Utility Field Buildings, Box Offices,  
 Cashier Islands, Currency Exchanges,  
 Ticket Booths*

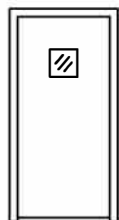
**DOOR DESIGNS**



F



G



V

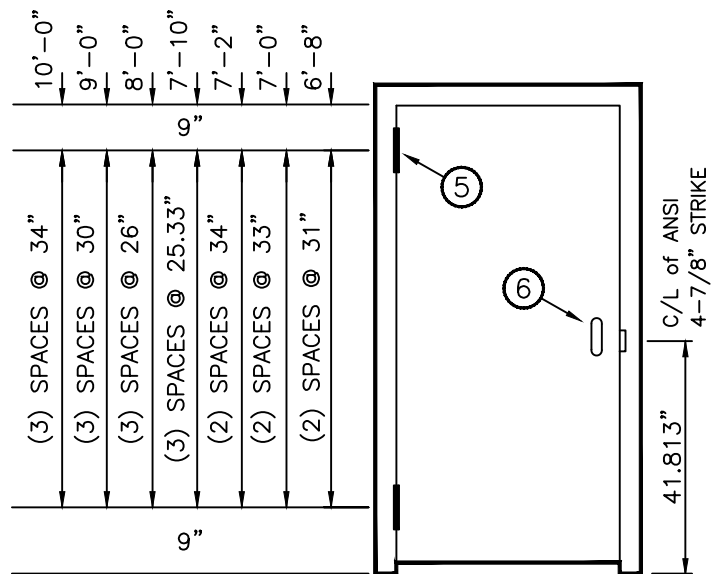


FG

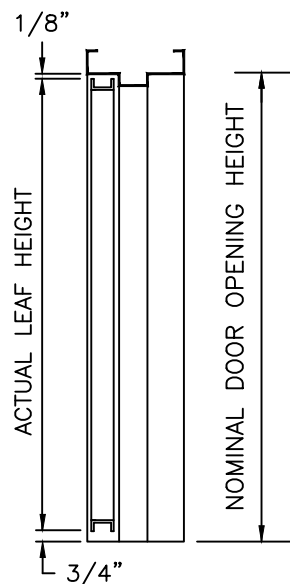
BALLISTIC LEVEL	WEAPON TYPE	BULLET TYPE	BULLET VELOCITY	MUZZLE ENERGY
<b>I</b>	9mm	FULL METAL JACKET 124gr	1234 ft/s	380-460 ft/lbs
<b>II</b>	.357 Mag.	JACKETED LEAD POINT 158gr	1312 ft/s	743-889 ft/lbs
<b>III</b>	.44 Mag.	LEAD SOFT POINT 240gr	1417 ft/s	1370-1593 ft/lbs

D7-2

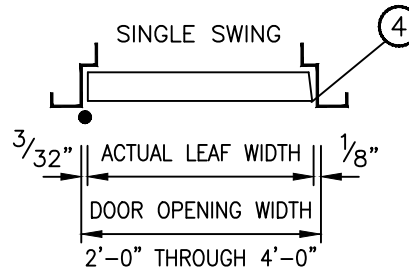
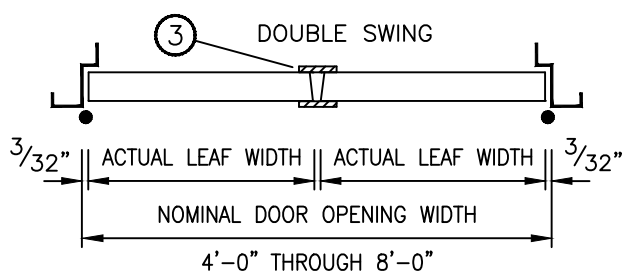
Hardware locations shown match Ceco standard frames.



ELEVATION



VERTICAL SECTION

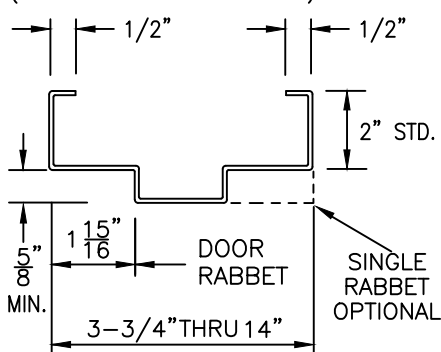


HORIZONTAL SECTIONS

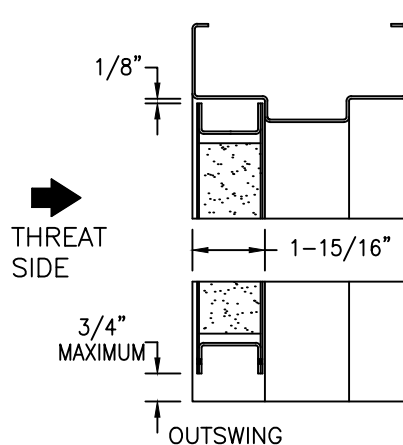
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

### TYPICAL PROFILE

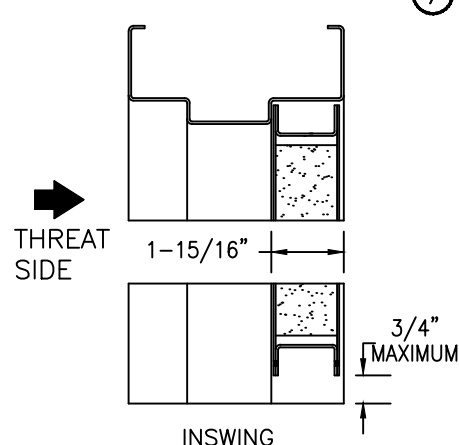
Double rabbet shown, single available (Frame corners are welded)



### VERTICAL SECTION



### VERTICAL SECTION



**CecoDoor**

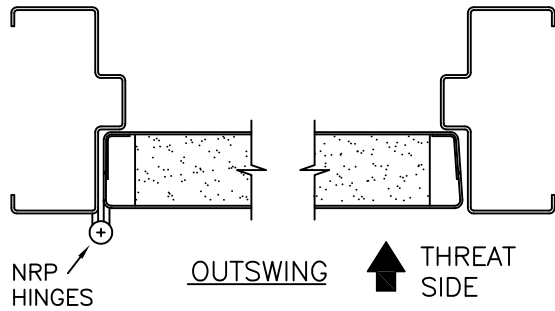
**ASSA ABLOY**

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01/29/21

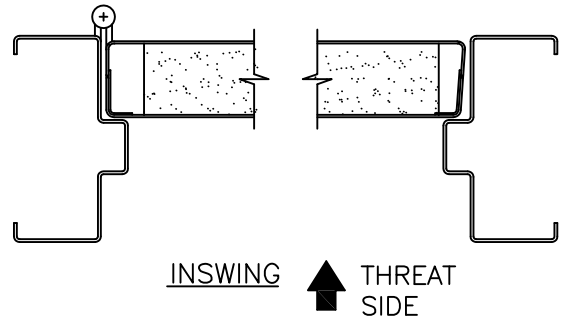
D7-3

HORIZONTAL SECTION



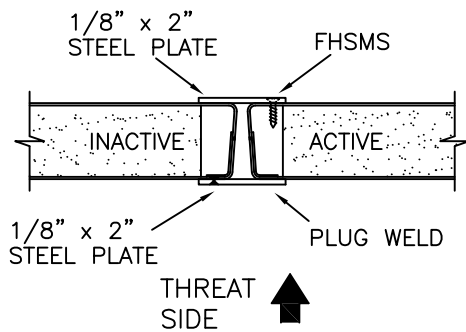
①

HORIZONTAL SECTION



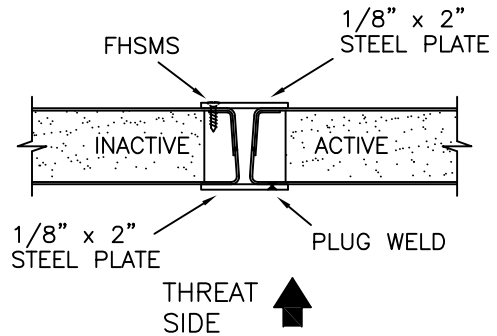
②

ASTRAGAL FOR MEETING STILES—INSWING (STANDARD)



③

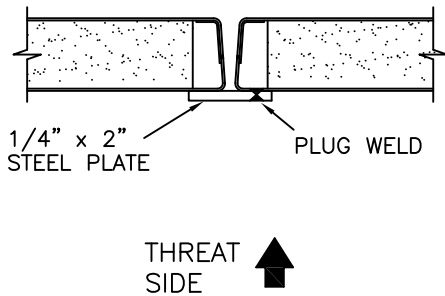
ASTRAGAL FOR MEETING STILES—OUTSWING (STANDARD)



③

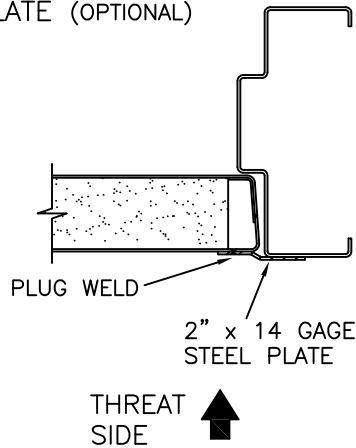
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

OUTSWING PAIR PROTECTION PLATE (OPTIONAL)



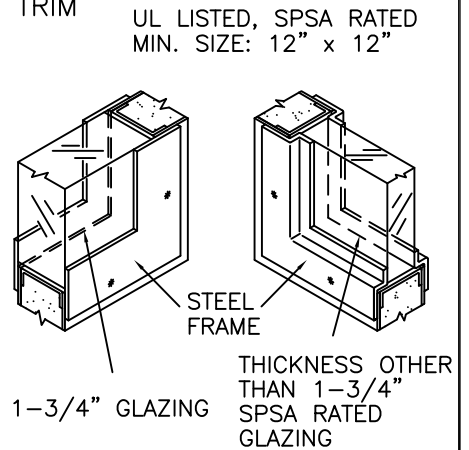
③

LOCK JAMB PROTECTION PLATE (OPTIONAL)



④

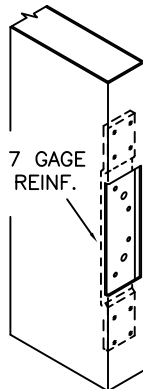
GLAZING TRIM



⑨

HINGE PREPARATION

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.

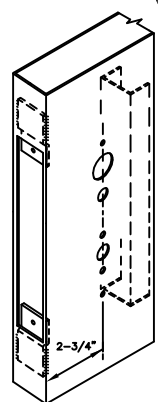
⑤

LOCK PREPARATION GOV. 86-4 MORTISE TYPE

(LM2) (ANSI A115.1) 2-3/4" BACKSET

(LM0) SIMILAR TO DETAIL LESS FACE CUTOUT

OPTIONAL LOCK  
• CYLINDRICAL  
• RIM EXIT  
• MORTISE EXIT



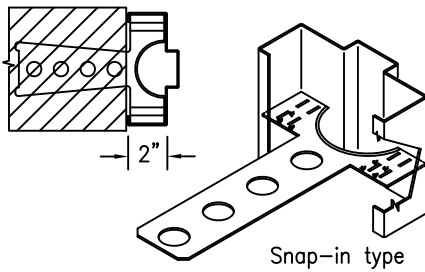
⑥

08/20/19

D7-4

## MASONRY "T" ANCHOR (ADJUSTABLE) MT

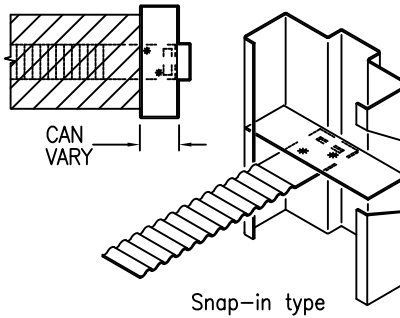
FOR STANDARD DEPTHS SHOWN BELOW.



3-3/4", 4-1/4", 4-3/4", 5-1/4"  
AND 5-3/4" DEPTHS

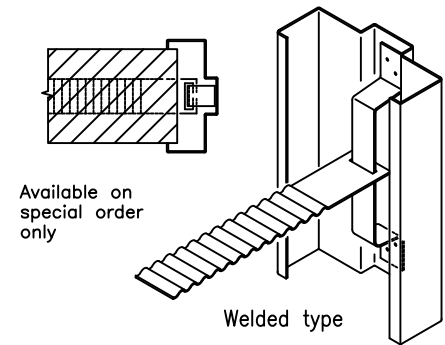
## MASONRY "T" ANCHOR MT

FOR SPECIAL DEPTHS AND OVERSIZE FRAMES



FOR DEPTHS OTHER THAN STANDARD

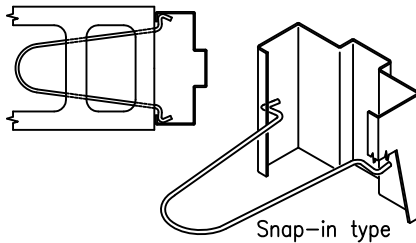
## YOKE AND STRAP MASONRY ANCHOR YS



Available on special order only

## WIRE MASONRY ANCHOR WMA

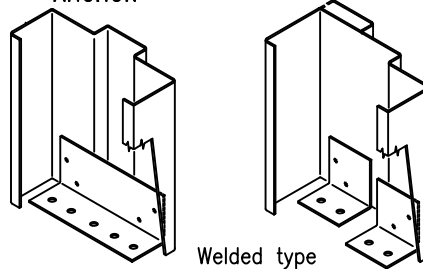
FOR STANDARD AND SPECIAL DEPTH FRAMES



(For 3" thru 8-3/4" Depths)

## FLOOR ANCHOR SA STANDARD DOUBLE RABBIT ONE PIECE ANCHOR

STANDARD ANCHOR

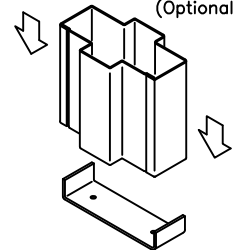


Welded type

## SINGLE RABBIT DOUBLE EGRESS

## SLFA (Optional)

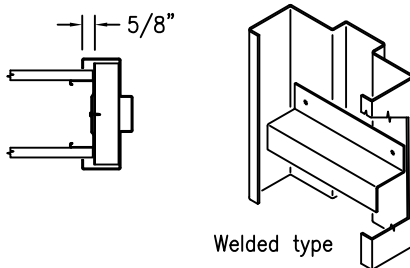
IN-FIELD:  
FASTEN  
ANCHOR  
TO FLOOR.  
SLIP-FIT  
FRAME  
OVER  
ANCHOR



SIDELITE FLOOR ANCHOR

## METAL STUD "Z" ANCHOR MSZ1

FOR STANDARD AND SPECIAL DEPTH FRAMES

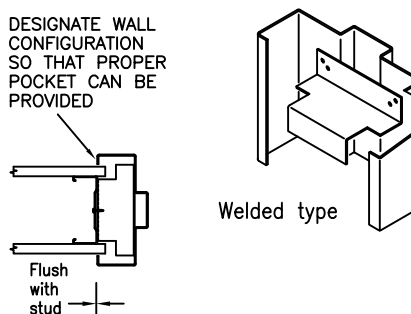


Welded type

## METAL STUD "Z" ANCHOR MSZ2

FOR STANDARD AND SPECIAL DEPTH FRAMES

DESIGNATE WALL CONFIGURATION SO THAT PROPER POCKET CAN BE PROVIDED

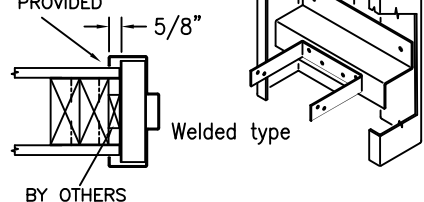


Welded type

## WOOD STUD "Z" STRAP ANCHOR WSZS

FOR STANDARD AND SPECIAL DEPTH FRAMES

DESIGNATE WALL CONFIGURATION SO THAT PROPER POCKET CAN BE PROVIDED



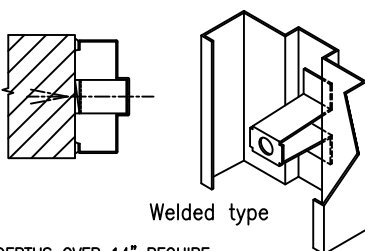
Welded type

BY OTHERS

(Used also for METAL STUD Walls)

## EXISTING OPENING ANCHOR EO/N

FOR STANDARD AND SPECIAL DEPTH FRAMES



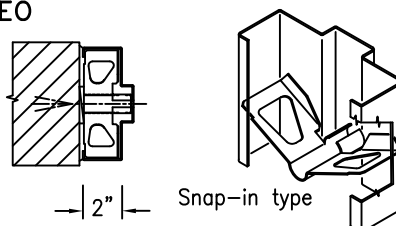
Welded type

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

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

## EXISTING OPENING ANCHOR (STANDARD) EO

FOR STANDARD AND SPECIAL DEPTH FRAMES

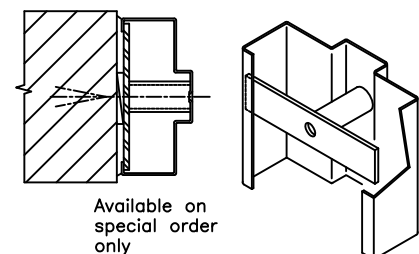


Snap-in type

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

## EXISTING OPENING ANCHOR EO

FOR STANDARD AND SPECIAL DEPTH FRAMES



Available on special order only

08/20/19

**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.

**STANDARD SIZES  
NOMINAL DOOR OPENING**

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

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

STEEL STIFFENED CORE  
20 MIN., 3/4 HOUR,  
1 HOUR & 1-1/2 HOUR

SINGLE SWING

•MAX. SIZE 4'0" X 8'0"

•MORTISE LOCK or  
MORTISE EXIT

PAIRS NOT AVAILABLE

•GLASS LITES & LOUVERS  
NOT AVAILABLE

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 galvanized 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".

**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)

 **Ceco Door**

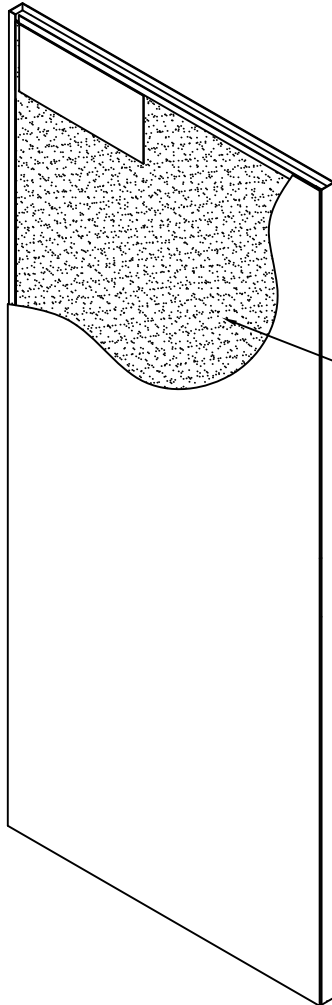
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**ASSA ABLOY**

# 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



PROPRIETARY  
BALLASTIC ARMOR

*Vertical stiffeners placed to support the  
bullet resistant armor.*

*Conforms to UL 752*

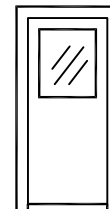
*Suggested Use:*

*Interior or Exterior ...*

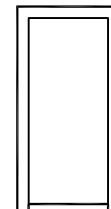
*Openings For The Protection Of:  
Personnel Or Equipment,  
Telephone Repeater Stations,  
Unmanned Utilities Stations,  
ATM Buildings, Shooting range*

## DOOR DESIGNS

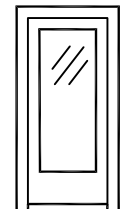
12" x 12" MIN.  
VISIBLE GLASS



G



F

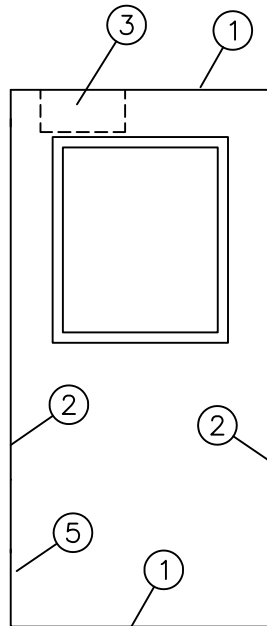


FG

## UL 752 RATINGS of BULLET RESISTANT MATERIALS

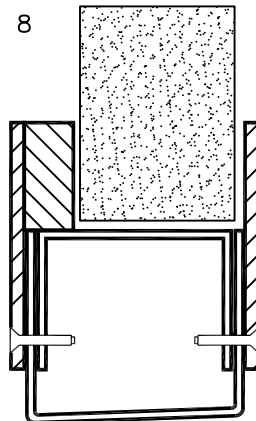
RRatings	Ammunition	Grains	Weight	Velocity		Number of Shots
				MIN. (FPS)	MAX. (FPS)	
LEVEL 4	.30 Caliber Rifle Lead Core Soft Point	180	11.7	2540	2794	1
LEVEL 5	7.62mm Rifle Lead Core Full Metal Copper Jacket, Military Ball	150	9.7	2750	3025	1
LEVEL 6	9mm Full Metal Copper Jacket with with Lead Core	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

D8-2

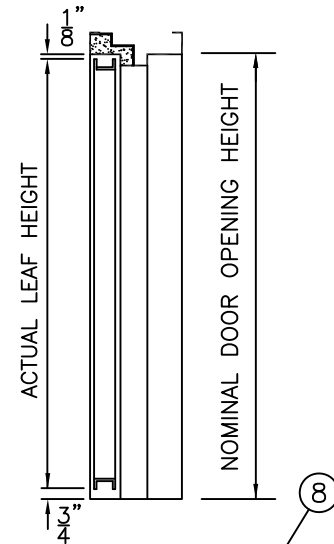


ELEVATION

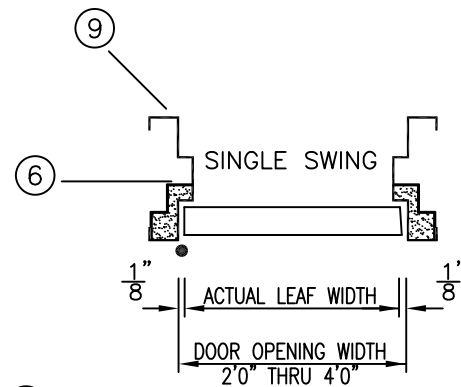
OPTIONAL:  
LEVEL 4 THRU 8  
GLASS KIT



GLASS KIT DESIGN MAY VARY WITH GLASS THICKNESS.  
GLASS KIT AND GLASS ARE FACTORY INSTALLED.



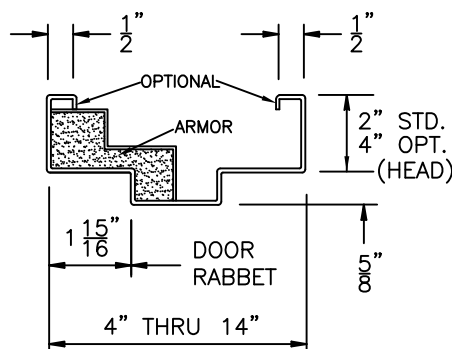
VERTICAL SECTION



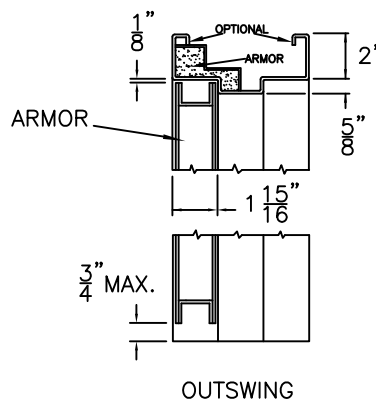
HORIZONTAL SECTION

Horizontal and vertical sections shown above depict outswing armor conditions.

TYPICAL EQUAL  
RABBET PROFILE

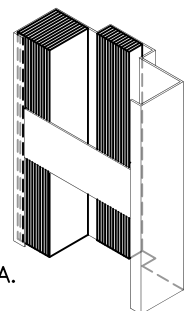


VERTICAL SECTION



OUTSWING

METAL STUD ANCHOR



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)

**CecoDoor**

**ASSA ABLOY**

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08/20/19

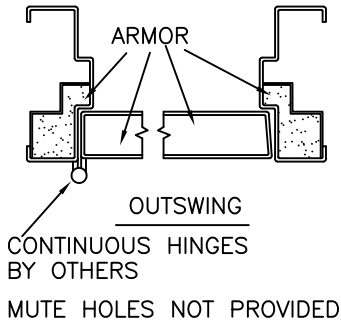


# TECH-DATA

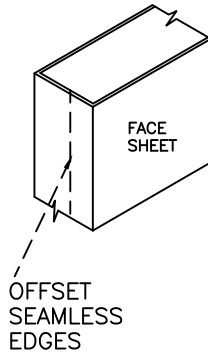
## ARMORSHIELD LEVEL 4 THRU 8 DOOR SYSTEM

D8-3

### HORIZONTAL SECTION ④



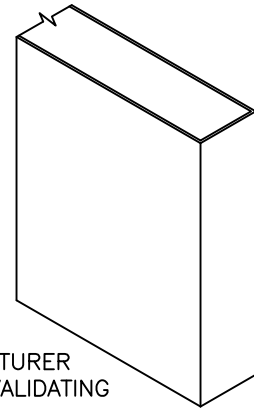
### DOOR CONSTRUCTION ②



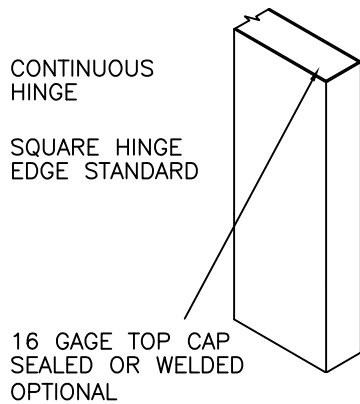
### HARDWARE PREPARATION STANDARD ②

SURFACE MOUNTED ONLY  
RIM EXIT  
VERTICAL ROD EXIT

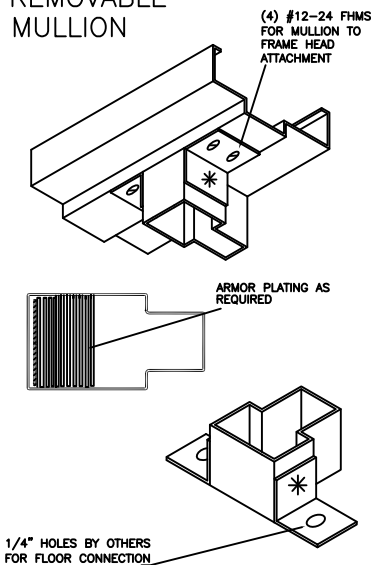
HARDWARE MANUFACTURER RESPONSIBLE FOR VALIDATING BULLET RESISTANCE



### STANDARD HINGE PREPARATION ⑤



### REMOVABLE MULLION ⑤

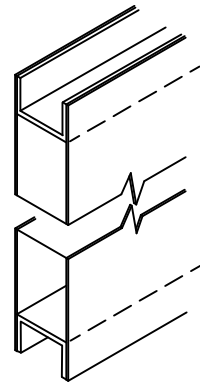


### 16 GAGE STEEL END CHANNELS ①

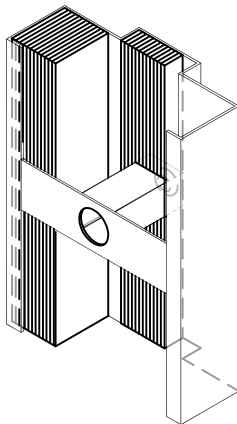
WELDED TO BOTH FACE SHEETS

INVERTED TOP AND BOTTOM

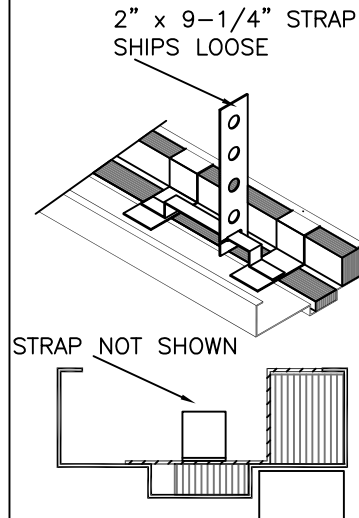
OPTIONAL TOP AND BOTTOM CAPS ARE AVAILABLE



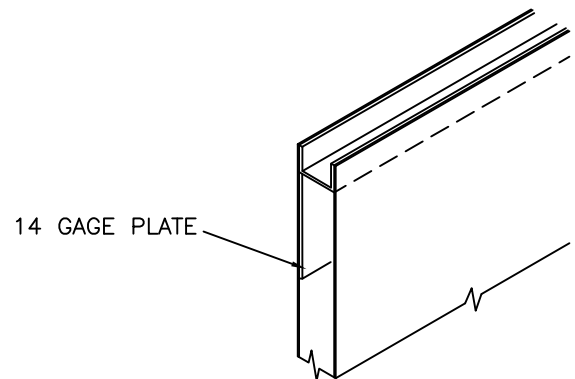
### EXISTING OPENING ANCHOR ⑥



### 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

Experience a safer  
and more open world

**CecoDoor**  
**ASSA ABLOY**



### STANDARD SIZES NOMINAL DOOR OPENING

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

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CLASSIFIED BULLET  
RESISTANT LABELS  
NOT AVAILABLE

### PRODUCT SPECIFICATIONS:

1-3/4" thick ArmorShield Level 4 thru 8 bullet resistant doors shall be provided by Ceco Door Products. Doors & frames shall provide bullet resistance in accordance with UL 752. Assembly is equipped with hollow metal door, frame and crated for shipment. Door weight is 24 pounds per square foot.

**ArmorShield Level 4 thru 8 doors** are seamless design. Door edges are continuously welded seams and ground smooth. No seams are visible on faces or vertical edges. Face sheets are commercial quality 14 gage steel conforming to hot-dipped galvanized 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.

### 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)