



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

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

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

www.miamidade.gov/economy

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 "DH-5460" PVC Double Hung Window -- N.I.

APPROVAL DOCUMENT: Drawing No. MD-DH5460-01 titled "Double Hung Window Installation - NI", sheets 1 through 12 of 12, dated 05/15/15, with revision A 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: None

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# 15-0812.03 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.



Handwritten signature and date: 8/15/16

NOA No. 16-0714.08
Expiration Date: September 17, 2020
Approval Date: August 25, 2016
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under previous NOA No. 15-0812.03)
2. Drawing No. **MD-DH5460-01** titled "Double Hung Window Installation - NI", sheets 1 through 12 of 12, dated 05/15/15, with revision A 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™ spacer system and XL Edge™ 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) Large Missile Impact Test per FBC, TAS 201-94
6) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of series 5460 and series 5560, PVC double hung windows, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-8006**, dated 04/27/15, signed and sealed by Idalmis Ortega, P.E.
(Submitted under previous NOA No. 15-0812.03)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC-5th Edition (2014)**, dated 07/30/15, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
(Submitted under previous NOA No. 15-0812.03)
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. 16-0714.08
Expiration Date: September 17, 2020
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E. MATERIAL CERTIFICATIONS (CONTINUED)

1. Notice of Acceptance No. **12-1120.02** issued to Royal Window and Door Profiles, Plant 13 for their “**White Rigid PVC Exterior Extrusions for Windows and Doors**” dated 02/28/13, expiring on 02/28/18.
2. Notice of Acceptance No. **14-0529.13** issued to Royal Window and Door Profiles, Plant 13 for their “**Bronze and Lighter Shades of Cap Coated Rigid PVC Exterior Extrusions for Windows and Doors**” dated 04/16/15, expiring on 04/16/20.
3. Notice of Acceptance No. **14-0529.14** issued to Royal Window and Door Profiles, Plant 13 for their “**Performance Core Rigid PVC Exterior Extrusions for Windows and Doors**” dated 04/16/15, expiring on 04/16/20.

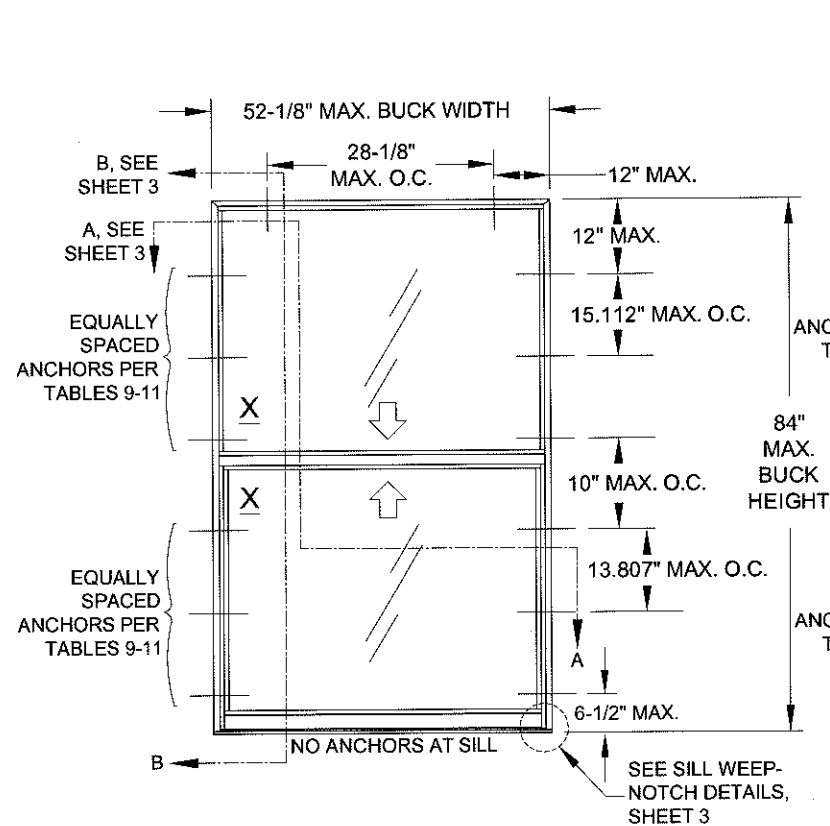
F. STATEMENTS

1. Statement letter of conformance, complying with **FBC-5th Edition (2014)**, dated July 30, 2015, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
(Submitted under previous NOA No. 15-0812.03)
2. Statement letter of no financial interest, dated July 30, 2015, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
(Submitted under previous NOA No. 15-0812.03)
3. Proposal issued by Product Control, dated 8/6/14 and revised on 8/19/14, signed by Jaime Gascon, P.E. Supervisor, Product Control Section.
(Submitted under previous NOA No. 15-0812.03)
4. Proposal No. **16-0125** issued by the Product Control Section, dated March 09, 2016, signed by Ishaq Chanda, P.E.

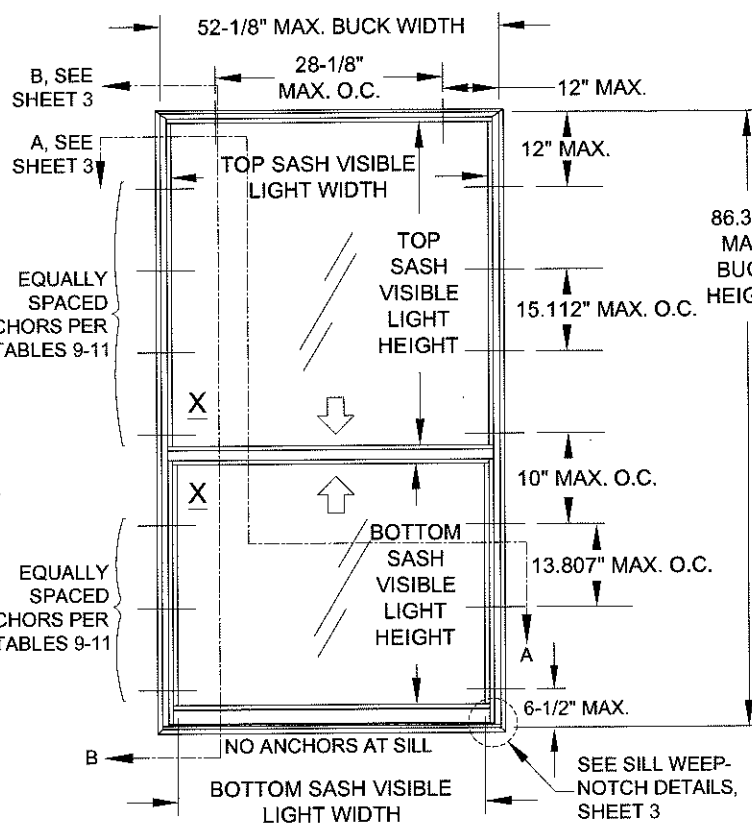
G. OTHERS

1. Notice of Acceptance No. **15-0812.03**, issued to PGT Industries, Inc. for their Series “DH-5460” PVC Double Hung Window - N.I.” approved on 09/17/15 and expiring on 09/17/20.

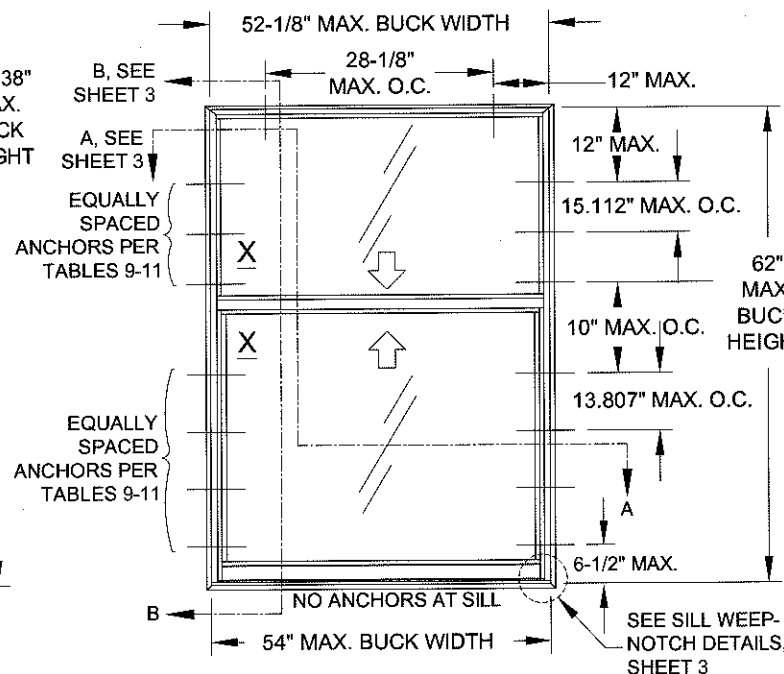

Manuel Perez, P.E.
Product Control Examiner
NOA No. 16-0714.08
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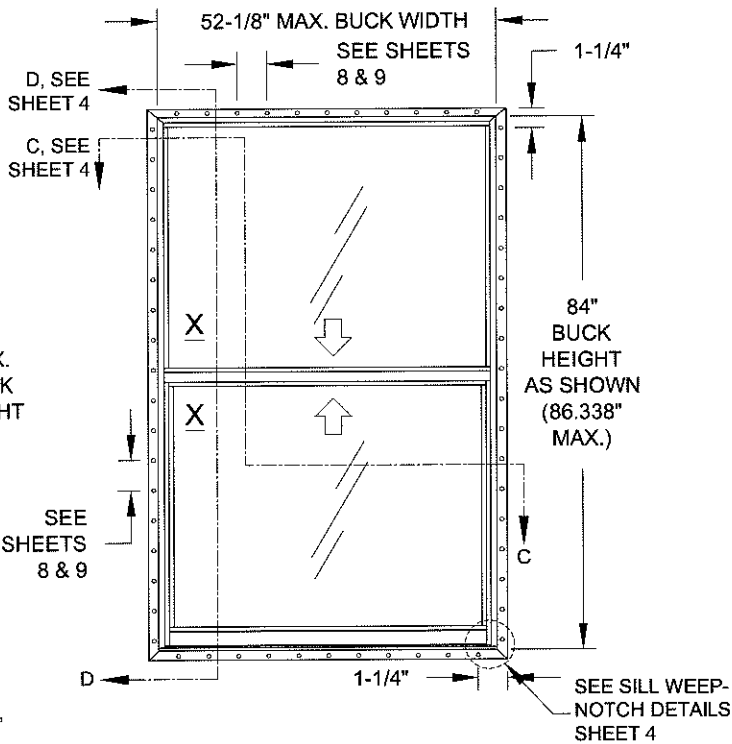
ELEVATION FOR TYP. EQUAL LEG FRAME
SHOWN WITH EQUAL-LITE CONFIGURATION



ELEVATION FOR TYP. FLANGE FRAME
SHOWN WITH ORIEL/PROVIEW CONFIGURATION



ELEVATION FOR TYP. FLANGE FRAME
SHOWN WITH STANDARD COTTAGE CONFIGURATION
FOR CUSTOM COTTAGE CONFIGURATION UP TO
75\"/>



ELEVATION FOR TYP. FIN OR J-CHANNEL FRAME
SHOWN WITH EQUAL-LITE CONFIGURATION
ANCHORED THROUGH THE NAIL-FIN
(SIMILAR ANCHOR DIMENSIONS FOR OTHER CONFIGURATIONS)

DESIGN PRESSURE RATING	IMPACT RATING
VARIABLES PER REINFORCEMENT LEVEL, SEE SHEETS 6-7	NOT RATED FOR IMPACT RESISTANCE

GENERAL NOTES: SERIES 5460 NON-IMPACT RESISTANT DOUBLE HUNG WINDOW

- THIS PRODUCT HAS BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- SHUTTERS ARE REQUIRED WHEN USED IN WIND-BORNE DEBRIS REGIONS.
- 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.
- ALL WOOD BUCKS LESS THAN 1-1/2\"/>
- ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. USE ANCHORS OF SUFFICIENT LENGTH TO ACHIEVE REQUIRED MIN. EMBEDMENT. 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.
- 1/4\"/>
- DESIGN PRESSURES:
 - NEGATIVE DESIGN LOADS BASED ON STRUCTURAL TESTING AND GLASS PER ASTM E1300.
 - POSITIVE DESIGN LOADS BASED ON WATER TEST PRESSURE, STRUCTURAL TESTING AND GLASS PER ASTM E1300.
- 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.
- METAL SUBSTRATE TO MEET MIN. STRENGTH AND THICKNESS REQUIREMENTS PER CURRENT FLORIDA BUILDING CODE AND TO BE REVIEWED BY THE AUTHORITY HAVING JURISDICTION.
- REFERENCES: TEST REPORTS FTL-8006; ELCO ULTRACON NOA; ELCO CRETEFLEX NOA; ELCO AGGRE-GATOR NOA; ROYAL WINDOW AND DOOR PROFILES, LTD WHITE & BRONZE/LIGHTER SHADES OF CAP COATED PVC EXTRUSION NOA'S; NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, ANSI/AF&PA NDS & ALUMINUM DESIGN MANUAL
- APPLICABLE EGRESS REQUIREMENTS TO BE REVIEWED BY BUILDING OFFICIAL.

USER INSTRUCTIONS:

- DETERMINE THE SITE SPECIFIC, WINDOW OPENING'S DESIGN PRESSURE REQUIREMENT FROM ASCE 7.
- DETERMINE THE MOST SUITABLE ANCHOR GROUP FROM TABLES 2 OR 3 ACCORDING TO THE INSTALLATION CONDITIONS.
- KNOWING YOUR GLAZING OPTION (TABLE 1), WINDOW CONFIGURATION AND SIZE, DETERMINE YOUR WINDOW'S DESIGN PRESSURE FROM TABLES 4 OR 5. IT MUST EQUAL OR EXCEED THE DESIGN PRESSURE REQUIREMENT FOR THE WINDOW OPENING OBTAINED IN STEP 1.
- DETERMINE THE ANCHOR QUANTITY FROM TABLES 6 OR 7. VERIFY THE ANCHOR/SUBSTRATE WILL MEET REQUIREMENTS FOR YOUR OPENING'S CONDITION FROM TABLES 2 OR 3, AND THAT ALL MIN. REQUIREMENTS FROM THIS SHEET-SET ARE MET.
- INSTALL AS PER SHEET 3 FOR THRU-FRAME INSTALLATION OR SHEET 4 FOR INTEGRAL FIN INSTALLATION.

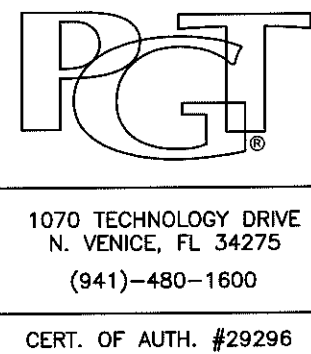
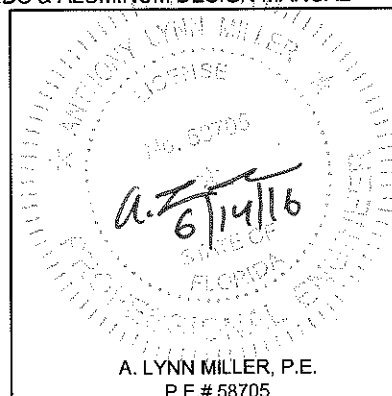
NOTE: DESIGN PRESSURE RATING DETERMINATION IS THE SAME PROCESS FOR ALL FRAME TYPES (J-CHANNEL, FLANGE, INTEGRAL FIN OR EQUAL LEG/BOX).

GENERAL NOTES.....	1
ELEVATIONS.....	1
FRAME, GLASS & ANCHOR OPTIONS.....	2
INSTALLATION, FLANGE & EQUAL LEG/BOX.....	3
INSTALLATION, INTEGRAL FIN & J-CHANNEL.....	4
GLAZING DETAILS.....	5
DESIGN PRESSURES.....	6-7
ANCHOR QUANTITIES.....	8-9
EXTRUSION PROFILES.....	10
ASSEMBLY & PARTS LIST.....	11-12

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

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 16-0714.08
Expiration Date Sept. 17, 2020
By *Manuel Inez*
Miami/Dade Product Control



Revised By: JR	Date: 05/05/16	Revision: A) ADDED SPACERS TO SHEET 5.	Revision:
Description: GENERAL NOTES & ELEVATION	Drawn By: J ROSOWSKI		
Title: DOUBLE HUNG WINDOW INSTALLATION - NI	Date: 05/15/15		
Series/Model: DH-5460	Scale: NTS	Sheet: 1 OF 12	Drawing No. MD-DH5460-01
			Rev: A

TABLE 1: ALLOWABLE GLASS TYPES

Glass Type	Description (Listed from Exterior to Interior)	Design Pressure	
		Table #	Sheet #
1	3/4" I.G.: 1/8" A Exterior Cap + 1/2" Air Space + 1/8" A Exterior Cap	4, 5	6, 7
2	3/4" I.G.: 1/8" T Exterior Cap + 1/2" Air Space + 1/8" T Exterior Cap	4, 5	6, 7
3	3/4" I.G.: 3/16" A Exterior Cap + 3/8" Air Space + 3/16" A Exterior Cap	4, 5	6, 7
4	3/4" I.G.: 3/16" T Exterior Cap + 3/8" Air Space + 3/16" T Exterior Cap	4, 5	6, 7

GLAZING NOTES:
"A" = ANNEALED
"T" = TEMPERED

TABLE 2: ALLOWABLE ANCHORS THROUGH THE FRAME

Group	Anchor	Substrate	Min. Edge Distance	Min. Embedment*
A	#10 SMS (steel, 18-8 S.S. or 410 S.S.)	P.T. Southern Pine (SG=0.55)	7/16"	1-3/8"
		Steel, A36*	3/8"	0.050"
		Steel Stud, A653 Gr. 33*	3/8"	0.0451" (18 Ga.)
		Aluminum, 6063-T5*	3/8"	0.050"
	3/16" steel Ultracon	P.T. Southern Pine (SG=0.55)	7/16"	1-3/8"
		Concrete (min. 2.85 ksi)	1"	1-3/8"
B	#12 SMS (steel, 18-8 S.S. or 410 S.S.)	UngROUTED CMU, (ASTM C-90)	2-1/2"	1-1/4"
		P.T. Southern Pine (SG=0.55)	9/16"	1-3/8"
		Steel, A36*	3/8"	0.050"
		Steel Stud, A653 Gr. 33*	3/8"	0.0451" (18 Ga.)
C	1/4" steel Ultracon	Aluminum, 6063-T5*	3/8"	0.063"
		Concrete (min. 2.85 ksi)	1"	1-3/4"
	1/4" steel Creteflex	UngROUTED CMU, (ASTM C-90)	2-1/2"	1-1/4"
		Concrete (min. 3.35 ksi)	1"	1-3/4"
D	1/4" steel Ultracon	Concrete (min. 2.85 ksi)	2-1/2"	1-3/4"
		P.T. Southern Pine (SG=0.55)	1"	1-3/8"
	1/4" steel Creteflex	Concrete (min. 3.35 ksi)	2-1/2"	1-3/4"
		UngROUTED CMU, (ASTM C-90)	2-1/2"	1-1/4"
	1/4" steel Aggre-Gator	P.T. Southern Pine (SG=0.55)	1"	1-3/8"
		Concrete (min. 3.275 ksi)	1-1/2"	1-3/8"
	1/4" steel Aggre-Gator	P.T. Southern Pine (SG=0.55)	1"	1-3/8"
		Grouted CMU, (ASTM C-90)	2"	2"

* MIN. OF 3 THREADS BEYOND THE METAL SUBSTRATE. FOR STEEL STUDS, MIN. Fu=45 KSI & MIN. Fy=33 KSI.

"UNGROUTED CMU" VALUES MAY BE USED FOR GROUTED CMU APPLICATIONS.

Frame Types (see Fig B)	Glass Options (see Table 1)	Frame Configs. (see Fig A)	Installation Options that may be used	
Flange (#2)	1 - 4	Equal-Lite, Oriel/Proview & Cottage	Through the frame of the window.....	into 2X Wood Frame/Buckstrip - sheet 3, option 1
				into Concrete/CMU - sheet 3, option 2
				through 1X Buckstrip into Concrete/CMU - sheet 3, option 3
				into Metal - sheet 3, option 4
Box / Equal-Leg (#4)	1 - 4	Equal-Lite, Oriel/Proview & Cottage	Through the frame of the window.....	into 2X Wood Frame/Buckstrip - sheet 3, option 1
				into Concrete/CMU - sheet 3, option 2
				through 1X Buckstrip into Concrete/CMU - sheet 3, option 3
				into Metal - sheet 3, option 4
J-Channel (#1)	1 - 4	Equal-Lite, Oriel/Proview & Cottage	Through the integral fin.....	into 2X Wood Frame/Buckstrip - sheet 4, option 5
				into Metal - sheet 4, option 7
			Through the frame of the window.....	into 2X Wood Frame/Buckstrip - sheet 4, option 6
				into Metal - sheet 4, option 8
Integral Fin (#3)	1 - 4	Equal-Lite, Oriel/Proview & Cottage	Through the integral fin.....	into 2X Wood Frame/Buckstrip - sheet 4, option 5
				into Metal - sheet 4, option 7
			Through the frame of the window.....	into 2X Wood Frame/Buckstrip - sheet 4, option 6
				into Metal - sheet 4, option 8

FIGURE B: FRAME TYPES

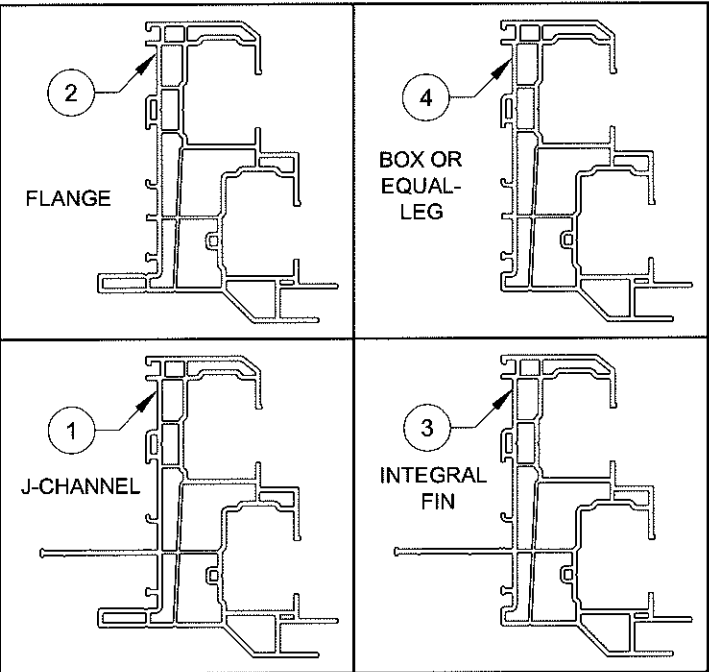


FIGURE A: FRAME CONFIGURATIONS

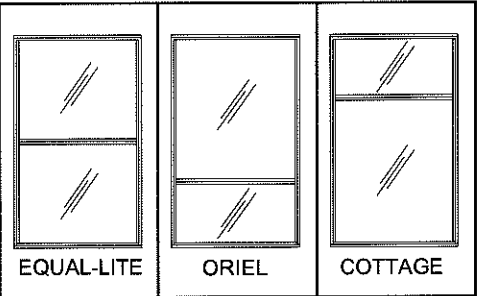
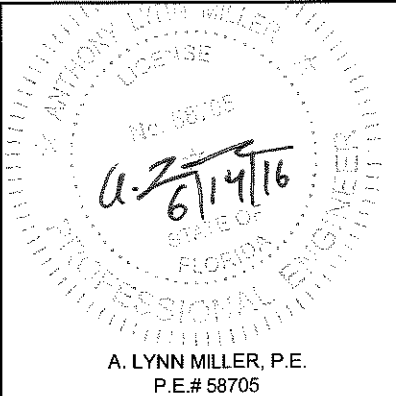


TABLE 3: ALLOWABLE ANCHORS THROUGH THE INTEGRAL FIN

Group	Anchor	Substrate	Min. Edge Distance	Min. Embedment*
E	2-1/2" x .131" Common Nail	P.T. Southern Pine (SG=.55)	3/8"	2-7/16"
F	2-1/2" Ring-shank Roofing Nail	P.T. Southern Pine (SG=.55)	3/8"	2-7/16"
		P.T. Southern Pine (SG=.55)	1/2"	1-3/8"
		Aluminum, 6063-T5*	3/8"	0.050"
		Steel Stud, Gr. 33*	3/8"	0.0451" (18 Ga.)
	#10 Trusshead SMS (steel, 18-8 S.S. or 410 S.S.)	Steel, A36*	3/8"	0.050"
		P.T. Southern Pine (SG=.55)	9/16"	1-3/8"
		Aluminum, 6063-T5*	3/8"	0.063"
		Steel Stud, Gr. 33*	3/8"	0.050"
F	#12 SMS (steel, 18-8 S.S. or 410 S.S.)	Steel, A36*	3/8"	0.050"

* MIN. OF 3 THREADS BEYOND THE METAL SUBSTRATE. FOR STEEL STUDS, MIN. Fu=45 KSI & MIN. Fy=33 KSI.



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

CERT. OF AUTH. #29296

Revised By:	Date:	Revision:
Revised By:	Date:	Revision:

Description:
GLASS/ANCHORS/FRAME OPTIONS

Title:
DOUBLE HUNG WINDOW INSTALLATION - NI

Series/Model: DH-5460	Scale: NTS	Sheet: 2 OF 12	Drawing No. MD-DH5460-01	Rev: A
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PRODUCT REVISED
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Miami Dade Product Council

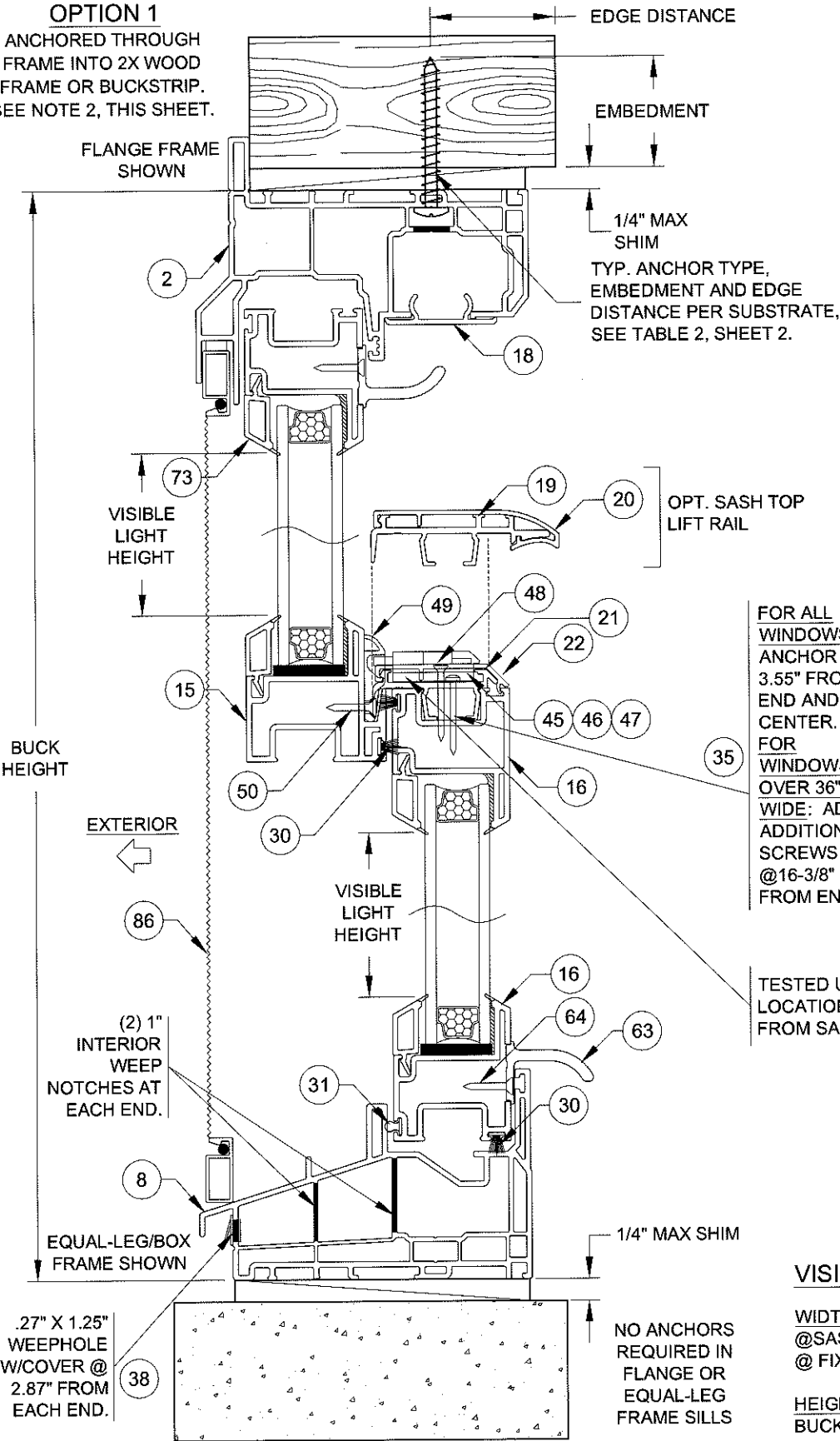
Drawn By:
J ROSOWSKI

Date:
05/15/15

INSTALLATION DETAILS FOR FLANGE & EQUAL-LEG/BOX FRAMES

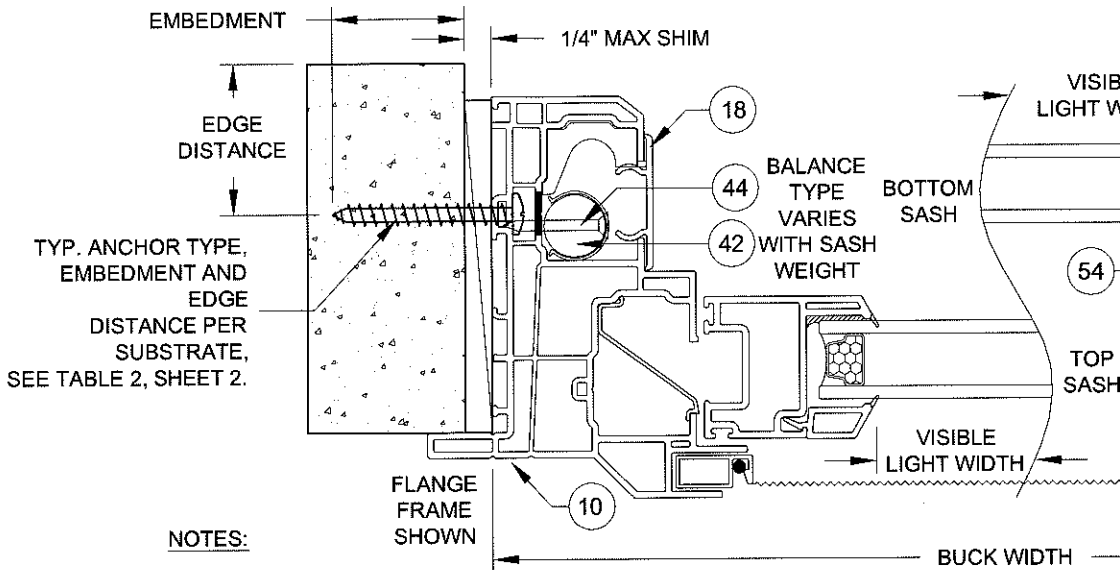
INSTALLATION
OPTION 1

ANCHORED THROUGH
FRAME INTO 2X WOOD
FRAME OR BUCKSTRIP.
SEE NOTE 2, THIS SHEET.



VERTICAL SECTION B-B

INSTALLATION OPTION 2
ANCHORED THROUGH FRAME
DIRECTLY INTO CONCRETE/CMU.



NOTES:

1) USE ONLY
SUBSTRATE-APPROPRIATE
ANCHORS LISTED ON TABLE 2,
SHEET 2. FOLLOW EMBEDMENT AND
EDGE DISTANCE LIMITS. ANY
INSTALLATION OPTION SHOWN MAY
BE USED ON ANY SIDE OF THE
WINDOW.

2) MASONRY ANCHORS MAY BE
USED INTO WOOD AS PER TABLE 2,
SHEET 2. 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.

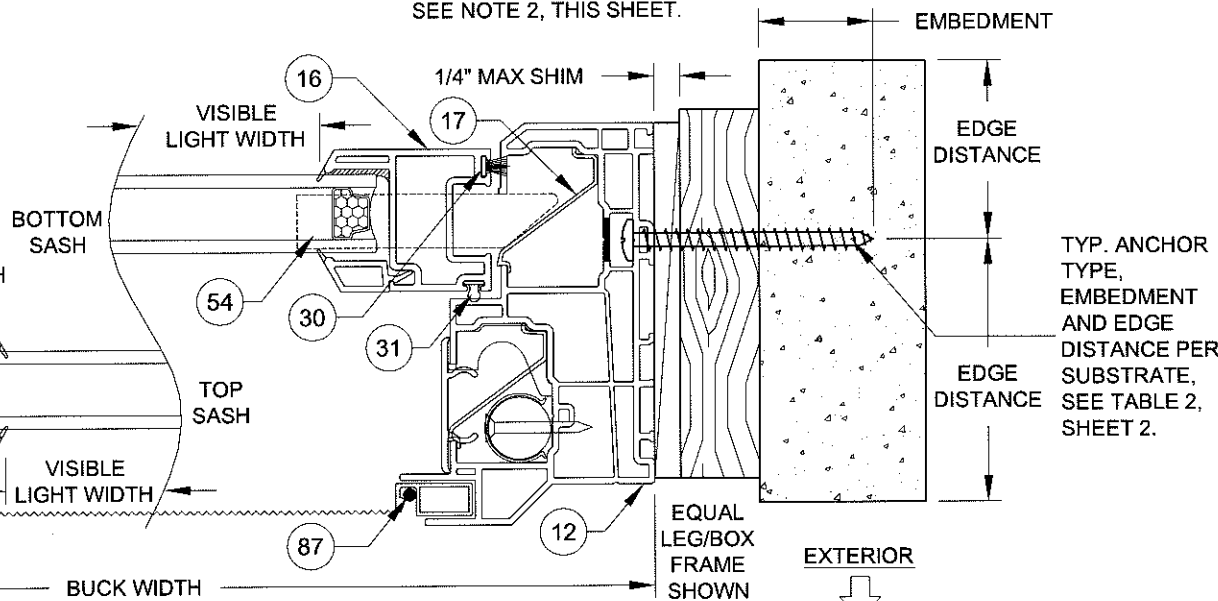
3) VISIBLE LIGHT WIDTH OR HEIGHT
(ALSO REFERRED TO AS DAYLIGHT
OPENING) IS MEASURED FROM
BEADING TO BEADING.

VISIBLE LIGHT FORMULAS

WIDTH
@SASH: BUCK WIDTH - 6-1/2"
@ FIXED LITE: BUCK WIDTH - 7-1/2"

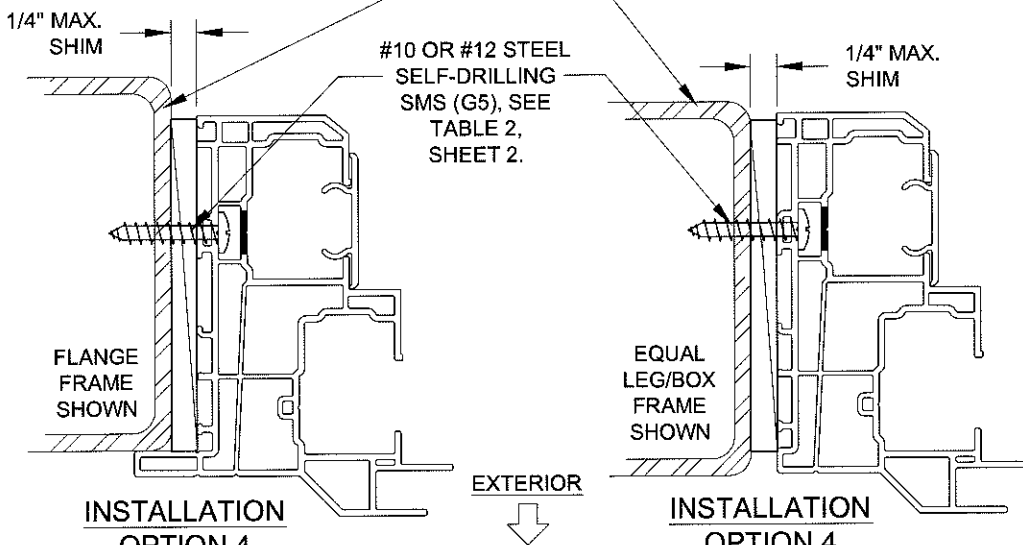
HEIGHT (EQUAL-LITE)
BUCK HEIGHT/2 - 4-3/8"

INSTALLATION OPTION 3
ANCHORED THROUGH FRAME AND 1X
BUCKSTRIP INTO CONCRETE/CMU.
SEE NOTE 2, THIS SHEET.



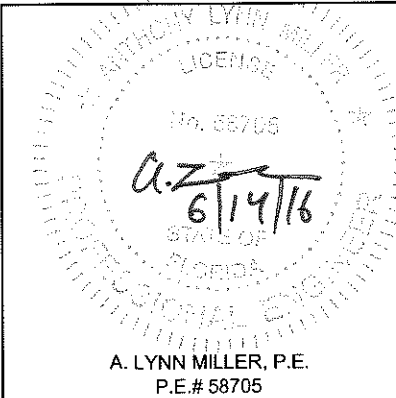
HORIZONTAL SECTION A-A

DADE APPROVED MULLION, FBC COMPLIANT ALUMINUM/STEEL FRAMING OR STEEL STUD.
MAY BE VERTICAL OR HORIZONTAL. SEE SUBSTRATE PROPERTIES, TABLE 2, SHEET 2.



INSTALLATION
OPTION 4
ANCHORED THROUGH
FRAME INTO METAL

INSTALLATION
OPTION 4
ANCHORED THROUGH
FRAME INTO METAL



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

CERT. OF AUTH. #29296

Revised By:	Date:	Revision:
Revised By:	Date:	Revision:

Description:
FLANGE & EQUAL-LEG/BOX FRAMES

Title:
DOUBLE HUNG WINDOW INSTALLATION - NI

Series/Model:	Scale:	Sheet:	Drawing No.	Rev:
DH-5460	NTS	3 OF 12	MD-DH5460-01	A

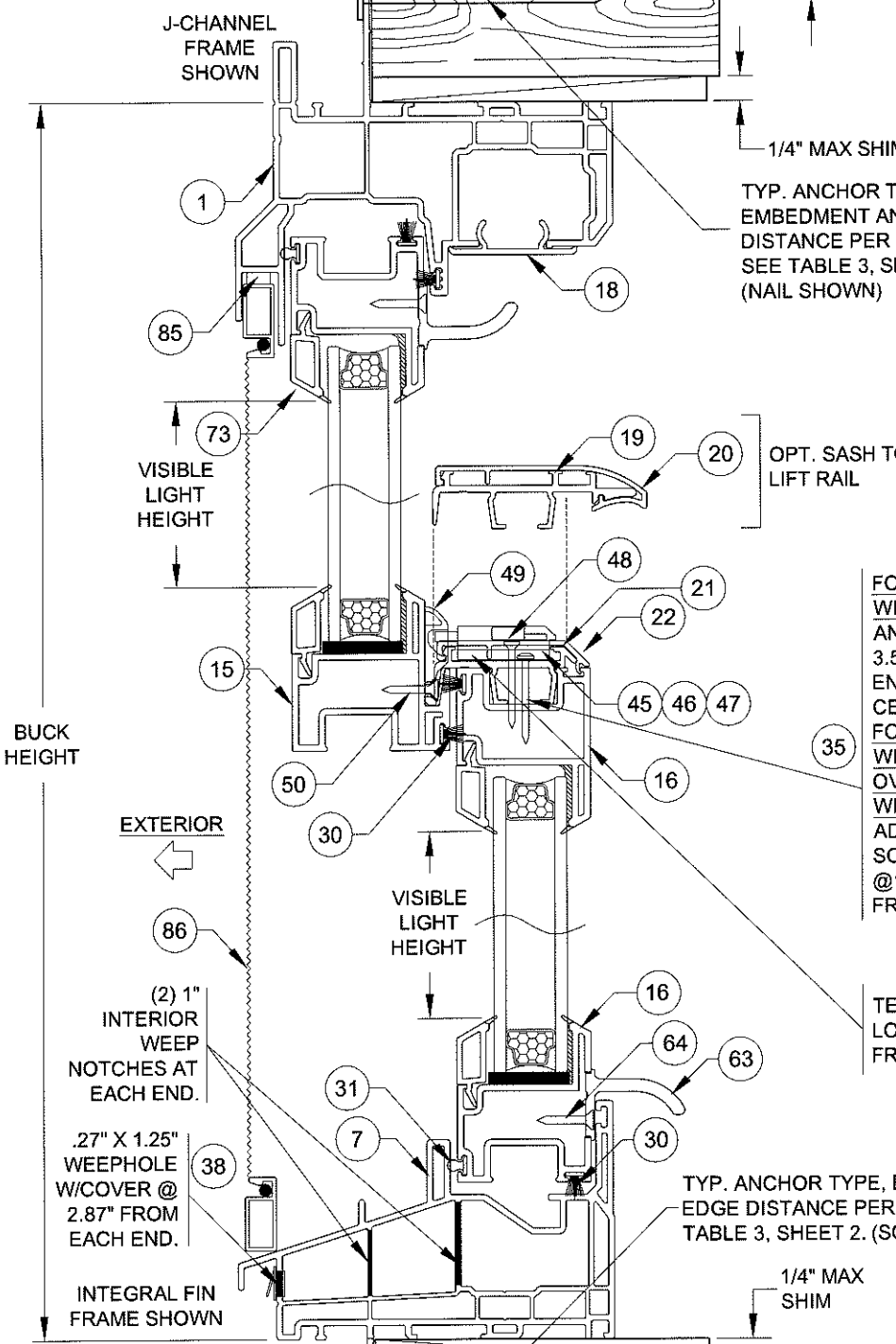
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 16-0714-08
Expiration Date Sept 17, 2020
By: Manuel Perez
Miami Dade Product Control

Drawn By:
J ROSOWSKI

Date:
05/15/15

INSTALLATION DETAILS FOR INTEGRAL FIN & J-CHANNEL FRAMES

INSTALLATION OPTION 5
ANCHORED THROUGH INTEGRAL
FIN INTO 2X WOOD FRAME OR
BUCK- STRIP. SEE NOTE 2, THIS
SHEET.



NO ANCHORS REQUIRED IN
FRAME SILL IF ANCHORING
THROUGH THE FRAME.

INSTALLATION OPTION 5
ANCHORED THROUGH
INTEGRAL FIN INTO 2X WOOD
FRAME OR BUCK- STRIP. SEE
NOTE 2, THIS SHEET.

VERTICAL SECTION D-D

TYP. ANCHOR TYPE,
EMBEDMENT AND EDGE
DISTANCE PER SUBSTRATE,
SEE TABLE 2, SHEET 2.

TYP. ANCHOR TYPE,
EMBEDMENT AND EDGE
DISTANCE PER SUBSTRATE,
SEE TABLE 3, SHEET 2.
(NAIL SHOWN)

FOR ALL
WINDOWS: 1
ANCHOR @
3.55" FROM
END AND AT
CENTER.
FOR
WINDOWS
OVER 36"
WIDE: ADD
ADDITIONAL
SCREWS
@16-3/8"
FROM END.

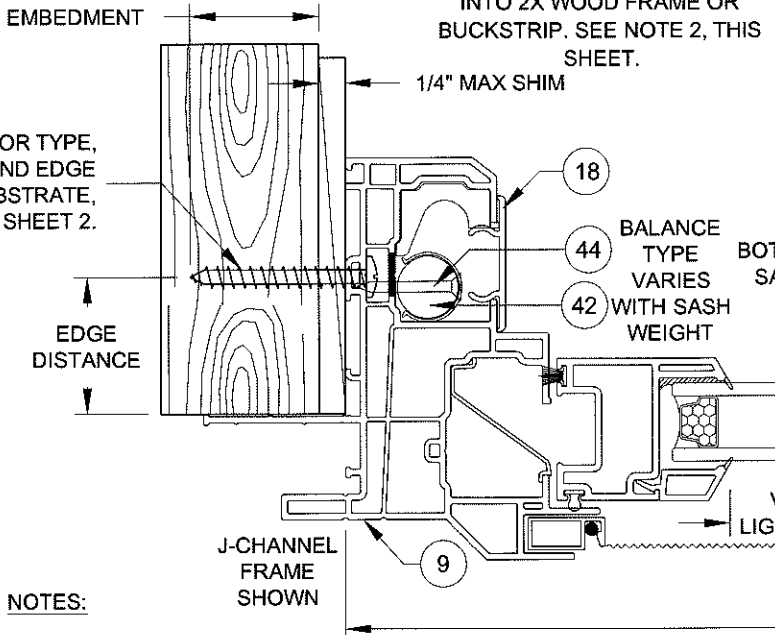
TESTED UNIT
LOCATION: 6-5/8"
FROM SASH END.

TYP. ANCHOR TYPE, EMBEDMENT AND
EDGE DISTANCE PER SUBSTRATE, SEE
TABLE 3, SHEET 2. (SCREW SHOWN)

VISIBLE LIGHT FORMULAS

WIDTH
@SASH: BUCK WIDTH - 6-1/2"
@ FIXED LITE: BUCK WIDTH - 7-1/2"
HEIGHT (EQUAL-LITE)
BUCK HEIGHT/2 - 4-3/8"

INSTALLATION OPTION 6
ANCHORED THROUGH FRAME
INTO 2X WOOD FRAME OR
BUCKSTRIP. SEE NOTE 2, THIS
SHEET.

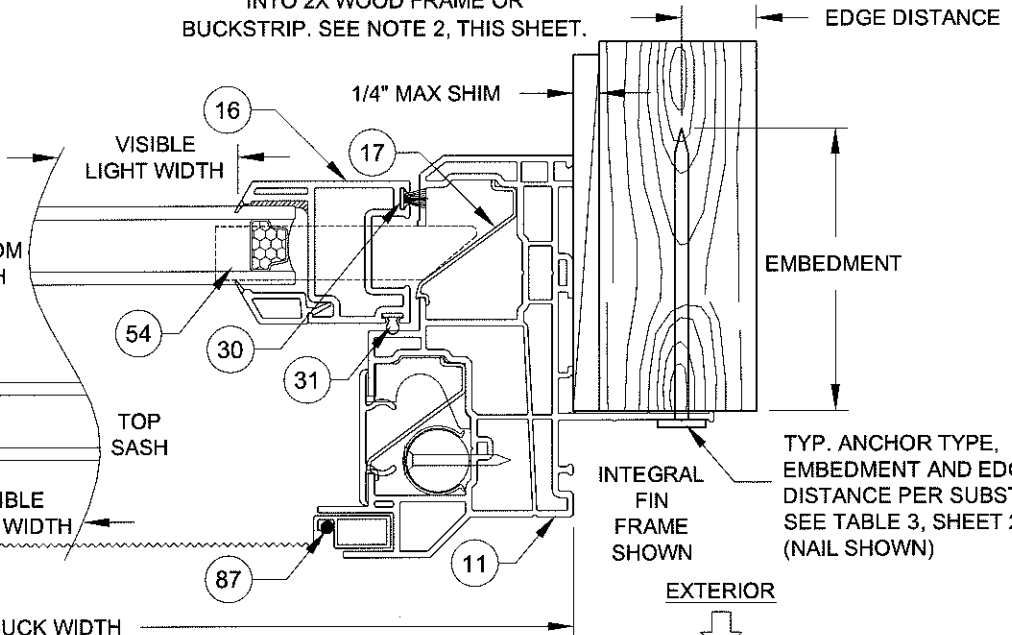


NOTES:

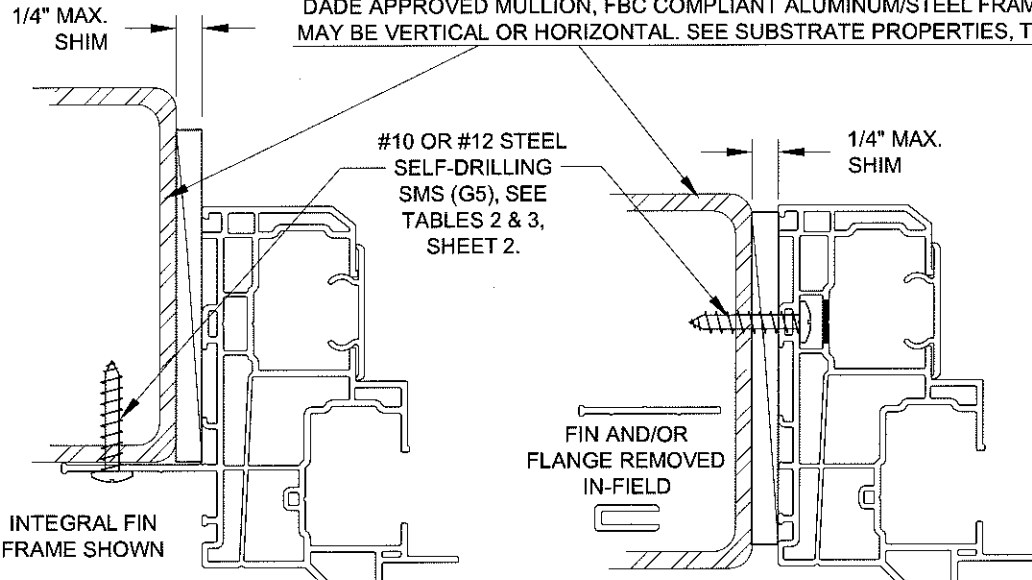
- 1) USE ONLY
SUBSTRATE-APPROPRIATE
ANCHORS LISTED ON TABLES 2 & 3
OF SHEET 2. FOLLOW EMBEDMENT
AND EDGE DISTANCE LIMITS. ANY
INSTALLATION OPTION SHOWN MAY
BE USED ON ANY SIDE OF THE
WINDOW.
- 2) MASONRY ANCHORS MAY BE
USED INTO WOOD AS PER TABLE 2,
SHEET 2. ALL WOOD BUCKS LESS
THAN 1-1/2" THICK ARE 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.
- 3) VISIBLE LIGHT WIDTH OR HEIGHT
(ALSO REFERRED TO AS DAYLIGHT
OPENING) IS MEASURED FROM
BEADING TO BEADING.

HORIZONTAL SECTION C-C

INSTALLATION OPTION 5
ANCHORED THROUGH INTEGRAL FIN
INTO 2X WOOD FRAME OR
BUCKSTRIP. SEE NOTE 2, THIS
SHEET.



DADE APPROVED MULLION, FBC COMPLIANT ALUMINUM/STEEL FRAMING OR STEEL STUD.
MAY BE VERTICAL OR HORIZONTAL. SEE SUBSTRATE PROPERTIES, TABLES 2 & 3, SHEET 2.

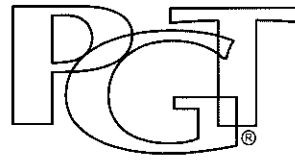


INSTALLATION
OPTION 7
ANCHORED THROUGH
INTEGRAL FIN INTO METAL

INSTALLATION
OPTION 8
ANCHORED THROUGH FRAME INTO
METAL (INTEGRAL FIN/FLANGE REMOVED)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 16-0714.08
Expiration Date Sept 17, 2020
By Manuel Perez
Miami Dade Product Control

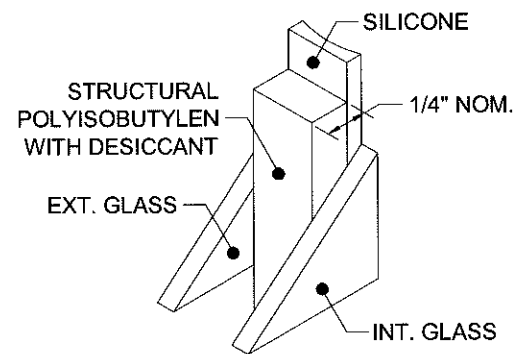
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705
6/14/16



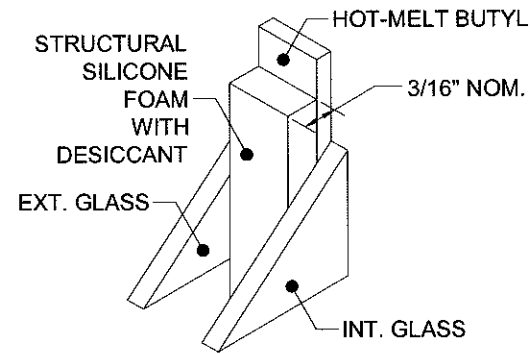
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941)-480-1600

CERT. OF AUTH. #29296

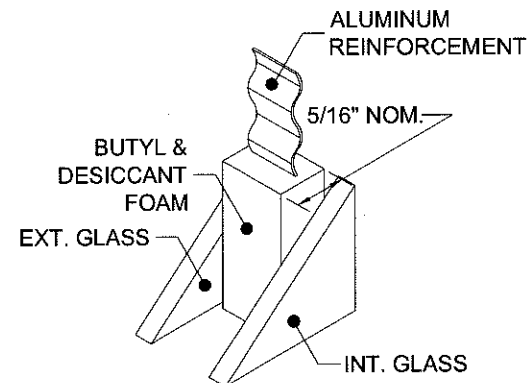
Revised By:	Date:	Revision:
Revised By:	Date:	Revision:
Description: J-CHANNEL & INTEGRAL FIN FRAMES		
Title: DOUBLE HUNG WINDOW INSTALLATION - NI		
Series/Model: DH-5460	Scale: NTS	Sheet: 4 OF 12
Drawing No. MD-DH5460-01		Rev: A
Date: 05/15/15		Drawn By: J ROSOWSKI



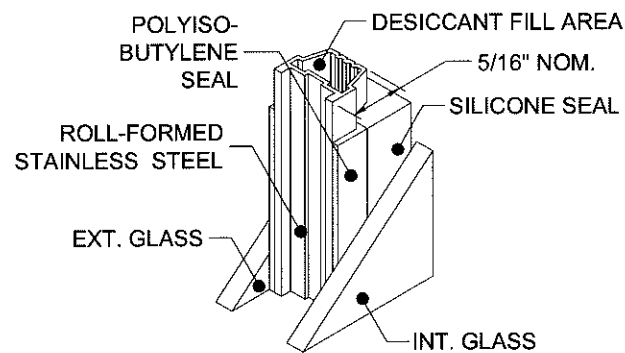
76 **KODISPACE
4SG TPS**



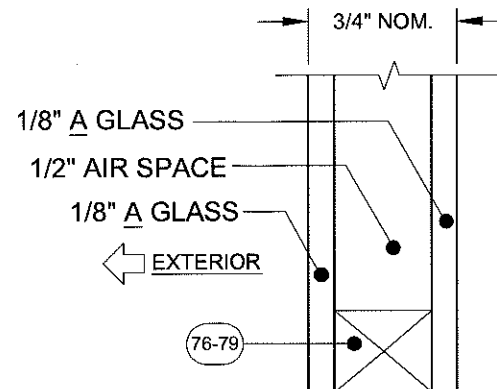
77 **SUPER
SPACER[®] NXT[™]**



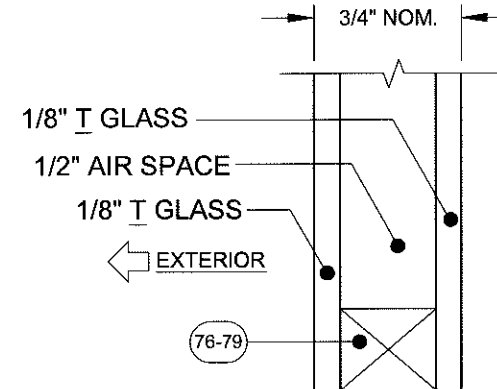
78 **DURASEAL[®]
SPACER**



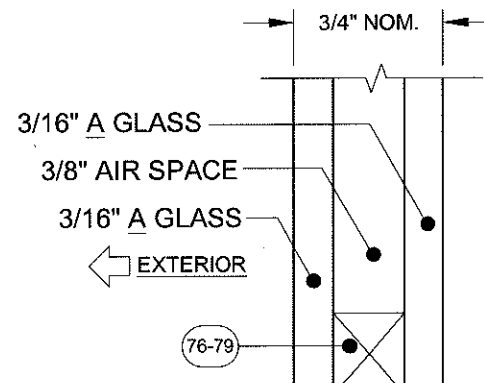
79 **XL EDGE[™]
SPACER**



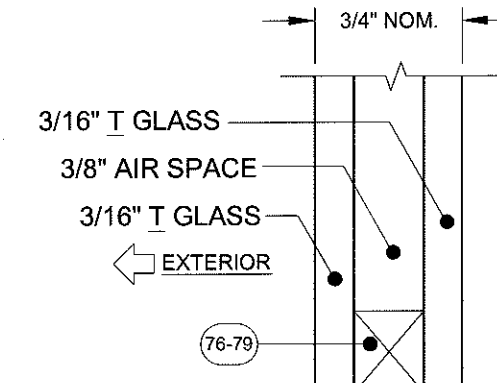
GLASS TYPE 1



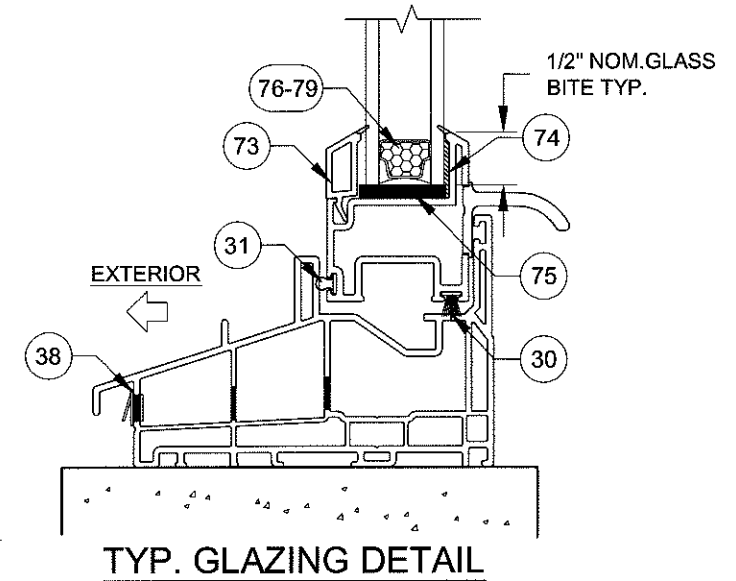
GLASS TYPE 2



GLASS TYPE 3



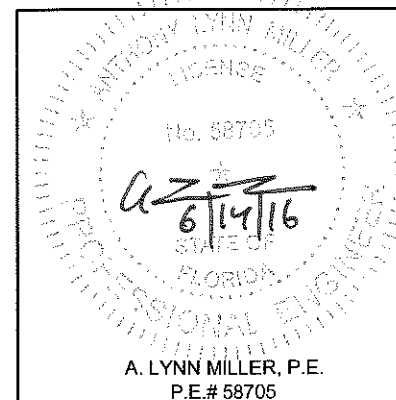
GLASS TYPE 4



Part #	Description	Material
76	Kommerling 4SG TPS Spacer System	See this Sheet for Materials
77	Quanex Super Spacer NXT with Hot Melt Butyl	
78	Quanex Duraseal Spacer	
79	Cardinal XL Edge Spacer	

REFERENCE TEST REPORTS: FTL-8717, 8968 & 8970

GLAZING NOTES:
"A" = ANNEALED
"T" = TEMPERED



1070 TECHNOLOGY DRIVE
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CERT. OF AUTH. #29296

Revised By: JR	Date: 05/05/16	Revision: A) ADDED SPACERS
Revised By:	Date:	Revision:
Description: GLAZING DETAILS		
Title: DOUBLE HUNG WINDOW INSTALLATION - NI		Date: 05/15/15
Series/Model: DH-5460	Scale: NTS	Sheet: 5 OF 12
Drawing No. MD-DH5460-01		Rev: A

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 16-0714.08
Expiration Date Sept. 17, 2020
by *Manuel Perez*
Miami Dade Product Control

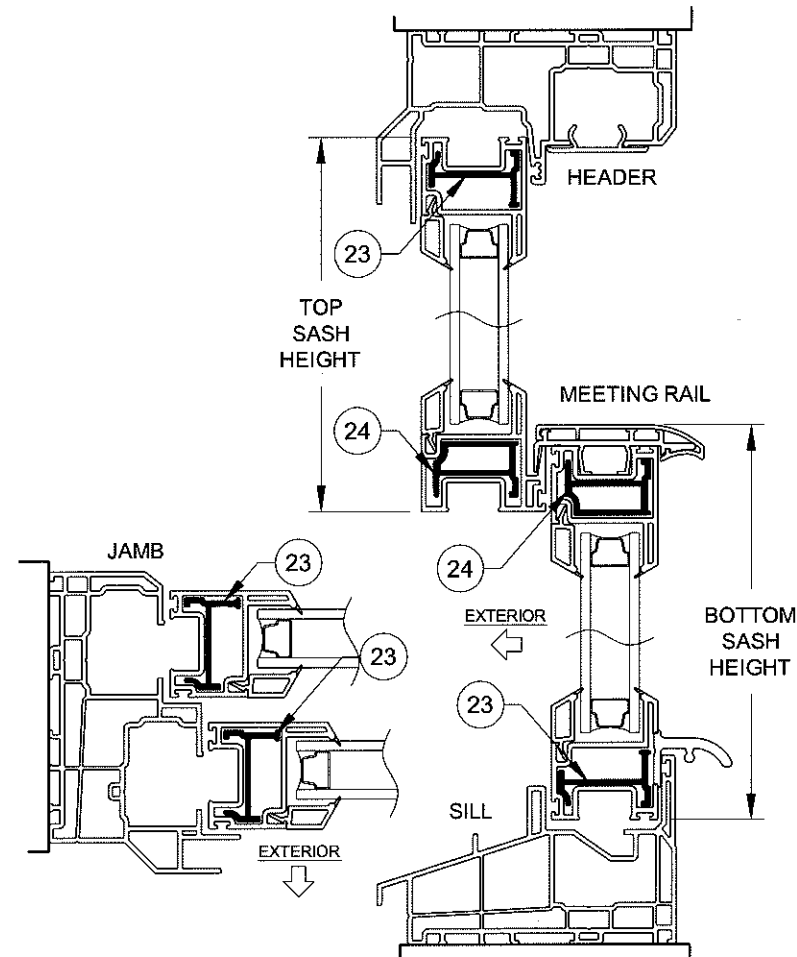
Drawn By:
J ROSOWSKI

TABLE 4:

Glass Types: 1, 2, 3 & 4	Reinforcement Level: R1	Bottom Sash Description for given Range @ Window Height Shown	Bottom Sash Height Range (in)	Final Design Pressure (lbs/ft ²)											
				Window Buck Width (in)											
				18	24	32	36	40	48	52.125					
24		Equal-lite	11.266	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-92.0	+50.0	-86.0
		Standard Cottage	13.517 - 15.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-89.0	+50.0	-82.0
28		Equal-lite	11.517 - 13.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-98.5
		Standard Preview	11.266 - 11.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-94.0
37.375		Tallest	21.517 - 24.891	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-93.0	+50.0	-74.0
		Standard Cottage	18.017 - 21.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-85.6	+50.0	-77.1
		Equal-lite	15.017 - 18.016	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-86.2	+50.0	-77.7
		Standard Preview	11.517 - 15.016	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-86.5	+50.0	-77.9
		Shortest	11.266 - 11.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-90.4	+50.0	-80.5
44		Tallest	29.517 - 31.516	+50.0	-100.0	+50.0	-99.5	+50.0	-92.8	+50.0	-92.8	+50.0	-82.9	+50.0	-74.0
		Custom Size	26.517 - 29.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-79.6	+50.0	-71.2
		Standard Cottage	23.517 - 26.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-78.1	+50.0	-70.0
		Equal-lite	20.517 - 23.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-99.3	+50.0	-69.5
		Custom Size	18.016 - 20.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-78.1	+50.0	-70.1
48		Standard Preview	11.517 - 18.015	+50.0	-100.0	+50.0	-100.0	+50.0	-97.8	+50.0	-97.8	+50.0	-75.5	+50.0	-67.4
		Shortest	11.266 - 11.516	+50.0	-100.0	+50.0	-100.0	+50.0	-96.3	+50.0	-96.3	+50.0	-85.6	+50.0	-76.5
		Tallest	27.517 - 35.141	+50.0	-100.0	+50.0	-84.5	+50.0	-76.1	+50.0	-75.1	+50.0	-72.1	+50.0	-64.0
		Standard Cottage	23.517 - 27.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-94.3	+50.0	-65.0
		Equal-lite	20.517 - 23.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-94.9	+50.0	-65.7
49.625		Standard Preview	18.016 - 20.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-96.4	+50.0	-66.6
		Custom Size	14.517 - 18.015	+50.0	-100.0	+50.0	-98.7	+50.0	-91.9	+50.0	-91.9	+50.0	-74.8	+50.0	-66.7
		Custom Size	11.517 - 14.516	+50.0	-100.0	+50.0	-86.2	+50.0	-77.8	+50.0	-77.1	+50.0	-77.1	+50.0	-69.1
		Shortest	11.266 - 11.516	+50.0	-100.0	+50.0	-85.3	+50.0	-76.9	+50.0	-76.0	+50.0	-76.0	+50.0	-72.4
		Tallest	30.517 - 36.766	+50.0	-94.5	+50.0	-79.2	+50.0	-70.4	+50.0	-68.9	+50.0	-68.8	+50.0	-64.7
62		Standard Cottage	27.517 - 30.516	+50.0	-100.0	+50.0	-100.0	+50.0	-98.8	+50.0	-98.8	+50.0	-95.0	+50.0	-65.1
		Custom Size	24.517 - 27.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-93.6	+50.0	-64.4
		Equal-lite	21.517 - 24.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-93.3	+50.0	-64.3
		Standard Preview	18.016 - 21.516	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-100.0	+50.0	-94.0	+50.0	-64.4
		Custom Size	14.517 - 18.015	+50.0	-100.0	+50.0	-91.5	+50.0	-83.7	+50.0	-83.4	+50.0	-83.4	+50.0	-65.7
75		Custom Size	11.517 - 14.516	+50.0	-96.1	+50.0	-80.6	+50.0	-71.9	+50.0	-70.5	+50.0	-70.5	+50.0	-68.2
		Shortest	11.266 - 11.516	+50.0	-95.2	+50.0	-79.8	+50.0	-71.0	+50.0	-69.6	+50.0	-69.5	+50.0	-69.5
		Tallest	36.517 - 36.767	+50.0	-94.5	+50.0	-79.2	+50.0	-70.3	+50.0	-68.9	+50.0	-68.8	+50.0	-59.0
		Standard Cottage	34.517 - 36.516	+50.0	-95.4	+50.0	-80.0	+50.0	-71.2	+50.0	-69.8	+50.0	-69.7	+50.0	-57.7
		Custom Size	31.517 - 34.516	+50.0	-100.0	+50.0	-86.8	+50.0	-78.5	+50.0	-77.8	+50.0	-64.1	+50.0	-56.7
84		Equal-lite	28.517 - 31.516	+50.0	-100.0	+50.0	-98.7	+50.0	-91.9	+50.0	-91.9	+50.0	-85.4	+50.0	-56.5
		Custom Size	25.517 - 28.516	+50.0	-100.0	+50.0	-86.2	+50.0	-77.8	+50.0	-77.1	+50.0	-77.1	+50.0	-56.7
		Standard Preview	22.517 - 25.516	+50.0	-91.6	+50.0	-76.5	+50.0	-67.5	+50.0	-65.8	+50.0	-65.5	+50.0	-57.4
		Custom Size	20.017 - 22.516	+50.0	-84.5	+50.0	-69.9	+50.0	-60.8	+50.0	-58.7	+50.0	-57.8	+50.0	-57.8
		Custom Size	18.016 - 20.016	+50.0	-79.5	+50.0	-65.4	+50.0	-56.3	+50.0	-54.0	+50.0	-52.8	+50.0	-52.6
86.338		Shortest	16.928 - 18.015	+50.0	-77.0	+50.0	-63.2	+50.0	-54.1	+50.0	-51.8	+50.0	-50.4	+50.0	-50.0
		Tallest	38.517 - 41.266	+50.0	-81.7	+50.0	-67.4	+50.0	-58.3	+50.0	-56.1	+50.0	-55.0	+50.0	-52.1
		Equal-lite	36.517 - 38.516	+50.0	-89.1	+50.0	-74.1	+50.0	-65.1	+50.0	-63.3	+50.0	-62.8	+50.0	-52.1
		Custom Size	34.517 - 36.516	+50.0	-88.6	+50.0	-73.7	+50.0	-64.6	+50.0	-62.8	+50.0	-62.3	+50.0	-52.1
		Custom Size	31.517 - 34.516	+50.0	-80.7	+50.0	-66.5	+50.0	-57.3	+50.0	-55.1	+50.0	-54.0	+50.0	-52.1
86.338		Standard Preview	29.928 - 31.516	+50.0	-77.0	+50.0	-63.2	+50.0	-54.1	+50.0	-51.8	+50.0	-50.4	+50.0	-50.0
		Equal-lite	40.017 - 41.266	+50.0	-79.5	+50.0	-65.4	+50.0	-56.3	+50.0	-54.0	+50.0	-52.8	+50.0	-50.2
86.338		Custom Size	38.928 - 40.016	+50.0	-77.0	+50.0	-63.2	+50.0	-54.1	+50.0	-51.8	+50.0	-50.4	+50.0	-50.0
		Custom Size	** - 41.266	+50.0	-77.0	+50.0	-63.2	+50.0	-54.1	+50.0	-51.8	+50.0	-50.4	+50.0	-50.0

SEE TABLE 6, SHEET 8 FOR ANCHOR GROUP AND QUANTITY.

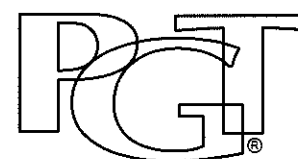
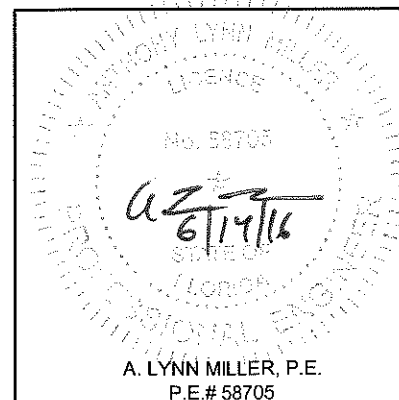
** MIN. BOTTOM SASH HEIGHT = WINDOW BUCK HEIGHT - 45.072



SECTION DETAIL FOR WINDOWS WITH
LEVEL R1 REINFORCEMENT & GLASS TYPES 1-4
(REINFORCEMENTS SHOWN IN FIGURES
ABOVE APPLY TO ALL FRAME TYPES &
CONFIGURATIONS)

NOTES:

- 1) USE THIS TABLE FOR ALL WINDOWS INSTALLED THROUGH THE FRAME OR INTEGRAL FIN.
- 2) FRAME DIMENSIONS ARE BUCK. SASH HEIGHT IS AS PER THE FIGURE.
- 3) FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION SHOWN ON THE TABLE.



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

CERT. OF AUTH. #29296

Revised By:	Date:	Revision:
Revised By:	Date:	Revision:
Description: DESIGN PRESSURE TABLE		
Title: DOUBLE HUNG WINDOW INSTALLATION - NI		Date: 05/15/15
Series/Model: DH-5460	Scale: NTS	Sheet: 6 OF 12
Drawing No. MD-DH5460-01		Rev: A

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. **16-0714.08**
Expiration Date **Sept. 17, 2020**
Manuel Perez
Miami Dade Product Council

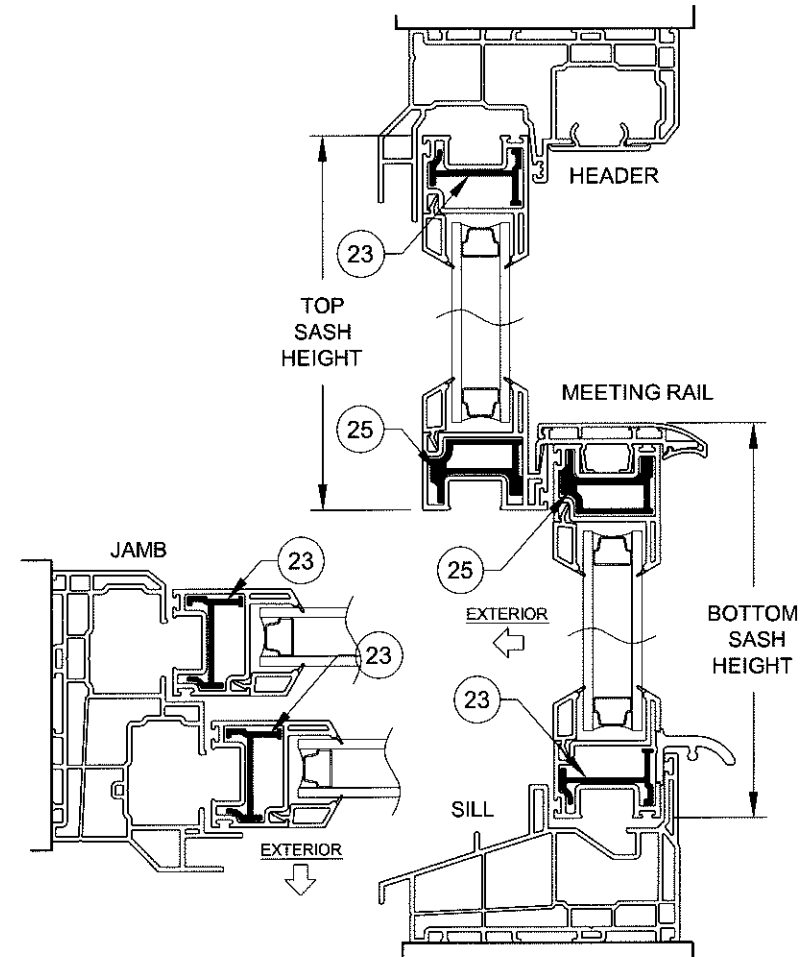
Drawn By:
J ROSOWSKI

TABLE 5:

Glass Types: 2, 3 & 4	Bottom Sash Description for given Range @ Window Height Shown	Bottom Sash Height Range (in)	Final Design Pressure (lbs/ft ²)															
			Window Buck Width (in)															
			18	24	32	36	40	48	52	125								
Window Buck Height (in)	24	Equal-lite	11.266	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-121.0	+65.0	-112.0	
	28	Standard Cottage	13.517 - 15.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-116.0	+65.0	-107.0	
		Equal-lite	11.517 - 13.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	
		Standard Preview	11.266 - 11.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-123.0	
	37.375	Tallest	21.517 - 24.891	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-93.0	+65.0	-104.0	+65.0	-96.0	
		Standard Cottage	18.017 - 21.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-119.8	+65.0	-108.0	
		Equal-lite	15.017 - 18.016	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-120.7	+65.0	-108.8	
		Standard Preview	11.517 - 15.016	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-121.1	+65.0	-109.0	
		Shortest	11.266 - 11.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-117.8	
		Tallest	29.517 - 31.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-116.0	+65.0	-103.7	
	44	Custom Size	26.517 - 29.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-111.4	+65.0	-99.7	
		Standard Cottage	23.517 - 26.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-109.3	+65.0	-98.0	
		Equal-lite	20.517 - 23.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-108.3	+65.0	-97.3	
		Custom Size	18.016 - 20.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-109.3	+65.0	-98.1	
		Standard Preview	11.517 - 18.015	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-105.7	+65.0	-94.4	
		Shortest	11.266 - 11.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-119.8	+65.0	-107.1	
	48	Tallest	27.517 - 35.141	+65.0	-130.0	+65.0	-118.3	+65.0	-106.5	+65.0	-105.1	+65.0	-105.1	+65.0	-100.9	+65.0	-89.6	
		Standard Cottage	23.517 - 27.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-101.7	+65.0	-91.0	
		Equal-lite	20.517 - 23.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-102.7	+65.0	-91.9	
		Standard Preview	18.016 - 20.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-104.1	+65.0	-93.2	
		Custom Size	14.517 - 18.015	+65.0	-130.0	+65.0	-130.0	+65.0	-128.7	+65.0	-128.7	+65.0	-128.7	+65.0	-104.7	+65.0	-93.4	
		Custom Size	11.517 - 14.516	+65.0	-130.0	+65.0	-130.0	+65.0	-109.0	+65.0	-107.9	+65.0	-107.9	+65.0	-107.9	+65.0	-96.8	
	49.625	Shortest	11.266 - 11.516	+65.0	-130.0	+65.0	-119.4	+65.0	-107.6	+65.0	-106.4	+65.0	-106.4	+65.0	-106.4	+65.0	-102.7	
		Tallest	30.517 - 36.766	+65.0	-130.0	+65.0	-110.9	+65.0	-98.5	+65.0	-96.4	+65.0	-96.3	+65.0	-96.3	+65.0	-90.6	
		Standard Cottage	27.517 - 30.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-102.1	+65.0	-91.1	
		Custom Size	24.517 - 27.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-100.9	+65.0	-90.2	
		Equal-lite	21.517 - 24.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-100.7	+65.0	-90.0	
		Standard Preview	18.016 - 21.516	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-130.0	+65.0	-101.0	+65.0	-90.2	
	62	Custom Size	14.517 - 18.015	+65.0	-130.0	+65.0	-128.1	+65.0	-117.2	+65.0	-116.7	+65.0	-116.7	+65.0	-103.3	+65.0	-92.0	
		Custom Size	11.517 - 14.516	+65.0	-130.0	+65.0	-112.9	+65.0	-100.6	+65.0	-98.8	+65.0	-98.7	+65.0	-98.7	+65.0	-95.5	
		Shortest	11.266 - 11.516	+65.0	-130.0	+65.0	-111.8	+65.0	-99.4	+65.0	-97.5	+65.0	-97.3	+65.0	-97.3	+65.0	-97.3	
		Tallest	36.517 - 36.767	+65.0	-130.0	+65.0	-110.9	+65.0	-98.5	+65.0	-96.4	+65.0	-96.3	+65.0	-93.4	+65.0	-82.6	
		Standard Cottage	34.517 - 36.516	+65.0	-130.0	+65.0	-111.9	+65.0	-99.6	+65.0	-97.7	+65.0	-97.6	+65.0	-91.4	+65.0	-80.8	
		Custom Size	31.517 - 34.516	+65.0	-130.0	+65.0	-121.5	+65.0	-109.9	+65.0	-108.9	+65.0	-108.9	+65.0	-89.8	+65.0	-79.4	
	75	Equal-lite	28.517 - 31.516	+65.0	-130.0	+65.0	-130.0	+65.0	-128.7	+65.0	-128.7	+65.0	-119.5	+65.0	-89.4	+65.0	-79.1	
		Custom Size	25.517 - 28.516	+65.0	-130.0	+65.0	-120.7	+65.0	-109.0	+65.0	-107.9	+65.0	-107.9	+65.0	-89.8	+65.0	-79.4	
		Standard Preview	22.517 - 25.516	+65.0	-128.2	+65.0	-107.0	+65.0	-94.5	+65.0	-92.2	+65.0	-91.7	+65.0	-91.0	+65.0	-80.4	
		Custom Size	20.017 - 22.516	+65.0	-118.3	+65.0	-97.8	+65.0	-85.1	+65.0	-82.2	+65.0	-81.0	+65.0	-80.9	+65.0	-80.9	
		Custom Size	18.016 - 20.016	+65.0	-111.3	+65.0	-91.5	+65.0	-78.8	+65.0	-75.6	+65.0	-74.0	+65.0	-73.6	+65.0	-73.6	
		Shortest	16.928 - 18.015	+65.0	-107.9	+65.0	-88.4	+65.0	-75.8	+65.0	-72.5	+65.0	-70.6	+65.0	-70.0	+65.0	-70.0	
	84	Tallest	38.517 - 41.266	+65.0	-114.4	+65.0	-94.3	+65.0	-81.6	+65.0	-78.5	+65.0	-77.0	+65.0	-76.8	+65.0	-72.9	
		Equal-lite	36.517 - 38.516	+65.0	-124.7	+65.0	-103.8	+65.0	-91.1	+65.0	-88.6	+65.0	-87.9	+65.0	-83.4	+65.0	-72.9	
		Custom Size	34.517 - 36.516	+65.0	-124.1	+65.0	-103.2	+65.0	-90.5	+65.0	-87.9	+65.0	-87.2	+65.0	-83.4	+65.0	-72.9	
		Custom Size	31.517 - 34.516	+65.0	-113.0	+65.0	-93.0	+65.0	-80.3	+65.0	-77.2	+65.0	-75.6	+65.0	-75.3	+65.0	-72.9	
	86.338	Standard Preview	29.928 - 31.516	+65.0	-107.9	+65.0	-88.4	+65.0	-75.8	+65.0	-72.5	+65.0	-70.6	+65.0	-70.0	+65.0	-70.0	
		Equal-lite	40.017 - 41.266	+65.0	-111.3	+65.0	-91.5	+65.0	-78.8	+65.0	-75.6	+65.0	-74.0	+65.0	-73.6	+65.0	-70.2	
	86.338	Custom Size	38.928 - 40.016	+65.0	-107.9	+65.0	-88.4	+65.0	-75.8	+65.0	-72.5	+65.0	-70.6	+65.0	-70.0	+65.0	-70.0	
		Custom Size	** - 41.266	+65.0	-107.9	+65.0	-88.4	+65.0	-75.8	+65.0	-72.5	+65.0	-70.6	+65.0	-70.0	+65.0	-70.0	

SEE TABLE 7, SHEET 9 FOR ANCHOR GROUP AND QUANTITY.

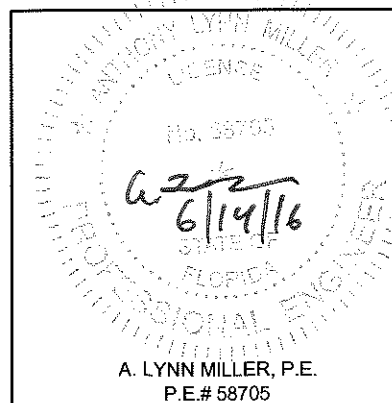
** MIN. BOTTOM SASH HEIGHT = WINDOW BUCK HEIGHT - 45.072



SECTION DETAIL FOR WINDOWS WITH
LEVEL R2 REINFORCEMENT & GLASS TYPES 2-4
(REINFORCEMENTS SHOWN IN FIGURES
ABOVE APPLY TO ALL FRAME TYPES &
CONFIGURATIONS)

NOTES:

- 1) USE THIS TABLE FOR ALL WINDOWS INSTALLED THROUGH THE FRAME OR INTEGRAL FIN.
- 2) FRAME DIMENSIONS ARE BUCK. SASH HEIGHT IS AS PER THE FIGURE.
- 3) FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION SHOWN ON THE TABLE.



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

CERT. OF AUTH. #29296

Revised By:	Date:	Revision:
Revised By:	Date:	Revision:
Description: DESIGN PRESSURE TABLE		Drawn By: J ROSOWSKI
Title: DOUBLE HUNG WINDOW INSTALLATION - NI		Date: 05/15/15
Series/Model: DH-5460	Scale: NTS	Sheet: 7 OF 12
Drawing No. MD-DH5460-01		Rev: A

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 16-0714.08
Expiration Date Sept. 17, 2020
By: *Manuel Perez*
Miami Dade Product Control

TABLE 6:

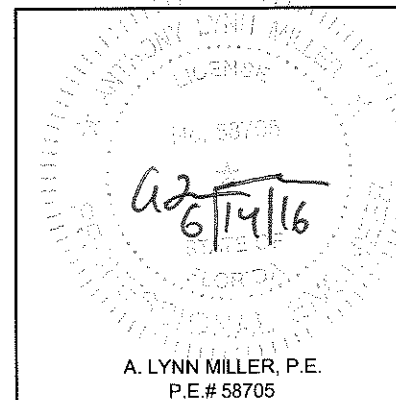
FOR ANCHOR GROUP D, TABLE 7, SHEET 9 MAY BE USED.

Anchor Quantities Required for "Through-Frame" Installation			Anchor Group A																Anchor Group B																Anchor Group C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
			18" Wide			24" Wide			32" Wide			36" Wide			40" Wide			48" Wide			52-1/8" Wide			18" Wide			24" Wide			32" Wide			36" Wide			40" Wide			48" Wide			52-1/8" Wide																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
			Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header	Jamb		Header

[illegible]

** MIN. BOTTOM SASH HEIGHT = WINDOW BUCK HEIGHT - 45.072

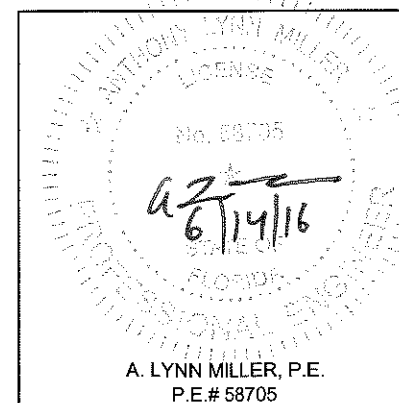
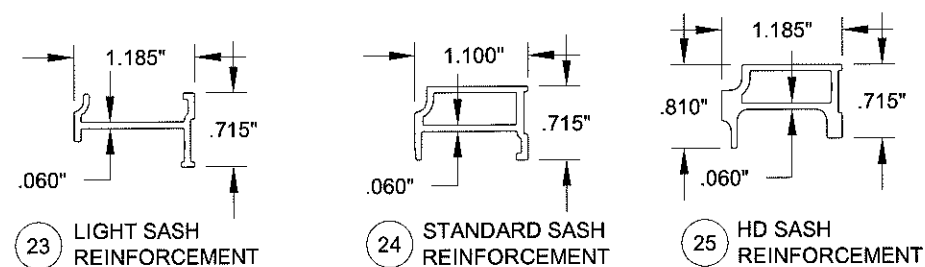
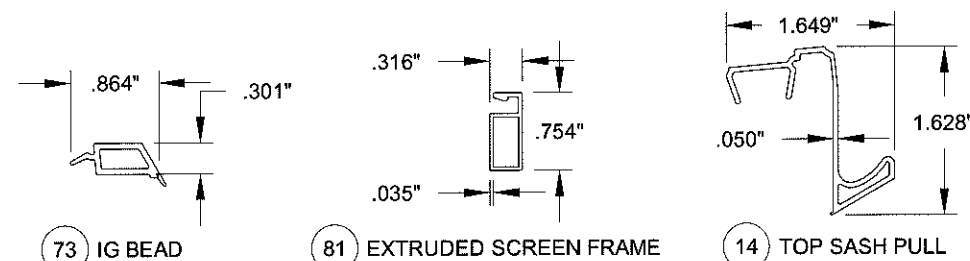
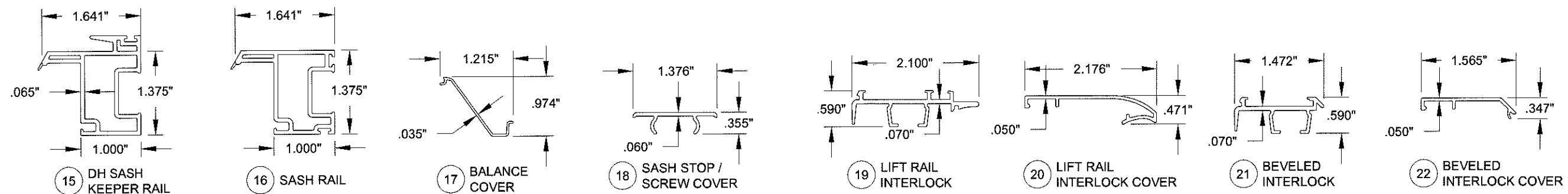
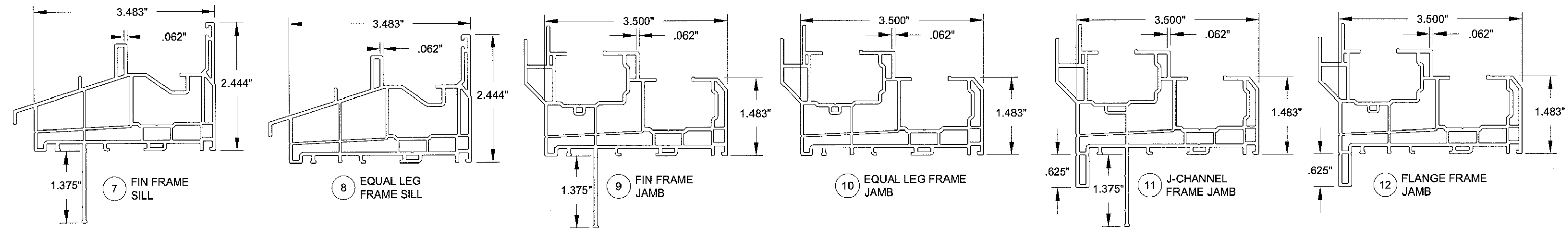
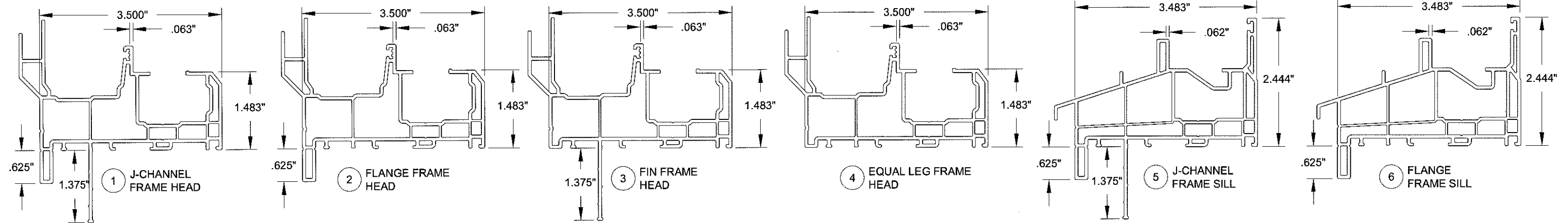
- 1) USE THE ABOVE "ANCHOR QUANTITIES REQUIRED....." TABLE FOR ANCHORS INSTALLED THROUGH THE FRAME.
- 2) USE THE ABOVE "MAX. ANCHOR O.C. SPACING....." TABLE FOR ANCHORS INSTALLED THROUGH THE INTEGRAL FIN.
- 3) FRAME DIMENSIONS ARE BUCK. "MR"=MEETING RAIL.
- 4) FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION SHOWN ON THE TABLE.
- 5) REFER TO TABLES 2 & 3, SHEET 2 FOR ANCHOR GROUP DESCRIPTIONS.



CERT. OF AUTH. #29296

Revised By:	Date:	Revision:	Expiration Date: 05/11/2020 J. J. Rosowski J. J. Rosowski J. J. Rosowski	
Revised By:	Date:	Revision:		
Description:			Drawn By:	
ANCHOR QUANTITY TABLE			J ROSOWSKI	
Title:			Date:	
DOUBLE HUNG WINDOW INSTALLATION - NI			05/15/15	
Series/Model:	Scale:	Sheet:	Drawing No.	Rev:
DH-5460	NTS	9 OF 12	MD-DH5460-01	A

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 16-0714.08
Expiration Date Sep. 17, 2020
By Manuel Perez
Florida Trade Product Council



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

CERT. OF AUTH. #29296

Revised By:	Date:	Revision:
Revised By:	Date:	Revision:
Description: WINDOW EXTRUSIONS		
Title: DOUBLE HUNG WINDOW INSTALLATION - NI		
Series/Model: DH-5460		
Scale: NTS		
Sheet: 10 OF 12		
Drawing No. MD-DH5460-01		
Rev: A		
Date: 05/15/15		

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 16-0714.08
Expiration Date Sept. 17, 2020
By *Manuel J. Jara*
Miami Dade Product Council

Drawn By:
J ROSOWSKI

TABLE 8:

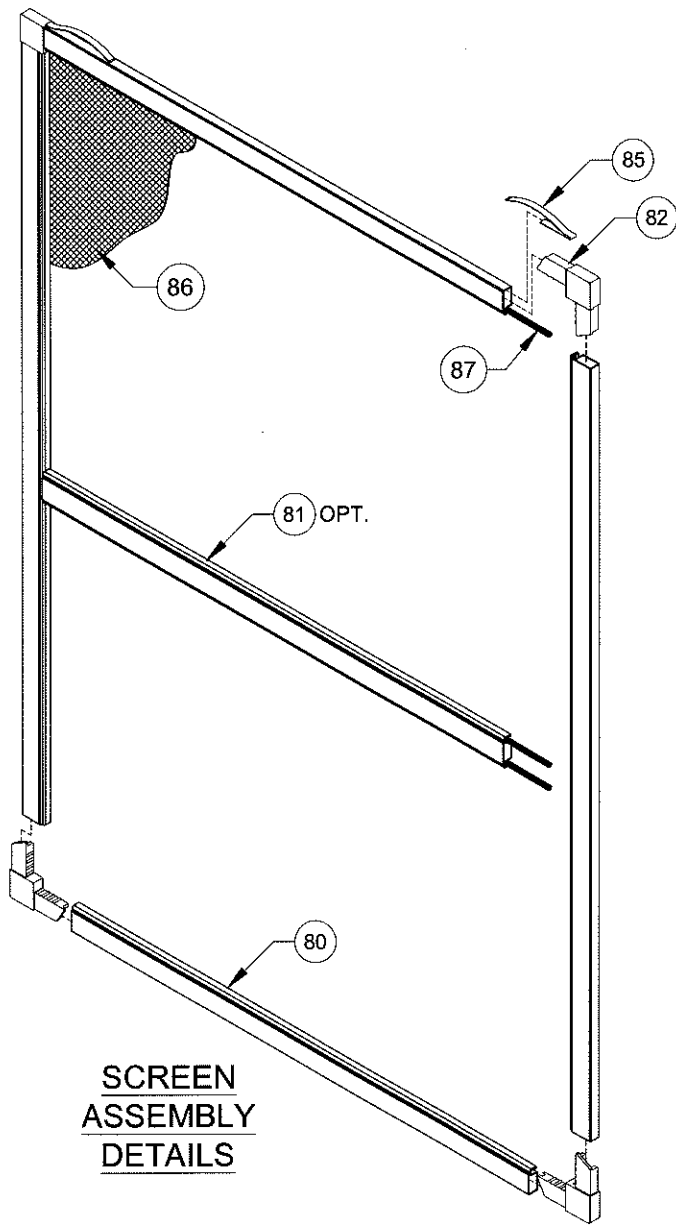
Bill of Material			
#	Part #	Description	Material
1	620113	Frame Head - J-Channel	PVC
2	620114	Frame Head - Flange	PVC
3	620115	Frame Head - Fin	PVC
4	620116	Frame Head - Equal Leg/Box	PVC
5	620105	Frame Sill - J-Channel	PVC
6	620106	Frame Sill - Flange	PVC
7	620107	Frame Sill - Fin	PVC
8	620108	Frame Sill - Equal Leg/Box	PVC
9	620109	Frame Jamb - J-Channel	PVC
10	620110	Frame Jamb - Flange	PVC
11	620111	Frame Jamb - Fin	PVC
12	620112	Frame Jamb - Equal Leg/Box	PVC
14	620171	Top Sash Pull (opt.)	PVC
15	620140	Keeper Rail	PVC
16	620129	Sash Rail (Sides, Top & Bottom)	PVC
17	620134	Balance Cover	PVC
18	620133	Sash Stop/Screw Cover	PVC
19	620156	Lift Rail Interlock	6005 T5 Al
20	620144	Lift Rail Interlock Cover	PVC
21	620157	Beveled Interlock	6005 T5 Al
22	620145	Beveled Interlock Cover	PVC
23	620150	Light Sash Reinforcement	6063 T6 Al
24	620151	Standard Sash Reinforcement	6063 T6 Al
25	620152	HD Sash Reinforcement	6063 T6 Al
30	61644	Weatherstrip, .187" x .270" Fin Pile	
31	6Q300	Weatherstrip, .190" x .300" Foam Bulb	
32	61719	Weatherstrip, .187" x .220" PolyPile	
33	61825	Weatherstrip Plug, .220" Finseal	
35	78X1MTT	#8 x 1" Ph. PH SDS (Interlock Mounting Screw)	SS
38	720210	Weep Hole Cover	PVC
39	720185	Tilt Latch Reinforcement Clip	PVC
40	720XXXX	Constant Force Balance	
41	78X34PPAX	#8 x 3/4" Ph. FH SMS (Con. Force Balance Screw)	SS
42		Spiral Balance	
43	720205	Spiral Balance Shoe	Nylon
44	78X114FPAX	#8 x 1-1/4" Ph. FH SMS (Spiral Balance Screw)	SS

NOTES:
1) GLASS AND SOME PARTS/OPTIONS NOT SHOWN ON DRAWING FOR CLARITY.
2) J-CHANNEL FRAME SHOWN, PARTS # 1, 5 & 9. OTHER FRAME TYPES APPLY.
3) PVC BY ROYAL WINDOW AND DOOR PROFILES, LTD., TO BE LABELED FOR AAMA EXTRUDER CODE.
4) FOR REINFORCEMENT TYPES, SEE DETAILS ON SHEETS 6 & 7.
5) ITEMS # 13, 26-29, 34, 36, 37, 65-72 & 84 ARE NOT USED AND ARE NOT PART OF THIS APPROVAL.

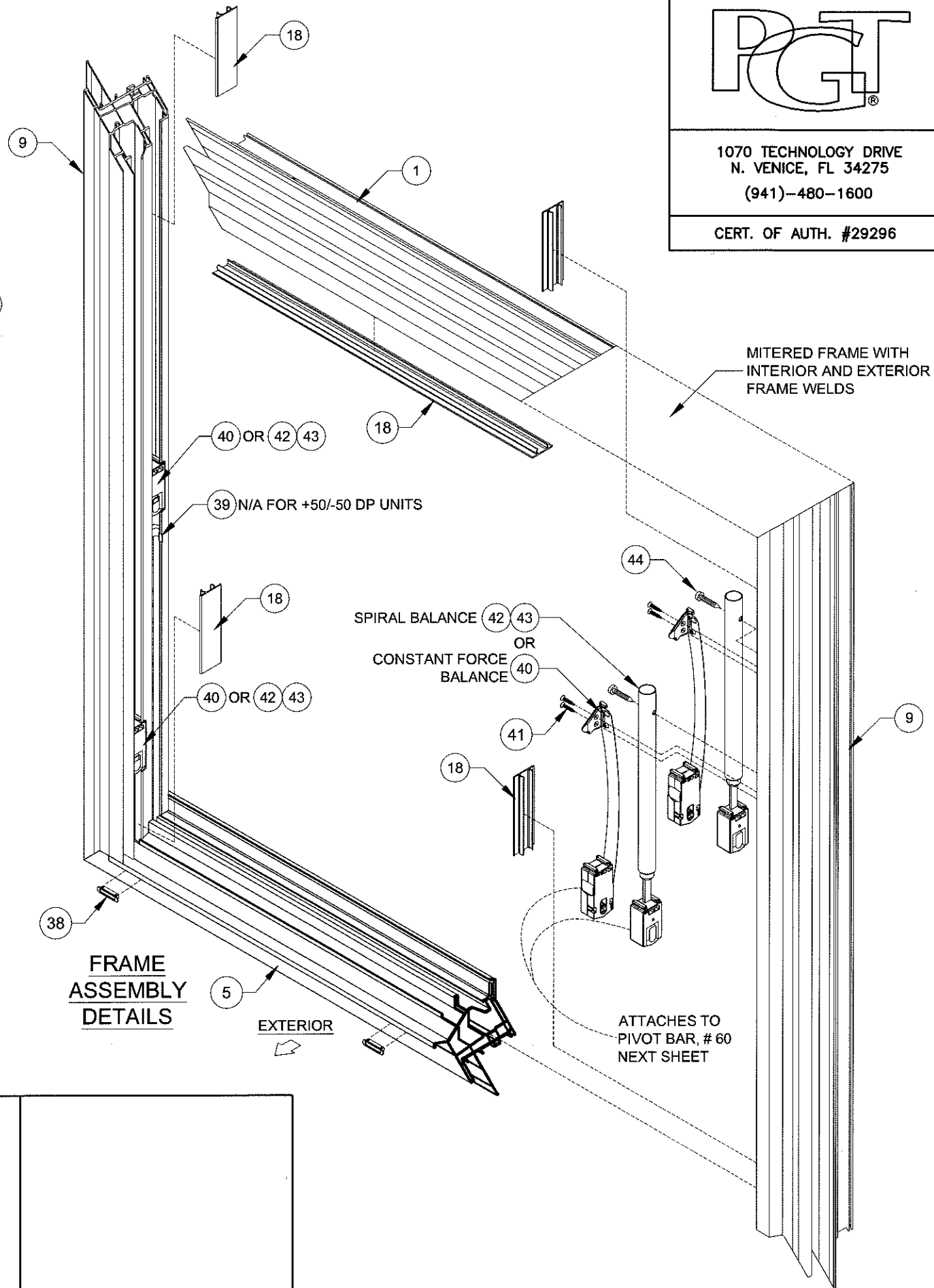
Revised By:	Date:	Revision:
Revised By:	Date:	Revision:
Description: BILL OF MATERIAL A (BOM)		Drawn By: J ROSOWSKI
Title: DOUBLE HUNG WINDOW INSTALLATION - LM		Date: 05/15/15
Series/Model: DH-5460	Scale: NTS	Sheet: 11 OF 12
Drawing No. MD-DH5460-01		Rev: A



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 16-0714.08
Expiration Date Sept. 11, 2020
By *Manuel Perez*
Miami/Dade Project Control



SCREEN
ASSEMBLY
DETAILS



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

CERT. OF AUTH. #29296

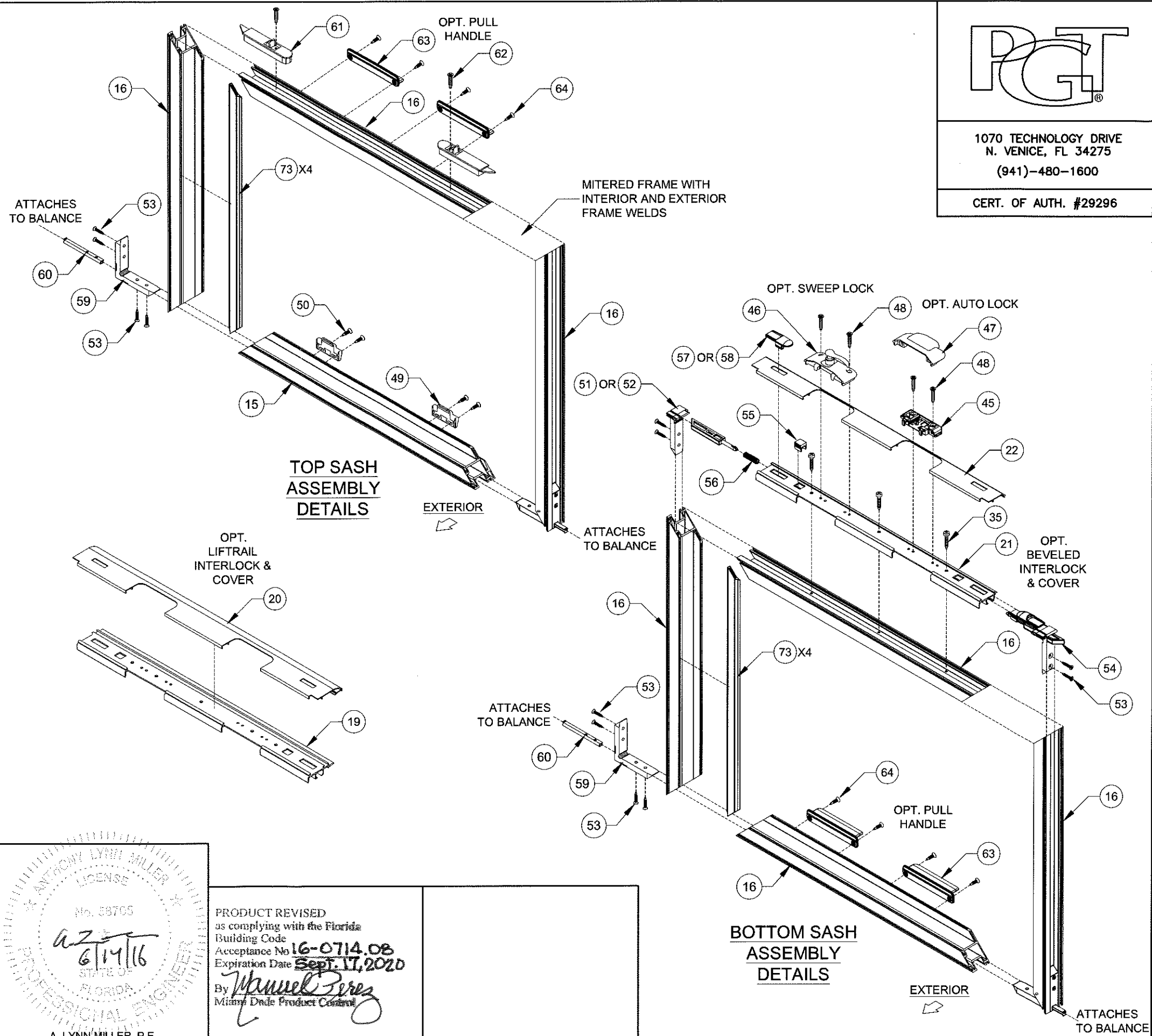
TABLE 8, CONT.:

Bill of Material, cont.			
#	Part #	Description	Material
45	720197	Auto Lock Mechanism	C Steel
46	720198&9	Sweep Lock	Cast Zinc
47	720195&6	Auto Lock Cover Assembly	Cast Zinc
48	76X1180PTX	#6 x 1-1/8" Ph. FH SDS (Auto/Sweep Lock Screw)	SS
49	720200	Auto and Sweep Lock Keeper	Cast Zinc
50	76X34PPTX	#6 x 3/4" PH. PH SDS (Keeper Screw)	SS
51	420181 L/R	Beveled Tilt Latch Corner Key	PVC
52	420182 L/R	Pull Rail Tilt Latch Corner Key	PVC
53	7634PHFL	#6 x 3/4" Ph. FH SDS (Pivot Bar & tilt Latch Screw)	SS
54	420183	Tilt Latch	PVC
55	420184	Tilt Latch Retainer	PVC
56	720207	1" Tilt Latch Spring	SS
57	420186	Plastic Tilt Latch Finger Pull	PVC
58	720192	Metal Tilt Latch Finger Pull	Cast Zinc
59	420180	Pivot Bar Corner Key (Top & Bottom Sash)	PVC
60	720206	Pivot Bar (Top & Bottom Sash)	SS
61	7101/7102	Top Sash Tilt Latch (L&R)	PVC
62	76X12FPTX	#6 x 1/2" Ph. FH SDS (Top Sash Tilt Latch Screw)	SS
63	720191	Sash Pull Handle (opt.)	Cast Zinc
64	78X34FPT	#8 x 3/4" Ph. FH SDS (Pull Handle Screw)	SS
73	720136	I.G. Bead	PVC
74		Backbedding, GE 7700 or Dow 791	Silicone
75	71684&5	Setting Block (7/8" x 2" x 1/8"), 85 +/- 5 duro.	EPDM
80	61012	Extruded Screen Frame	Alum
81	60775	Extruded Screen Spreader Bar	Alum
82	7CKGLB21	Screen Corner Key for Extruded Frame	PVC
83	72045	Extruded Screen Spreader Bar Clip	Alum
85	7CASP	Tension Spring	SS
86	61816C48	Screen Cloth	Fiberglass
87	61635/61624	.140" Screen Spline (Machine/Hand Rolled)	Vinyl

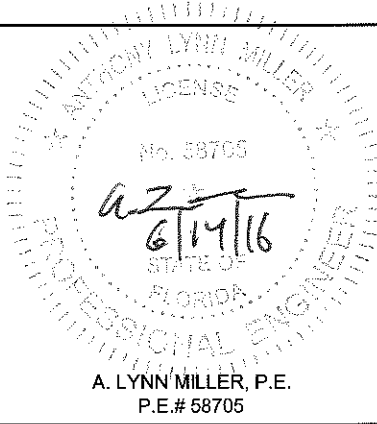


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Title: DOUBLE HUNG WINDOW INSTALLATION - LM		Date: 05/15/15
Series/Model: DH-5460	Scale: NTS	Sheet: 12 OF 12
Drawing No. MD-DH5460-01	Rev: A	



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