

PICTURE WINDOW - LARGE MISSILE IMPACT

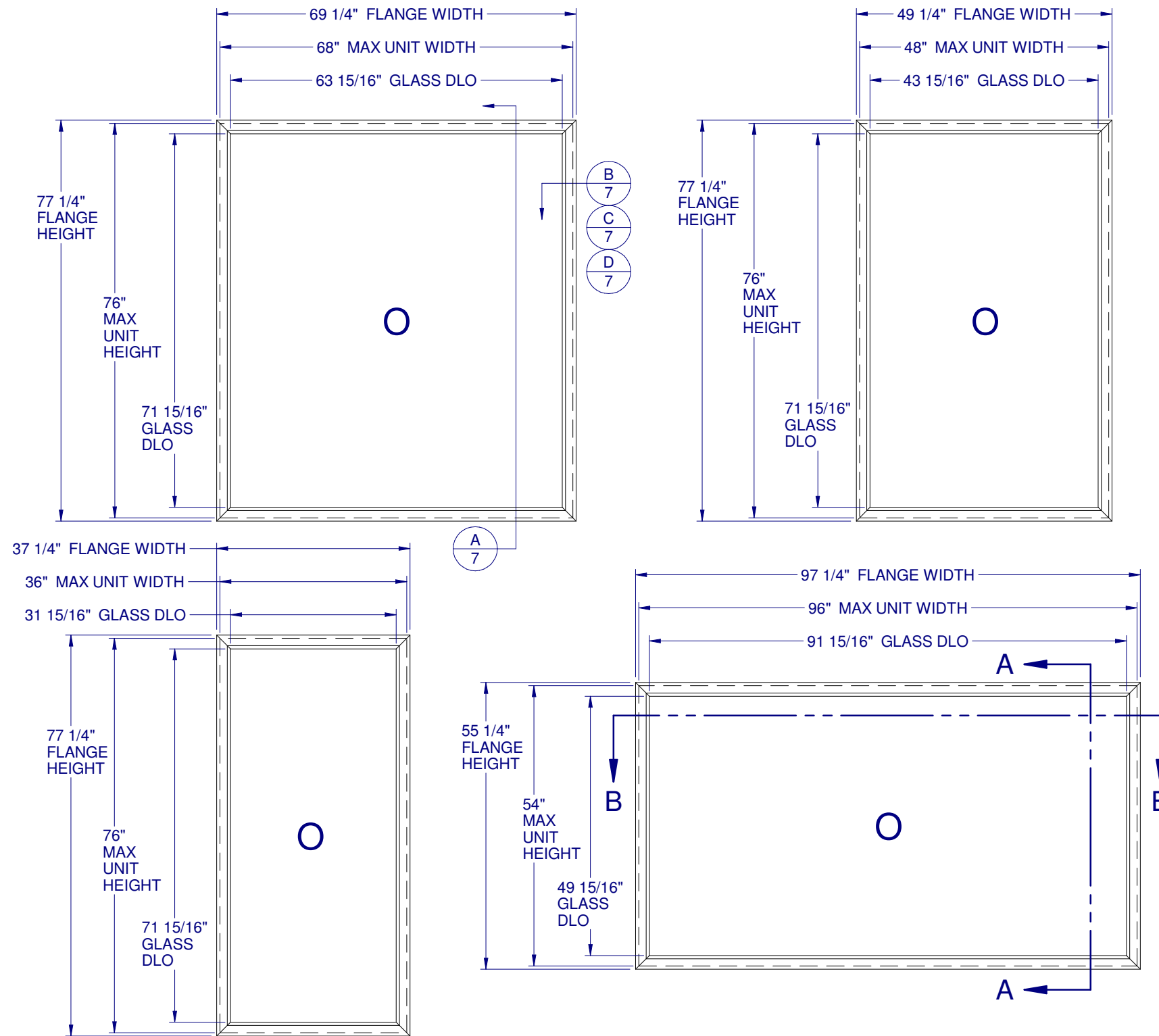


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| MAX. UNIT SIZE | DESIGN PRESSURE RATING | IMPACT RATING |
|----------------|------------------------|----------------------|
| 36" x 76" | +/- 50 PSF | LARGE MISSILE IMPACT |
| 48" x 76" | | |
| 68" x 76" | | |
| 96" x 54" | | |

GENERAL NOTES:

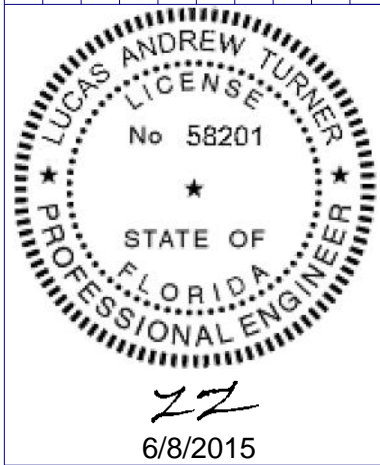
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE FLORIDA BUILDING CODE (FBC), CURRENT EDITION AND IS RATED FOR MISSILE LEVEL D IMPACT USE IN WIND ZONE 3 AREAS AS DEFINED IN ASTM E 1996 PER THE FBC.
THIS PRODUCT MAY NOT BE USED IN THE HIGH VELOCITY HURRICANE ZONE (HVHZ) OR IN ASTM E 1996 WIND ZONE 4 AREAS.
2. GLAZING OPTIONS: (SEE SHEET 3)
3. CONFIGURATIONS: "O". ARCHITECTURAL SHAPES INCLUDE, BUT ARE NOT LIMITED TO, THOSE SHOWN ON SHEET 2.
4. DESIGN PRESSURE RATING:
-NEGATIVE DESIGN LOADS BASED ON, TESTED PRESSURE AND GLASS TABLES ASTM E-1300-04.
-POSITIVE DESIGN LOADS BASED ON, TESTED PRESSURE, WATER INFILTRATION TEST PRESSURE AND GLASS TABLES ASTM E-1300-04.
5. ANCHORAGE: THE 33 1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. SEE SHEET 7 FOR ANCHOR DETAILS. WINDLOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
6. PRODUCT APPROVED FOR IMPACT RESISTANCE. SHUTTERS ARE NOT REQUIRED.
7. ALL FRAMES FULLY WELDED.
8. SERIES / MODEL DESIGNATION PW-6150.
9. THE DESIGNATION X AND O STAND FOR THE FOLLOWING:
O = FIXED SASH
10. SECTION CALLOUTS APPLY TO ALL ELEVATIONS IN A SIMILAR LOCATION.

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6150 PVC PICTURE WINDOW IMPACT

| NO. | DESCRIPTION: | BY: | DATE: |
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REVISIONS



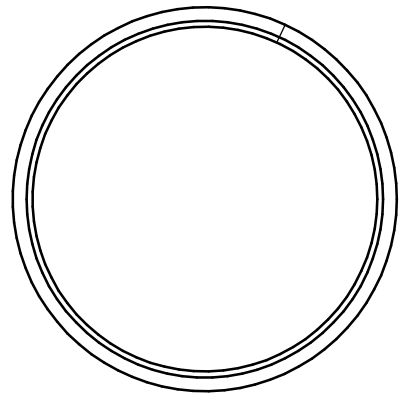
LUCAS A. TURNER, P.E.
FL PE # 58201
1239 JABARA AVE.
NORTH PORT, FL 34288
PH. 941-380-1574

SHEET DESCRIPTION:

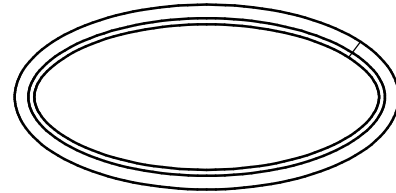
GENERAL NOTES AND ELEVATIONS

| | |
|--------------------|-------------------|
| DRAWN BY: EMK | DATE: 05/26/15 |
| DWG #: CWS-1073 | REV.: - |
| SCALE: 1:25 | SHEET 1 OF 7 |

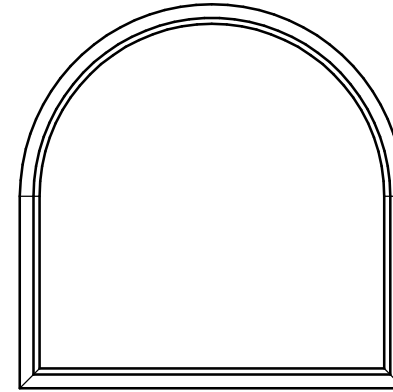
**6150 PVC
PICTURE WINDOW
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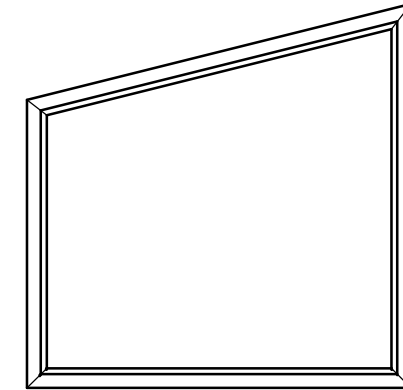
FULL CIRCLE



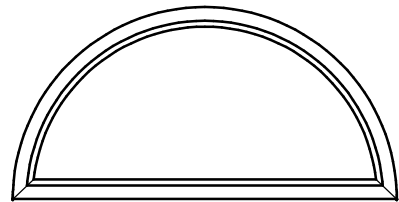
FULL ELLIPSE (OVAL)



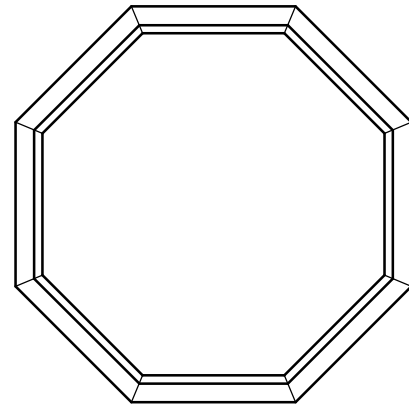
TOMBSTONE



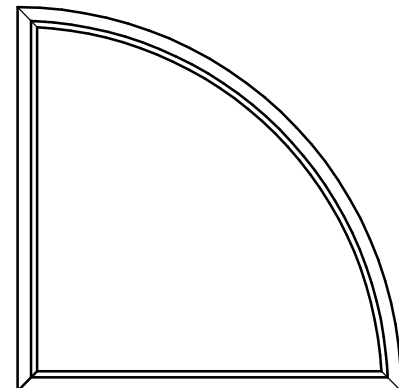
TRAPEZOID



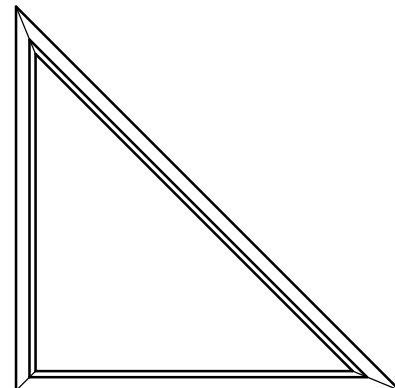
1/2 CIRCLE



OCTAGON



1/4 CIRCLE



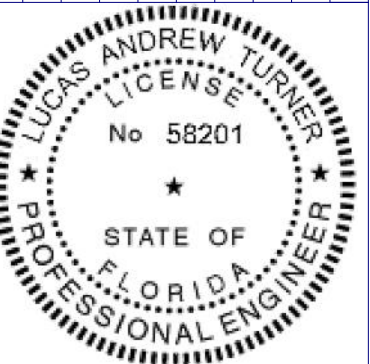
TRIANGLE

NOTES:

1. SEE SHEET 6 FOR DETAILED ANCHOR INSTALLATION REQUIREMENTS.
2. THRU FRAME - MASONRY, WOOD OR METAL OPENING.
THRU FIN - WOOD OPENING.
3. OVERALL SIZE MUST NOT EXCEED THE MAX. WIDTH AND HEIGHT OF RECTANGULAR WINDOWS ON SHEET 1.
4. ANCHOR SPACING FOR ARCHITECTURAL FLANGE AND FIN WINDOWS MUST FOLLOW THE LAYOUTS SHOWN ON SHEET 6, WITH ANCHOR SPACING MEASURED ALONG THE LENGTH OF THE PRODUCT.

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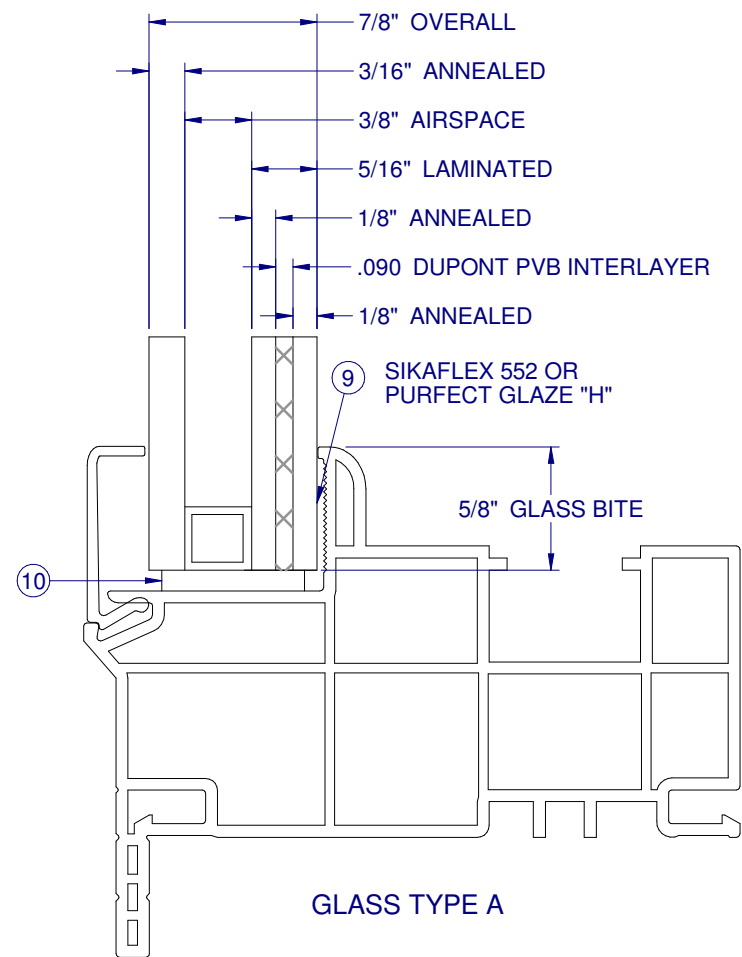


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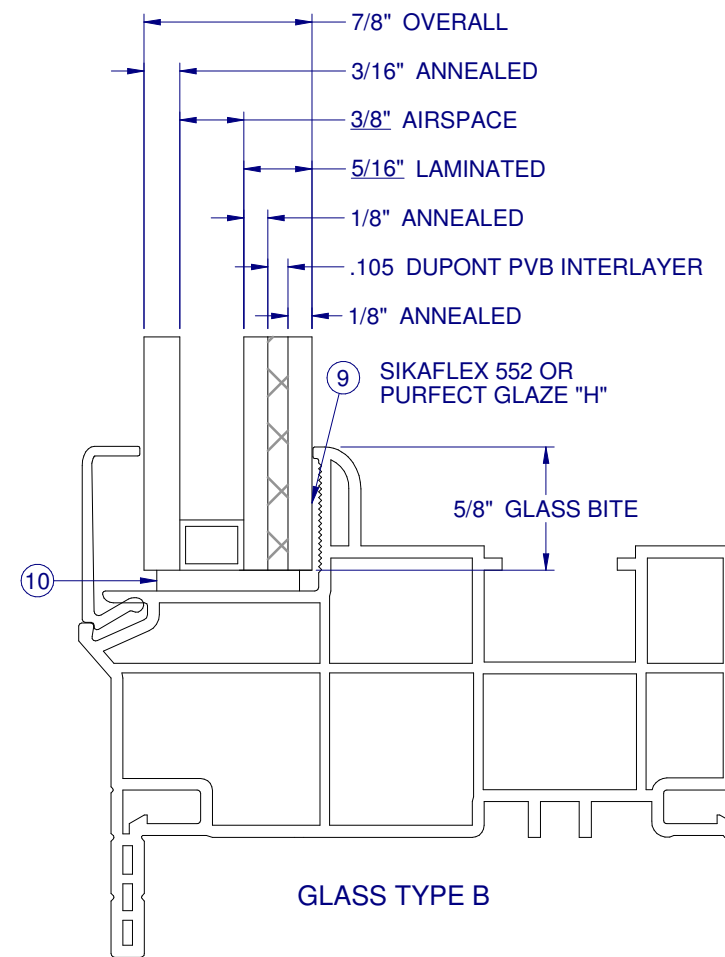
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SHEET DESCRIPTION:
ARCHITECTURAL SHAPES

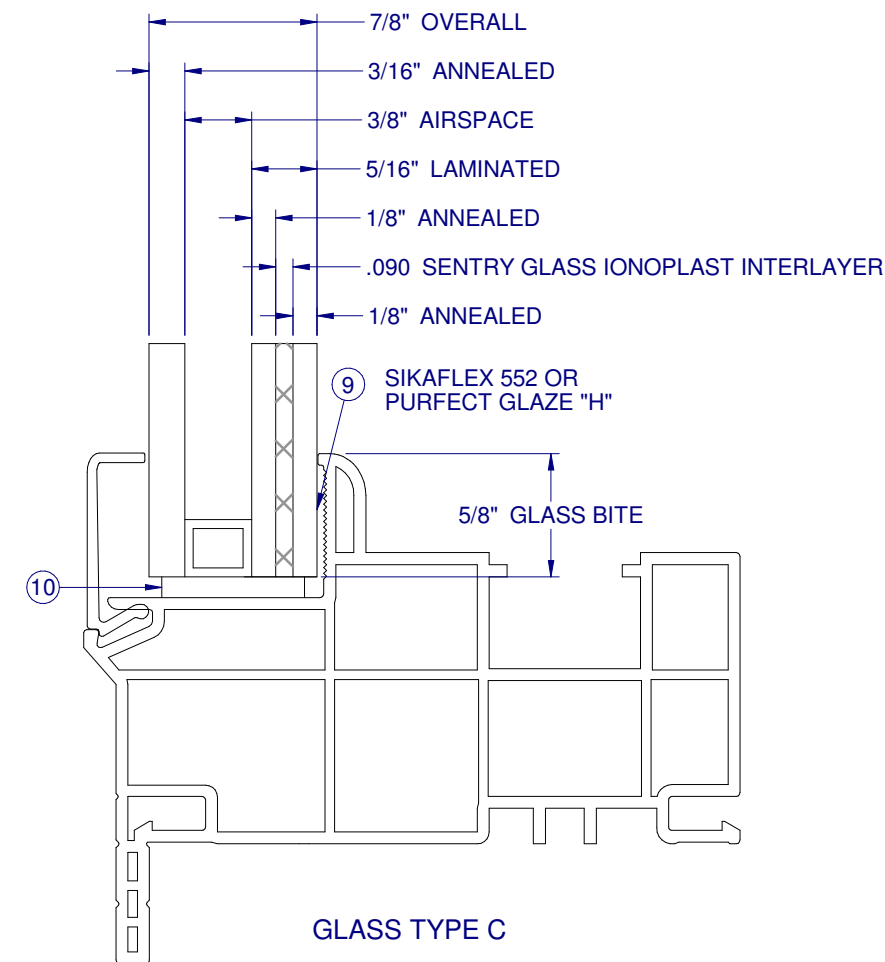
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| DRAWN BY: EMK | DATE: 05/26/15 |
| DWG #: CWS-1073 | REV.: - |
| SCALE: 1:1 | SHEET 2 OF 7 |



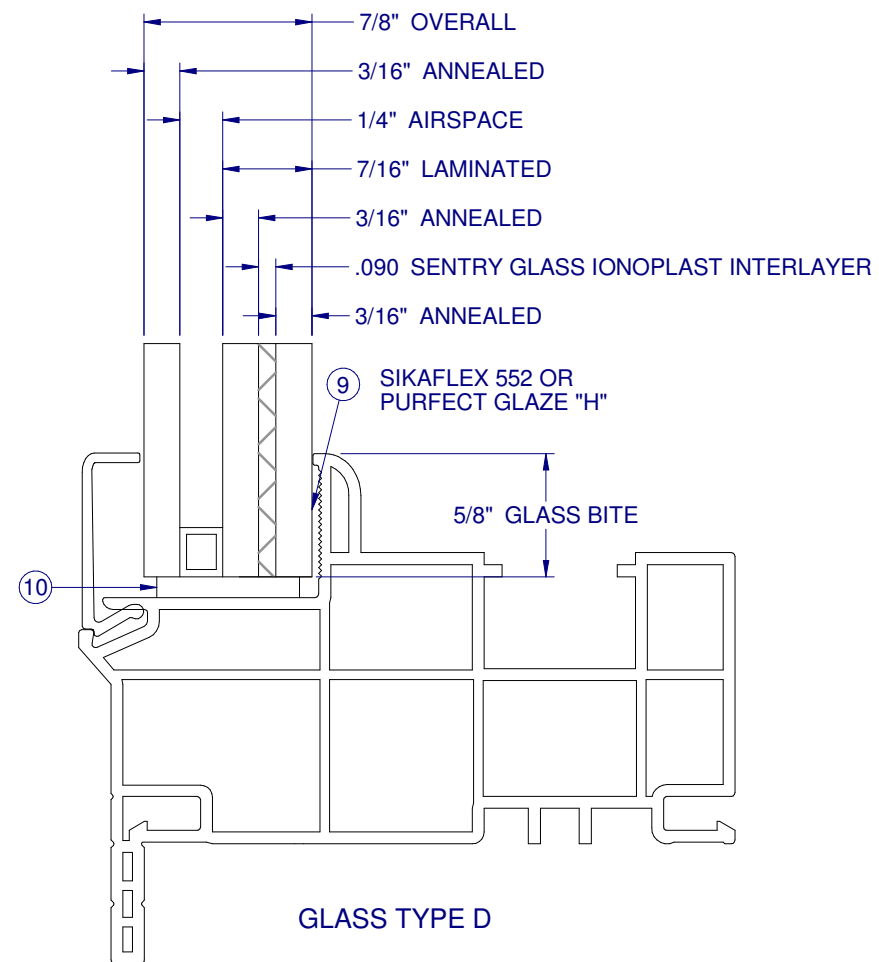
GLASS TYPE A



GLASS TYPE B



GLASS TYPE C



GLASS TYPE D

| MAX. UNIT SIZE | GLASS TYPE |
|----------------|------------|
| 36" x 76" | A |
| 48" x 76" | B |
| 68" x 76" | C |
| 96" x 54" | D |

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**6150 PVC
 PICTURE WINDOW
 IMPACT**

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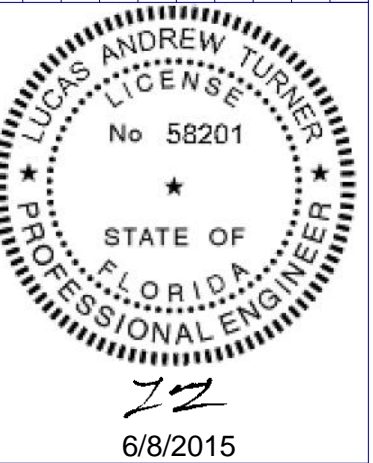
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SHEET DESCRIPTION:
GLAZING DETAILS

| | |
|--------------------|-------------------|
| DRAWN BY: EMK | DATE: 05/26/15 |
| DWG #: CWS-1073 | REV.: - |
| SCALE: 1:1 | SHEET 3 OF 7 |

**6150 PVC
PICTURE WINDOW
IMPACT**

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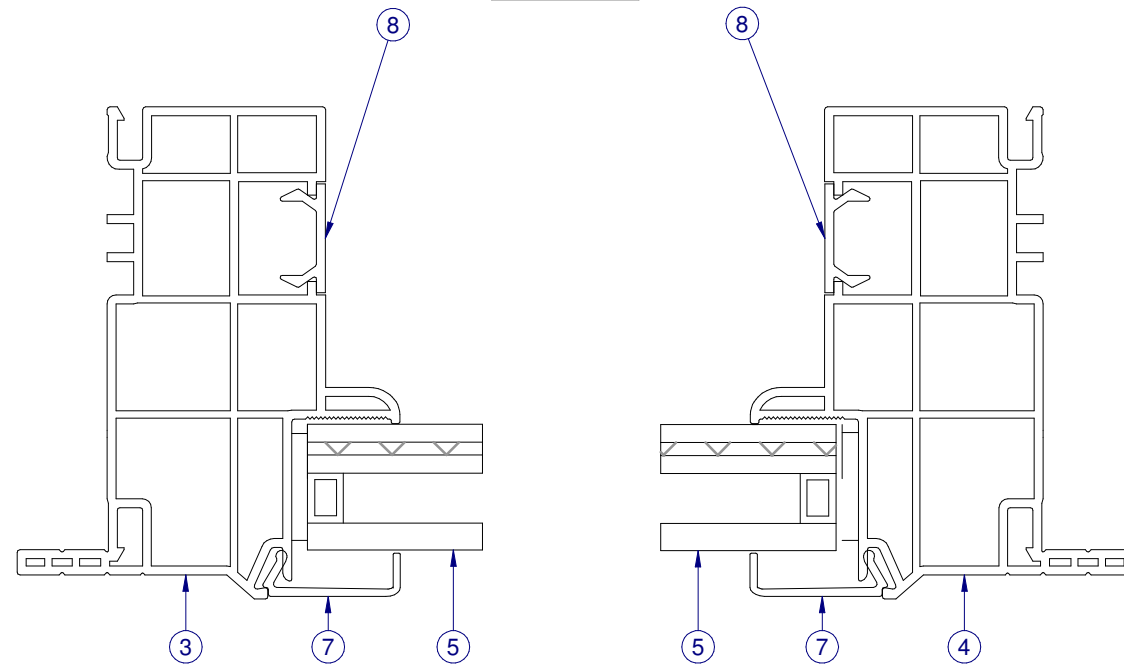


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SHEET DESCRIPTION:
SECTION VIEWS

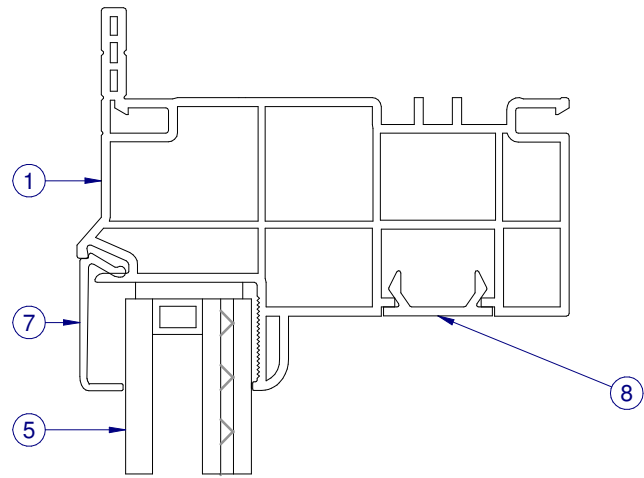
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| DRAWN BY: EMK | DATE: 05/26/15 |
| DWG #: CWS-1073 | REV.: - |
| SCALE: 1:1.33 | SHEET 4 OF 7 |

INTERIOR

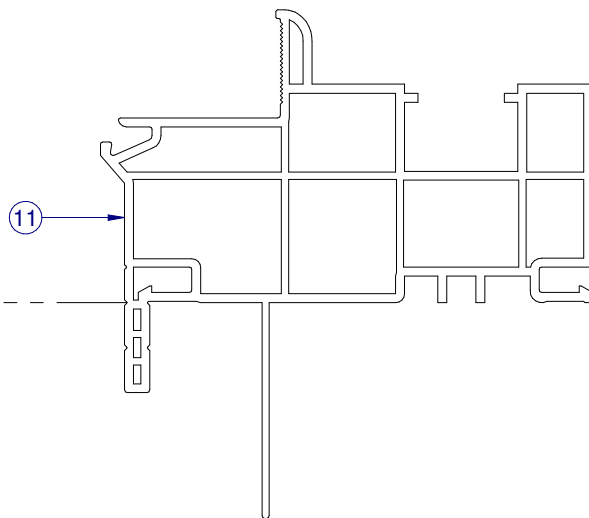


SECTION VIEW B-B

INTERIOR

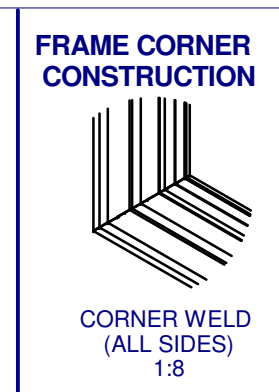


SECTION VIEW A-A



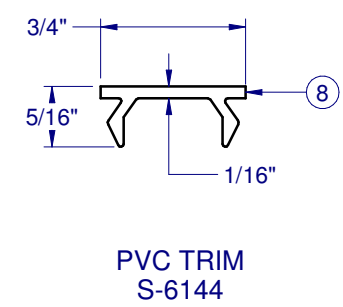
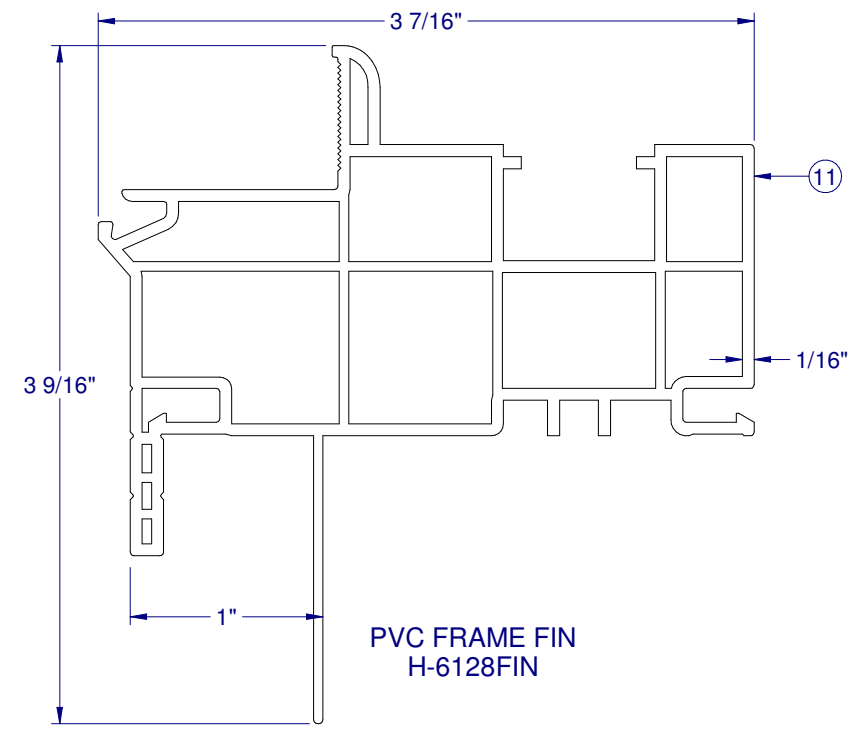
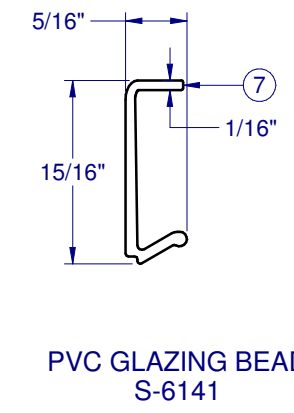
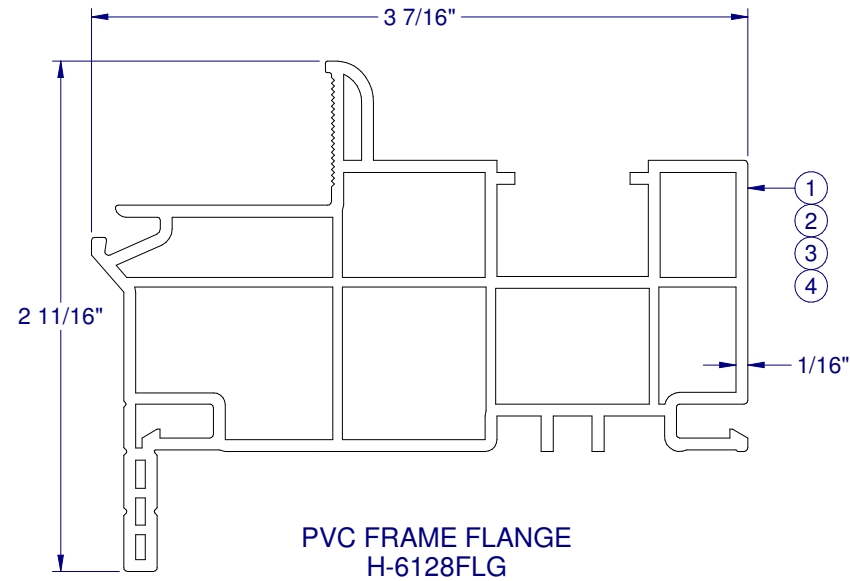
ALTERNATE FIN FRAME

| ITEM | PART # | DESCRIPTION | VENDOR | MATERIAL |
|------|-----------|--|---------------|----------|
| 1 | H-6128FLG | MAIN FRAME, FLANGE, HEAD | ATN | PVC |
| 2 | H-6128FLG | MAIN FRAME, FLANGE, SILL | ATN | PVC |
| 3 | H-6128FLG | MAIN FRAME, FLANGE, L. JAMB | ATN | PVC |
| 4 | H-6128FLG | MAIN FRAME, FLANGE, R. JAMB | ATN | PVC |
| 5 | GLASS | SEE SHEET 3 | | |
| 7 | S-6141 | GLAZING BEAD | ATN | PVC |
| 8 | S-6144 | FRAME FILLER | ATN | PVC |
| 9 | | PURFECT GLAZE "H", SIKAFLEX 552 | HENKEL / SIKA | |
| 10 | P-3352 | SET. BLK., 85 DUR., 1/8" x 5/8" x 2" Lg. | | |
| 11 | H-6128FIN | MAIN FRAME, FIN, PVC | ATN | PVC |

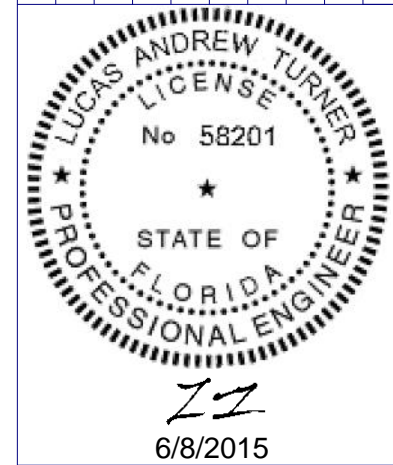


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 PH. 941-380-1574

SHEET DESCRIPTION:
BOM AND EXTRUSIONS

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|--------------------|-------------------|
| DRAWN BY: EMK | DATE: 05/26/15 |
| DWG #: CWS-1073 | REV.: - |
| SCALE: 1:1 | SHEET 5 OF 7 |

**6150 PVC
PICTURE WINDOW
IMPACT**

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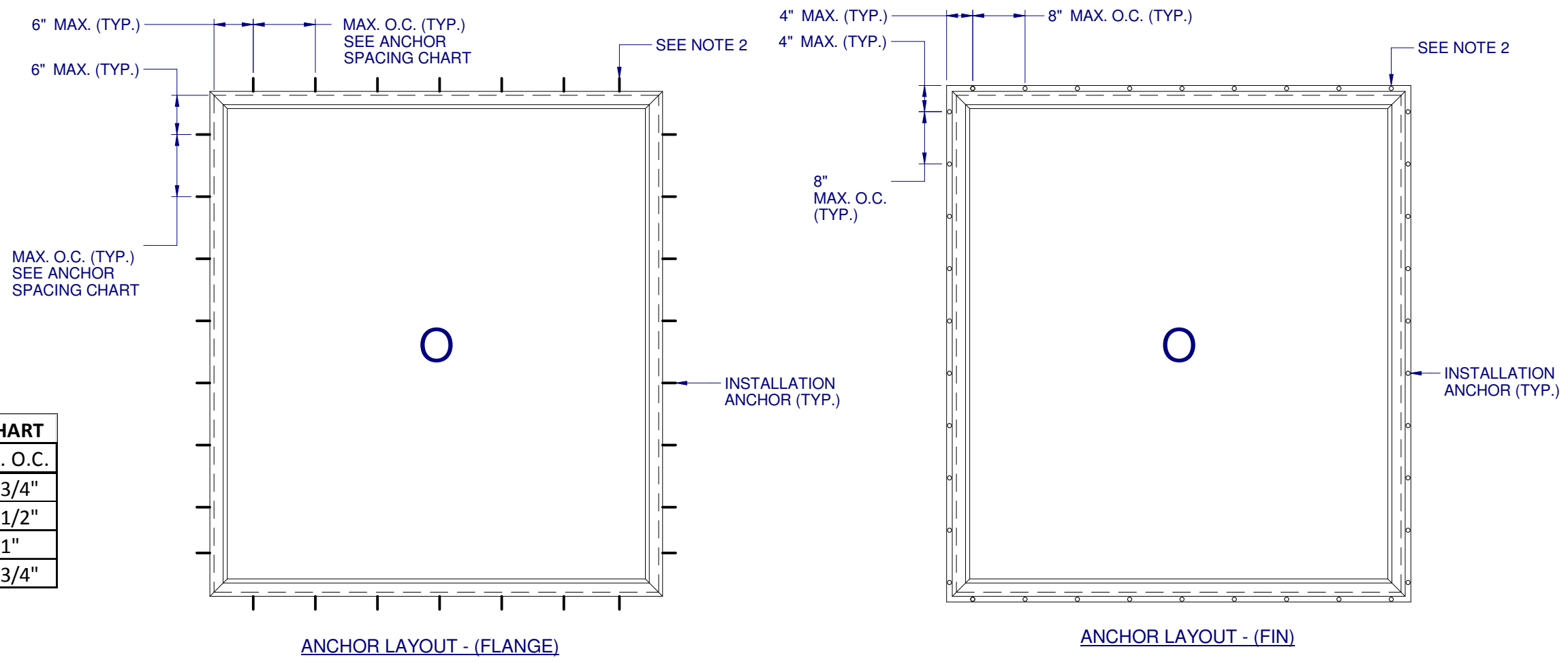
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SHEET DESCRIPTION:
**ANCHOR SCHEDULE AND
NOTES**

| | |
|---------------------------|--------------------------|
| DRAWN BY: EMK | DATE: 05/26/15 |
| DWG #: CWS-1073 | REV.: - |
| SCALE: 1:20 | SHEET 6 OF 7 |



| ANCHOR SPACING CHART | |
|----------------------|-----------|
| MAX. UNIT SIZE | MAX. O.C. |
| 36" x 76" | 20-3/4" |
| 48" x 76" | 15-1/2" |
| 68" x 76" | 11" |
| 96" x 54" | 13-3/4" |

- NOTES:
- INSTALL ONE ANCHOR AT EACH INSTALLATION LOCATION. ANCHOR SPACING APPLIES TO ALL SHAPES (SEE SHEET 2) ALONG ALL FRAME EDGES. SILL ANCHOR SPACING SAME AS HEAD.
 - SHIM AS REQ AT EACH INSTALLATION ANCHOR USING LOAD BEARING SHIMS. MAX. ALLOWABLE SHIM STACK TO BE 1/4". USE SHIMS WHERE SPACE GREATER THAN 1/16" IS PRESENT. LOAD BEARING SHIMS SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER. WOOD SHIMS ARE NOT ALLOWED.
 - ANCHOR TYPE, SIZE, SPACING AND EMBEDMENT SHALL BE AS SPECIFIED IN THESE DRAWINGS, SEE TABLE 1, SHEET 7.
 - ALL INSTALLATION ANCHORS MUST BE MADE OF OR PROTECTED WITH A CORROSION RESISTANT MATERIAL OR COATING. DISSIMILAR METALS OR MATERIALS IN CONTACT WITH PRESSURE TREATED WOOD MUST BE PROTECTED TO PREVENT REACTION.
 - INSTALLATION ANCHORS SHALL BE IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM SPECIFIED IN TABLE 1, SHEET 7.
 - ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL DRESSING OR STUCCO. FOR CONCRETE/CMU OPENINGS, EMBEDMENT SHALL BE BEYOND WOOD BUCKS, IF USED, INTO SUBSTRATE. INSTALLATIONS INTO SOLID CONCRETE OR GROUT-FILLED CMU MAY INCLUDE BUT DO NOT REQUIRE 1X WOOD BUCKS BETWEEN THE PRODUCT AND SUBSTRATE. INSTALLATIONS INTO HOLLOW CMU REQUIRE THE USE OF 1X WOOD BUCKS BETWEEN THE PRODUCT AND SUBSTRATE.
 - A MINIMUM CENTER-TO-CENTER SPACING SHALL BE MAINTAINED BETWEEN ALL FASTENERS: 3-9/16" FOR MASONRY, 1" FOR WOOD AND METAL.
 - WOOD OR MASONRY OPENINGS, BUCKS AND BUCK FASTENERS SHALL BE PROPERLY DESIGNED BY THE ARCHITECT OR ENGINEER OF RECORD AND INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE. SUBSTRATES SHALL MEET THE MINIMUM STRENGTH REQUIREMENTS AS SHOWN IN TABLE 1, SHEET 7. CONCRETE AND MASONRY SUBSTRATES MAY NOT BE CRACKED.
 - SEALING AND FLASHING STRATEGIES FOR OVERALL WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS FOLLOWING THE CURRENT VERSION OF THE REFERENCE DOCUMENTS: FMA/AAMA 100(FIN WINDOWS), FMA/AAMA 200(FLANGE WINDOWS), FMA/WDMA 250(BOX WINDOWS), FMA/AAMA/WDMA 300(EXTERIOR DOORS)

6150 PVC PICTURE WINDOW IMPACT

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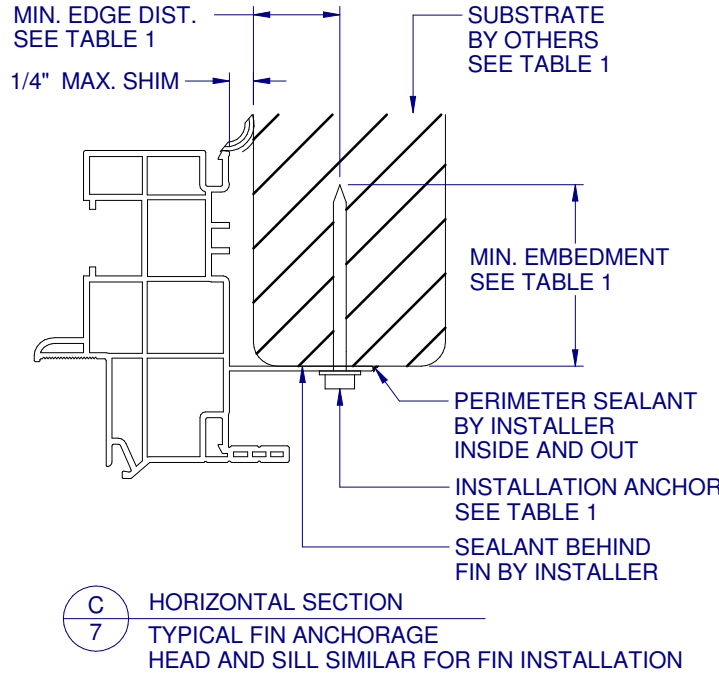
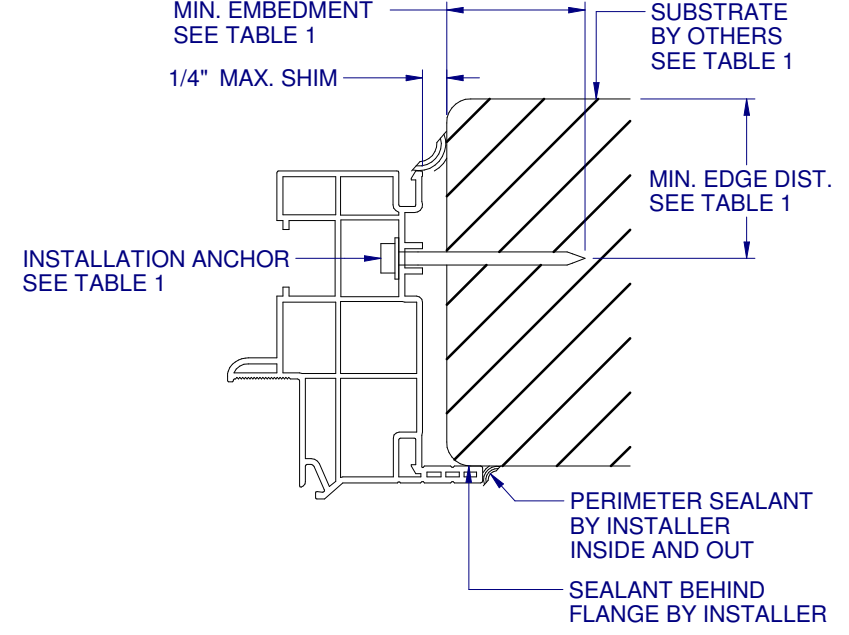
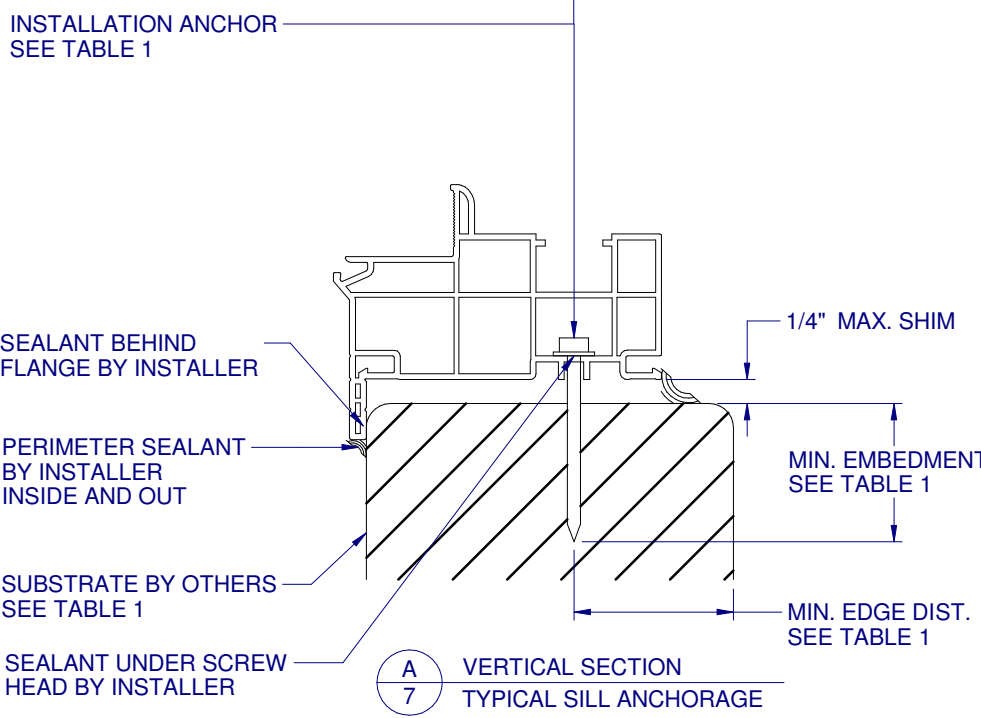
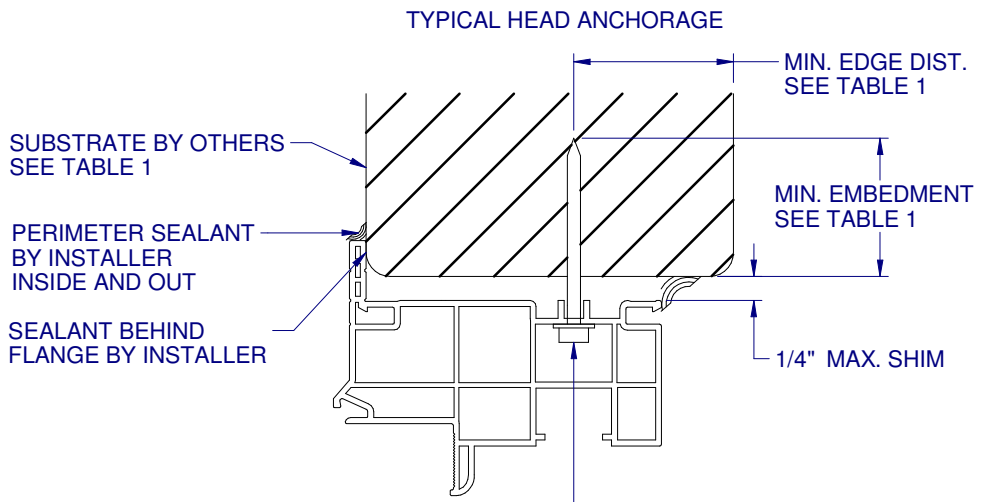
LUCAS ANDREW TURNER
LICENSE No 58201
STATE OF FLORIDA
PROFESSIONAL ENGINEER

LZ
6/8/2015

LUCAS A. TURNER, P.E.
FL PE # 58201
1239 JABARA AVE.
NORTH PORT, FL 34288
PH. 941-380-1574

SHEET DESCRIPTION:
INSTALLATION DETAILS

| | |
|---------------------------|--------------------------|
| DRAWN BY: EMK | DATE: 05/26/15 |
| DWG #: CWS-1073 | REV.: - |
| SCALE: 1:2 | SHEET 7 OF 7 |



| FRAME TYPE | SUBSTRATE TYPE | ANCHOR TYPE | MIN. EMBEDMENT | MIN. EDGE DIST. |
|------------|---|--|-------------------------|-----------------|
| FLANGE | CONCRETE (2.0 KSI MIN.) | 3/16" ITW TAPCON | 1-1/2" | 1-1/8" |
| FLANGE | HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.) | 3/16" ITW TAPCON | 1" | 2" |
| FLANGE | CONCRETE (2.85 KSI MIN.) | 3/16" ELCO ULTRACON | 1" | 1" |
| FLANGE | GROUT-FILLED CMU (ASTM C-90) | 3/16" ELCO ULTRACON | 1-3/4" | 2-1/2" |
| FLANGE | 2X MIN. SOUTHERN PINE (G=0.55) | 3/16" ITW TAPCON OR ELCO ULTRACON | 1-3/8" | 7/8" |
| FLANGE | 2X MIN. SOUTHERN PINE (G=0.55) | #10 WOOD SCREW | 1-3/8" | 7/8" |
| FLANGE | 16 GAUGE (0.060") MIN. STEEL STUD (33 KSI YIELD MIN) | #10-16 HILTI KWIK-FLEX OR ITW TEKS SELF-DRILLING SCREW | FULL THREAD THRU 0.060" | 7/16" |
| FLANGE | 1/8" ALUM. (6063-T5 MIN.) OR 1/8" STEEL (33 KSI MIN.) | #10 GRADE 5 SELF-TAPPING / DRILLING SCREW | FULL THREAD THRU 0.125" | 7/16" |
| FIN | 2X MIN. SOUTHERN PINE (G=0.55) | #8 WOOD SCREW | 1-1/2" | 7/16" |

FLANGE REMOVAL NOTE: PARTIALLY OR FULLY REMOVING THE FLANGE, UP TO AND INCLUDING A BOX-FRAME APPLICATION IS ACCEPTABLE PROVIDED:

- MIN. 1/4" FILLET OF CONSTRUCTION-GRADE ADHESIVE CAULK IS APPLIED INSIDE AND OUT, FULL PERIMETER, BY INSTALLER.
- PRODUCT ANCHORAGE IS IN ACCORDANCE WITH REQUIREMENTS AS SHOWN FOR FLANGE WINDOWS.