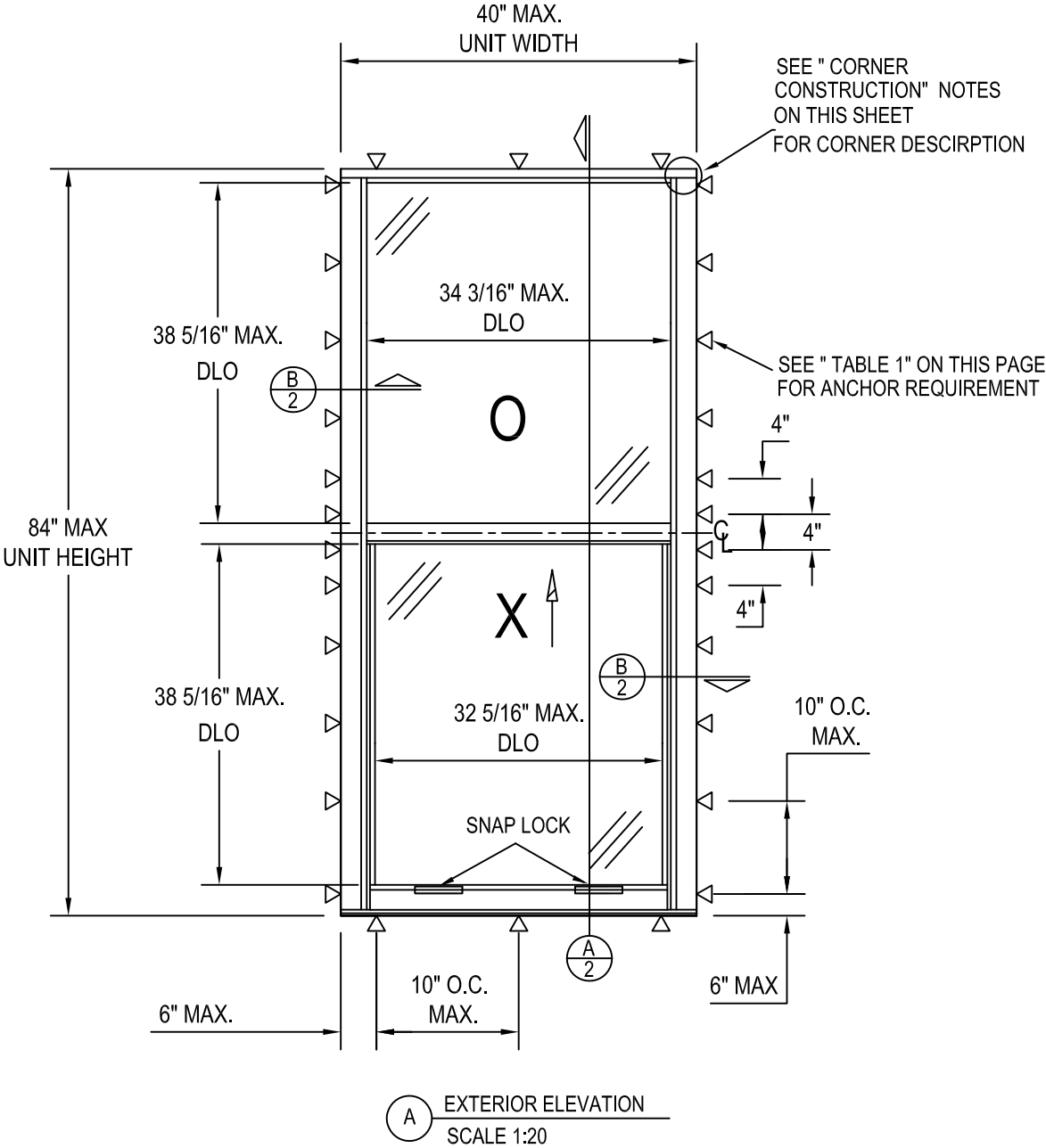


TR 9100 SINGLE HUNG SIDE LOAD I WINDOW (LARGE MISSILE IMPACT)



DESIGN PRESSURE = +80/- 110 PSF

HARDWARE TYPE & LOCATION:

SNAP LOCK - TWO @ 11" FROM EACH END OF BOTTOM RAIL

GENERAL NOTES

1. THIS PRODUCT HAS BEEN TESTED TO TAS 201/202/203-94, AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, CURRENT EDITION, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (IN HVHZ MAY ONLY BE INSTALLED UP TO 30 FT ABOVE GRADE).
2. THIS PRODUCT, FABRICATED, GLAZED, AND ANCHORED AS DETAILED IN THIS DRAWING, IS LARGE MISSILE IMPACT RESISTANT AND DOES NOT REQUIRE THE USE OF SHUTTERS.
3. ALLOWABLE CONFIGURATION: O/X (FIXED LITE OVER SINGLE HUNG VENT)
4. THE DESIGN PRESSURE RATINGS INDICATED IN THIS DRAWING ARE AS LIMITED BY ASTM E-1300 GLASS TABLES, AND TESTED PRESSURES.
5. DISSIMILAR MATERIALS THAT COME INTO CONTACT, INCLUDING BUT NOT LIMITED TO PRESSURE TREATED WOOD BUCKS, SHALL BE COATED OR OTHERWISE PROTECTED TO PREVENT GALVANIC REACTIONS.
6. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER INFILTRATION RESISTANCE SHALL BE THE RESPONSIBILITY OF OTHERS.
7. 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.
8. STRUCTURAL INTEGRITY OF SUBSTRATE MATERIALS TO RECEIVE THE LOADS FROM THIS PRODUCT, AND INSTALLATION OF WOOD BUCKS TO THE SUBSTRATE, TO BE ENGINEERED BY OTHERS OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
9. THIS PRODUCT SHALL BE INSTALLED USING ONE OF THE APPROVED FASTENERS IN TABLE 1 APPROPRIATE FOR THE SUBSTRATE TYPE, AT THE MINIMUM SPACING SHOWN IN THE ELEVATION VIEW ON THIS PAGE. SEE COASTAL COMPLIANCE NOTE, THIS PAGE.
10. MINIMUM ANCHOR EMBEDMENTS LISTED IN TABLE 1 SHALL BE BEYOND WALL DRESSING OR STUCCO AND FULLY INTO SUBSTRATE.
11. SUBSTRATES SHALL MEET THE MINIMUM STRENGTH REQUIREMENTS AS SHOWN IN TABLE 1. 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 THREADS BEYOND.

TABLE 1: INSTALLATION ANCHOR REQUIREMENTS TABLE

ID	SUBSTRATE TYPE	ANCHOR TYPE	MIN. EMBED	MIN. EDGE DIST.
A	CONCRETE (2.0 KSI MIN)	3/16" ITW TAPCON	1"	1 1/8"
B	HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.)	3/16" ITW TAPCON	1"	2"
C	CONCRETE (3.05 KSI MIN.)	3/16" DEWALT ULTRACON+	1-3/4"	1"
D	HOLLOW OR GROUT-FILLED CMU (ASTM C90)	3/16" DEWALT ULTRACON+	1-1/4"	2 1/2"
E	2X MIN. SPRUCE-PINE-FIR WOOD (G=0.42)	3/16" DEWALT ULTRACON+	1-3/8"	1"
F	2X MIN. SPRUCE-PINE-FIR WOOD (G=0.42)	#10 WOOD SCREW	1-3/8"	1"
G	16 GAUGE (0.060") MIN. STEEL STUD 33KSI YIELD MIN.	#10-16 ITW TEKS SELF-DRILLING SCREW	SEE NOTE 11	1/2"
H	1/8" ALUM. 6063-T5 MIN. OR 1/8" STEEL 36 KSI MIN.	#10 GRADE 5 SELF-TAPPING/ DRILLING SCREW	SEE NOTE 11	1/2"

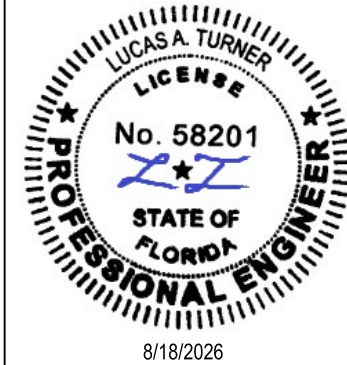
INSTALL ONE ANCHOR PER LOCATION INDICATED IN ELEVATION VIEW

CORNER CONSTRUCTION:

FRAME: HORIZONTAL HEAD AND SILL MEMBERS RUN THROUGH. VERTICAL MEMBERS ARE COPED AND FASTENED TO HORIZONTAL MEMBERS USING (2) #8-18-1" PPH-LP STAINLESS STEEL FASTENERS AT EACH JOINT. KEEPER RAIL IS COPED AND FASTENED TO EACH JAMB USING (2) #8-18 X 1" PPH - LP STAINLESS STEEL FASTENERS AT EACH JOINT. JOINTS ARE SEALED WITH SEALANT.

SASH: VERTICAL MEMBERS RUN THROUGH. HORIZONTAL MEMBERS ARE COPED AND FASTENED TO VERTICAL MEMBERS USING (2) #8-18 X 1" PPH-LP STAINLESS STEEL FASTENERS AT EACH JOINT. JOINTS ARE SEALED WITH SEALANT.

Lucas Turner
2026.08.18
16:16:10 -05'00'



LUCAS A. TURNER, FL P.E. #58201
TURNER ENGINEERING & CONSULTING, INC.
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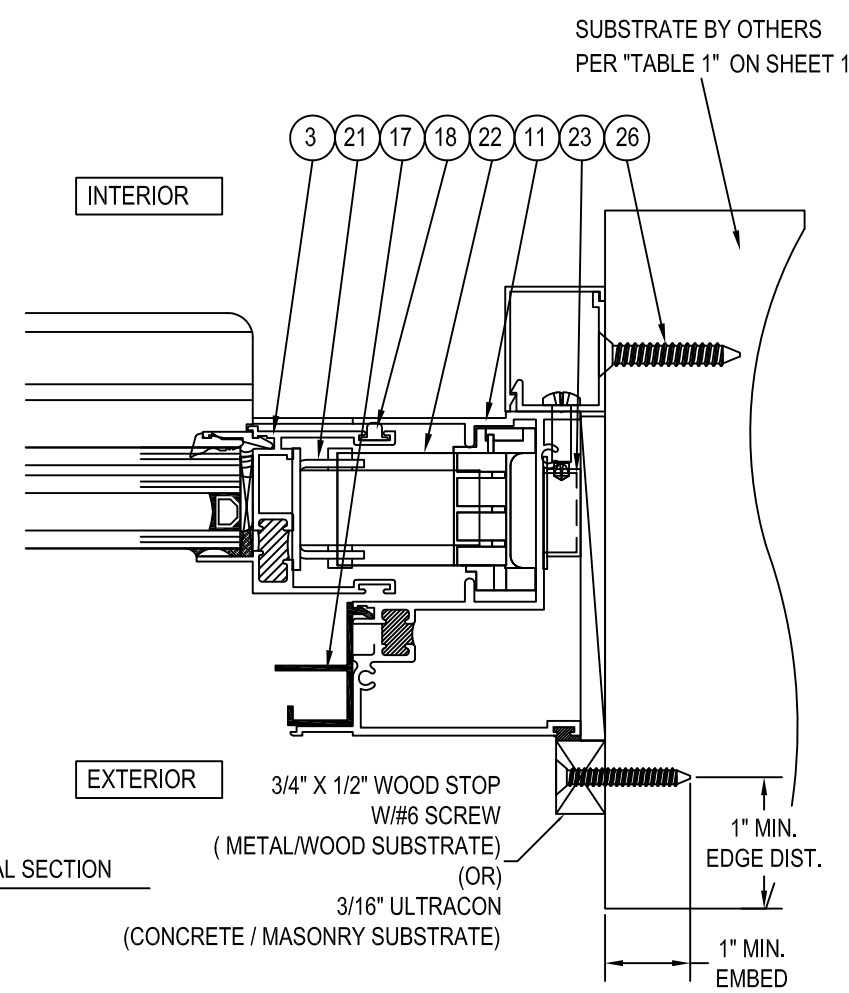
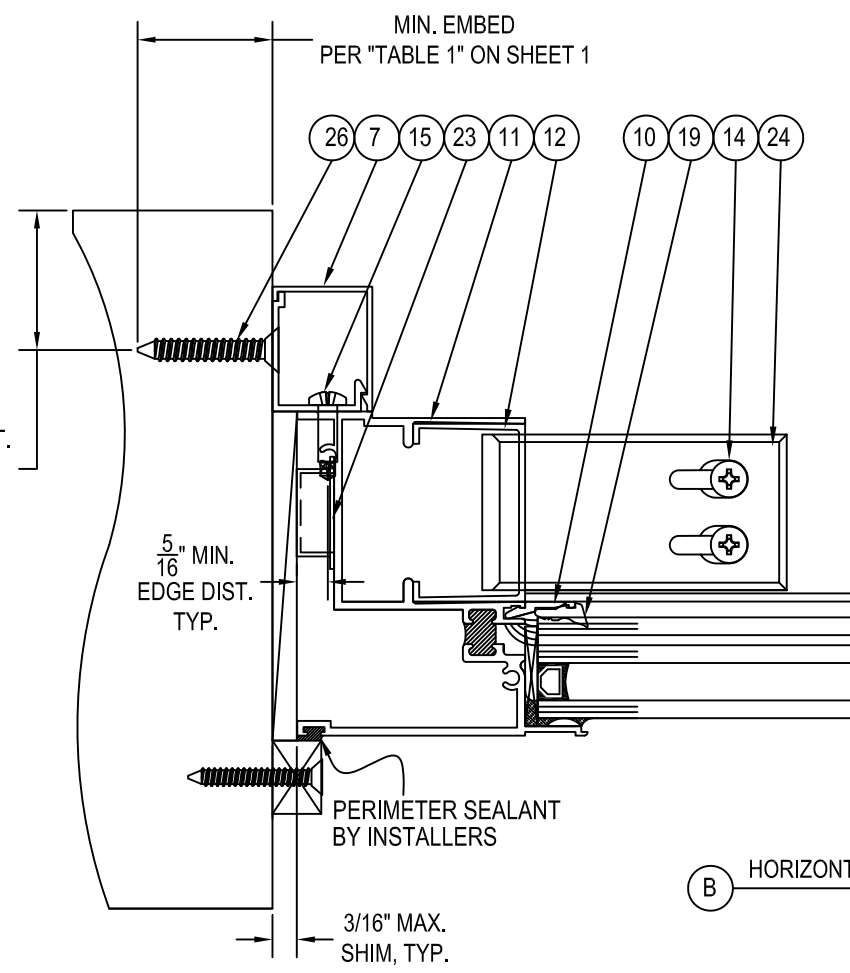
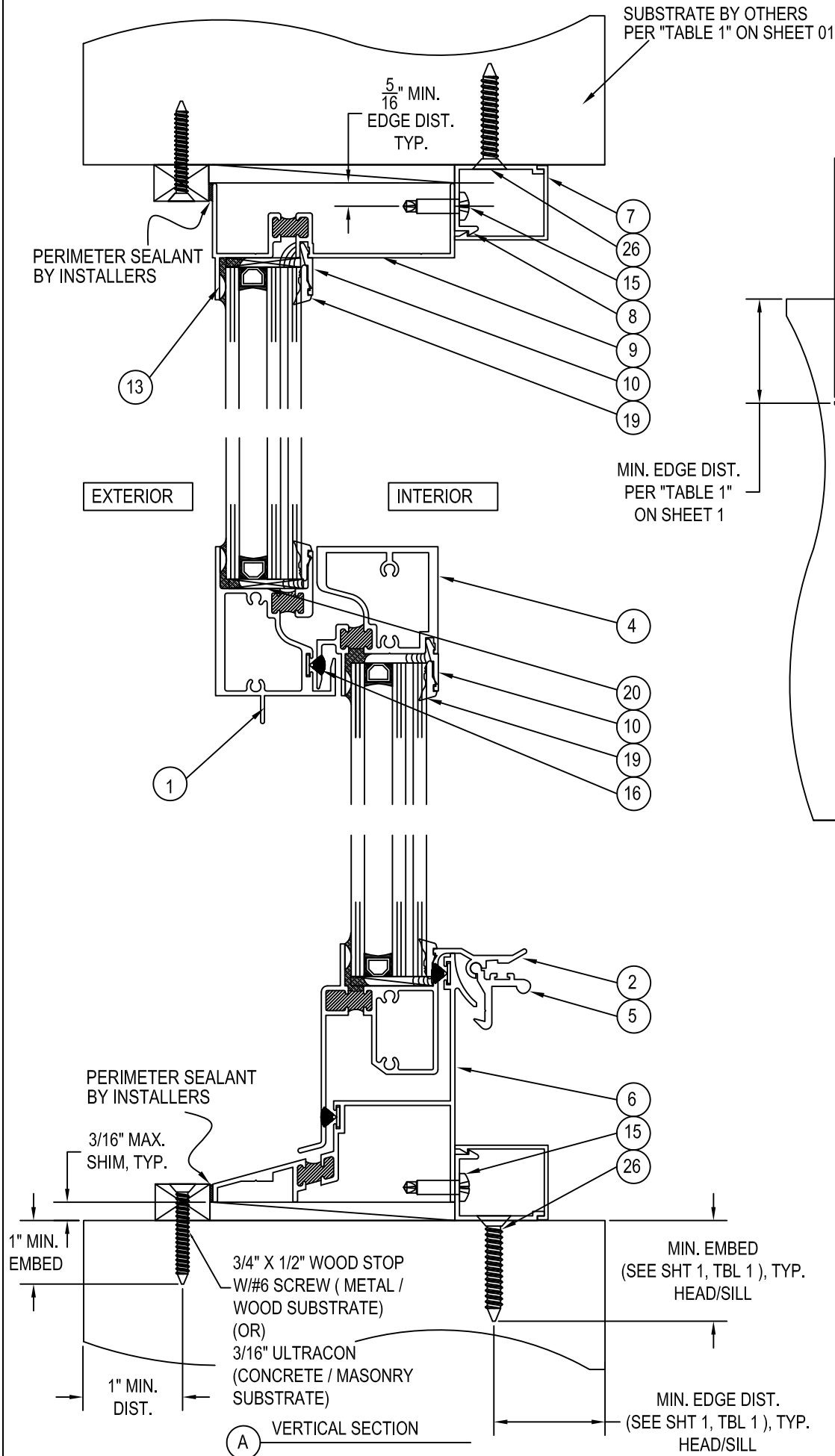
TRACO
A DIVISION OF KAWNEER

71 PROGRESS AVENUE
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PHONE (724) 776-7000
FAX (724) 776-7114

TR 9100 SINGLE HUNG SIDE LOAD I WINDOW
LARGE MISSILE IMPACT

SCALE: 1/20

DRAWN BY YSE	DATE 03/22/12
SHEET 1 OF 3	
I-LM9100-001	
I-LM9100-001	



GLAZING NOTE: 1" INSULATED GLASS UNIT CONSISTING OF 3/16" HEAT STRENGTHENED LITE (EXTERIOR), METAL SPACER 3/8" NOMINAL (0.312" ACTUAL), AND 7/16" LAMINATED LITE (INTERIOR) CONSISTED OF (2) 3/16" HEAT STRENGTHENED LITES WITH A 0.10 EASTMAN (SOLUTIA) SAFLEX HP PVB INTERLAYER

REV.	DATE	DESCRIPTION	BY
E.C. NO.	XXXX-XX	XX/XX/XX	

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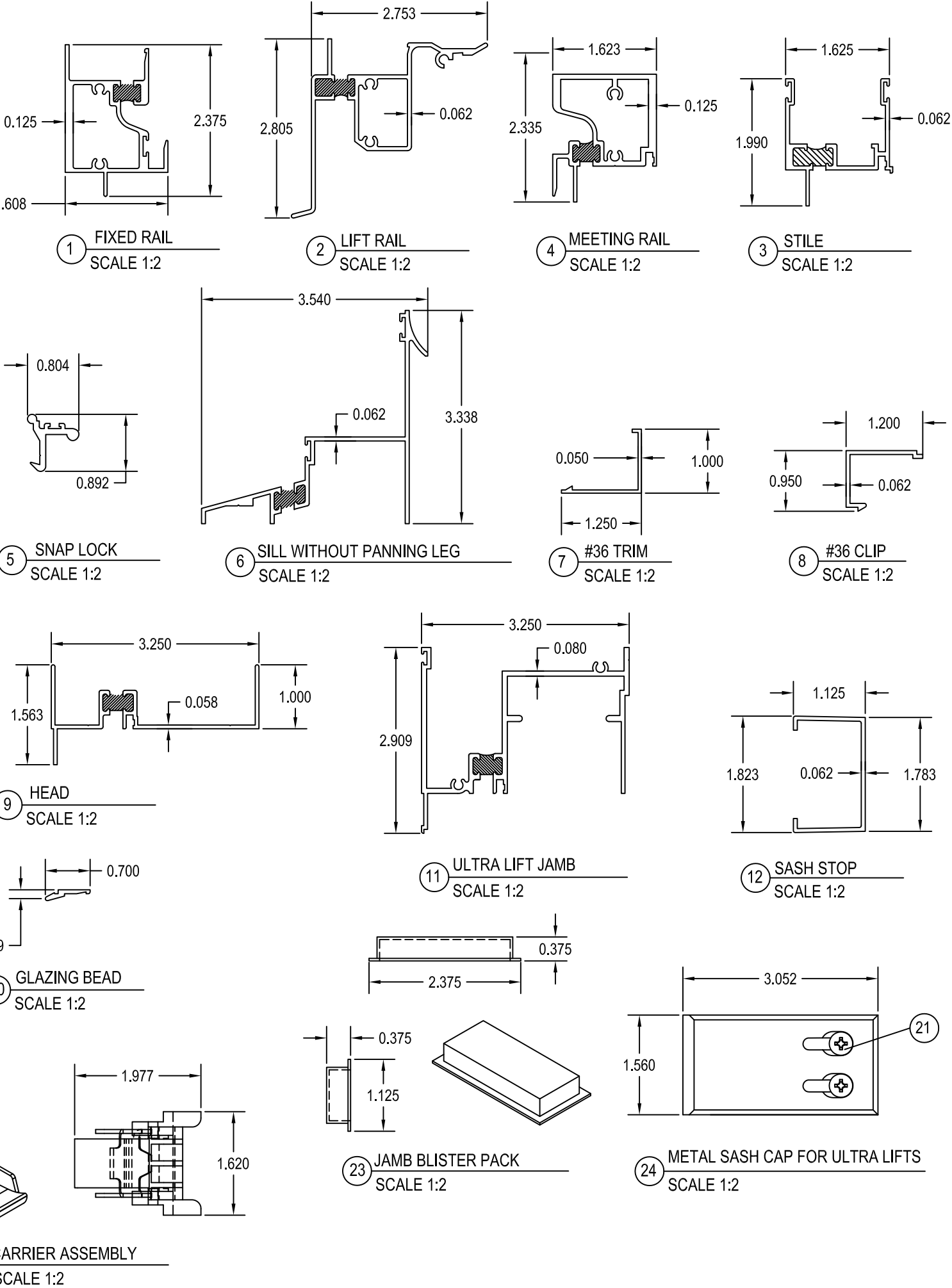
71 PROGRESS AVENUE CRANBURY TOWNSHIP, PA 16066 PHONE (724) 776-7000 FAX (724) 776-7114	TR 9100 SINGLE HUNG SIDE LOAD WINDOW LARGE MISSILE IMPACT	DRAWN BY YSE	DATE 03/22/12
		SHEET 2 OF 3	

I-LM9100-002

SCALE: NONE

MATERIAL PARTS LIST

ITEM#	PART #	DESCRIPTION	MATERIAL
EXTRUSIONS			
1	H-1403	FIXED RAIL	6063-T6 ALUMINUM
2	H-2213	LIFT RAIL	6063-T6 ALUMINUM
3	S-1406	STILE	6063-T6 ALUMINUM
4	H1404	MEETING RAIL	6063-T6 ALUMINUM
5	S-1628	SNAP LOCK	6063-T6 ALUMINUM
6	S-1676	SILL WITHOUT PANNING LEG	6063-T6 ALUMINUM
7	S-1649	#36 TRIM	6063-T6 ALUMINUM
8	S-1648	#36 CLIP	6063-T6 ALUMINUM
9	S-2274	HEAD	6063-T6 ALUMINUM
10	S-1407	GLAZING BEAD	6063-T6 ALUMINUM
11	S-2276	ULTRA LIFT JAMB	6063-T6 ALUMINUM
12	S-2123	SASH STOP FOR "ULTRA LIFT" JAMB	6063-T6 ALUMINUM
HARDWARE, GASKET AND MISC. PARTS			
13	30-3774	0.62" BUMP ON	POLYURETHEN
14	15-0365	#10-24x3/8" PFH "F" SS	410 STAINLESS STEEL
15	15-0073	#10-16 x 3/4 PPH TEK 410SS	410 STAINLESS STEEL
16	20-7002	0.250 X 0.270 WEATHERSTRIP	FINSEAL WEATHERSTRIP
17	20-0088	VINYL SCREEN TRACK	RIGID PVC
18	20-0620	WEATHERSTRIP SPACER	RIGID VINYL
19	20-4132	INTERIOR WEDGE GASKET	EPDM RUBBER
20	20-6031	1/8"x1"x2" SETTING BLOCK	EPDM
21	30-3713	SIDE LOAD BRACKET ASSEMBLY	ALUMINUM / STAINLESS STEEL
22	30-3712	CARRIER ASSEMBLY	ALUMINUM/STAINLESS STEEL/ NYLON
23	30-2208	JAMB BLISTER PACK	CLEAR PVC
24	30-2982	METAL SASH CAP FOR ULTRA LIFTS	6063-T6 ALUMINUM
25	30-3276	5/16" LPX MILL SPACER PI 192" BY ALLMETAL	UNS A93105 ALUMINUM
26	-	ANCHOR (PER TABLE 1)	-



REV.	DATE	DESCRIPTION	BY
E.C. NO.	xxxx-xx	XX/XX/XX	

LUCAS A. TURNER
LICENSE
No. 58201
STATE OF FLORIDA
PROFESSIONAL ENGINEER
8/18/2026

LUCAS A. TURNER, FL P.E. #58201
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TR 9100 SINGLE HUNG SIDE LOAD WINDOW
LARGE MISSILE IMPACT

SCALE: NONE

DRAWN BY	YSE	DATE	03/22/12
DRWG. NO.	I-LM9100-003		
SHEET	3 OF 3		
	I-LM9100-003		