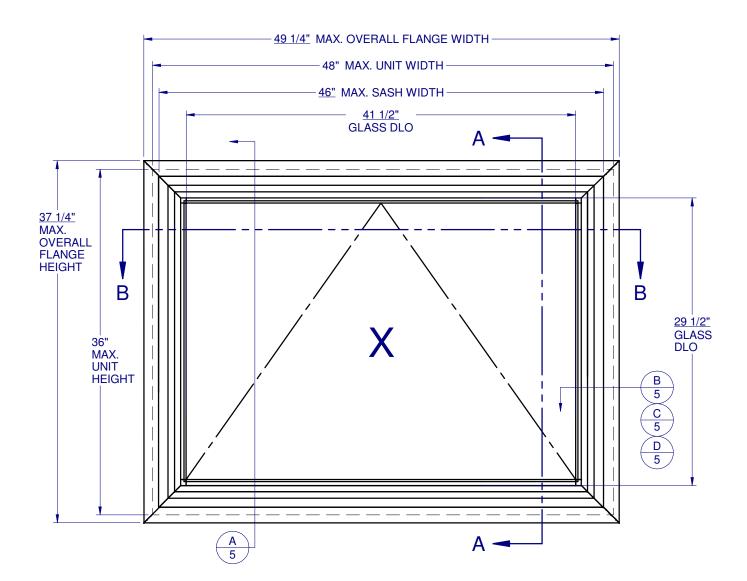
# **AWNING - LARGE MISSILE IMPACT**



#### **GENERAL NOTES:**

- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE FLORIDA BUILDING CODE (FBC), CURRENT EDITION INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) AND IS RATED FOR WIND ZONE 4 MISSILE LEVEL D IMPACT USE AS DEFINED IN ASTM E 1996 PER THE FBC.
- 2. GLAZING OPTIONS: (SEE SHEET 2)
- 3. CONFIGURATIONS: ALL WINDOWS ARE OPEN FROM BOTTOM TO OUTSIDE.
- 4. DESIGN PRESSURES:

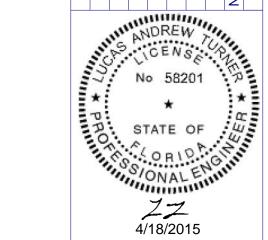
   -NEGATIVE DESIGN LOADS BASED ON TESTED PRESSURE AND GLASS TABLES ASTM E-1300-04.
   -POSITIVE DESIGN LOADS BASED ON TESTED PRESSURE, WATER INFILTRATION TEST PRESSURE, AND GLASS TABLES ASTM E-1300-04.
- 5. ANCHORAGE: THE 33 1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. SEE SHEET 5 FOR INSTALLATION DETAIL. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- 6. PRODUCTS APPROVED FOR IMPACT RESISTANCE. SHUTTERS ARE NOT REQUIRED.
- 7. ALL FRAMES ARE PROCESSED AND SCREWED TOGETHER. PVC VENTS FULLY WELDED.
- 8. SERIES/MODEL DESIGNATION AW-8450.
- 9. THE DESIGNATION X STANDS FOR THE FOLLOWING: X = OPERABLE SASH
- 10. SECTION CALLOUTS APPLY TO ALL ELEVATIONS IN A SIMILAR LOCATION.

# CUSTOM1 WINDOW SYSTEMS

1900 SW 44TH AVE. OCALA, FLORIDA 34474 WWW.CWS.CC

### 8450 PVC AWNING IMPACT

|  |  | TEF 03/16/15           | ADE 03/22/12         | ADE 07/07/08 | DATE:             |           |  |
|--|--|------------------------|----------------------|--------------|-------------------|-----------|--|
|  |  | TEF                    | ADE                  | ADE          | BY:               |           |  |
|  |  | C UPDATED PER 2014 FBC | UPDATED PER 2010 FBC | FBC UPDATE   | NO.: DESCRIPTION: | REVISIONS |  |
|  |  | ပ                      | В                    | A            | NO.:              |           |  |



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

SHEET DESCRIPTION:

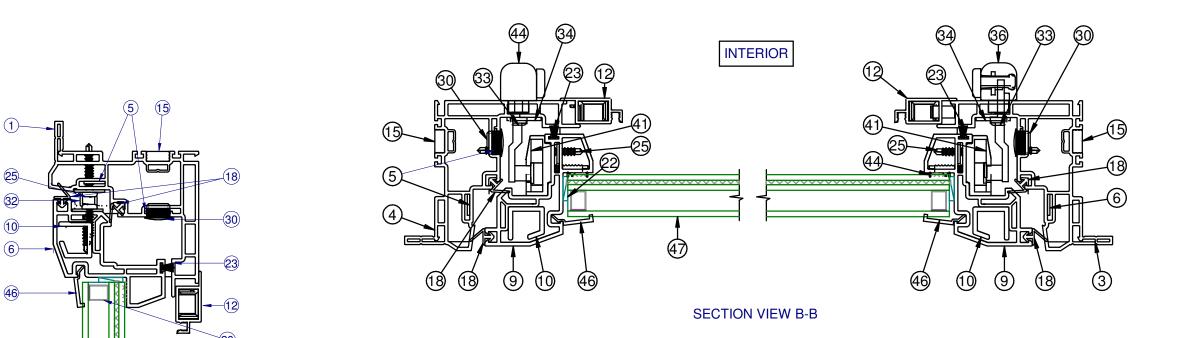
GENERAL NOTES AND ELEVATIONS

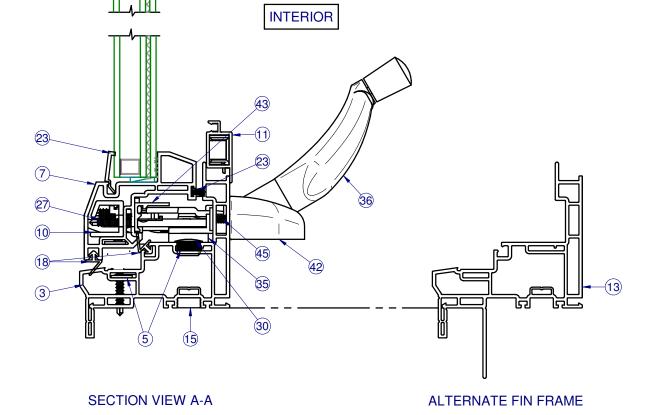
| DD AMAL DV | DATE       |
|------------|------------|
| DRAWN BY:  | DATE:      |
| ADE        | 05/05/2007 |
| DWG #:     | REV.:      |
| CWS-163    | С          |
| SCALE:     | SHEET      |
| 1:10       | 1 OF 5     |
|            |            |

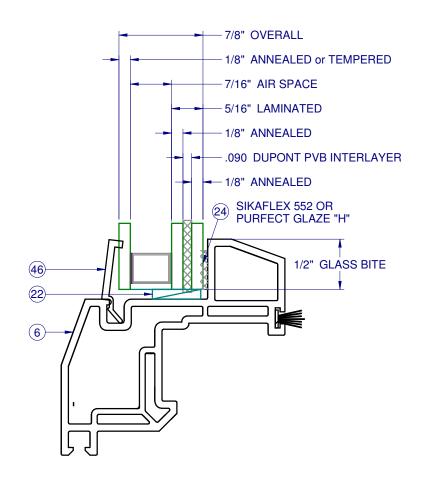
### TABLE OF CONTENTS

| 1 |
|---|
| 2 |
| 3 |
| 4 |
| 5 |
|   |

| LOCATION | MAX. UNIT SIZE | DESIGN PRESSURE RATING | IMPACT RATING        |
|----------|----------------|------------------------|----------------------|
| NON-HVHZ | 48" x 36"      | +/- 65 PSF             | LARGE MISSILE IMPACT |
| HVHZ     | 40 X 30        | +/- 67.5 PSF           | LANGE MISSILE IMPACT |



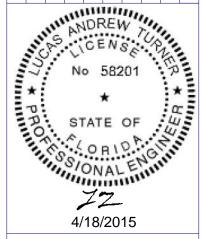






### 8450 PVC AWNING IMPACT

|  |  | 03/16/15               | ADE 03/22/12         | ADE 07/07/08 | DATE:             |           |  |
|--|--|------------------------|----------------------|--------------|-------------------|-----------|--|
|  |  | TEF                    | ADE                  | ADE          | BY:               |           |  |
|  |  | C UPDATED PER 2014 FBC | UPDATED PER 2010 FBC | FBC UPDATE   | NO.: DESCRIPTION: | REVISIONS |  |
|  |  | ပ                      | В                    | Α            | NO.:              |           |  |



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

SHEET DESCRIPTION:

# SECTION VIEWS AND GLAZING DETAIL

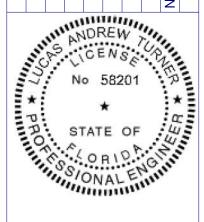
| DRAWN BY: | DATE:      |
|-----------|------------|
| ADE       | 05/05/2007 |
| DWG #:    | REV.:      |
| CWS-163   | С          |
| SCALE:    | SHEET      |
| 1:2       | 2 OF 5     |

| ITEM     | PART #           | DESCRIPTION   | VENDOR                    | MATERIAL             |
|----------|------------------|---|---------------------------|----------------------|
| 1        | H-6030           | FR., AWNING., MAIN, HEAD                            | Mikron                    | Rigid PVC            |
| 2        | H-6030           |   | Mikron                    | Rigid PVC            |
| 3        | H-6030           | FR., AWNING, MAIN, JB., RIGHT                       | Mikron                    | Rigid PVC            |
| 4        | H-6030           | FR., AWNING, MAIN, JB., LEFT                        | Mikron                    | Rigid PVC            |
| 5        | P-4050           | COIL-ALUMINUM, 5052-H32 (.050 X .437) JB, LEFT      | Precision Steel           | Aluminum             |
| 6        | H-6008           | SASH, AWNING, TOP RAIL                              | Mikron                    | Rigid PVC            |
| 7        | H-6008           | SASH, AWNING, BOT. RAIL                             | Mikron                    | Rigid PVC            |
| 8        | H-6008           | SASH, AWNING, SIDE RAIL, RIGHT                      | Mikron                    | Rigid PVC            |
| 9        | H-6008           | SASH, AWNING, SIDE RAIL, LEFT                       | Mikron                    | Rigid PVC            |
| 10       | S-1505           | REINF. AWNING, SASH SIDE RAIL LEFT                  | Keymark                   | Aluminum             |
| 11       | H-1592           | SCREEN RAIL, SIDE                                   | Keymark                   | Aluminum             |
| 12       | H-1593           | SCREEN RAIL, TOP/BTM/SIDE                           | Keymark                   | Aluminum             |
| 13       | H-6030A          | FR., AWNING., MAIN, HEAD, W/ INTEGRAL FIN           | Mikron                    | Rigid PVC            |
| 14       | P-3029           | SCREEN LIFT-OUT                                     | Hurley                    | Steel                |
| 15       | P-3113           | SCREW SUPPORT FOR PVC                               | Team                      | Rubber               |
| 16       | P-3195           | SCREEN SPRING, NO HOLE TENSION                      | Hurley                    | Steel                |
| 17       | P-3197           | SCREEN CORNER KEY                                   | M&M                       | Nylon                |
| 18       | P-3217           | WSTP., WHITE LEAF SEAL, FRAME                       | Amesbury                  | Rubber               |
| 19       | P-3228           | SCREEN SPLINE, .155 DIA, BLK                        | Dapa                      | Foam                 |
| 20       | P-3281           | SPACER, DURASEAL, .SEE SHEET 3                      | Truseal                   |                      |
| 21       | P-3342           | SEAM SEALER, SM-5504                                | Schnee                    | Silicone             |
| 22       | P-3352           | SET. BLK., 85 DUR., 1/8" X 5/8" X 2" LG.            | Frank Lowe                | Rubber               |
| 23       | P-3429           | WSTP., .270 X.187 BACK, ULTRA FIN, BLACK, SASH      | Ultrafab                  | Nylon                |
| 24       | P-3438           | PURFECT GLAZE "H", SIKA FLEX 552                    | Truseal/Sika              | Silicone             |
| 25       | P-3539           | #8 X 3/4" QUAD PH TEK, ZINC, SCREW                  | Fastenal                  | Steel                |
| 26       | P-3581           | SCREEN CLOTH, 18 X 16 FIBERGLASS                    | Wier                      | Fiberglass           |
| 27       | P-3587           | #8 X 1" PH FH TEK 2, ZINC, SCREW                    | Fastenal                  | Steel                |
| 28       | P-3613           | CWS LBL. (LOGO)                                     |                           |                      |
| 29       |                  | AW-8400 GOLD CERT. LABEL, NFRC TAB                  |                           |                      |
| 30       |                  | CAP PLUG, 1/2" HOLE                                 | M&M                       | Nylon                |
| 31       | P-3881           | TEMPORARY LBL. (NFRC/DP)                            |                           |                      |
| 32       | P-3940           | SNUBBER, SS, PVC                                    |                           |                      |
| 33       |                  | #8-32 X 1/2" PH PH, MS, SS (ROTO HDWE. LOCK)        | Fastenal                  | Steel                |
| 34       | P-4005           | SUPPORT PLATE, LOCK, SS, ROTO HDWE. (Use w/ P-      |                           | Stainless            |
| 35       | P-4012           |   | Roto                      | Stainless            |
| 36       | P-4014           | HANDLE, STD, ROTO OPER, ROTO HDWE. (WHITE)          | Roto                      | Stainless            |
| 37       | P-4015           | HINGE ARM, WASHABILITY, 13", ROTO HARDWARE          | Roto                      | Stainless            |
| 38       | P-4018           | HINGE TRACK, 13" ROTO HDWE., "A" & "B"              | Roto                      | Stainless            |
| 39       | P-4024           | GASKET, ROTO OPER., ROTO HDWE., 1/16"               | HOP                       | Closed Cell          |
| 40       | P-4042<br>P-4043 | GASKET, LOCK  | HOP                       | Closed Cell          |
| 41<br>42 | P-4043<br>P-4044 | STRIKE, MULTI-POINT ROTO OPER., SCISSOR ARM, AWNING | Progress Plastics<br>Roto | Plastic<br>Stainless |
| 42       | P-4044<br>P-4045 | SWIVEL BRACKET, ROTO OPER., AWNING                  | Roto                      | Stainless            |
| 43       | P-4045<br>P-4047 | LOCK, SINGLE-POINT, ROTO HDWE., WHITE               | Roto                      | Stainless            |
| 45       | P-4047<br>P-4521 | #8-32 x 3/4" Phil Trilobe Truss, SS                 | Fastenal                  | Steel                |
| 46       | S-6064           | GLZ. BD., 7/8"                                      | Mikron                    | Rigid PVC            |
| 47       | GLASS            | SEE SHEET 2   | IVIINIUII                 | riigiu i VO          |
| 7/       | GLASS            | OLL OHLLI Z   |                           |                      |



## 8450 PVC AWNING IMPACT

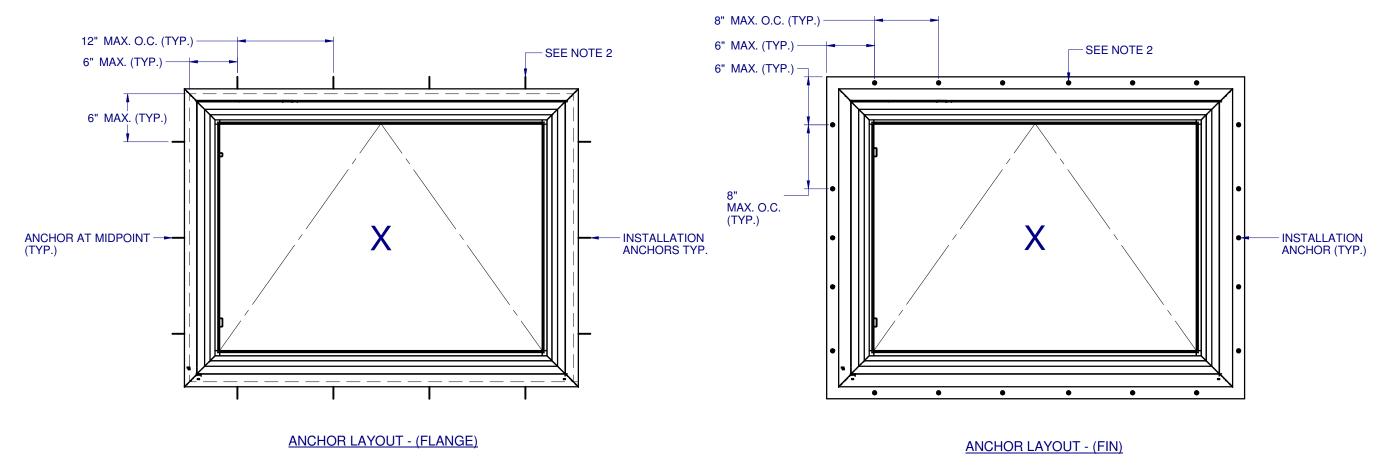
|  |  | 03/16/15               | 03/22/12             | ADE 07/07/08 | DATE:             |           |
|--|--|------------------------|----------------------|--------------|-------------------|-----------|
|  |  | TEF                    | ADE                  | ADE          | BY:               |           |
|  |  | C UPDATED PER 2014 FBC | UPDATED PER 2010 FBC | FBC UPDATE   | NO.: DESCRIPTION: | REVISIONS |
|  |  | ပ                      | В                    | ⋖            | 9<br>9            |           |



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

SHEET DESCRIPTION:

| DRAWN BY: | DATE:      |
|-----------|------------|
| ADE       | 05/05/2007 |
| DWG #:    | REV.:      |
| CWS-163   | С          |
| SCALE:    | SHEET      |
| 1:2       | 3 OF 5     |



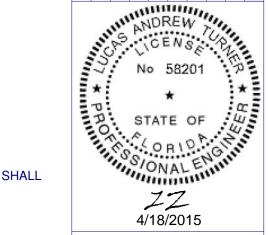
### NOTES:

- 1. INSTALL ONE ANCHOR AT EACH LOCATION. SILL ANCHOR SPACING SAME AS HEAD.
- 2. SHIM AS REQ'D 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 BECONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER. WOOD SHIMS ARE NOT ALLOWED.
- 3. ANCHOR TYPE, SIZE, SPACING AND EMBEDMENT SHALL BE AS SPECIFIED IN THESE DRAWINGS, SEE TABLE 1, SHEET 5.
- 4. 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.
- 5. 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 5.
- 6. 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 TO SOLID CONCRETE OR GROUT-FILLED CMU MAY INCLUDE BUT DO NOT REQUIRE 1X WOOD BUCKS BETWEEN THE PRODUCT AND THE SUBSTRATE. INSTALLATIONS TO HOLLOW CMU REQUIRE THE USE OF 1X BUCKS BETWEEN THE PRODUCT AND SUBSTRATE.
- 7. A MINIMUM CENTER-TO-CENTER SPACING SHALL BE MAINTAINED BETWEEN ALL FASTENERS: 3" FOR MASONRY, 1" FOR WOOD AND METAL.
- 8. 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 5. CONCRETE AND MASONRY SUBSTRATES MAY NOT BE CRACKED.
- 9. 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)



### 8450 PVC AWNING IMPACT

|  |  | 03/16/15               | ADE 03/22/12         | ADE 07/07/08 | DATE:             |           |
|--|--|------------------------|----------------------|--------------|-------------------|-----------|
|  |  | TEF                    | ADE                  | ADE          | BY:               |           |
|  |  | C UPDATED PER 2014 FBC | UPDATED PER 2010 FBC | FBC UPDATE   | NO.: DESCRIPTION: | REVISIONS |
|  |  | 0                      | М                    | ٧            | NO.:              |           |

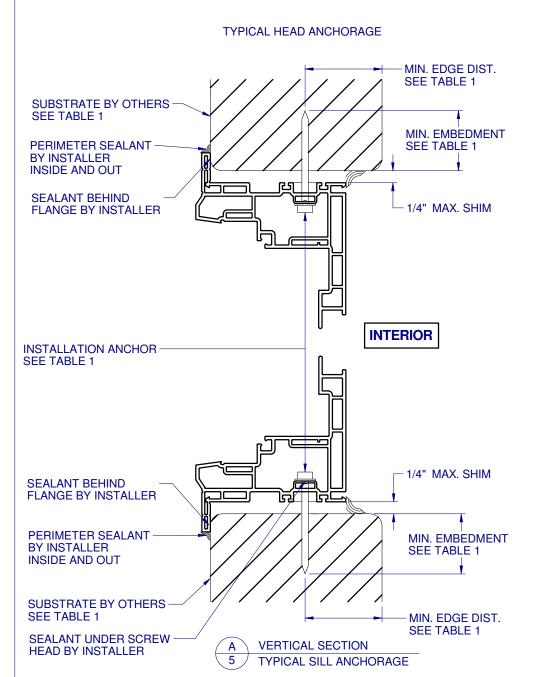


LUCAS A. TURNER, P.E. FL PE # 58201 1239 JABARA AVE. NORTH PORT, FL 34288 PH. 941-380-1574

SHEET DESCRIPTION:

ANCHOR SCHEDULE AND NOTES

| DRAWN BY: | DATE:      |
|-----------|------------|
| ADE       | 05/05/2007 |
| DWG #:    | REV.:      |
| CWS-163   | С          |
| SCALE:    | SHEET      |
| 1:12      | 4 OF 5     |



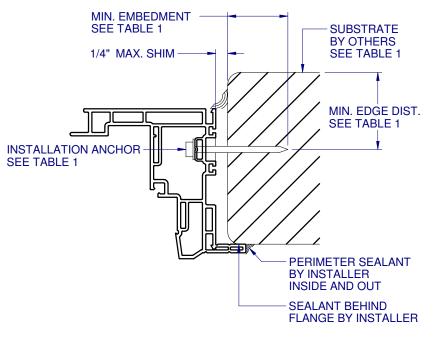
1/8" ALUM. (6063-T5 MIN.) OR

2X MIN. SPRUCE-PINE-FIR (G=0.42)

1/8" STEEL (33 KSI MIN.)

**FLANGE** 

FIN



B HORIZONTAL SECTION
5 TYPICAL JAMB ANCHORAGE

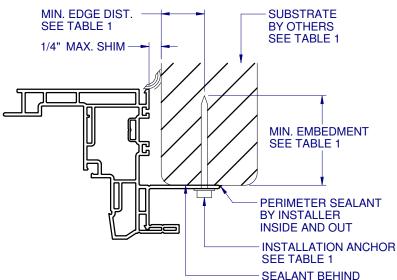
**FULL THREAD** 

THRU 0.125"

1-1/2"

7/16"

7/16"

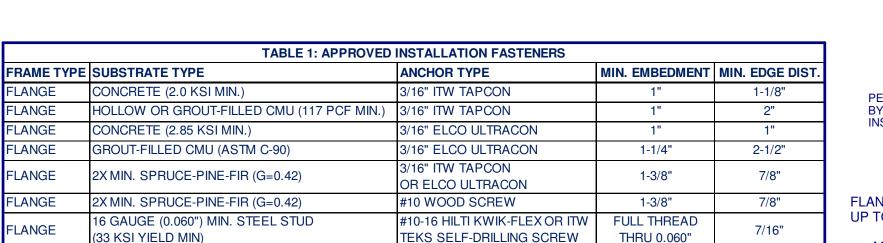


C HORIZONTAL SECTION

TYPICAL FIN ANCHORAGE

HEAD AND SILL SIMILAR FOR FIN INSTALLATION

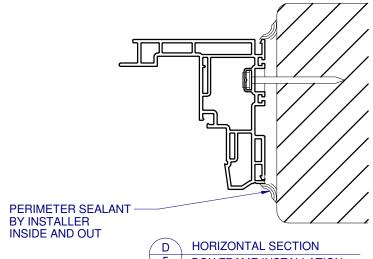
FIN BY INSTALLER



#10 GRADE 5 SELF-TAPPING

**DRILLING SCREW** 

#8 WOOD SCREW



D HORIZONTAL SECTION

5 BOX FRAME INSTALLATION
HEAD AND SILL SIMILAR FOR BOX INSTALLATION

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

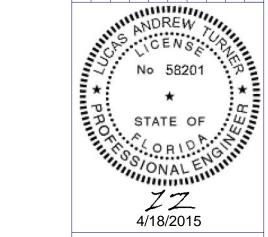
- MIN. 1/4" FILLET OF CONSTRUCTION-GRADE ADHESIVE CAULK IS APPLIED INSIDE AND OUT, FULL PERIMETER, BY INSTALLER.
- PRODUCT ANCHORAGE IS IN ACCORDANCE WITH REQUIREMENTS AS SHOWN FOR FLANGE WINDOWS.



WWW.CWS.CC

### 8450 PVC AWNING IMPACT

|  |  | 03/16/15               | ADE 03/22/12         | ADE 07/07/08 | DATE:             |           |
|--|--|------------------------|----------------------|--------------|-------------------|-----------|
|  |  | TEF                    | ADE                  | ADE          | BY:               |           |
|  |  | C UPDATED PER 2014 FBC | UPDATED PER 2010 FBC | FBC UPDATE   | NO.: DESCRIPTION: | REVISIONS |
|  |  | ပ                      | ш                    | 4            | 9<br>9            |           |



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: | DATE:      |
|----|-----------|------------|
| ): | ADE       | 05/05/2007 |
|    | DWG #:    | REV.:      |
|    | CWS-163   | С          |
|    | SCALE:    | SHEET      |
|    | 1:2       | 5 OF 5     |