

# MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

# DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

### **NOTICE OF ACCEPTANCE (NOA)**

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

#### Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

#### DESCRIPTION: Series "HR-810" Aluminum Horizontal Rolling Window - S.M.I.

**APPROVAL DOCUMENT:** Drawing No. **MD-HR810-SM**, titled "Horizontal Roller Window Details – SM", sheets 1 through 6 of 6, dated 05/05/12, with revision B dated 05/05/16, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

#### MISSILE IMPACT RATING: Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA# 15-0609.04 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.

MIAMI-DADE COUNTY
APPROVED

18/24/16

NOA No. 16-0714.15 Expiration Date: November 01, 2017 Approval Date: September 01, 2016

Page 1

#### PGT Industries, Inc.

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### A. DRAWINGS

- 1. Manufacturer's die drawings and sections. (Submitted under NOA No. 12-0718.05)
- 2. Drawing No. MD-HR810-SM, titled "Horizontal Roller Window Details SM", sheets 1 through 6 of 6, dated 05/05/12, with revision B dated 05/05/16, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

#### B. TESTS

- 1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of a PVC sliding glass door, a PVC fixed window and an aluminum sliding glass door, using: Kodispace 4SG TPS spacer system, Duraseal® spacer system, Super Spacer® NXT<sup>TM</sup> spacer system and XL Edge<sup>TM</sup> spacer system at insulated glass, prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-8717**, **FTL-8968** and **FTL-8970**, dated 11/16/15, 06/07/16 and 06/02/16 respectively, all signed and sealed by Idalmis Ortega, P.E.

- 2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
  - 5) Small Missile Impact Test per FBC, TAS 201-94
  - 6) Large Missile Impact Test per FBC, TAS 201-94
  - 7) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of an aluminum horizontal sliding window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-6890**, dated 06/04/12, signed and sealed by Marlin D. Brinson, P.E. (Submitted under NOA No. 12-0718.05)

#### C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with **FBC-5**<sup>th</sup> **Edition (2014)**, dated 05/16/15, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
  - (Submitted under previous NOA No. 15-0609.04)
- 2. Glazing complies with ASTM E1300-09.

#### D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

Manuel Perez, P.E. Product Control Examiner NOA No. 16-0714.15

Expiration Date: November 01, 2017 Approval Date: September 01, 2016

### PGT Industries, Inc.

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 14-0916.10 issued to Kuraray America, Inc. for their "Butacite® PVB Glass Interlayer" dated 04/25/15, expiring on 12/11/16.
- 2. Aluminum Alloy 6063HS-T6: Fixed Meeting Rail w/ weathering strip (PGT/Indalex Part No. 4054B), High strength alloy with the minimum yield strength of 30 Ksi, minimum Tensile strength of 33 Ksi and minimum Elongation of 8 Ksi.
- **3.** QUANEX Part Edgetherm FS insulating glass spacer/swiggle seal complying with the following:
  - a) ASTM F 1249–06 (2011) Standard Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor.
  - b) ASTM E 2190-10 Standard Specification for Insulating Glass Unit Performance and Evaluation
  - c) ASTM D 395–03 (2008) Standard Test Methods for Rubber Property Compression Set

#### F. STATEMENTS

- 1. Statement letter of conformance, complying with FBC-5<sup>th</sup> Edition (2014), dated May 28, 2015, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E. (Submitted under previous NOA No. 15-0609.04)
- 2. Statement letter of no financial interest, issued by manufacturer, dated May 28, 2015 signed and sealed by Anthony Lynn Miller, P.E. (Submitted under previous NOA No. 15-0609.04)
- 3. Laboratory compliance letter for Test Report No. **FTL-6890**, issued by Fenestration Testing Laboratory, Inc., dated 06/04/12, signed and sealed by Marlin D. Brinson, P.E. (Submitted under NOA No. 12-0718.05)
- 4. Proposal No. **16-0125** issued by the Product Control Section, dated March 09, 2016, signed by Ishaq Chanda, P.E.

#### G. OTHERS

1. Notice of Acceptance No. **15-0609.04**, issued to PGT Industries, Inc. for their Series "HR-810" Aluminum Horizontal Sliding Window - S.M.I., approved on 08/20/15 and expiring on 11/01/17.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 16-0714.15

Expiration Date: November 01, 2017 Approval Date: September 01, 2016

# GENERAL NOTES: SERIES 810 IMPACT- RESISTANT HORIZONTAL ROLLER WINDOW

- 1) THIS PRODUCT HAS BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 2) MIAMI-DADE COUNTY APPROVED SHUTTERS <u>ARE</u> REQUIRED FOR INSTALLATIONS AT OR BELOW 30FT (NONE REQUIRED AT INSTALLATIONS ABOVE 30FT.
- 3) FOR MASONRY APPLICATIONS IN MIAMI-DADE COUNTY, USE ONLY MIAMI-DADE COUNTY APPROVED MASONRY ANCHORS. MATERIALS USED FOR ANCHOR EVALUATIONS WERE SOUTHERN PINE, ASTM C90 CONCRETE MASONRY UNITS AND CONCRETE WITH MIN. KSI PER ANCHOR TYPE, SEE TABLE 4, SHEET 3.
- 4) ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1X INSTALLATIONS. 1X WOOD BUCKS ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED TO PROPERLY TRANSFER LOADS TO THE STRUCTURE. WOOD BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.
- 5) ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. USE ANCHORS OF SUFFICIENT EMBEDMENT AS SPECIFIED ON TABLE 4, SHEET 3. NARROW JOINT SEALANT IS USED ON ALL FOUR CORNERS OF THE FRAME. INSTALLATION ANCHORS SHOULD BE SEALED. OVERALL SEALING/FLASHING STRATEGY FOR WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS AND IS BEYOND THE SCOPE OF THESE INSTRUCTIONS.
- 6) SHIMS ARE REQUIRED AT EACH ANCHOR LOCATION WHERE THE PRODUCT IS NOT FLUSH TO THE SUBSTRATE. USE SHIMS CAPABLE OF TRANSFERRING APPLIED LOADS. WOOD BUCKS, BY OTHERS, MUST BE SUFFICIENTLY ANCHORED TO RESIST LOADS IMPOSED ON THEM BY THE WINDOW.

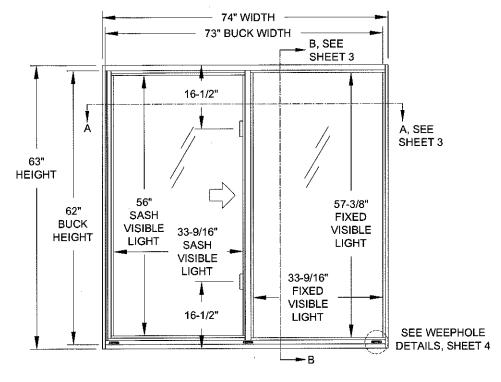
#### 7) DESIGN PRESSURES:

A. NEGATIVE DESIGN LOADS BASED ON STRUCTURAL TEST PRESSURE, FRAME ANALYSIS AND GLASS PER ASTM E1300.

B. POSITIVE DESIGN LOADS BASED ON WATER TEST PRESSURE, STRUCTURAL TEST PRESSURE, FRAME ANALYSIS AND GLASS PER ASTM E1300.

- 8) THE ANCHORAGE METHODS SHOWN HAVE BEEN DESIGNED TO RESIST THE WINDLOADS CORRESPONDING TO THE REQUIRED DESIGN PRESSURE. THE 33-1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. THE 1.6 LOAD DURATION FACTOR WAS USED FOR THE EVALUATION OF ANCHORS INTO WOOD. ANCHORS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE FOR CORROSION RESISTANCE.
- 9) REFERENCES: TEST REPORTS FTL-6890; ELCO ULTRACON NOA; ELCO CRETEFLEX NOA; ANSI/AF&PA NDS FOR WOOD CONSTRUCTION AND ADM ALUMINUM DESIGN MANUAL.
- 10) I.G. GLASS CAPS TO BE TEMPERED WHEN INSTALLED IN LOCATIONS OVER 30FT IN THE HVHZ.

	DESIGN PRESSURE RATING	IMPACT RATING
	VARIES, SEE TABLE 1. THIS SHEET	RATED FOR SMALL MISSILE IMPACT RESISTANCE
-		



 GENERAL NOTES
 1

 ELEVATION (SIZE)
 1

 DESIGN PRESSURES
 1

 ELEVATION (ANCHORS)
 2

 ANCHOR SPACING/QUANTITIES
 2

 ANCHOR SPECIFICATIONS
 2

 INSTALLATION
 3

 ASSEMBLY DETAILS
 3

 EXTRUSION PROFILES
 4

 PARTS LIST
 5

 GLAZING DETAILS
 6

PRODUCT REVISED

Drawing No.

MD-HR810-SM

В

as complying with the Florida

# MAX. DIMENSIONS OF HORIZONTAL ROLLER, XO (OX SIM.)

#### TABLE 1:

#### Maximum Design Pressure, DP (psf) Frame Height 50-5/8 63' 44" Glass Glass Types 4 - 6 All Glass Glass Glass Types Glass Glass Frame Anchors B & C Width 2 - 6 Type 1 Type 2 Type 3 Anchor A Types Type 1 +90.0 / -140.0 | +90.0 / -140.0 | +90.0 / -140.0 | +90.0 / -140.0 | +90.0 / -140.0 | +90.0 / -140.0 | +90.0 / -140.0 | +90.0 / -140.0 | +90.0 / -140.0 35" +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 37" +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 | +90.0 / -140.0 53-1/8' +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 +90.0 / -139.2 +90.0 / -140.0 +90.0 / -140.0 61" +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 +90.0 / -129.1 +90.0 / -123.4 +90.0 / -133.1 +90.0 / -137.1 +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 | +90.0 / -140.0 64" +90.0 / -140.0 +90.0 / -140.0 +90.0 / -118.7 +90.0 / -128.0 +90.0 / -131.9 +90.0 / -140.0 67" +90.0 / -140.0 | +90.0 / -140.0 +90.0 / -140.0 +90.0 / -140.0 70" +90.0 / -140.0 +90.0 / -135.6 +90.0 / -140.0 +90.0 / -114.1 +90.0 / -123.1 +90.0 / -126.8 +90.0 / -139.2 +90.0 / -108.9 | +90.0 / -117.5 | +90.0 / -121.0 | +90.0 / -134.6 +90.0 / -140.0 +90.0 / -130.6 +90.0 / -140.0 74" +90.0 / -140.0

P.O. BOX 1529

NOKOMIS, FL 34274

CERT. OF AUTH. #29296

Series/Model:

HR-810

CANDIDA.

A. LYNN MILLER, P.E.

P.E.# 58705

Building Code Acceptance No 16-0714,15 Expiration Date 100. Date: Revised By: Revision: By Manuel Sugar Miami Pade Product Control B) SHEET 6 & SPACERS JR 05/05/16 MOVED GLASS TO IT. Date: Revised By: Revision: Drawn By: Description: J ROSOWSKI 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 HORIZONTAL ROLLER WINDOW DETAILS - SM 05/05/12

Scale:

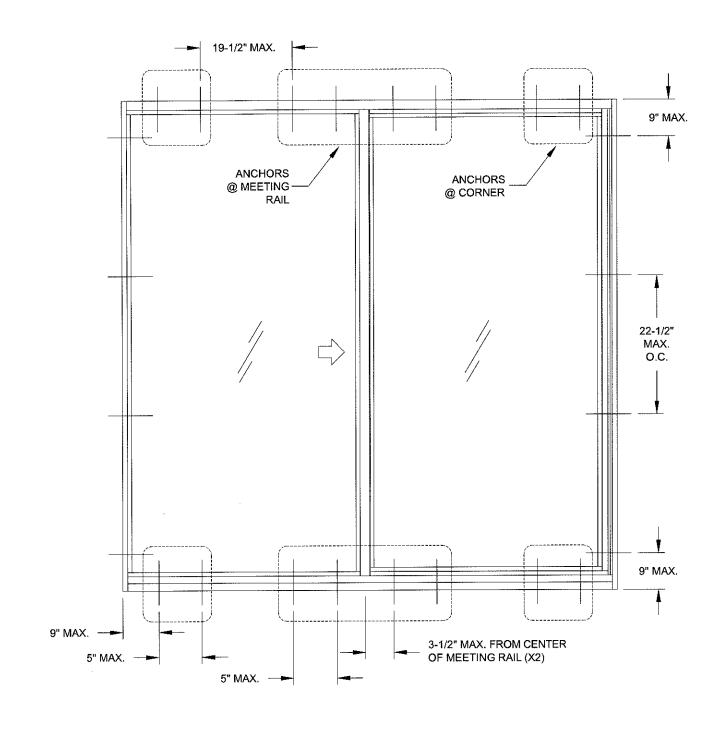
NTS

Sheet:

1 OF 6

#### STANDARDS USED:

- •2014 FLORIDA BUILDING CODE (FBC), 5TH EDITION
- •ASTM E1300-09
- ANSI/AF&PA NDS-2012 FOR WOOD CONSTRUCTION
- ALUMINUM DESIGN MANUAL, ADM-2010
- ◆AISI-S100-07/S2-2010



#### TABLE 3:

Minimum Anchors Required													
		Frame Height											
	38-3/8"			44"			50-5/8"			63"			
Frame Member & Anchor Location	Frame Width	Anchor Group A	Anchor Group B	Anchor Group C	Anchor Group A	Anchor Group B	Anchor Group C	Anchor Group A	Anchor Group B	Anchor Group C	Anchor Group A	Anchor Group B	Anchor Group C
	35"	0	0	0	0	0	0	0	0	0	0	0	0
	37"	1	1	1	1	1	1	1	1	1	1	1	1
Head & Sill	53-1/8"	1	1	1	1	1	1	1	1	1	1	1	1
1 1	61"	2	2	1	2	2	1	2	2	1	2	2	1
@ each Comer	64"	2	2	1	2	2	1	2	2	1	2	2	1
Conse	67"	2	2	1	2	2	1	2	2	1	2	2	1
	70"	2	2	1	2	2	1	2	2	1	2	2	1
	74"	2	2	1	2	2	1	2	2	1	2	2	1
Head & Sill @ Meeting Rail													
	35"	2	2	2	3	3	3	3	3	3	4	3	3
	37"	2	2	2	3	3	3	3	3	3	4	3	3
	53-1/8"	3	2	2	3	3	3	4	3	3	5	3	3
Jamb	61"	3	2	2	3	3	3	4	3	3	5	4	3
Janib	64"	3	2	2	3	3	3	4	3	3	6	4	3
	67"	3	2	2	4	3	3	4	3	3	6	4	3
	70"	3	2	2	4	3	3	4	3	3	6	4	3
	74"	3	2	2	4	3	3	4	3	3	6	4	3

SEE TABLE 4, SHEET 3 FOR ANCHOR GROUP DESCRIPTIONS.

0. 58705

0. 58705

0. 61916

CONAL

A. LYNN MILLER, P.E.

P.E.#58705

1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 P.O. BOX 1529 NOKOMIS, FL 34274

CERT. OF AUTH. #29296

_	D	D-4			
ı	Revised By:		Revision: B) MOVED GLASS TO		
	JR	05/29/15	SHEET 6		
	Revised By:	Date:	Revision:		

Building Code
Acceptance No 16-0714.15
Expiration Date Nov. 120617
By Maybel Ties
Miami Dade Product Chiefe

PRODUCT REVISED as complying with the Florida

Description:
ANCHOR SPACING & QUANTITIES

J ROSOWSKI

В

HORIZONTAL ROLLER WINDOW DETAILS - SM 05/05/12

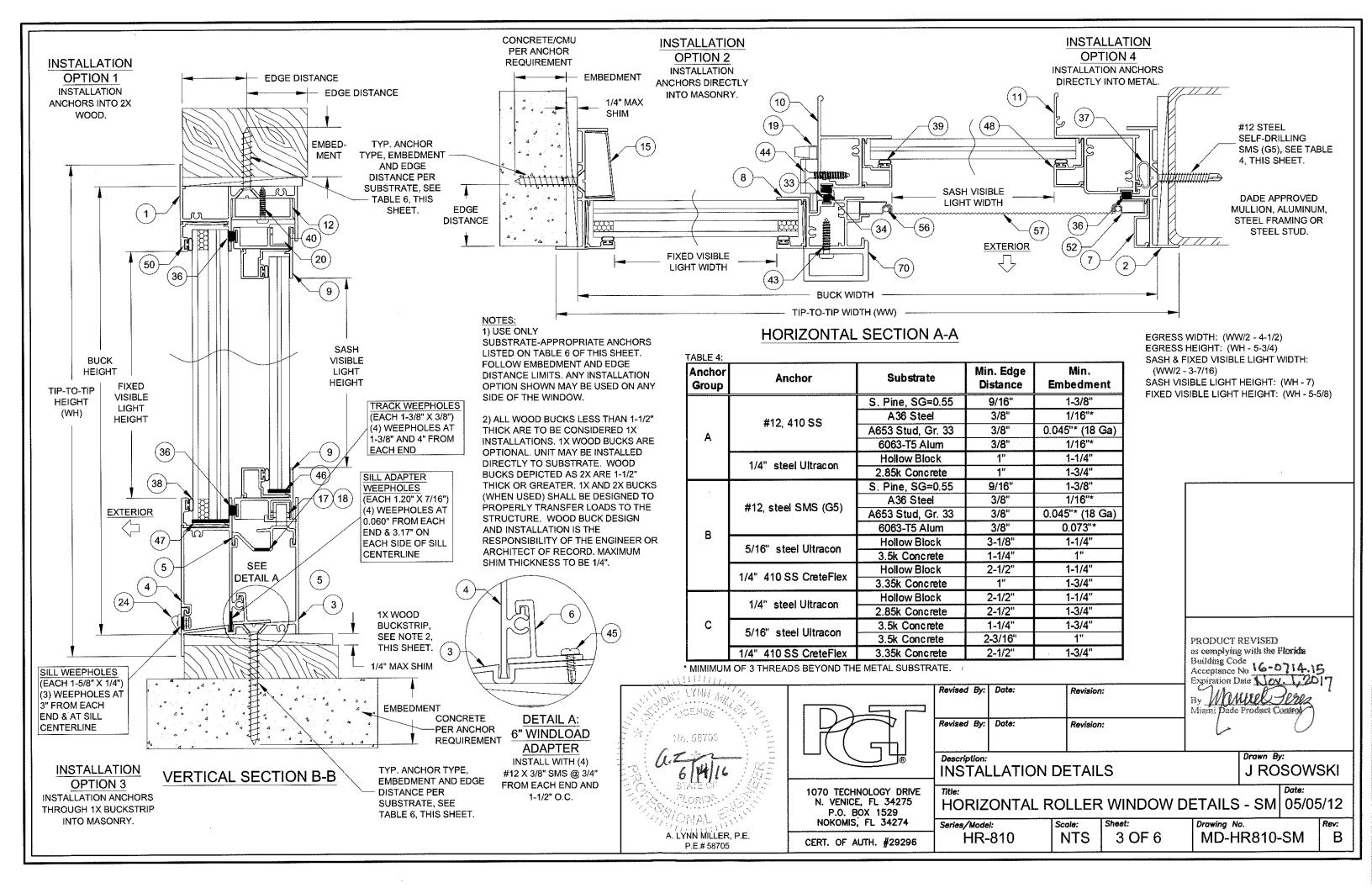
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 Sheet:
 Drawing No.

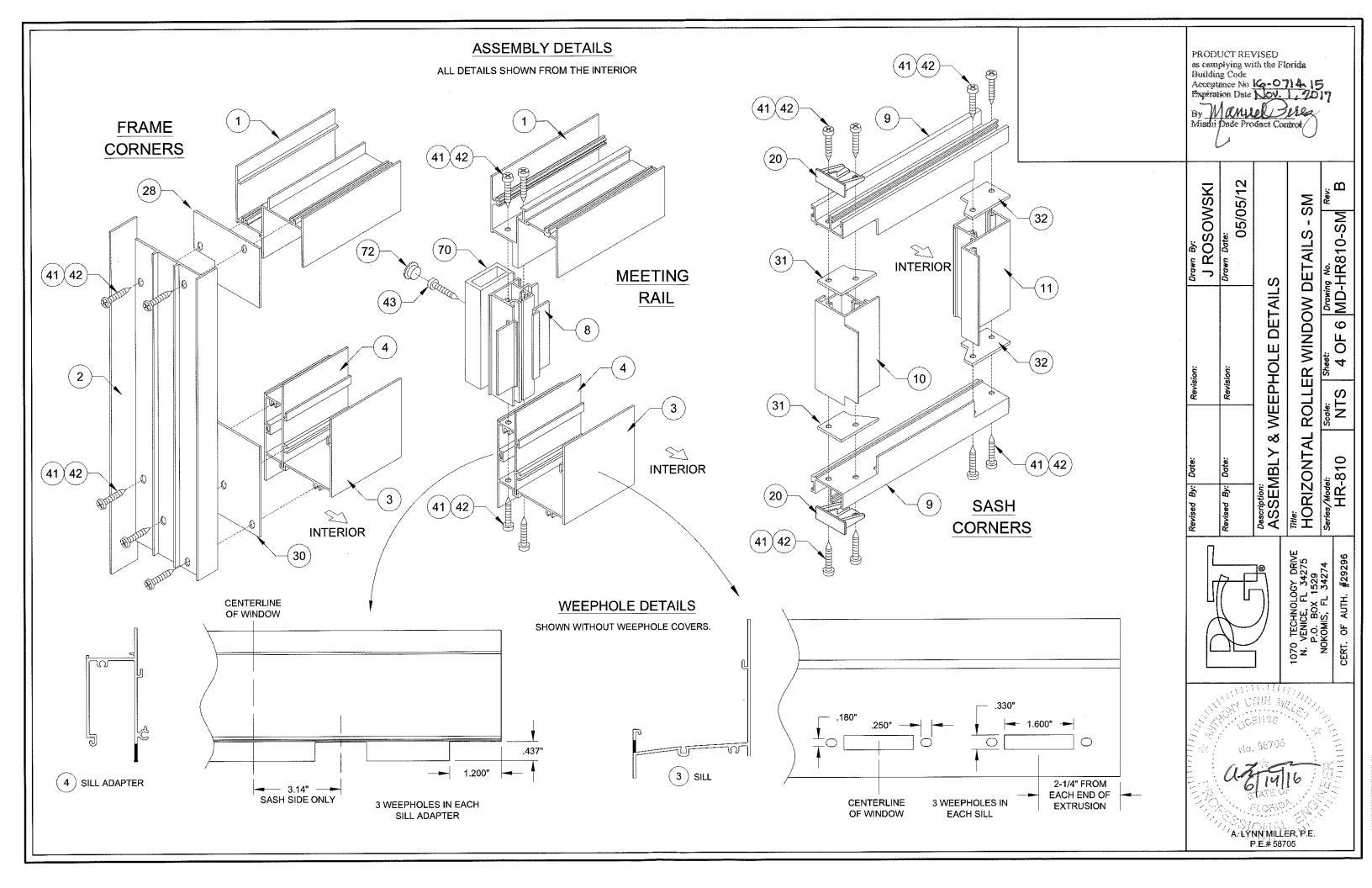
 - HR-810
 NTS
 2 OF 6
 MD-HR810-SM

#### NOTES:

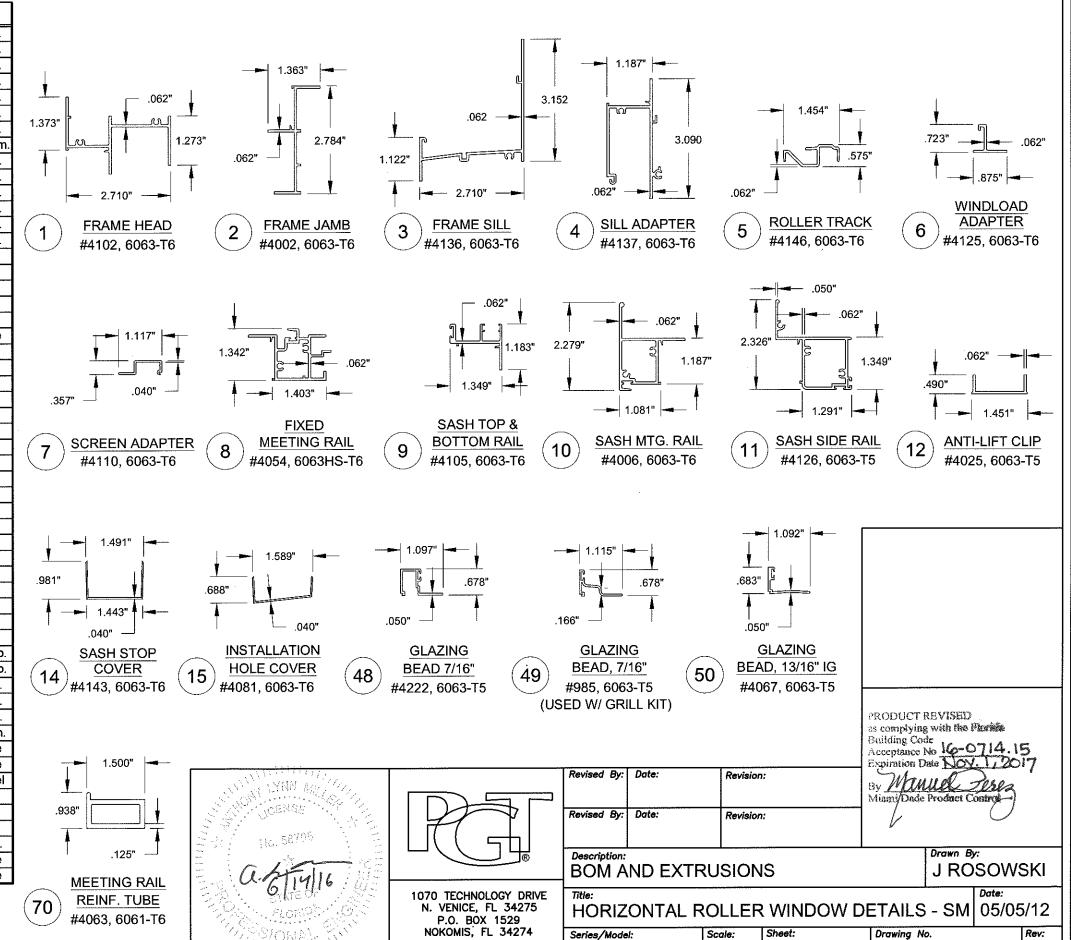
1) USE THIS TABLE FOR ALL WINDOWS PER THE ELEVATIONS ON SHEET 1. DIMENSIONS SHOWN ARE TIP-TO-TIP.
2) FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION SHOWN ON THE TABLE.

3) I.G. GLASS CAPS TO BE TEMPERED WHEN INSTALLED IN LOCATIONS OVER 30' IN THE HVHZ.





tem	Dwg.#	Description	Mat.
1	4102	Frame Head	6063-T6 Alum.
2	4002	Frame Jamb	6063-T6 Alum.
3	4136	Frame Sill	6063-T6 Alum.
4	4137	Sill Adaptor	6063-T6 Alum.
5	4146	Roller Track	6063-T6 Alum.
6	4125	Windload Adapter, 6"	6063-T6 Alum.
7	4110	Screen Adaptor	6063-T6 Alum.
8	4054	Fixed Meeting Rail	6063HS-T6 Alum
9	4105	Sash Top/Bottom Rail	6063-T6 Alum.
10	4006	Sash Meeting Rail	6063-T6 Alum.
11	4126	Sash Side Rail	6063-T5 Alum.
12	4025	Anti-lift Clip	6063-T5 Alum.
14	4143	Sash Stop Cover	6063-T6 Alum.
15	4081	Installation Hole Cover	6063-T6 Alum.
17	225-1	Roller Housing & Sash Guide	Vinyl
18	226	Tandem Roller Wheels, 2.5" from each end of vent	Brass
	1096	Sweep Latch	Die-cast Zinc
19	4133	Top/Bottom Rail Cover	Nylon
20		Mtg Rail Sweep Latch Plug	Vinyl Foam
23	4080B		Polypropolene
24	1298	Weep Hole Cover	Rigid PVC
25	4150	Sash Rail Cover Cap (1 Left & Right)	
27	4151	Lock Rail Cover Cap (1 Left & Right)	Rigid PVC
28	4130	Main Frame Head Joint Gasket	Polyethylene
29	1626	Adhesive Open Cell Foam Pad	Foam
30	4134C	Main Frame Sill Joint Gasket	Polyethylene
31	4148	Sash Interlock Gaskets A	Polyethylene
32	4147	Sash Siderail Gaskets B	Polyethylene
33	4066	.187" x .230" Wstp. Fin Seal	
34	1235	.170" x .270" Wstp. Fin Seal	
36	1683	.250" x .270" Wstp. Fin Seal	
37	7070	Bulb Wstp187" x .275"	Flex PVC 70
38	1224	Vinyl Bulb Beading Wstp, Thin	Flex PVC 70
39	1225	Vinyl Bulb Beading Wstp, Thick	Flex PVC 70
40		#8 x 3/4" Ph. Pn. SMS	Steel
41	1155	#8 x 1" Quad Pn. SMS	Steel
42	1155-1	#8 x 1" Sq. Pn. Twin Fast SMS	410 S. S.
43	1179	#10 x 3/4" Ph. Pn. SMS, @10-3/4" O.C. & 3/8" from ends	18-8 S. S.
44	1016	#8 x 5/8" Ph. Fl. SMS	Steel
45		#12 x 3/8" Ph. Pn. SMS, @3/4" & 1-1/2" O.C.	Steel
46	1265-3	Mono Setting Block 3/32" x 1/4" x 1"	EPDM, 85 Duro.
47	1715	Lami IG Setting Block 1/8" x 3/4" x 1-1/14"	EPDM, 85 Duro.
48	4222A	7/16" Lami Glaz. Bead	6063-T5 Alum.
49	985C	7/16" Lami Grid Glaz. Bead	6063-T5 Alum.
50	4067B	13/16" Lami IG Glaz. Bead	6063-T5 Alum.
52	1014F	Screen Frame	3105-H14 Alum.
53	1630	Screen Corner Key with Rings	Polypropolene
54	1631	Screen Comer Key without Rings	Polypropolene
55	320B	Screen Spring	Stainless Steel
56	1624	Screen Spline135"	EM. PVC
57	1	Screen Cloth	Fiberglass
60	<b>-</b>	Dow Coming 899 Sealant	Silicone
70	4063	Meeting Rail Reinforcement Tube	6061-T6 Alum.
71	4064	Meeting Rail Reinforcement Tube End Cap	Polypropolene
72	947	Hole Plug	Polypropolene
14-	, VT/	L 1010 I Mg	,, p



A. LYNN MILLER, P.E.

P.E.# 58705

5 OF 6

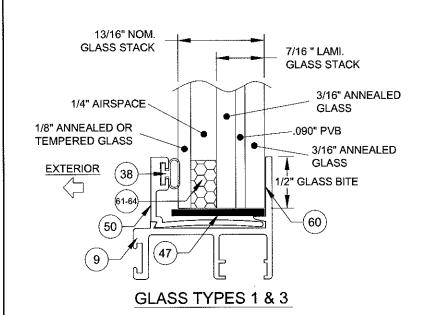
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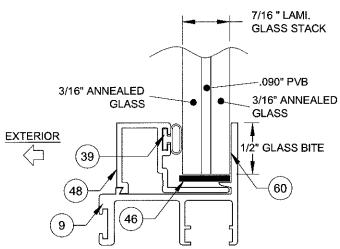
HR-810

CERT. OF AUTH. #29296

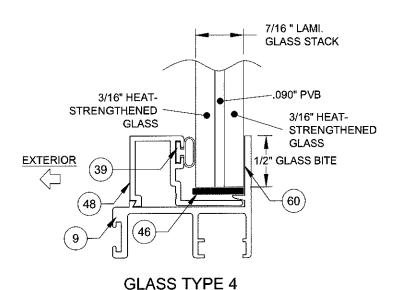
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MD-HR810-SM





### **GLASS TYPE 2**



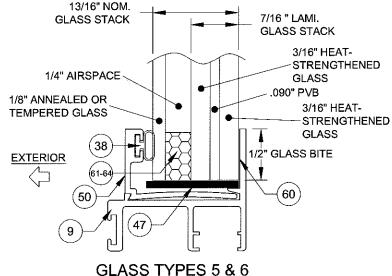
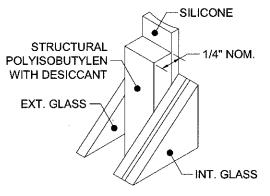
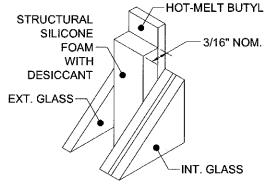


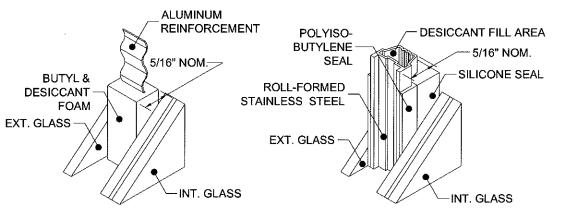
TABLE 2:

# Glass Types 13/16" Lami IG: (1/8" Annealed Cap - 1/4" Airspace - 3/16" Annealed - 0.90" PVB - 3/16" Annealed) 2 7/16" Lami: (3/16" Annealed - 0.90" PVB - 3/16" Annealed) 13/16" Lami IG: (1/8" Tempered - 1/4" Airspace - 3/16" Annealed - 0.90" PVB - 3/16" Annealed) 7/16" Lami: (3/16" HS - 0.90" PVB - 3/16" HS) 13/16" Lami IG: (1/8" Tempered Cap - 1/4" Airspace - 3/16" HS - 0.90" PVB - 3/16" HS) 13/16" Lami IG; (1/8" Annealed Cap - 1/4" Airspace - 3/16" HS - 0.90" PVB - 3/16" HS)





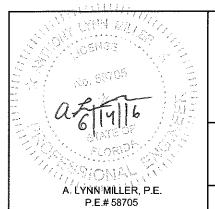
**KODISPACE** 4SG TPS



DURASEAL®

Part #	Description	Material		
61	Kommerling 4SG TPS Spacer System	_		
62	Quanex Super Spacer nXT with Hot Melt Butyl	See this Sheet for Materials		
63	Quanex Duraseal Spacer			
64	Cardinal XL Edge Spacer	Matchalo		

REFERENCE TEST REPORTS: FTL-8717, 8968 & 8970





1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 P.O. BOX 1529 NOKOMIS, FL 34274 CERT. OF AUTH. #29296

Revised By: Date: Revision: NEW SHEET W/SPACERS JR 05/29/15 MOVED GLASS. Revised By: Date: Revision:

Acceptance No 16-0714.15 Expiration Date 109. 1, 2017 Miam/Dade Product Control

as complying with the Florida

PRODUCT REVISED

Building Code

Description:

**GLAZING** 

Drawn By: J ROSOWSKI

HORIZONTAL ROLLER WINDOW DETAILS - SM 05/05/12

Series/Model: Sheet: Scale: HR-810 NTS 6 OF 6 MD-HR810-SM

1) I.G. GLASS CAPS TO BE TEMPERED WHEN INSTALLED IN LOCATIONS OVER 30' IN THE HVHZ. <sup>1</sup> 2) "PVB" = .090" BUTACITE PVB BY KURARAY <sup>®</sup>AMERICA, INC.