

D19A-1

**ASSA ABLOY**

**1-3/4" Trio-E DOOR**

VERTICALLY STEEL STIFFENED CORE  
WITH POLYURETHANE FOAMED IN PLACE

BEVELED LOCK EDGE, HANDED  
SQUARE LOCK EDGE, NON-HANDED

*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. 22 gage steel stiffeners are placed 6" apart and welded every 5" along their length.*



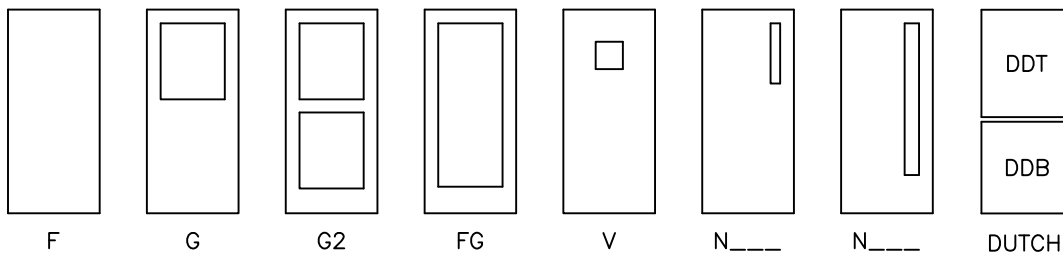
*Suggested Use:*

*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*

**DESIGN PATENT PENDING**

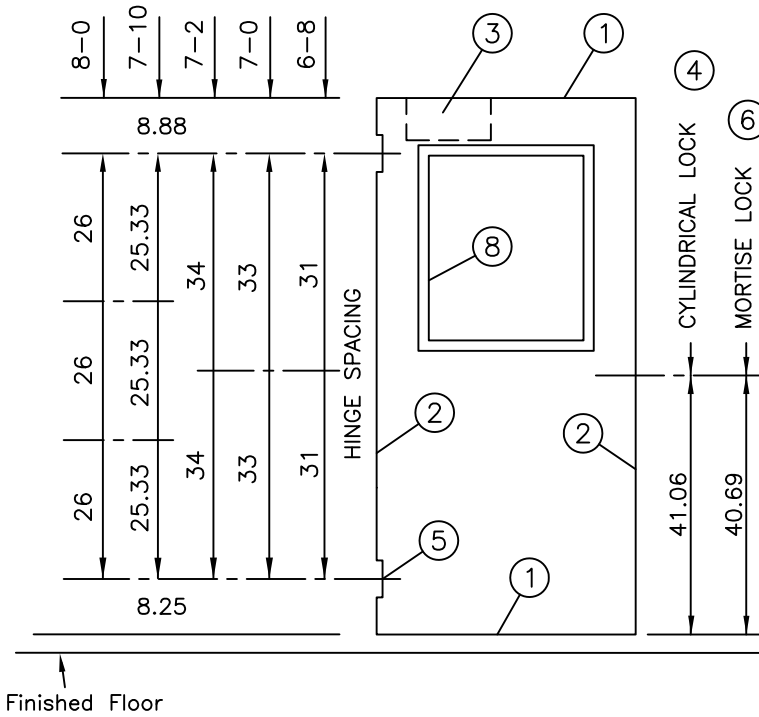
**DESIGNS**



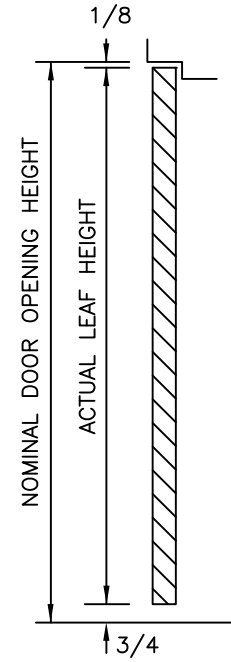
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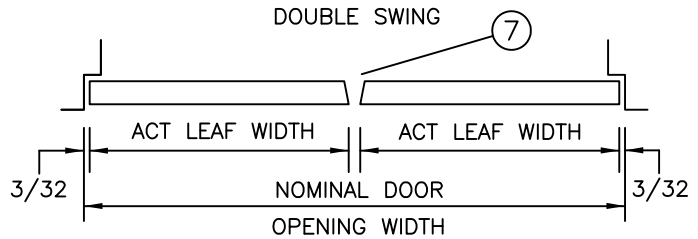
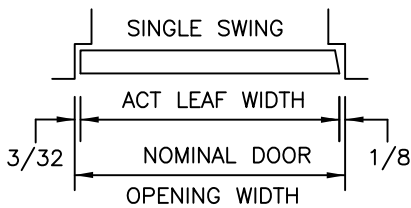
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



VERTICAL SECTION

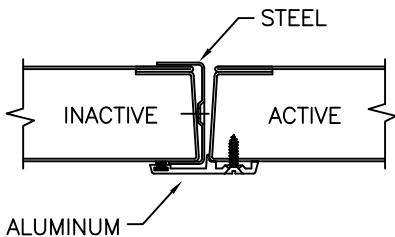


HORIZONTAL SECTIONS

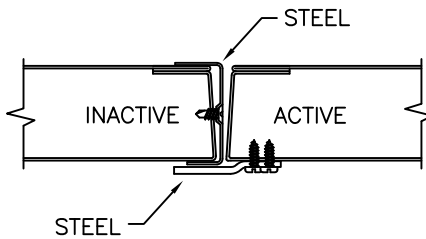
(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

DESIGN PATENT PENDING

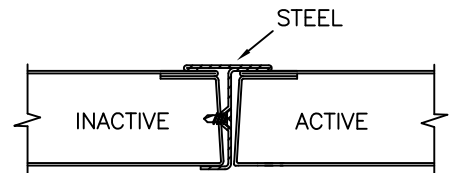
OVERLAPPING ASTRAGAL 4451  
FOR 1-3/4" THICK DOORS WITH OPTIONAL POLY-PILE INSERT



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



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



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# TECH-DATA

Trio-E DOORS

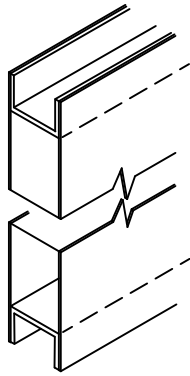
D19A-3

## 16 GAGE STEEL END CHANNELS

WELDED  
TO BOTH  
FACE SHEETS

INVERTED  
TOP AND  
BOTTOM

OPTIONAL  
TOP AND  
BOTTOM CAPS

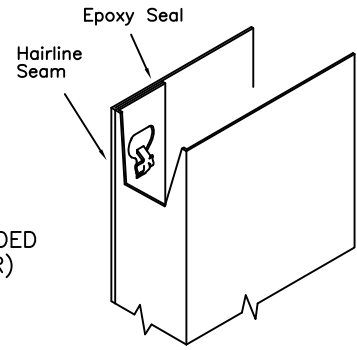


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## VERTICAL EDGES

MECHANICALLY  
INTERLOCKED  
HEMMED EDGES

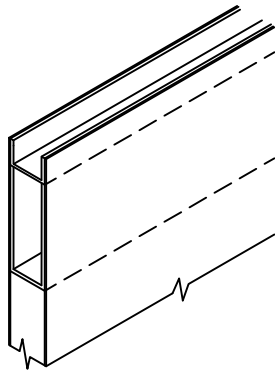
ALSO AVAILABLE  
SEAMLESS (WELDED  
OR BODY FILLER)



②

## CLOSER REINFORCEMENT (OPTIONAL)

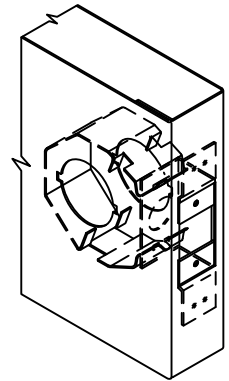
14 GAGE STEEL  
CHANNEL 20" LONG



③

## LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

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

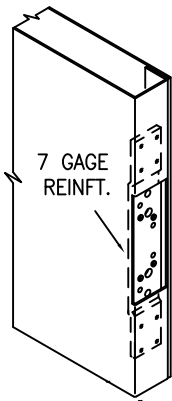


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## HINGE PREPARATION

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

HINGE EDGE IS HANDED  
AND NOT BEVELED.

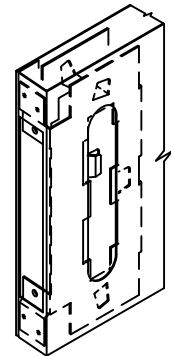


ANSI A156.7  
TEMPLATE

⑤

## LOCK PREPARATION GOV. 86-4 MORTISE TYPE

(LM1) (ANSI A115.1)  
2-3/4" BACKSET  
(LM0) SIMILAR TO DETAIL  
LESS FACE CUTOUT  
(LPO) SIMILAR TO DETAIL  
LESS ALL CUTOUTS  
AND REINFORCEMENT



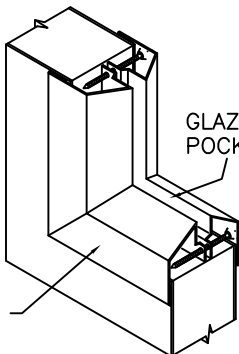
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LOCK EDGE IS BEVELED  
1/8" in 2" (1:16)

## GLAZING TRIM SlimTrim

STEEL

GLAZING  
POCKET



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**CecoDoor**

**ASSA ABLOY**

D19A-4

DESIGN PATENT PENDING

**STANDARD SIZES  
NOMINAL DOOR OPENING**

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

DESIGN PATENT PENDING

**FIRE DOORS**

LABELING AGENCY: UL & WH
TEST: UL10C, UL10B, NFPA252 • DESIGNS: F, G, N, V • RATING:
20 min to 1-1/2 HR MAX. SIZE: 40 x 80 SINGLE

**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 & 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 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 1). 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 core with polyurethane filler. 22 gage stiffeners are placed no more than 6" apart and welded no more than 5" along their length. 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

**PERFORMANCE**

Physical Endurance Level:	Meets ANSI A250.4 Performance Test 18 and 16 Gage: Level A (1,000,000 Cycles)
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Flush Door Thermal Characteristic Value:	CORE CALCULATED (ASTM C518)	R = 11.01	U = 0.091
	FULLY OPERABLE ASSEMBLIES TESTED WITH THERMAL BREAK FRAME AND PEMKO THRESHOLD 273X3AFG AND 216AFG DOOR SHOE. (ASTM C1363)	R = 3.4	U = 0.294
	FULLY OPERABLE ASSEMBLIES TESTED WITH KERF FRAME AND PEMKO THRESHOLD 273X3AFG AND 216AFG DOOR SHOE. (ASTM C1363)	R = 2.77	U = 0.361

10/4/10