

SERIES TU24000 STOREFRONT SYSTEM FBC PRODUCT APPROVAL DRAWINGS

NOTES:

1. THE PRODUCT ILLUSTRATED SATISFIES THE REQUIREMENTS FOR THE 2014 FLORIDA BUILDING CODE NOT INCLUDING HVHZ.
2. THE INSTALLATION DRAWINGS DEPICTED WITHIN ARE NECESSARY TO MEET THE STRUCTURAL LOAD REQUIREMENTS. PLEASE SEE THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR SEALING, FLASHING AND DRAINAGE REQUIREMENTS.
3. THIS PRODUCT IS NOT IMPACT RESISTANT AND THEREFORE AN APPROVED IMPACT PROTECTION SYSTEM IS REQUIRED FOR THIS PRODUCT IF IT IS INSTALLED IN A WIND BORNE DEBRIS AREA.
4. THE GLAZING FOR THESE UNITS SHALL COMPLY WITH ASTM E 1300. TESTED GLAZING IS 1" INSULATING GLASS CONSISTING OF TWO SHEETS OF 1/4" FULLY TEMPERED GLASS SEPARATED BY A 1/2" SPACER.
5. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/2". SHIM ALL SPACES IN EXCESS OF 1/16".
7. CONCRETE INSTALLATIONS ASSUME A MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE OF 3,200 PSI . USE A 1/4" ITW TAPCON OR A 1/4" POWERS TAPPER ANCHOR FOR INSTALLATION INTO CONCRETE. THE ANCHOR SHALL HAVE A MINIMUM OF 1-3/8" EMBEDMENT. ANCHORS SHALL BE LOCATED AS DESCRIBED IN THE ELEVATION DETAIL. ANCHORS SHALL BE LOCATED AS DESCRIBED IN THE ELEVATION DETAIL.
7. METAL FRAMING INSTALLATION SHALL BE A MINIMUM OF 18 GAUGE 33 KSI STRENGTH METAL. USE A 1/4-20 GRADE 5 SMS WITH SUFFICIENT LENGTH TO ACHIEVE FULL PENETRATION OF THE METAL FRAMING AND EMBED 1/4" BEYOND THE DRILL POINT. ANCHORS SHALL BE LOCATED AS DESCRIBED IN THE ELEVATION DETAIL.
8. CORROSIVE RESISTANT FASTENERS SHALL BE USED.
9. STOREFRONT FRAME MATERIAL SHALL BE 6063-T5 ALUMINUM.
10. UNITS SHALL BE INSTALLED AS DESCRIBED IN THESE INSTALLATION INSTRUCTIONS AND ALSO IN CONFORMANCE TO THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.
11. PRODUCT MAY BE INSTALLED TO UNLIMITED WIDTHS AS LONG AS THE OVER ALL HEIGHT DOES NOT EXCEED 144". THE MAXIMUM STOREFRONT BAY WIDTH SHALL NOT EXCEED 47-1/8".
12. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATIONS TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.

ANCHORAGE SCHEDULE AND DESCRIPTION				
SUBSTRATE	ANCHOR	EMBEDMENT	ANCHOR SPACING	EDGE DISTANCE
CONCRETE	1/4" TAPPER	MINIMUM 1-3/8"	MINIMUM 2-1/2"	MINIMUM 2-1/2"
CONCRETE	1/4" TAPCON	MINIMUM 1-1/4"	MINIMUM 3"	MINIMUM 2-1/2"
STEEL STUD	1/4-20 GR.5 SMS	MINIMUM 1"	MINIMUM 2"	MINIMUM 2"

TESTED DESIGN PRESSURE RATING	IMPACT RATING
+/-30.0	N/A

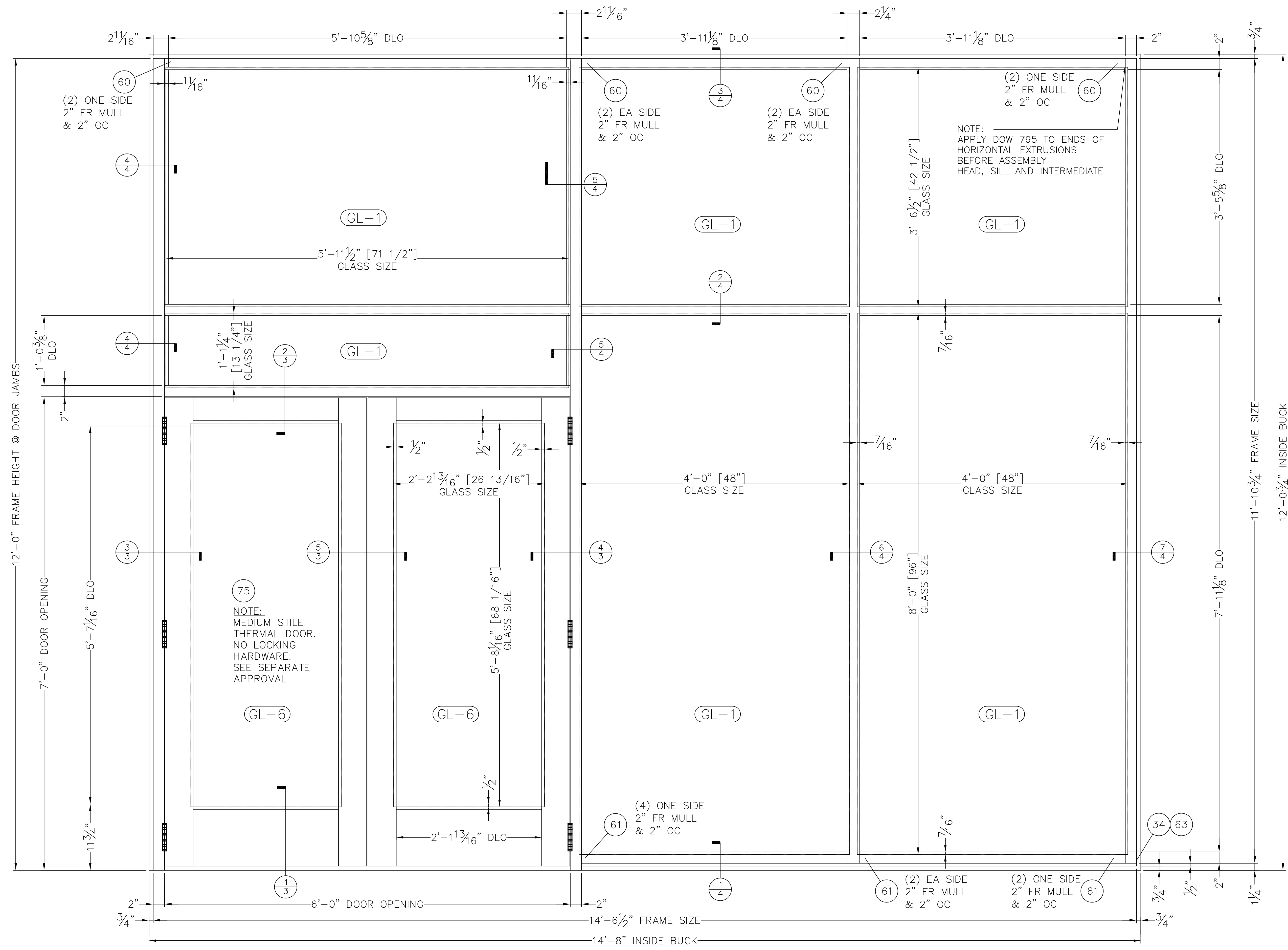
DRAWINGS TABLE OF CONTENTS

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- SHEET 3-4: ANCHORAGE DETAILS
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- SHEET 7: B.O.M.

MAXIMUM BAY SIZES:
47-1/8" X 144"

MAXIMUM D.L.O:
47-1/8" X 95-1/8"

REVISIONS	MATERIAL	TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544	SCALE NTS
	EST. AREA		DWG NO. 101285D
	EST. WT.	SERIES TU24000 STOREFRONT SYSTEM FBC INSTALLATION DRAWINGS ELEVATIONS AND GLAZING DETAILS	SHEET NO. 1 OF 7
	EST. PERIM.		EXTRUSION NO. REV.
	DRAWN BY JMR	DATE 04/29/15	



NOTE:
APPLY DOW 795 TO ENDS OF
HORIZONTAL EXTRUSIONS
BEFORE ASSEMBLY
HEAD, SILL AND INTERMEDIATE

NOTE:
MEDIUM STILE
THERMAL DOOR.
NO LOCKING
HARDWARE.
SEE SEPARATE
APPROVAL

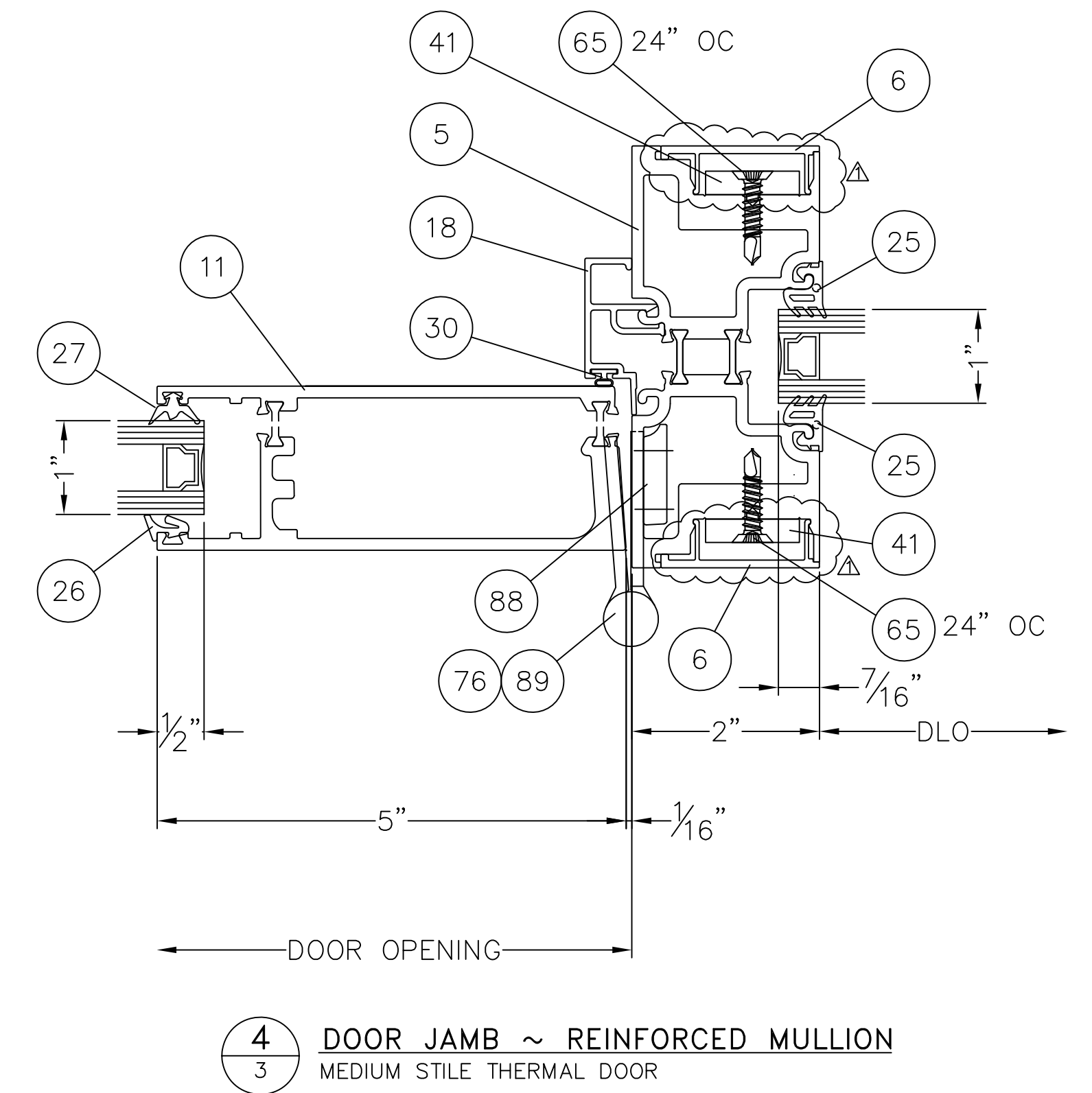
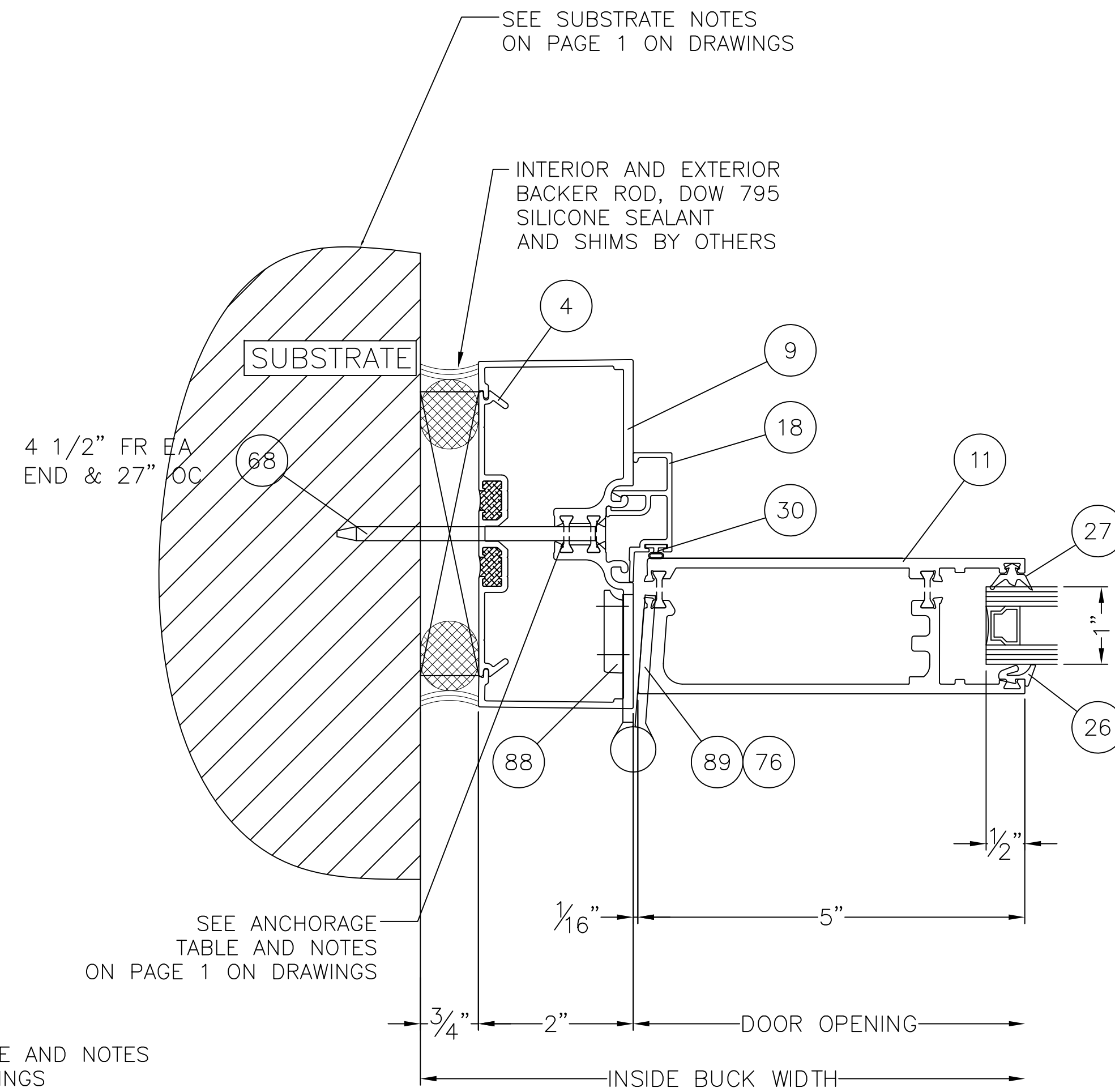
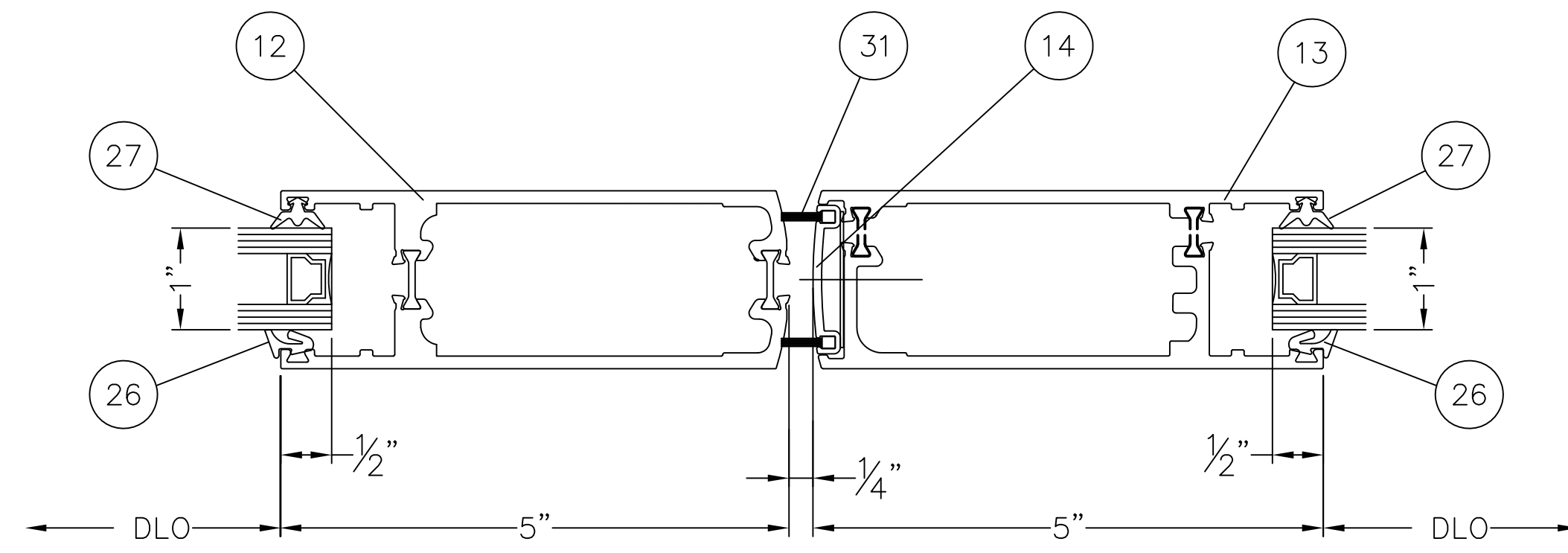
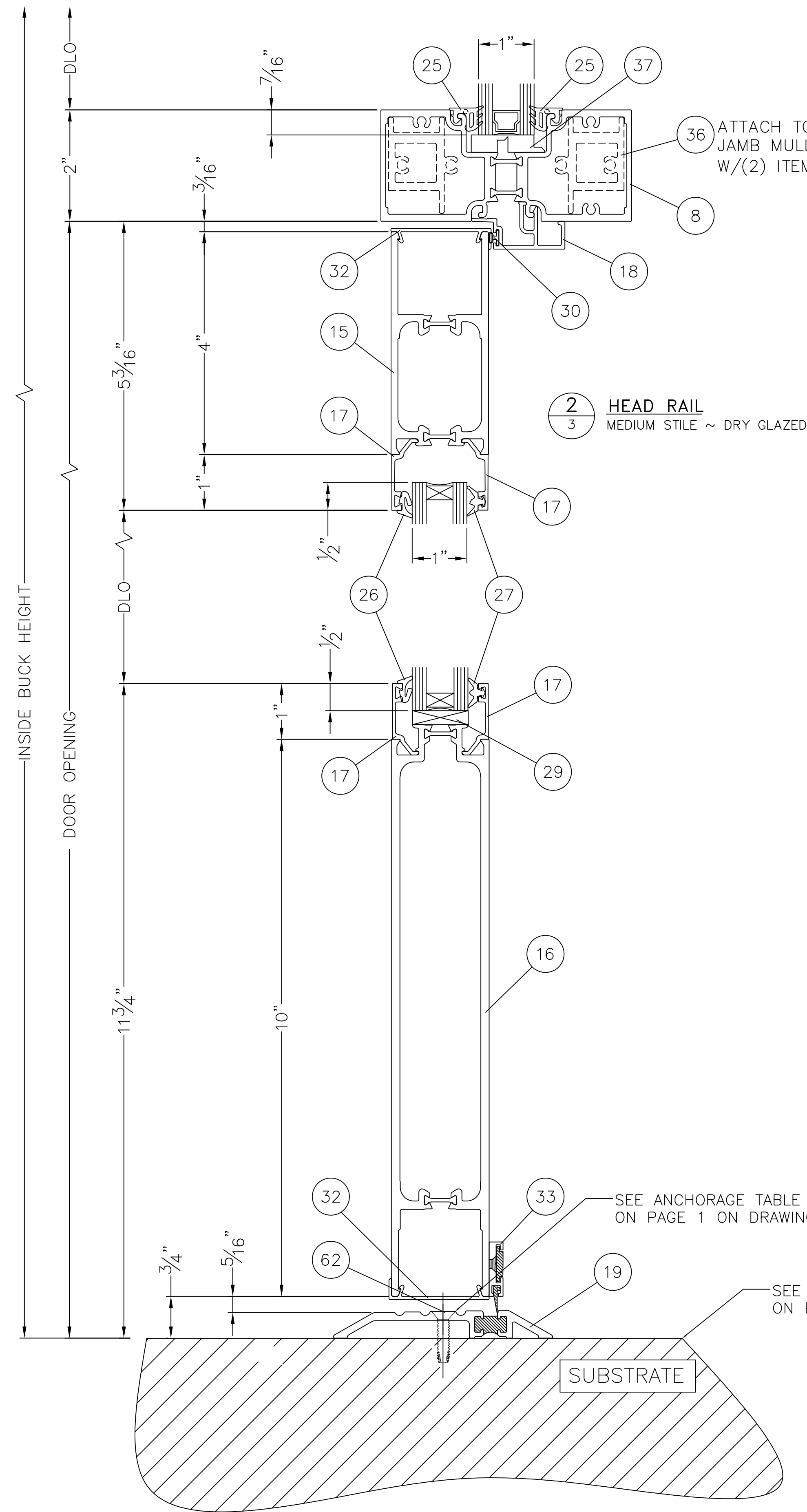
GLAZING TYPES

TAG	DESCRIPTION
GL-1	1" INSULATED GLASS -1/4" CLEAR, FULLY TEMPERED -1/2" AIR SPACE -1/4" CLEAR, FULLY TEMPERED

TU24000 STOREFRONT ELEVATION AND ANCHORAGE
NON-IMPACT - STEEL REINFORCED
WET GLAZED

NOTE - STOREFRONT MAY BE INSTALLED TO AN INFINITE LENGTH PROVIDED THE MAXIMUM BAY WIDTH DOES NOT EXCEED 47-1/8".

REVISIONS		MATERIAL	TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544	SCALE NTS	
		EST. AREA	SERIES TU24000 STOREFRONT SYSTEM FBC INSTALLATION DRAWINGS ELEVATIONS AND GLAZING DETAILS	DWG NO. 101285D	
		EST. WT.		SHEET NO. 2 OF 7	
		EST. PERIM.		EXTRUSION NO.	REV.
		DRAWN BY JMR		DATE 04/29/15	



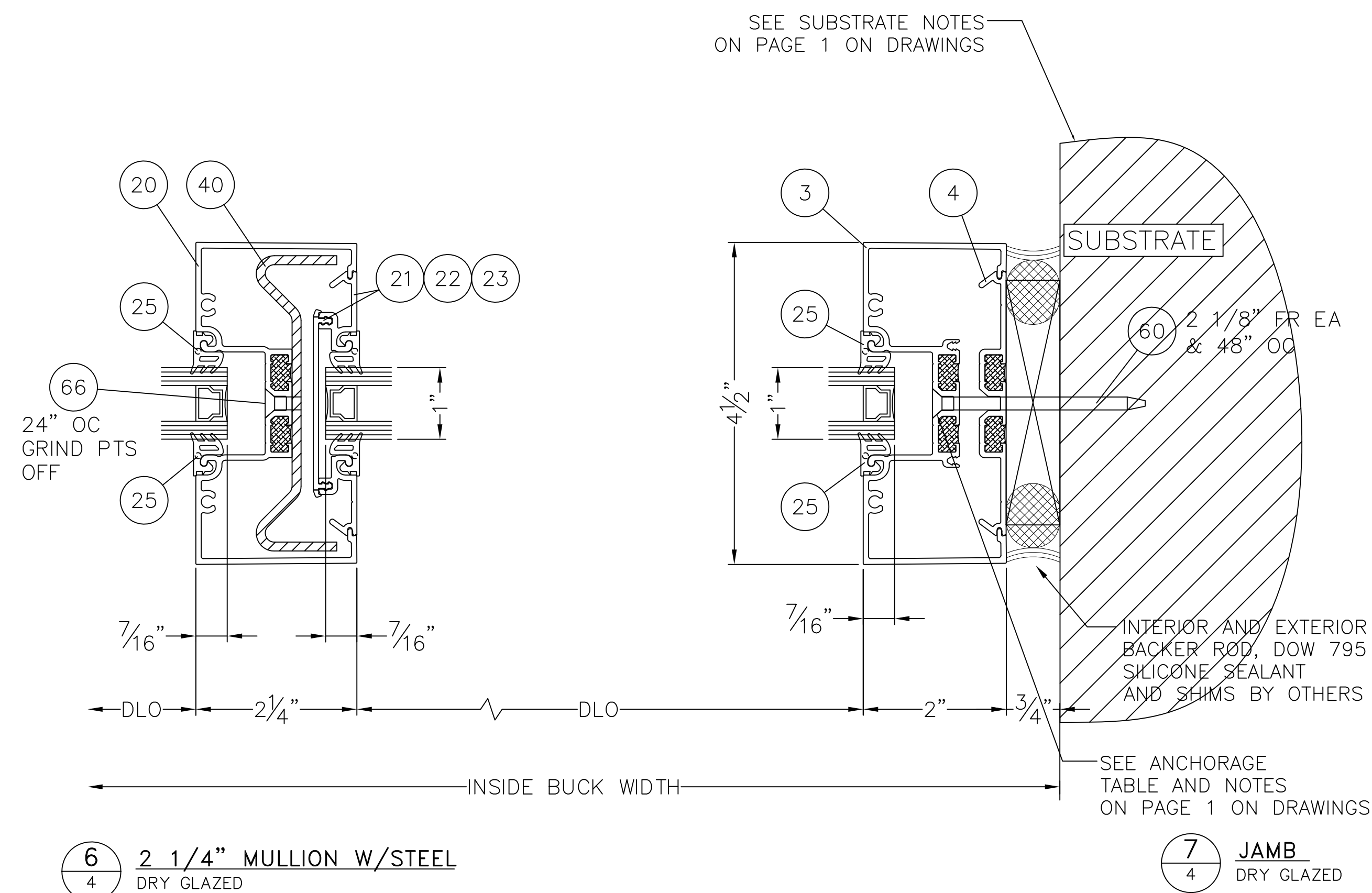
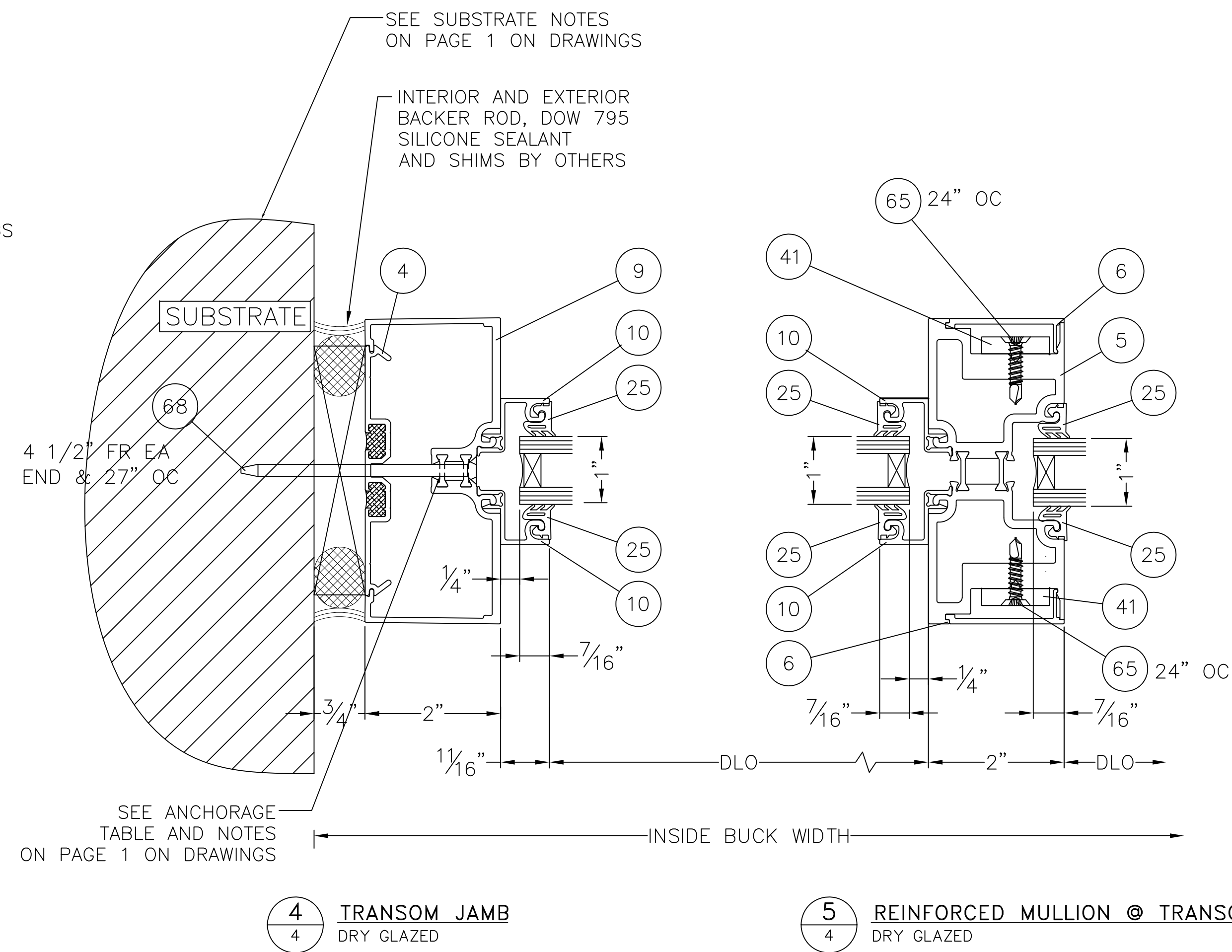
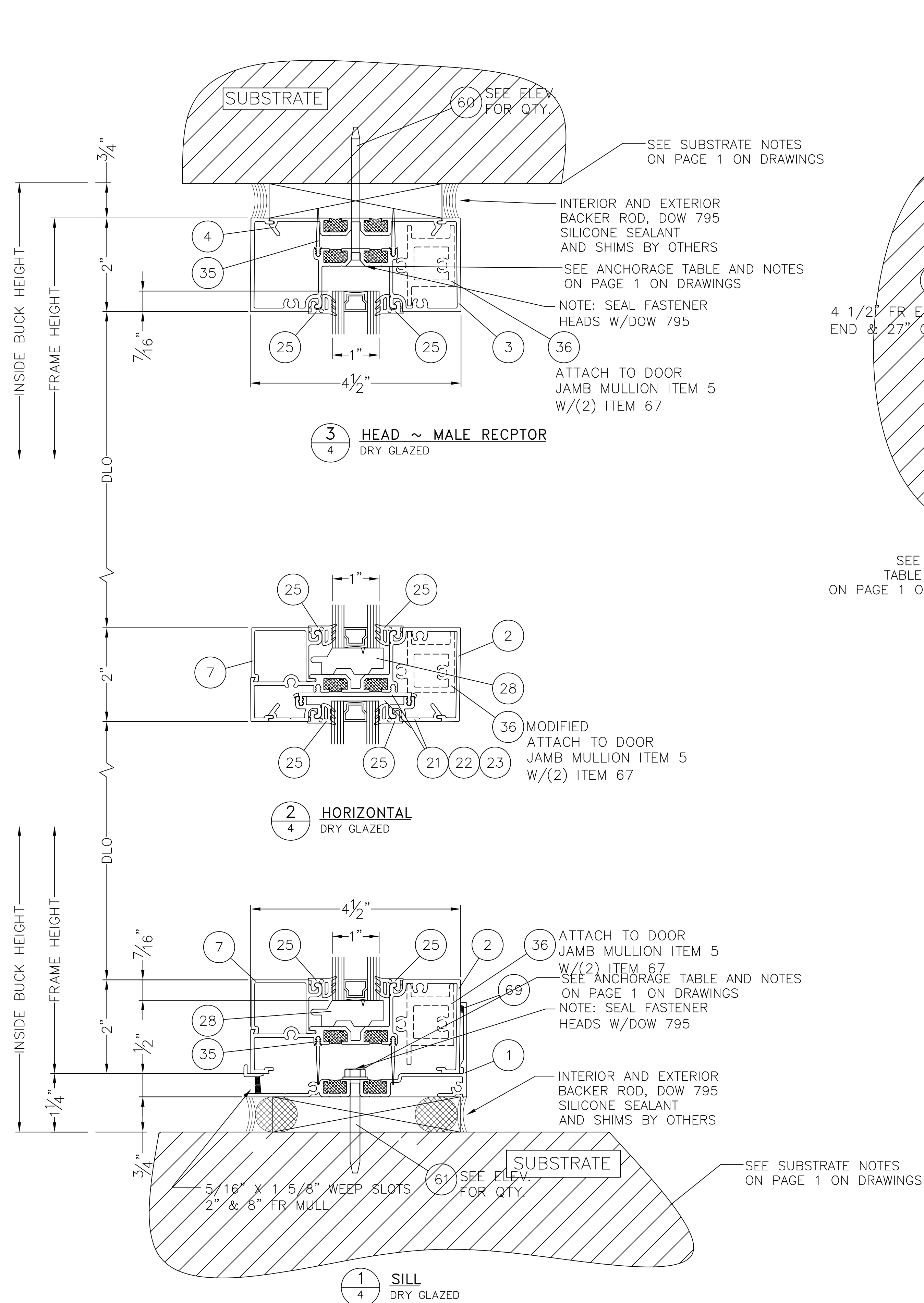
1
3 BOTTOM RAIL
MEDIUM STILE ~ DRY GLAZED

3
3 JAMB W/BUTT HINGE
MEDIUM STILE THERMAL DOOR

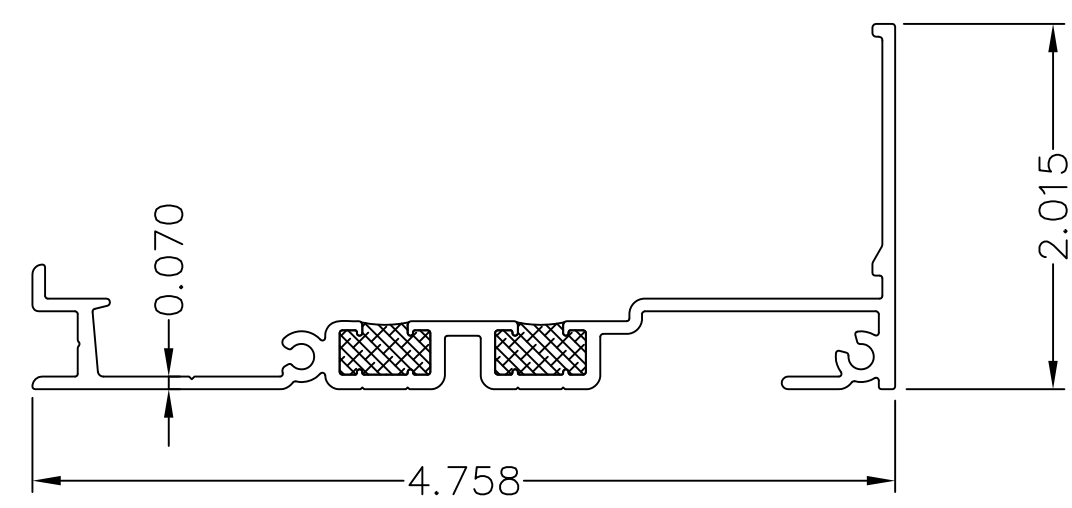
4
3 DOOR JAMB ~ REINFORCED MULLION
MEDIUM STILE THERMAL DOOR

5
3 THERMAL DOORS
MEDIUM STILE ~ DRY GLAZED

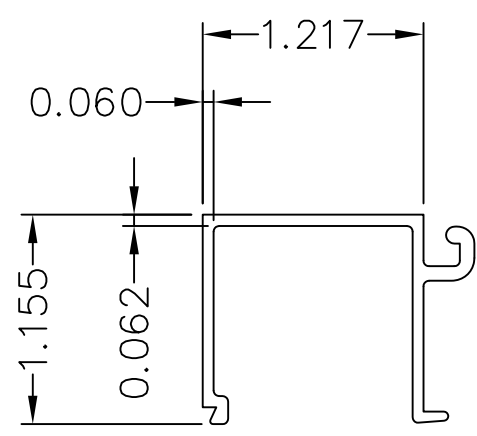
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		EST. AREA			DWG NO. 101285D
		EST. WT.			SHEET NO. 3 OF 7
		EST. PERIM.	SERIES TU24000 STOREFRONT SYSTEM FBC INSTALLATION DRAWINGS INSTALLATION DETAILS		EXTRUSION NO.
		DRAWN BY JMR	DATE 04/29/15		REV.



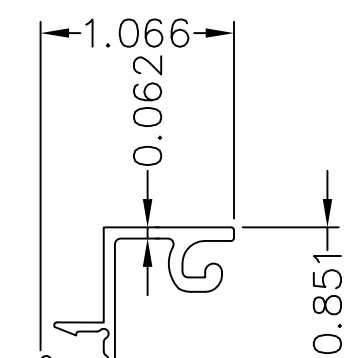
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		EST. AREA		DWG NO. 101285D
		EST. WT.		SHEET NO. 4 OF 7
		EST. PERIM.	SERIES TU24000 STOREFRONT SYSTEM FBC INSTALLATION DRAWINGS INSTALLATION DETAILS	EXTRUSION NO.
		DRAWN BY JMR	DATE 04/29/15	REV.



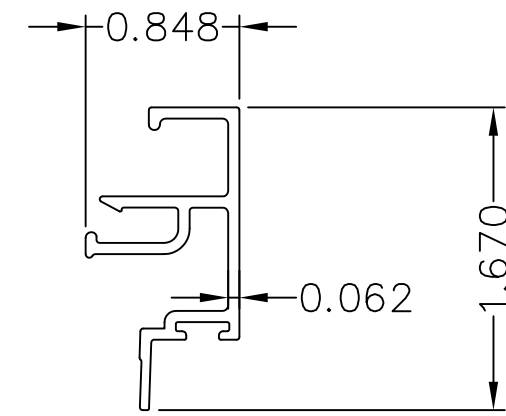
ITEM 1-TU24259
THERMAL SUB SILL



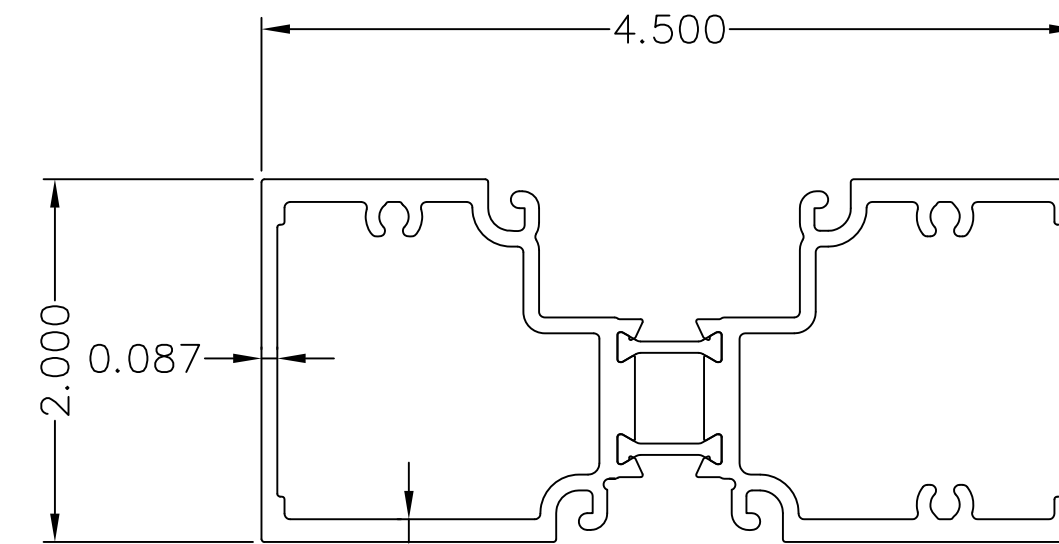
ITEM 7-E14104
GLAZING STOP



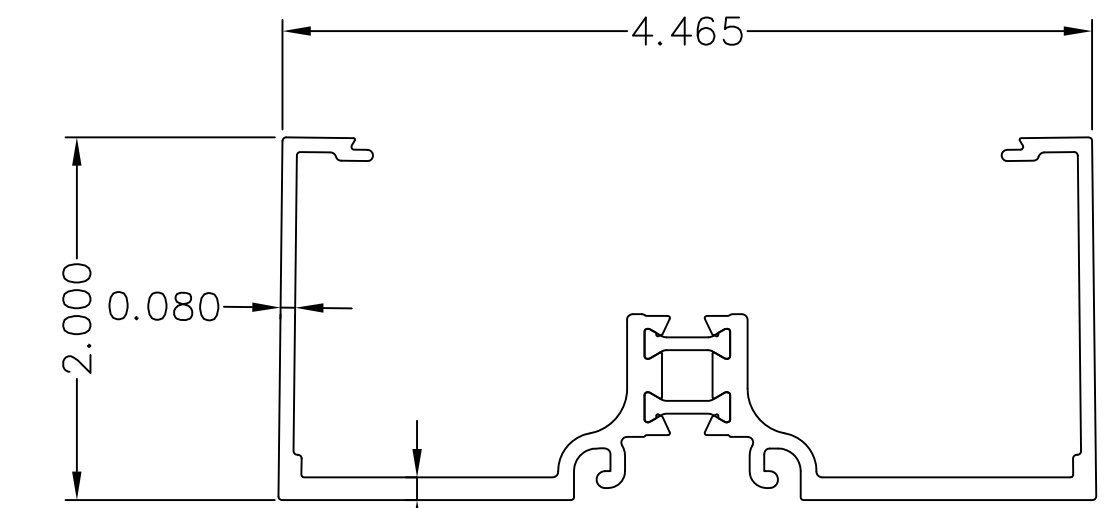
ITEM 10-E6221
GLASS ADAPTOR



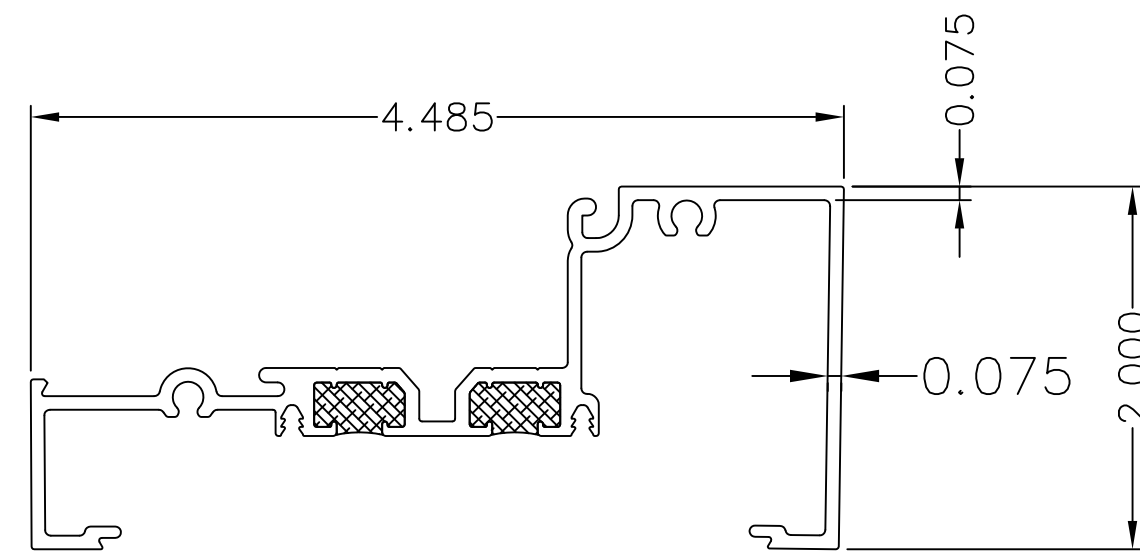
ITEM 18-E6223
INNER DOOR STOP



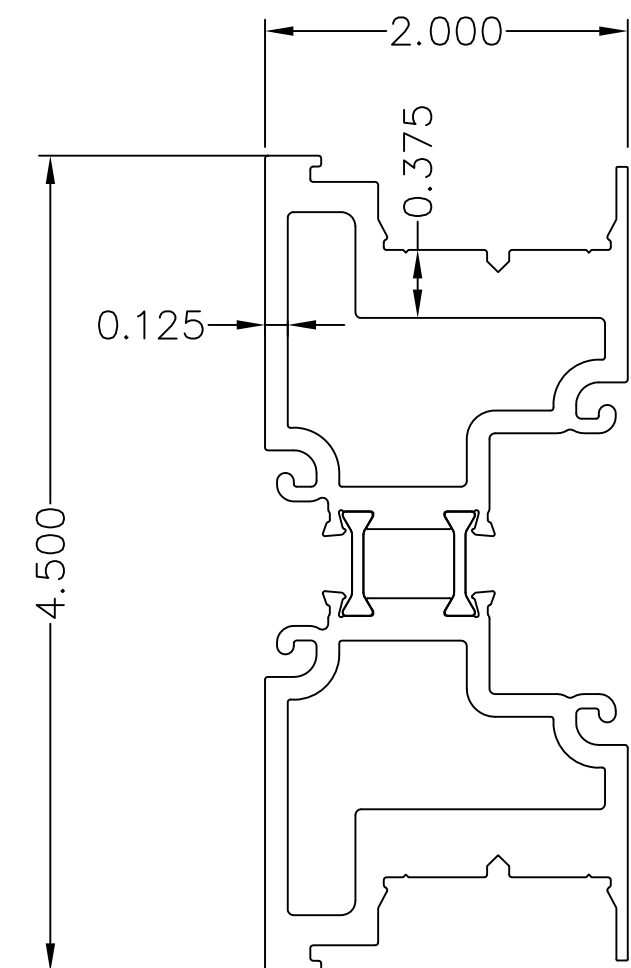
ITEM 8-A624142
DOOR HEADER



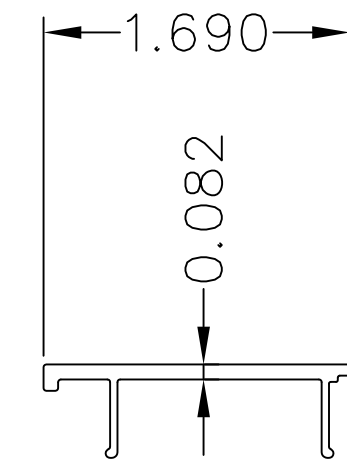
ITEM 9-A624040
DOOR JAMB



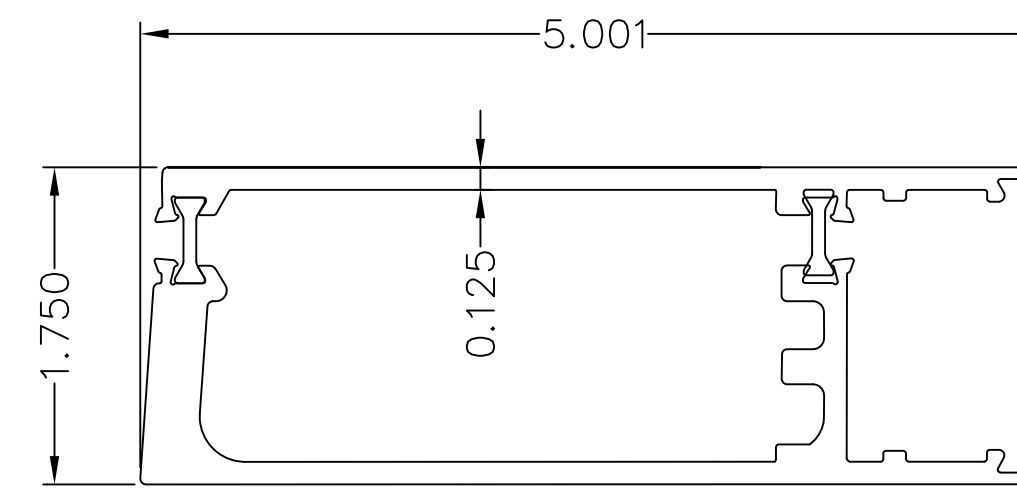
ITEM 2-TU24240
OPEN BACK SILL



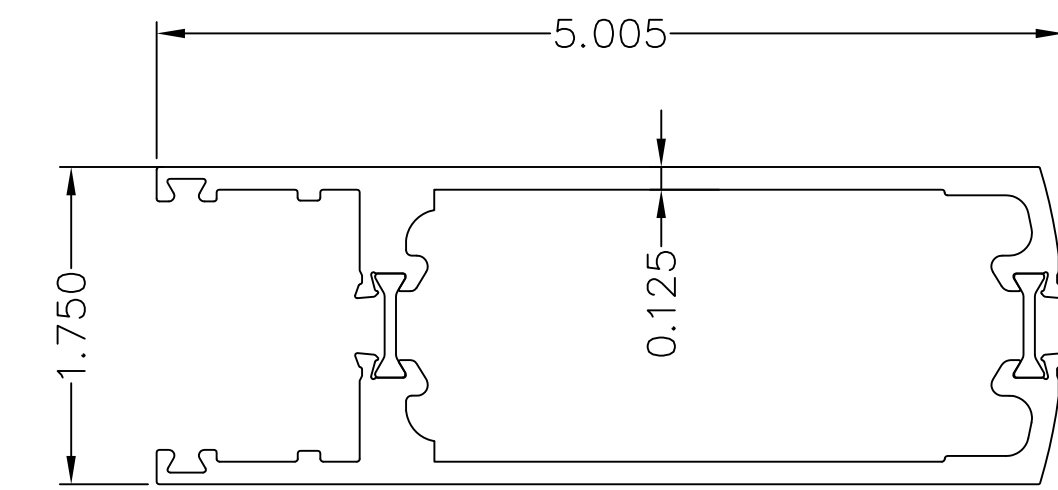
ITEM 5-A245656
(E2456) EXTRUSION
REINFORCED THERMAL DOOR MULLION



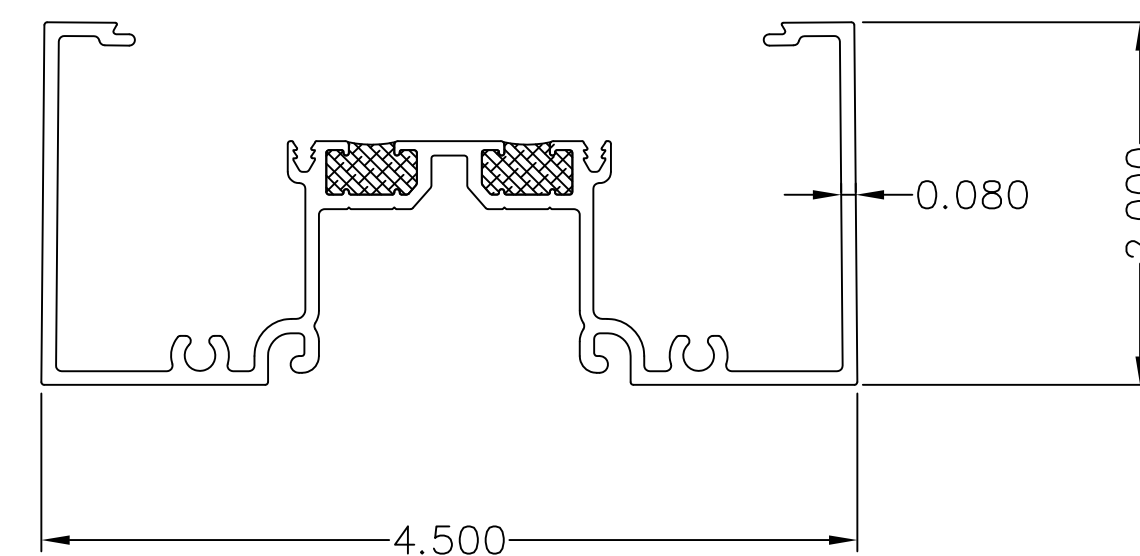
ITEM 6-E6648
SNAP CAP



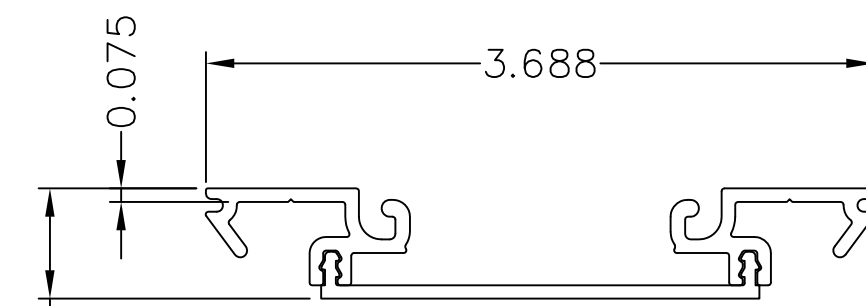
ITEM 11 - A627879
ASSEMBLY
MED STILE - HINGE



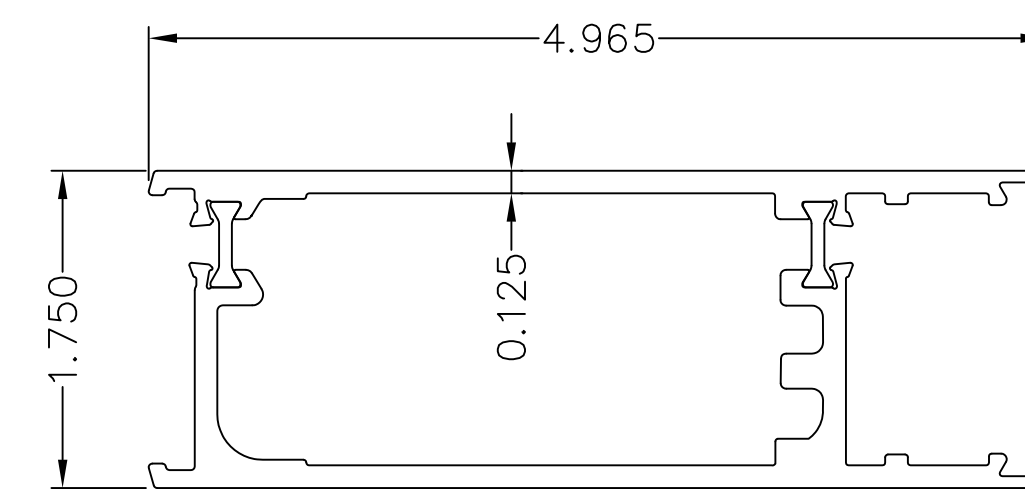
ITEM 12 - A628282
ASSEMBLY
MED RD FACE STILE



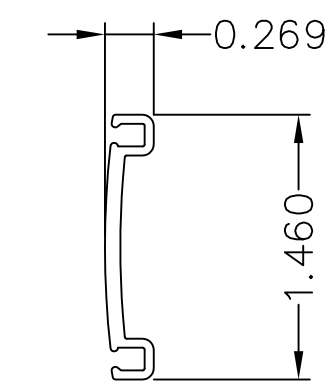
ITEM 3-TU24441
THERMAL OPEN BACK HEAD/JAMB/VERTICAL



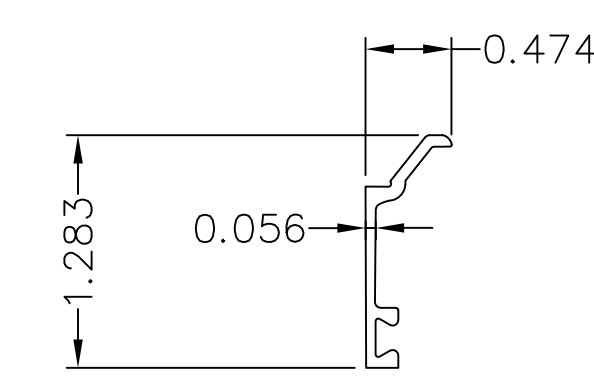
ITEM 21-A244545 CLOSURE POCKET ASSEMBLY
ITEM 22-E2445 CLOSURE POCKET SNAP
ITEM 23-P6595 BRIDGE (PLASTIC)



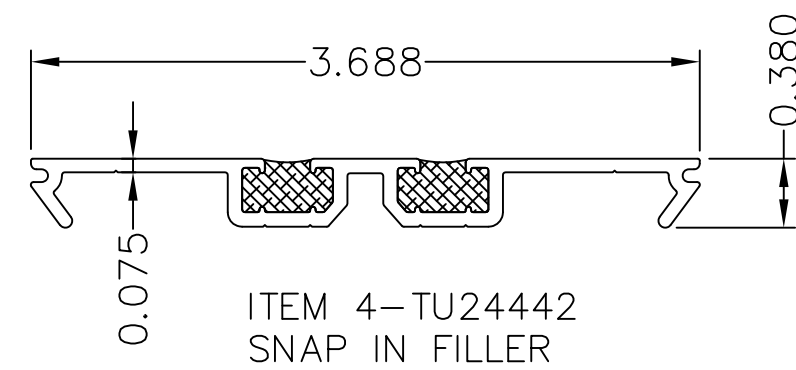
ITEM 13 - A628384
ASSEMBLY
MED STILE - LOCK W/ASTRAGAL



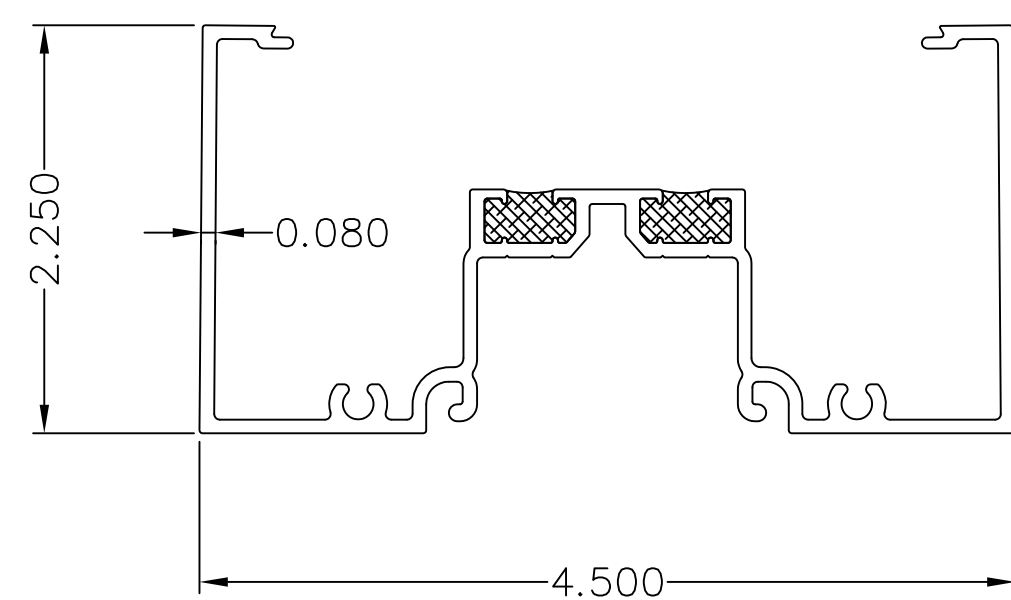
ITEM 14 - E1152
ASTRAGAL



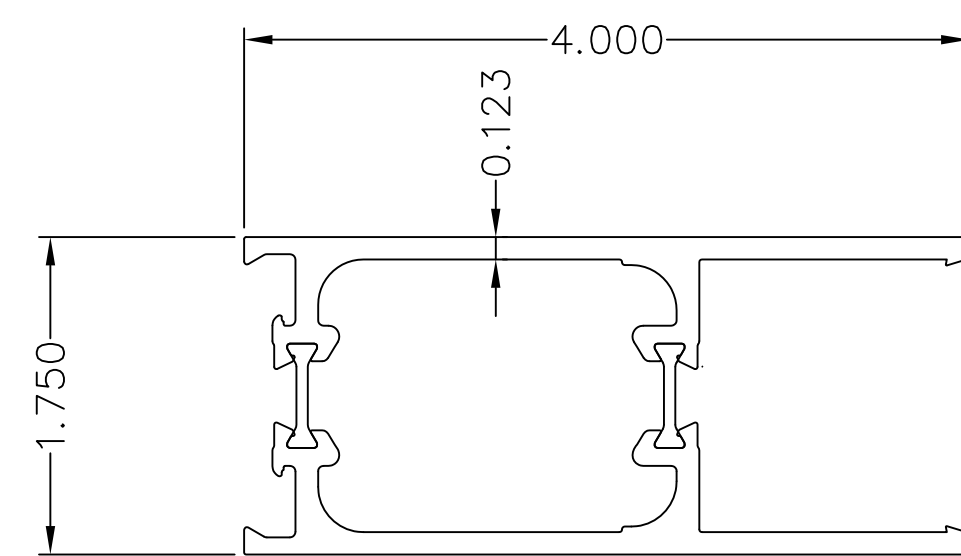
ITEM 17 - E6291
GLAZING STOP



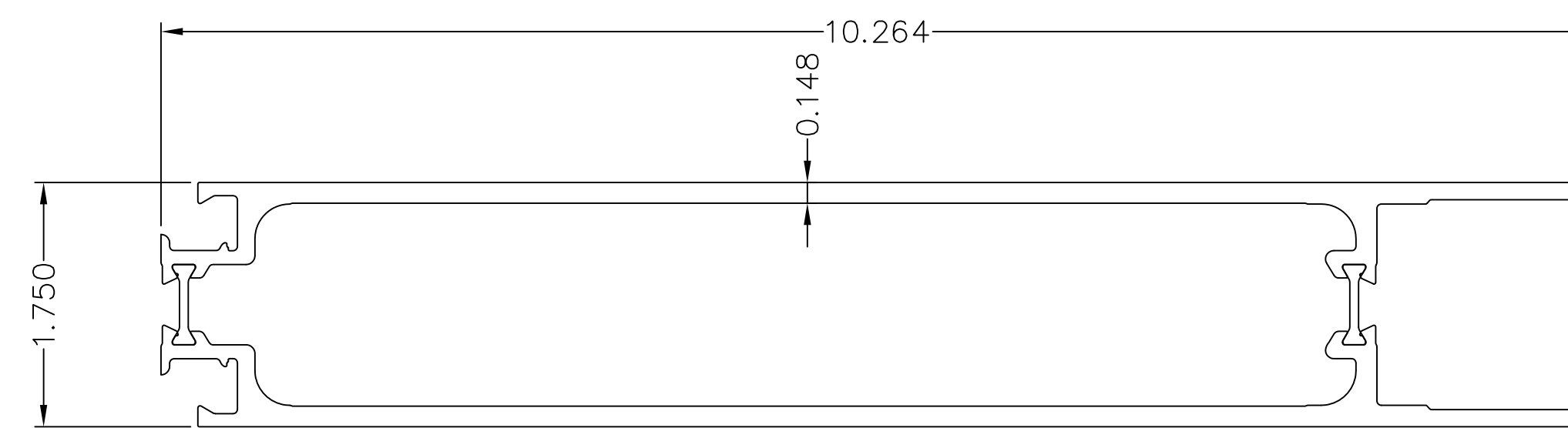
ITEM 4-TU24442
SNAP IN FILLER



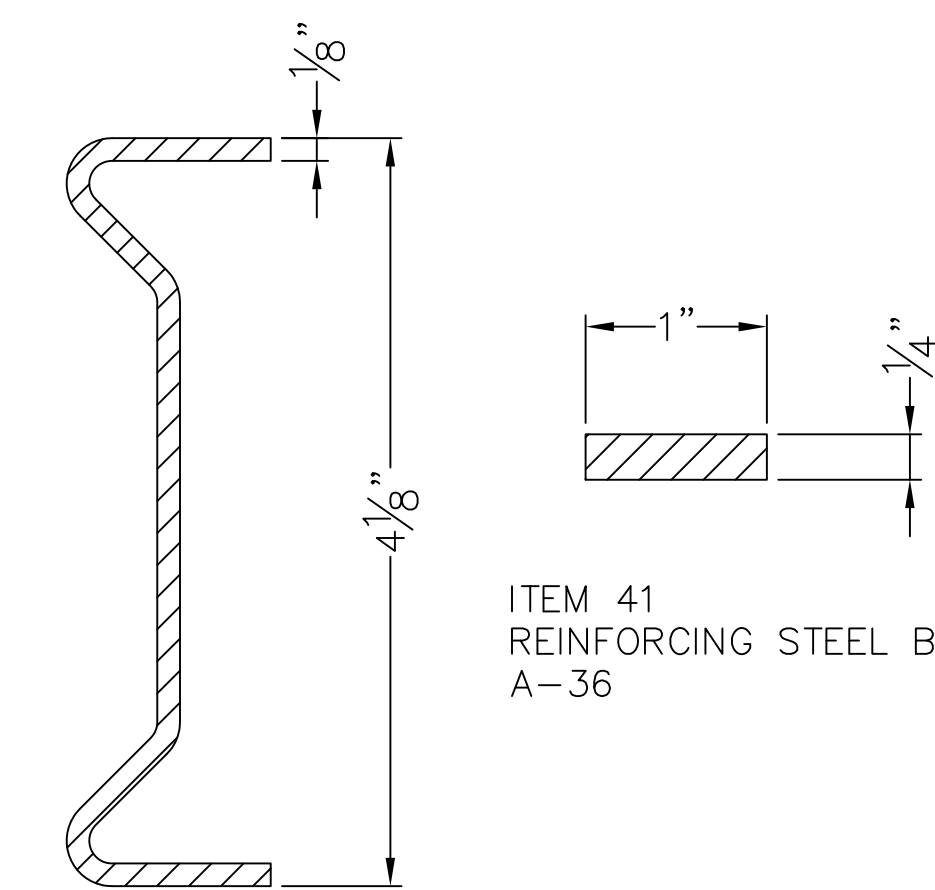
ITEM 20-TU24243
2 1/4" WIDE THERM JAMB/VERTICAL



ITEM 15 - A621414
ASSEMBLY
MED STILE TOP RAIL

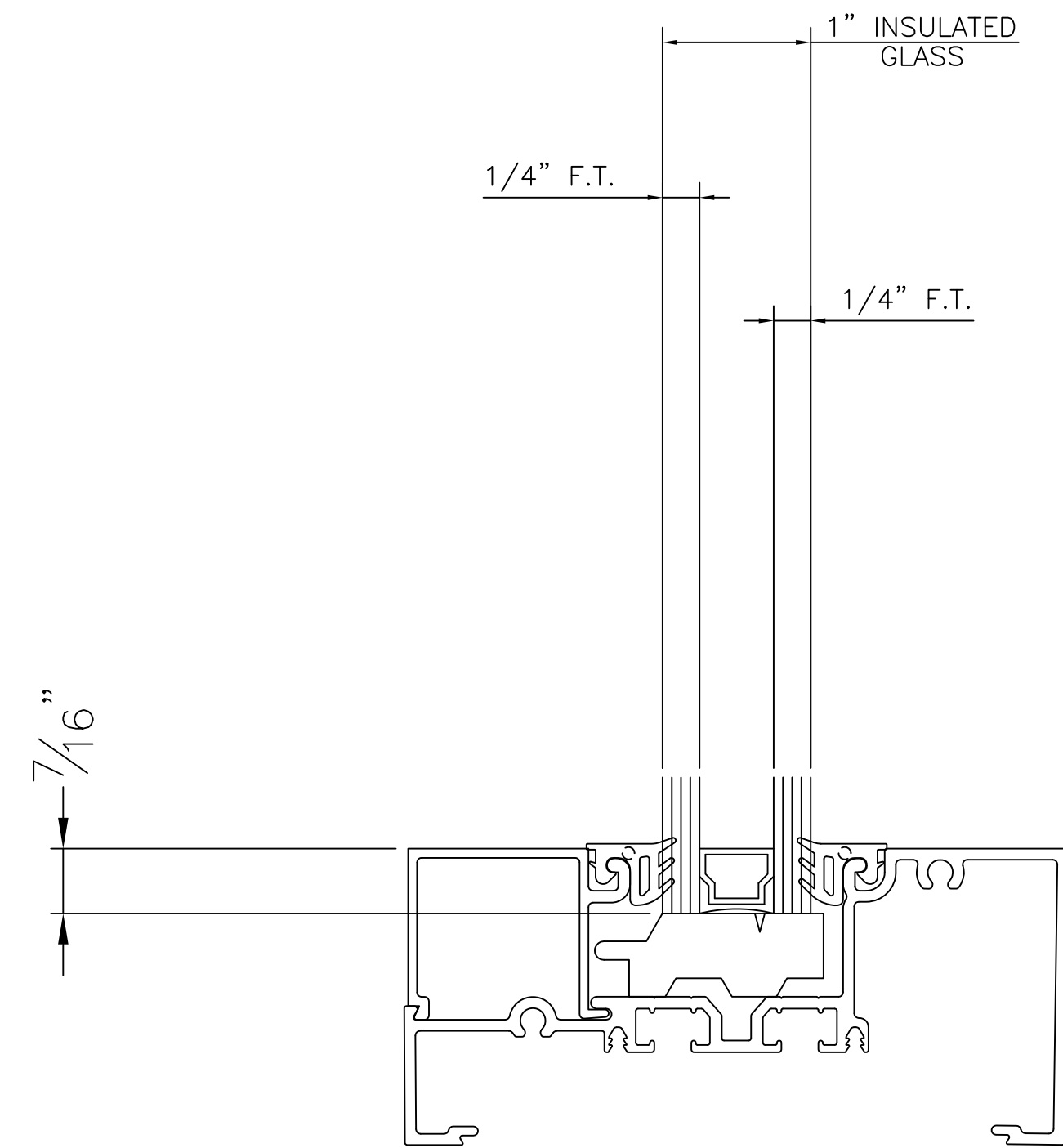


ITEM 16 - A621010
ASSEMBLY
BOTTOM RAIL



ITEM 40 - P1437
REINFORCING STEEL A-36

REVISIONS		MATERIAL	TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544		SCALE NTS
		EST. AREA	SERIES TU24000 STOREFRONT SYSTEM FBC INSTALLATION DRAWINGS PARTS DETAILS		DWG NO. 101285D
		EST. WT.			SHEET NO. 5 OF 7
		EST. PERIM.			EXTRUSION NO.
		DRAWN BY JMR	DATE 04/29/15		



GLAZING DETAILS

NOTE: GLAZING MUST COMPLY WITH ASTM E1300 FOR THE GIVEN DESIGN PRESSURE.

REVISIONS		MATERIAL		TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544		SCALE NTS	
		EST. AREA				DWG NO. 101285D	
		EST. WT.		SERIES TU24000 STOREFRONT SYSTEM FBC INSTALLATION DRAWINGS GLAZING DETAILS		SHEET NO. 6 OF 7	
		EST. PERIM.				EXTRUSION NO. REV.	
		DRAWN BY JMR	DATE 04/29/15				

NON-IMPACT STOREFRONT TEST SPECIMEN - PARTS LIST				MATERIAL
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	1	TU24259	EXTRUSION ~ THERMAL SUB SILL	ALUMINUM-6063-T5
2	5	TU24240	EXTRUSION ~ THERMAL OPEN BACK SILL	ALUMINUM-6063-T5
3	4	TU24441	EXTRUSION ~ THERMAL HEAD/JAMB/VERTICAL	ALUMINUM-6063-T5
4	5	TU24442	EXTRUSION ~ SNAP IN FILLER	ALUMINUM-6063-T5
5	1	A245656	EXTRUSION ~ REINFORCED THERMAL DOOR MULLION (E2456)	ALUMINUM-6063-T5
6	2	E6648	EXTRUSION ~ SNAP CAP	ALUMINUM-6063-T5
7	5	E14104	EXTRUSION ~ GLAZING STOP	ALUMINUM-6063-T5
8	1	A624142	EXTRUSION ASSEMBLY ~ DOOR FRAME ~ HEADER	ALUMINUM-6063-T5
9	1	A624040	EXTRUSION ASSEMBLY ~ DOOR FRAME ~ JAMB	ALUMINUM-6063-T5
10	8	E6221	EXTRUSION ASSEMBLY ~ 1" GLASS ADAPTOR	ALUMINUM-6063-T5
11	2	A627879	EXTRUSION ASSEMBLY ~ STILE MED ~ HINGE	ALUMINUM-6063-T5
12	1	A628282	EXTRUSION ASSEMBLY ~ STILE, MED ~ RD FACE	ALUMINUM-6063-T5
13	1	A628384	EXTRUSION ASSEMBLY ~ STILE, MED ~ LOCK/ASTRICAL	ALUMINUM-6063-T5
14	1	E1152	EXTRUSION ~ ASTRICAL (DOOR)	ALUMINUM-6063-T5
15	1	A621414	EXTRUSION ASSEMBLY ~ TOP RAIL 4"	ALUMINUM-6063-T5
16	1	A621010	EXTRUSION ASSEMBLY ~ BOTTOM RAIL 10"	ALUMINUM-6063-T5
17	8	E6291	EXTRUSION ~ GLASS STOP TOP & BOTTOM RAIL	ALUMINUM-6063-T5
18	3	E6223	EXTRUSION ~ INNER DOOR STOP	ALUMINUM-6063-T5
19	1	T6250	THERMAL THRESHOLD	ALUMINUM-6063-T5
20	1	TU24243	EXTRUSION ~ 2 1/4" WIDE THERM JAMB/VERTICAL	ALUMINUM-6063-T5
21	4	A244545	CLOSURE POCKET ASSEMBLY	
22	2 PER ASSY	E2445	EXTRUSION ~ CLOSURE POCKET SNAP END 12'-2"	ALUMINUM-6063-T5
23	1 PER ASSY	P6595	BRIDGE 12'-2"	P-PART-PLASTIC
24				
25	230'	P2728	GASKET, GLASS, EPG	P-PART-RUBBER
26	35'	P1112	GASKET, GLASS, EPG (DOOR)	P-PART-RUBBER
27	35'	P2183	GASKET, GLASS, EPG (DOOR)	P-PART-RUBBER
28	10	P1132	SETTING BLOCK 4" LG	P-PART-RUBBER
29	4	P1912	SETTING BLOCK 1/4 x 1/2 x 4" LG	P-PART-RUBBER
30	22'	P6296	BULB WEATHERSEAL	P-PART-WEATHERSEAL
31	15'	P938	PILE, DOOR STOP, AMESBURY GROUP	P-PART-PLASTIC/FAB
32	4	P6240	ELEMENT INHIBITOR (TOP & BOTTOM RAIL)	P-PART-RIGID PVC
33	2	P1275	CONCEALED SCREW WEATHERSTRIP 35 7/8" LG	P-PART-WEATHERSTRIP
34	1	P2455	END DAM FOR SUB SILL TU24259	P-PART-ALUM .040 SHT.
35	50'	P6569	BAFFLE	P-PART-
36	7	P1152	SHEAR BLOCK 1 3/8" LG	P-PART-
37	2	P946	SETTING BLOCK 4" LG	P-PART-RUBBER
38				
39				
40	1	P1437	A-36 STEEL CHANNEL 12'-4" LG	P-PART-STEEL
41	2	TBA	A-36 1/4"x 1" STEEL BAR 12'-4" LG	P-PART-STEEL
42				
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DOOR PARTS AS REQ'D (SEE SEPARATE APPROVAL)

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL
60	16	BY OTHERS	SCREW ~ #12-14 x 3" FH SD #3PT (FRAME TO BUCK)	P-PART-FASTENER
61	10	BY OTHERS	SCREW ~ #12-14 x 2" HEX WASHER HD SD #3PT (FRAME TO BUCK)	P-PART-FASTENER
62	8	BY OTHERS	SCREW ~ 1/4-20 x 1" TYPE F FH THD CUTTING (THRES. TO STEEL BUCK)	P-PART-FASTENER
63	2	S196	SCREW ~ #8 x 3/8" SELF TAPPING PAN HEAD (END DAM TO SUB SILL)	P-PART-FASTENER
64	36	S423	SCREW ~ #10-16 x 1 1/2" HWH SD #3PT (FRAME TO FRAME)	P-PART-FASTENER
65	18	S-419	SCREW ~ #12-14 x 1" FH U-CUT SD #3PT (STEEL TO FRAME)	P-PART-FASTENER
66	9	TBA	SCREW ~ #12-14 x 3/4" FH SELF DRILLING (STEEL TO FRAME)	P-PART-FASTENER
67	14	S009	SCREW ~ #10 x 1 3/4" PH (SB TO FRAME)	P-PART-FASTENER
68	6	BY OTHERS	SCREW ~ #1/4-14 x 3 1/2" FH SD #3PT (FRAME TO BUCK)	P-PART-FASTENER
69	AS REQ'D	BY OTHERS	SILICONE SEALANT DOW 795	P-PART-SEALANT
70				
71				
72				
73				
74				
75	1	NA	6'-0" x 7'-0" MEDIUM STILE THERMAL DOOR	DOOR ASSEMBLY
76	X	S070	SCREW ~ #12-24 x 1/2" FLAT HD PHIL (HINGE)	P-PART-FASTENER
77	X	S341	SCREW ~ #10-24 x 3/4" FLAT HD PHIL (ASTRAGAL)	P-PART-FASTENER
78	X	P518	LABEL, DOOR, GREEN BRUSHED SILVER (DOOR)	P-PART-LABEL
79	X	P1539	SPRING, STEEL, ASTRAGAL, ADJUSTABLE, (DOOR)	P-PART-HARDWARE
80	X	P1553	WASHER, SCREW & SHOULDER SCREW (DOOR)	P-PART-FASTENER
81	X	S071	NUT, STUD, 3/8-16 X 3/8 (DOOR TIE ROD) (NOT SHOWN)	P-PART - FASTENER
82	X	S186	WASHER, 1/2 OD X 1/4 ID X .062 ALUMINUM (DOOR)	P-PART - FASTENER
83	X	S161	SCREW, 10-24 X 1/2 FLAT HEAD PHIL (DR HINGE/FLUSH BOLTS)	P-PART - FASTENER
84	X	P908	SCREW, 10-24 X 1/2 FH MACH PHIL (DOOR)	P-PART - FASTENER
85	X	P020B	ROD, THREADED TIE, 3/8" (DOOR)	P-PART - FASTENER
86	X	P853	WASHER, DOOR ROD (DOOR)	P-PART - HARDWARE
87				P-PART - HARDWARE
88	6	P2092	HINGE, BUTT, REINFORCEMENT (DOOR)	P-PART - HARDWARE
89	6	P092	BUTT HINGE HAGAR BB-1191	P-PART - HARDWARE
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97				
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REVISIONS		MATERIAL	TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544		SCALE NTS
		EST. AREA	SERIES TU24000 STOREFRONT SYSTEM FBC INSTALLATION DRAWINGS INSTALLATION DETAILS		DWG NO. 101285D
		EST. WT.			SHEET NO. 7 OF 7
		EST. PERIM.			EXTRUSION NO.
		DRAWN BY JMR	DATE 04/29/15	REV.	