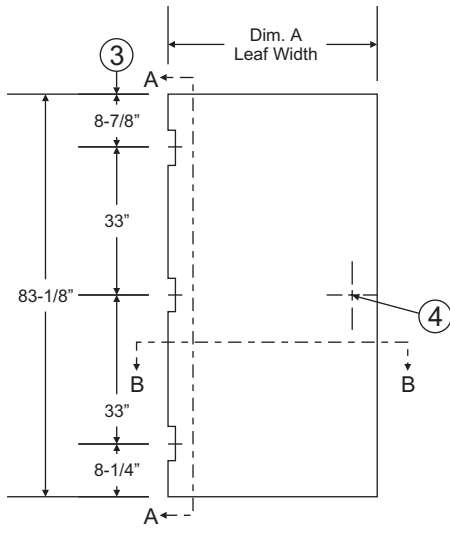




Insulated Door Leaf; Polyurethane Core

8-1-99

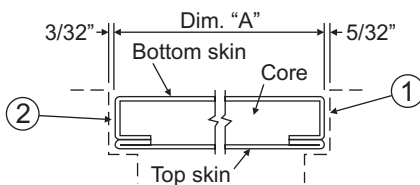


ELEVATION "F" DESIGN

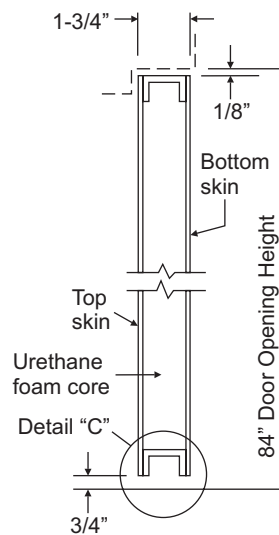
- ① Vertical edge seams mechanically interlocked
- ② Square hinge and lock edges
- ③ 4-1/2" x .134" full mortise hinge prep
- ④ Gov. 160/161 cyl lock prep ...prefix VCR

MATERIAL: Face sheets -- 20 gage, galvanized, smooth steel. 16 gage steel flush top channel and inverted bottom channel. 7 gage steel hinge reinforcements. Core is a rigid cell, foamed-in-place polyurethane with a 1.8 lbs./ft³ density conforming to ASTM D-1622. Insulating core is chemically bonded to all interior surfaces, completely seals unit, and provides total surface support.

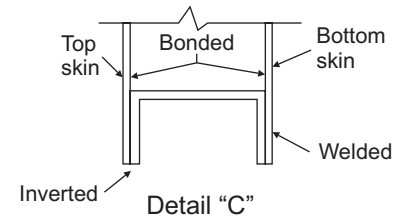
FINISH: BRONZE OR WHITE



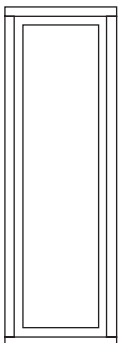
SECTION BB



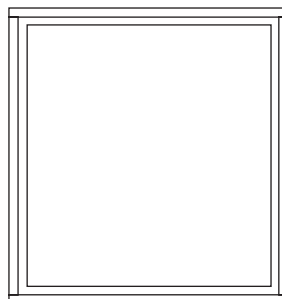
SECTION AA



Lite Kits



Narrow Lite
6-5/8" x 36-5/8"

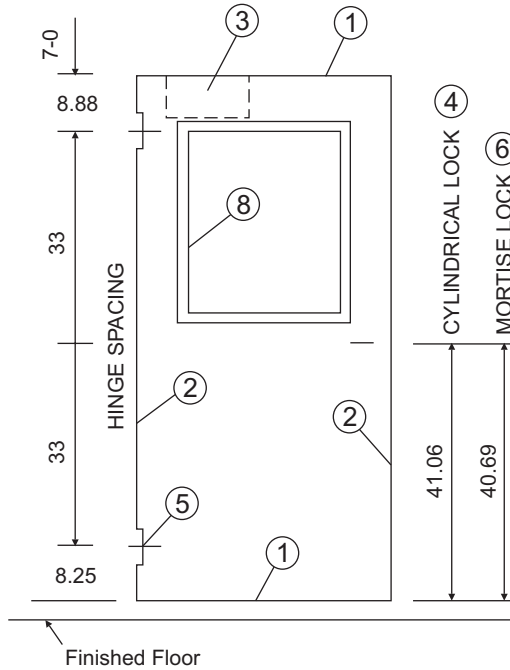


Half-Glass
23-3/4" x 29-7/16"

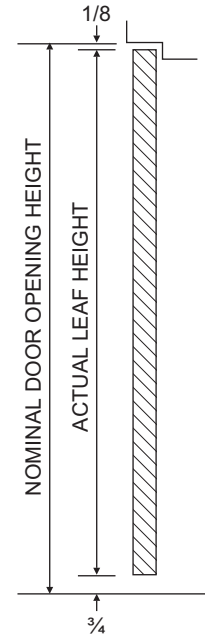


Insulated Door Leaf; Polyurethane Core

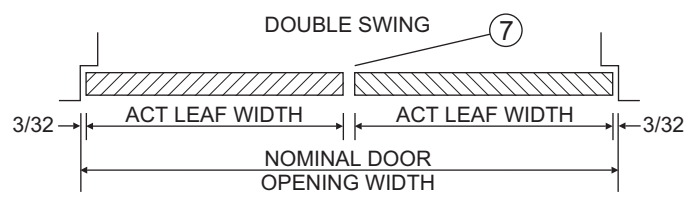
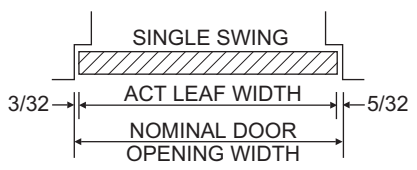
8-1-99



DOOR ELEVATION



VERTICAL SECTION



HORIZONTAL SECTIONS

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

OVERLAPPING ASTRAGAL ⑦
4451
FOR 1-3/4" THICK DOORS WITH OPTIONAL POLY-PILE INSERT

STEEL
INACTIVE
ACTIVE
ALUMINUM

SPLIT ASTRAGAL ⑦
4461
WITH WOOL-PILE INSERT

ACTIVE
ACTIVE
SNAP-ON COVER
ALUMINUM

OVERLAPPING ASTRAGAL ⑦
4461
FOR 1-3/4" THICK DOORS

STEEL
INACTIVE
ACTIVE

LISTED



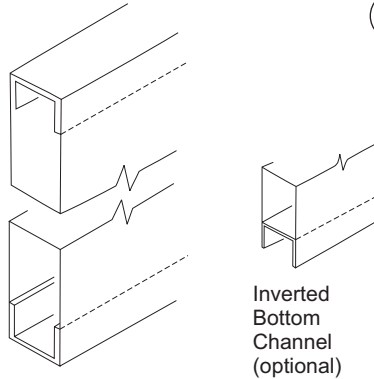
Insulated Door Leaf; Polyurethane Core

8-1-99

16 GAGE STEEL
END CHANNELS

WELDED
TO DOOR

FLUSH
TOP AND
BOTTOM
CHANNELS



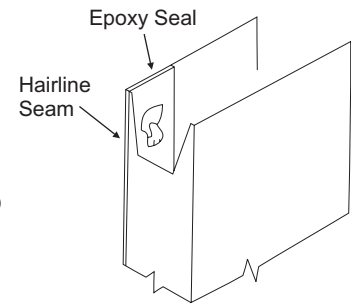
Inverted
Bottom
Channel
(optional)

1

VERTICAL EDGES

MECHANICALLY
INTERLOCKED
HEMMED EDGES

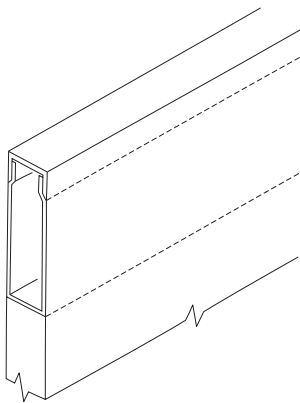
ALSO AVAILABLE
SEAMLESS (WELDED
OR BODY FILLER)



2

CLOSER
REINFORCEMENT
(OPTIONAL)

12 GAGE
STEEL
CHANNEL
16" LONG

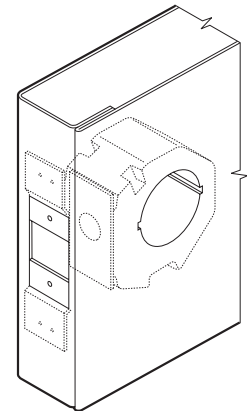


3

LOCK PREPARATION
GOV. 160/161
CYLINDRICAL TYPE

(C)

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



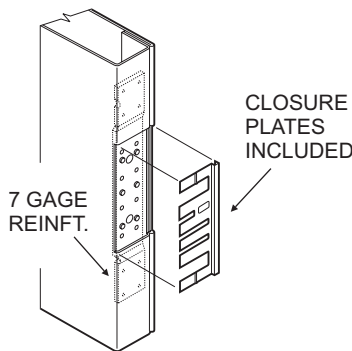
4

HINGE
PREPARATION

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

ANSI A156.7
TEMPLATE

NON-HANDED



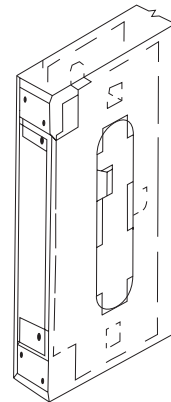
5

LOCK
PREPARATION
GOV. 86-4
MORTISE TYPE

(M) (ANSI a115.1)
2-3/4" BACKSET

(B) SIMILAR TO DETAIL
LESS FACE CUTOUT

(P) SIMILAR TO DETAIL
LESS ALL CUTOUT
AND REINFORCEMENT



6

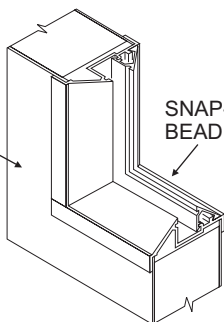
GLAZING TRIM
4831 (APPLIED)

FOR STANDARD
FLUSH DOORS

ALUMINUM

SNAP-IN
BEAD

3/8" WIDE
GLAZING
POCKET



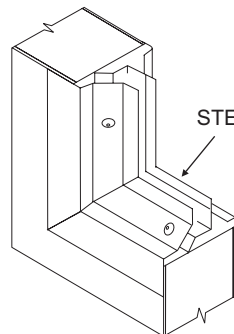
8

GLAZING TRIM
4841 (APPLIED)

FOR ALL
FIRE DOORS

3/8" WIDE
GLAZING
POCKET

LISTED



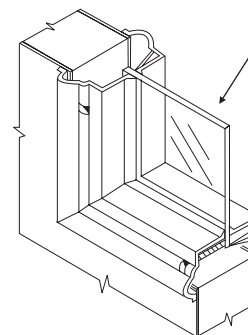
8

GLAZING TRIM

FOR STANDARD
EMBOSSED
PANEL DOORS

1/8" TEMPERED
SAFETY GLASS

HIGH-IMPACT
MOULDED
POLYSTYRENE
TRIM



8



Insulated Door Leaf; Polyurethane Core

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STANDARD SIZES
NOMINAL DOOR OPENING

WIDTH		HEIGHT
SINGLE	DOUBLE	
2'-0"	4'-0"	6'-8"
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"	9'-0"

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/SDI 100-91; 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 A366 or A620 & A568...or (optional) hot-dipped galvanized steel conforming to ASTM A526 or A642 & A525 -- 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. 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 flush by 16 gage steel channels welded in place. The bottom edge channel can also be installed inverted (optional).

SIZE LIMITS - DESIGNS

	FLUSH DESIGN	6 PANEL	8 PANEL	CROSS BUCK & LITES
MAX.	4090	4070	3070	3070
MIN.	2068	2668	2868	2868

E6 and E8 designs: mortise lock preparation limited to 3'-0" width, minimum.

FIRE DOORS

LABELING AGENCY: WARNOCK HERSEY
TEST: ASTM E-152, UL10B, UBC 43-2
• DESIGNS: F, G, N, V, E6, OR E8
• RATING: (20 GAGE) ¾ HR, OR 1-1/2 HR.
MAX. SIZE: 40 x 80 SINGLE 80 x 80 PAIR
• RATING: (18 & 16 GAGE) ¾ HR, 1-1/2 HR., OR 3 HR.
MAX. SIZE: 40 x 90 SINGLE 80 x 90 PAIR

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 169/161 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 12 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 A224.1-1990 with the thickness of primer coat not being less than 0.7 mils. 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. For accurate color selectors ask for a Ceco Colorstyle chart.

MATERIAL

DOOR FACE SHEETS	GRADE	C.R.	GALV		RECOMMENDED DOOR FRAME MATERIAL
			A60	G90	
20 Gage Steel (4080 max.)	Standard Duty	STD	OPT	-	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

Core Thermal Characters:	U Factor: 0.067 R Factor: 14.97
Sound Transmission Class:	STC 26 (F Design, 18 Gage Face Sheets, ASTM E90-81 & E413-73 [Fully Operable])
Physical Endurance Level:	Meets ANSI A 151.1 Performance Test, 20 GAGE: Level B (500,000 Cycles); 18 and 16: Level A (1,000,000 Cycles)



Insulated Door Leaf; Polyurethane Core

8-1-99

WALK DOOR SYSTEM
POLYURETHANE FOAM CORE

PERFORMANCE TESTS

<u>Description</u>	<u>Test Method</u>	<u>Results</u>
1. Slam Test	ANSI A151.1-81	250,000 Cycles. Grade 1 without failure
2. Twist or torque test	ANSI A151.1-81	Max. defl. At 300# = .800" max. Permanent set = .029".
3. Acoustical properties	ASTM E90-61T	STC rating of 26.
4. Insulation properties	ASTM C236 Mod.	"U" factor = 0.067. "R" factor = 14.97.
5. Standard fire rating * Must be installed in fire rated frame.	ASTM E152	Door is rated at 1-1/2" hours. (class "B" label)
6. Paint performance	ASTM B117 ASTM D2247 Weatherometer	200 hrs. salt spray. 500 hrs. humidity. 1000 hrs.

CONFORMANCE TO NATIONALLY ACCEPTED SPECIFICATIONS AND STANDARDS

<u>Requirements</u>	<u>Complies</u>
1. ANSI/SDI 100	YES
2. RR-D-575B	YES
3. PBS 4-0810	YES
4. CS 242-62	YES
5. CEGS-08110	YES
6. NFGS-08110	YES
7. H-08-1, 08110	YES
8. ASTM D1621	YES
9. ASTM D1622	YES
10. ASTM D1623	YES
11. UL 10B/ANSI A2.2	YES
12. ANSI A115	YES
13. ANSI A156.7	YES
14. NFPA 80	YES
15. ASHRAE 90	YES (if weatherstripped)
16. ASTM D-2247	500 hrs.
17. ASTM B-117	200 hrs.
18. ASTM A-525	A-60 Coating Designation
19. ASTM A-366	Uncoated
20. PS-4-66	YES
21. CS-9-65	YES
22. ANSI A224.1-80	YES
23. ASTM C236 Mod.	YES