

# MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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

# **NOTICE OF ACCEPTANCE (NOA)**

CGI Windows & Doors, Inc. 3780 W. 103<sup>rd</sup> Street Hialeah, FL 33018

#### 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 "160 Sentinel" Aluminum Outswing Glazed Doors w/wo Sidelites - LMI

**APPROVAL DOCUMENT:** Drawing No. **160 OS FD-LM** Rev A (former MD-160FD Rev A), titled "Series Sentinel 160 Alum Outswing Door", sheets 1 thru of 14 of 14, , prepared by manufacture, dated 07/14/20 and last revised on 07/09/23, signed and sealed by Lynn A. Miller, P.E., bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

# MISSILE IMPACT RATING: Large and Small Missile Impact

- 1. See Design Pressure ratings single and double doors in sheet <u>3</u>, single sidelite in sheet <u>4</u> and door mullion in sheet <u>5</u>. For mulled unit lower design of door or sidelite or mullion shall apply to the entire assembly.
- 2. See glazing option in sheets 1 and 2 and locking hardware options in sheet 10.

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and series and following statement: "Miami-Dade County Product Control Approved", 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 & renews # 20-0722.16 and consists of this page 1 and evidence pages E-1, E-2, E-3, E-4 & E-5, as well as approval document mentioned above.

The submitted documentation was reviewed by Ishaq I. Chanda, P.E.

MIAMI-DADE COUNTY
APPROVED

Ishaq I. Chands

NOA No. 23-0717.02 Expiration Date: August 08, 2028 Approval Date: August 03, 2023

Page 1

#### 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S

#### A. DRAWINGS

- 1. Manufacturer's die drawings and sections (submitted under files below)
- 2. Drawing No.**W13-01 Rev D**, titled "Series 160 Sentinel Outswing Doors", sheets 1 thru of 11 of 11, inclusive sheet 9.1, prepared by Al-Farooq Corporation, dated 01-03-13 and last revised on AUG 05, 2015, signed and sealed by Javad Ahmad, P.E.

# B. TESTS (submitted under file #13-0226.06)

- 1. 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(+50.0 PSF, sill S-I only)
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

Along with manufacturer's parts and section drawing marked-up drawings of aluminum out w/ sidelites, by American test Lab of South Florida, Inc., Test Report No. **ATLSF-1218.01-12** dated 02/11/2013, signed and sealed by Henry Hatem, P.E.

- 2. 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 manufacturer's parts and section drawing marked-up drawings of aluminum sidelites, issued by Certified Testing Lab., Test Report No. CTLA 3056WC (sample #3) dated 04/16/2015, signed and sealed by Ramesh Patel, P.E

# C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC-2014 (5<sup>th</sup> Edition), prepared by Al Farooq Corporation, dated 10/06/2014, 05/19/15 and last revised on AUG 04, 2015, signed and sealed by Javad Ahmad, P.E.
- 2. Glazing complies w/ ASTME-1300-02, -04 and -2009.

#### D. **QUALITY ASSURANCE**

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

#### E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. **11-0624.02** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont Sentry Glass** ® **Interlayer**", expiring on 01/14/17.
- 2. Notice of Acceptance No. **12-1231.10** issued to Eastman Chemical Company (MA) former Solutia Inc. for "Saflex clear & color glass interlayer", expiring on 05/21/16.
- 3. Notice of Acceptance No. 12-1231.08 issued to Eastman Chemical Company (MA) former Solutia Inc. for "Saflex CP-Saflex & Saflex HP composite interlayer w/ PET core", expiring on 12/11/18.

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No 23-0717.02
Expiration Date: August 08, 2028
Approval Date: August 03, 2023

# F. STATEMENTS

- 1. Statement letter of conformance to FBC 2014 (5<sup>th</sup> Edition) and letter of no financial interest, prepared by Al Farooq Corporation, dated 09/23/14, signed and sealed by Javad Ahmad, P.E.
- 2. Lab compliance and addendum letters, as part of the above referenced test reports.

#### G. OTHER

- 1. This file NOA revises # **13-0226.06**, expiring 08/08/18.
- 2. Test proposals approved dated 12/16/14 & # **12-0553**, dated 04/25/12 approved by RER.

# 2. EVIDENCE SUBMITTED UNDER PREVIOUS NOA(s)

#### A. DRAWINGS

1. Drawing No.**W13-01 Rev F**, titled "Series Sentinel 160 Alum Outswing Door (L.M.I./S.M.I.)", sheets 1 thru of 13 of 13, inclusive sheet 1.1, prepared by Al-Farooq Corporation, dated 01/03/13 and last revised on 02/13/18, signed and sealed by Javad Ahmad, P.E.

#### B. TESTS

- 1. 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) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

Along with manufacturer's parts and section drawing marked-up drawings of aluminum out w/sidelites, by Fenestration Testing Laboratory, Inc., Test Report No. **FTL 17102** dated 05/19/17, signed and sealed by Idalmis Ortega, P.E.

# C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with **FBC** 6<sup>th</sup> **Edition** (2017), prepared by Al Farooq Corporation, dated 11/13/17, signed and sealed by Javad Ahmad, P.E.
- 2. Glazing complies w/ ASTME-1300-09.

#### D. **QUALITY ASSURANCE**

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

#### E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 17-0808.02 issued to Kuraray America., Inc. for their "Sentry Glas® (Clear and White) Interlayer", expiring on 07/04/23.
- 2. Notice of Acceptance No. 17-0712.05 issued to Eastman Chemical Company (MA) for their "Saflex Clear & Color glass Interlayers", expiring on 05/21/21.

Ishaq I. Chands

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No 23-0717.02
Expiration Date: August 08, 2028
Approval Date: August 03, 2023

# **CGI Windows & Doors, Inc.**

# **NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

# E. MATERIAL CERTIFICATIONS (continue)

- 3. Notice of Acceptance No. 17-0712.03 issued to Eastman Chemical Company (MA) for their "Saflex CP-Saflex & Saflex HP Composite Glass Interlayers w/ PET Core", expiring on 12/11/18.
- 4. Notice of Acceptance No. 17-1114.14 issued to Kuraray America., Inc. for their "Trosifol® Ultraclear, Clear, and Color PVB Glass Interlayers", expiring on 07/08/19.

#### F. STATEMENTS

1. Statement letter of conformance to **FBC 6<sup>th</sup> Edition (2017)** and of no financial interest prepared by Al Farooq Corporation, dated 11/13/17, signed and sealed by Javad Ahmad, P.E.

#### G. OTHER

- 1. This NOA revises NOA #14-1015.04, expiring on 08/08/18.
- 2. Test proposal #**16-0947**, dated 07/26/16, approved by RER.

# 3. Evidence submitted under previous approval

#### A. DRAWINGS

1. Drawing No. **MD-160FD** Rev **A** (former **W13-01 Rev F**), titled "Series Sentinel 160 Alum Outswing Door", sheets 1 thru of 14 of 14, prepared by manufacture, dated 07/14/20, signed and sealed by Lynn A. Miller, P.E.

#### B. TESTS

- 1. 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) Large Missile Impact Test per FBC, TAS 201–94
- 5) Cyclic Wind Pressure Loading per FBC, TAS 203–94

along with marked-up drawings and installation diagram of all CGI Windows and Doors, Inc. and PGT Industries, Inc., representative units listed below and tested to qualify **Dowsil 791** and **Dowsil 983** silicones, per Proposal #19-1155TP, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.:

# **CGI Windows and Doors Inc. test specimens:**

FTL-20-2108.1, CGI SH360 Aluminum Single Hung Window (unit 1 in proposal) FTL-20-2108.2, CGI CA238 Alum. Outswing Casement Window (unit 2 in proposal) FTL-20-2108.3, CGI SGD560 Aluminum Sliding Glass Door (unit 3 in proposal) FTL-20-2108.4, CGI PW410 Aluminum Fixed Window (unit 4 in proposal) and FTL-20-2108.5, CGI SH360 Aluminum Single Hung Window (unit 5 in proposal) all dated 08/24/20 and signed and sealed by Idalmis Ortega, P.E.

Ishaq I. Chanda Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No 23-0717.02

Expiration Date: August 08, 2028 Approval Date: August 03, 2023

#### **B.** TESTS (continue):

# **PGT** Industries, Inc. test specimens:

FTL-7897, PGT PW5520 PVC Fixed Window (unit 6 in proposal), dated 09/03/14, FTL-20-2107.1, PGT SGD780 Aluminum Sliding Glass Door (unit 7 in proposal) FTL-20-2107.2, PGT CA740 Alum. Outswing Casement Window (unit 8 in proposal) FTL-20-2107.3, PGT PW7620A Aluminum Fixed Window (unit 9 in proposal) and FTL-20-2107.4, PGT PW7620A Aluminum Fixed Window (unit 10 in proposal) all dated 07/13/20 and signed and sealed by Idalmis Ortega, P.E.

#### C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC 2020, 7<sup>th</sup> Edition, prepared by manufacturer, dated 07/14/20, signed and sealed by A. Lynn Miller, P. E.
- **2.** Glazing complies with ASTM E1300–04, -09, -12 and -16.

# D. QUALITY ASSURANCE

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

#### E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. **17-0808.02** issued to Kuraray America, Inc. (former E.I. DuPont DE Nemours & Co., Inc.) for the "Sentry Glass ® Interlayer", expiring on 07/4/23.
- 2. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America**, **Inc.** (Former E.I. DuPont DE Nemours & Co., Inc. for the "Kuraray Trofosil Ultra clear and color PVB Interlayer (Former Kuraray **Butacite** ® **PVB interlayer**)", expiring on 07/08/24.
- 3. Notice of Acceptance No. 18–0301.06 issued to Eastman Chemical Company (MA) (Former Solutia, Inc.) for the "Saflex CP Saflex and Saflex HP Composite Glass Interlayers w/ PET Core", expiring on 12/11/23.

#### F. STATEMENTS

- 1. Statement letter of conformance to FBC 2020 (7th Edition), issued by manufacturer, dated 07/14/20, signed and sealed by Lynn Miller, P. E.
- 2. Notification of Successor Engineer per the Florida Administrative Code Section 61G15-27.001, notifying original engineer that the successor engineer is assuming full professional and legal responsibility for all engineering documents pertaining to this NOA, dated 07/20/20, signed and sealed by A. Lynn Miller, P.E.

#### G. OTHER

- 1. This NOA revises 17-1226.05 expiring 08/08/23 for FBC 2020 updates.
- 2. RER Test proposals #19-1155 dated 01/10/20 approved by Ishaq I. Chanda, P.E.

Ishaq I. Chands

Ishaq I. Chanda, P.E. Product Control Unit Supervisor NOA No 23-0717.02

Expiration Date: August 08, 2028 Approval Date: August 03, 2023

#### 4. New Evidence submitted

#### A. DRAWINGS

- 1. Drawing No. **160 OS FD-LM** Rev **A** (former **MD-160FD** Rev **A**, titled "Series Sentinel 160 Alum Outswing Door", sheets 1 thru of 14 of 14, , prepared by manufacture, dated 07/14/20 and last revised on 07/09/23, signed and sealed by Lynn A. Miller, P.E.
- **B.** TESTS (submitted under previous approval)
  - 1. None.
- C. CALCULATIONS (submitted under previous approval)
  - 1. None.

# D. QUALITY ASSURANCE

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

# E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. **22-1116.01** issued to Kuraray America, Inc. (former E.I. DuPont DE Nemours & Co., Inc.) for the "Sentry Glass ® Interlayer", expiring on 07/04/28.
- 2. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America**, **Inc.** (Former E.I. DuPont DE Nemours & Co., Inc. for the "Kuraray Trofosil Ultra clear and color PVB Interlayer (Former Kuraray **Butacite** ® **PVB interlayer**)", expiring on 07/08/24.
- 3. Notice of Acceptance No. **22-1130.06** issued to Eastman Chemical Company (MA) (Former Solutia, Inc.) for the "Saflex CP Saflex and Saflex HP Composite Glass Interlayers w/ PET Core", expiring on 12/11/28.

# G. STATEMENTS

- 1. Statement letter of conformance to FBC 2023 (8th Edition) and FBC 2020 (7th edition), issued by manufacturer, dated 07/10/23, signed and sealed by Lynn Miller, P. E
- 2. Statement letter of conformance to FBC 2020 (7<sup>th</sup> Edition), issued by manufacturer, dated 07/14/20, signed and sealed by Lynn Miller, P. E. (submitted under previous approval).

#### G. OTHER

1. This NOA revises & renews 20-0722.16 expiring 08/08/28 consists of FBC 2023 updates.

Ishaq I. Chanda, P.E.

Product Control Unit Supervisor NOA No 23-0717.02

Expiration Date: August 08, 2028 Approval Date: August 03, 2023

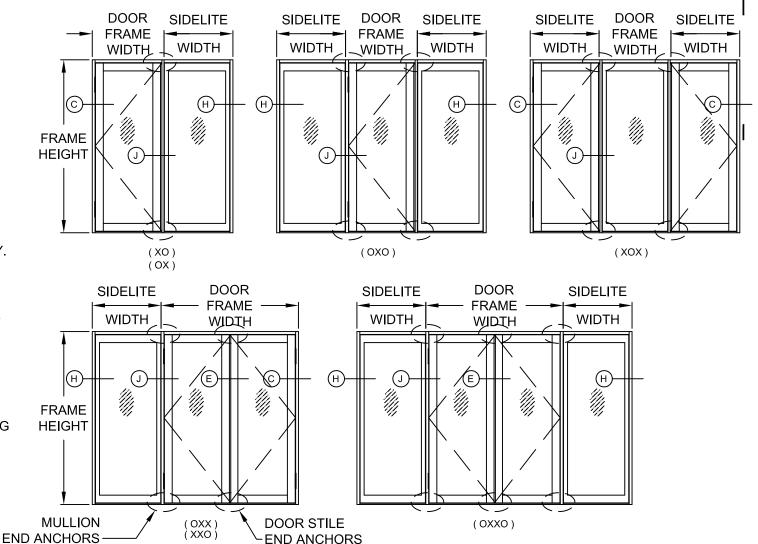
# SERIES SENTINEL 160 ALUMINUM OUTSWING DOOR WITH SIDELITES

IMPACT RATING

RATED FOR LARGE & SMALL

MISSILE IMPACT RESISTANCE

- 1) APPROVAL APPLIES TO SINGLE (X) AND DOUBLE (XX) PANEL DOORS WITH OR WITHOUT SIDELITES. SIDELITES CAN BE ON ONE OR BOTH SIDES OF DOOR.
- 2) DOORS WITH STANDARD THRESHOLD APPROVED FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED. DOORS WITH SADDLE (ADA) THRESHOLD NOT APPROVED FOR WATER INFILTRATION RESISTANCE.
- 3) THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2020 (7TH EDITION)/2023 (8TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 4) 1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.
- 5) ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- 6) A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
- 7) ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.
- 8) MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2020/2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.
- 9) THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC. CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.



# INSTRUCTIONS: USE TABLES AS FOLLOWS.

- STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2 FOR SINGLE (X) & DOUBLE (XX) DOORS SEE TABLE 1 FOR DESEIGN PRESSURE.
- STEP 3 FOR SIDELITES & STANDALONE WINDOWS (O), SEE TABLE 2 FOR DESEIGN PRESSURE.
- STEP 4 FOR SIDELITE MULLED TO DOORS, SEE TABLE 3 FOR DESIGN PRESSURE.
- STEP 5 THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

#### CODES / STANDARDS USED:

- 2023 FLORIDA BUILDING CODE (FBC), 8TH EDITION
   2020 FLORIDA BUILDING CODE (FBC), 7TH EDITION
- 2020 FLORIDA BUILDING CODE (FBC), 7TH EDITION
- ASTM E1300-09
- ANSI/AF&PA NDS-2018 FOR WOOD CONSTRUCTION
- ALUMINUM DESIGN MANUAL, ADM-2020

SEE SHEET 2

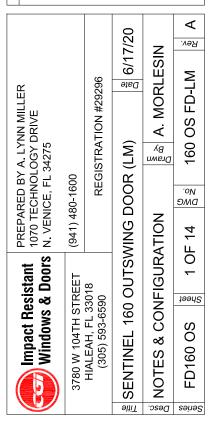
- AISI S100-16
- AISC 360-16

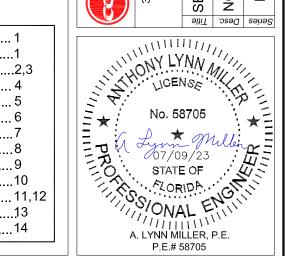
SEE SHEET 3

PRODUCT RENEWED as complying with the Florida Building Code NOA-No. 23-0717.02

Expiration Date 08/08/2028

By | Shang | Chank
Miami-Dade Product Control





# DOOR OPTIONS

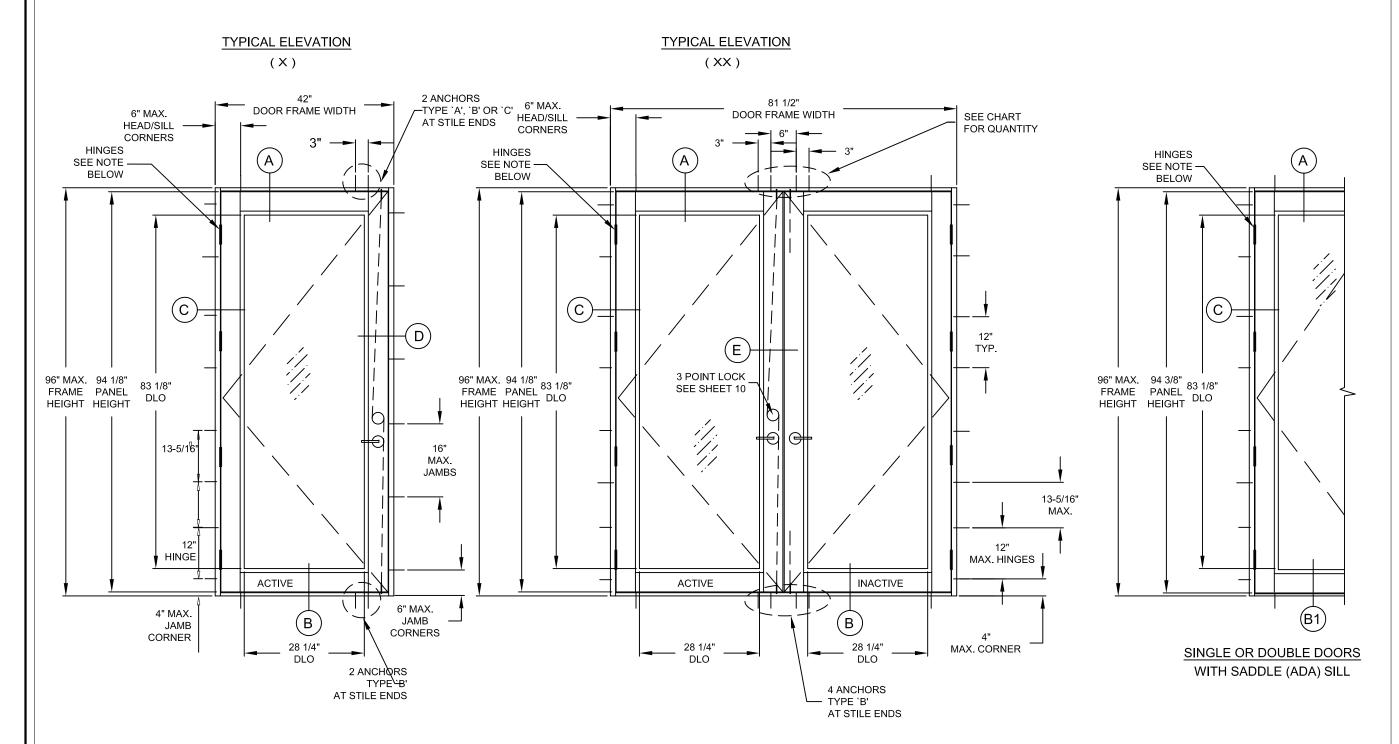


TABLE A:

HEAD ANC	HORS AT		ENDS
SHIM		HOR TY	PE
THICKNESS	Α	В	С
1/4"	4	4	4
3/8"	6	6	6
1/2"	7	7	-

HINGES:

4" X 4-1/2" BUTT HINGES

TOP AND BOTTOM HINGES AT 6-7/8" FROM EACH END

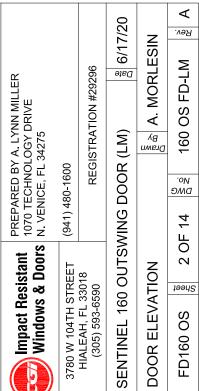
INTERMEDIATE HINGES EQUALLY SPACED

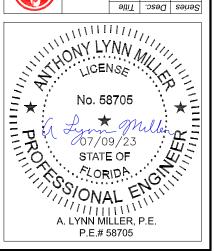
- (3) HINGES PER PANEL UP TO 35" PANEL WIDTHS (STD. THRESHOLD ONLY)
- (4) HINGES PER PANEL ABOVE 35" PANEL WIDTHS (STD. THRESHOLD)
- (4) HINGES PER PANEL ALL WIDTHS (SADDLE THRESHOLD)

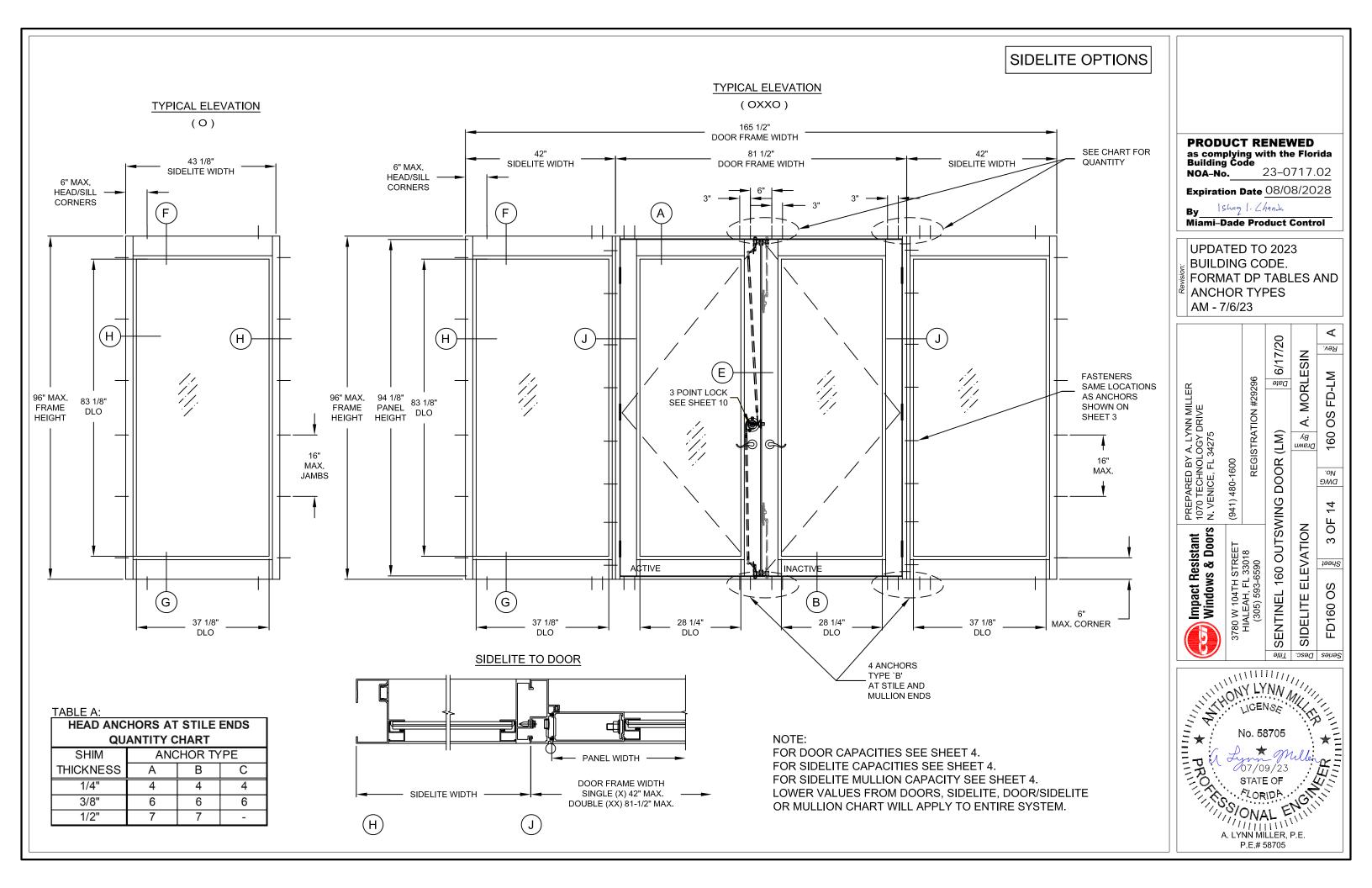
**PRODUCT RENEWED** as complying with the Florida Building Code NOA-No. 23-0717.02

Expiration Date 08/08/2028

Ishaq I. Chands Miami-Dade Product Control







#### TABLE 1:

	DESIGN	N PRESSU	IRE (DP)	DUE TO	THRESI	HOLD, LO	OCK SET	OR SPA	CER TY	PE
	(X) OR (XX	) DOOR			FR	AME HEIG	HT UP TO	96"		
US	SING ANY GL	ASS TYPE	THRES	SHOLD	L	OCK SETS	3	INSUL.	INSUL. GLASS SPACERS	
	(X)	(XX)	STD.	ADA	SCH	СС	BLDW	CLX	KOD	QUAN
TH	37-1/4"	72"	+/-80	+/-70	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
WIDT	42"	81-1/2"	+/-80	+/-70	+/-80	+/-80	+/-70	+/-70	+/-80	-

LOCK SETS: SCH = SCHLAGE CC = COPPER CREEK GLASS SPACERS: CXL = CARDINAL XL KOD = KODISPACE

BLDW = BALDWIN

QUAN = QUANEX DURASEAL OR SUPERSPACER

TABLE 2:

IAD	LE 2:							
		DESIGN	PRESSU	RE (DP) I	DUE TO	GLASS		
	DEL ITE 0 0		WIND	OW/SIDELI	TE FRAME	HEIGHT		
	DELITES & ANDALONE	84"		90"			96"	
	/INDOWS	GLASS TYPES	Gl	LASS TYPE	S	GI	LASS TYPE	S
		A, B, C1, C2 & C3	A, B & C1	C2	C3	A, B & C1	C2	C3
	30"	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
WIDTH	33"	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
	36"	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
PANEL	37-1/8"	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80	+/-80
PA	39"	+/-80	+/-80	+/-80	+/-80	-	+/-70	+/-80
	42"	+/-80	-	+/-70	+/-80	-	+/-70	+/-80

# TABLE 3:

DESIGN	PRESSURE (	DP) DUE	TO MU	LLION
SIDELITE	DOOR PANEL	FR	AME HEIG	HT
WIDTH	WIDTH	84"	90"	96"
24"	UP TO 39-3/4"	+/-80	+/-80	+/-80
30"	UP TO 39-3/4"	+/-80	+/-80	+/-80
33"	UP TO 39-3/4"	+/-80	+/-80	+/-80
36"	UP TO 39-3/4"	+/-80	+/-80	+/-78.3
37-1/8"	UP TO 39-3/4"	+/-80	+/-80	+/-77.2
39"	UP TO 39-3/4"	+/-80	+/-80	+/-75.4
42"	UP TO 39-3/4"	+/-80	+/-80	+/-72.6

#### SIDELITE DLO DIMENSIONS:

DLO HEIGHT = FRAME HEIGHT - 12.875"
DLO WIDTH = SIDELITE WIDTH - 6" STAND ALONE SIDELITE ONLY
DLO WIDTH = SIDELITE WIDTH - 4.875" SIDELITE TO DOOR ONLY

# DOOR DLO DIMENSIONS:

DLO HEIGHT = FRAME HEIGHT - 12.875" DLO WIDTH (X DOORS) = FRAME WIDTH - 13.75" DLO WIDTH (XX DOORS) = (FRAME WIDTH - 25)/2

# NOTES:

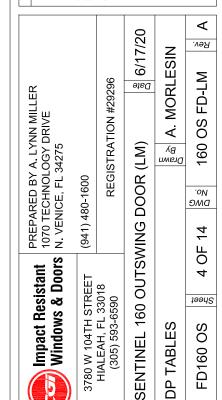
- 1) THE FRAME AREA OF ALTERNATE SIZE MUST NOT EXCEED TESTED FRAME AREA 100.3 SQ. FT.
- 2) VERIFY COMPLIANCE WITH EGRESS LIMITATIONS WHERE REQUIRED.
- 3) GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS).
- 4) FLUSH BOLTS AND LOCKS MUST BE ENGAGED TO HEAD AND SILL DURING PERIODS OF HURRICANE WARNING.

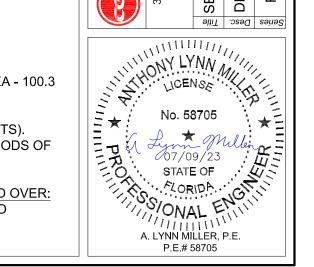
GLASS SPACER LIMITATIONS FOR SIDELITES WIDER THAN 37-1/8" OR 90" TALL AND OVER: FOR GLASS TYPES 'C2' & 'C3': QUANEX DURASEAL & SUPERSPACER NOT ALLOWED FOR GLASS TYPE 'C3': CARDINAL XL (LIMIT MAX. LOADS TO ±70.0 PSF)

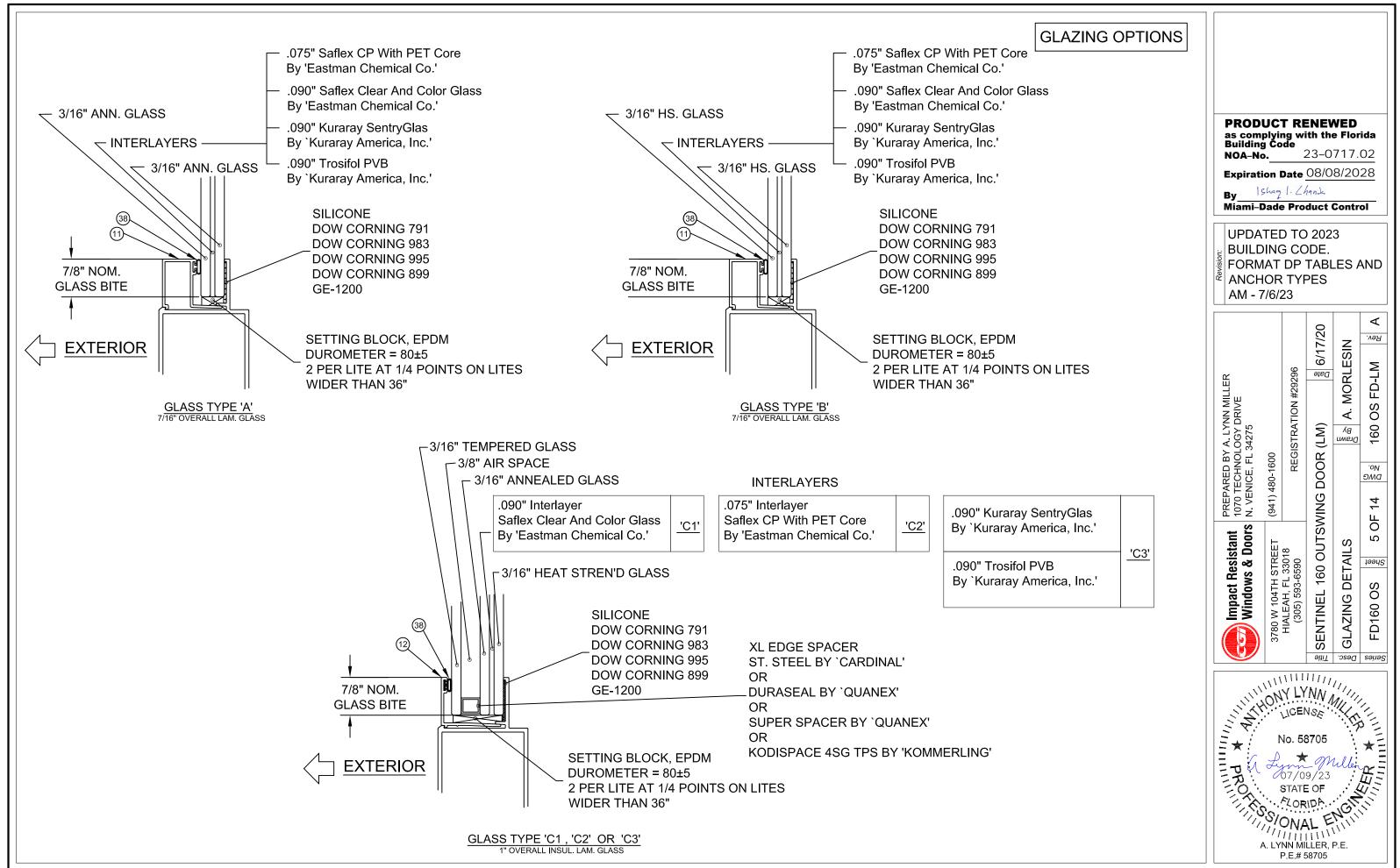
product renewed as complying with the Florida Building Code NOA-No. 23-0717.02

Expiration Date 08/08/2028

By | Shang | Chank
Miami-Dade Product Control







**PRODUCT RENEWED** as complying with the Florida Building Code 23-0717.02

Expiration Date 08/08/2028

Miami-Dade Product Control

**UPDATED TO 2023** FORMAT DP TABLES AND

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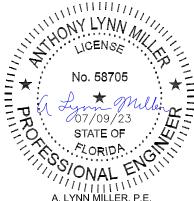
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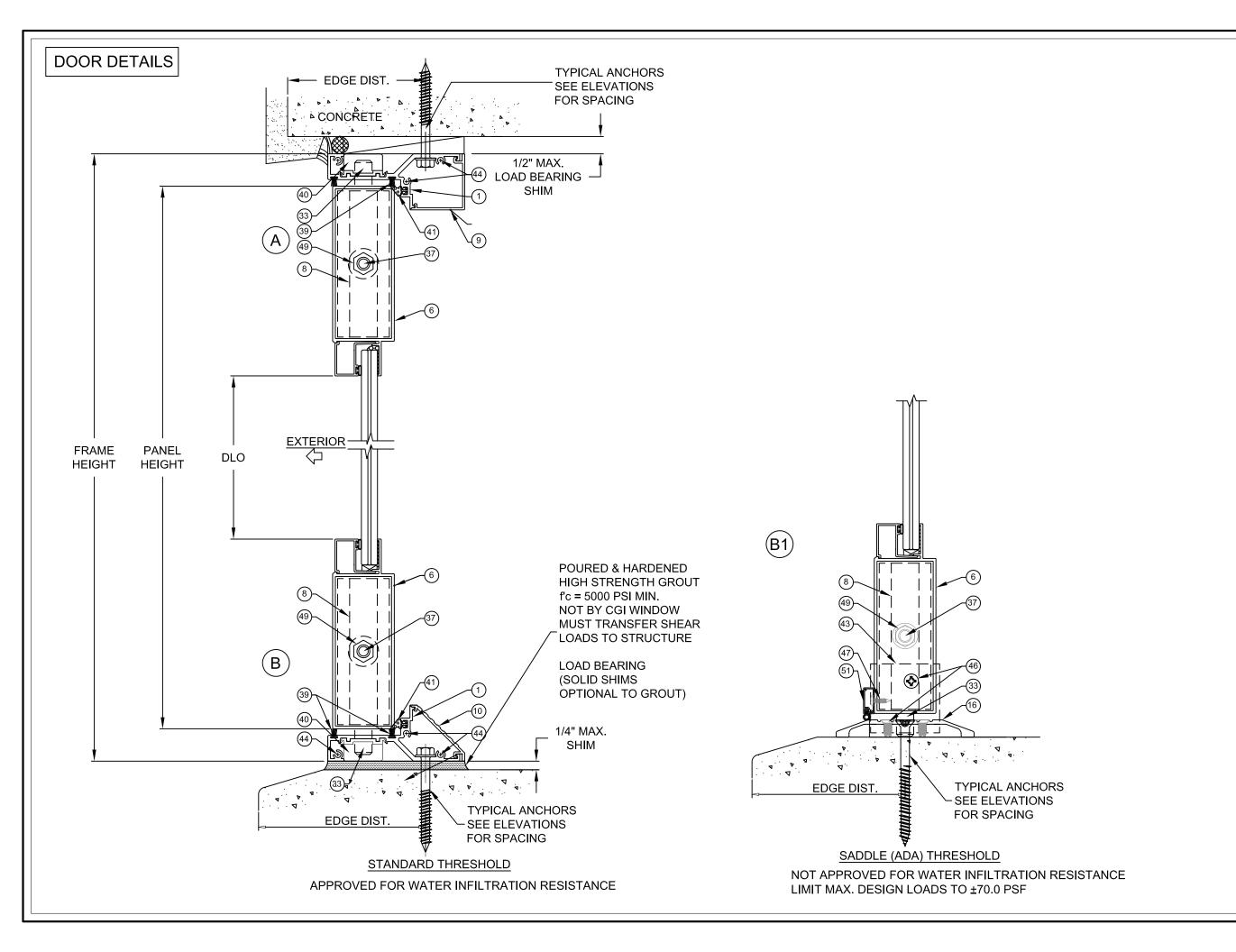
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FD160 OS

Rev. MORLESIN OS FD-LM ⋖ 160 Drawn By No.





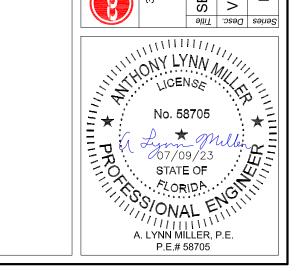
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Expiration Date 08/08/2028

By Ishaq I. Chands

Miami-Dade Product Control

Windows & Doors N. Venice, FL 34275	& Doo	rs N VEN	ECHNOLO IICE, FL 3	1070 I ECHNOLOGY DRIVE N. VENICE, FL 34275			
3780 W 104TH STREET	TREET	(941) 4	(941) 480-1600				
HIALEAH, FL 33018 (305) 593-6590	3018 90		REGIS	STRATION #292	596		
TINEL 160	OUT	SWING [	JOOR (		Date 6/17	7/20	
RTICAL SE	CTIO	7		Drawn By A. MOF	RESI	7	
	Sheet	OF 14	No.	160 OS FD-	r.	Rev.	⋖
	(305) 593-656 ENTINEL 16C 'ERTICAL SE FD160 OS	(305) 593-6590  NTINEL 160 OUT  RTICAL SECTION  D160 OS	(305) 593-6590  SENTINEL 160 OUTSWING I  SENTICAL SECTION  SENTICAL SECTION  SENTICAL SECTION	(305) 593-6590 REGIS NTINEL 160 OUTSWING DOOR ( RTICAL SECTION  0160 OS 8 6 0F 14 8 8 5 8	WING DOOR (LM)    Sample   Color   Col	A. MO	A. MORLESIN



# DOOR DETAILS

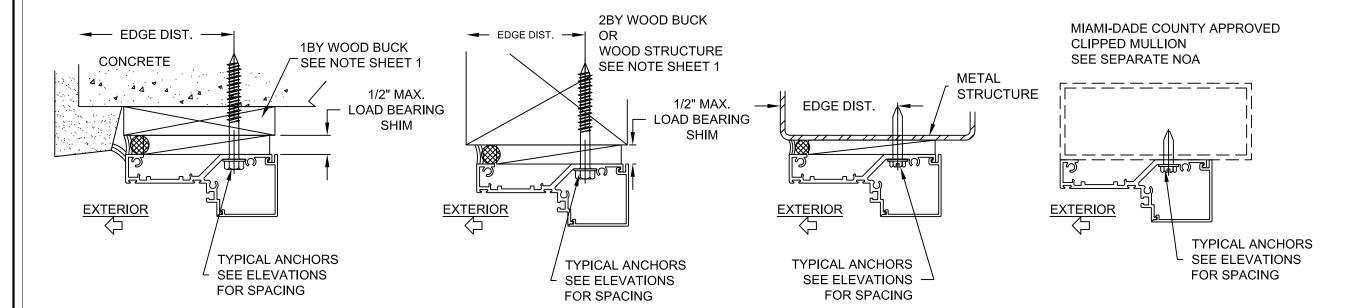


TABLE B: SEE ELEV. FOR SPACING

Group	Anchor	Substrate	Frame Member	Min. Edge Distance	Min. Embedment
		directly into 2BY P.T. Southern Pine, (SG=0.55)	Head/Sill/Jamb	1"	1-1/2"
Α	1/4" DeWalt Ultracon+ or 1/4" HILTI KWIK CON II	Thru 1BY wood buck into Concrete, (min. 3 ksi)	Head/Sill	2-1/2"	1-3/4"
		Thru 1BY into Ungrouted CMU, (ASTM C-90)	Jamb	2-1/2"	1-1/4"
В	1/4" DeWalt Ultracon+ or	Directly into Concrete, (min. 3 ksi)	Head/Sill	2-1/2"	1-3/4"
Ь	1/4" HILTI KWIK CON II	Directly into Ungrouted CMU, (ASTM C-90)	Jamb	2-1/2"	1-1/4"
С	1/4", TEKS or steel SMS	Aluminum, (1/8" min)	Head/Sill/Jamb	3/4"	-
	(G5)	Steel, (1/8" min)	Head/Sill/Jamb	3/4"	-

- 1) STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED
- 2) MIN. OF 3 THREADS BEYOND THE METAL SUBSTRATE.
- 3) METAL SUBSTRATE TO MEET MIN. STRENGTH AND THICKNESS REQUIREMENTS PER CURRENT FLORIDA BUILDING CODE AND TO BE REVIEWED BY THE AUTHORITY HAVING JURISDICTION.
- 4) 'UNGROUTED CMU' VALUES MAY BE USED FOR GROUTED CMU APPLICATIONS.
- 5) ALL ANCHOR HEADS TYPES ARE APPLICABLE GROUP 'C': INTO MIAMI-DADE COUNTY APPROVED MULLIONS OR STEEL

WOOD AT HEAD, JAMBS OR SILL SG = 0.55 MIN.
CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

1/4" ULTRACON+ ANCHORS BY 'DEWALT' ARE LIMITED TO A MAXIMUM 1/4" SHIM SPACE. ALL OTHER ANCHORS MAY USE 1/4", 3/8" OR 1/2" SHIM SPACE.

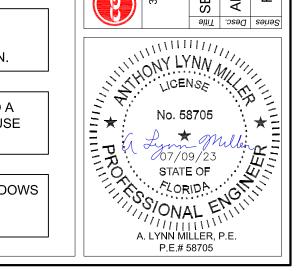
WOOD BUCKS AND METAL STRUCTURE NOT BY CGI WINDOWS MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

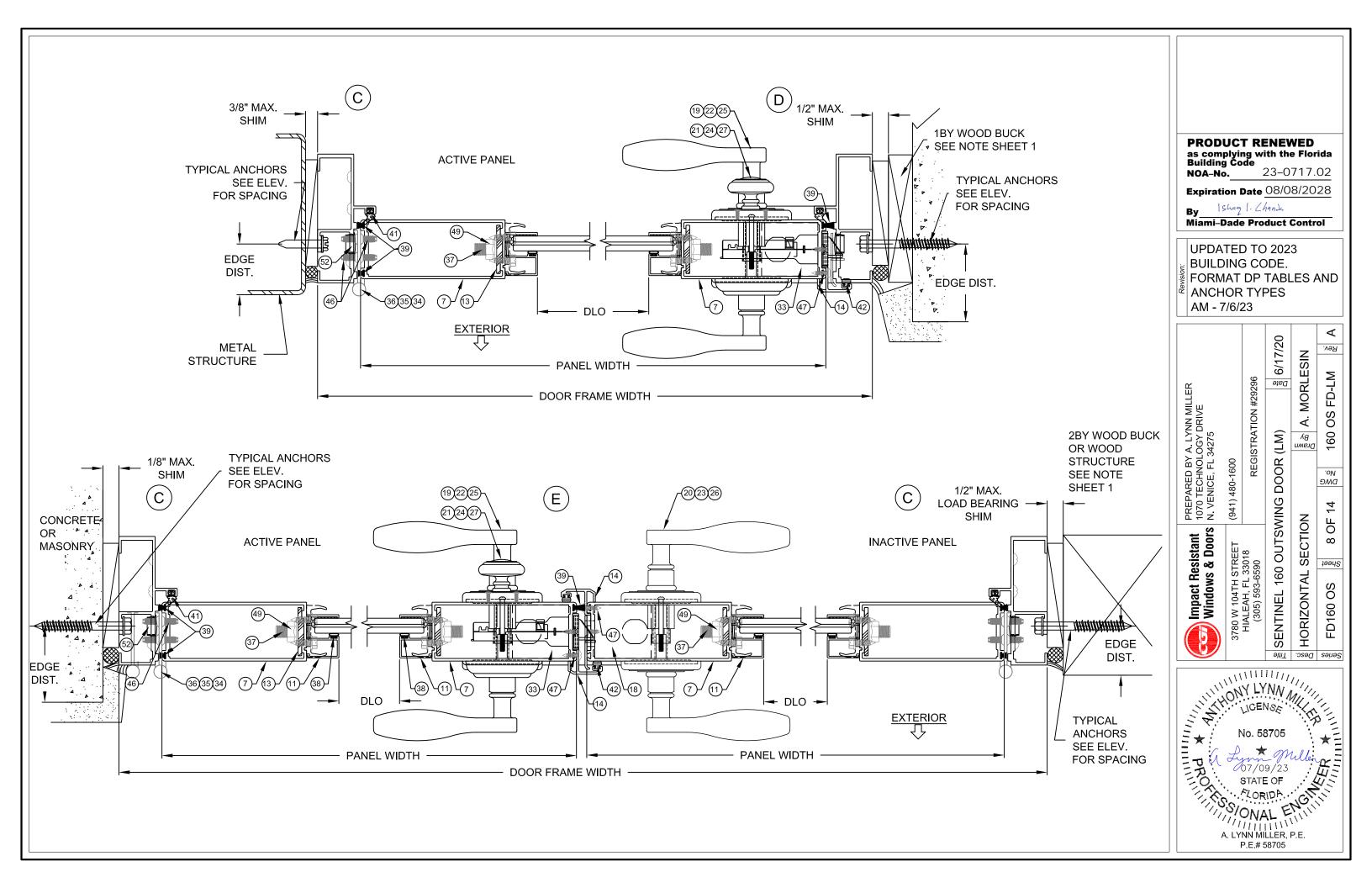
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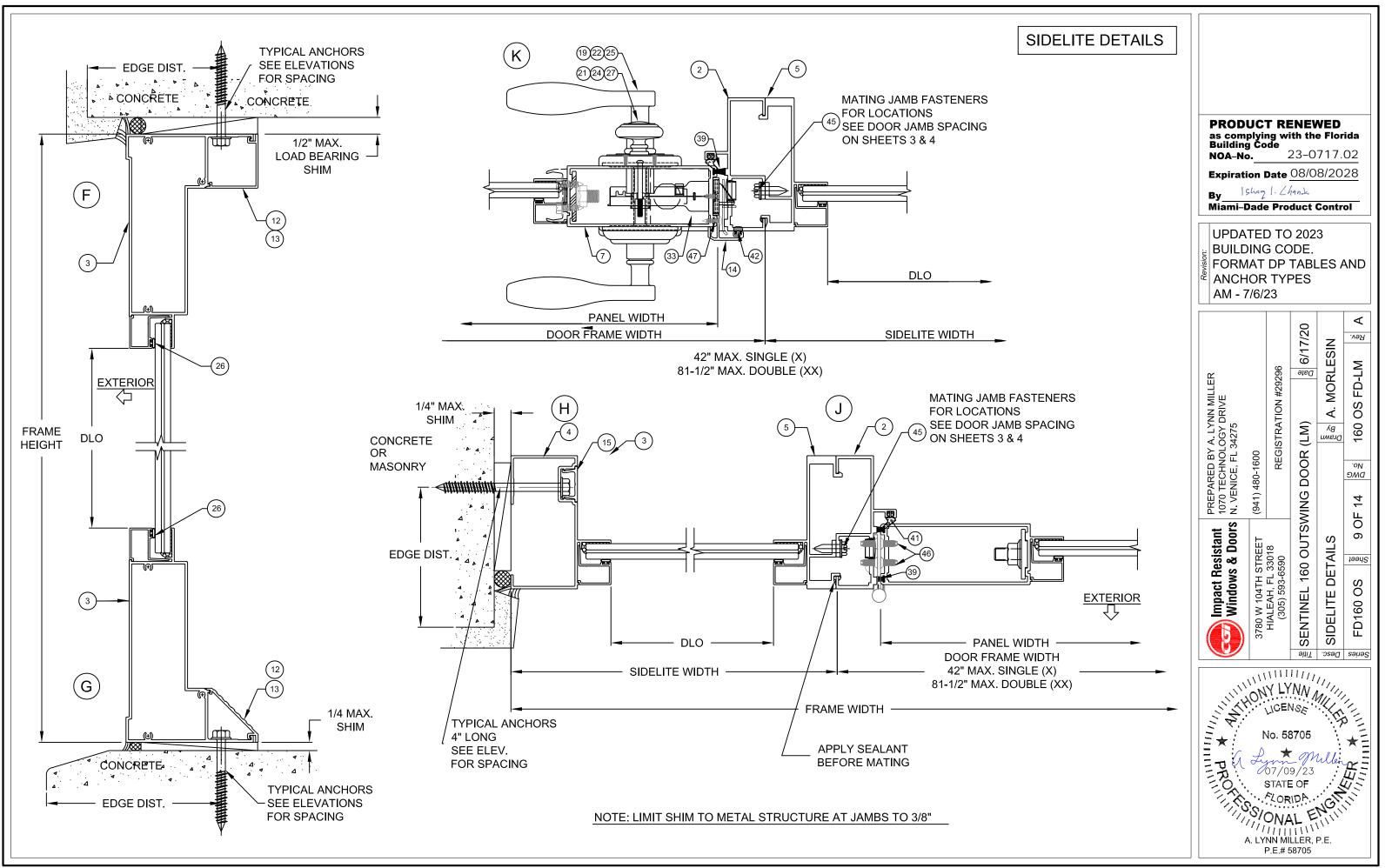
Expiration Date 08/08/2028

By Shang I. Chank
Miami-Dade Product Control

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE  N. VENICE, FL 34275  (941) 480-1600  REGISTRATION #29296  IING DOOR (LM)    S   S   A. MORLESIN   S   S   160 OS FD-LM   S   A   A   A	Impact Resistant 1070 TECHNOLOGY I Windows & Doors N. VENICE, FL 34275	3780 W 104TH STREET (941) 480-1600	HIALEAH, FL 33018 (305) 593-6590	SENTINEL 160 OUTSWING DOOR (LM)	ANCHOR TABLE	FD160 OS (1) 7 OF 14 (1) (1) (2)
SIN SIN WAR	RED BY A. LYNN MILLER ECHNOLOGY DRIVE CE, FL 34275	0-1600	REGISTRATION #29296		Drawn By A. MORLE	
				17/20	NIS	Кеу.



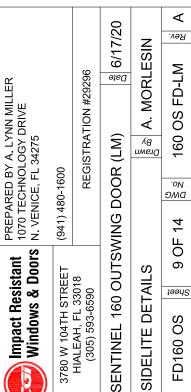


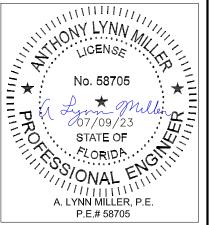


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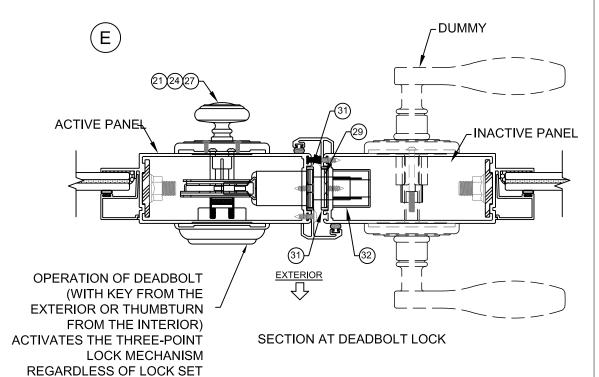
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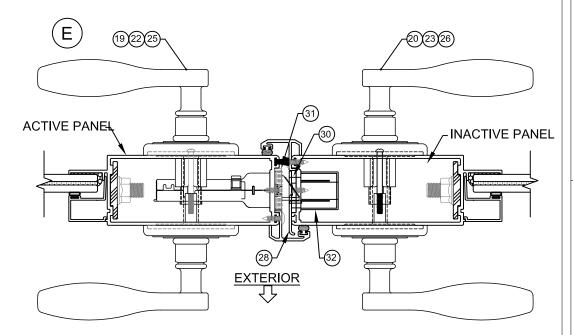
**UPDATED TO 2023** FORMAT DP TABLES AND





ITEM	PART No.	QUANTITY	DESCRIPTION		MATERIAL
1	AL-189	AS REQD.	FRAME HEAD & SILL		ALUM. 6063-T6
2	AL-190	AS REQD.	FRAME JAMB		ALUM. 6063-T6
3	AL-191	AS REQD.	SIDELITE HEAD & SILL		ALUM. 6063-T6
4	AL-197	AS REQD.	FREE STANDING SIDELITE JAMB		ALUM. 6063-T6
5	AL-198	AS REQD.	MATING SIDELITE JAMB		ALUM. 6063-T6
6	AL-193	AS REQD.	PANEL TOP & BOTTOM		ALUM. 6063-T6
7	AL-194	AS REQD.	PANEL VERTICAL STILE		ALUM. 6063-T6
8	AL-199	AS REQD.	SHEAR BLOCK		ALUM. 6063-T6
9	AL-191	AS REQD.	FRAME HEAD & SILL SCREW COVER		ALUM. 6063-T5
10	AL-192	AS REQD.	FRAME HEAD & SILL SLANTED SCREW COVER		ALUM. 6063-T5
11	AL-121	AS REQD.	GLAZING BEAD (7/16" LAM.)		ALUM. 6063-T5
12	AL-123	AS REQD.	GLAZING BEAD (1" INSUL. & LAM.)		ALUM. 6063-T5
13	AL-200	AS REQD.	SHEAR PLATE		ALUM. 6063-T6
14	AL-195	AS REQD.	ASTRAGAL		ALUM. 6063-T5
15	AL-508	AS REQD.	FREE STAND JAMB SCREW COVER		ALUM. 6063-T5
16	AL-540	AS REQD.	SADDLE THRESHOLD, ADA COMPLIANT)		ALUM. 6063-T6
17	HD-4503PL	AS REQD.	3 POINT LOCK ASSY. @ ACTIVE PANEL, USED BY	Y ALL OPTIONS	METAL
18	HD-1204	AS REQD.	FLUSHBOLT ASSEMBLY @ INACTIVE PANEL, USE		ALLOY, STEEL
19	HD-5455	AS REQD.	LEVER LATCH LOCK @ ACTIVE PANEL		
20	HD-5455	AS REQD.	DUMMY LEVER @ INACTIVE PANEL	LOCK SET OPTION 1	BRASS
21	HD-8231	AS REQD.	DEADBOLT THUMBTURN @ ACTIVE PANEL	†	
22	JI0 TDR605	AS REQD.	LEVER LATCH LOCK @ ACTIVE PANEL		
23	JI0 TDR605	AS REQD.	DUMMY LEVER @ INACTIVE PANEL	LOCK SET OPTION 2	BRASS
24	JD60	AS REQD.	DEADBOLT THUMBTURN @ ACTIVE PANEL	1	
25	HD-34-10116	AS REQD.	LEVER LATCH LOCK @ ACTIVE PANEL		
26	HD-34-10116	AS REQD.	DUMMY LEVER @ INACTIVE PANEL	LOCK SET OPTION 3	BRASS, STEEL
27	HD- DB2410	AS REQD.	DEADBOLT (THUMBTURN) @ ACTIVE PANEL	-	B10100, 01222
28	HD-537	AS REQD.	LATCH LOCK STRIKE PLATE. SECURED W/(2) 1/8"	' x 3/4" PHP FH SMS	S.STEEL
29	HD-538	AS REQD.	DEADBOLT STRIKE PLATE. SECURED W/(2) 1/8" x		S.STEEL
30	HD-536N	AS REQD.	LATCH LOCK STRIKE PLATE SHIM		NYLON
31	HD-390P	AS REQD.	LATCH LOCK & DEADBOLT STRIKE PLATE TRIM		NYLON
32	HD-STRIKE BOX	AS REQD.	LATCH LOCK & DEADBOLT PROTECTIVE DUST BO	)X	NYLON
33	HD-525-9-REV		BOLT LOCK ASSEMBLY		S.STEEL
33A	HD-533C		FLUSH BOLT GUIDE (TOP & BOTTOM)		CAST (ZINC)
34	HD-CH-108	4/PANEL	4-1/12" x 4" HINGE		ALUMINUM
35	HD-ABB00-US32D	4/PANEL	4-1/12" x 4" HINGE		BRASS
36	HD-AB800-US	4/PANEL	4-1/12" x 4" HINGE		S. STEEL
37	3/8"-16 RDD	2/PANEL	3/8"-16 FULLY THREADED ROD (ZINC PLATED)		STEEL
38	WS-382V	AS REQD.	GLAZING BULB (DUROMETER 75-80)		PVC
39	WS-W33321	AS REQD.	0.187" x 0.320" ULTRA SOFT FIN WEATHERSTRIP		FVC
40	HD-203	2/PANEL	SHOOT BOLT PROTECTOR @ DOOR FRAME HEAI	D & SII I	PVC
41	HD-12-10042	AS REQD.	0.350" REACH POCKET SEAL (FRAME PERIMETEI		FVC
42	WS-32011	AS REQD.	FOAM-TITE CLOSED CELL FOAM COMPRESSION	<u>'</u>	-
43	HD-CLIP ANGLE	2/EACH	2" X 2" x 1/4" CLIP ANGLE (ADA THRESHOLD TO J		- ALUMINUM
43	HD-CLIP ANGLE	3/CDRNER	#10 x 1-1/4" PHP. PH. SMS. (PANEL & FRAME ASS	·	S. STEEL
45	-	SEE ELEV.	#14 x 3/4" HH. TEK (MULLION ATTACHMENT)	SLIVIDET)	S. STEEL
46		8/HINGE 4/CLIP	#12-24 x 1/2" PHP. FH. UC. THREAD FDRMING		S. STEEL
47		2/EACH	#6 x 1/2" PHP. TH. SMS. (ASTRAGAL ATTACHMEN	T	S. STEEL
48		1/EACH	#10 x 3/4" PHP. PH. SMS. (BOLT LOCK / FLUSHBO	•	S. STEEL
48	- 3/8"-16 NUT	4/PANEL	3/8"-16 SERRATED FLANGE NUT (ZINC PLATED)	JET GOIDE AGGT.)	S. STEEL
50	3/0 - 10 NUT		#8-32 x 1/2" PHP. PH. HS. (FLUSHBOLT ASSEMBL	Υ)	
	-	2/FLUSHBOLT	<u> </u>	<u> </u>	S. STEEL
	HD 00DD 67V/EED	1/⊏∧ ← ⊔		שיים סם סייים	
51 52	HD-00DR SWEEP HD-34-10003	1/EACH 1/SCREW HOLE	DOOR SWEEP (OPTIONAL). SECURED W/ #6 x 1/2 INSTALLATION SCREW HOLE PLUG (AT DOOR FR		ALUMINUM NYLON





SECTION AT LEVER LATCH LOCK

# SEALANTS:

OPTION INSTALLED.

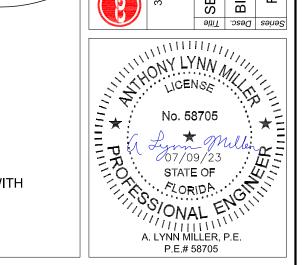
ALL JOINTS AND FRAME CONNECTIONS SEALED WITH GE SCS2000 SILICONE SEALANT

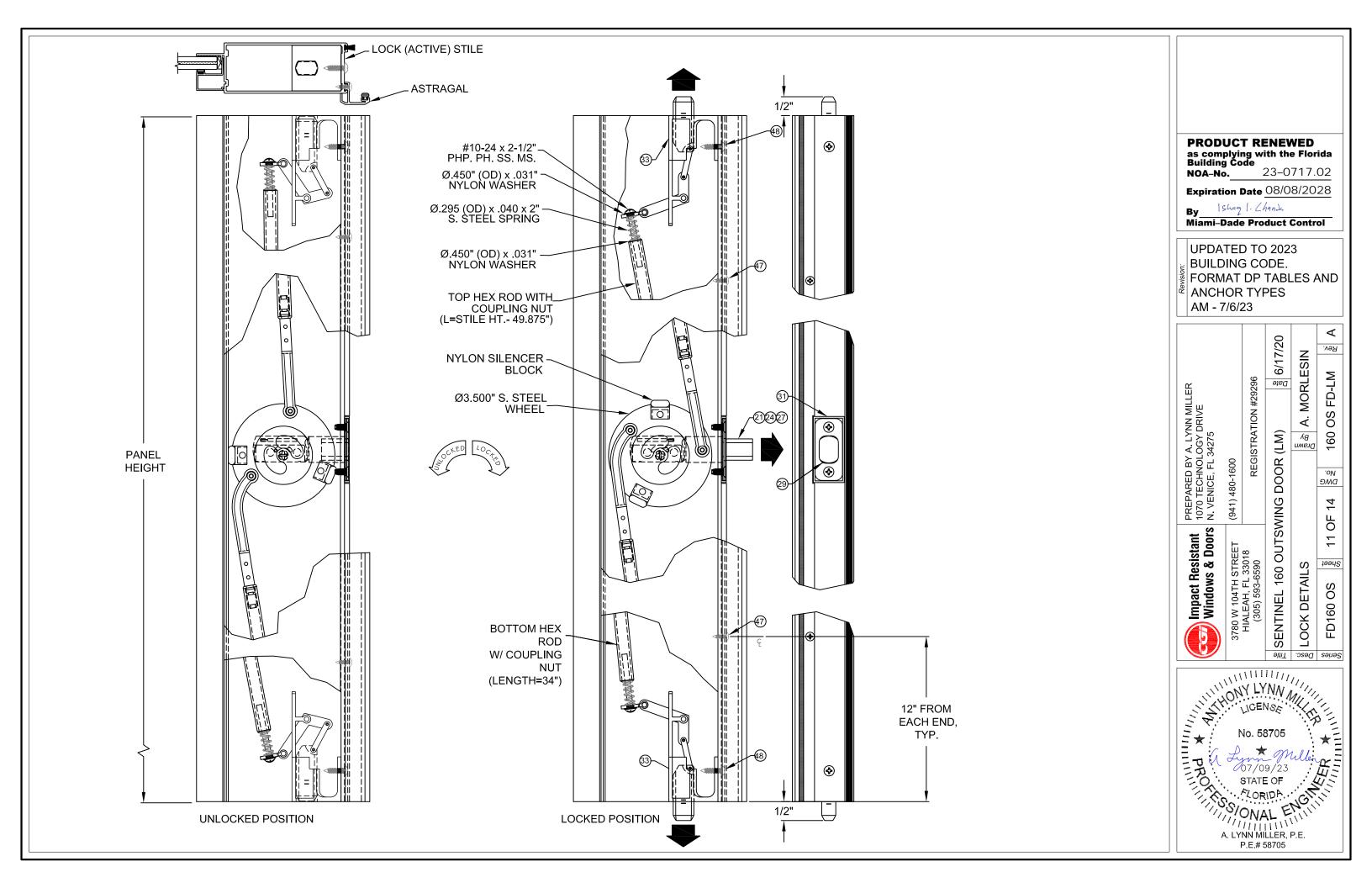
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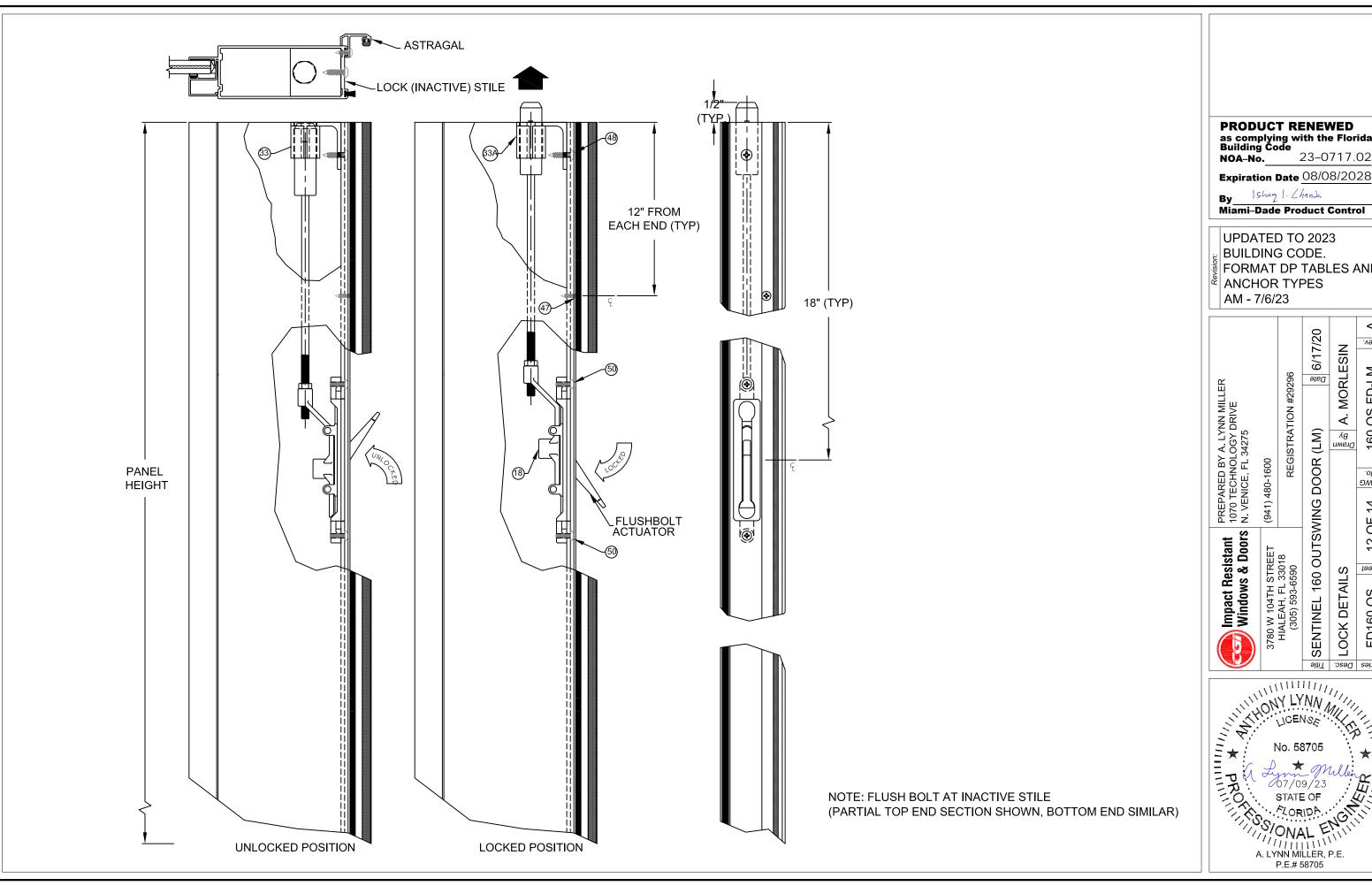
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By Sheq I. Chank
Miami-Dade Product Control

Windows & Doors N. Venice, FL 34275	sistant & Doors	1070 TE N. VENI	CE, FL 3	Windows & Doors IV. VENICE, FL 34275	<u>:</u>		
3780 W 104TH STREET	REET	(941) 480-1600	30-1600				
HIALEAH, FL 33018 (305) 593-6590	3018 30		REGI	REGISTRATION #29296	596		
SENTINEL 160 OUTSWING DOOR (LM)	OUTSV	VING D	000R	(LM)	6/17/20	//20	
BILL OF MATERIAL	RIAL			Drawn A. MORLESIN	RLESIN	7	
FD160 OS	Sheet O	10 OF 14 BWG 89	No.	160 OS FD-LM		Rev.	⋖







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By Ishaq 1. Chanks

UPDATED TO 2023 BUILDING CODE. FORMAT DP TABLES AND ANCHOR TYPES

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s   Desc.   Title	Mindows & Doors   1070 TECHNOLOGY   1070 TECHN	& DC   1   1   1   1   1   1   1   1   1	DOUS T T T T T T T T T T T T T T T T T T T	1070 TI N. VEN (941) 4	1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION # VING DOOR (LM)	OGY DR 34275 STRATIC (LM)	55%	296 Date 6/17/20	
Serie	FD160 OS	әәүѕ	12.0	12 OF 14 PM	DWG.	160 0	160 OS FD-LM	5	үәД

