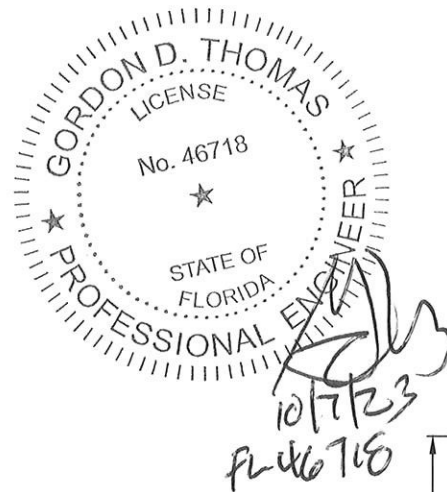
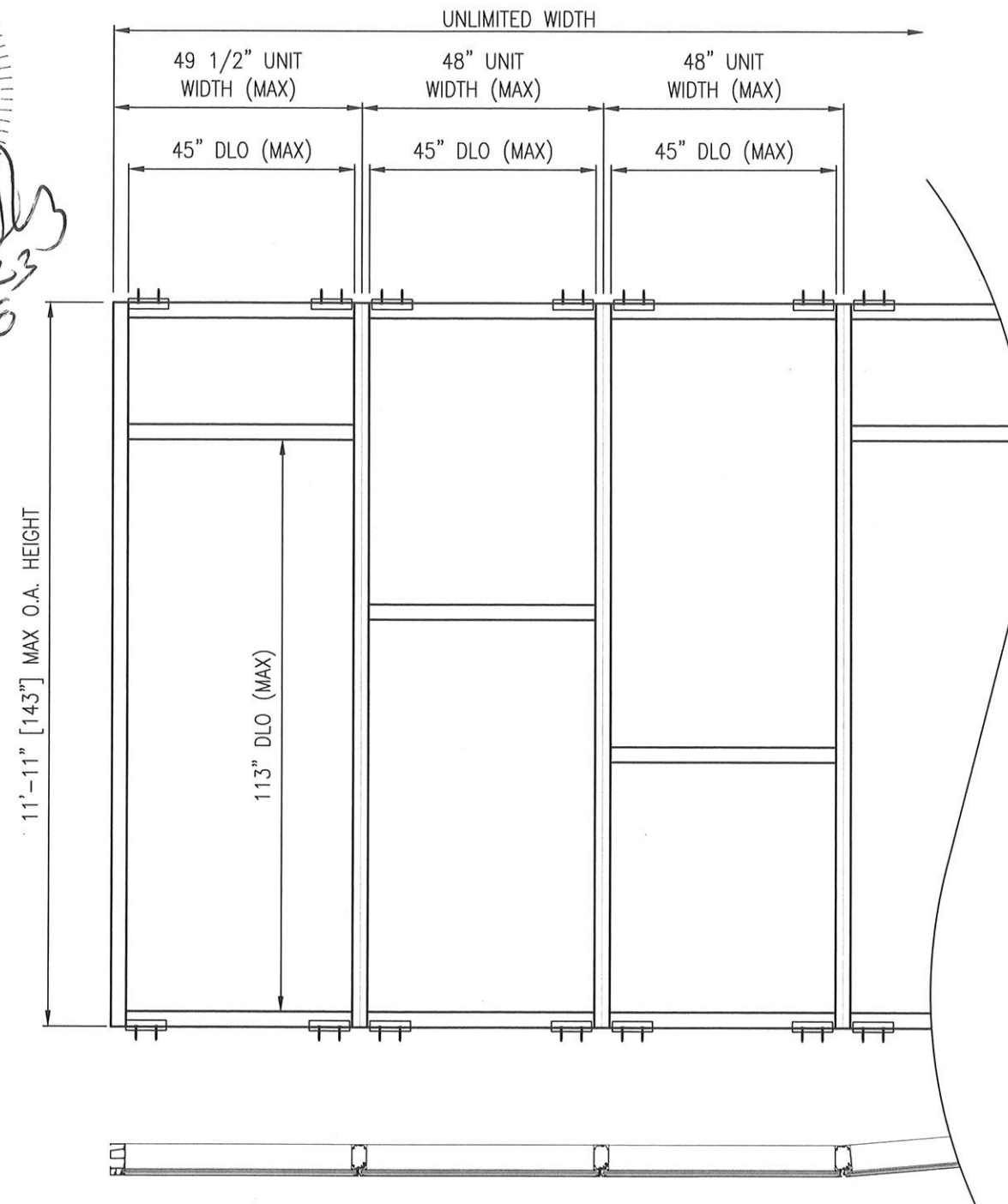


THERMALLY BROKEN  
"SMALL MISSILE IMPACT"



1. This product has been evaluated and is in compliance with the 8th Edition (2023) Florida Building Code structural requirements including the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. When used in "HVHZ" this product complies with Section 1626 of the Florida Building Code and does not require an impact resistant covering when installed greater than 30 feet above grade.
4. When used in areas outside of the "HVHZ" requiring wind borne debris protection this product complies with Section 1609.1.2 of the 2020 FBC and does not require an impact resistant covering when installed greater than 30 feet above grade.
5. When installed 30 feet or less above grade in areas requiring wind borne debris protection, this product must be protected with an impact resistant cover that complies with Section 1609.1.2 of the FBC
6. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
7. This product meets water infiltration requirements for "HVHZ".



| INDEX TO DRAWINGS |                                               |
|-------------------|-----------------------------------------------|
| SHEET #           | DESCRIPTION                                   |
| 1                 | GENERAL NOTES, ELEVATION AND DESIGN PRESSURES |
| 2                 | ELEVATION - CAPTURED/REINFORCED               |
| 3                 | ELEVATION - CAPTURED/NON-REINFORCED           |
| 4                 | ELEVATION - BUTT-GLAZED/REINFORCED            |
| 5                 | ELEVATION - BUTT-GLAZED/NON-REINFORCED        |
| 6                 | HORIZONTAL DETAILS                            |
| 7                 | VERTICAL DETAILS                              |
| 8                 | VERTICAL DETAILS                              |
| 9                 | ANCHORS AND GLAZING                           |
| 10                | COMPONENTS                                    |
| 11                | COMPONENTS AND BILL OF MATERIALS              |

| 650WS WINDOW WALL DESIGN PRESSURE TABLE |                   |            |                 |                      |                          |   |      |                       |          |                      |
|-----------------------------------------|-------------------|------------|-----------------|----------------------|--------------------------|---|------|-----------------------|----------|----------------------|
| MAX UNIT<br>HEIGHT                      | MAX UNIT<br>WIDTH | REINFORCED | GLAZING<br>TYPE | GLAZING<br>CONDITION | MAX. D.L.O.<br>DIMENSION |   |      | DESIGN PRESSURE (PSF) |          | IMPACT RATING        |
|                                         |                   |            |                 |                      |                          |   |      | POSITIVE              | NEGATIVE |                      |
| 143"                                    | 48"               | YES        | GL1             | CAPTURED             | 45"                      | X | 113" | +100                  | -100     | SMALL MISSILE IMPACT |
| 143"                                    | 48"               | YES        | GL1             | BUTT GLAZED          | 45"                      | X | 113" | +100                  | -100     | SMALL MISSILE IMPACT |
| 143"                                    | 48"               | NO         | GL1             | CAPTURED             | 45"                      | X | 113" | +55                   | -55      | SMALL MISSILE IMPACT |
| 143"                                    | 48"               | NO         | GL1             | BUTT GLAZED          | 45"                      | X | 113" | +50                   | -50      | SMALL MISSILE IMPACT |

5008 TAMPA WEST BLVD.  
TAMPA, FLORIDA 33634  
PHONE: (813) 889-0718  
FAX: (813) 886-0666



**PRODUCT:** SERIES 650WST WINDOW WALL  
SMALL MISSILE IMPACT

**PART OR ASSEMBLY:** \_\_\_\_\_

**GENERAL NOTES**

**ELEVATION AND DESIGN PRESSURES**

[illegible]

DATE: 3/7/23

SCALE: NA

DWG. BY: ECV

CHK BY: —

DRAWING NO.:  
FL24544.5

SHEET: **1** OF **11**

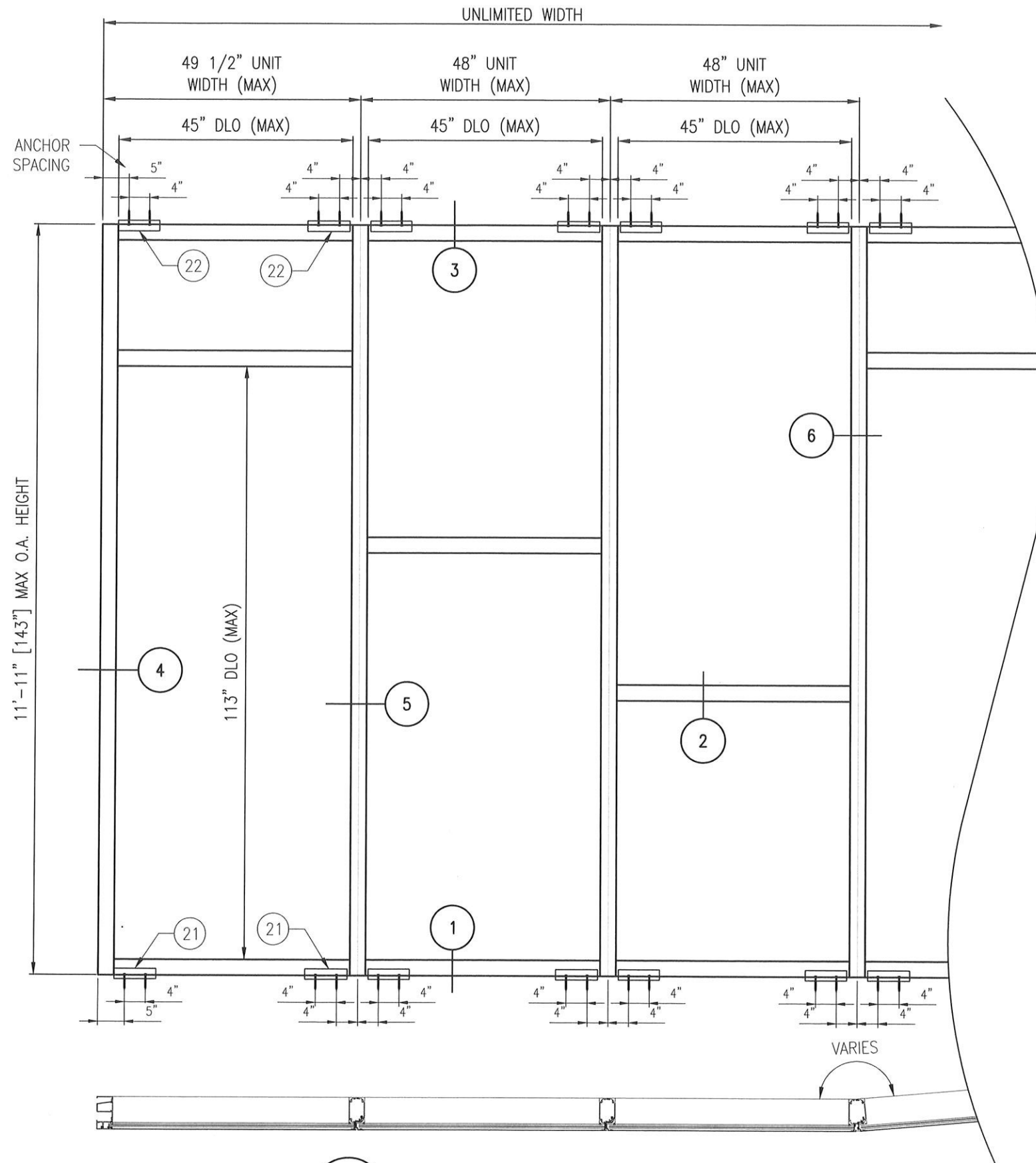


SUN METALS

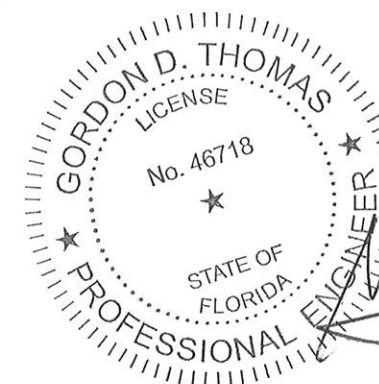
PART OR ASSEMBLY: ELEVATION CAPTURED/REINFORCED

[illegible]

SHEET: 2 OF 11



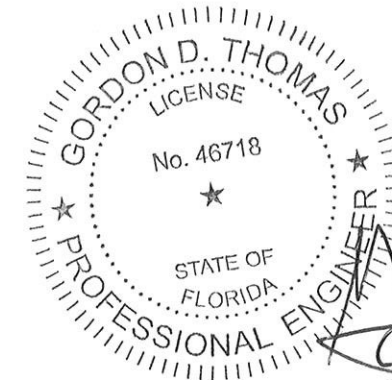
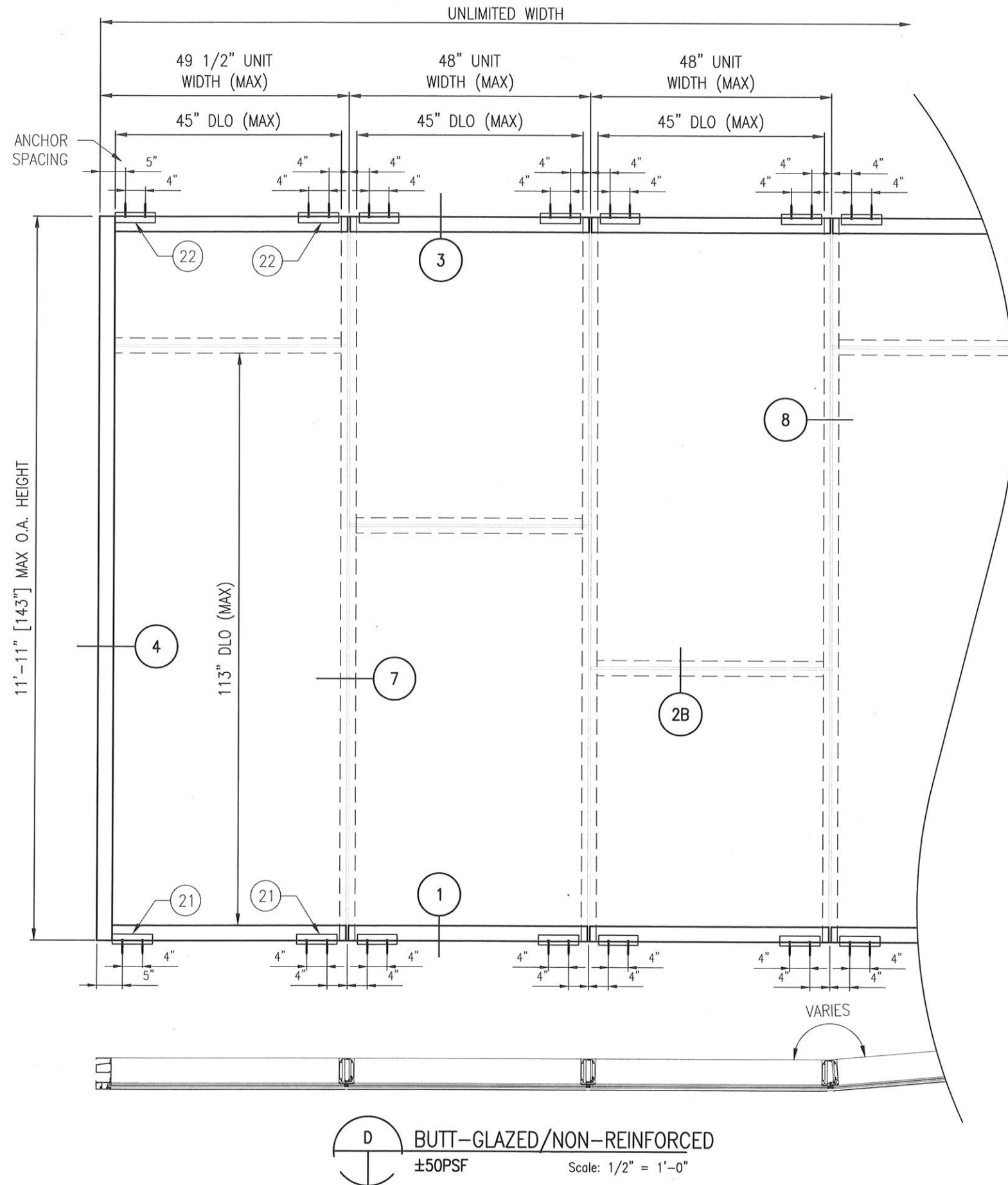
**B** CAPTURED/NON-REINFORCED  
±55PSF  
Scale: 1/2" = 1'-0"



10/7/23  
FL 46718

|                                                                                               |                                                           |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| 5008 TAMPA WEST BLVD.<br>TAMPA, FLORIDA 33634<br>PHONE: (813) 889-0718<br>FAX: (813) 886-0666 |                                                           |
|                                                                                               |                                                           |
| PRODUCT:<br>SERIES 650WST WINDOW WALL<br>SMALL MISSILE IMPACT                                 | PART OR ASSEMBLY:<br>ELEVATION<br>CAPTURED/NON-REINFORCED |
| DATE: 3/7/23<br>SCALE: AS INDICATED<br>DWG. BY: ECV<br>CHK BY: -<br>DRAWING NO.:<br>FL24544.5 | SHEET: <b>3</b> OF <b>11</b>                              |





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**SUN METALS**

PRODUCT: SERIES 650WST WINDOW WALL  
SMALL MISSILE IMPACT

PART OR ASSEMBLY: ELEVATION  
BUTT-GLAZED/NON-REINFORCED

| NO | DATE    | DESCRIPTION                  | BY  |
|----|---------|------------------------------|-----|
| 1  | 9/15/23 | UPDATE TO 8TH ED. (2023) FBC | ECV |

DATE: 3/7/23

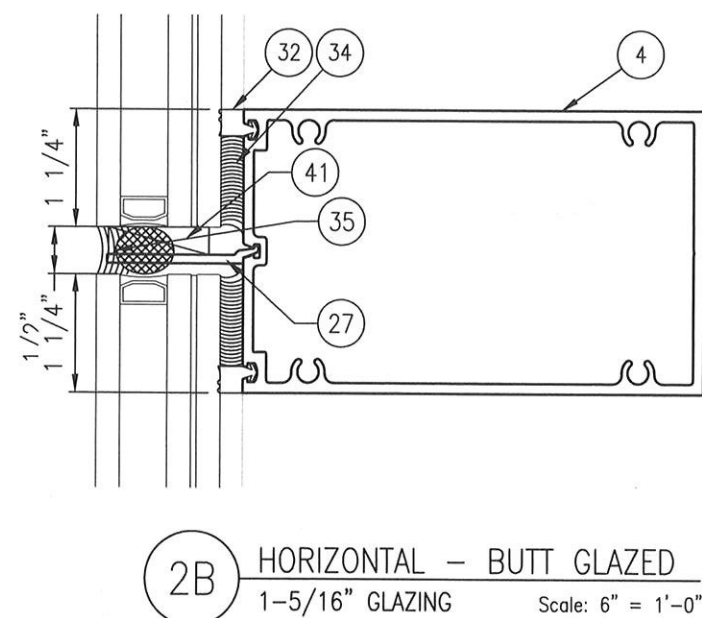
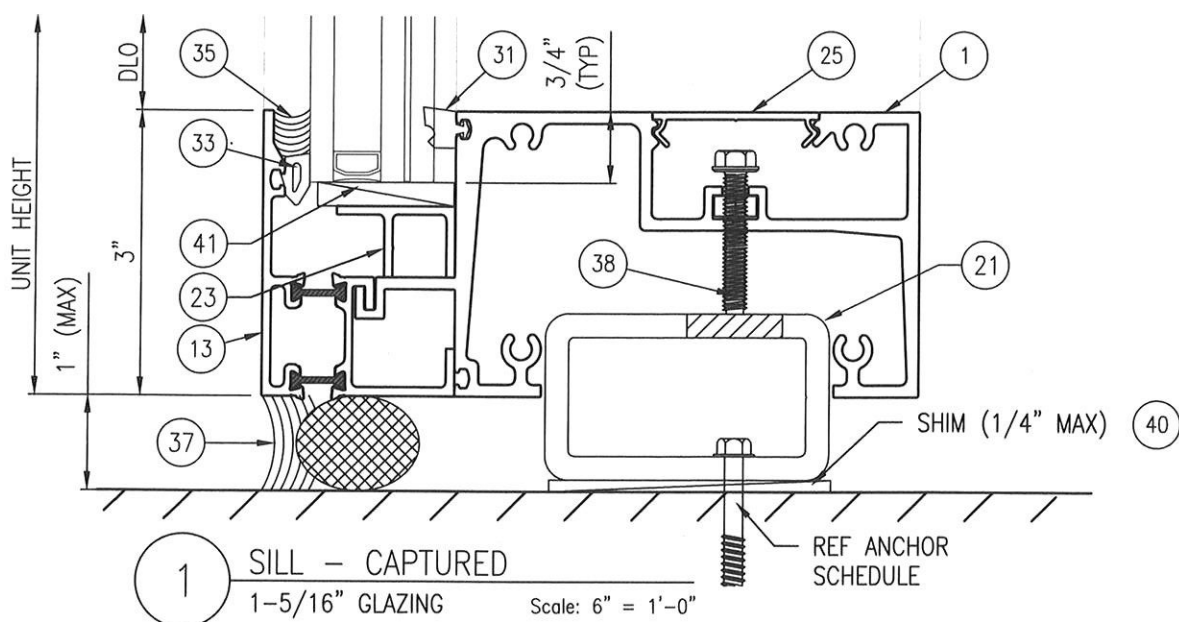
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DWG. BY: ECV

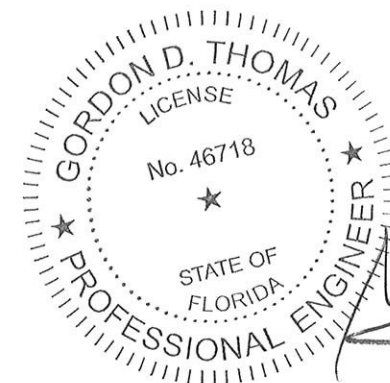
CHK BY: -

DRAWING NO.: FL24544.5

SHEET: **5** OF **11**



42 ALL FRAME ASSEMBLY SCREWS TO BE  
#14 X 1-1/2" PH S/S SMS



10/7/23  
fcb6718

5008 TAMPA WEST BLVD.  
TAMPA, FLORIDA 33634  
PHONE: (813) 889-0718  
FAX: (813) 886-0666



PRODUCT: SERIES 650WST WINDOW WALL  
SMALL MISSILE IMPACT

**PART OR ASSEMBLY:**

## HORIZONTAL DETAILS

[illegible]

DATE: 3/7/23

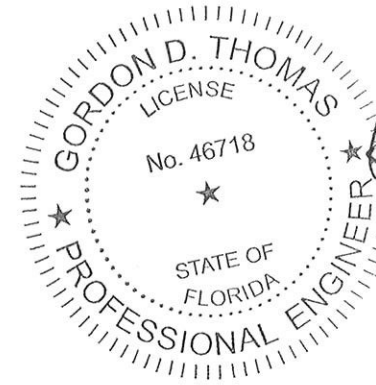
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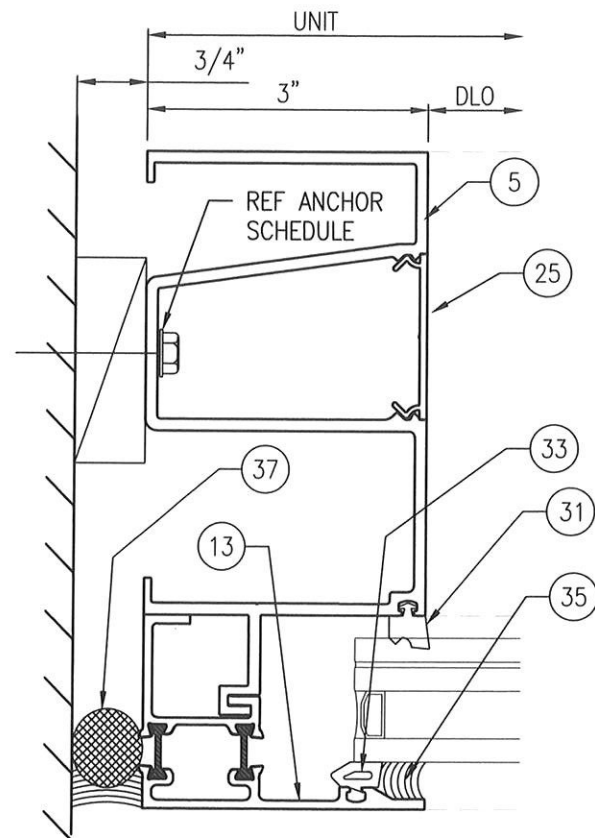
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DRAWING NO.:  
FL24544.5

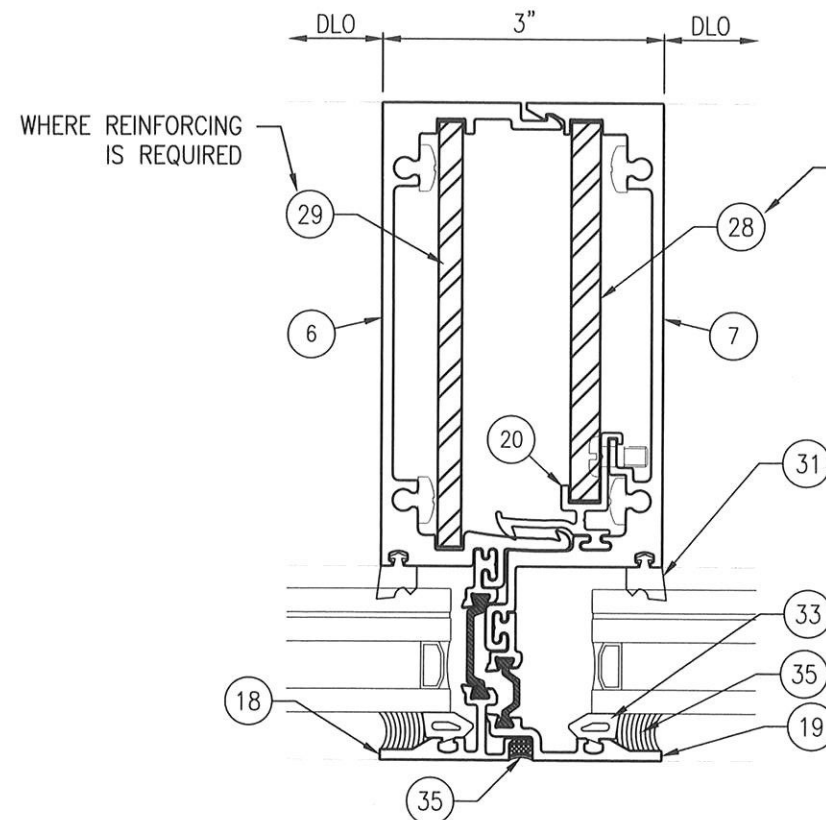
SHEET: 6 OF 11



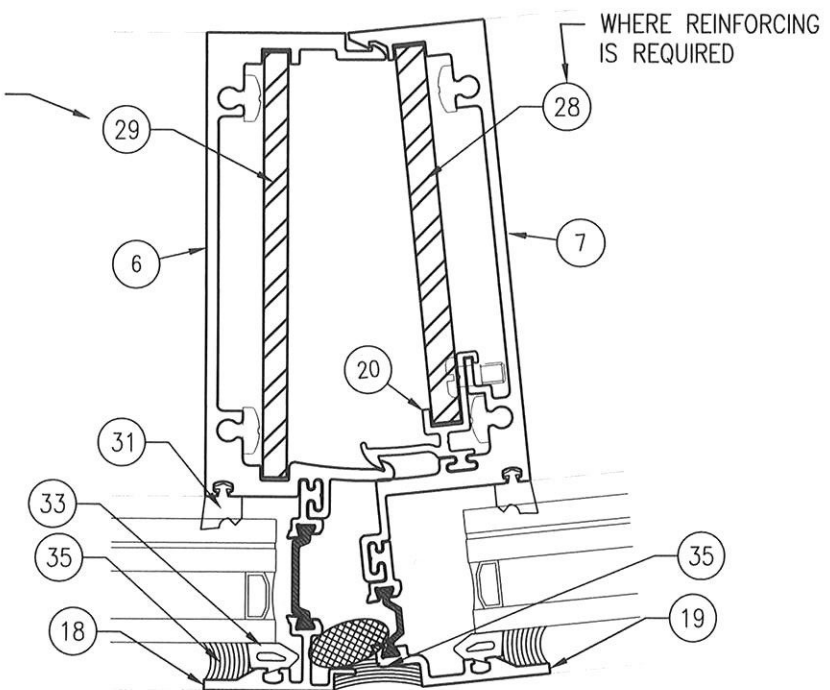
10/7/23  
FL 46718



4 JAMB - CAPTURED  
1-5/16" GLAZING Scale: 6" = 1'-0"

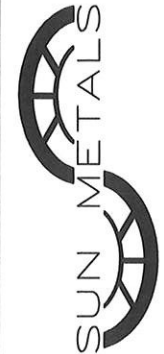


5 MULLION - CAPTURED  
1-5/16" GLAZING Scale: 6" = 1'-0"



6 MULLION - CAPTURED (SPLAYED)  
1-5/16" GLAZING Scale: 6" = 1'-0"

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PRODUCT:  
SERIES 650WST WINDOW WALL  
SMALL MISSILE IMPACT

PART OR ASSEMBLY:  
VERTICAL DETAILS

| NO | DATE    | DESCRIPTION                      | BY  |
|----|---------|----------------------------------|-----|
|    |         |                                  |     |
| 1  | 9/15/23 | UPDATE TO 8TH ED. (2023) FBC ECV | ECV |

DATE: 3/7/23

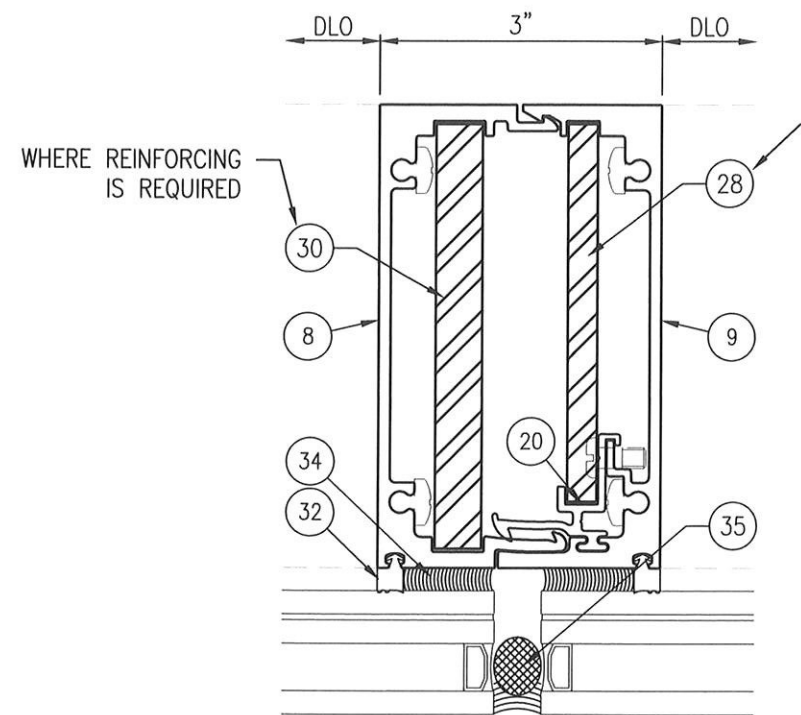
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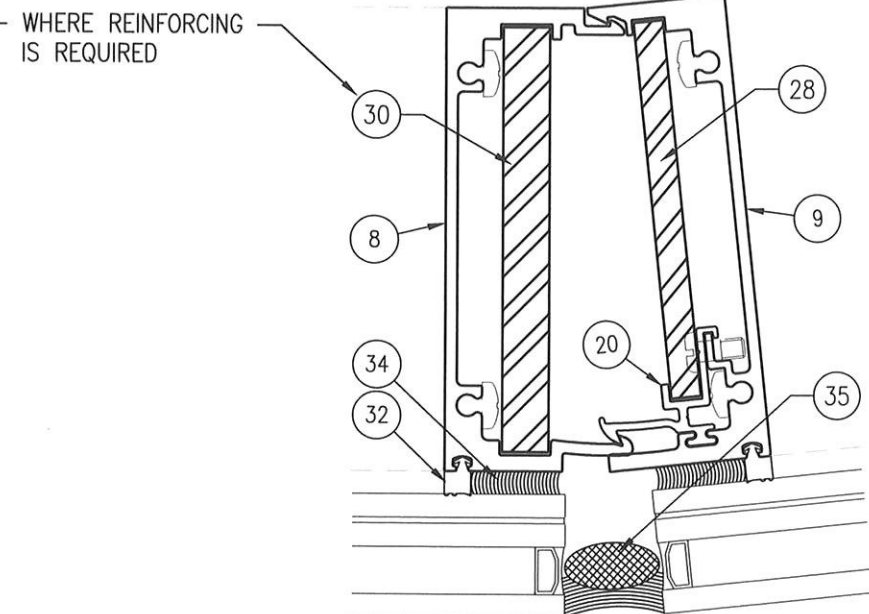
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DRAWING NO.:  
FL24544.5

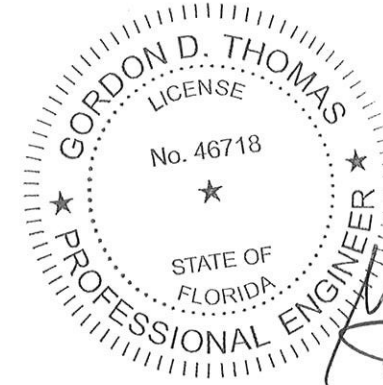
SHEET: 7 OF 11



7 MULLION - BUTT GLAZED  
1-5/16" GLAZING Scale: 6" = 1'-0"



8 MULLION - BUTT GLAZED (SPLAYED)  
1-5/16" GLAZING Scale: 6" = 1'-0"



*Handwritten signature and date:*  
10/7/23  
FL 46718

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FAX: (813) 886-0666



PRODUCT:  
SERIES 650WST WINDOW WALL  
SMALL MISSILE IMPACT

PART OR ASSEMBLY:

VERTICAL DETAILS

| NO | DATE    | DESCRIPTION                      | BY  |
|----|---------|----------------------------------|-----|
| 1  | 9/15/23 | UPDATE TO 8TH ED. (2023) FBC ECV | ECV |

DATE: 3/7/23

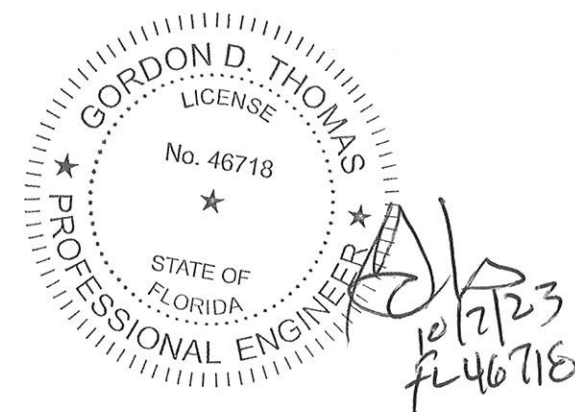
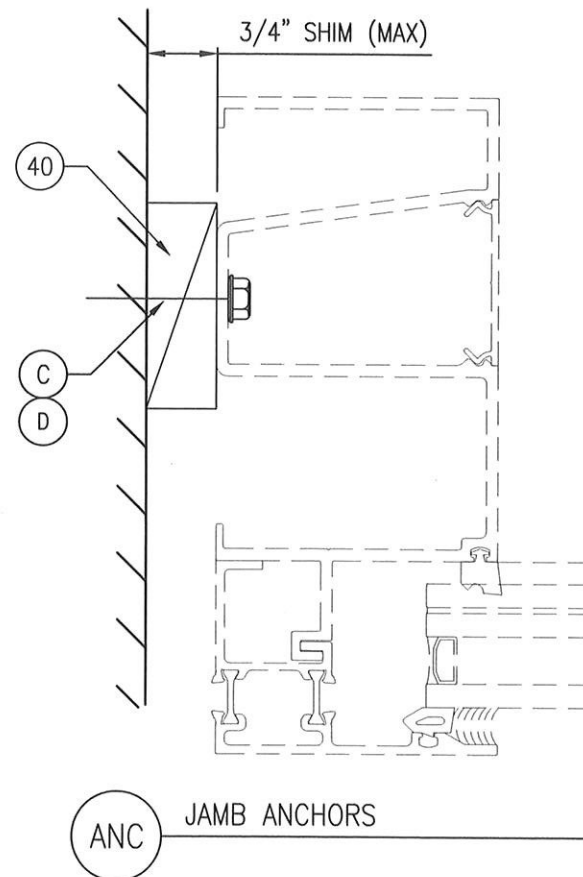
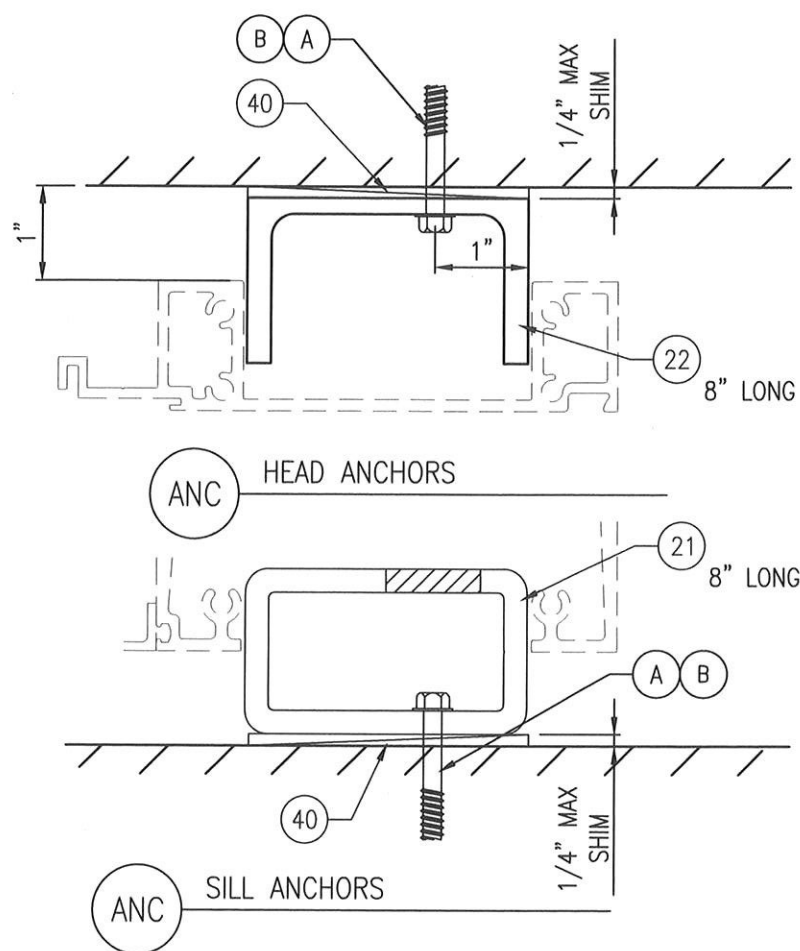
SCALE: HALF

DWG. BY: ECV

CHK BY: -

DRAWING NO.:  
FL24544.5

SHEET: 8 OF 11



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**PRODUCT:**

SERIES 650WST WINDOW WALL  
SMALL MISSILE IMPACT

**PART OR ASSEMBLY:**

ANCHORS AND GLAZING

---

| REVISIONS |         | DATE                         | DESCRIPTION | BY |
|-----------|---------|------------------------------|-------------|----|
| 1         | 9/15/23 | UPDATE TO 8TH ED. (2023) FBC | ECV         |    |

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DATE: 3/7/23

SCALE: NA

DWG. BY: ECV

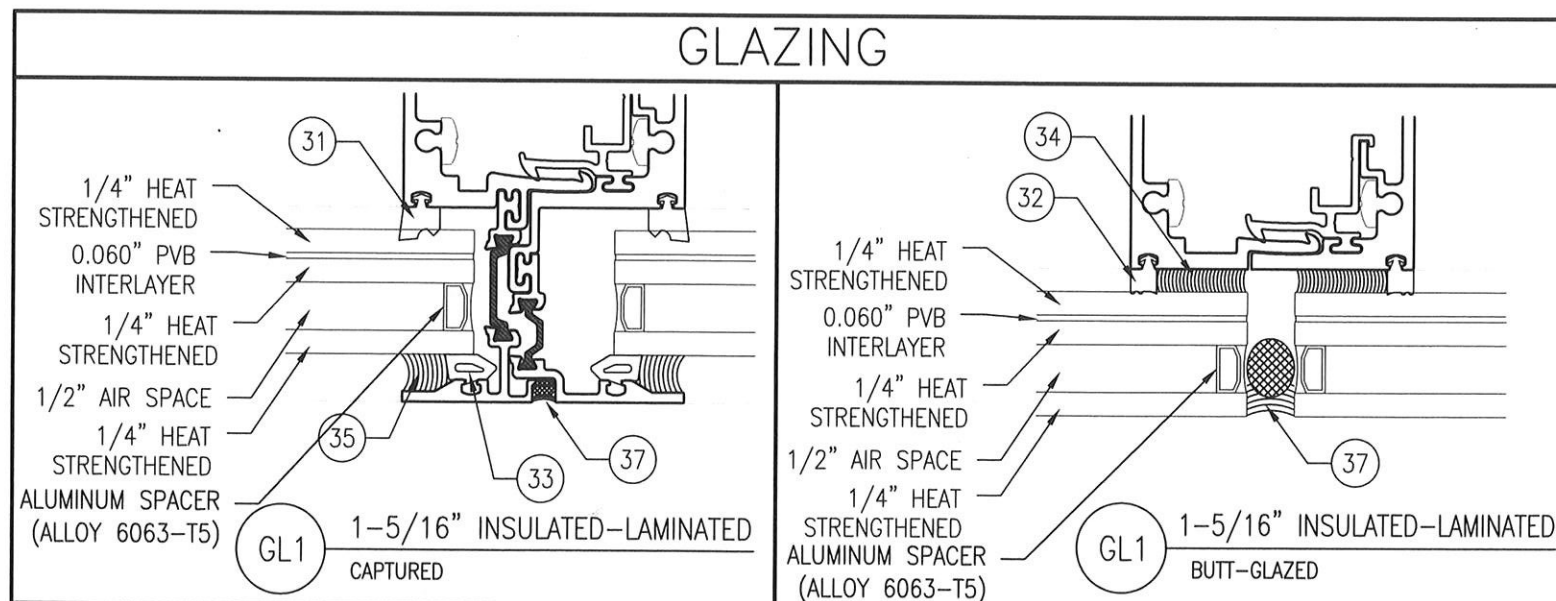
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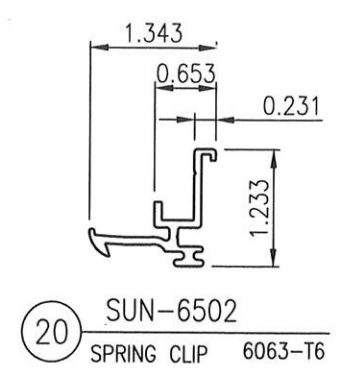
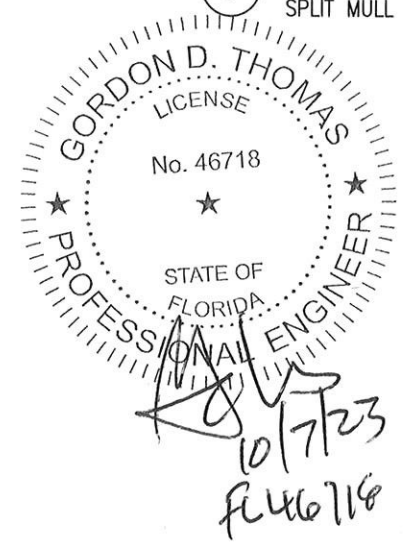
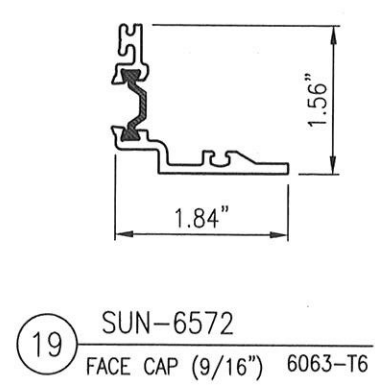
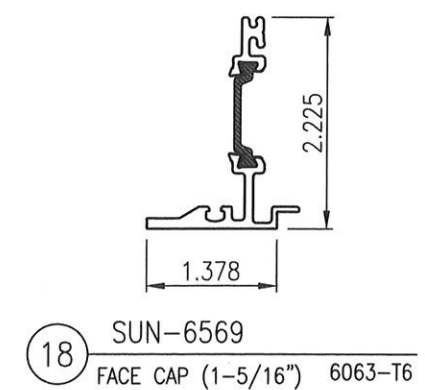
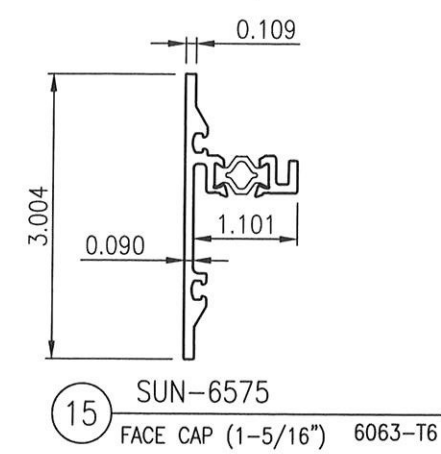
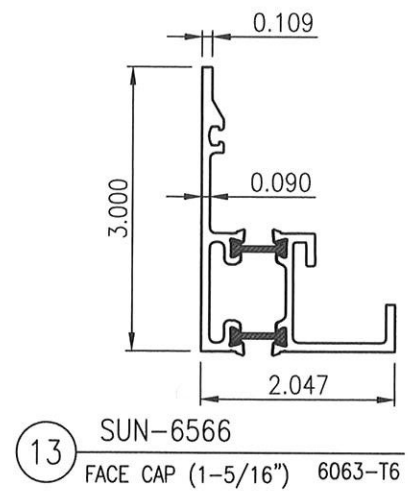
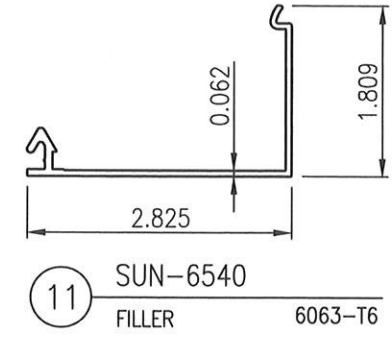
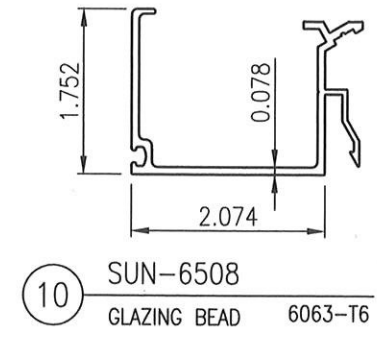
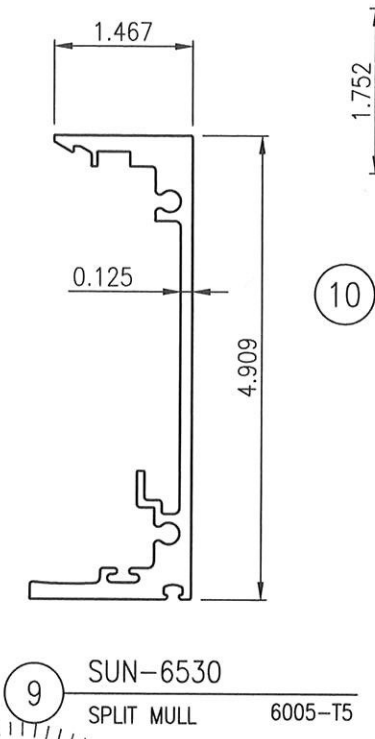
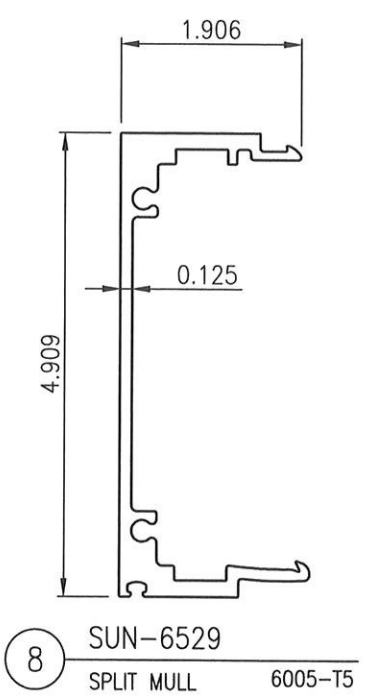
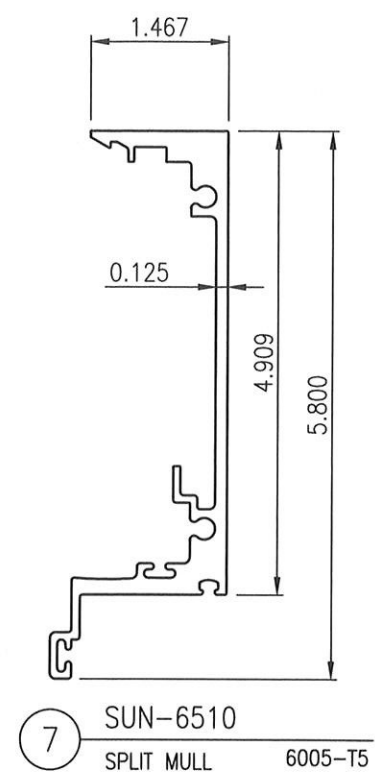
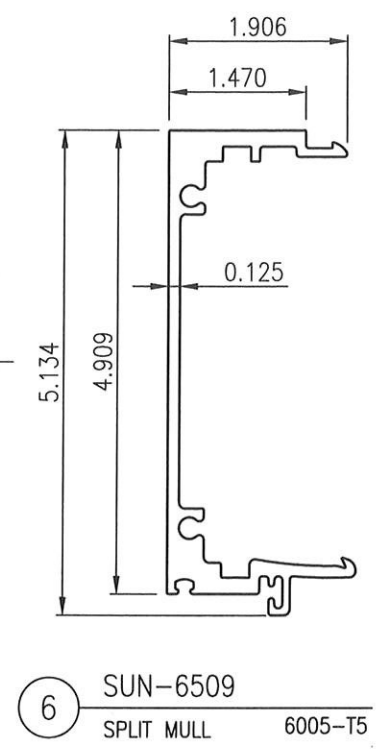
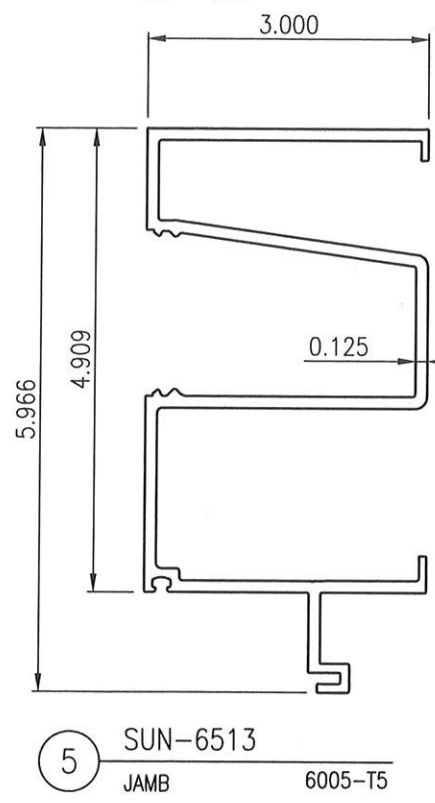
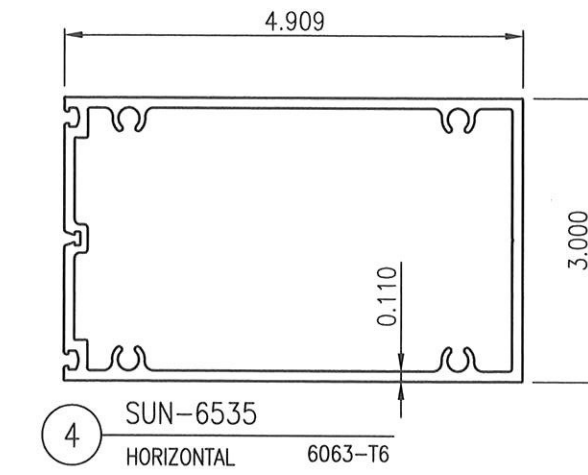
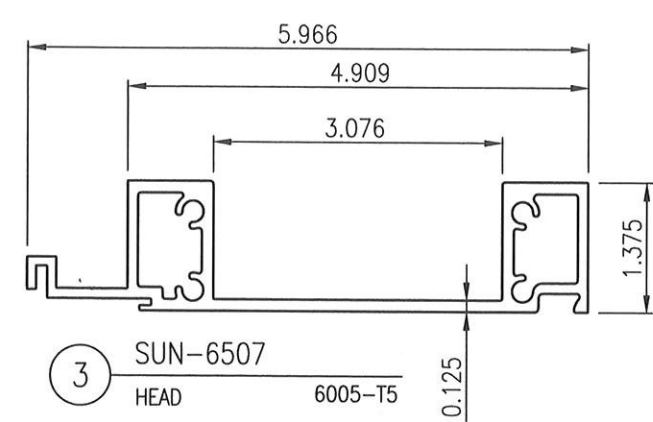
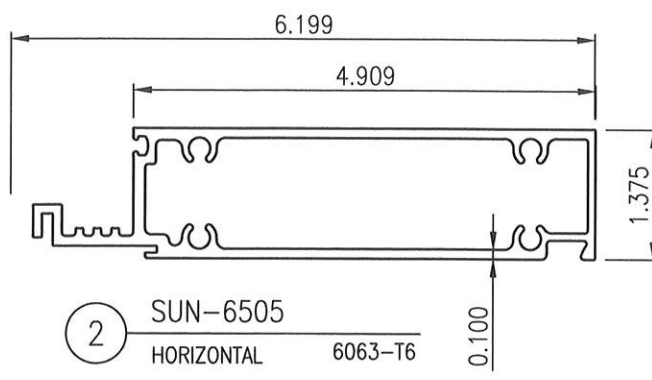
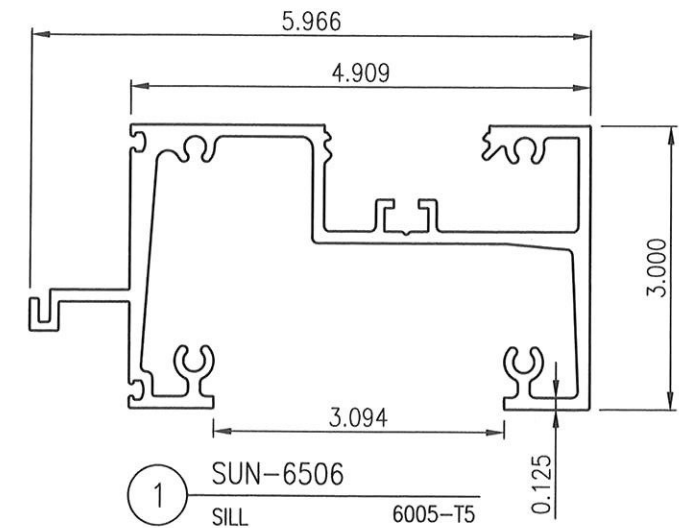
DRAWING NO.: FL24544.5

SHEET: **9** OF **11**

| ANCHOR SCHEDULE (100 PSF/REINFORCED) |             |                                                                                                                                                                                                                                                                                       |
|--------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PRIMARY HEAD AND SILL ANCHORS        |             |                                                                                                                                                                                                                                                                                       |
| SUBSTRATE                            | ANCHOR TYPE | DESCRIPTION                                                                                                                                                                                                                                                                           |
| CONCRETE                             | A           | 3/8" Powers Wedge Bolt with 2-1/8" min embedment, 4" minimum edge distance. Minimum clip length 8". Concrete is 4,000 PSI minimum conforming to ACI 301.                                                                                                                              |
| STEEL                                | B           | 5/16" diameter self drilling screws or bolts. Steel with 0.125" minimum wall thickness conforming to ASTM A500 Grade B, Fy=46,000 PSI & Fu=58,000 PSI or ASTM A653, Fy=33,000 PSI, Fu=45,000 PSI. Minimum embedment of 3 threads through steel substrate, with 1" min. edge distance. |
| JAMB ANCHORS                         |             |                                                                                                                                                                                                                                                                                       |
| CONCRETE                             | C           | 3/8" Powers Wedge Bolt with 2-1/8" min embedment. Minimum clip length 8". Concrete is 4,000 PSI minimum conforming to ACI 301.                                                                                                                                                        |
| STEEL                                | D           | 3/8" diameter self drilling screws or bolts. Steel with 0.125" minimum wall thickness conforming to ASTM A500 Grade B, Fy=46,000 PSI & Fu=58,000 PSI or ASTM A653, Fy=33,000 PSI, Fu=45,000 PSI. Minimum embedment of 3 threads through steel substrate, with 1" min. edge distance.  |

| ANCHOR SCHEDULE (55 PSF/NON-REINFORCED) |             |                                                                                                                                                                                                                                                                             |
|-----------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PRIMARY HEAD AND SILL ANCHORS           |             |                                                                                                                                                                                                                                                                             |
| SUBSTRATE                               | ANCHOR TYPE | DESCRIPTION                                                                                                                                                                                                                                                                 |
| CONCRETE                                | A           | 5/16" HWH ITW Tapcon® XL concrete anchor with 1-3/4" min. embedment, 2-1/2" minimum edge distance. Minimum clip length 8". Concrete is 3,000 PSI minimum conforming to ACI 301.                                                                                             |
| STEEL                                   | B           | 1/4" diameter self drilling screws. Steel with 0.125" minimum wall thickness conforming to ASTM A500 Grade B, Fy=46,000 PSI & Fu=58,000 PSI or ASTM A653, Fy=33,000 PSI, Fu=45,000 PSI. Minimum embedment of 3 threads through steel substrate, with 1" min. edge distance. |





5008 TAMPA WEST BLVD.  
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PRODUCT:  
SERIES 650WST WINDOW WALL  
SMALL MISSILE IMPACT

PART OR ASSEMBLY:  
COMPONENTS

---

| NO | DATE    | DESCRIPTION                      | BY |
|----|---------|----------------------------------|----|
|    |         |                                  |    |
| 1  | 9/15/23 | UPDATE TO 8TH ED. (2023) FBC ECV |    |

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DATE: 3/7/23

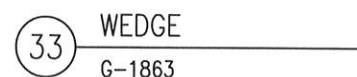
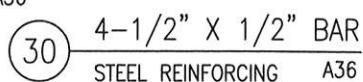
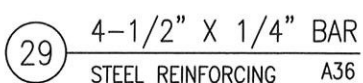
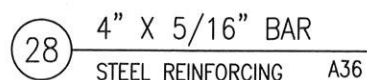
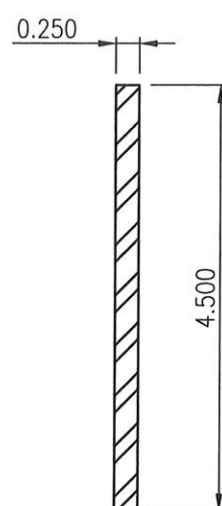
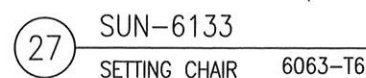
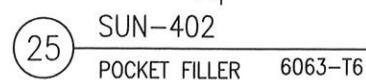
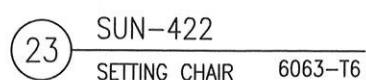
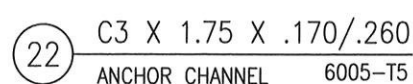
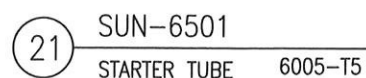
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DWG. BY: ECV

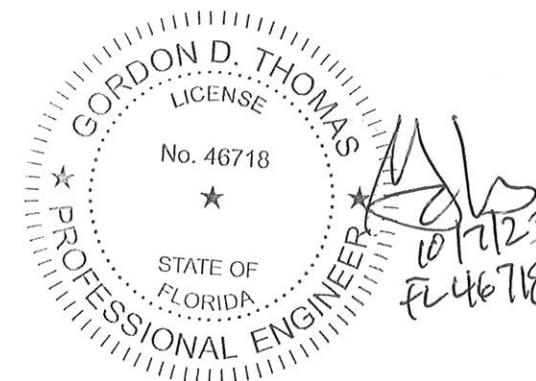
CHK BY: -

DRAWING NO.:  
FL24544.5

SHEET: **10** OF **11**



| BILL OF MATERIALS |           |                                        |             |              |                                      |
|-------------------|-----------|----------------------------------------|-------------|--------------|--------------------------------------|
| ITEM #            | PART #    | DESCRIPTION                            | MATERIAL    | MANUFACTURER | NOTES                                |
| 1                 | SUN-6506  | SILL                                   | 6005-T5     | SUN METALS   |                                      |
| 2                 | SUN-6505  | HORIZONTAL                             | 6063-T6     | SUN METALS   |                                      |
| 3                 | SUN-6507  | HEAD                                   | 6005-T5     | SUN METALS   |                                      |
| 4                 | SUN-6535  | HORIZONTAL (BUTT-GLAZED)               | 6063-T6     | SUN METALS   |                                      |
| 5                 | SUN-6513  | JAMB                                   | 6005-T5     | SUN METALS   |                                      |
| 6                 | SUN-6509  | MALE SPLIT MULLION (CAPTURED)          | 6005-T5     | SUN METALS   |                                      |
| 7                 | SUN-6510  | FEMALE SPLIT MULLION (CAPTURED)        | 6005-T5     | SUN METALS   |                                      |
| 8                 | SUN-6529  | MALE SPLIT MULLION (BUTT-GLAZED)       | 6005-T5     | SUN METALS   |                                      |
| 9                 | SUN-6530  | FEMALE SPLIT MULLION (BUTT-GLAZED)     | 6005-T5     | SUN METALS   |                                      |
| 10                | SUN-6508  | INTERIOR GLAZING BEAD                  | 6063-T6     | SUN METALS   |                                      |
| 11                | SUN-6540  | HORIZONTAL FILLER TRIM                 | 6063-T6     | SUN METALS   |                                      |
| 13                | SUN-6566  | FACE CAP (1 5/16" GLAZING)             | 6063-T6     | SUN METALS   |                                      |
| 15                | SUN-6575  | FACE CAP (1 5/16" GLAZING)             | 6063-T6     | SUN METALS   |                                      |
| 18                | SUN-6569  | FACE CAP (1 5/16" GLAZING)             | 6063-T6     | SUN METALS   |                                      |
| 19                | SUN-6572  | FACE CAP (1 5/16" GLAZING)             | 6063-T6     | SUN METALS   |                                      |
| 20                | SUN-6502  | SPRING CLIP                            | 6063-T6     | SUN METALS   |                                      |
| 21                | SUN-6501  | STARTER TUBE                           | 6005-T5     | SUN METALS   |                                      |
| 22                |           | 3 X 1-3/4 X .170/.260 ALUMINUM CHANNEL | 6005-T5     | VARIES       |                                      |
| 23                | SUN-422   | SETTING CHAIR                          | 6063-T6     | SUN METALS   |                                      |
| 25                | SUN-402   | POCKET FILLER                          | 6063-T6     | SUN METALS   |                                      |
| 27                | SUN-6133  | SETTING CHAIR (1-5/16" BUTT-GLAZED)    | 6063-T6     | SUN METALS   |                                      |
| 28                |           | 4"x5/16" STEEL BAR                     | A36         | VARIES       |                                      |
| 29                |           | 4-1/2"x1/4" STEEL BAR                  | A36         | VARIES       |                                      |
| 30                |           | 4-1/2"x1/2" STEEL BAR                  | A36         | VARIES       |                                      |
| 31                | TR-6142E  | SPONGE                                 | EPDM        | TREMCO       |                                      |
| 32                | TR-10681S | CAULK STOP                             | SILICONE    | TREMCO       |                                      |
| 33                | G-1863    | WEDGE                                  | EPDM        | GRP          |                                      |
| 34                | DOW 983   | STRUCTURAL SILICONE                    | SILICONE    | DOW CORNING  |                                      |
| 35                | DOW 795   | PERIMETER CAP BEAD WEATHERSEAL         | SILICONE    | DOW CORNING  |                                      |
| 37                |           | PERIMETER WEATHERSEAL AND BACKER ROD   | SILICONE    | DOW CORNING  | DOW 790, 791, 795 OR APPROVED EQ.    |
| 38                |           | 1/4" DIA. JACKING/LEVELING SCREW       | 18-8 SS     |              |                                      |
| 39                |           | #12 x 3/4" PH SMS                      | 18-8 SS     |              |                                      |
| 40                |           | SHIM                                   | POLYSTYRENE | VARIES       | FULL BEARING HIGH IMPACT POLYSTYRENE |
| 41                |           | SETTING BLOCK (4" LONG)                | SILICONE    | VARIES       |                                      |
| 42                |           | #14 x 1-1/2" PH S/S FRAME ASSY SCREWS  | 18-8 SS     |              |                                      |
|                   |           |                                        |             |              |                                      |
|                   |           |                                        |             |              |                                      |



5008 TAMPA WEST BLVD.  
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**PRODUCT:**

SUN 650WST  
SMALL MISSILE IMPACT

**PART OR ASSEMBLY:**

## COMPONENTS AND BILL OF MATERIALS

|           |         |                          |     |     |
|-----------|---------|--------------------------|-----|-----|
| 1         | 9/15/23 | UPDATE TO 8TH ED. (2023) | FBC | ECV |
| NO        | DATE    | DESCRIPTION              | BY  |     |
| REVISIONS |         |                          |     |     |

DATE: 3/7/23

SCALE: HALF

DWG. BY: ECV

CHK BY: —

DRAWING NO.:  
FL24544.5

SHEET: 11 OF 11