Engineering Evaluation Report # AW5540-20250213

Prepared by:
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Certificate of Authorization: #29286

Manufacturer:
PGT Industries, LLC
3400 Precision Dr.
N. Venice, FL 34275

Product Description:
Series AW5540 Impact Resistant Vinyl Awning Window with Diamond Glass, (LMI), FL-29701

Compliance:
The above-mentioned product has been evaluated for compliance with the requirements of the Florida Department of Business and Professional Regulation for Statewide Acceptance per Rule 61 G20-3.005 method 1(d). The product listed herein complies with the requirements of the current Florida Building Code.

This product has been evaluated and is in compliance with the current Florida Building Code, including the "High Velocity Hurricane Zone" (HVHZ).

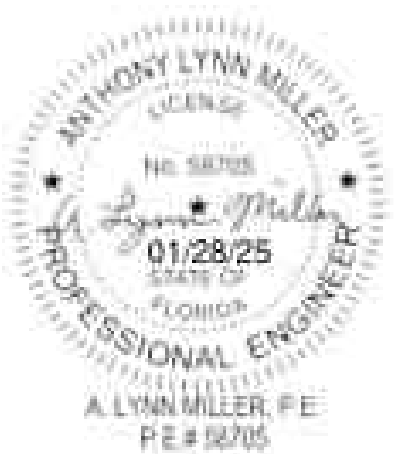
Supporting Technical Documentation:
1. Approval Document: Drawing number AW5540-DG-LM, signed and sealed by A. Lynn Miller, P.E.
2. Test Report No.: FTL-8183, FTL 19-9037 & 20-2107.1-4, signed and sealed by Idalmis Ortega, P.E.
Fenestration Testing Laboratories, Medley, FL 33166
3. Test Report No.: NOK-0112, NOK-0113, NOK-0115 & NOK-0116, signed and sealed by Idalmis Ortega, P.E.
OAI Laboratories, Nokomis, FL 34275

TAS 201-94 Large Missile Impact Test
TAS 202-94 Uniform Static Air Pressure Test
TAS 203-94 Cyclic Pressure Loading Test

3. Calculations, signed and sealed by A. Lynn Miller, P.E., dated 04/24/15, 3/25/20 & 01/28/25.

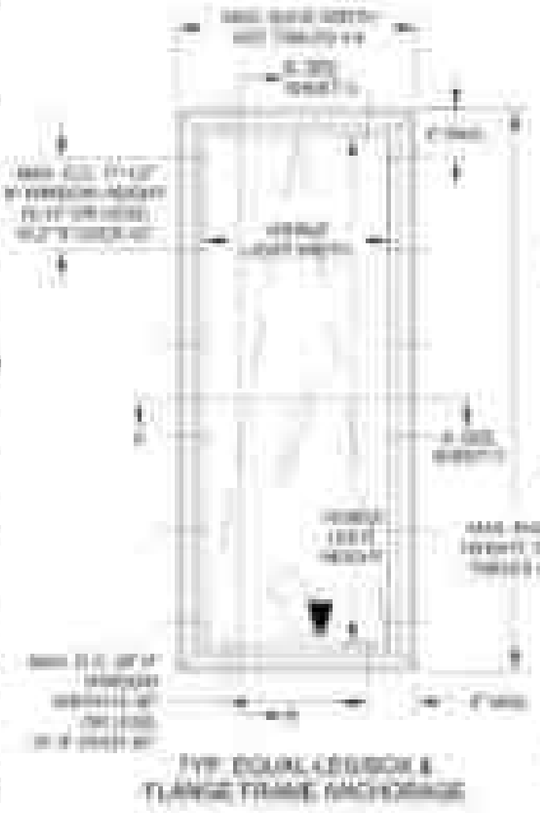
4. Miami-Dade RER Product Control Section NOA's; PVB and SG Interlayers by Kuraray America, Inc.

Limitations and Conditions of use:
- Units must be glazed per ASTM E1300-09, refer to approval document for glazing details.
- This product is rated to be used in the HVHZ.
- This product is impact resistant and does not require impact protection in wind borne debris regions.
- Frame and sash material to be extruded Vinyl.
- Units must be installed in accordance with approval document, AW5540-DG-LM.

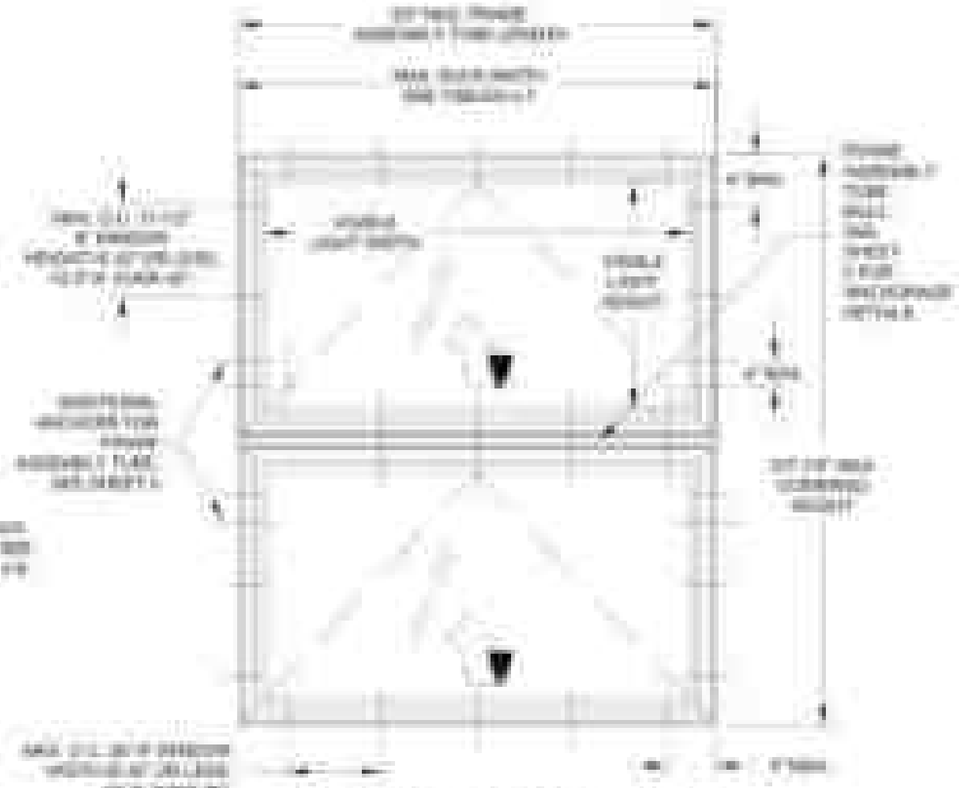


A. LYNN MILLER, P.E.
P.E.# 59705

GENERAL NOTES SERIES 4000/5000
IMPACT RESISTANT
VINYL AWNING WINDOW
WITH LAMINATED GLASS



TYP. EQUAL LEG/BOX & FLANGE FRAME ANCHORAGE



TYP. BOX EQUAL LEG/BOX & FLANGE FRAME ANCHORAGE USING FRAME ASSEMBLY TUBE/RAIL



TYP. INTEGRAL FIN & J-CHANNEL FRAME ANCHORAGE

VISIBLE VENT FORMULAS

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ROHA VERSION 1 11

PGT

STATE OF FLORIDA

TABLE 1

Glass Type	Description	Safety #	Manual #
1	[illegible]	X	X
2	[illegible]	X	X
3	[illegible]	X	X
4	[illegible]	X	X
5	[illegible]	X	X
6	[illegible]	X	X
7	[illegible]	X	X

X = [illegible]
(M) = [illegible]
(*) = [illegible]
*FOR = [illegible]
(**) = [illegible]

[illegible]

[illegible]

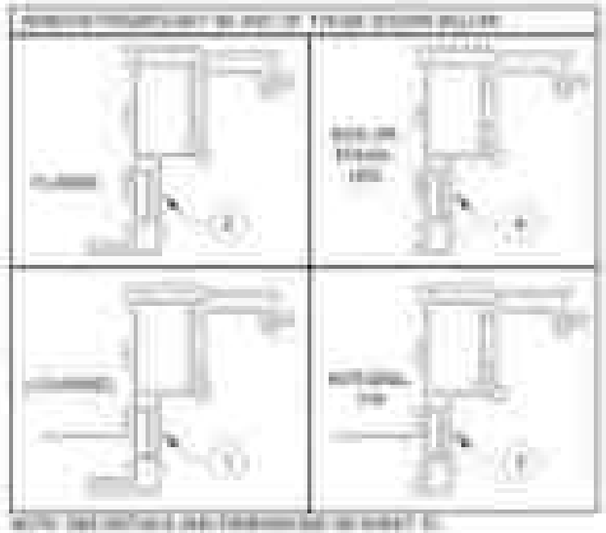
Group	Anchor	Substrate	Min. Edge Distance	Min. Embedment
A	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]

NOTE: [illegible]

TABLE 2 [illegible]

Group	Anchor	Substrate	Min. Edge Distance	Min. Embedment
A	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]

1. [illegible]
2. [illegible]



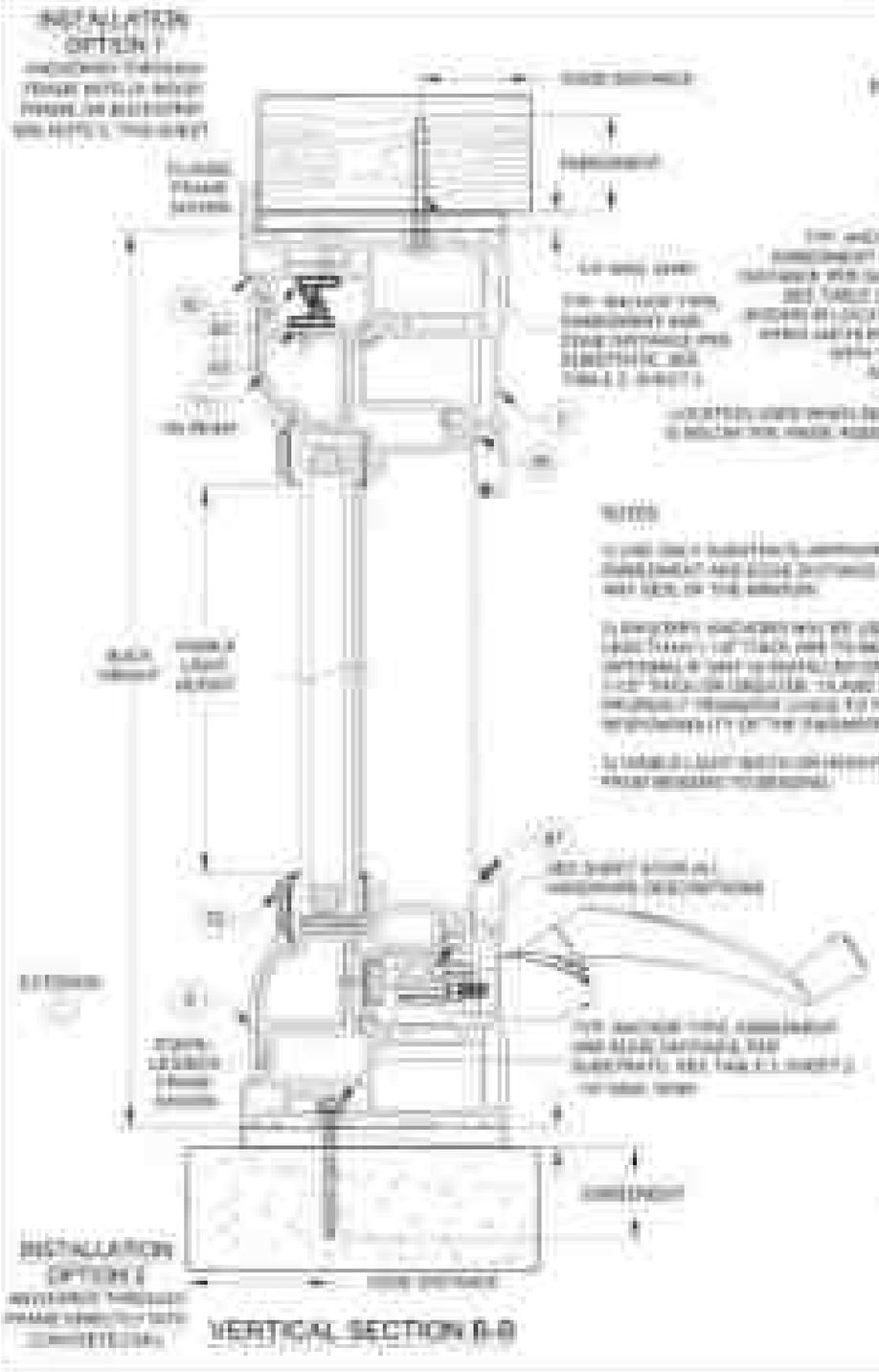


TYP. GLAZING DETAIL

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[illegible]

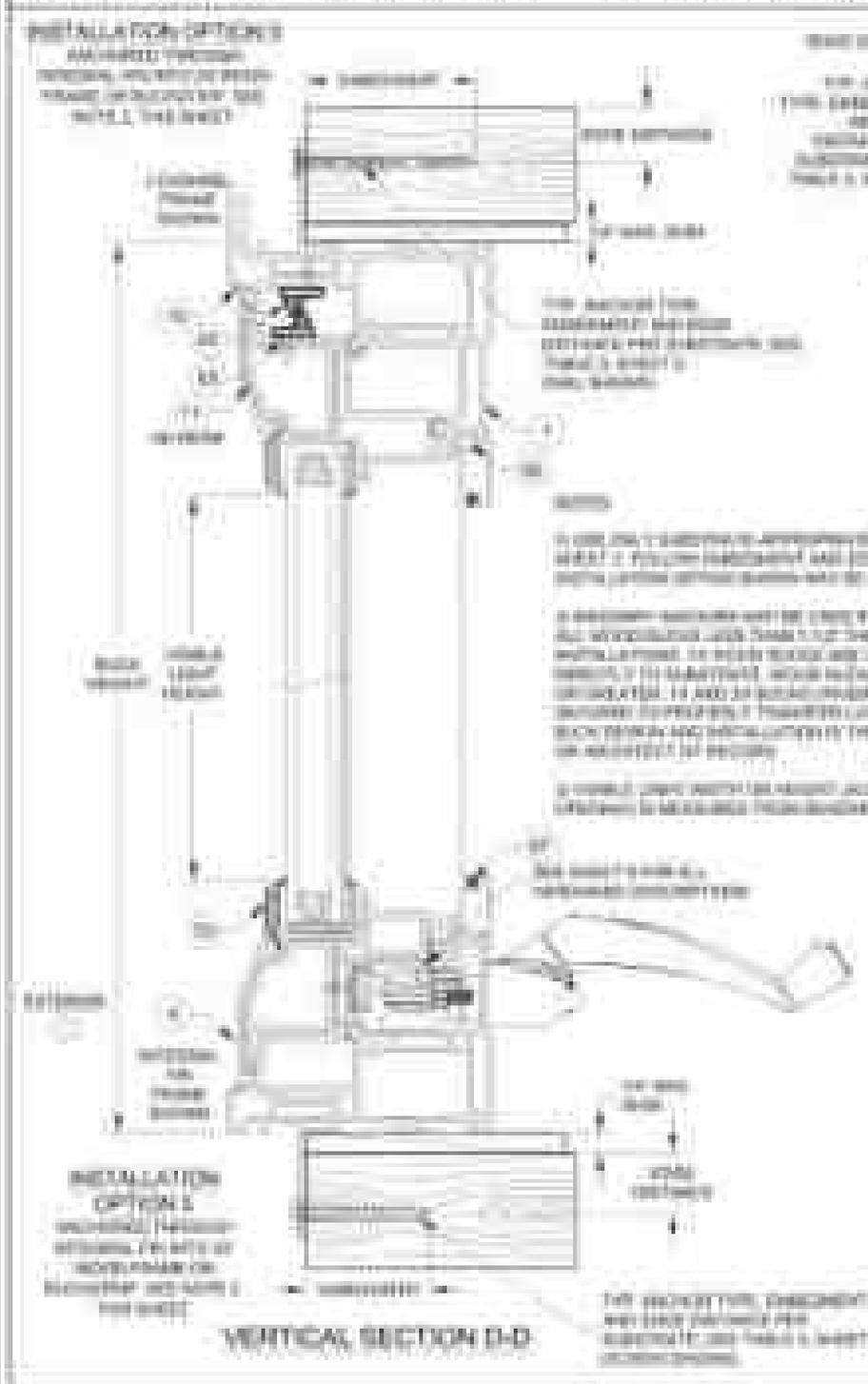
INSTALLATION DETAILS FOR FLANGE & EQUAL-LEG SIDX FRAMES



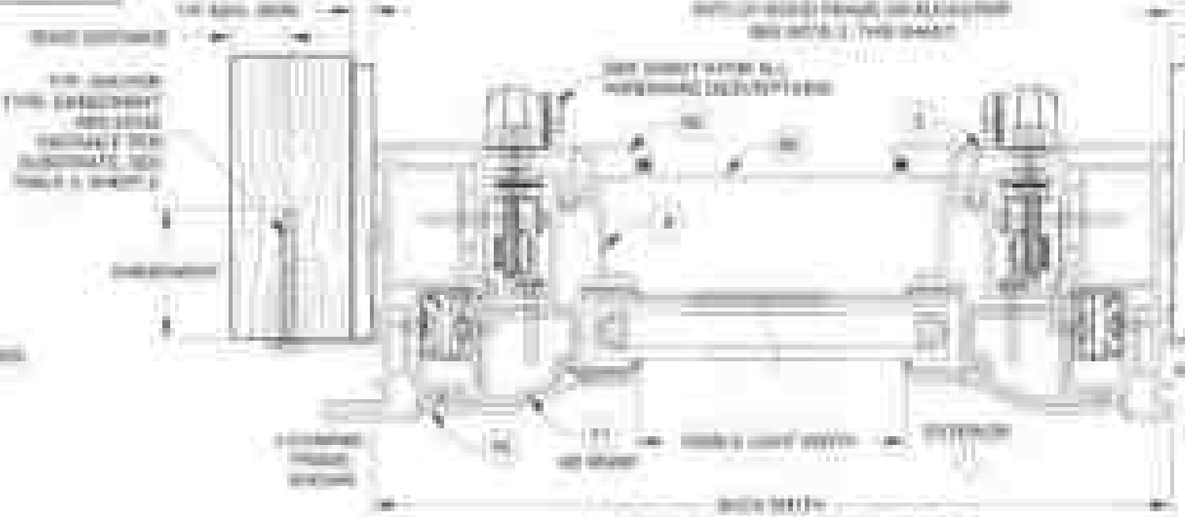
NOTES

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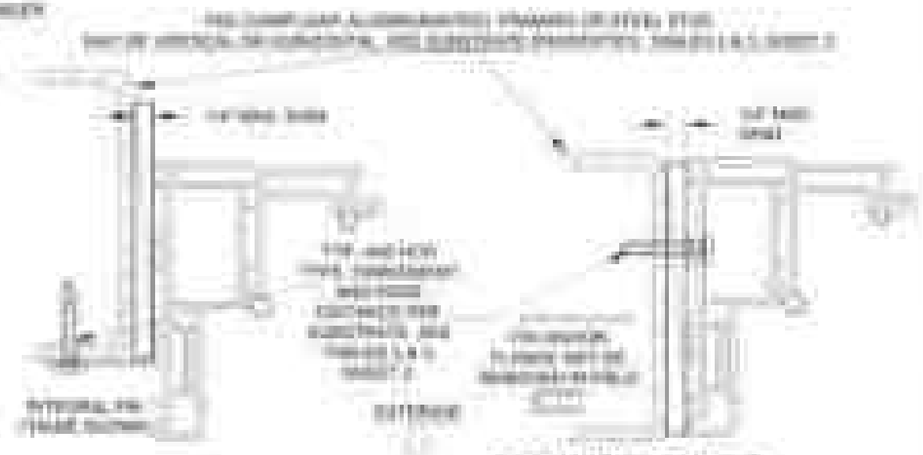
INSTALLATION DETAILS FOR INTEGRAL FIN & J-CHANNEL FRAMES



VERTICAL SECTION D-D



HORIZONTAL SECTION C-C



INSTALLATION OPTION 6

INSTALLATION OPTION 7

PGT

WINCO WINDOWS (LSI)

CHANNEL & FINTRIMED

SHEET 11 OF 11

SHEET

ILLUSTRATION OF AWNING-TO-AWNING (XX)

EQUAL SIZED FRAME WITH IDENTICAL PRODUCTS COMBINED

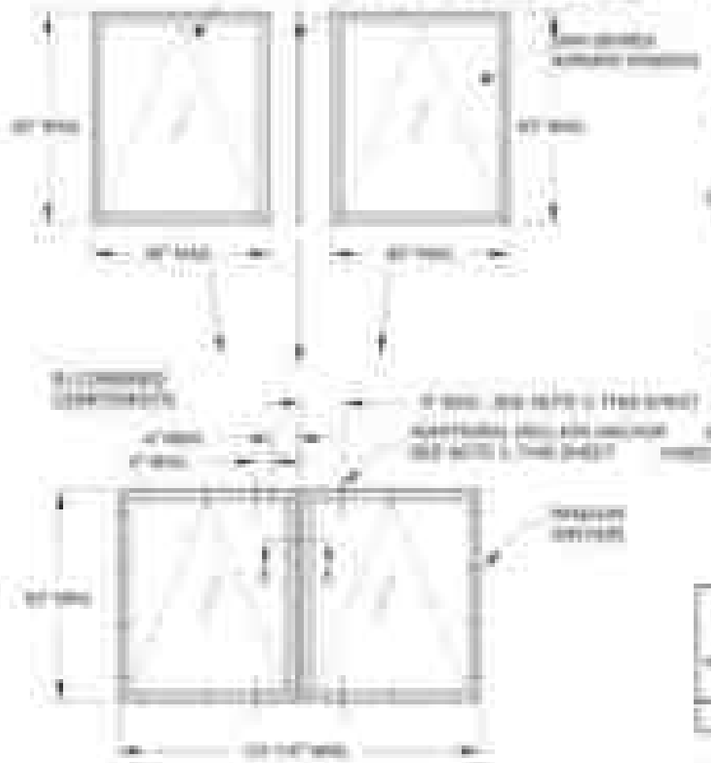
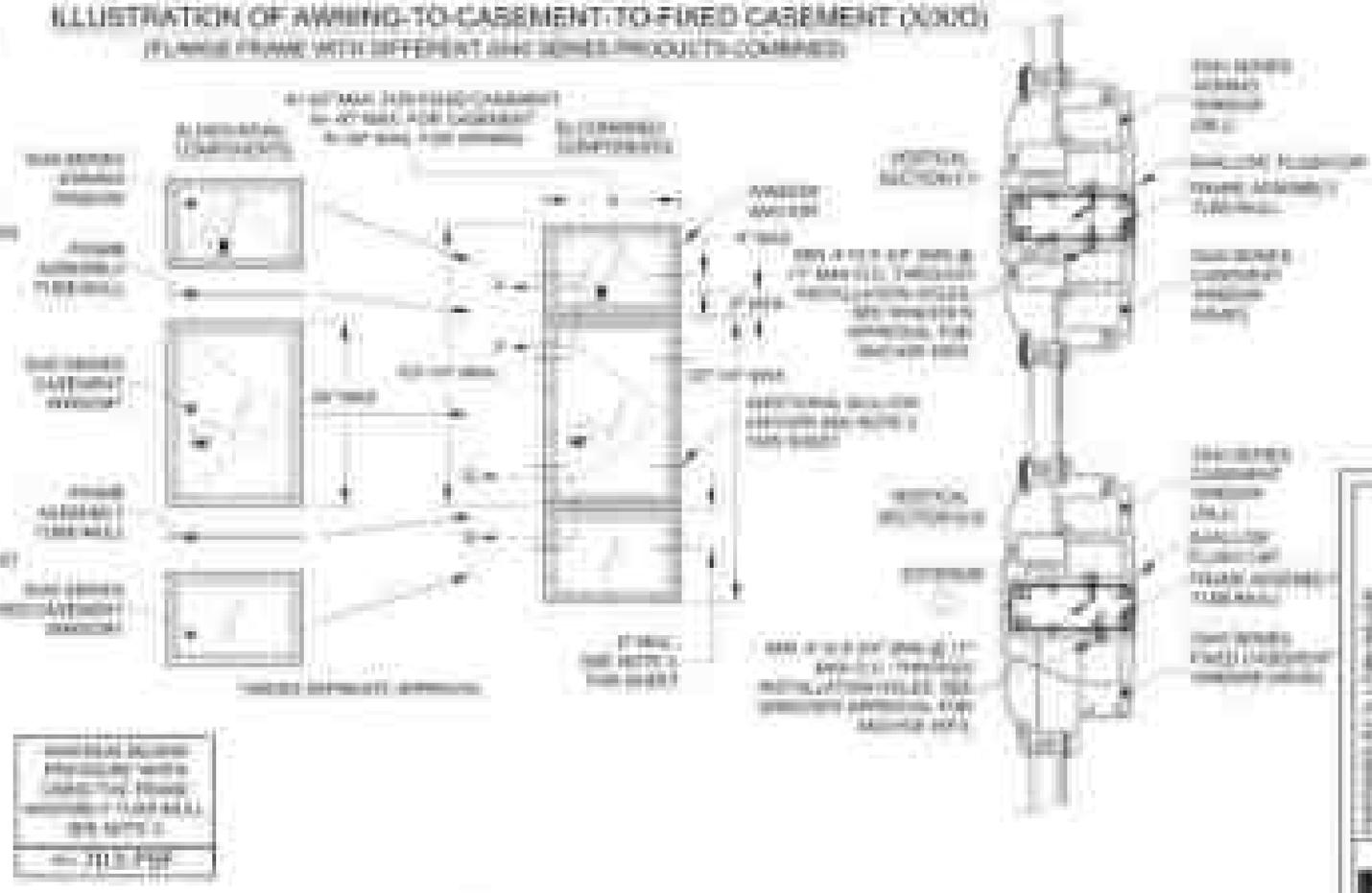


ILLUSTRATION OF AWNING-TO-CASEMENT-TO-FIXED CASEMENT (XOO)

FLANGE FRAME WITH DIFFERENT AWC SERIES PRODUCTS COMBINED



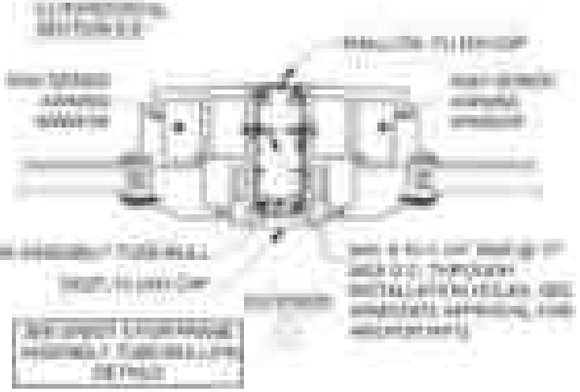
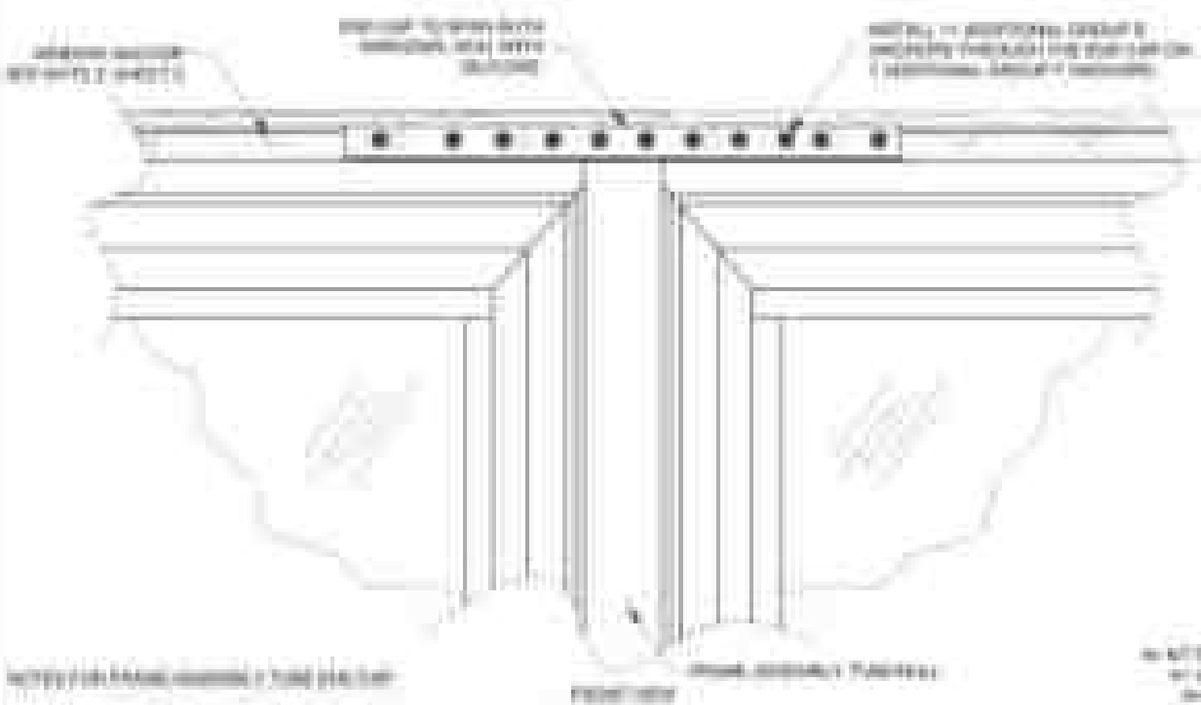




ILLUSTRATION OF END CAP USE WITH FIN AND J-CHANNEL FRAMES



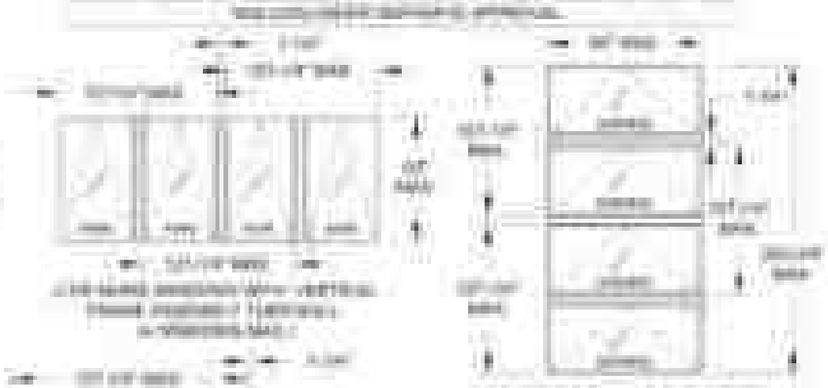








Table 4

Window Design Pressure (+/- psf)														
Overall Dimensions (Rough Opening)														
Rough Height (in.)														

Window Type: [illegible]

NOTES:

1. [illegible]
2. [illegible]





IGT

TABLE 1

Window Design Pressures (+/-, psf)											Glass Types			
Design Designation	Zone 1				Zone 2				Zone 3				Zone 4	
	1E	1F	1G	1H	2E	2F	2G	2H	3E	3F	4E	4F	5E	5F
30														
35														
40														
45														
50														
55														
60														
65														
70														
75														
80														

TABLE 2

Window Design Pressure (+/-, psf)										Glass Type	7
Design Designation	Zone 1				Zone 2						
	2A	2C	2E	2G	2H	2J	2K	2L	2M	2P	2R
30											
35											
40											
45											
50											
55											
60											
65											
70											
75											
80											

NOTES

1. GLASS TYPES 1 & 2 MAY NOT BE USED IN THE HIGH WIND REGION.

GLASS TYPE 3
(7/8" NOM. GLASS STACK)

GLASS TYPE 4
(7/8" NOM. GLASS STACK)

GLASS TYPE 5
(7/8" NOM. GLASS STACK)

GLASS TYPE 6
(7/8" NOM. GLASS STACK)

GLASS TYPE 7
(7/8" NOM. GLASS STACK)

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VERTICAL HARDWARE

HORIZONTAL HARDWARE

EXTERIOR

NOTES:

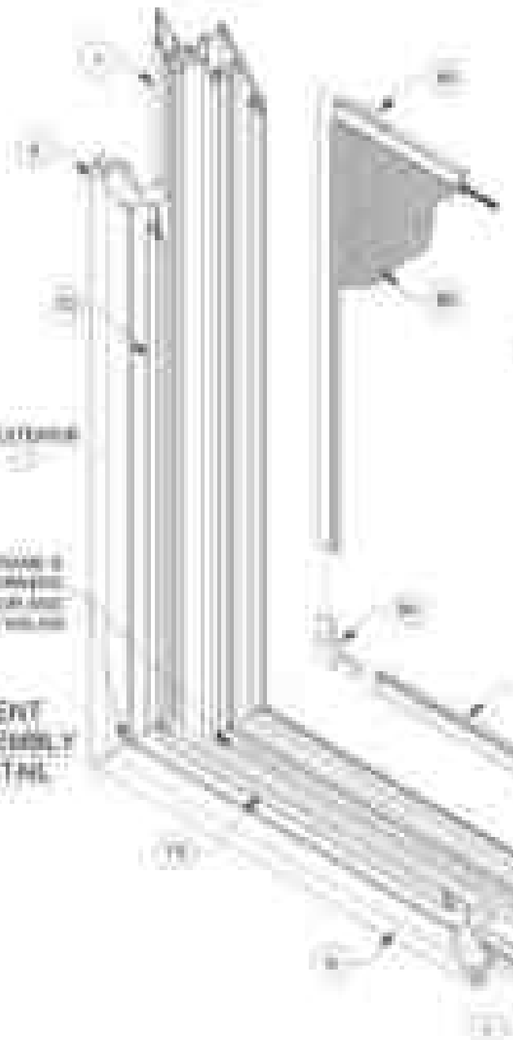
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ID	Part #	Description	Material
1	[illegible]	Channel Frame	Alum.
2	[illegible]	Hinge Frame	Alum.
3	[illegible]	Hinge Pin Frame	Alum.
4	[illegible]	Fixed Leaf/Sill Frame	Alum.
5	[illegible]	Sill Vent Rail	Alum.
6	[illegible]	Sill Vent Reinforcement (For Large)	Extr. 6063-T5
7	[illegible]	Weatherstrip, 90 +/- 7 Duro	Plas-TPV
8	[illegible]	Sash Stick Lock	Zn. Diecast
9	[illegible]	Sash Stick Lock Pole Keeper Plate	Zn. Diecast
10	[illegible]	Tie Bar	Zn. Diecast
11	[illegible]	Tie Bar Guide	Zn. Diecast
12	[illegible]	Sash Lift Keeper	Zn. Diecast
13	[illegible]	#8 x 1/2" Pan Hd Machine Screw	SS
14	[illegible]	#8 x 3/4" Pan, Phil Tek	SS
15	[illegible]	#8 x 1-1/2" FHC, Phil Tek	SS
16	[illegible]	Awning Sidelock Operator	Zn. Diecast
17	[illegible]	Awning Handle Operator	Zn. Diecast
18	[illegible]	Awning Sidelock Operator Pivot	SS
19	[illegible]	Awning Handle Operator Bracket	Zn. Diecast
20	[illegible]	Operator Support Wiring	Nylon/Wire
21	[illegible]	Operator Retaining Plate	Zn. Diecast
22	[illegible]	Operator Cover	
23		Operator Handle	Zn. Diecast
24	[illegible]	Locking Handle	Zn. Diecast
25	[illegible]	Handle Escutcheon	Zn. Diecast
26	[illegible]	#8 x 1/2" Pan Hd Machine Screw	SS
27	[illegible]	#8 x 3/4" Pan, Phil Tek	SS
28	[illegible]	#8 x 1" Pan, Phil Tek	SS
29	[illegible]	Awning Sidelock Hinge	Zn. Diecast
30	[illegible]	#10 x 1/2" Pan, Phil Machine Screw	SS
31	[illegible]	Tie Bumper	Stainless Steel
32	[illegible]	#8 x 1/2" Pan, Phil	SS
33	[illegible]	Locker Jaw Plug	PVC
34	[illegible]	Screen Pin Lower Interlock Plunger	Steel
35	[illegible]	Lever for Awning Head	PVC
36		Reinforcing, Dir Fitch or Dav Fit or Dav Bit	Polyolefin
37	[illegible]	Glazing Bead 0.728" x 1" x 0.071", 90 +/- 7 Duro	EPDM
38	[illegible]	Insulated Screen Interlock	
39	[illegible]	Screen Corner Key	
40	[illegible]	Screen Spring	
41	[illegible]	Screen Clip	
42	[illegible]	Top Screen Frame Weatherstrip Retainer	
43	[illegible]	Frame Assembly Tape	Polyolefin Foam
44	[illegible]	Screen Push Pin	PVC
45	[illegible]	Glass Push Clip	PVC
46	[illegible]	Frame Assembly Tube End Cap	PVC











FRAME OPTIONS

SCREEN ASSEMBLY DETAIL

FRAME ASSEMBLY DETAIL

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