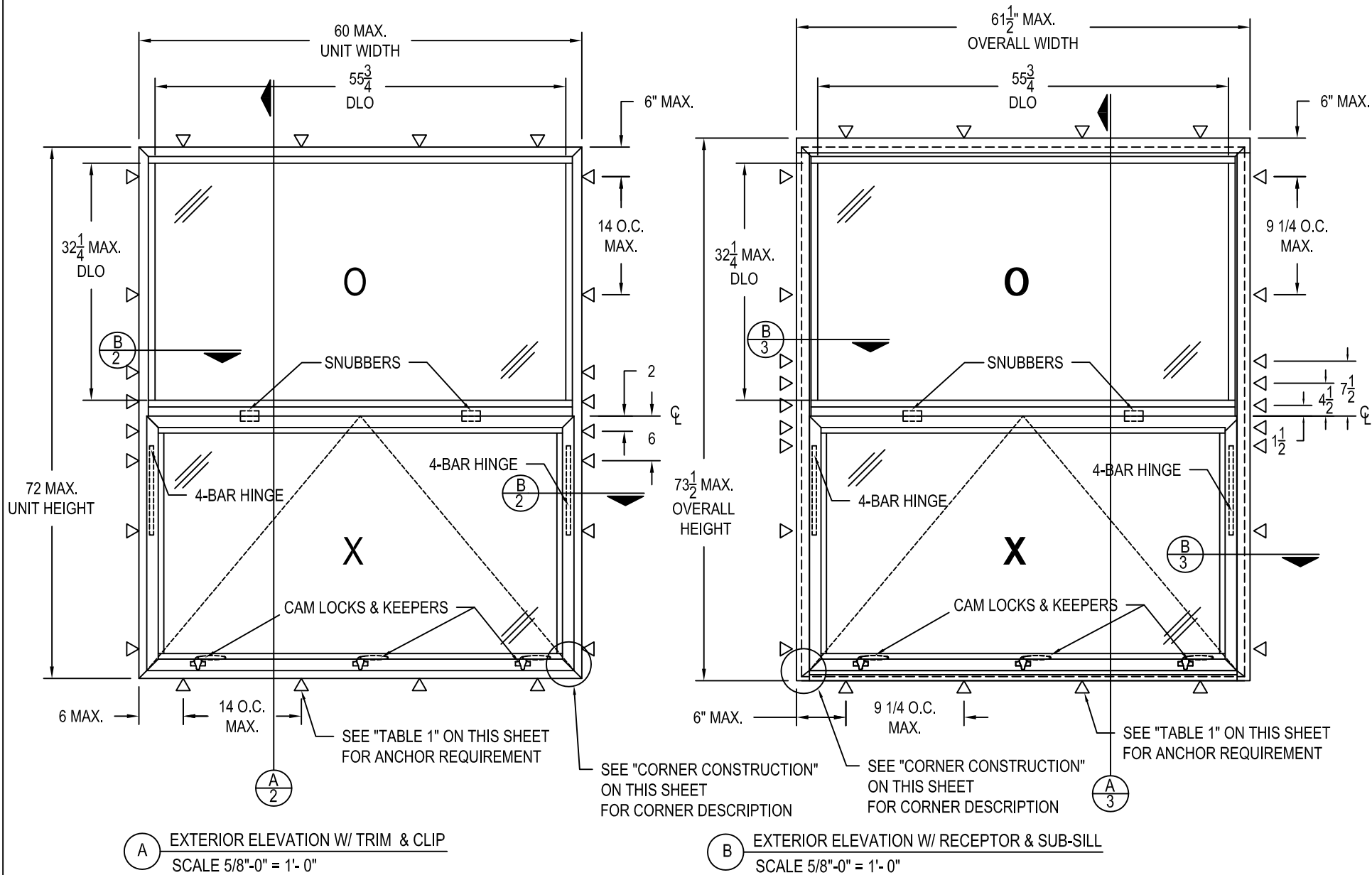


# NX3510 - FIXED/PROJECTED WINDOW (LARGE MISSILE IMPACT)



## 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 PROJECT-OUT 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.
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.

DESIGN PRESSURE FOR TRIM & CLIP  
**+100/- 100 PSF**

DESIGN PRESSURE FOR RECEPTOR & SUBSILL  
**+95/- 95 PSF**

## HARDWARE TYPE & LOCATIONS

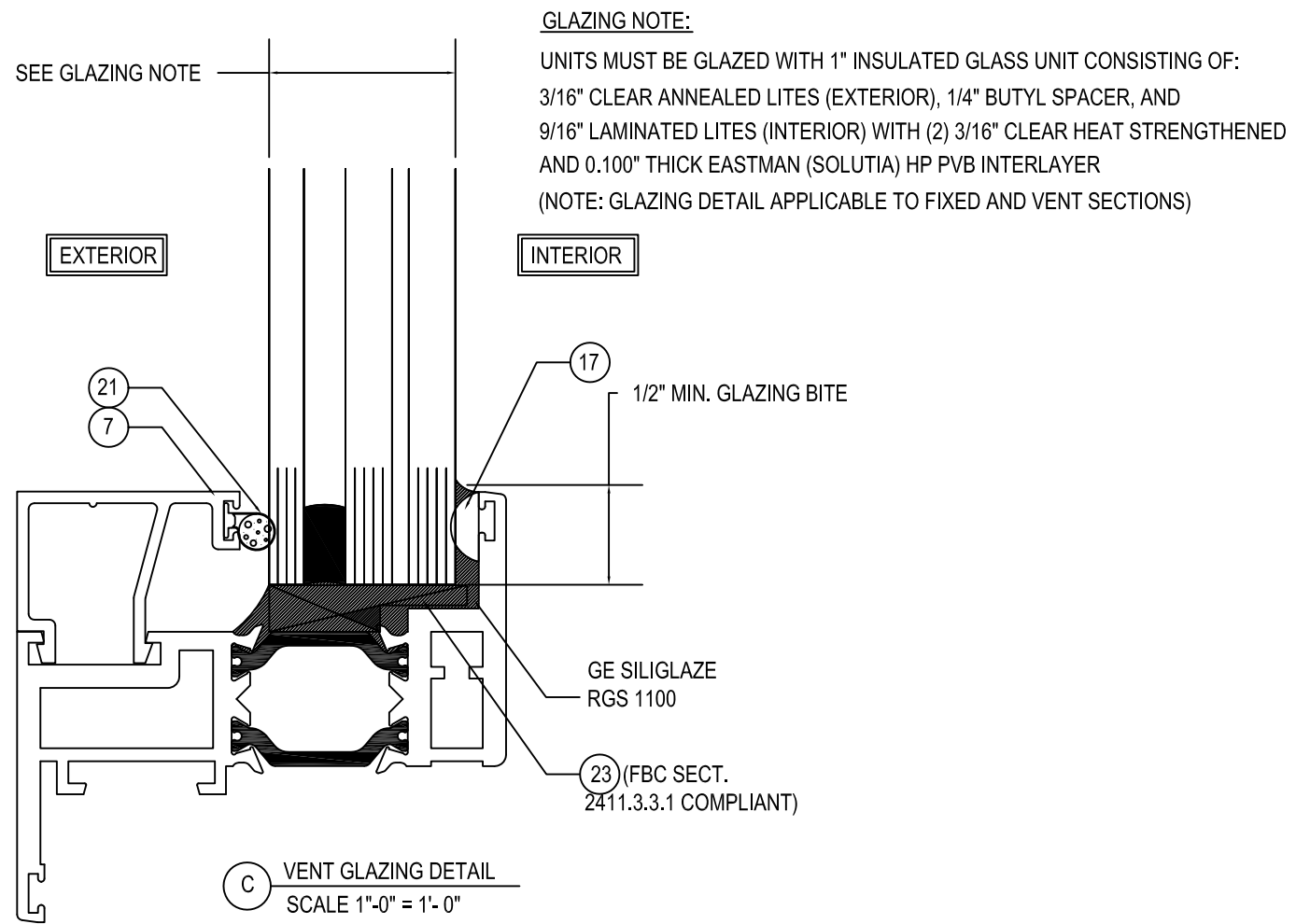
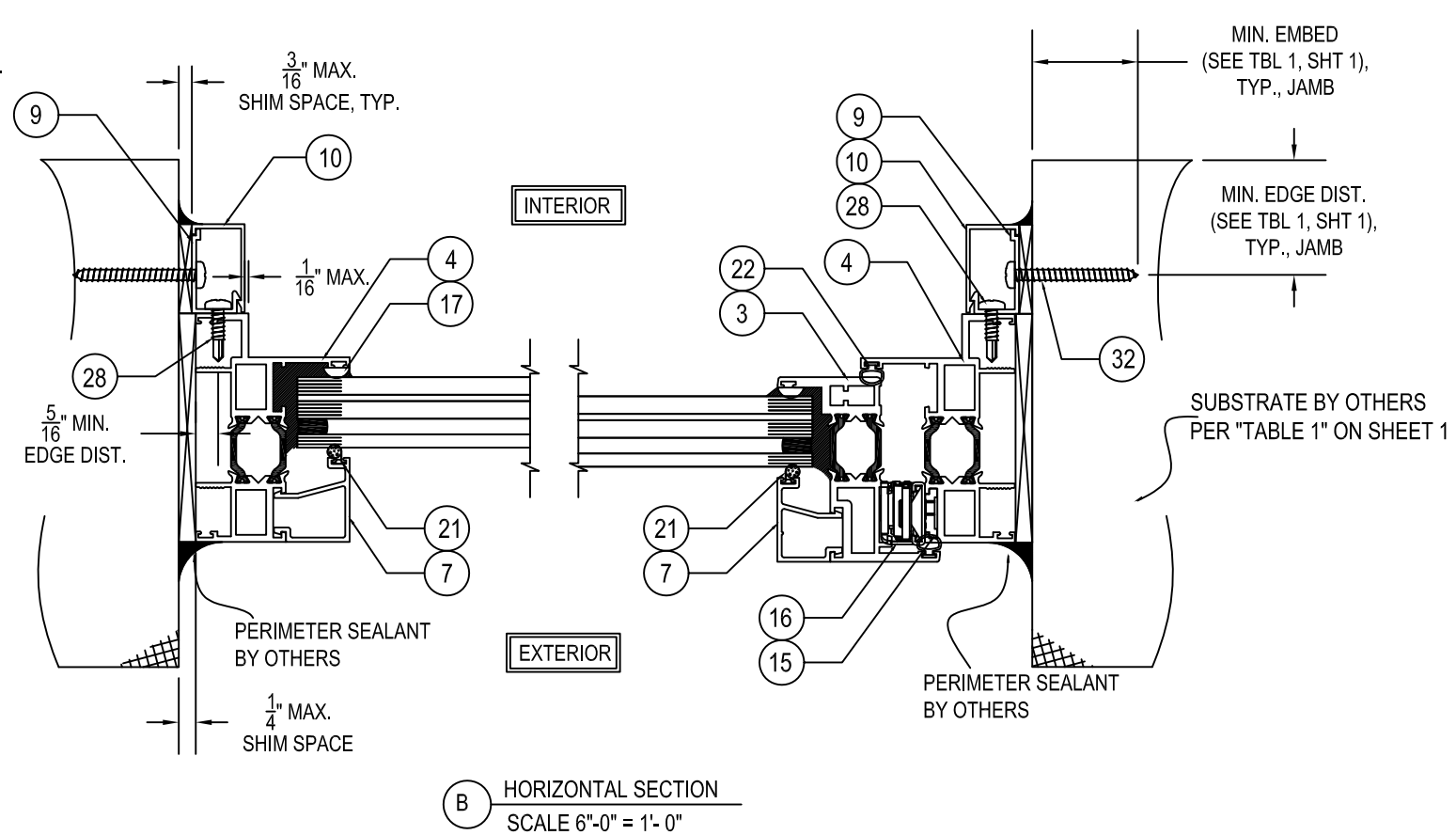
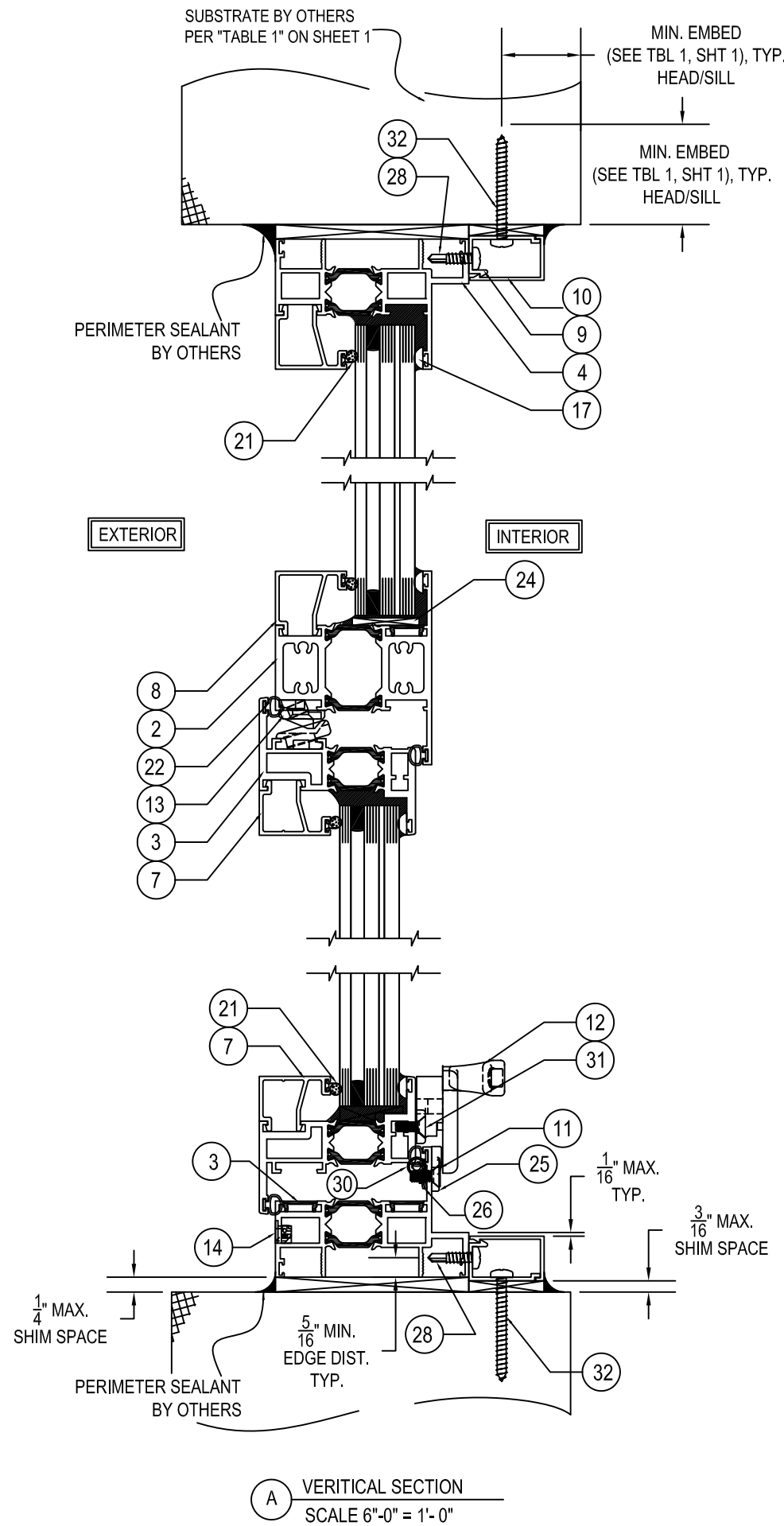
CAMLOCK & KEEPER (ITEM #12 & 11) , TWO @ 8" FROM EACH END AND ONE @ MID-SPAN OF BOTTOM RAIL  
4-BAR HINGES (ITEM #16), ONE EACH @ JAMB & STILE  
SNUBBERS (ITEM #13), TWO @ 15" FROM EACH END OF HEAD/TOP RAIL

## CORNER CONSTRUCTION:

**FRAME:** VERTICAL AND HORIZONTAL MEMBERS ARE MITERED AND JOINED TOGETHER WITH CORNER KEYS, CRIMPED AND SEALED WITH SEALANT.  
**VENT:** VERTICAL AND HORIZONTAL MEMBERS ARE MITERED AND JOINED TOGETHER WITH CORNER KEYS, CRIMPED AND SEALED WITH SEALANT.  
**RECEPTOR:** RECEPTOR HEAD RUNS THROUGH. VERTICAL JAMB RECEPTORS ARE SQUARED CUT AND BUTTED TO HEAD RECEPTOR. .  
JOINTS ARE SEALED WITH SEALANT  
**RECEPTOR - SUBSILL:** VERTICAL JAMB RECEPTORS RUN THROUGH. HORIZONTAL SUB-SILL IS SQUARED CUT AND BUTTED TO JAMB RECEPTORS.  
JOINTS ARE SEALED WITH SEALANT.

| TABLE 1: INSTALLATION ANCHOR REQUIREMENTS TABLE             |                                                    |                                          |             |                 |
|-------------------------------------------------------------|----------------------------------------------------|------------------------------------------|-------------|-----------------|
| ID                                                          | SUBSTRATE TYPE                                     | ANCHOR TYPE                              | MIN. EMBED  | MIN. EDGE DIST. |
| A                                                           | CONCRETE (2.0 KSI MIN)                             | 1/4" ITW TAPCON                          | 1 1/2"      | 1 1/2"          |
| B                                                           | HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.)          | 1/4 ITW TAPCON                           | 1"          | 4"              |
| C                                                           | CONCRETE (3.05 KSI MIN.)                           | 1/4" DEWALT ULTRACON+                    | 1-3/4"      | 2 1/2"          |
| D                                                           | HOLLOW OR GROUT-FILLED CMU (ASTM C90)              | 1/4" DEWALT ULTRACON+                    | 1-1/4"      | 2 1/2"          |
| E                                                           | 2X MIN. SPRUCE-PINE-FIR WOOD (G=0.42)              | 1/4" DEWALT ULTRACON+                    | 1-3/8"      | 1"              |
| F                                                           | 2X MIN. SPRUCE-PINE-FIR WOOD (G=0.42)              | #12 WOOD SCREW                           | 1-3/8"      | 1"              |
| G                                                           | 16 GAUGE (0.060") MIN. STEEL STUD 33KSI YIELD MIN. | #12-24 ITW TEKS SELF-DRILLING SCREW      | SEE NOTE 11 | 1/2"            |
| H                                                           | 1/8" ALUM. 6063-T5 MIN. OR 1/8" STEEL 36 KSI MIN.  | #12 GRADE 5 SELF-TAPPING/ DRILLING SCREW | SEE NOTE 11 | 1/2"            |
| INSTALL ONE ANCHOR PER LOCATION INDICATED IN ELEVATION VIEW |                                                    |                                          |             |                 |

| REV.                                                                                                                                                                                                                                                                                                    | DATE | DESCRIPTION      | BY |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|----|
|                                                                                                                                                                                                                                                                                                         |      |                  |    |
|                                                                                                                                                                                                                                                                                                         |      |                  |    |
|                                                                                                                                                                                                                                                                                                         |      |                  |    |
| E.C. NO.      XXXX-XX      XX/XX/XX                                                                                                                                                                                                                                                                     |      |                  |    |
| <div></div>                                                                                                                                                                                                          |      |                  |    |
| 8/17/2023                                                                                                                                                                                                                                                                                               |      |                  |    |
| LUCAS A. TURNER, FL P.E. #58201<br>TURNER ENGINEERING & CONSULTING, INC.<br>2428 OLD NATCHEZ TRACE TRAIL<br>CAMDEN, TN 38320<br>PH. 941-380-1574                                                                                                                                                        |      |                  |    |
| Lucas Turner<br>2023.08.17<br>21:04:16<br>-05'00'                                                                                                                                                                                                                                                       |      |                  |    |
| <div><div><div><div>71 PROGRESS AVENUE<br/>CRANBURY TOWNSHIP, PA 16066<br/>PHONE (724) 776-7000<br/>FAX (724) 776-7114</div><div>NX-3510 - FIXED/PROJECTED WINDOW<br/>LARGE MISSILE IMPACT</div></div></div></div> |      |                  |    |
| DRAWN BY<br>YSE                                                                                                                                                                                                                                                                                         |      | DATE<br>06/15/12 |    |
| DRWG. NO.<br>I-LMNX3510-001                                                                                                                                                                                                                                                                             |      |                  |    |
| SHEET<br>1 OF 04                                                                                                                                                                                                                                                                                        |      | SCALE: NONE      |    |



**GLAZING NOTE:**  
UNITS MUST BE GLAZED WITH 1" INSULATED GLASS UNIT CONSISTING OF:  
3/16" CLEAR ANNEALED LITES (EXTERIOR), 1/4" BUTYL SPACER, AND  
9/16" LAMINATED LITES (INTERIOR) WITH (2) 3/16" CLEAR HEAT STRENGTHENED  
AND 0.100" THICK EASTMAN (SOLUTIA) HP PVB INTERLAYER  
(NOTE: GLAZING DETAIL APPLICABLE TO FIXED AND VENT SECTIONS)

| REV. | DATE | DESCRIPTION | BY |
|------|------|-------------|----|
|      |      |             |    |
|      |      |             |    |
|      |      |             |    |

E.C. NO.      XXXXX-XX      XX/XX/XX

8/17/2023

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

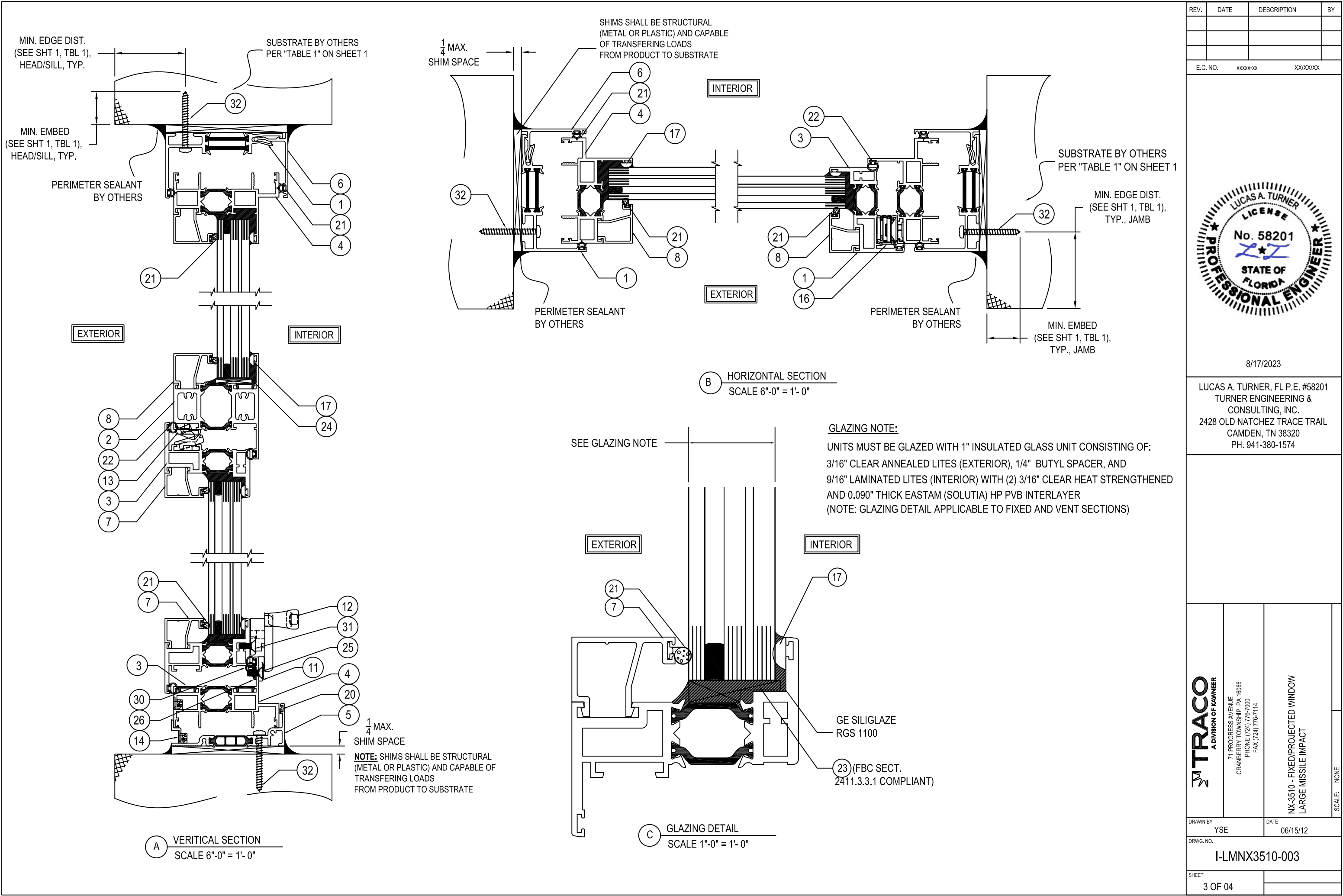
**TRACO**  
A DIVISION OF KAWNEER

71 PROGRESS AVENUE  
CRANBURY TOWNSHIP, PA 16066  
PHONE (724) 776-7000  
FAX (724) 776-7114

NX-3510 - FIXED/PROJECTED WINDOW  
LARGE MISSILE IMPACT

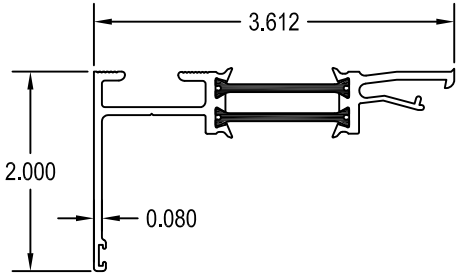
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|                            |                  |
|----------------------------|------------------|
| DRAWN BY<br>YSE            | DATE<br>05/15/12 |
| DRWG. NO.<br>I-LMN3510-002 |                  |
| SHEET<br>2 OF 04           |                  |

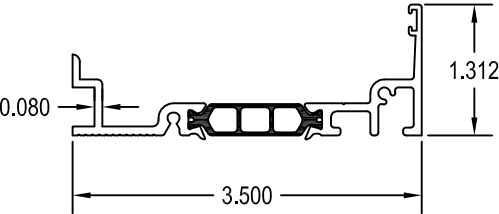


MATERIAL PARTS LIST

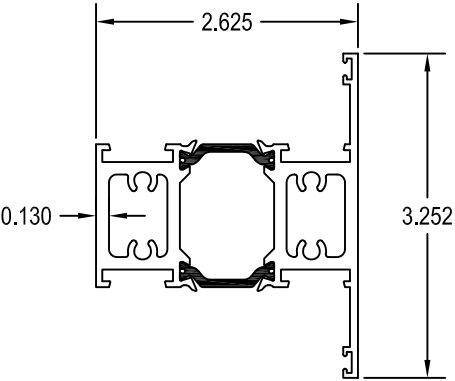
| ITEM#                          | PART #     | DESCRIPTION                                             | MATERIAL                                                                 |
|--------------------------------|------------|---------------------------------------------------------|--------------------------------------------------------------------------|
| EXTRUSIONS                     |            |                                                         |                                                                          |
| 1                              | IF-1151    | 2" x 3 1/4" RECEPTOR                                    | 6063-T6 ALUMINUM                                                         |
| 2                              | IF-1110    | HORIZONTAL "T" MULLION - PROJECT OUT                    | 6063-T6 ALUMINUM                                                         |
| 3                              | IF-1108    | PROJECT OUT VENT RAIL                                   | 6063-T6 ALUMINUM                                                         |
| 4                              | IF-1105    | PROJECT OUT MASTER FRAME - 3 1/4"                       | 6063-T6 ALUMINUM                                                         |
| 5                              | IF- 0120   | NX-300 SUB-SILL ASSEMBLY                                | 6063-T6 ALUMINUM                                                         |
| 6                              | S- 071     | 1 1/4" X 3 1/4" NX RECEPTOR - INTERIOR                  | 6063-T6 ALUMINUM                                                         |
| 7                              | S-4946     | GLAZING BEAD - VENT                                     | 6063-T6 ALUMINUM                                                         |
| 8                              | S-4945     | GLAZING BEAD - FIXED                                    | 6063-T6 ALUMINUM                                                         |
| 9                              | S-018      | #5 CLIP                                                 | 6063-T6 ALUMINUM                                                         |
| 10                             | S-017      | #5 TRIM                                                 | 6063-T6 ALUMINUM                                                         |
| HARDWARE, GASKET & MISC. PARTS |            |                                                         |                                                                          |
| 11                             | 30-4270    | PROJECT OUT SWEEP LATCH KEEPER                          | WHITE BRONZE                                                             |
| 12                             | 30-4266    | PROJECT OUT CAM LOCK, RH                                | WHITE BRONZE                                                             |
| 13                             | 30-3709    | SNUBBER KIT                                             | CAST ZINC                                                                |
| 14                             | 30-3886    | WEEP COVER                                              | NYLON 69                                                                 |
| 15                             | 30-3689    | SHIM FOR 11" 4-BAR HINGE                                | STAINLESS STEEL                                                          |
| 16                             | 30-3640    | 11" 4-BAR HINGE PROJECTED                               | STAINLESS STEEL                                                          |
| 17                             | 30-3086    | 0.150" BUMPON                                           | POLYURETHANE                                                             |
| 18                             | 20-0730-16 | EURO GROOVE FILLER                                      | PVC                                                                      |
| 19                             | 20-4069    | 0.275" DIA OFFSET BULB                                  | FOAM-TITE BULB                                                           |
| 20                             | 20-4163    | STRIP SEAL GASKET                                       | BULB TO BE TPE/SANTOPRENE<br>BACKING TO BE RIGID POLYPROPYLENE           |
| 21                             | 20-4164    | BULB VINYL                                              | BULB TO BE TPE/SANTOPRENE<br>BACKING TO BE RIGID POLYPROPYLENE           |
| 22                             | 20-4258    | FRAME / VENT GASKET                                     | BULB TO BE 60 DUROMETER BLACK ALCRYN<br>BACKING TO BE 60 SHORE - D - PVC |
| 23                             | 20-6079    | OFFSET SETTING BLOCK                                    | RUBBER POLYMER                                                           |
| 24                             | 20-6111    | 1/8" X 1 1/8" X 4" SETTING BLOCK                        | 100% SILICONE                                                            |
| 25                             | 15-0066    | #10-24 X 1/2" PFH "MS" 18-8 SS                          | 18-8 STAINLESS STEEL                                                     |
| 26                             | 15-0067    | #10-24 P-M NUT                                          | 100% SILICONE                                                            |
| 27                             | 15-0043    | #10-12 X 1 1/2" PPH "A" 410 SS                          | 410 STAINLESS STEEL                                                      |
| 28                             | 15-0073    | #10-16 X 3/4" PPH "TEK" 410 SS                          | 410 STAINLESS STEEL                                                      |
| 29                             | 15-0367    | #10-16 X 1 1/4" PPH "LP" SS                             | 410 STAINLESS STEEL                                                      |
| 30                             | 15-0501    | #8-32 AK SERIES THREADED INSERT                         | 410 STAINLESS STEEL                                                      |
| 31                             | 15-0555    | #8-32 X 1/2" PFH "MS" 18-8 SS<br>W/ # 10 HEAD & LOCTITE | 18-8 STAINLESS STEEL                                                     |
| 32                             | -          | ANCHOR (PER TABLE 1 ON SHEET 1)                         | PER TABLE 1                                                              |



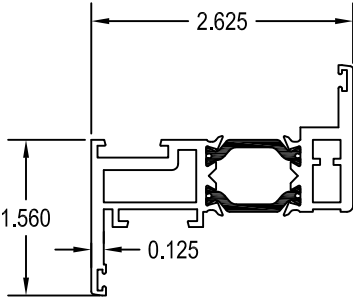
1 2" x 3 1/4" RECEPTOR  
SCALE 1:2



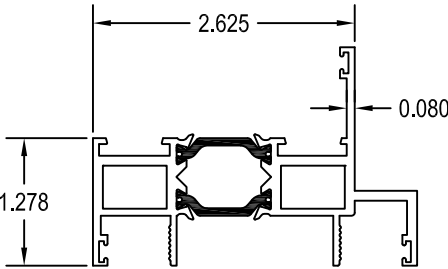
5 NX-300 SUB-SILL ASSEMBLY  
SCALE 1:2



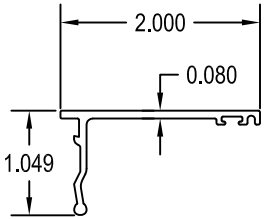
2 HORIZONTAL "T" MULLION - PROJECT OUT  
SCALE 1:2



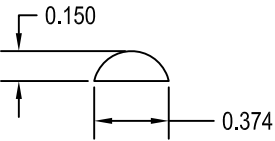
3 PROJECT OUT VENT RAIL  
SCALE 1:2



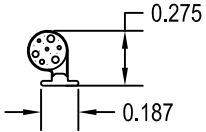
4 PROJECT OUT MASTER FRAME - 3 1/4"  
SCALE 1:2



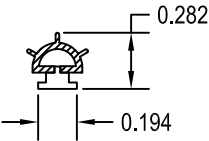
6 1 1/4" X 3 1/4" NX RECEPTOR - INTERIOR  
SCALE 1:2



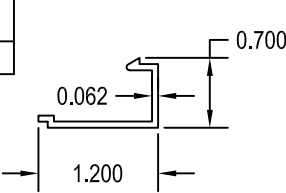
17 0.150" BUMPON  
SCALE 1:1



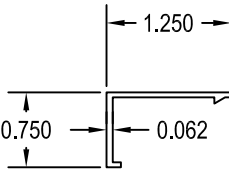
19 0.275" DIA OFFSET BULB  
SCALE 1:1



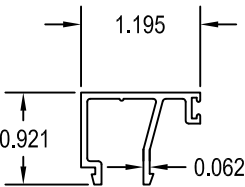
21 BULB VINYL  
SCALE 1:1



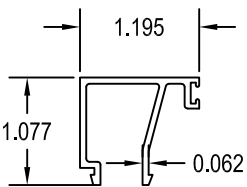
9 #5 CLIP  
SCALE 1:2



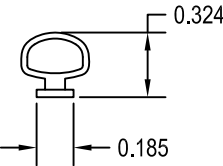
10 #5 TRIM  
SCALE 1:2



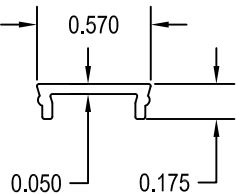
7 GLAZING BEAD - VENT  
SCALE 1:2



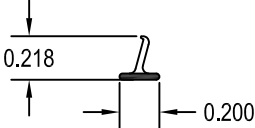
8 GLAZING BEAD - FIXED  
SCALE 1:2



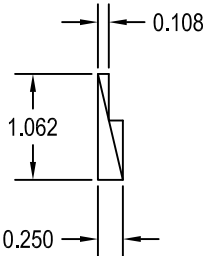
22 FRAME / VENT GASKET  
SCALE 1:1



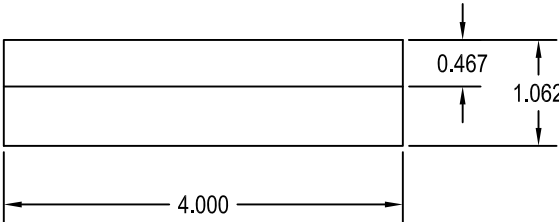
18 EURO GROOVE FILLER  
SCALE 1:1



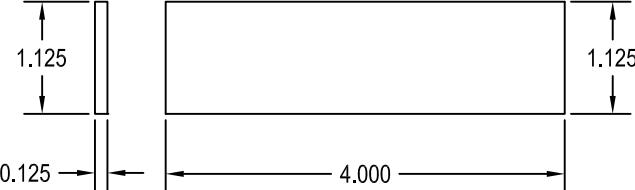
20 STRIP SEAL GASKET  
SCALE 1:1



23 OFFSET SETTING BLOCK  
SCALE 1:2



24 1/8" X 1 1/8" X 4" SETTING BLOCK  
SCALE 1:2



REV.

DATE

DESCRIPTION

BY

E.C. NO.

XXXX-XX

XX/XX/XX

LUCAS A. TURNER

LICENSE

No. 58201

STATE OF FLORIDA

PROFESSIONAL ENGINEER

8/17/2023

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

TRACO

A DIVISION OF KAWNEER

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PHONE (724) 776-7000  
FAX (724) 776-7114

NX-3510 FIXED/PROJECTED WINDOW  
LARGE MISSILE IMPACT

SCALE: NONE

DRAWN BY

YSE

DATE

06/18/12

DRWG. NO.

I-LMN3510-004

SHEET

4 OF 04