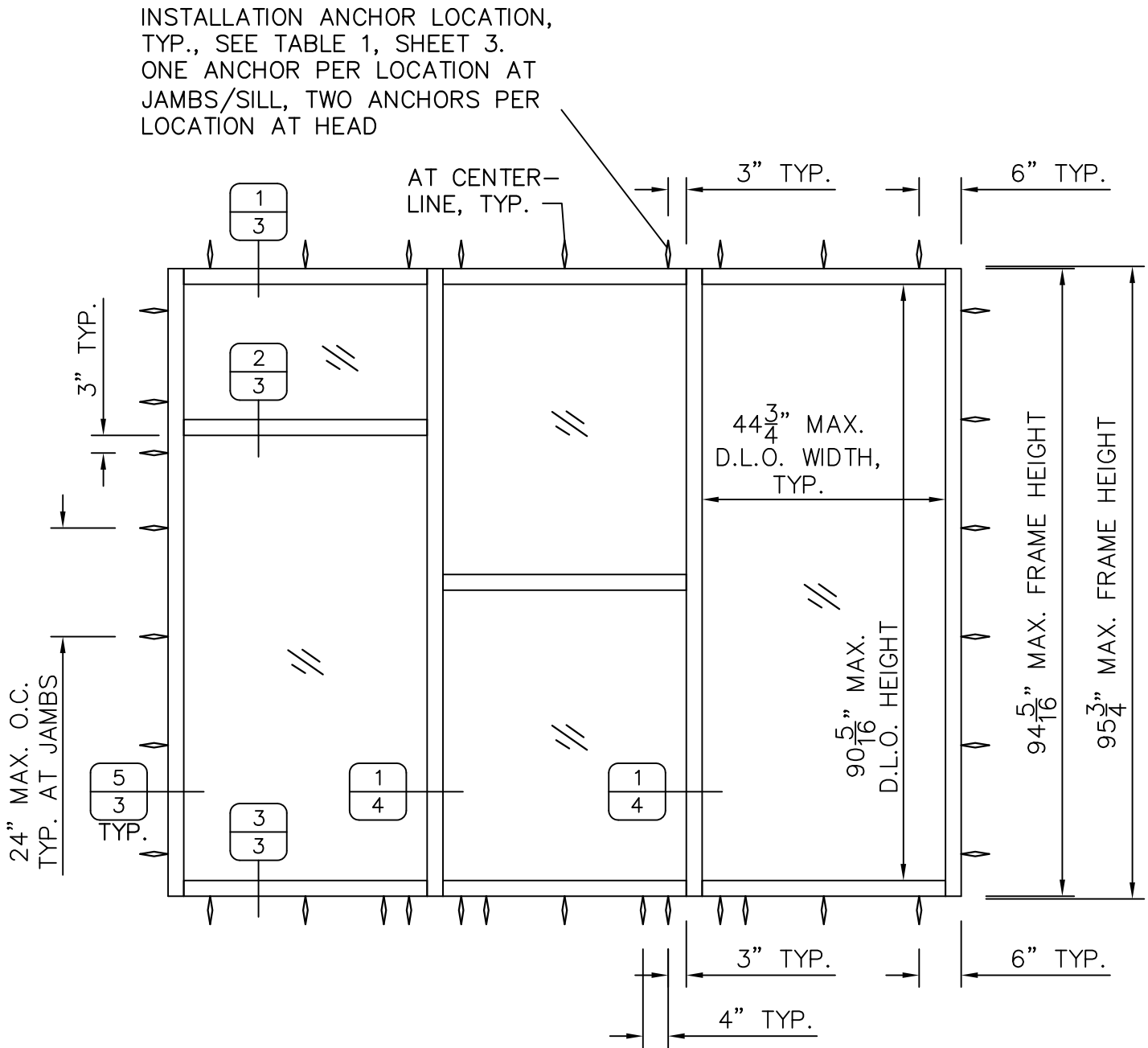


GENERAL NOTES

1. THIS STOREFRONT SYSTEM HAS BEEN TESTED TO ASTM E283, ASTM E330, ASTM E331, AND AAMA 501, AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC), CURRENT EDITION, OUTSIDE THE HIGH VELOCITY HURRICANE ZONE.
2. THE INSTALLED SYSTEM SHALL BE FABRICATED, GLAZED, AND ANCHORED IN ACCORDANCE WITH THIS DRAWING AS WELL AS THE APPLICABLE TEST REPORTS AND MANUFACTURER INSTALLATION INSTRUCTIONS, OR AS INDICATED BY THE ENGINEER OF RECORD IN APPROVED SHOP DRAWINGS.
3. THIS DRAWING INDICATES VARIOUS APPROVED GLAZING METHODS AND FRAMING TYPES WHICH MAY BE USED SINGLY OR IN COMBINATION FOR EACH PROJECT. ANY NUMBER OF PANELS MAY BE USED HORIZONTALLY PROVIDED THE MAXIMUM DLO SIZES AS INDICATED IN THIS DRAWING ARE NOT EXCEEDED.
4. THIS PRODUCT IS NON-IMPACT AND REQUIRES THE USE OF APPROVED SHUTTERS IN WINDBORNE DEBRIS AREAS.
5. REQUIRED DESIGN PRESSURES SHALL BE DETERMINED FOR EACH PROJECT IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS AND GOVERNING WIND SPEEDS FOR THE PROJECT LOCATION.
6. THE ALLOWABLE DESIGN PRESSURES AND LOAD CAPACITIES SHOWN IN THIS DRAWING ARE ALLOWABLE STRESS DESIGN (ASD) BASIS AND ARE AS LIMITED BY ASTM E-1300 GLASS TABLES AND TESTED PRESSURES.
7. DISSIMILAR MATERIALS THAT COME INTO CONTACT, INCLUDING BUT NOT LIMITED TO FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SUBSTRATES OR ALUMINUM, SHALL BE COATED OR OTHERWISE PROTECTED PER FBC REQUIREMENTS TO PREVENT CORROSION OR GALVANIC REACTIONS.
8. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER INFILTRATION RESISTANCE OF THE INSTALLED PRODUCT IS NOT WITHIN THE SCOPE OF THIS APPROVAL AND SHALL BE THE RESPONSIBILITY OF OTHERS.
9. THE 4/3 ALLOWABLE STRESS INCREASE HAS NOT BEEN USED IN THE ANCHOR ANALYSIS FOR THIS SYSTEM. THE 1.6 Cd FACTOR WAS USED IN THE ANALYSIS OF WOOD SUBSTRATE.
10. STRUCTURAL INTEGRITY OF SUBSTRATE MATERIALS TO RECEIVE THE LOADS FROM THIS PRODUCT, AND INSTALLATION OF WOOD BUCKS OR OTHER ACCESSORIES TO THE SUBSTRATE, TO BE ENGINEERED BY OTHERS OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
11. THIS PRODUCT SHALL BE INSTALLED USING ONE OF THE APPROVED FASTENING METHODS INDICATED IN THIS DRAWING, AS APPROPRIATE FOR THE SUBSTRATE TYPE, OR AS INDICATED BY THE ENGINEER OF RECORD IN APPROVED SHOP DRAWINGS. ANCHORAGE IN ACCORDANCE WITH THIS DOCUMENT SHALL UTILIZE THE ANCHOR SIZE, EMBEDMENT, EDGE DISTANCE, AND PATTERNS IN ACCORDANCE WITH THIS DRAWING.
12. MINIMUM ANCHOR EMBEDMENTS LISTED IN THIS DRAWING SHALL BE BEYOND WALL DRESSING OR STUCCO AND FULLY INTO SUBSTRATE.
13. SUBTRATES SHALL MEET THE MINIMUM STRENGTH REQUIREMENTS AS SHOWN IN ANCHOR DETAILS IN SECTION 6. CONCRETE OR MASONRY SUBSTRATES SHALL NOT BE CRACKED. FOR INSTALLATION TO METAL SUBSTRATES, ANCHORS SHALL BE LONG ENOUGH TO BE FULLY THREADED THROUGH THE METAL THICKNESS WITH AN ADDITIONAL 3/16" MIN. OF THREADS BEYOND.
14. HEAD, SILL, AND HORIZONTAL JOINERY TO VERTICALS: THE VERTICAL FRAME MEMBERS RUN THROUGH WHILE THE HORIZONTAL MEMBERS (HEAD/SILL/INTERMEDIATE HORIZ.) ARE SQUARE CUT & BUTTED TO THE VERTICAL FRAME MEMBERS. THE VERTICAL MEMBERS ARE FASTENED TO THE HORIZONTAL MEMBERS WITH TWO(2) #12-14 X 1-1/8" PHTF FASTENERS INTO THE HORIZONTAL SCREW SPLINES, AND SEALED WITH SILICONE.

TRIFAB 451T, NON-IMPACT



EXTERIOR ELEVATION
WITH HEAD RECEPTOR AND
STANDARD MULLION

ALLOWABLE DESIGN PRESSURE TABLE

CONFIGURATION	DESIGN PRESSURE RATING
FRAME HEIGHT OVER 81" OR DLO WIDTH OVER 38"	+/-30 PSF
FRAME HEIGHT 81" & LESS & DLO WIDTH 38" & LESS	+/-35 PSF

Lucas Turner
2023.08.17
21:11:39
-05'00'

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8/17/2023
LUCAS A. TURNER
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TURNER ENGINEERING &
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2428 OLD NATCHEZ TRACE TRL.
CAMDEN, TN 38320
PH. 941-380-1574

DRAWING NO.

FPA-451T

PRODUCT

TRIFAB 451T

DRAWN BY
LT

NOTES, 8'
ELEVATION

DATE

10/22/2020

SCALE

NTS

SHEET
1 OF 5

8/17/2023
10/22/20

REV. #
DATE

2023 FBC UPDATE
INITIAL RELEASE
PRINTS ISSUED FOR

INSTALLATION ANCHOR LOCATION, TYP., SEE TABLE 1, SHEET 3.
ONE ANCHOR PER LOCATION.

AT CENTER-LINE, TYP.

4" TYP.

3" TYP.

6" TYP.

3" TYP.

5 3 TYP.

2 3

4 3

2 4

5 4

48" MAX. D.L.O. WIDTH, TYP.

104" MAX. D.L.O. HEIGHT

108" MAX. FRAME HEIGHT

108 7/16" MAX. FRAME HEIGHT

24" MAX. O.C. TYP. AT JAMBS

3" TYP.

4" TYP.

6" TYP.

ALLOWABLE DESIGN PRESSURE TABLE

CONFIGURATION	DESIGN PRESSURE RATING
FRAME HEIGHT OVER 92" OR DLO WIDTH OVER 41"	+/-30 PSF
FRAME HEIGHT 92" & LESS & DLO WIDTH 41" & LESS	+/-35 PSF

The diagram illustrates the elevation of a three-panel sliding door assembly. Key features include:

- Top Section:** A header panel with a height of 3" TYP. and a width of 48" MAX. D.L.O. WIDTH, TYP.
- Main Panels:** Three vertical panels, each with a maximum frame height of 120" MAX. FRAME HEIGHT and a maximum clear opening height of 104" MAX. D.L.O. HEIGHT.
- Bottom Section:** A base panel with a height of 3" TYP. and a width of 48" MAX. D.L.O. WIDTH, TYP.
- Dimensions:** The total maximum frame height is 120 7/16". The total maximum clear opening height is 104".
- Installation Details:** Anchors are shown at the top and bottom of the panels, with labels indicating "INSTALLATION ANCHOR LOCATION, TYP., SEE TABLE 1, SHEET 3. ONE ANCHOR PER LOCATION." and "AT CENTER-LINE, TYP."
- Labels:** Various callouts identify components like "4" TYP.", "3" TYP.", "6" TYP.", "24" MAX. O.C. TYP. AT JAMBS", and "104" MAX. D.L.O. HEIGHT".

ALLOWABLE DESIGN PRESSURE TABLE

CONFIGURATION	DESIGN PRESSURE RATING
DLO HEIGHT OVER 96"	+/- 30 PSF
DLO HEIGHT 96" & LESS	+/- 35 PSF

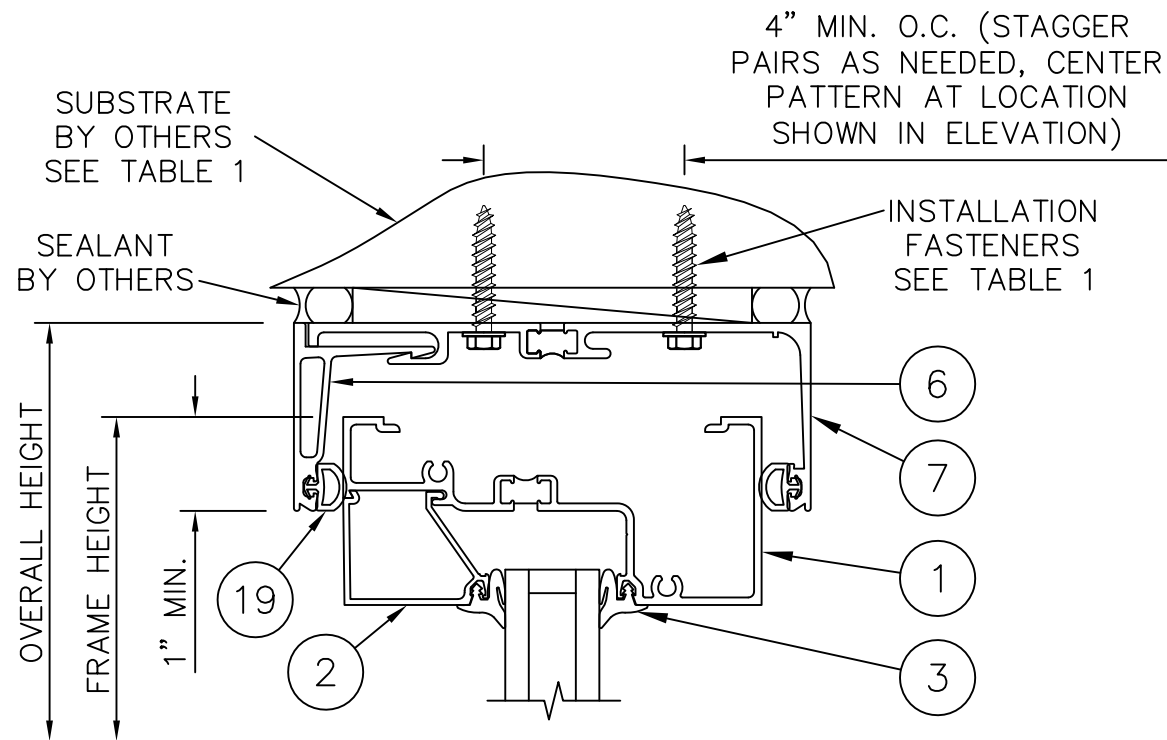


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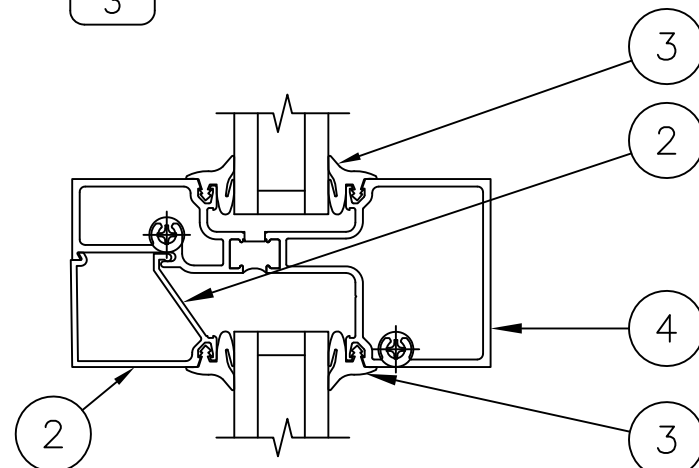
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2428 OLD NATCHEZ TRACE TRL.
CAMDEN, TN 38320
PH. 941-380-1574

DRAWING NO. FPA-451T	PRODUCT TRIFAB 451T
DRAWN BY LT	9' AND 10' ELEVATIONS
DATE 10/22/2020	
SCALE NTS	
SHEET 2 OF 5	

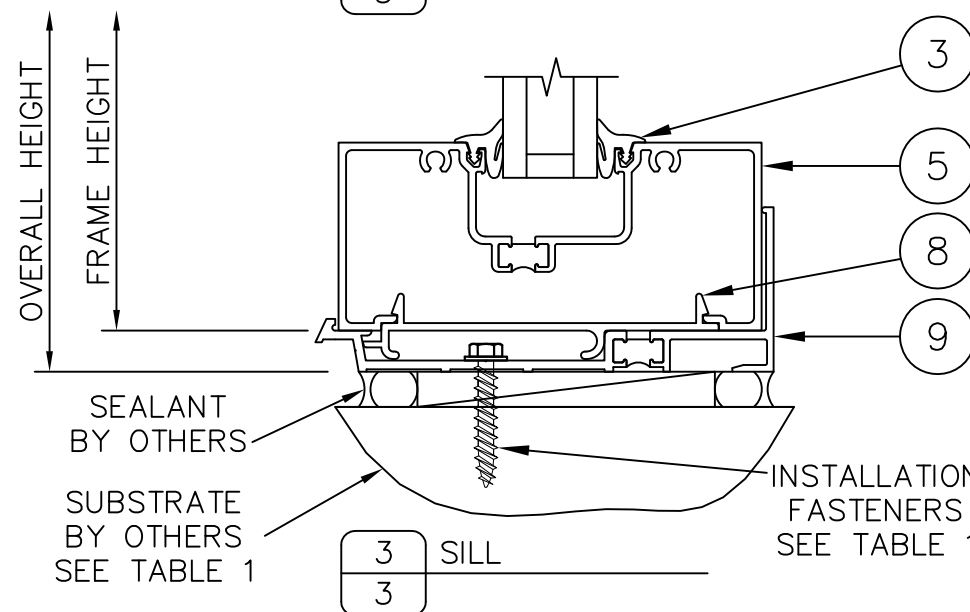
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INITIAL RELEASE	-	10/22/20	
PRINTS ISSUED FOR	REV. #	DATE	



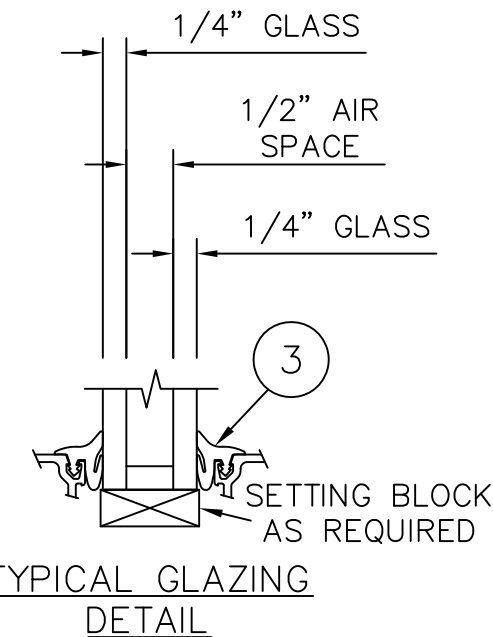
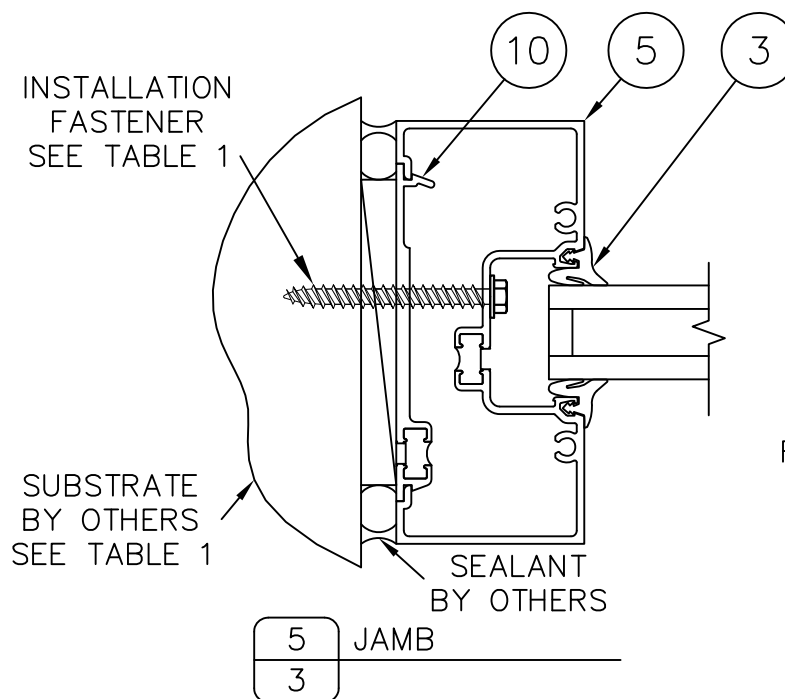
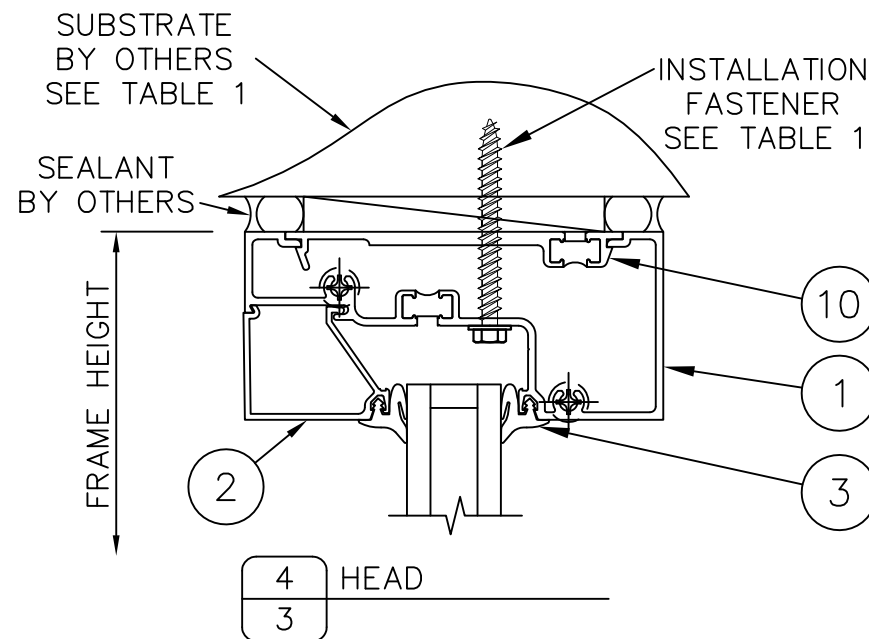
1 HEAD W/ RECEPTOR
3



2 HORIZONTAL
3



3 SILL
3

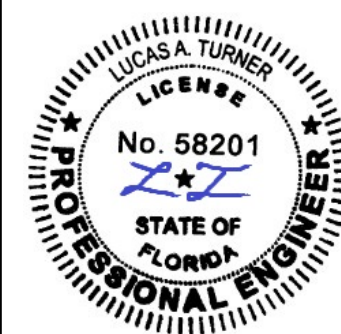


GLASS MAY BE ANNEALED, HEAT STRENGTHENED, OR TEMPERED AS REQUIRED BY ASTM E 1300 FOR EACH PROJECT. MUST BE TEMPERED FOR HAZARDOUS LOCATIONS OR WHERE SAFETY GLAZING IS REQUIRED.

TABLE 1. QUALIFIED ANCHOR INFORMATION

ID	SUBSTRATE	ANCHOR	MIN. EMBEDMENT	MIN. EDGE DISTANCE
A	SOLID UNCRACKED CONCRETE (2850 PSI MIN.)	1/4" ELCO COATED CARBON STEEL ULTRACON	1 3/4"	1"
B	CMU (ASTM C-90) (JAMBS ONLY)	1/4" ELCO COATED CARBON STEEL ULTRACON	1 3/4"	2 1/2"
C	SOLID UNCRACKED CONCRETE (3350 PSI MIN.)	1/4" ELCO CRETE-FLEX SS4 MASONRY SCREW	1 1/4"	2 1/2"
D	CMU (ASTM C-90)	1/4" ELCO CRETE-FLEX SS4 MASONRY SCREW	1 1/4"	2 1/2"
E	SOLID UNCRACKED CONCRETE (2000 PSI MIN.)	1/4" ITW COATED CARBON STEEL TAPCON	1 1/2"	1 1/2"
F	CMU (DENSITY > 117 PCF) (JAMBS ONLY)	1/4" ITW COATED CARBON STEEL TAPCON	1"	2"
G	CONCRETE (3000 PSI MIN)	1/4" HILTI COATED CARBON STEEL OR STAINLESS STEEL KWIK-CON II	1"	2 1/2"
H	CMU (ASTM C-90)	1/4" HILTI COATED CARBON STEEL OR STAINLESS STEEL KWIK-CON II	1"	2 1/2"
I	2x MIN. SOUTHERN PINE WOOD (G=0.55 MIN)	#14 GRADE 5 WOOD SCREW	1 1/2"	1"
J	16 GAUGE (0.060") MIN. STEEL STUD (33 KSI YIELD MIN.) OR 1/8" MIN. ALUMINUM (6063-T5 MIN.) OR 1/8" MIN. A36 STEEL	#1/4-14 ITW TEKS SELF-DRILLING SCREW	FULL + 3 THREADS	1/2"

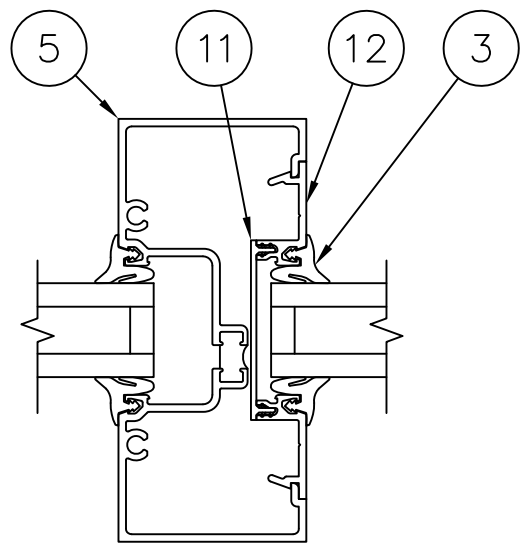
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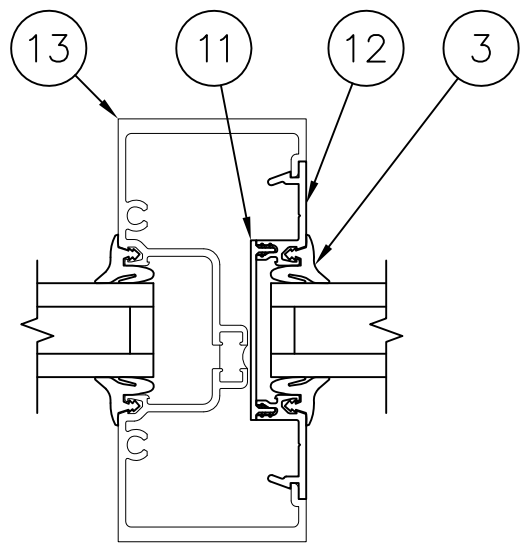
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LUCAS A. TURNER
FL P.E. #58201
TURNER ENGINEERING & CONSULTING, INC.
2428 OLD NATCHEZ TRACE TRL.
CAMDEN, TN 38320
PH. 941-380-1574

DRAWING NO. FPA-451T
PRODUCT TRIFAB 451T
DRAWN BY LT
INSTALLATION DETAILS, GLAZING DET.
DATE 10/22/2020
SHEET 3 OF 5
SCALE NTS

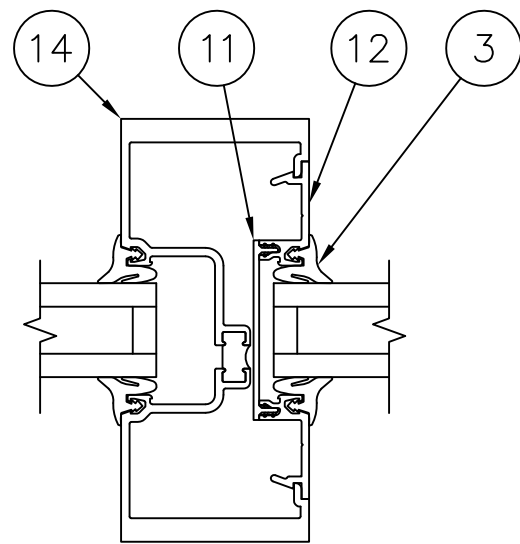
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-	10/22/20	



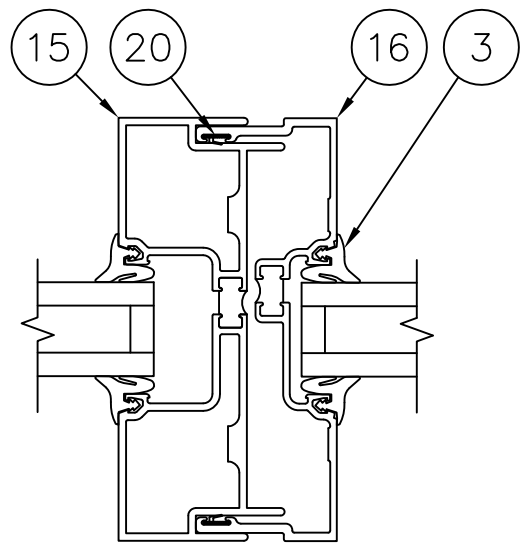
1 STANDARD MULLION
4



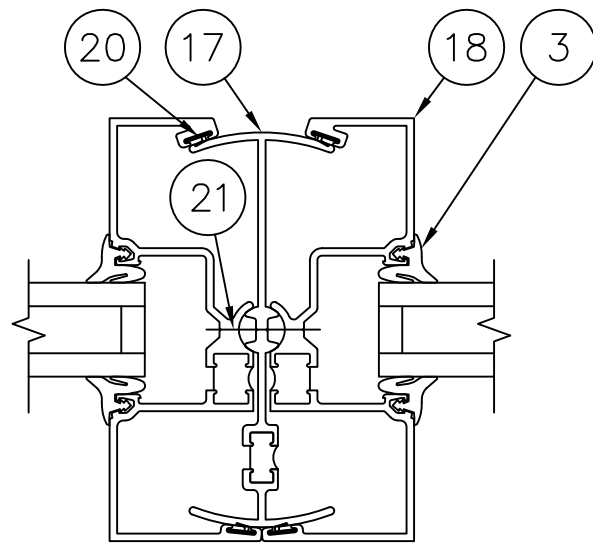
2 MEDIUM MULLION
4



3 HEAVY MULLION
4



4 EXPANSION MULLION
4



5 PIVOT MULLION
4

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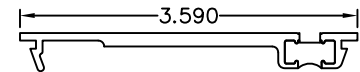
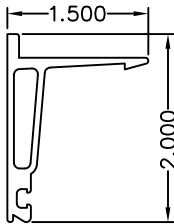
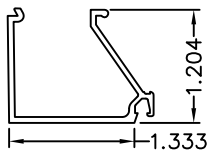
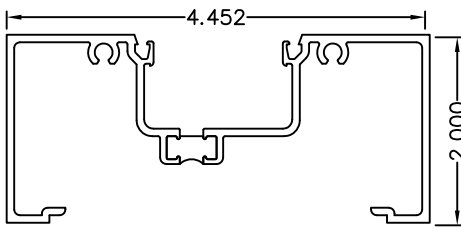
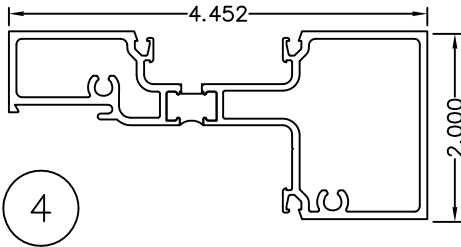
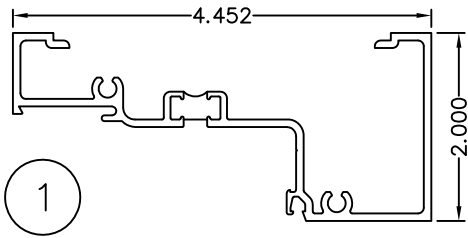
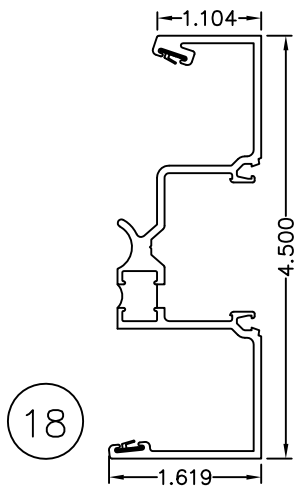
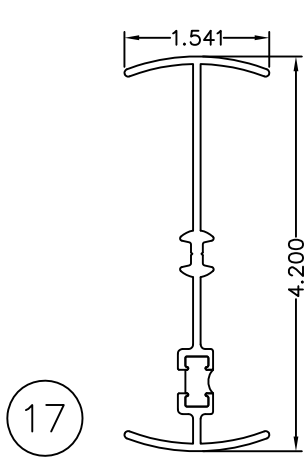
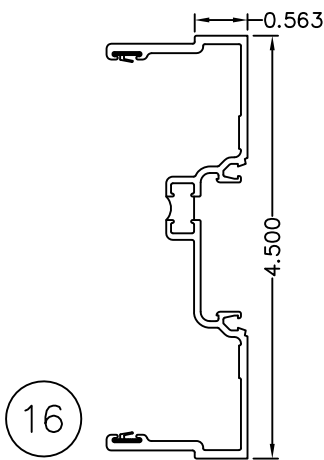
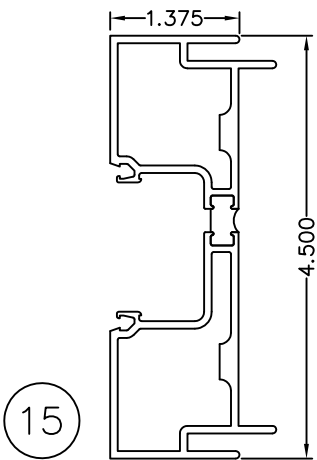
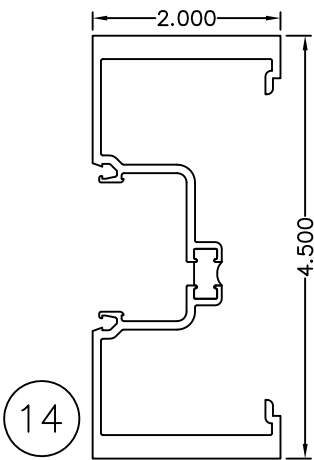
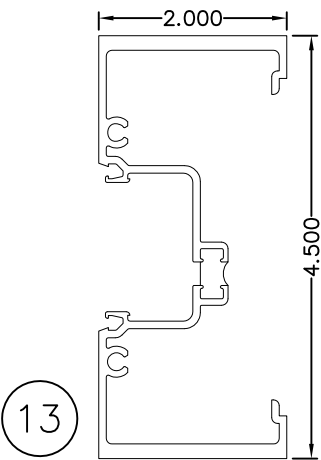
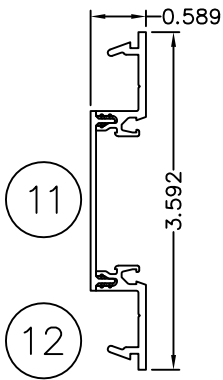
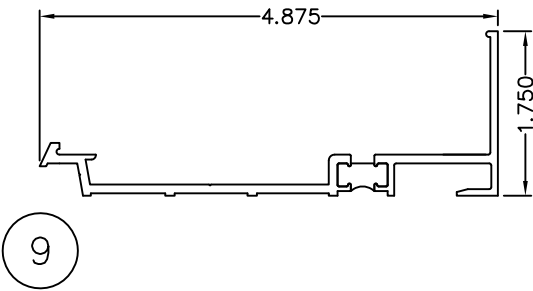
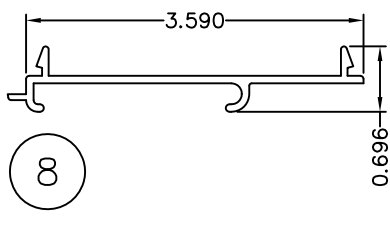
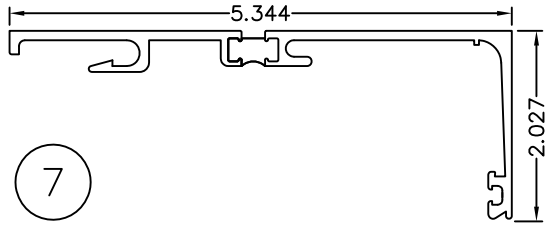


8/17/2023
LUCAS A. TURNER
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2428 OLD NATCHEZ TRACE TRL.
CAMDEN, TN 38320
PH. 941-380-1574

DRAWING NO. FPA-451T	PRODUCT TRIFAB 451T
DRAWN BY LT	MULLION DETAILS
DATE 10/22/2020	SHEET 4 OF 5
SCALE NTS	

2023 FBC UPDATE	1	8/17/2023
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PRINTS ISSUED FOR	REV. #	DATE

ITEM	PART NO.	DESCRIPTION	MATERIAL
1	451T-CG-003	HEAD FRAME	6063-T6 ALUM.
2	451T-CG-004	GLASS STOP	6063-T6 ALUM.
3	27-074	GLAZING GASKET	EPDM
4	451T-CG-011	HORIZONTAL FRAME	6063-T6 ALUM.
5	451T-CG-001	SILL/JAMB FRAME, STANDARD MULLION	6063-T6 ALUM.
6	451-VG-572	FRAME RECEPTOR COVER	6063-T6 ALUM.
7	451T-VG-570	FRAME RECEPTOR	6063-T6 ALUM.
8	451-HP-026	HP FLASHING CLIP	6063-T6 ALUM.
9	451T-HP-037	HP FLASHING	6063-T6 ALUM.
10	451T-126	SHIM SUPPORT	6063-T6 ALUM.
11	451T-CG-102	THERMAL SEPARATOR	RIGID PVC
12	451T-CG-102	THERMAL POCKET FILLER HALF	6063-T6 ALUM.
13	451T-CG-001A	MEDIUM WEIGHT MULLION	6063-T6 ALUM.
14	451T-CG-013	HEAVY WEIGHT MULLION	6063-T6 ALUM.
15	451T-CG-010A	HEAVY WT. FEMALE EXP. MULLION HALF	6063-T6 ALUM.
16	451T-CG-540	MALE EXP. MULL HALF	6063-T6 ALUM.
17	451T-CG-071	PIVOT MULLION	6063-T6 ALUM.
18	451T-CG-541	POCKET MULLION	6063-T6 ALUM.
19	065-401	WEATHERING	POLYPROPYLENE
20	27-806	WEATHERING	POLYPROPYLENE
21		#10 X 3/4" FHST SCREW, 6" FROM ENDS, 24" MAX. O.C.	
22	028-856	#12x 1 1/8" PHTF AB	



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NTS

PRODUCT

TRIFAB 451T

BOM, PROFILES

SHEET

5 OF 5

REV. #

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10/22/20

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