

FF700 SERIES OPAQUE or GLAZED STEEL FOUR-FOLD DOOR

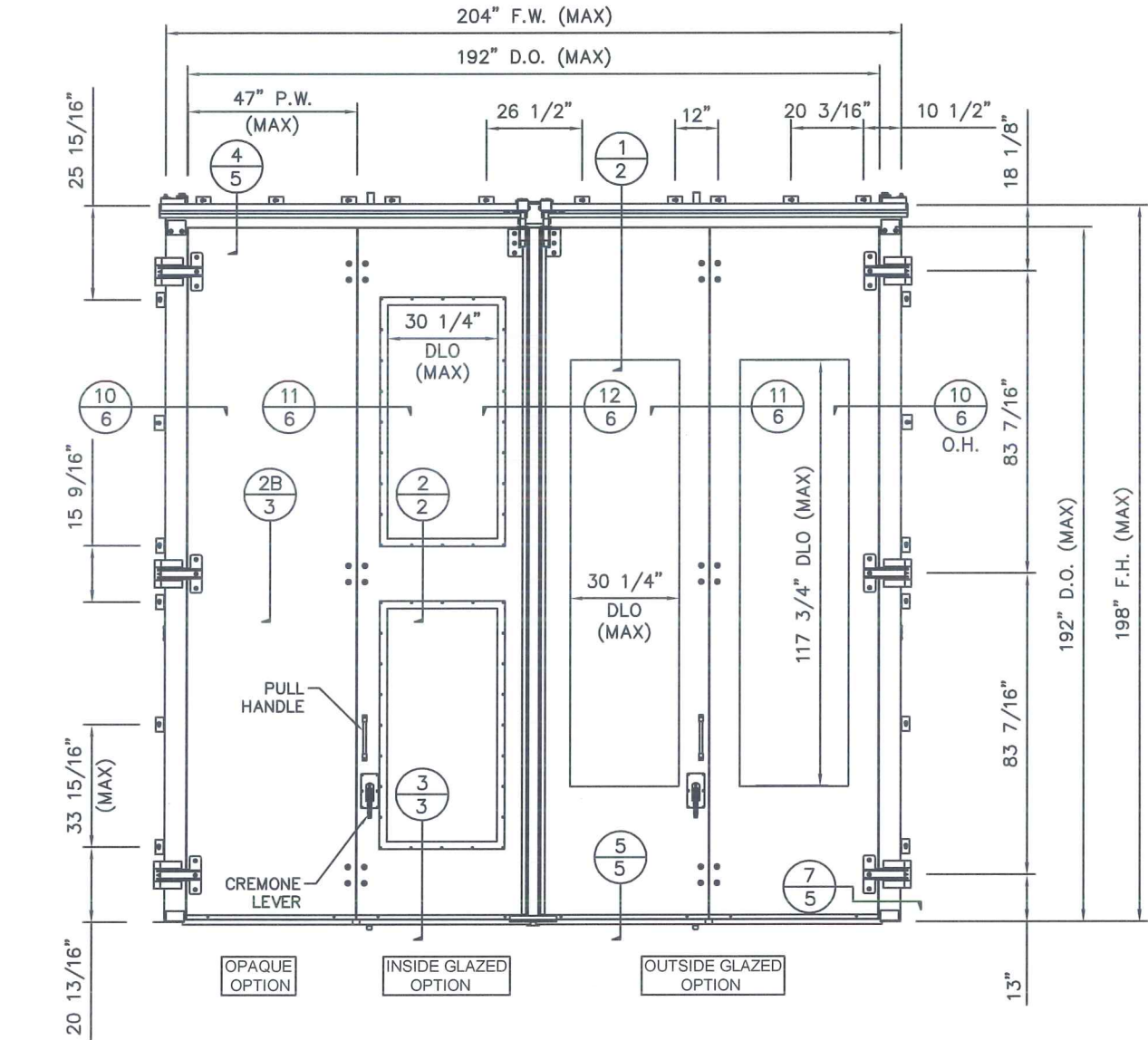
LMI LEVEL D OPAQUE or GLAZED STEEL BI-FOLD DOOR IN STEEL FRAME (HVHZ)

GENERAL NOTES:

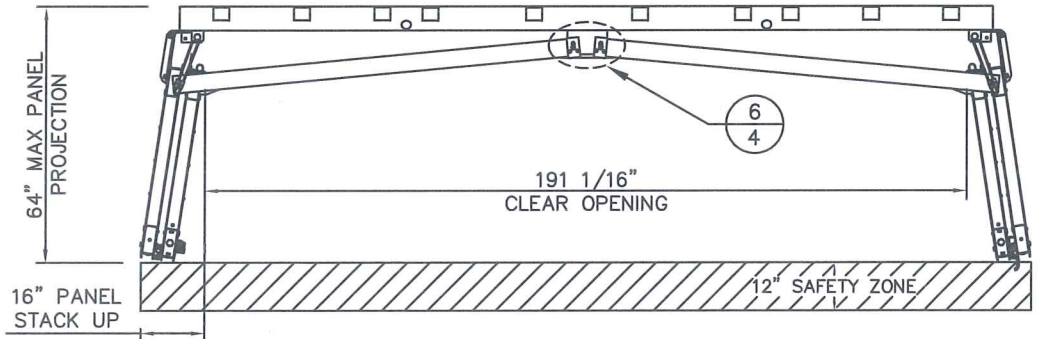
- 1. THIS SYSTEM HAS BEEN DESIGNED AND TESTED TO MEET ALL OF THE REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE, INCLUDING THE HVHZ PROVISIONS.
- 2. THIS SYSTEM HAS BEEN TESTED PER TAS 201, 202 (STRUCTURAL ONLY), 203, ASTM E330, E1886, AND E1996 FOR LEVEL D LARGE MISSILE IMPACT RESISTANCE. SHUTTERS ARE NOT REQUIRED.
- 3. THIS DOOR SYSTEM IS NOT TESTED OR RATED FOR WATER INFILTRATION RESISTANCE. IT IS INTENDED FOR USE ONLY IN LOCATIONS WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED OR WHERE IT IS PROTECTED BY AN OVERHANG MEETING THE REQUIREMENTS OF FBC SECTION 1709.5.1.
- 4. ANCHOR TYPE, SIZE, SPACING, AND EMBEDMENT SHALL BE AS LISTED ON SHEET 6/9. ANCHOR EMBEDMENT IN SUBSTRATE SHALL BE BEYOND WALL DRESSING OR STUCCO.
- 5. THE DESIGN OF THE SUBSTRATE IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD OR OTHER SPECIALTY ENGINEER, AND IS NOT A PART OF THIS APPROVAL. THE SUBSTRATE MUST SAFELY TRANSMIT THE LOADS APPLIED TO THIS SYSTEM TO THE BUILDING STRUCTURE.
- 6. FIRE RATINGS OR FIRE RESISTANCE IS NOT A PART OF THIS REVIEW.
- 7. ALL ANCHORS SECURING THE SYSTEM TO PRESSURE TREATED WOOD SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE CHEMICALS IN THE WOOD.
- 8. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE PROTECTED PER FBC REQUIREMENTS.
- 9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. Cd=1.6 WAS USED FOR WOOD SCREWS ONLY.
- 10. FASTENERS INSTALLED IN STEEL SHALL BE OF SUFFICIENT LENGTH TO FULLY PENETRATE THE METAL WITH THREE ADDITIONAL THREADS BEYOND.

CORNER CONSTRUCTION:

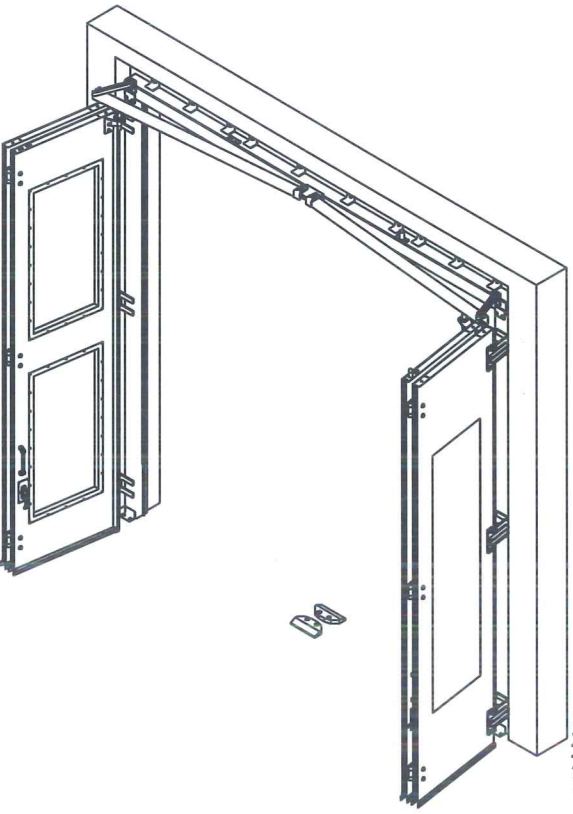
- 1. FRAME CORNERS ARE SQUARE CUT AND MECHANICALLY FASTENED AT THE HEAD USING CORNER JOINT PLATES WELDED TO THE HEAD AND (2) 1/2" DIA. HH CAP SCREWS.
- 2. DOOR PANEL STILES AND RAILS ARE SQUARE CUT AND WELDED AT EACH CORNER USING 1/8" FILLET WELDS.



INTERIOR ELEVATION



PLAN VIEW



DESIGN PRESSURE
+/- 120 Psf



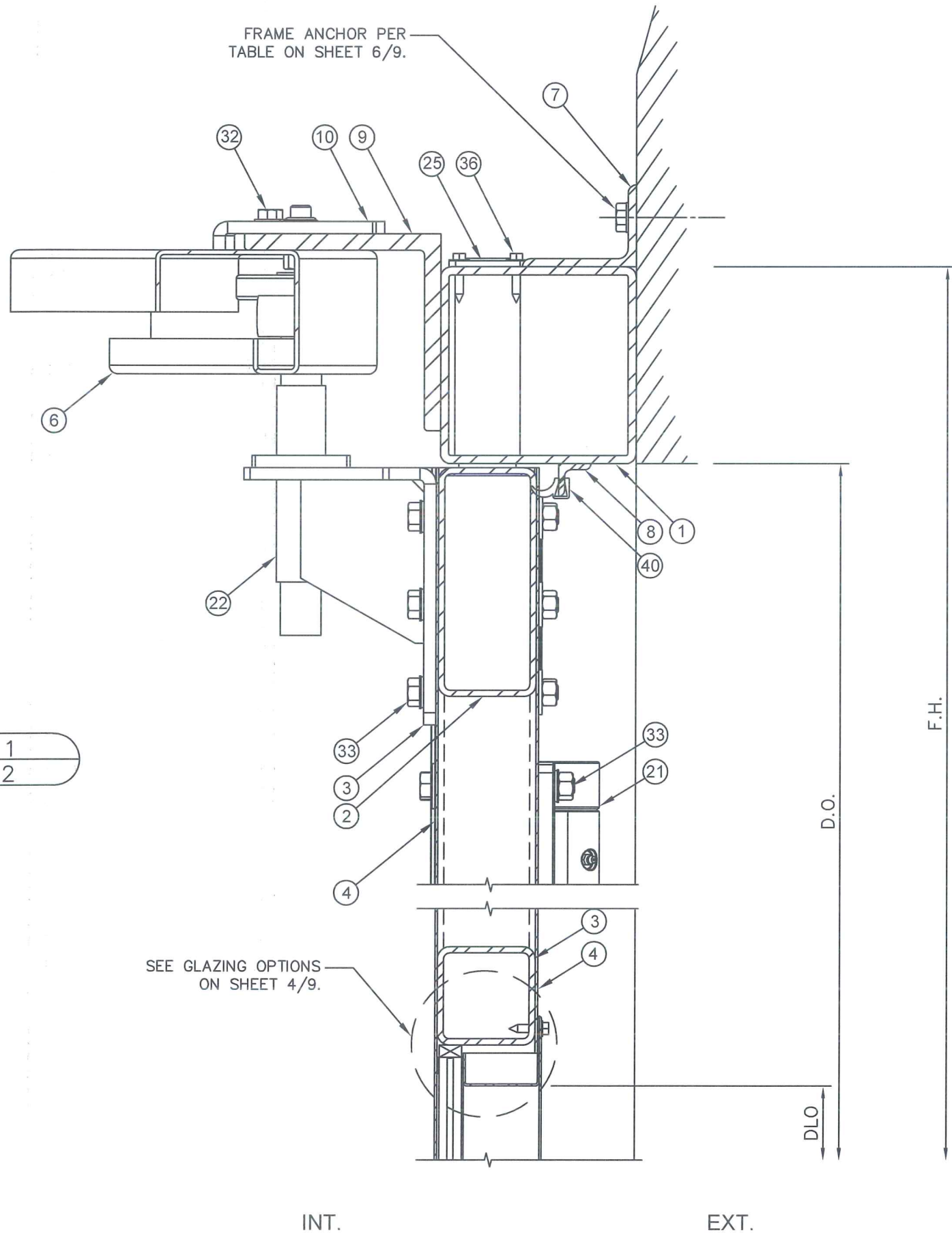
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A SENNECA COMPANY
101 POWER DRIVE
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PH: (800) 959-1352
www.doorengineering.com

DWG: FF700-LMI
SHEET: 1/9

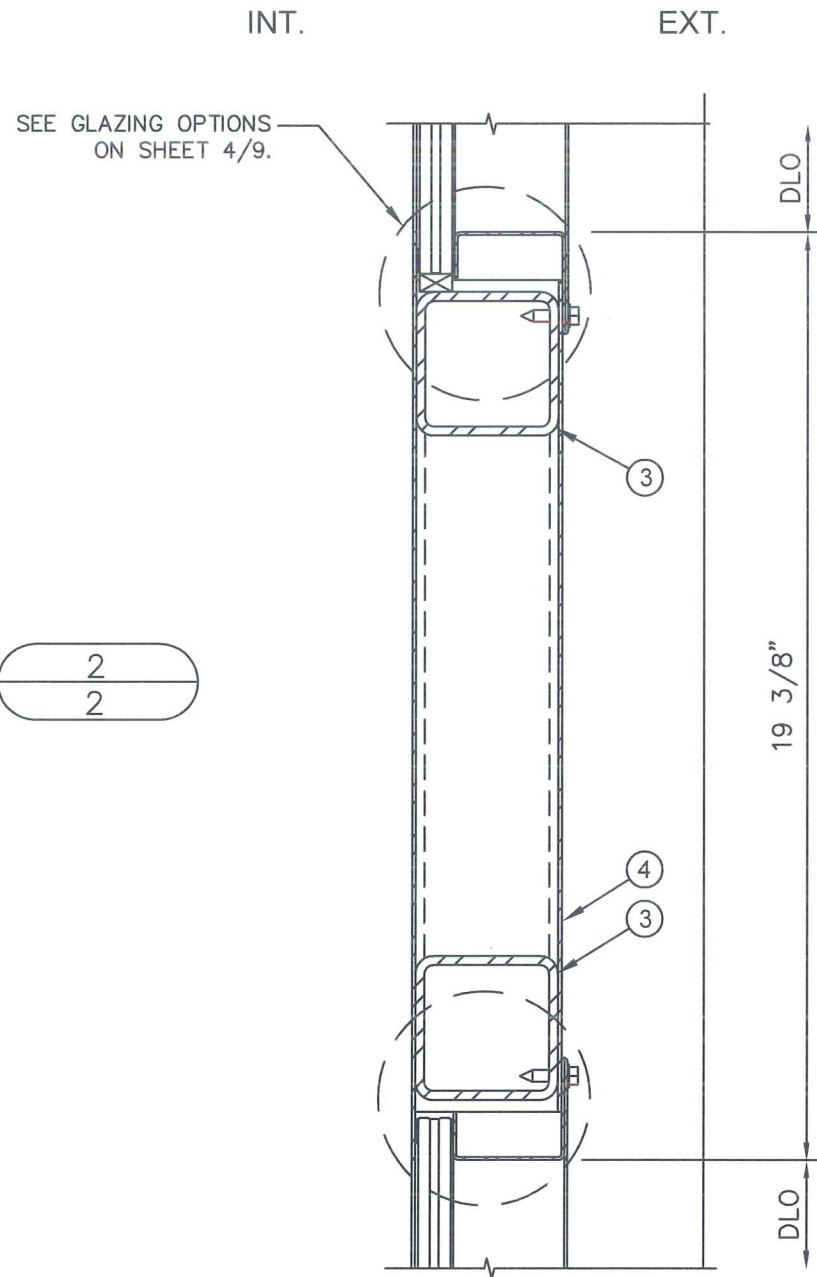
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FL PE# 62354
WALTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33411
(561) 225-1982

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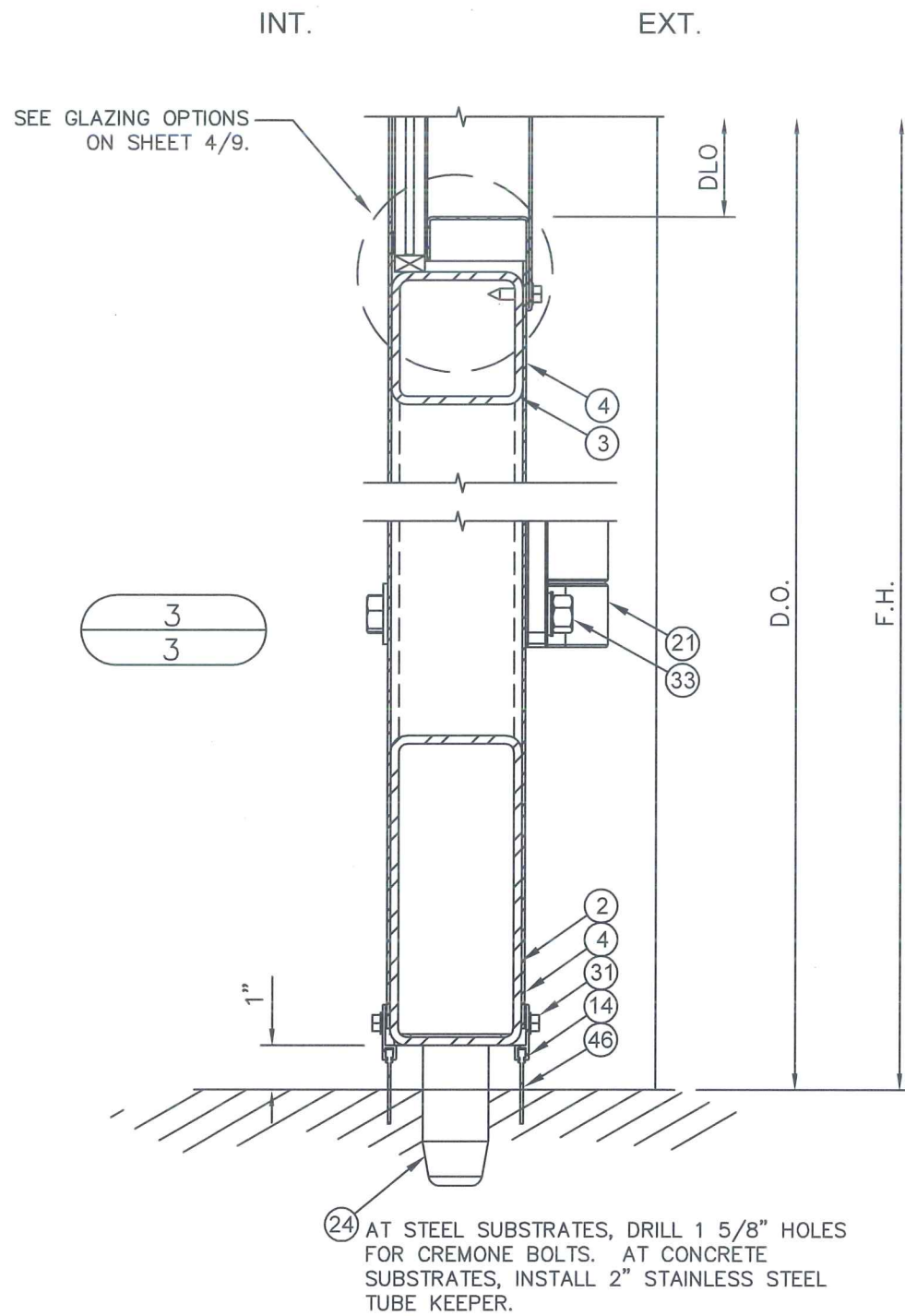
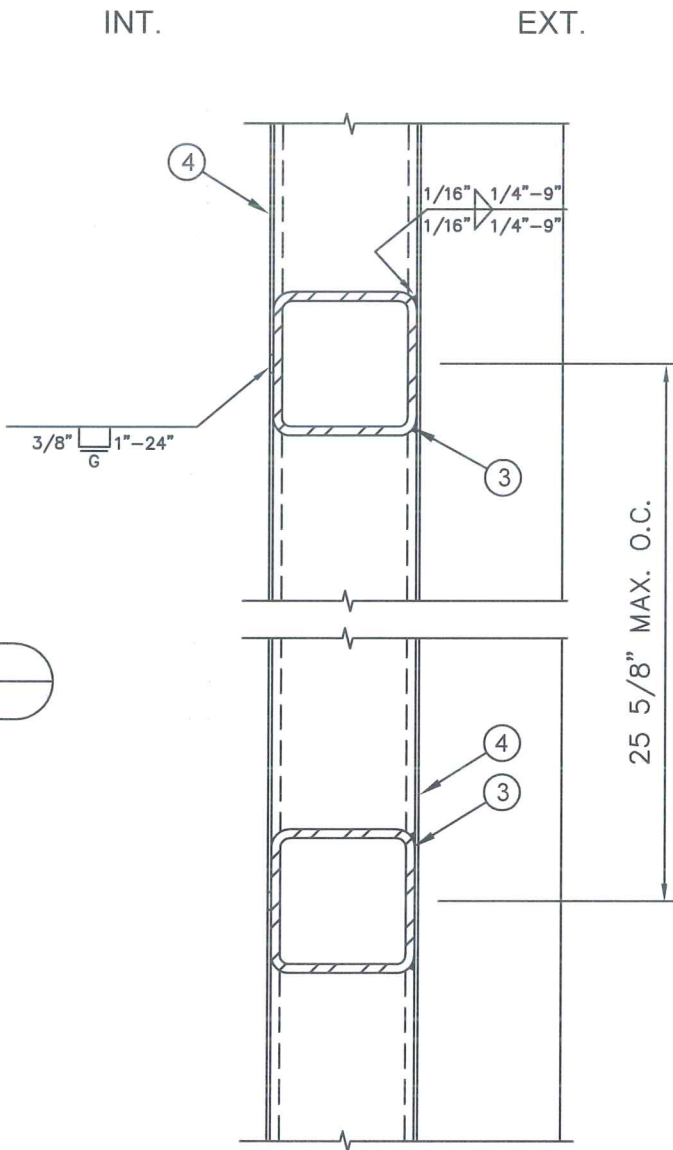
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DWG:	FF700-LMI
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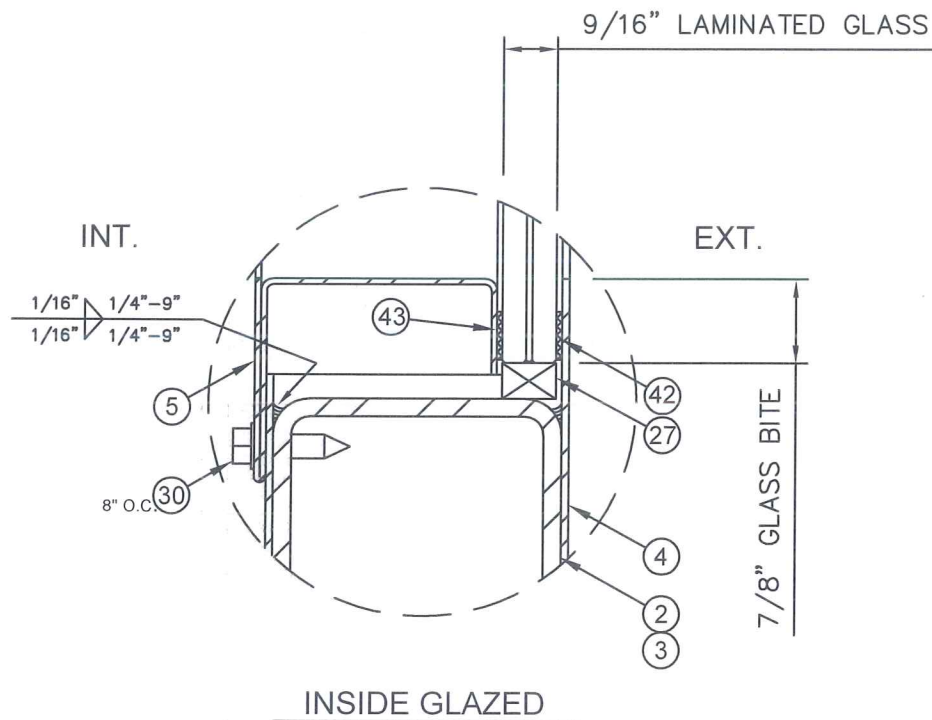
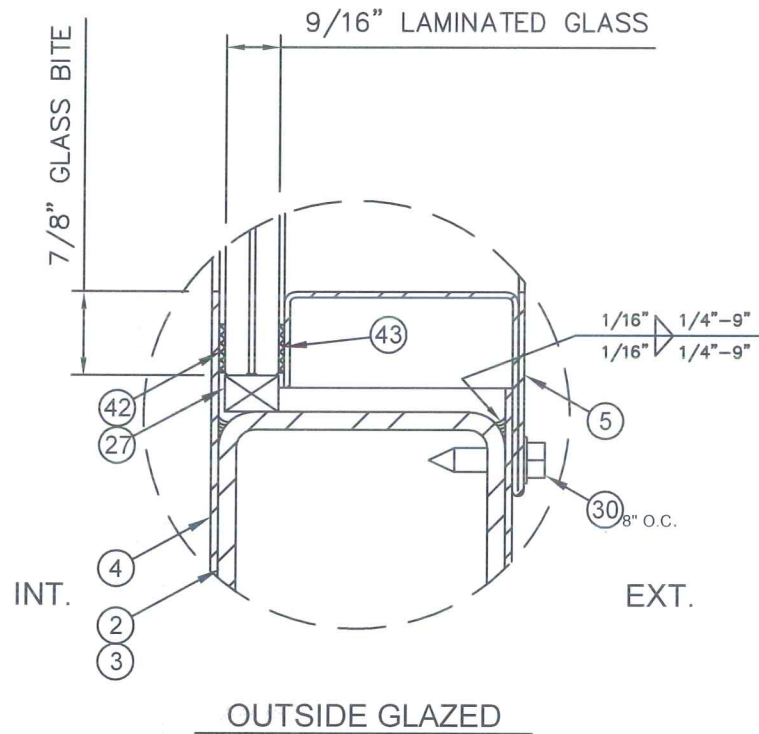


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GLAZING DETAILS

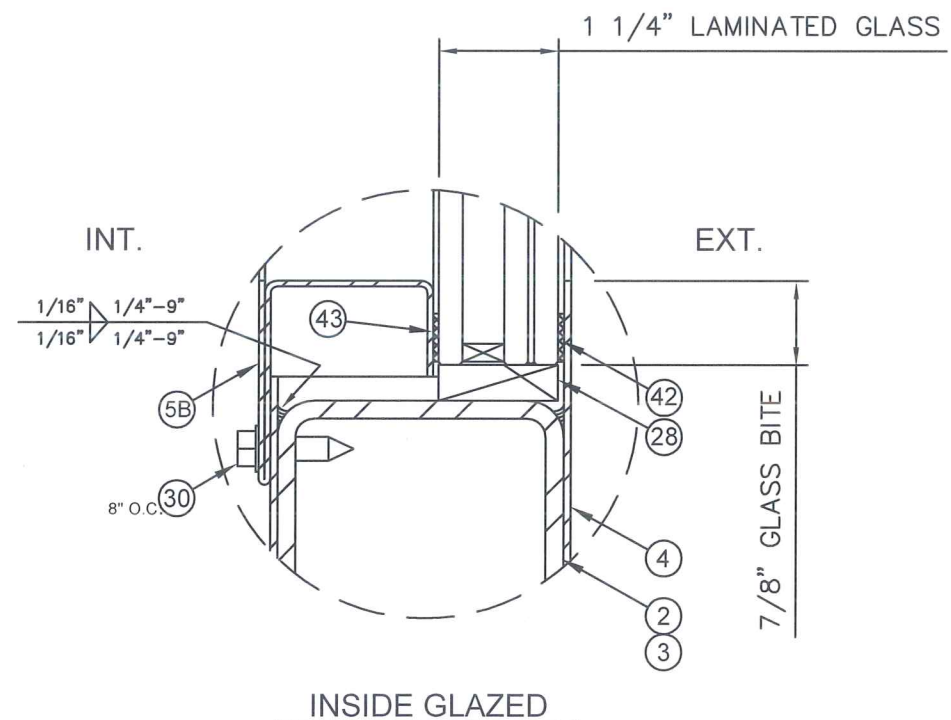
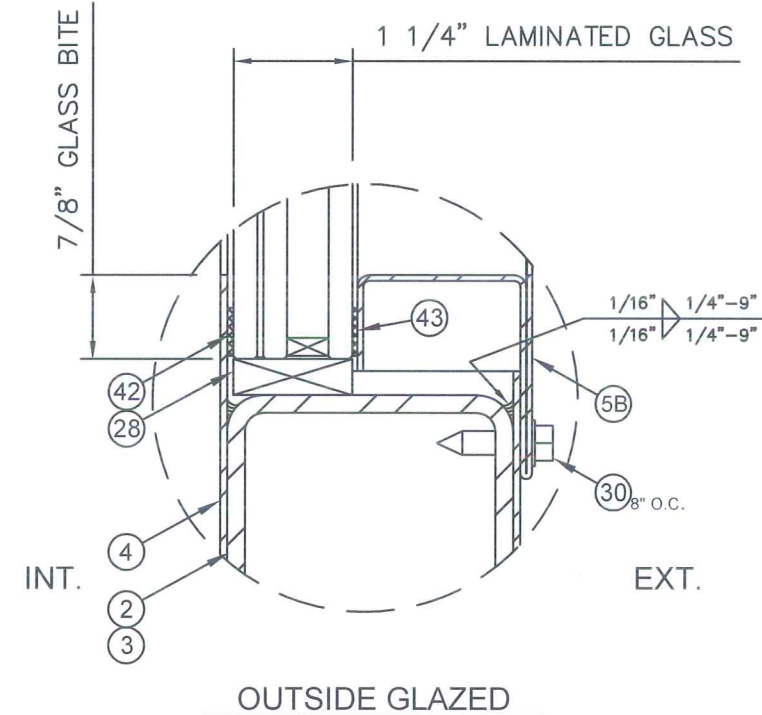


9/16" GLAZING OPTIONS

- GLASS TYPE 1: 1/4" HEAT STRENGTHENED
0.090" SENTRYGLAS INTERLAYER
1/4" HEAT STRENGTHENED
- GLASS TYPE 2: 1/4" HEAT STRENGTHENED
0.075" SAFLEX STORM INTERLAYER
1/4" HEAT STRENGTHENED

1 1/4" GLAZING OPTIONS

- GLASS TYPE 3: 1/4" TEMPERED
7/16" AIR SPACE (ALUM SPACER)
1/4" HEAT STRENGTHENED
0.090" SENTRYGLAS INTERLAYER
1/4" HEAT STRENGTHENED
- GLASS TYPE 4: 1/4" TEMPERED
7/16" AIR SPACE (ALUM SPACER)
1/4" HEAT STRENGTHENED
0.075" SAFLEX STORM INTERLAYER
1/4" HEAT STRENGTHENED



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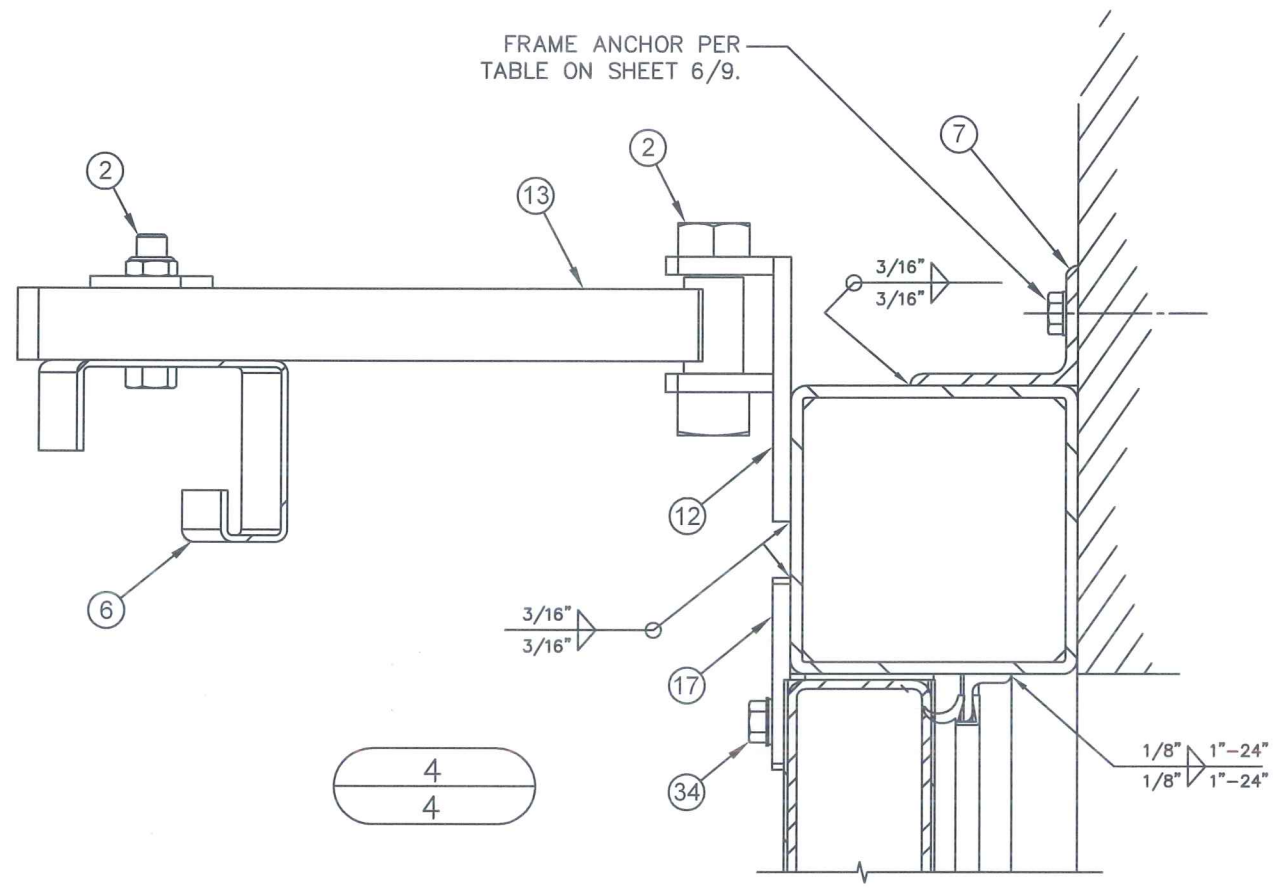


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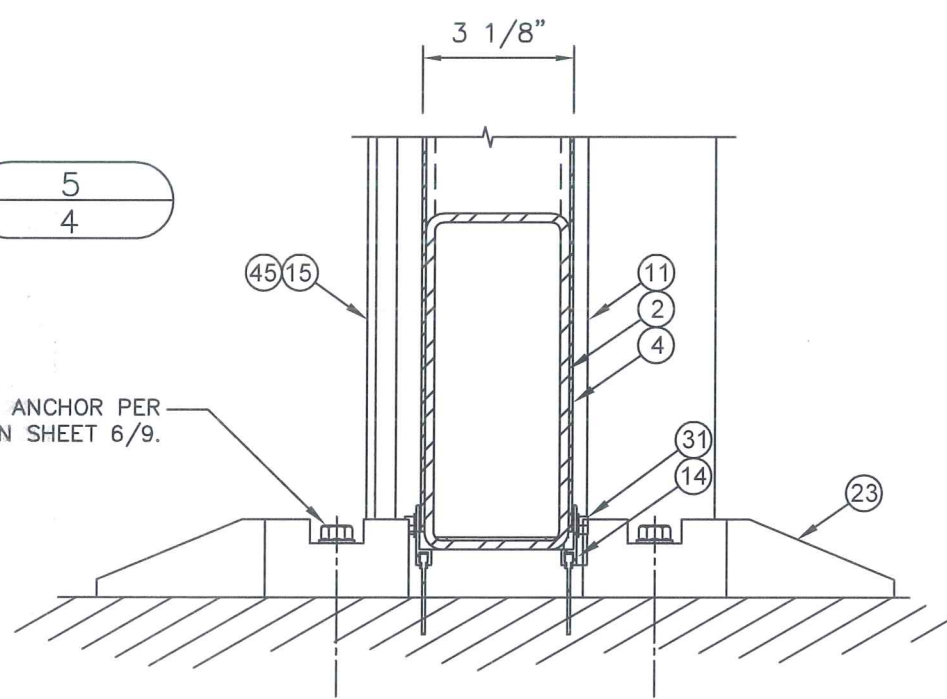
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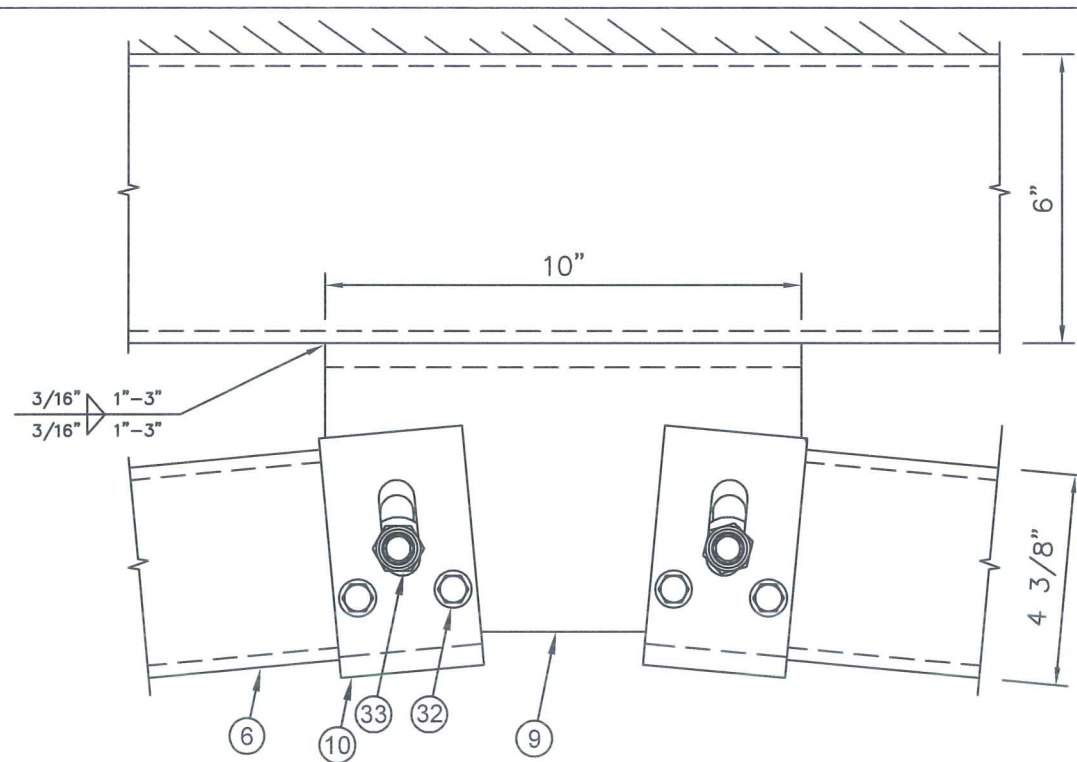


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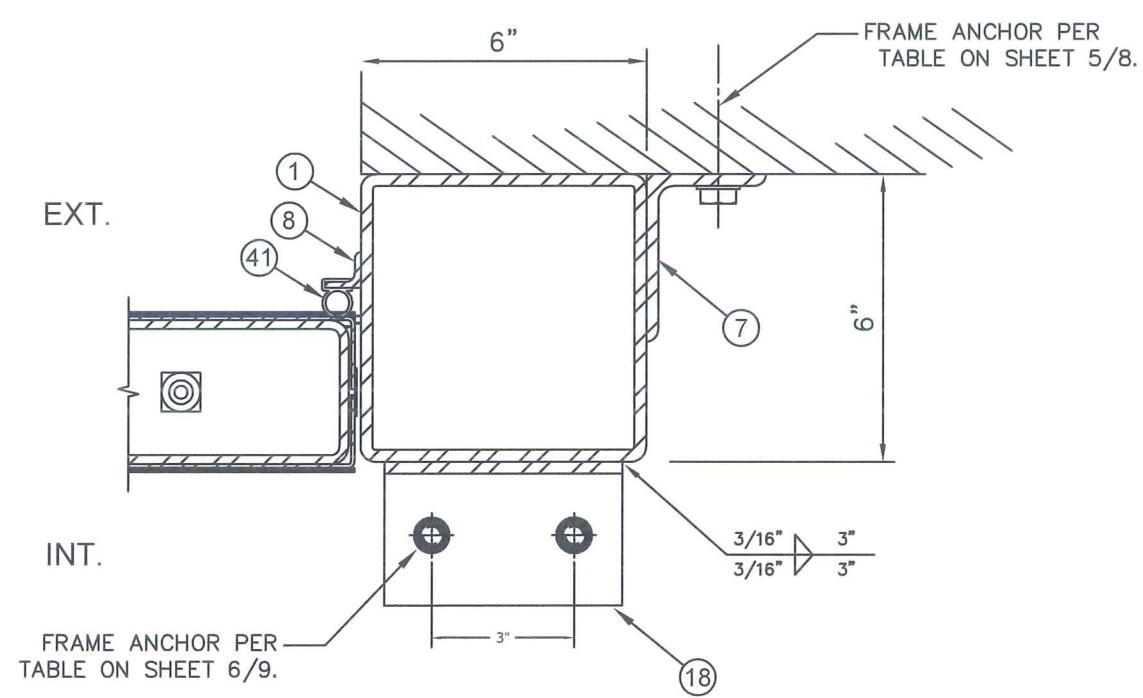
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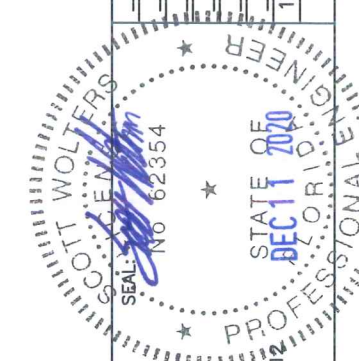
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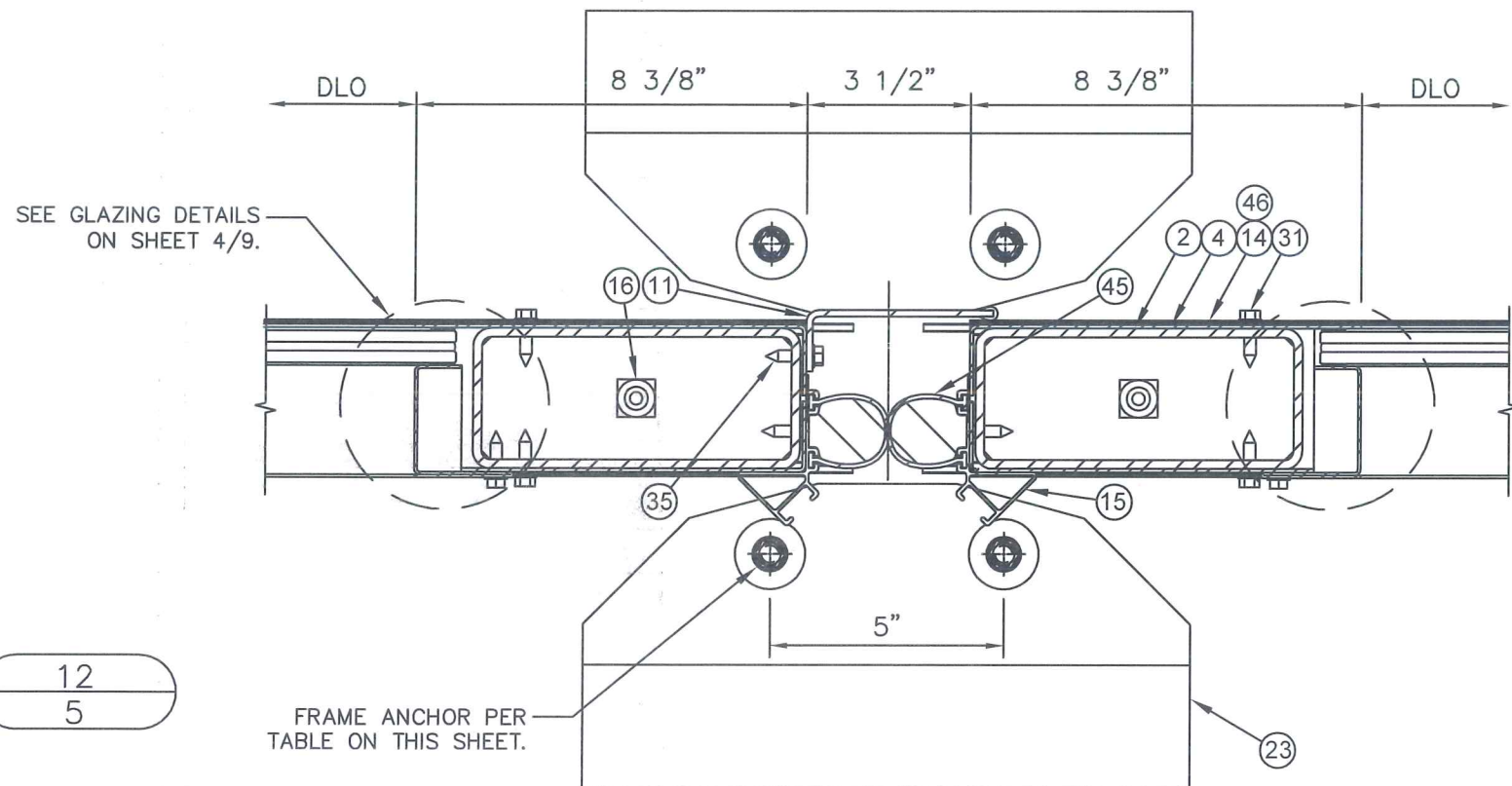
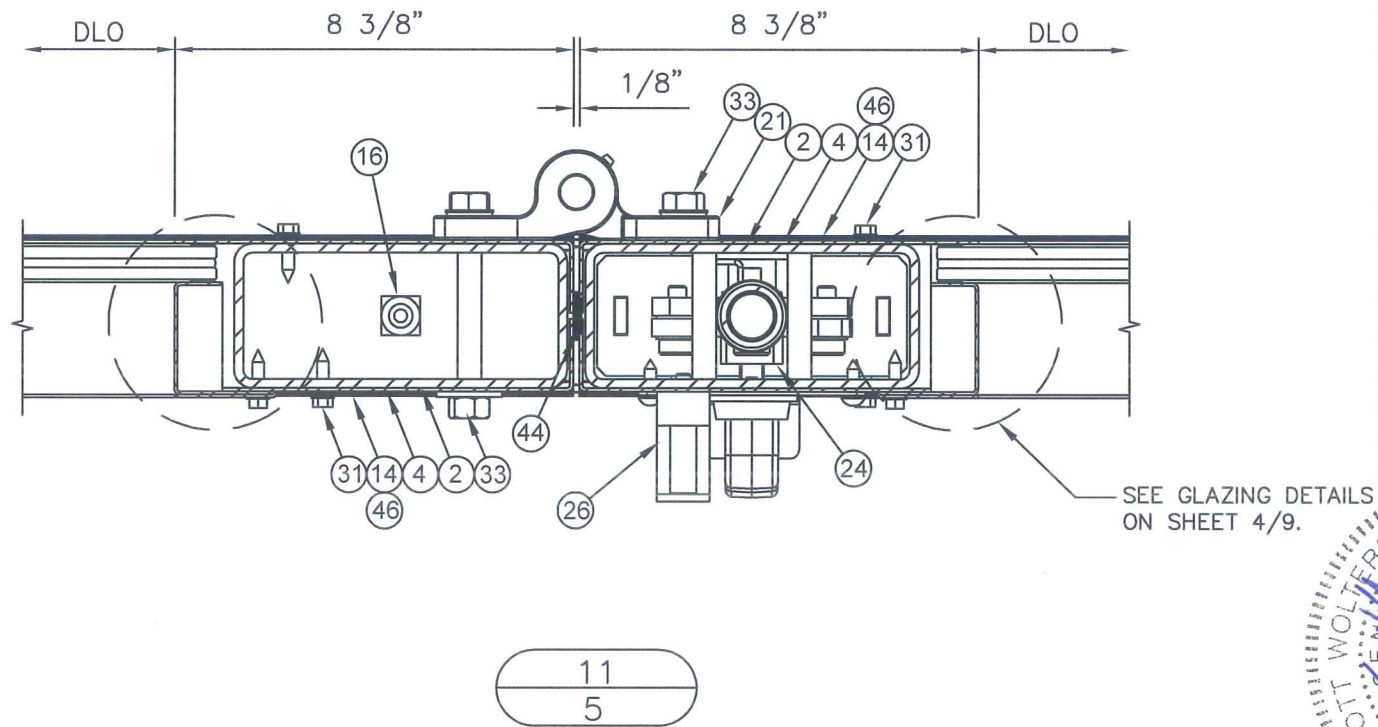
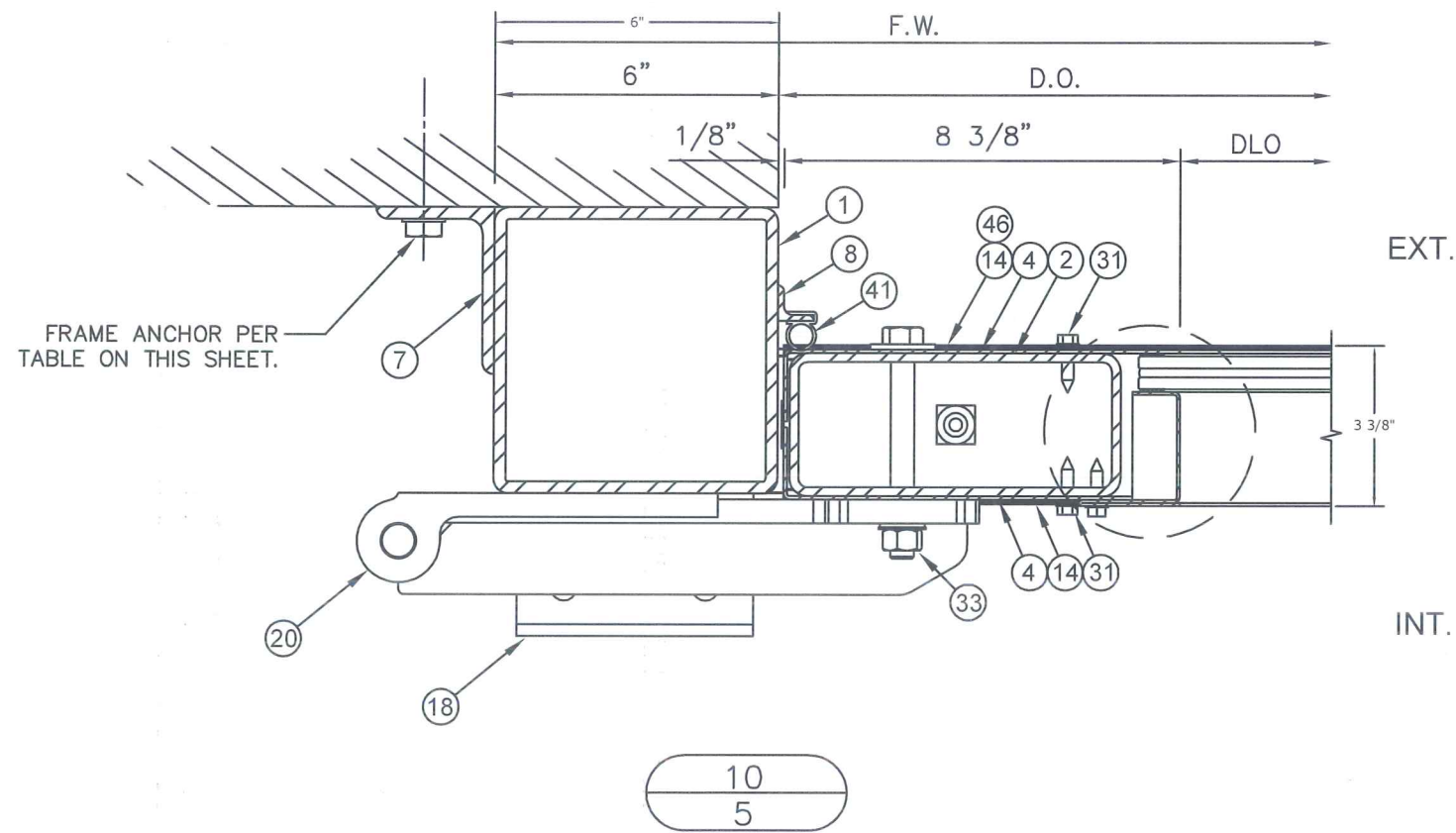


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SHEET: **5/9**

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SUBSTRATE TYPE	ANCHOR TYPE	MINIMUM EMBEDMENT	MINIMUM EDGE DISTANCE
STEEL (A36, 1/4" MIN)	1/2" DIA. F-TYPE THREAD-CUTTING SCREW (GR. 5 MIN)	FULL ⁺⁺	1"
	1/2" DIA. ELCO TAP-FLEX	FULL ⁺⁺	1"
CONCRETE (4000 psi MIN)	1/2" DIA. POWERS WEDGE BOLT	4"	4 1/2"
	1/2" DIA. HILTI KWIK HUS-EZ	4"	4 1/2"
	1/2" DIA. SIMPSON STRONG-TIE TITAN HD	4"	4 1/2"

⁺⁺ FULLY PENETRATES METAL WITH 3 THREADS BEYOND



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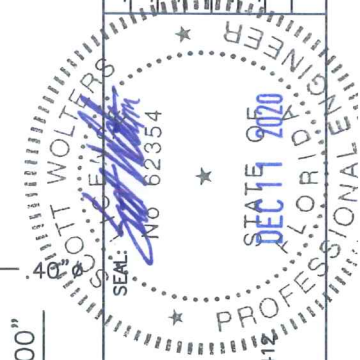
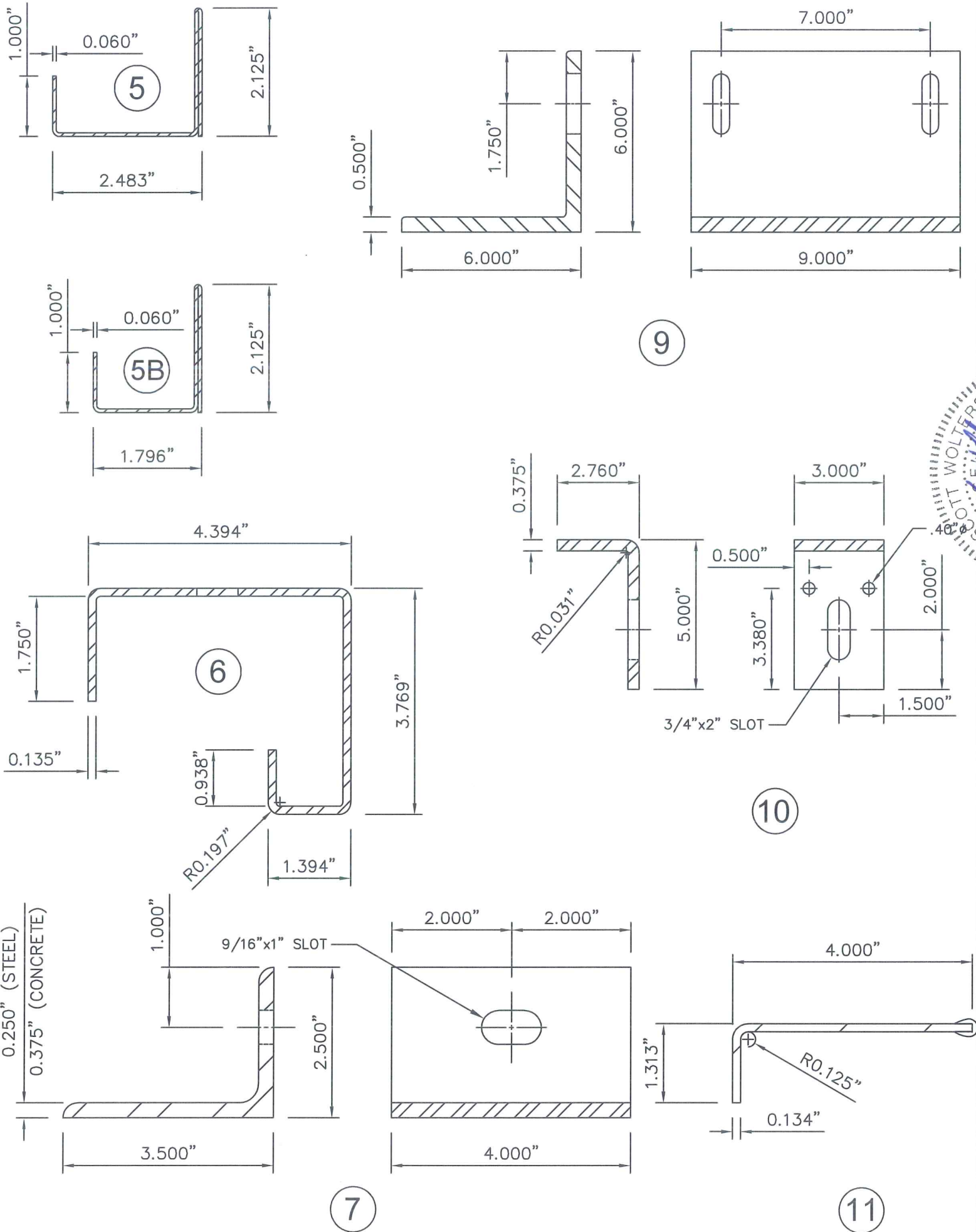


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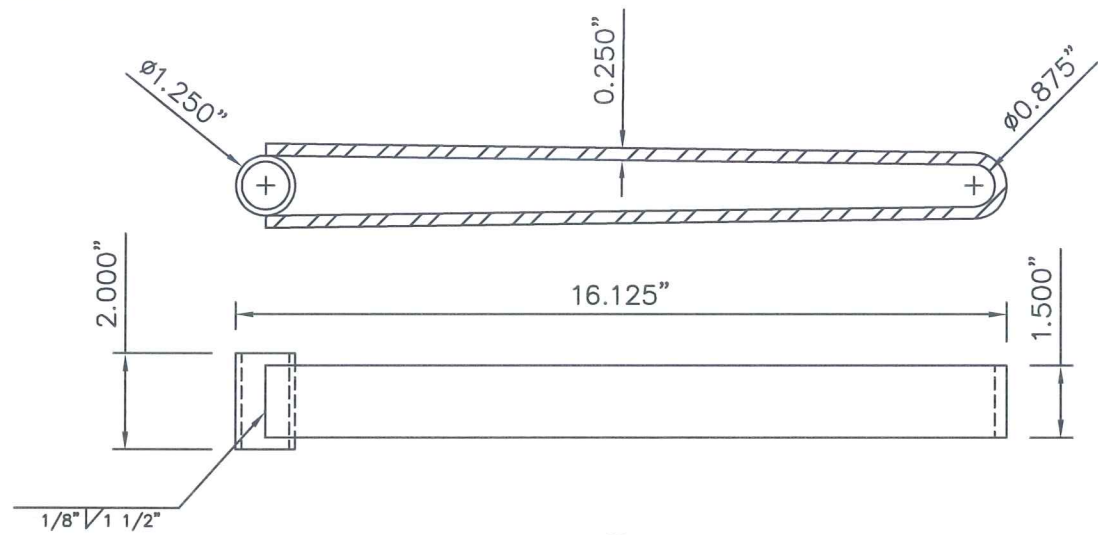
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BILL OF MATERIALS		
MARK	DESCRIPTION	MATERIAL
1	6"x6"x1/4" STEEL TUBE FRAME HEAD/JAMB	A500
2	7"x3"x3/16" STEEL TUBE DOOR STILE/RAIL	A500
3	3"x3"x11ga. STEEL TUBE DOOR INTERMEDIATE RAIL	A500
4	14ga. STEEL INTERIOR/EXTERIOR PANEL SHEETING	A1008
5	16ga. FORMED STEEL GLASS STOP (9/16" INFILL)	A60
5B	16ga. FORMED STEEL GLASS STOP (1 1/4" INFILL)	A60
6	10ga. FORMED STEEL HV1 TRACK	A1011
7s	2 1/2"x3 1/2"x1/4" STEEL CLIP ANGLE (STEEL SUBSTRATE)	A36
7c	2 1/2"x3 1/2"x3/8" STEEL CLIP ANGLE (CONCRETE SUBSTRATE)	A36
8	1"x1"x3/16" STEEL ANGLE	A36
9	6"x6"x1/2" STEEL ANGLE TRACK SUPPORT	A36
10	5"x2 3/4"x3/8" BENT STEEL TRACK REINF. ANGLE	A36
11	10 Ga. FORMED STEEL ASTRAGAL	A60
12	3/8" STEEL TRACK SUPPORT BRACKET WITH SQUARE NUT (GR. 5)	A36
13	1/4" BENT STEEL END TRACK SUPPORT WITH 1 1/4" STEEL SLEEVE	A36
14	ALUM. DOOR SWEEP WITH EPDM INSERT	
15	EPDM ASTRAGAL SEAL (#8507K13)	??
16	7"x3"x10ga. STEEL END CAP WITH 1/2" SQUARE NUT (GR. 5)	A1011
17	5"x4"x3/8" STEEL CORNER CLIP	A36
18	3"x3"x1/4" STEEL JAMB CLIP	A36
20	JAMB T-HINGE	1016073
21	BI-FOLD HINGE	
22	HV1 TROLLEY	
23	FLOOR GUIDE (#SBE-1025)	HDPE (recycled)
24	2 PT. LOCK (INTERIOR CREMONE BOLTS) A500 TUBE, A36 PLATE	A53 PIPE
25	CREMONE BOLT KEEPER	
26	PULL HANDLE	A1011
27	SETTING BLOCKS (9/16" GLAZING), (2) PER LITE	RUBBER
28	SETTING BLOCKS (1 1/4" GLAZING), (2) PER LITE	RUBBER
30	1/4"-14 HWH TEKS SCREW, 8" O.C. (MAX)	GR. 5 MIN.
31	1/4"x1" HWH TEKS SCREW, 20" O.C. (MAX)	GR. 5 MIN.
32	3/8" DIA. HH F-TYPE THREAD CUTTING SCREW	GR. 5 MIN.
33	1/2" DIA. HH CAP SCREW, NUT, & WASHERS	GR. 5 MIN.
34	1/2" DIA. HH F-TYPE THREAD CUTTING SCREW	GR. 5 MIN.
35	1/4"-14 HWH TEKS SCREW, 7" FROM ENDS AND 12" MAX. O.C.	GR. 5 MIN.
36	1/4"x1 1/2" HWH TEKS SCREW	GR. 5 MIN.
40	FIN WEATHERSTRIPPING (STANPRO 75000350)	EPDM
41	BULB WEATHERSTRIPPING (STANPRO 75001899)	EPDM
42	1/16"x1/2" BUTYL TAPE	
43	1/8"x1/2" FOAM GLAZING TAPE	
44	3/8"x1/2" CLOSED CELL FOAM (PERMALITE 10-00-458)	
45	FOAM FILLED RUBBER BULB GASKET	

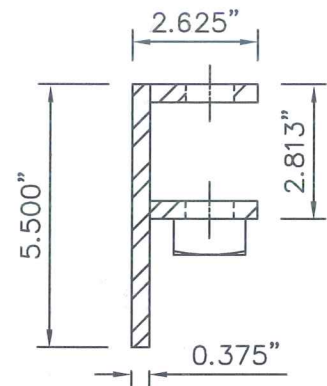


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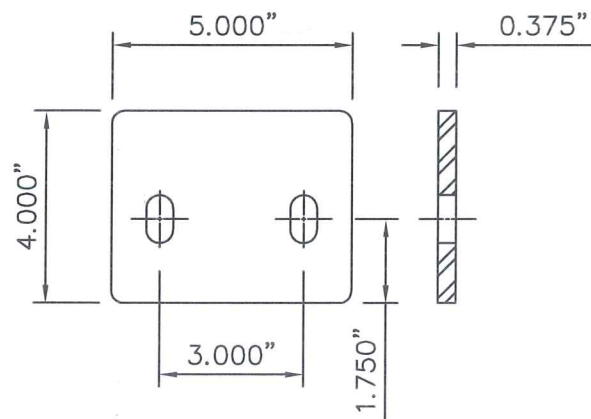
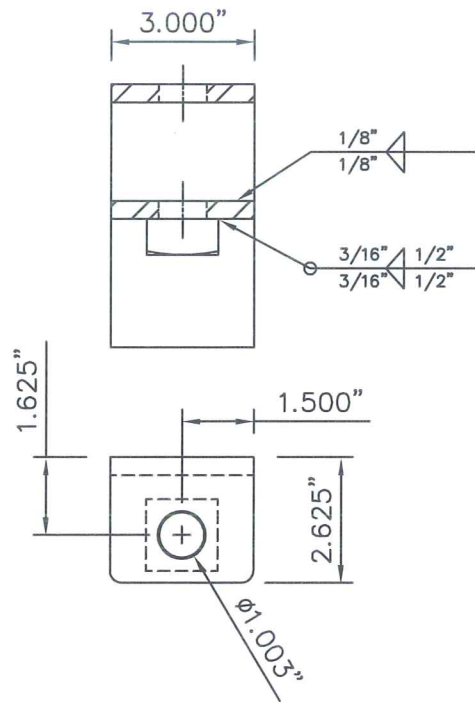
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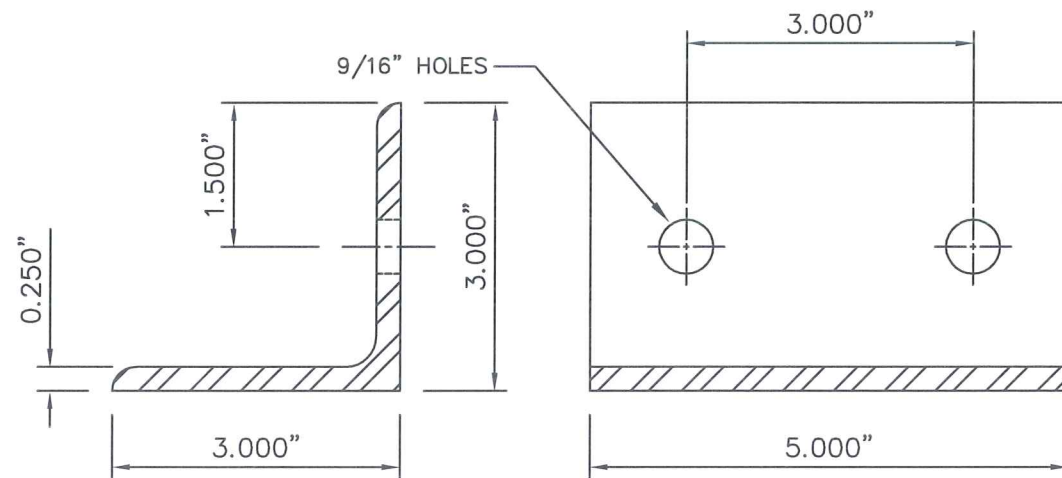
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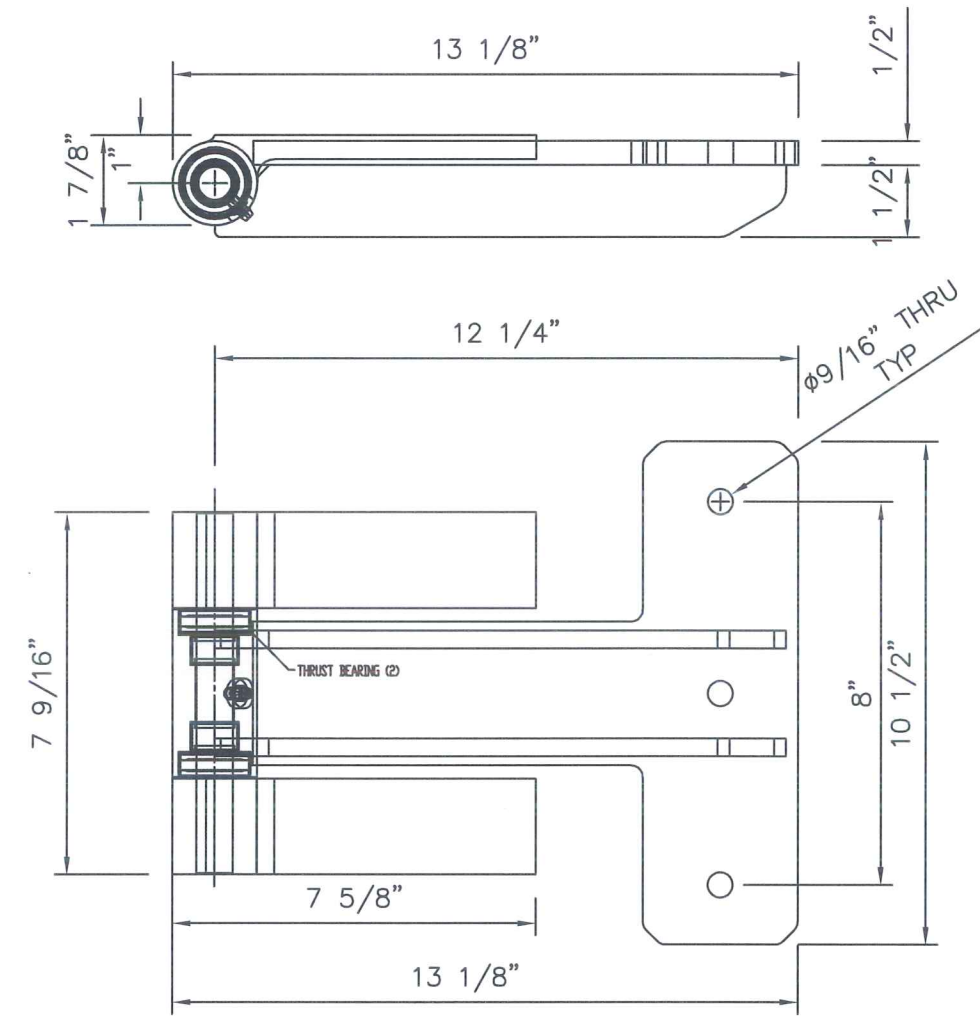


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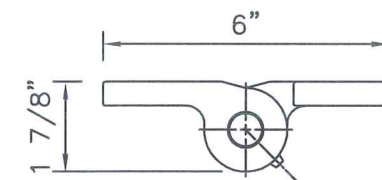
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JAMB T-HINGE

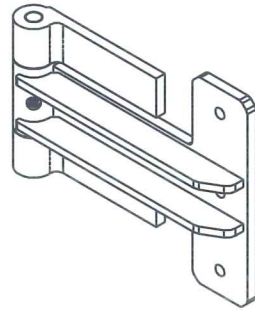
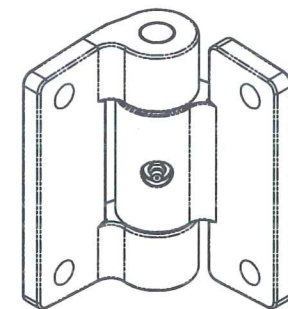
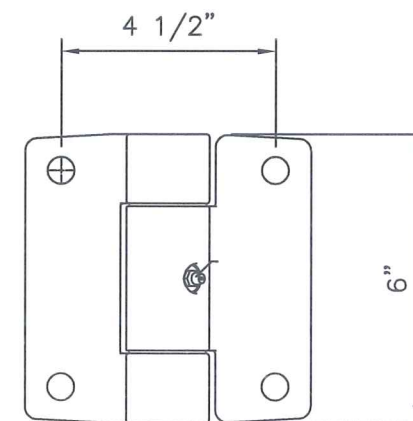


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BI-FOLD HINGE



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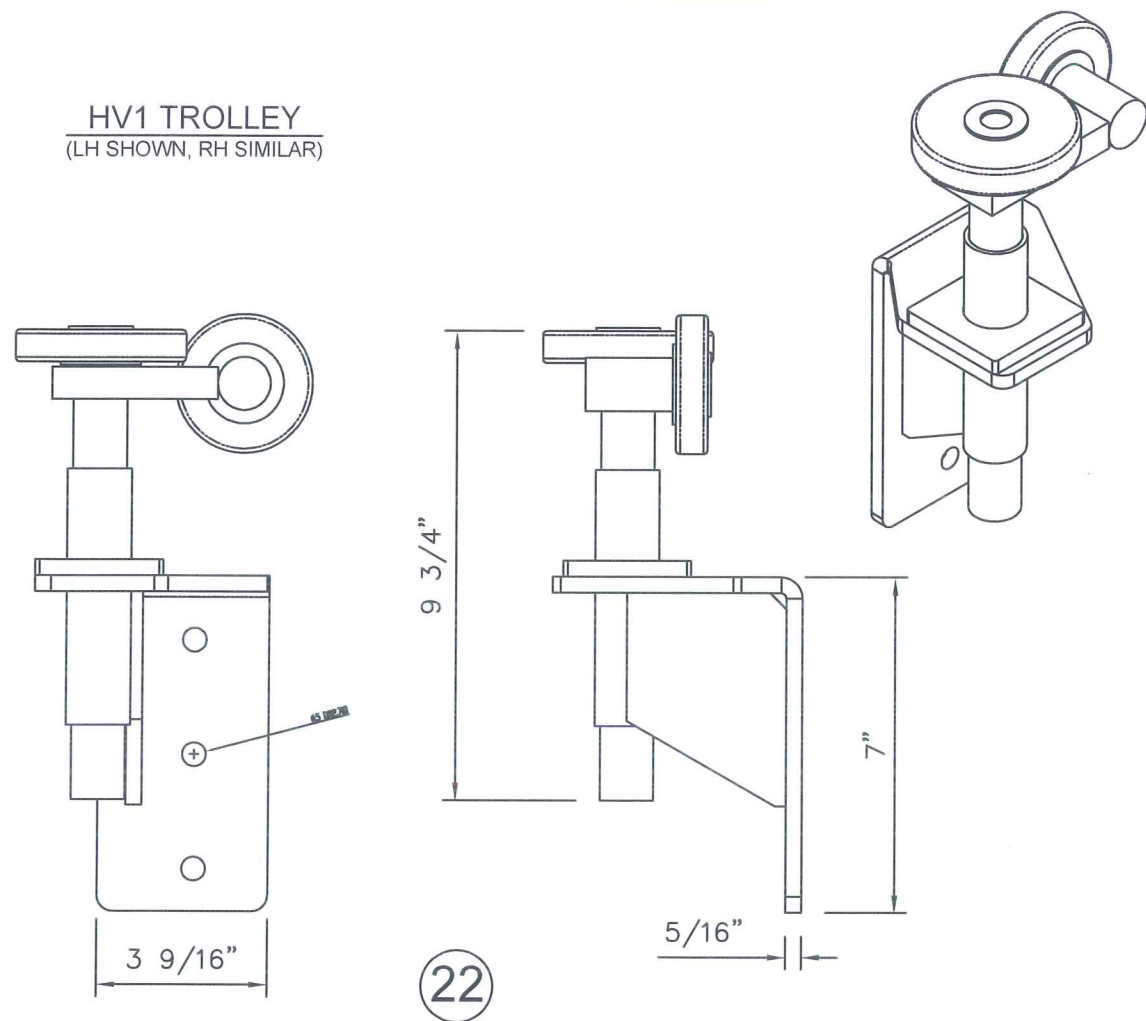
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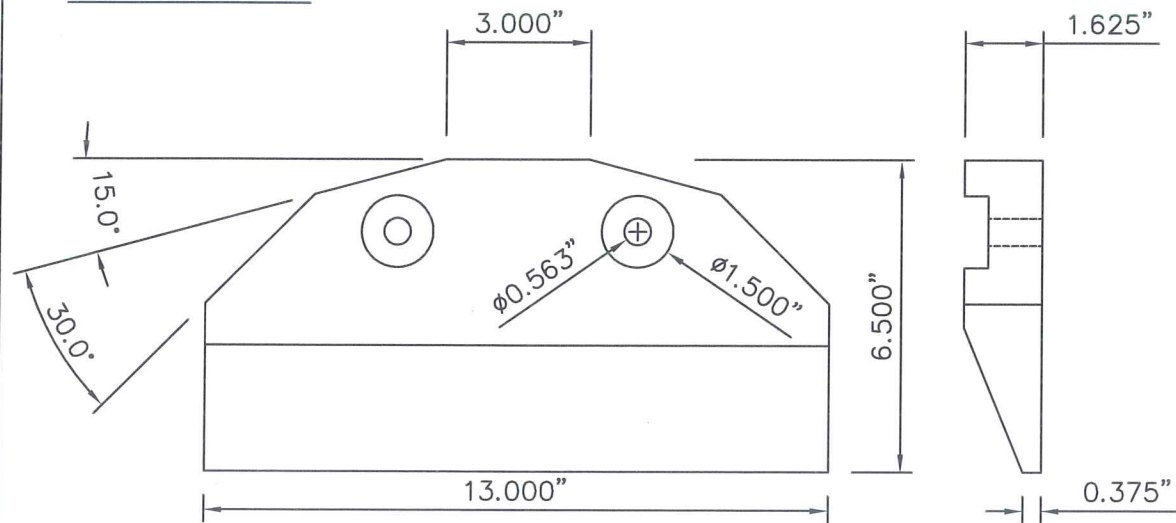
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HV1 TROLLEY (LH SHOWN, RH SIMILAR)



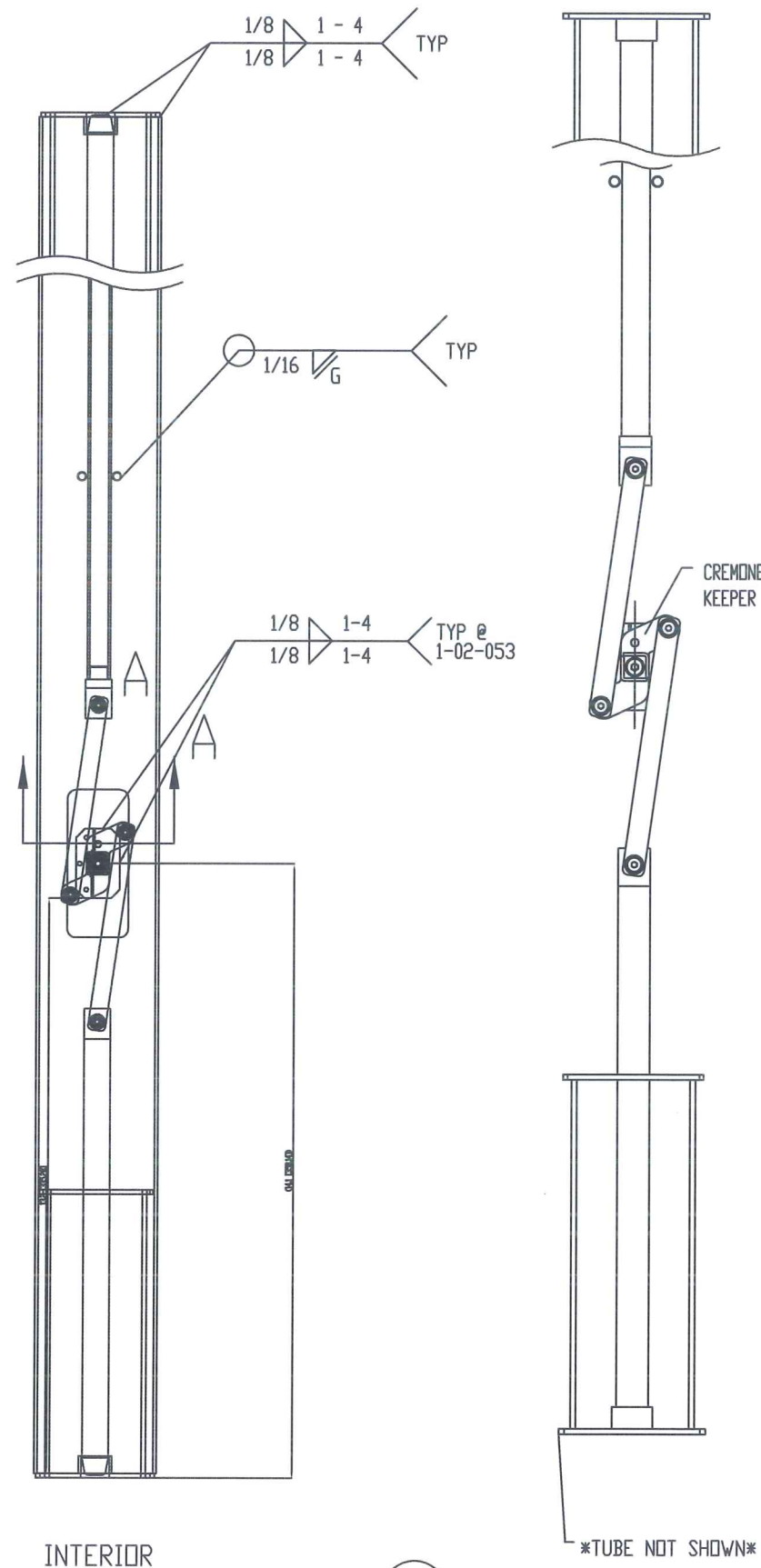
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FLOOR GUIDE

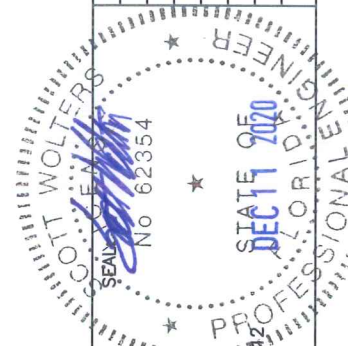
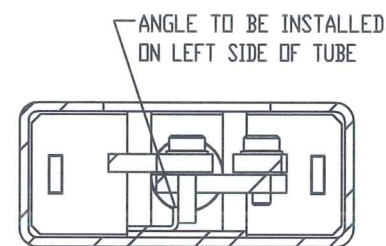


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2-POINT LOCK (INTERNAL CREMONE BOLTS)



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