SERIES E44000FS STOREFRONT SYSTEM
TDI APPROVAL DRAWINGS

TABLE 1. ANCHORAGE SCHEDULE AND DESCRIPTION				
SUBSTRATE	ANCHOR	EMBEDMENT	ANCHOR SPACING	EDGE DISTANCE
CONCRETE	3/8" HILTI KB III	MINIMUM 2–1/2"	MINIMUM 3"	MINIMUM 3"
1/4" METAL	5/16–16 GR.5 SMS	FULL THREAD	MINIMUM 2"	MINIMUM 1"

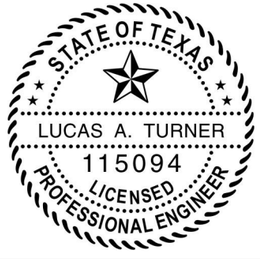
TESTED DESIGN PRESSURE RATING	IMPACT RATING	GLAZING TYPE
+/–50.0	LARGE AND SMALL MISSILE IMPACT	GL–1
+/–70.0		GL–2

DRAWINGS TABLE OF CONTENTS

SHEET 1: INDEX TO DRAWINGS AND NOTES
SHEET 2A–2B: ELEVATION AND ANCHOR LOCATIONS
SHEET 3–6: ANCHORAGE DETAILS
SHEET 7: FRAME PARTS DETAILS
SHEET 8: GLAZING DETAILS
SHEET 9: B.O.M.

MAXIMUM BAY SIZES:
46–3/4" X 123–3/4"

MAXIMUM D.L.O:
46–3/4" X 118–3/4"



Lucas A. Turner
2015-07-11
17:34-04:00

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NOTES:

1. THE PRODUCT HAS BEEN TESTED TO ASTM E 283, ASTM E 331, ASTM E330, ASTM E 1886, AND ASTM E 1996, AND MEETS THE REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE AND INTERNATIONAL RESIDENTIAL CODE, WITH 2006 TEXAS REVISIONS EFFECTIVE JANUARY 1, 2008.

2. THE INSTALLATION DRAWINGS DEPICTED WTHIN ARE NECESSARY TO MEET THE STRUCTURAL LOAD REQUIREMENTS AND DOES NOT ADDRESS WATER INFILTRATION. PLEASE SEE THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR SEALING, FLASHING AND DRAINAGE REQUIREMENTS.

3. THIS PRODUCT IS IMPACT RESISTANT AND THEREFORE AN APPROVED IMPACT PROTECTION SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IF IT IS INSTALLED IN A WINDBORNE DEBRIS AREA.

4. THE INSTALLED GLAZING FOR THESE UNITS SHALL COMPLY WITH ASTM E 1300. TESTED GLAZING CONSISTED OF ONE OF THE FOLLOWING MAKE–UPS:

GL–1. 9/16" LAMINATED GLASS CONSISTING OF 1/4" HEAT STRENGTHENED GLASS – 0.090" DUPONT BUTACITE PVB INTERLAYER – 1/4" HEAT STRENGTHENED GLASS.

GL–2. 9/16" LAMINATED GLASS CONSISTING OF 1/4" HEAT STRENGTHENED GLASS – 0.075" SOLUTIA VANCEVA PVB INTERLAYER – 1/4" HEAT STRENGTHENED GLASS.

5. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/2". SHIMS BY OTHERS SHALL BE LOAD–BEARING AND CAPABLE OF TRANSFERRING THE LOADS TO THE SUBSTRATE. SHIM ALL SPACES IN EXCESS OF 1/16".

7. CONCRETE INSTALLATIONS ASSUME A MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE OF 3,000 PSI. USE A 3/8" HILTI KWIK BOLT III ANCHOR FOR INSTALLATION INTO CONCRETE. THE ANCHOR SHALL HAVE A MINIMUM OF 2–1/2" EMBEDMENT AND 3" EDGE DISTANCE. ANCHORS SHALL BE LOCATED AS DESCRIBED IN THE ELEVATION DETAIL.

7. METAL FRAMING INSTALLATION SHALL BE A MINIMUM OF 1/4" THICKNESS 33 KSI STRENGTH STEEL OR 6063–T5 ALUMINUM. USE A 5/16–16 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.

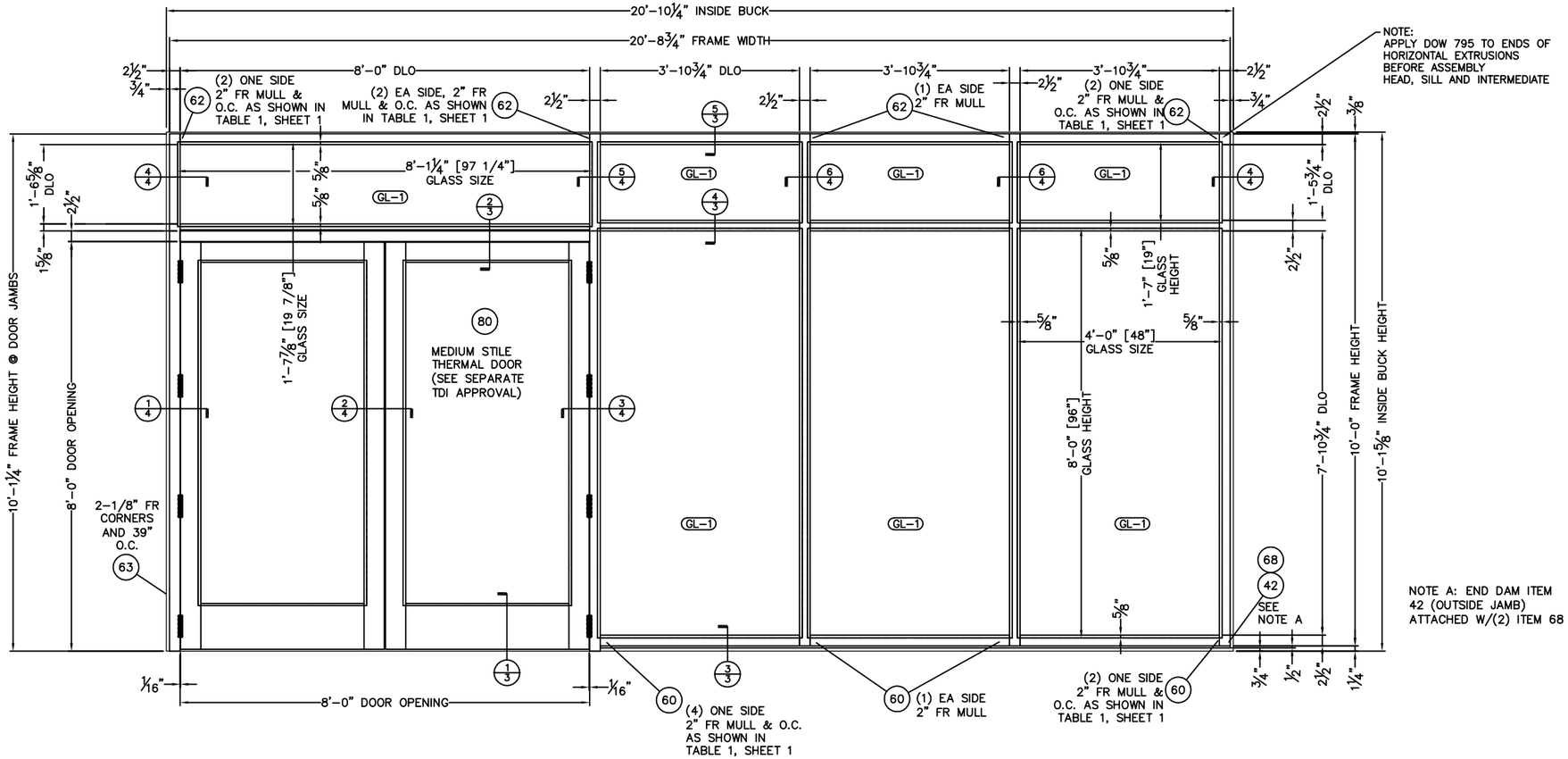
9. STOREFRONT FRAME MATERIAL SHALL BE 6063–T5 ALUMINUM.

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; THE MAXIMUM STOREFRONT BAY WIDTH SHALL NOT EXCEED 46–3/4" AND THE PRODUCT HEIGHTS SHALL NOT EXCEED THOSE SHOWN IN THIS DRAWING.

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 TEXAS LICENSED ENGINEER SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.

REVISIONS		MATERIAL		TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544	SCALE: NTS
		EST. AREA			DWG NO.: 101283D–TDI
		EST. WT.		SERIES E44000FS STOREFRONT SYSTEM TDI INSTALLATION DRAWINGS ELEVATIONS AND GLAZING DETAILS	SHEET NO.: 1 OF 9
		EST. PERIM.			EXTRUSION NO. / REV.
		DRAWN BY	DATE: 7/8/15		



E44000FS STOREFRONT ELEVATION AND ANCHORAGE, DP +/-50

HURRICANE IMPACT TESTED
WET GLAZED

NOTE – STOREFRONT MAY BE INSTALLED TO AN INFINITE LENGTH PROVIDED THE MAXIMUM BAY WIDTH DOES NOT EXCEED 46-3/4".

GLAZING TYPES

TAG	DESCRIPTION
GL-1	9/16" LAMINATED GLASS -1/4" CLEAR, HEAT STRENGTHED -.090 DUPONT BUTACITE PVB -1/4" CLEAR, HEAT STRENGTHED

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ZZ

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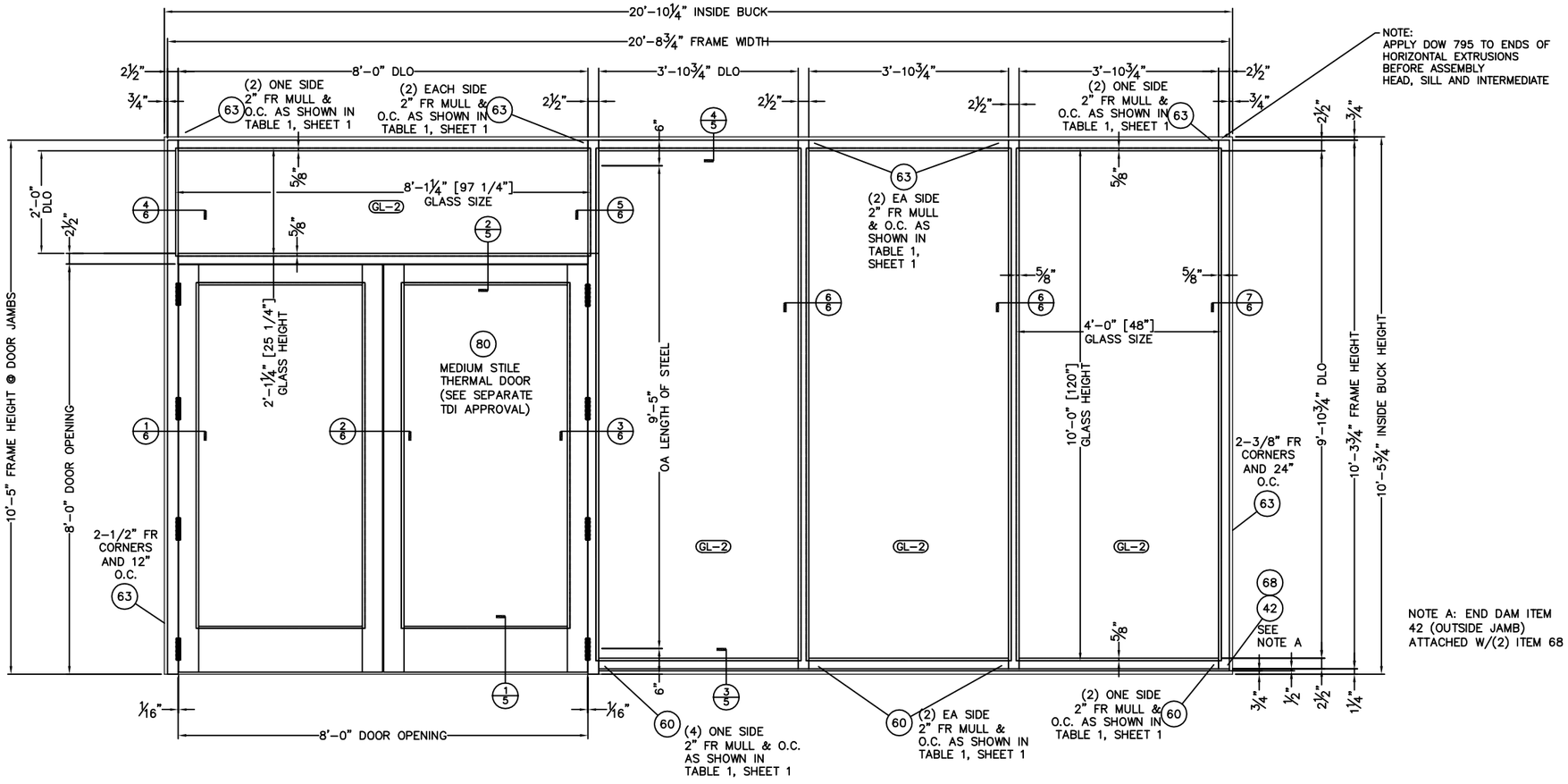
REVISIONS		MATERIAL		TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544	SCALE NTS
		EST. AREA			DWG NO. 101283D-TDI
		EST. WT.		SERIES E44000FS STOREFRONT SYSTEM TDI INSTALLATION DRAWINGS ELEVATIONS AND GLAZING DETAILS	SHEET NO. 2A OF 9
		EST. PERIM.			EXTRUSION NO. / REV.
		DRAWN BY	DATE 7/8/15		



E44000FS STOREFRONT ELEVATION AND ANCHORAGE DP +/−70

HURRICANE IMPACT TESTED
WET GLAZED

NOTE – STOREFRONT MAY BE INSTALLED TO AN INFINITE LENGTH PROVIDED THE MAXIMUM BAY WIDTH DOES NOT EXCEED 46-3/4".

GLAZING TYPES

TAG	DESCRIPTION
GL-2	9/16" LAMINATED GLASS -1/4" CLEAR, HEAT STRENGTHED -.075 SOLUTIA VANCEVA -1/4" CLEAR, HEAT STRENGTHED

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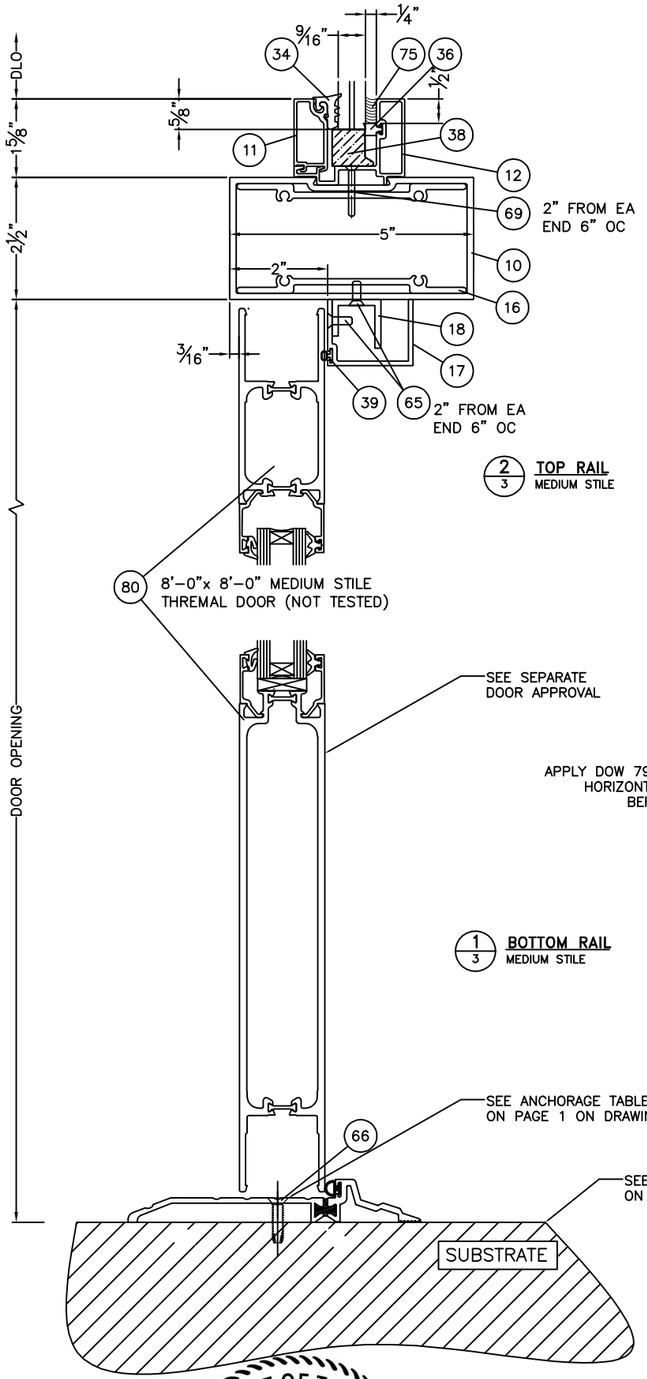
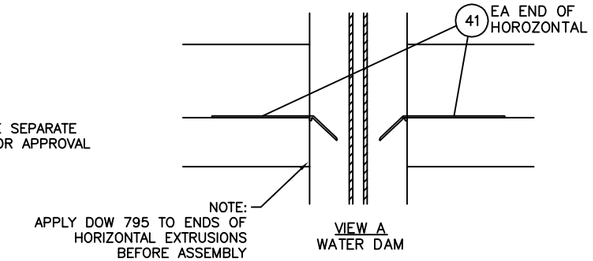
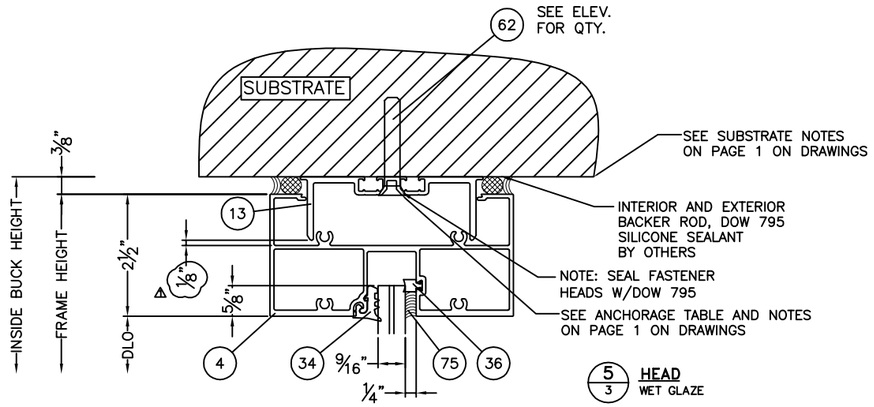
REVISIONS		MATERIAL		TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544	SCALE NTS
		EST. AREA			DWG NO. 101283D-TDI
		EST. WT.		SERIES E44000FS STOREFRONT SYSTEM TDI INSTALLATION DRAWINGS ELEVATIONS AND GLAZING DETAILS	SHEET NO. 2B OF 9
		EST. PERIM.			EXTRUSION NO. / REV.
		DRAWN BY	DATE 7/8/15		



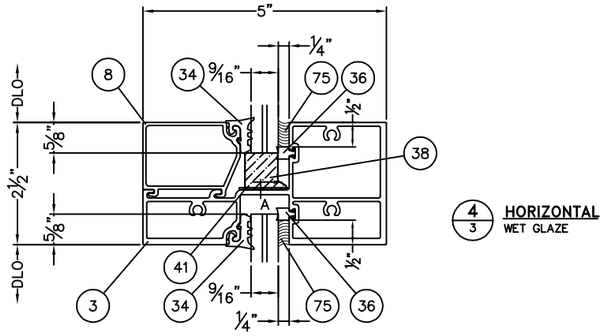
2 / 3 **TOP RAIL** MEDIUM STILE

1 / 3 **BOTTOM RAIL** MEDIUM STILE

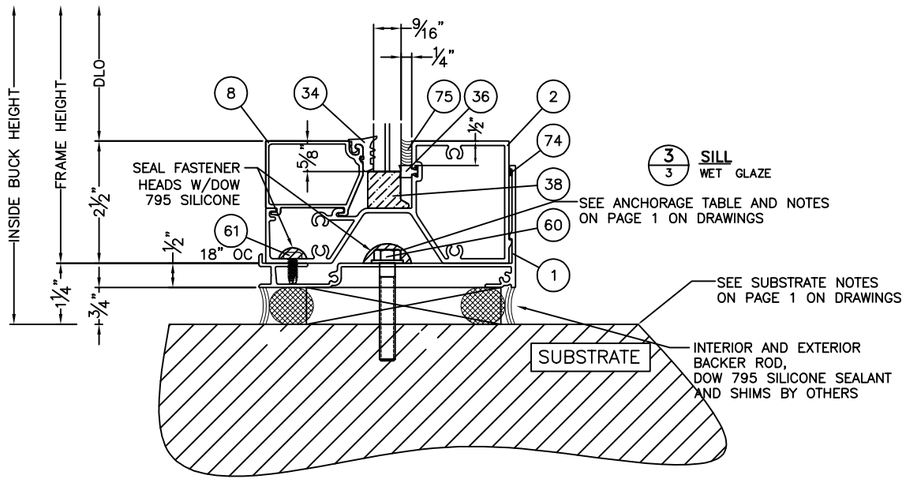




5 / 3 **HEAD** WET GLAZE



4 / 3 **HORIZONTAL** WET GLAZE



3 / 3 **SILL** WET GLAZE

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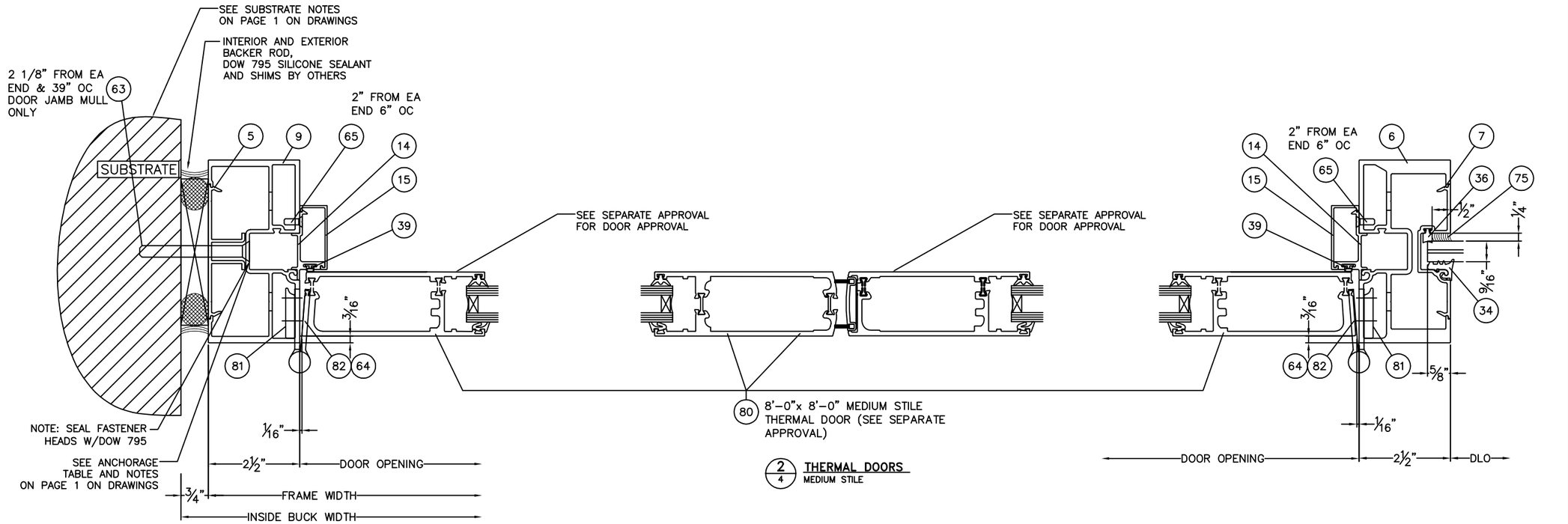
REVISIONS		MATERIAL	
		EST. AREA	
		EST. WT.	
		EST. PERIM.	
		DRAWN BY	DATE 7/8/15

TUBELITE, INC.
3056 WALKER RIDGE DRIVE NW
SUITE G
WALKER, MI 49544

SERIES E44000FS STOREFRONT SYSTEM
TDI INSTALLATION DRAWINGS
INSTALLATION DETAILS

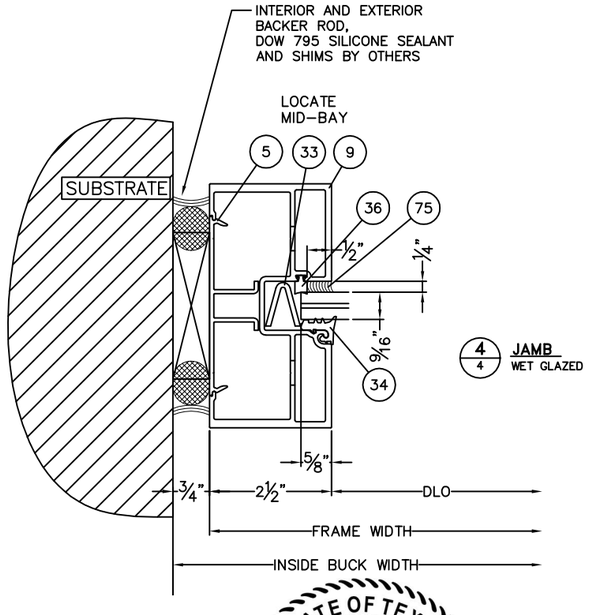
SCALE	NTS
DWG NO.	101283D-TDI
SHEET NO.	3 OF 9
EXTRUSION NO.	REV.



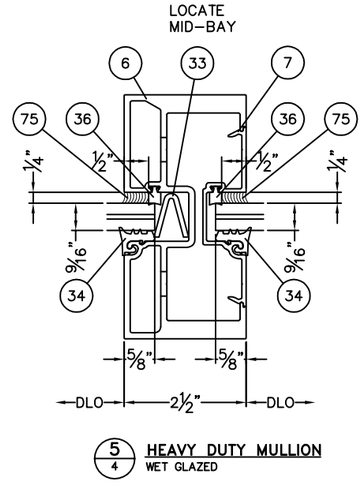
1/4 JAMB @ BUCK W/BUTT HINGE
MEDIUM STILE

2/4 THERMAL DOORS
MEDIUM STILE

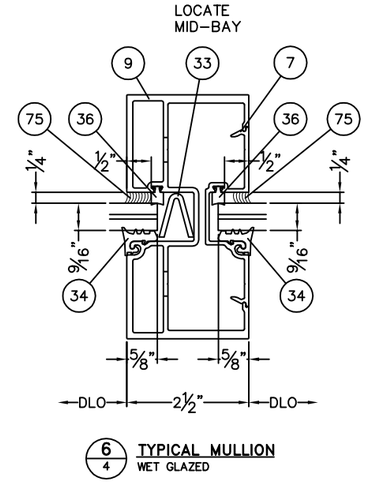
3/4 JAMB @ MULL W/BUTT HINGE
MEDIUM STILE



4/4 JAMB
WET GLAZED



5/4 HEAVY DUTY MULLION
WET GLAZED



6/4 TYPICAL MULLION
WET GLAZED

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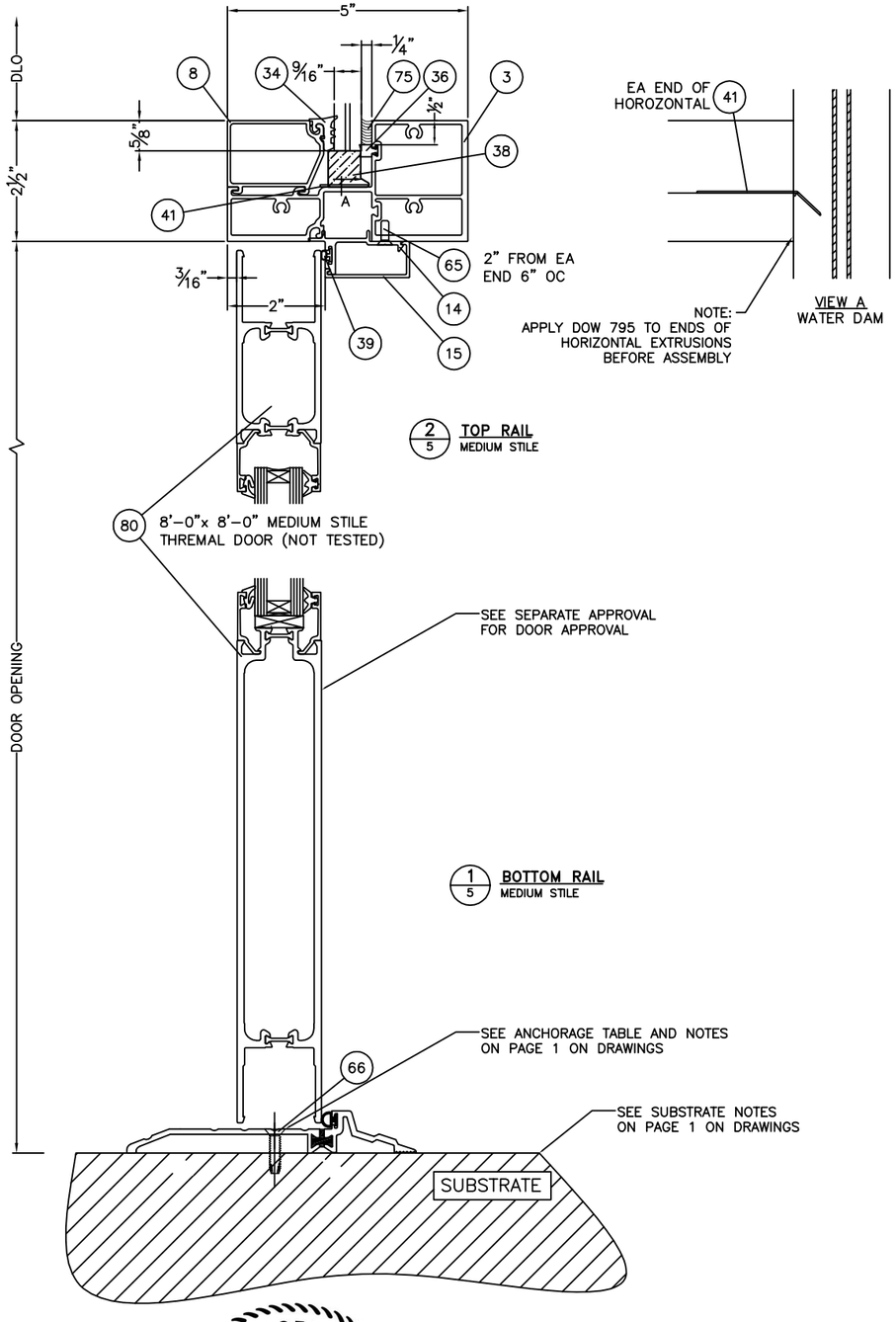
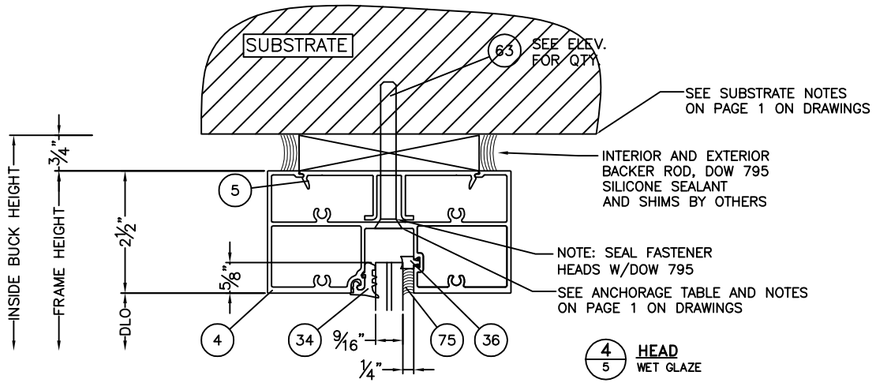
REVISIONS		MATERIAL		TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544	SCALE NTS
		EST. AREA			DWG NO. 101283D-TDI
		EST. WT.		SERIES E44000FS STOREFRONT SYSTEM TDI INSTALLATION DRAWINGS INSTALLATION DETAILS	SHEET NO. 4 OF 9
		EST. PERIM.			EXTRUSION NO. / REV.
		DRAWN BY	DATE 7/8/15		

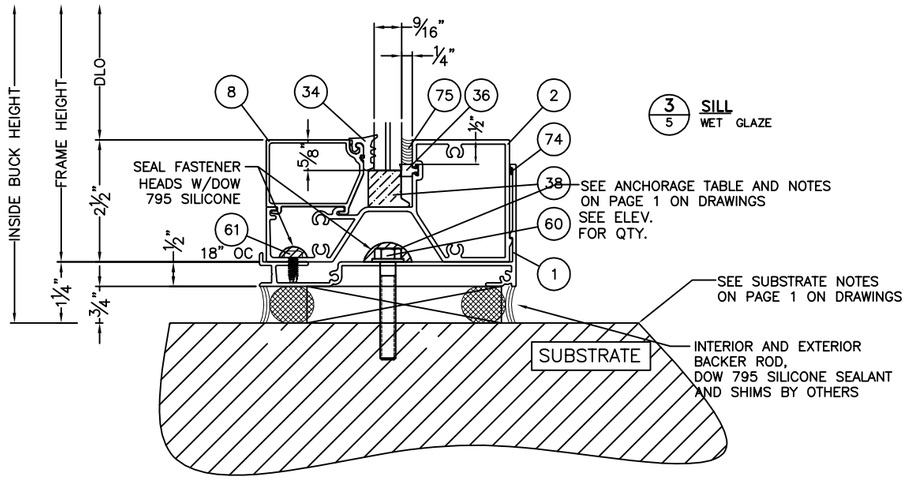


2 / 5 TOP RAIL
MEDIUM STILE

1 / 5 BOTTOM RAIL
MEDIUM STILE



4 / 5 HEAD
WET GLAZE



3 / 5 SILL
WET GLAZE

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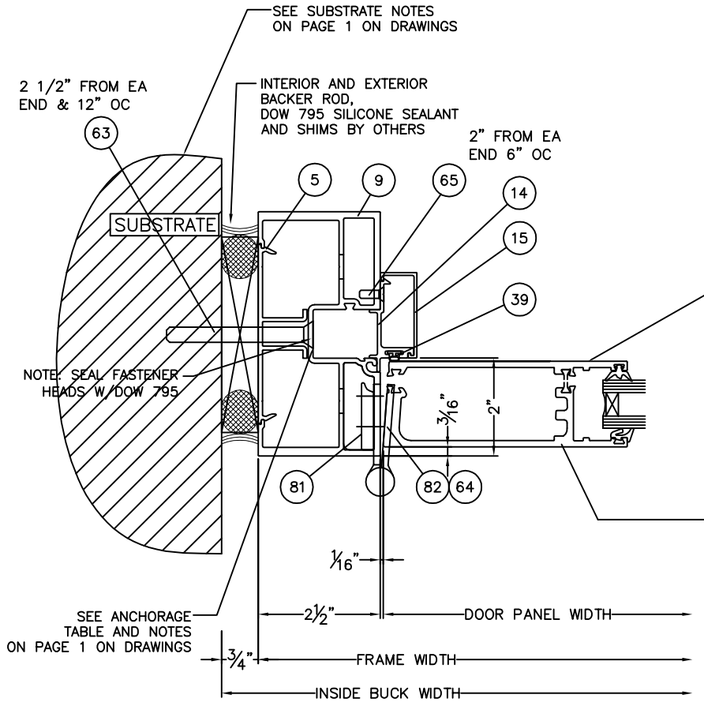
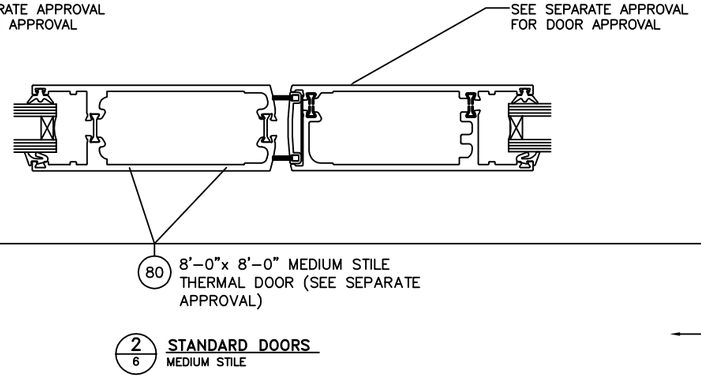
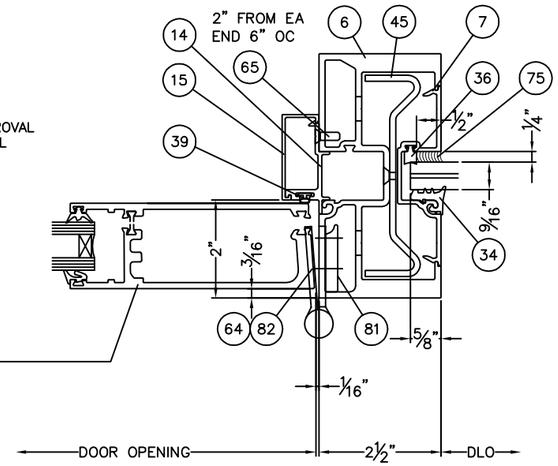
REVISIONS		MATERIAL	TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544	SCALE NTS
		EST. AREA		DWG NO. 101283D-TDI
		EST. WT.	SERIES E44000FS STOREFRONT SYSTEM TDI INSTALLATION DRAWINGS INSTALLATION DETAILS	SHEET NO. 5 OF 9
		EST. PERIM.		EXTRUSION NO. / REV.
		DRAWN BY / DATE 7/8/15		



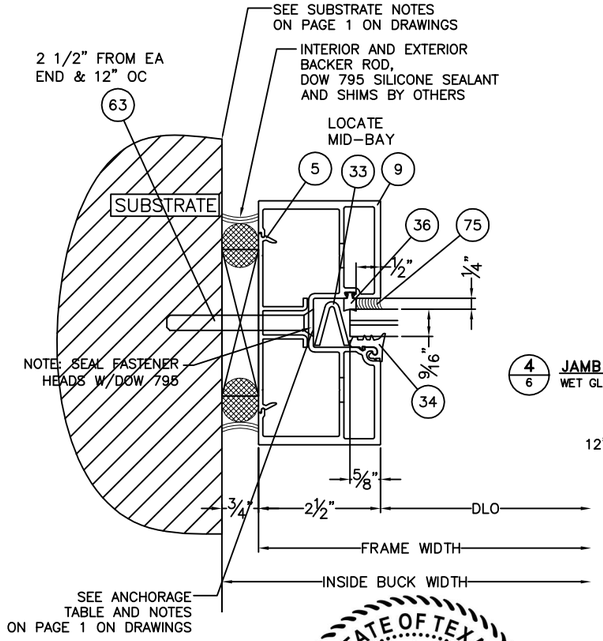
1/6 JAMB @ BUCK W/BUTT HINGE
MEDIUM STILE



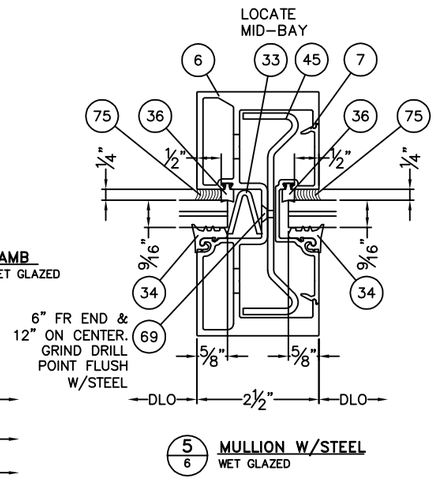
2/6 STANDARD DOORS
MEDIUM STILE



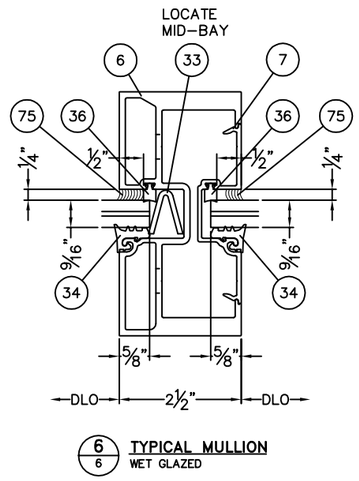
3/6 JAMB @ MULL W/BUTT HINGE
MEDIUM STILE



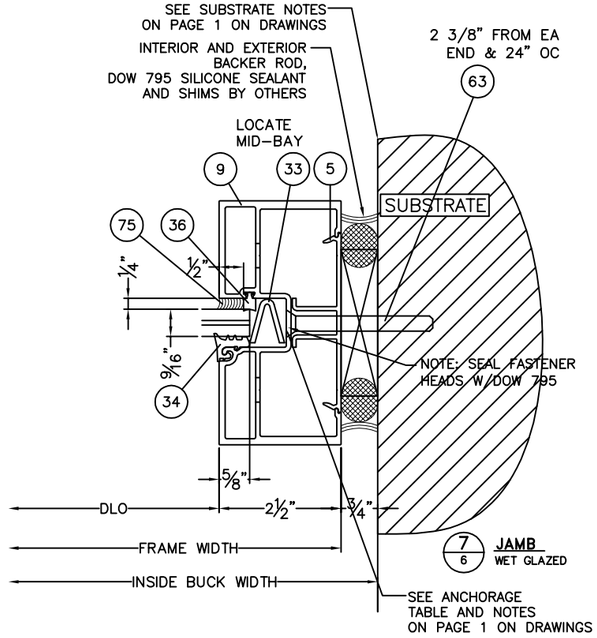
4/6 JAMB
WET GLAZED



5/6 MULLION W/STEEL
WET GLAZED



6/6 TYPICAL MULLION
WET GLAZED



7/6 JAMB
WET GLAZED

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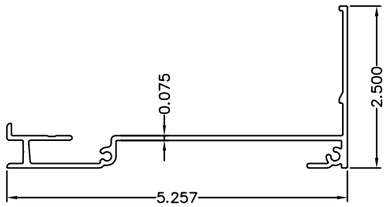
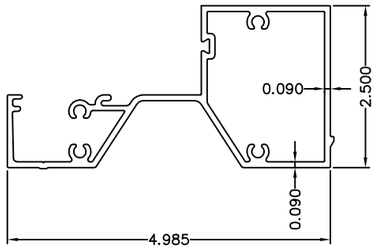
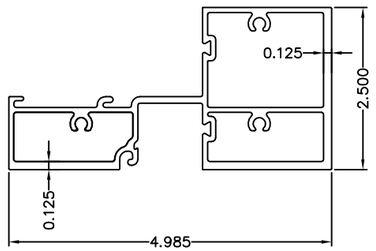
REVISIONS		MATERIAL		TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544	SCALE NTS
		EST. AREA			DWG NO. 101283D-TDI
		EST. WT.		SERIES E44000FS STOREFRONT SYSTEM TDI INSTALLATION DRAWINGS INSTALLATION DETAILS	SHEET NO. 6 OF 9
		EST. PERIM.			EXTRUSION NO. / REV.
		DRAWN BY	DATE 7/8/15		



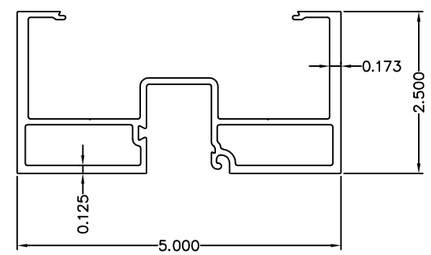
ITEM 1–E44259
SUB SILL



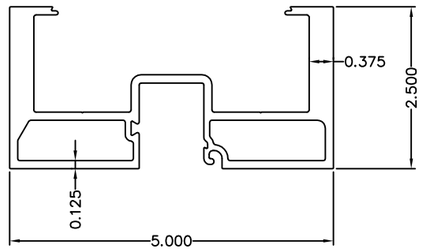
ITEM 2–E44240
OPEN BACK SILL



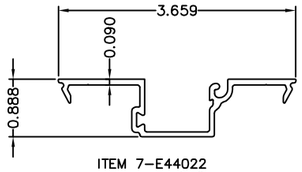
ITEM 3–E44143
INTERMEDIATE HORIZONTAL



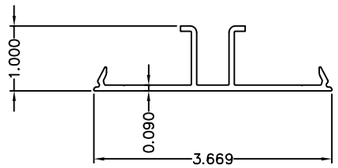
ITEM 9–E44144
JAMB/VERTICAL



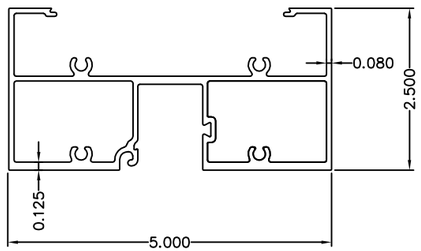
ITEM 6–E44261
HEAVY WALL JAM/VERTICAL



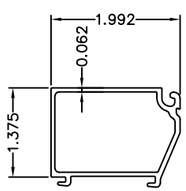
ITEM 7–E44022
SNAP IN 9/16" GLASS POCKET



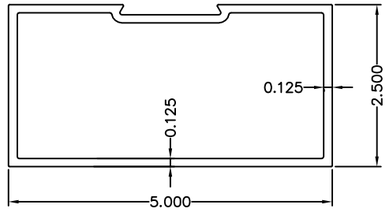
ITEM 5–E44142
SNAP IN FILLER



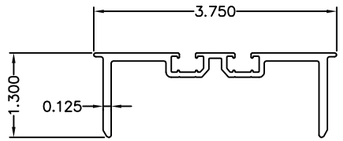
ITEM 4–E44441
HEAD HORIZONTAL



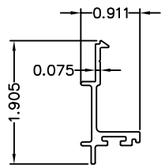
ITEM 8–E44104
GLASS STOP SILL/HORIZONTAL



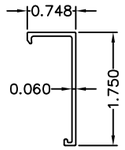
ITEM 10–E44021
DOOR HEADER



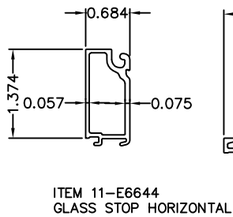
ITEM 13–E24032
HEAD RECEPTOR MALE



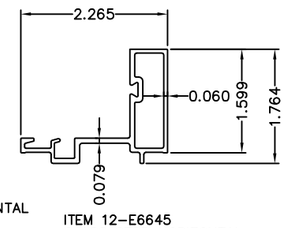
ITEM 14–E6643
INNER DOOR STOP



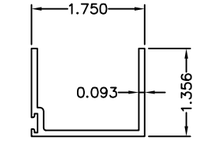
ITEM 15–E6519
OUTER DOOR STOP



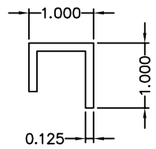
ITEM 11–E6644
GLASS STOP HORIZONTAL



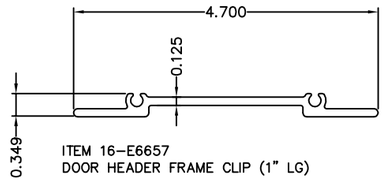
ITEM 12–E6645
GLASS STOP HORIZONTAL



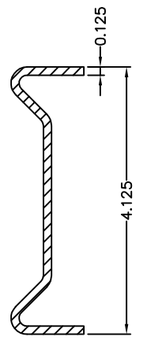
ITEM 17 – E2298
HORIZ. DOOR STOP



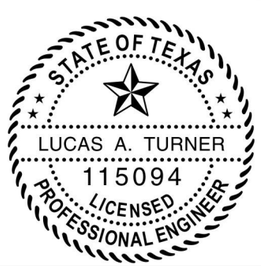
ITEM 18–E6504
INNER HORIZ. DOOR STOP CHANNEL



ITEM 16–E6657
DOOR HEADER FRAME CLIP (1" LG)

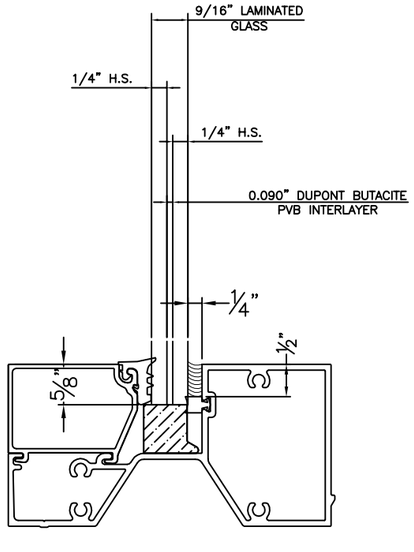


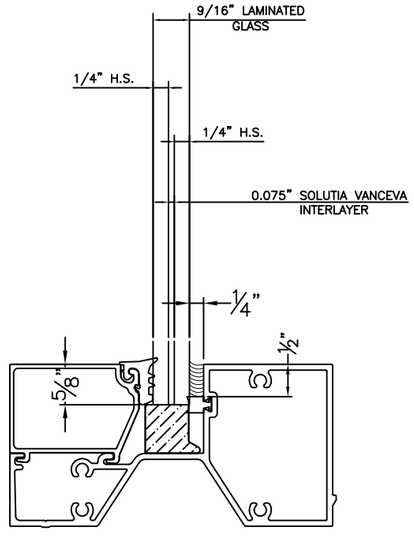
ITEM 45 – P1437
REINFORCING STEEL A–36



7/9/2015
LUCAS A. TURNER, P.E.
TX PE # 115094
1239 JABARA AVE.
NORTH PORT, FL 34288
PH. 941–380–1574

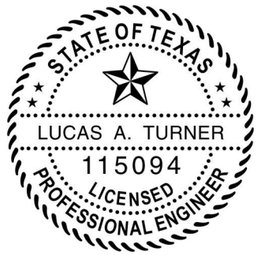
REVISIONS	MATERIAL	TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544	SCALE NTS
	EST. AREA		DWG NO. 101283D–TDI
	EST. WT.	SERIES E44000FS STOREFRONT SYSTEM TDI INSTALLATION DRAWINGS INSTALLATION DETAILS	SHEET NO. 7 OF 9
	EST. PERIM.		EXTRUSION NO. / REV.
	DRAWN BY / DATE 7/8/15		





GLAZING DETAILS

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



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NORTH PORT, FL 34288
PH. 941-380-1574

REVISIONS		MATERIAL		TUBELITE, INC. 3056 WALKER RIDGE DRIVE NW SUITE G WALKER, MI 49544	SCALE: NTS
		EST. AREA			DWG NO.: 101283D-TDI
		EST. WT.		SERIES E44000FS STOREFRONT SYSTEM TDI INSTALLATION DRAWINGS INSTALLATION DETAILS	SHEET NO.: 8 OF 9
		EST. PERIM.			EXTRUSION NO. / REV.
		DRAWN BY	DATE: 7/8/15		

HURRICANE STOREFRONT TEST SPECIMEN – PARTS LIST				MATERIAL
ITEM	QTY	PART NUMBER	DESCRIPTION	
1		E44259	EXTRUSION ~ SUB SILL	ALUMINUM–6063–T5
2		E44240	EXTRUSION ~ OPEN BACK SILL	ALUMINUM–6063–T5
3		E44143	EXTRUSION ~ INTERMEDIATE HORIZONTAL	ALUMINUM–6063–T5
4		E44441	EXTRUSION ~ HEAD HORIZONTAL	ALUMINUM–6063–T5
5		E44142	EXTRUSION ~ SNAP IN FILLER	ALUMINUM–6063–T5
6		E44261	EXTRUSION ~ HEAVY WALL JAMB/VERTICAL	ALUMINUM–6063–T5
7		E44022	EXTRUSION ~ SNAP IN 9/16" GLASS POCKET	ALUMINUM–6063–T5
8		E44104	EXTRUSION ~ GLAZING STOP	ALUMINUM–6063–T5
9		E44144	EXTRUSION ~ JAMB/VERICAL	ALUMINUM–6063–T5
10		E44021	EXTRUSION ~ DOOR HEADER	ALUMINUM–6063–T5
11		E6644	EXTRUSION ~ GLASS STOP HORIZONTAL	ALUMINUM–6063–T5
12		E6645	EXTRUSION ~ GLASS STOP HORIZONTAL	ALUMINUM–6063–T5
13		E24032	EXTRUSION ~ HEAD RECEPTOR MALE	ALUMINUM–6063–T5
14		E6643	EXTRUSION ~ INNER DOOR STOP	ALUMINUM–6063–T5
15		E6519	EXTRUSION ~ OUTTER DOOR STOP	ALUMINUM–6063–T5
16		E6657	EXTRUSION ~ DOOR HEADER FRAME CLIP	ALUMINUM–6063–T5
17		E2298	EXTRUSION ~ HORIZONTAL DOOR STOP	ALUMINUM–6063–T5
18		E6504	EXTRUSION ~ HORIZONTAL DOOR STOP CHANNEL	ALUMINUM–6063–T5
19				
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33		P1916	W ANTI–WALK BLOCK	P–PART–EPDM
34		P6503	TOP LOAD WEDGE GASKET, GLASS, EPG	P–PART–RUBBER
35				
36		P6587	WET GLAZE GASKET, GLASS, EPG	P–PART–RUBBER
37				
38		P6538	SETTING BLOCK 3/4 x 1 3/4 x 4" LG	P–PART–RUBBER
39		P6296	BULB GASKET	P–PART–PLASTIC/FAB
40				
41		P6597	WATER DIVERTER	P–PART–PVC
42		P1156	END DAM FOR SUB SILL E44259	P–PART–ALUM .040 SHT.
43				

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL
60		BY OTHERS	SEE ANCHOR NOTES ON PAGE 1 (FR. TO SUBSTRATE)	P–PART–FASTENER
61		S206	SCREW ~ #10–24 x 1/2" P FH TYPE 23 ST (SILL TO SUB SILL)	P–PART–FASTENER
62		BY OTHERS	SEE ANCHOR NOTES ON PAGE 1 (FR. TO SUBSTRATE)	P–PART–FASTENER
63		BY OTHERS	SEE ANCHOR NOTES ON PAGE 1 (FR. TO SUBSTRATE)	P–PART–FASTENER
64		S070	SCREW ~ #12–24 x 1/2" FLAT HD PHIL (HINGE)	P–PART–FASTENER
65		S174	SCREW ~ #8–32 x 1/2" PHIL FT HD MS (GLASS STOP)	P–PART–FASTENER
66		BY OTHERS	SEE ANCHOR NOTES ON PAGE 1 (FR. TO SUBSTRATE)	P–PART–FASTENER
67		S419	SCREW ~ #12–14 x 1" HWH SD #3PT (FRAME TO FRAME)	P–PART–FASTENER
68		S196	SCREW ~ #8 X 3/8" SELF TAPPING PAN HEAD (END DAM TO SUB SILL)	P–PART–FASTENER
69		S6504	SCREW ~ #6–32 x 1" FT HD PHIL TYPE F (GLASS STOP)	P–PART–FASTENER
70				
71				
72				
73				
74		BY OTHERS	SILICONE SEALANT DOW 795	P–PART–SEALANT
75		BY OTHERS	SILICONE SEALANT DOW 995	P–PART–SEALANT
76				
77				
78				
79				
80		NA	8'–0" x 8'–0" MEDIUM STILE THERMAL DOOR	SEE SEPARATE APPROVAL
81		P1218	HINGE, BUTT, REINFORCEMENT (P1218) (DOOR)	SEE SEPARATE APPROVAL
82		P1558 NRP	BUTT HINGE HAGAR BB–1199	SEE SEPARATE APPROVAL
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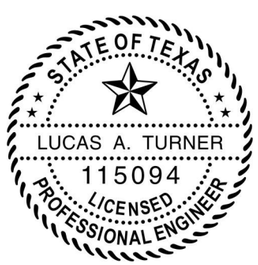

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REVISIONS		MATERIAL	
		EST. AREA	
		EST. WT.	
		EST. PERIM.	
		DRAWN BY	DATE 7/8/15

TUBELITE, INC.
3056 WALKER RIDGE DRIVE NW
SUITE G
WALKER, MI 49544

SERIES E44000FS STOREFRONT SYSTEM
TDI INSTALLATION DRAWINGS
INSTALLATION DETAILS

SCALE	NTS	
DWG NO.	101283D–TDI	
SHEET NO.	9 OF 9	
EXTRUSION NO.		REV.