Engineering Evaluation Report # AW5540-20200909

Prepared by:
A. Lynn Miller, P.E.
1070 Technology Dr.
N. Venice, FL 34275
(941) 480-1600
Certificate of Authorization: #29296

Manufacturer:
PGT Industries, Inc.
1070 Technology Drive
North Venice, FL 34275

Product Description:
AW5540 Series Impact-Resistant Vinyl Awning Window, (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).

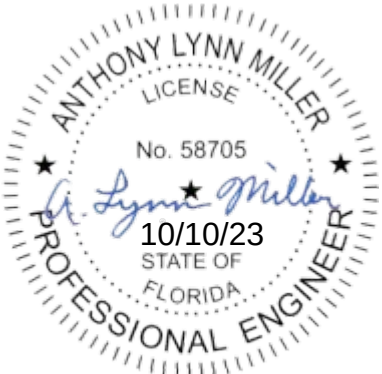
Supporting Technical Documentation:
1. Approval Document: Drawing number AW5540 LAMI, signed and sealed by A. Lynn Miller, P.E.
2. Test Report No.: FTL-8183, FTL 19-9037 & 20-2107.1-4, signed and sealed by Idalmis Ortega, P.E.
Fenestration Testing Laboratories, Medley, FL 33166

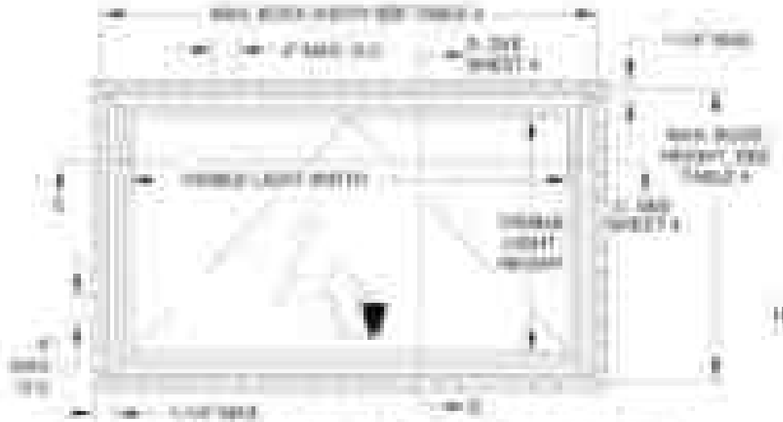
TAS 201-94 Large Missile Impact Test
TAS 202-94 Uniform Static Air Pressure Test
TAS 203-94 Cyclic Pressure Loading Test

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

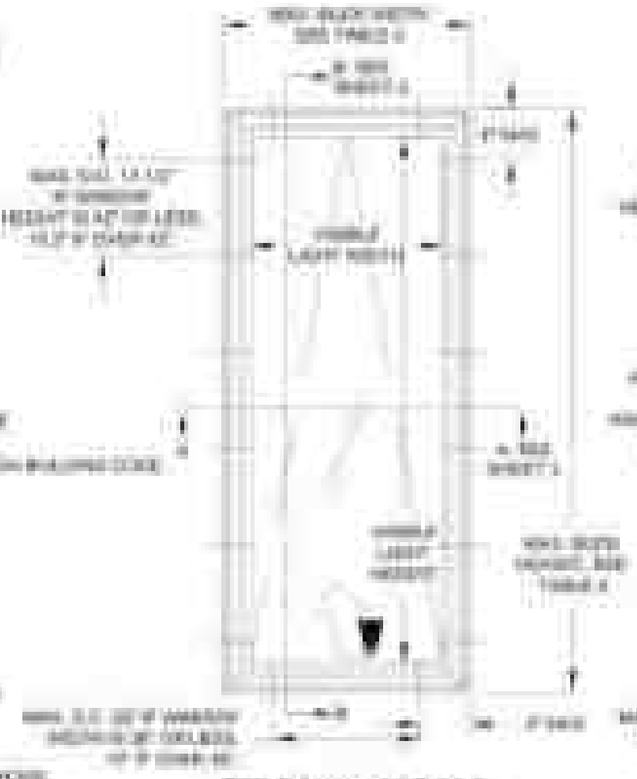
4. Miami-Dade RER Product Control Section NOA’s; PVB Interlayer by Kuraray America, Inc.

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 LAMI.

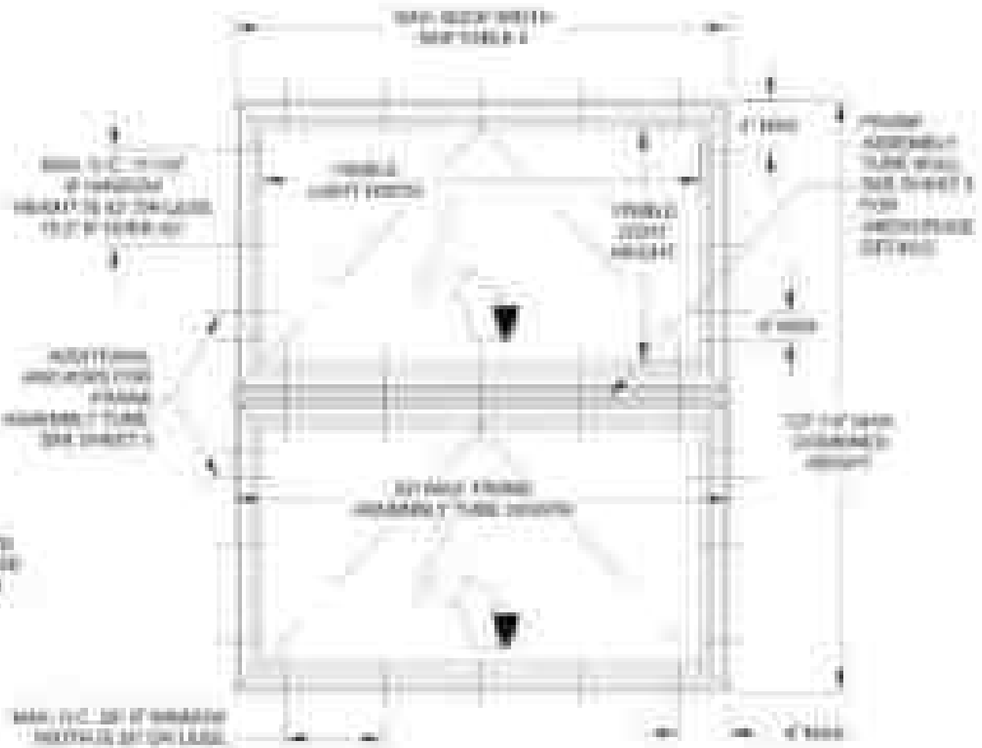




TYP. INTEGRAL FIN & J-CHANNEL FRAME ANCHORAGE



TYP. EQUAL LEGBOX & FLANGE FRAME ANCHORAGE



TYP. 90° EQUAL LEGBOX & FLANGE FRAME ANCHORAGE
USING FRAME ASSEMBLY TUBE (FLG.)

SERIES 9340 IMPACT RESISTANT, VINYL AWNING WINDOW

VISIBLE LIGHT FORMULAS

GENERAL NOTES & ELEVATIONS	1
FRAME, GLAZING & ANCHOR OPTIONS	2
INSTALLATION, FLANGE & LEGS	3
INSTALLATION, INTERIOR FIN & CHANNEL	4
FRAME ASSEMBLY TUBE	5 & 6
DESIGN PRESSURES	7
HARDWARE	8
SCREEN ASSEMBLY	9

COPYRIGHT © 2022
PGT INDUSTRIES, INC.
UNAUTHORIZED USE OR COPYING OF THESE DRAWINGS AND SPECIFICATIONS IS PROHIBITED AND MAY BE UNLAWFUL. ALL RIGHTS RESERVED.

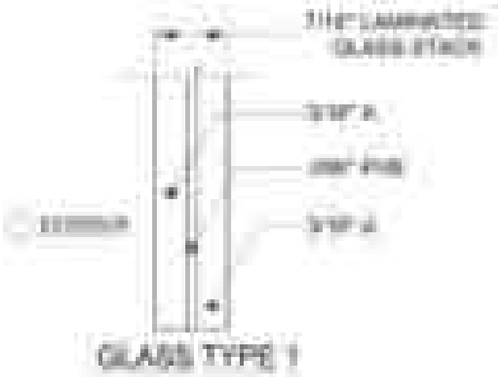
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 486-1600

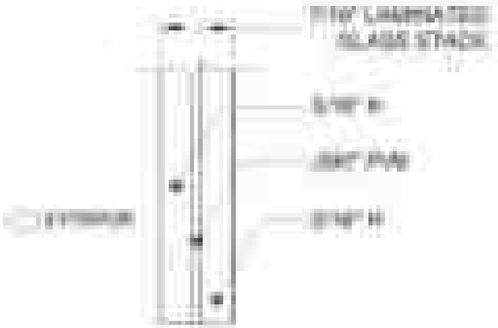
VINYL AWNING WINDOW (LAW)				9340SV19
GENERAL NOTES & ELEVATIONS				J. ROSCHMAN
ADDED HEAD TYPE NOTE. - JR - 10/13/22				
DRAWING NO.	NOTE	1 OF 9	WINDOW CLASS	R

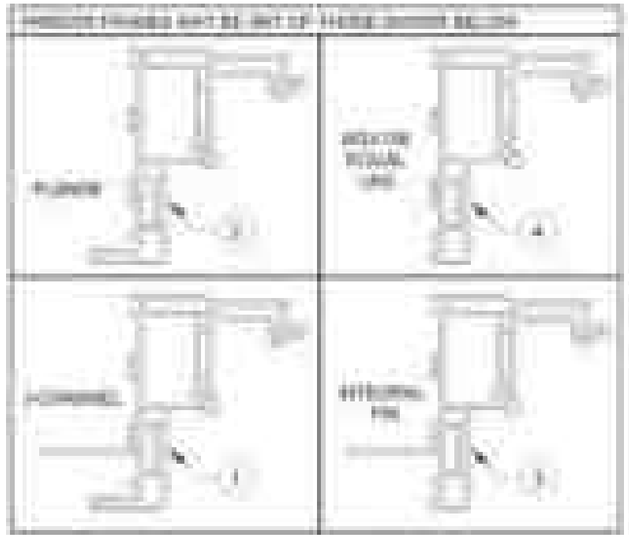
Glass Type	Description	Table #	Sheet #
1	[illegible]	3	7
2	[illegible]	4	7

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

Rating	Anchor	Substrate	Min. Edge Distance	Min. Embedment*
A	[illegible]	[illegible]	[illegible]	[illegible]









PGT
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

VINYL AWNING WINDOW (LWA)		06/03/19
GLASS/ANCHORS/FRAME OPTIONS		J. ROSCHMANN
DRAWING	NOTES	SCALE: 3/8" = 1'	WORKING CLASS	B

INSTALLATION DETAILS FOR FLANGE & EQUAL-LEG/BOX FRAMES

INSTALLATION OPTION 1

INSTALLATION OPTION 2

INSTALLATION OPTION 3

HORIZONTAL SECTION A-A

VERTICAL SECTION B-B

INSTALLATION OPTION 4

INSTALLATION OPTION 5

VISIBLE LIGHT FORMULAS

1975 TECHNOLOGY DRIVE
O'FALLON, IL 62269
(800) 466-1405

VINYL WARNING WINDOW (VW)

FLANGE & EQUAL-LEG/BOX FRAMES

COPYRIGHT © 2022
PGT INDUSTRIES, INC.
UNDER LICENSE TO MARVIN
WINDOWS AND DOORS

INSTALLATION DETAILS FOR INTEGRAL FIN & J-CHANNEL FRAMES

INSTALLATION OPTION 6

INSTALLATION OPTION 6

HORIZONTAL SECTION C-C

INSTALLATION OPTION 7

INSTALLATION OPTION 8

VERTICAL SECTION D-D

VISIBLE LIGHT FORMULAS

VINYL AWNING WINDOW (UW)					06/03/19
J-CHANNEL & INTEGRAL FIN FRAMES					J. ROSCHMAN
REV. DSAG	NOTE	4 OF 9		AWNING UW	6

ILLUSTRATION OF AWNING-TO-AWNING (XX)

(EQUAL LEG/EQUAL FRAME WITH IDENTICAL PRODUCTS COMBINED)

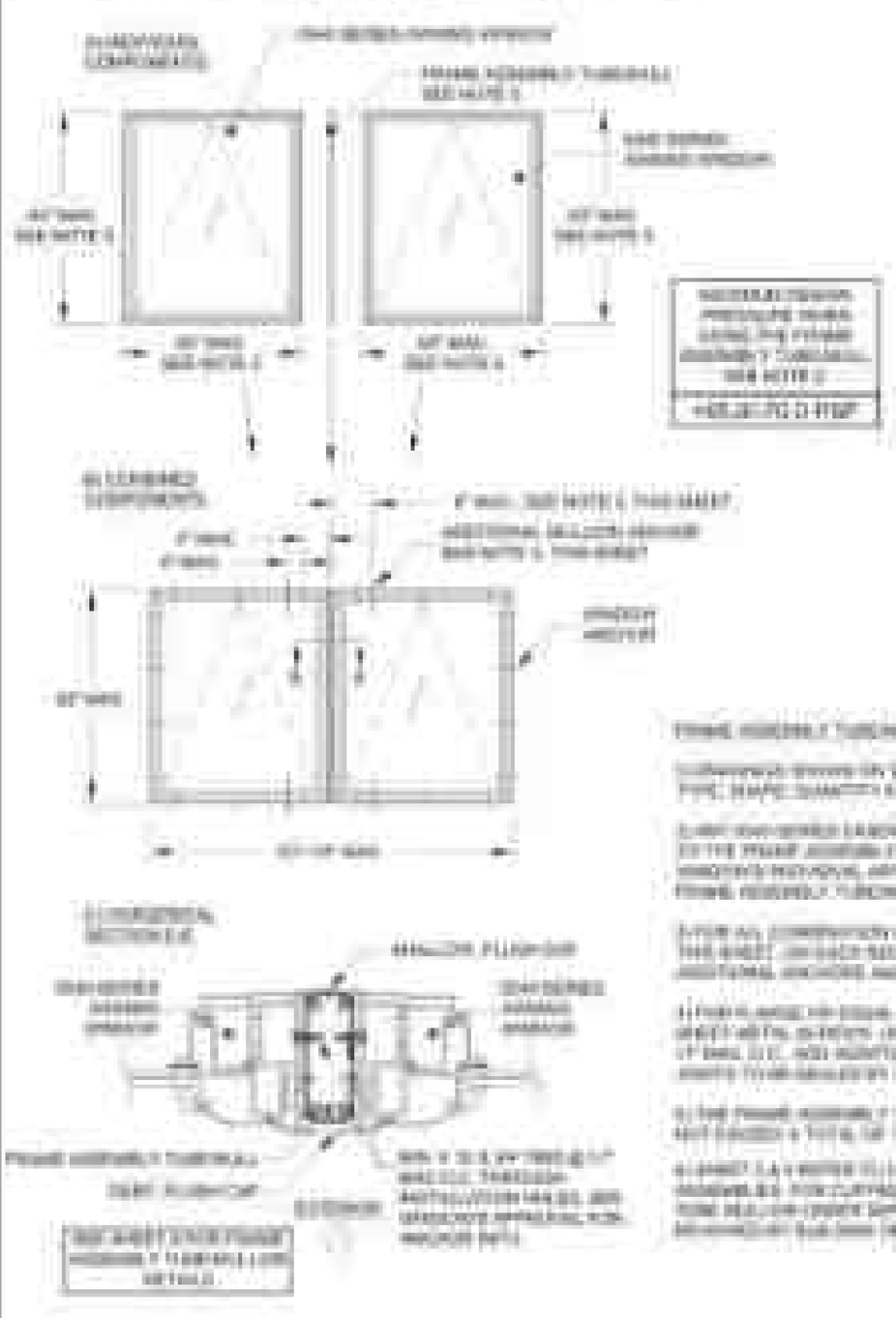
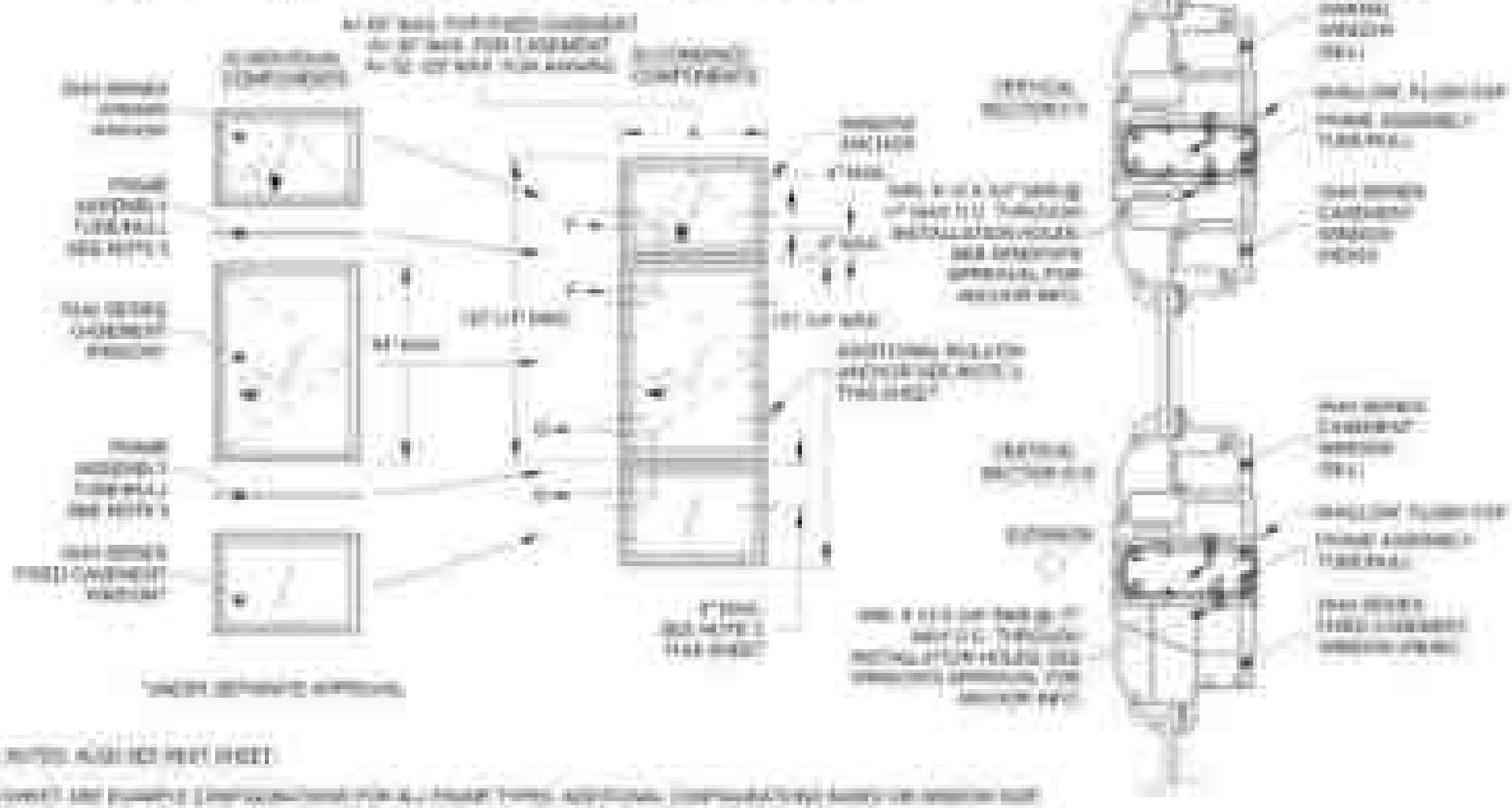


ILLUSTRATION OF AWNING-TO-CASEMENT-TO-FIXED CASEMENT (XOO)

(EQUAL FRAME WITH DIFFERENT SAID SERIES PRODUCTS COMBINED)



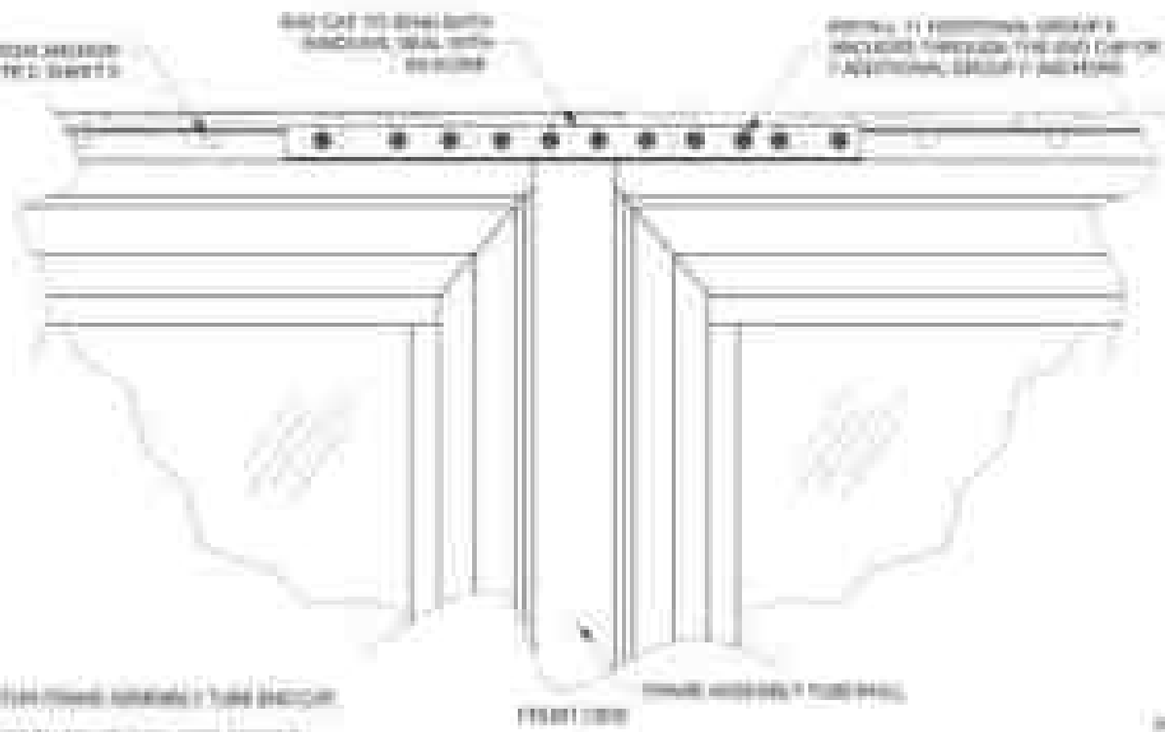
FRAME ASSEMBLY TUBE/RAIL NOTES ALSO SEE NEXT SHEET

	VINYL AWNING WINDOW (LW)			06/03/19
	FRAME ASSEMBLY TUBE DETAILS A			/ WOODWIN
ADV SDAD	NOTE	S OF S	AWNING LAW	E

COPYRIGHT © 2019
PGT INDUSTRIES, INC.
UNITED LICENSE TO MAKE
COPIES FOR PERMITTING

PGT
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

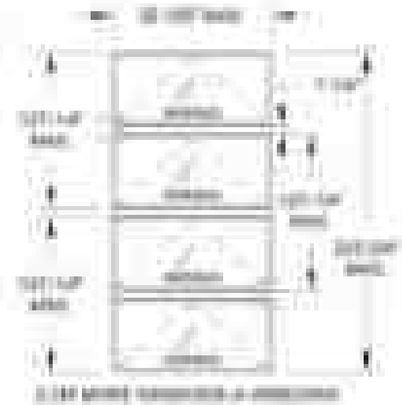
ILLUSTRATION OF END CAP USE WITH FIN AND J-CHANNEL FRAMES







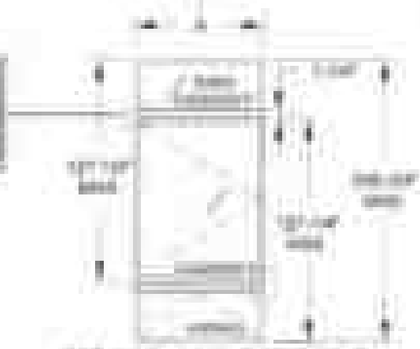




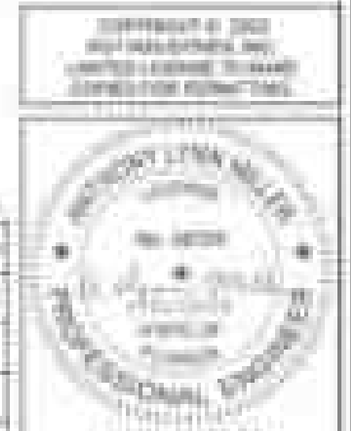












VINYL AWNING WINDOW (UNIT)	
FRAME ASSEMBLY TUBE DETAILS B	/ ROSCHMAN
BOX SEAL	NOTE
S OF S	AWNING UNIT
B	

PGT

PGT INDUSTRIES

1070 TECHNOLOGY DRIVE
N VENICE, FL 34275
(941) 480-1600

Table 1

Window Design Pressure (+/-, psf)

3/16" Annealed Glass

3/16" Heat Strengthened Glass

Glass Type: 1 & 2

Window Dimensions	Back Width (in)												
Back Height (in)	36	48	52	54	56	64	68	72	80	84	92	96	120
42	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+51/-51	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52
47 7/8	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	
53 5/8	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52		
59 1/2	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52			
65 1/4	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52					
71	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52						
77	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52							
82 7/8	+52/-52	+52/-52	+52/-52	+52/-52	+52/-52								
88 5/8	+52/-52	+52/-52	+52/-52	+52/-52									
94 3/8	+52/-52	+52/-52											
100 1/8	+52/-52	+52/-52											
105 7/8	+52/-52	+52/-52											
111 5/8	+52/-52	+52/-52											
117 3/8	+52/-52	+52/-52											
123 1/8	+52/-52	+52/-52											

MAX. D.C. BOLTING # ANCHORS THROUGH THE FRAME FOR SHEETS 1 & 2

APPLIED TO 6 J OR D ANCHORS (SEE TABLE 3)

TO CLOSURE ON SHEET 1

MAX. D.C. STRUCTURAL # ANCHORS THROUGH THE SUPPORT CLIPS FOR SHEET 2

APPLIED TO 6 ANCHORS (SEE TABLE 3)

FOR 6 ANCHORS

NOTES:

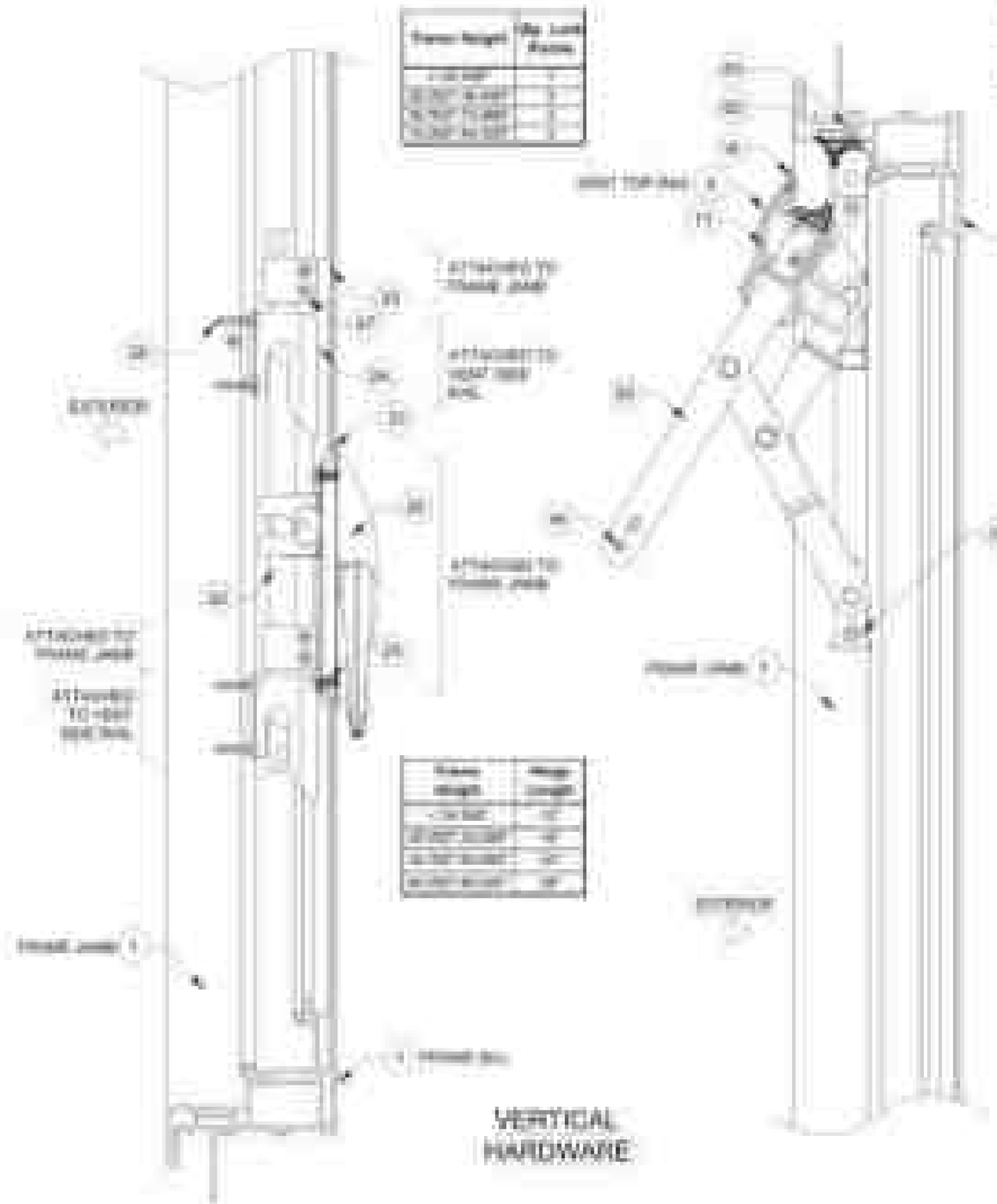
1. VALUES DETERMINED IN ACCORDANCE WITH ASTM E1300-16.
2. FOR GLASS SIZES BETWEEN LISTED SIZES, USE THE NEXT HIGHER GLASS WIDTH AND HEIGHT DIMENSIONS.

PGT
A GROUP OF KOTTS BRANDS
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

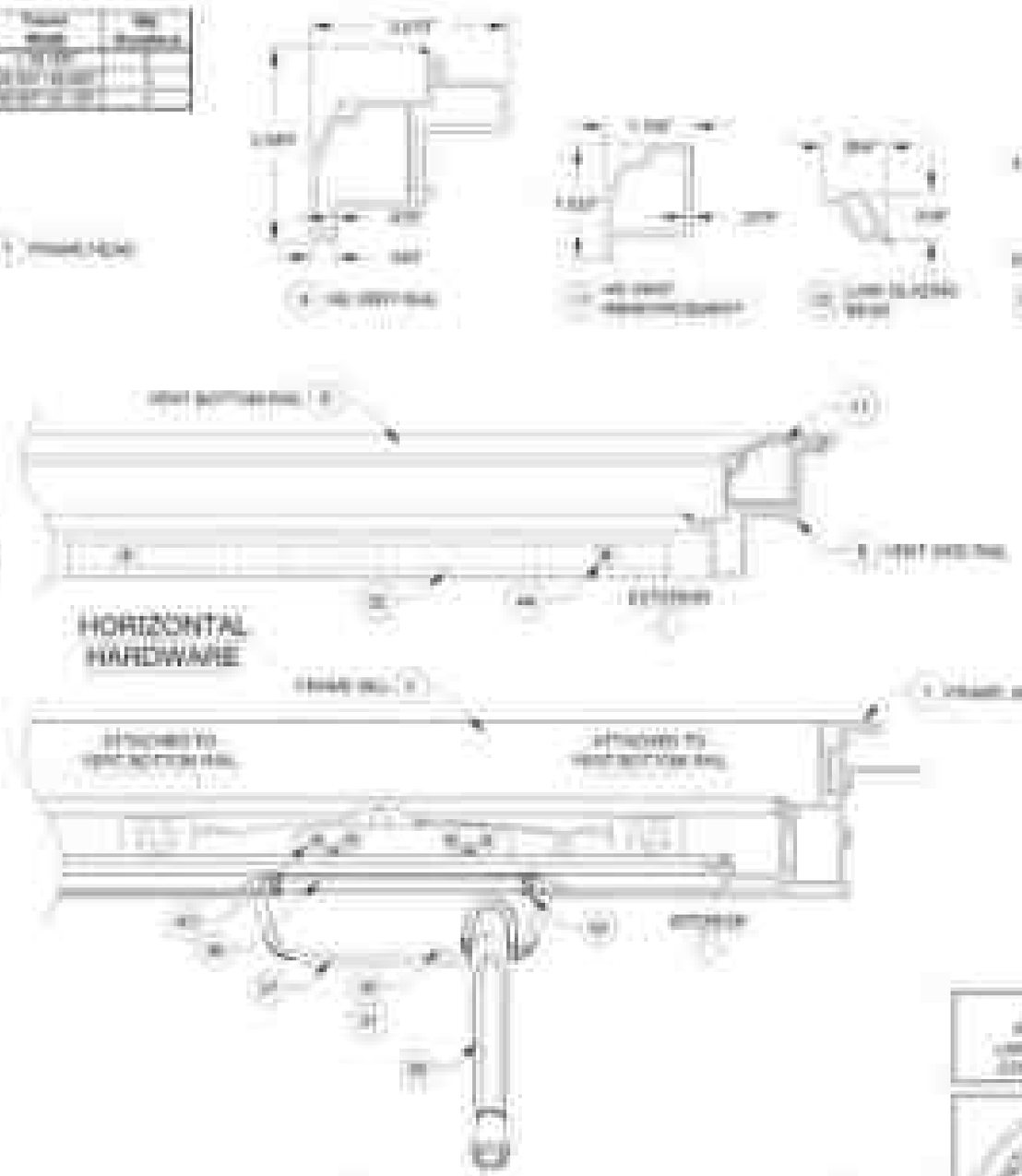
VINYL AWNING WINDOW (LAW)			04/02/19
DESIGN PRESSURES			J. ROSCHMAN
DRAWING	NOTES	SHEET 2 OF 6	WINDOW LAW	B

COPYRIGHT © 2022
PGT INDUSTRIES, INC.
UNPUBLISHED WORK
ALL RIGHTS RESERVED

ROBERT LYNN MILLER
No. 68704
STATE OF FLORIDA
PROFESSIONAL ENGINEER



VERTICAL HARDWARE



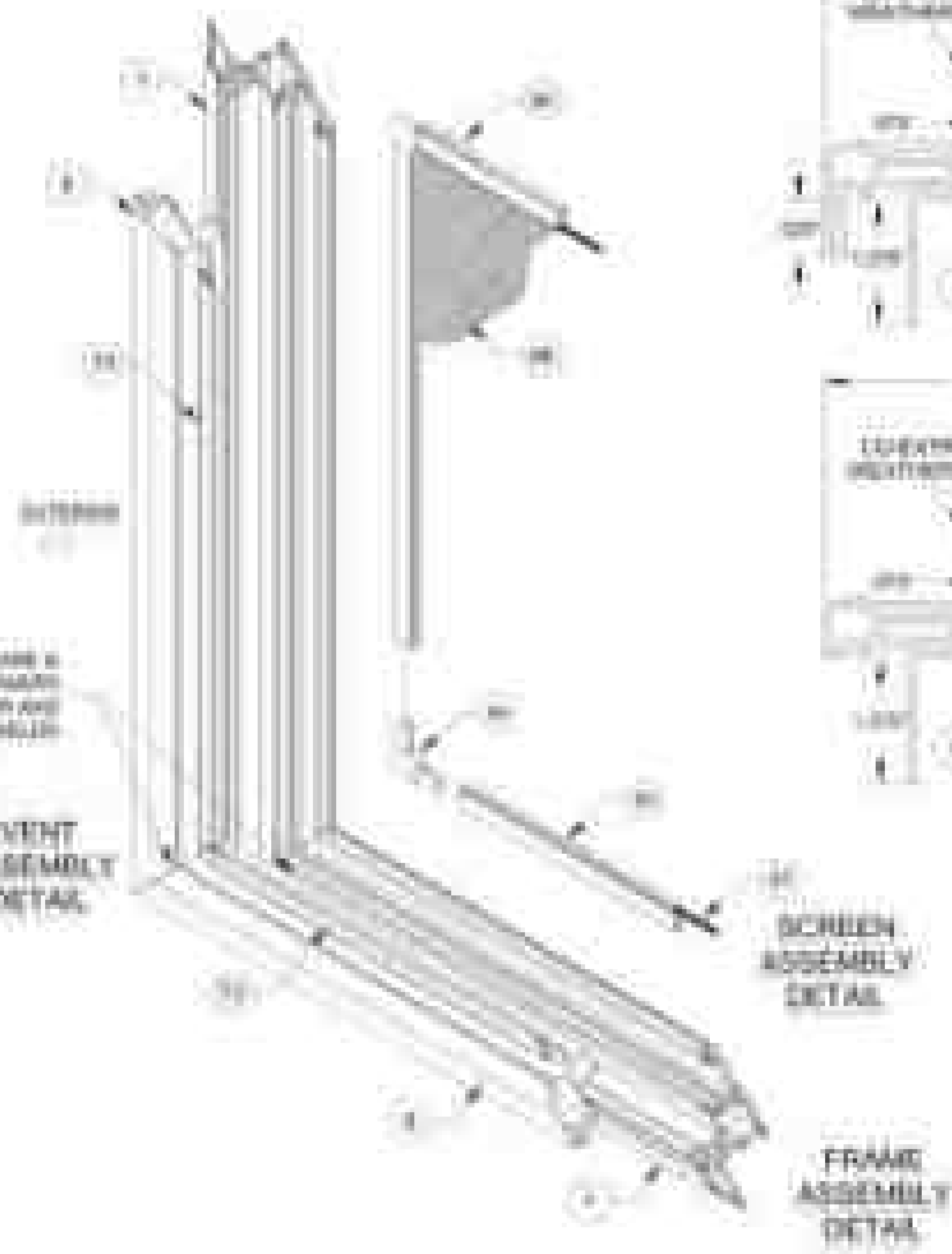
HORIZONTAL HARDWARE

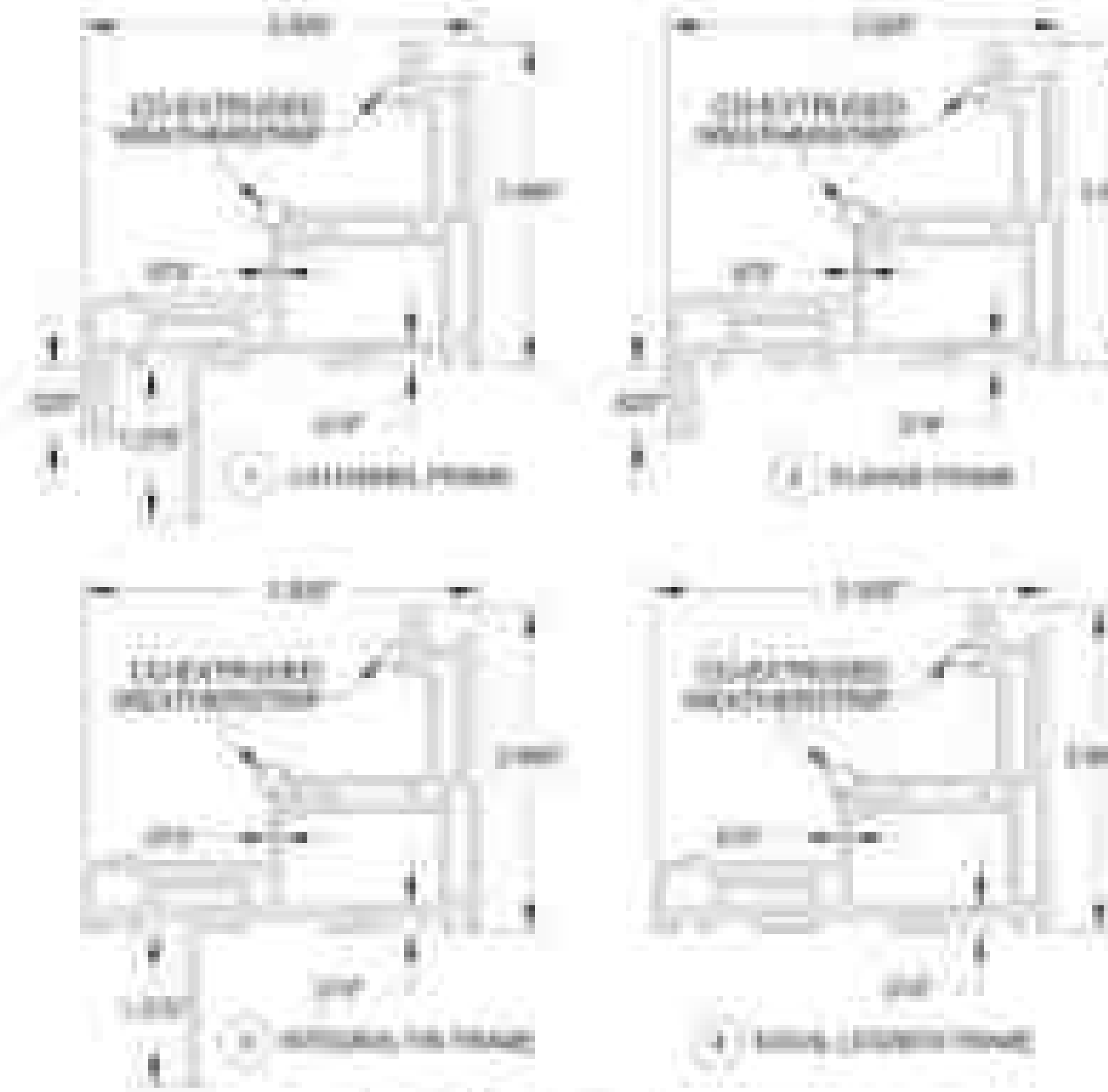
COPYRIGHT © 2022
PGT INDUSTRIES, INC.
UNPUBLISHED WORK
ALL RIGHTS RESERVED

PGT
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

VINYL AWNING WINDOW (LAM)		06/03/19
HARDWARE		/ WDO0HW0
REV. DESC.	NOTE	SCALE: 3/8" = 1'	APPROVED / DATE	SHEET

#	Part #	Description	Material
1	[illegible]	Laminated Frame	PVC
2	[illegible]	Flange Frame	PVC
3	[illegible]	Integral Fin Frame	PVC
4	[illegible]	Equal Leg/Box Frame	PVC
6	[illegible]	[illegible] Vent Sash	PVC
11	[illegible]	[illegible] Reinforcement (Full Length)	[illegible]
[illegible]	[illegible]	Weatherstrip [illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]
22	[illegible]	Tie Bar	[illegible]
23	[illegible]	Tie Bar [illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible] Machine Screw	SS
26	[illegible]	[illegible]	SS
27	[illegible]	[illegible]	SS
[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]	[illegible]	[illegible]
41	[illegible]	[illegible]	[illegible]
42	[illegible]	[illegible]	SS
[illegible]	[illegible]	[illegible]	SS
[illegible]	[illegible]	[illegible]	SS
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	SS
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	SS
[illegible]	[illegible]	[illegible]	PVC
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	PVC
[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]	PVC
[illegible]	[illegible]	[illegible]	PVC
[illegible]	[illegible]	[illegible]	PVC





FRAME OPTIONS

NOTES:
1) [illegible]
2) [illegible]
3) [illegible]
4) [illegible]

1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

VINYL AWNING WINDOW (LM)				[illegible]
BOM & ASSEMBLY				[illegible]
[illegible]	NTS	[illegible] OF [illegible]	[illegible]	[illegible]

COPYRIGHT © [illegible] [illegible] INDUSTRIES, INC. [illegible]

ANTHONY LYNN MILLER
PROFESSIONAL ENGINEER