

# MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 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)**

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. 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 Lynr A. Miller, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance numbe 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 # 17-1222.16 and consists of this page 1 and evidence pages E-1, E-2, E-3 & E-4, 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. 20-0722.16 Expiration Date: August 08, 2023 Approval Date: November 05, 2020

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. **OUALITY 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. Chands

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No 20-0722.16
Expiration Date: August 08, 2023
Approval Date: November 05, 2020

#### 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 20-0722.16
Expiration Date: August 08, 2023
Approval Date: November 05, 2020

# 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. New Evidence submitted

#### 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. Chands

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No 20-0722.16
Expiration Date: August 08, 2023
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#### **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.

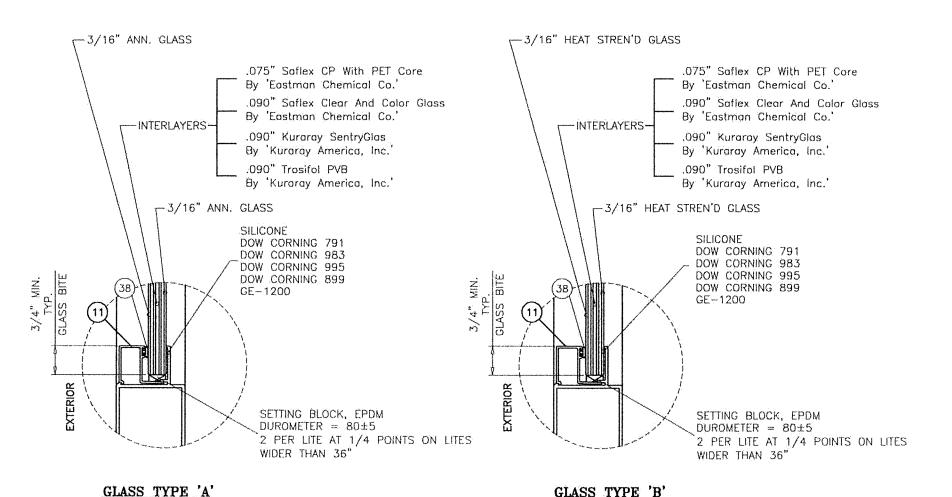
#### F. STATEMENTS

- 1. Statement letter of conformance to FBC 2020 (7<sup>th</sup> 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 17-0227.05 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



# SERIES SENTINEL 160 ALUMINUM OUTSWING DOOR W/ SIDELITES

APPROVAL APPLIES TO SINGLE (X) AND DOUBLE (XX) LEAF DOORS WITH OR WITHOUT SIDELITES.
SIDELITES CAN BE ON ONE OR BOTH SIDES OF DOOR.

DOORS WITH STANDARD THRESHOLD APPROVED FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED, DOORS WITH SADDLE (ADA) THRESHOLD NOT APPROVED FOR WATER INFILTRATION RESISTANCE,

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2017 (6TH EDITION)/2020 (7TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.

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 STLICEO

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2017/2020 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

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.

GLAZING OPTIONS

7/16" OVERALL LAM. GLASS

#### **INSTRUCTIONS:**

7/16" OVERALL LAM, GLASS

USE CHARTS 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) AND DOUBLE (XX) DOOR CAPACITIES SEE SHEET 3

STEP 3 FOR SIDELITE PANEL (0) CAPACITY SEE SHEET 4.

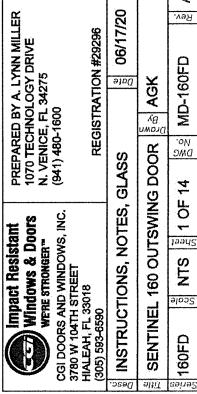
STEP 4 FOR SIDELITE COMBINATION WITH DOOR SEE MULLION CAPACITY CHART ON SHEET 5.

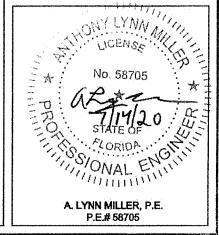
STEP 5 THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

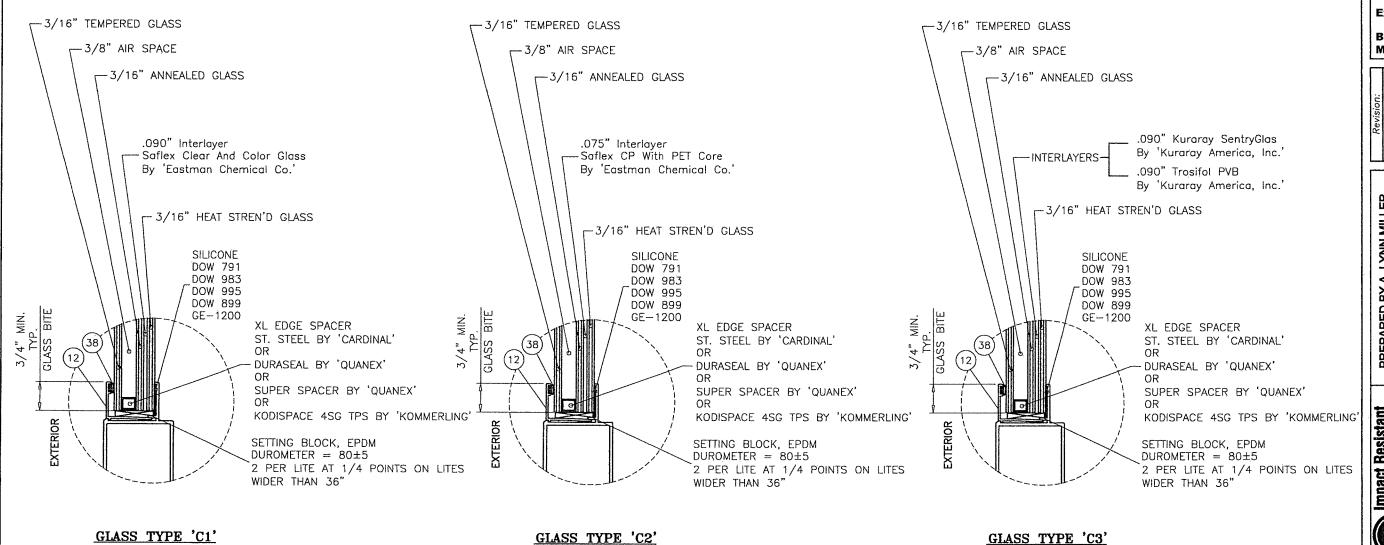
DOORS/SIDELITES ARE RATED FOR LARGE AND SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0722.16
Expiration Date 08/23/2023
By 154-21-Chank
Miami-Dade Product Control

A) UPDATED TO FBC 2020.
AK - 06/17/20







1" OVERALL INSUL. LAM. GLASS

1" OVERALL INSUL. LAM. GLASS

1" OVERALL INSUL. LAM. GLASS

**PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 20-0722.16

Expiration Date 08/23/2023

By Ishay 1. Chanda

Miami-Dade Product Control

A) ADDED BACKBEDDING. AK - 06/17/20

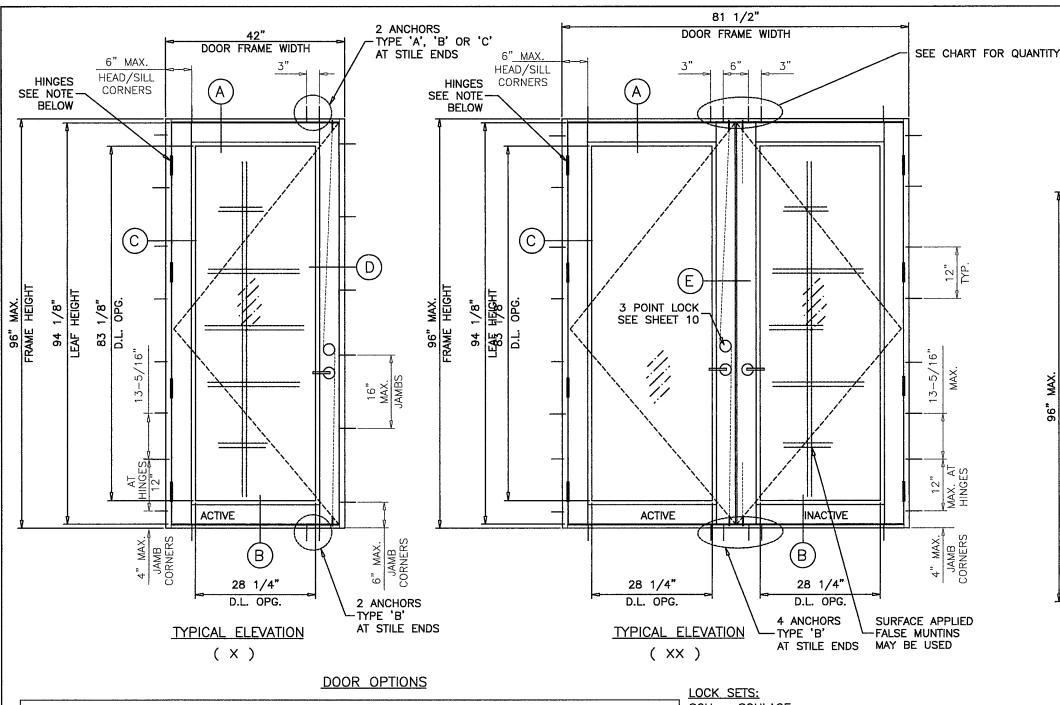
PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 06/17/20 Rev. REGISTRATION #29296 MD-160FD Date רם אח Ву Ву DWG DOOR 4 SENTINEL 160 OUTSWING 2 OF Windows & Doors
Were stronger.

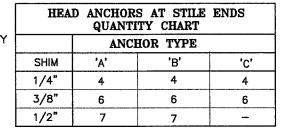
MENE STRONGER.

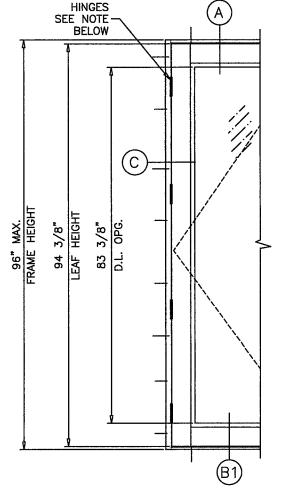
ORTH STREET Sheet NTS **GLASS TYPES** 160FD

No. 58705 SONAL EN A. LYNN MILLER, P.E. P.E.# 58705

eries Title Desc.







SINGLE OR DOUBLE DOORS WITH SADDLE (ADA) SILL

# SINGLE (X) OR DOUBLE (XX) DOORS LOAD CAPACITY - ± PSF

	GLASS TYPES 'A', 'B', 'C1', 'C2' & 'C3'										
	FRAME		LEAF	THRESHO	DLD TYPES	LO	OCK SET	S	INSUL.	GLASS SI	PACERS
WIDTH(X)	WIDTH (XX)	HEIGHT	WIDTH	STD.	ADA	SCH	CC	BLDW	CXL	KOD	QUAN
37-1/4"	72"	96"	35"	80.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0
42"	81-1/2"	96"	39-3/4"	80.0	70.0	80.0	80.0	70.0	70.0	80.0	-

NOTE:

VERIFY COMPLIANCE WITH EGRESS LIMITATIONS WHERE REQUIRED.

FLUSH BOLTS AND LOCKS MUST BE ENGAGED TO HEAD AND SILL DURING PERIODS OF HURRICANE WARNING.

SCH = SCHLAGE

CC = COPPER CREEK

BLDW = BALDWIN

#### **GLASS INSULATORS:**

CXL = CARDINAL XL

KOD = KODISPACE

DOOR D.L.O. DIMS.

QUAN = QUANEX DURASEAL QUANEX SUPERSPACER

D.L.O. HEIGHT = FRAME HEIGHT - 12.875"

D.L.O. WIDTH (X DOORS) = FRAME WIDTH - 13.75"

D.L.O. WIDTH (XX DOORS) = (FRAME WIDTH - 25)/2

## **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 LEAD UP TO 35" LEAD WIDTHS (STD. THRESHOLD ONLY)
- (4) HINGES PER LEAF ABOVE 35" LEAD WIDTHS (STD. THRESHOLD)
- (4) HINGES PER LEAD ALL WIDTHS (SADDLE THRESHOLD)

as complying with the Florida **Building Code** NOA-No. 20-0722.16

Expiration Date <u>08/23/2023</u>

Miami-Dade Product Control

**PRODUCT REVISED** 

Ishaq 1. Chands

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 THRESHOLD/LOCK/SPACER CAPACITY SENTINEL 160 OUTSWING DOOR 4 3 OF Impact Resistant
Windows & Doors
Were Stronger
RS AND WINDOWS, INC.
04TH STREET әәус NTS 160FD

A) NO CHANGES THIS SHEET

06/17/20

Date

REGISTRATION #29296

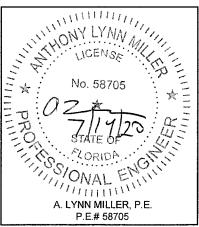
Rev.

MD-160FD

No. DMC

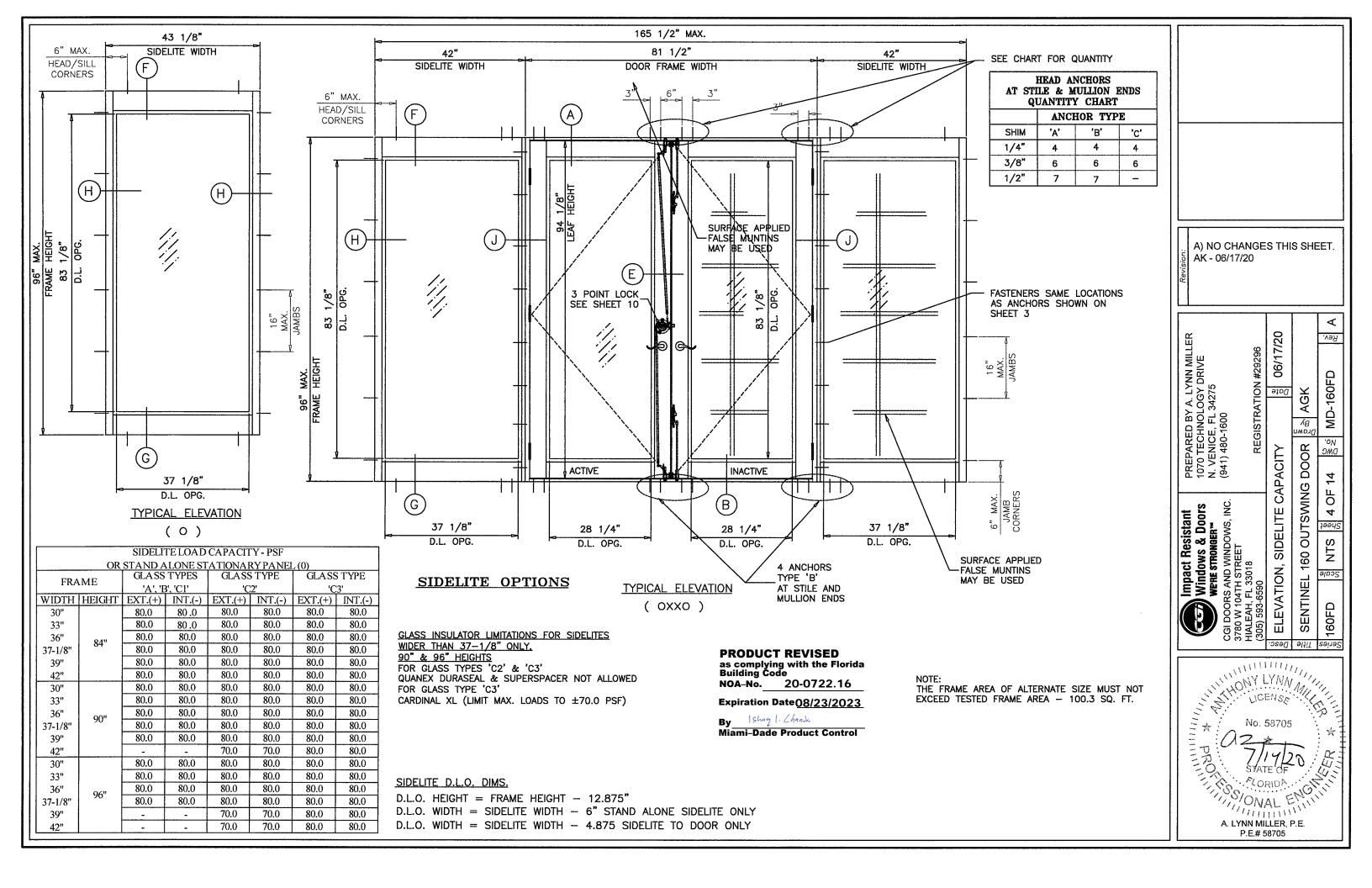
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AK - 06/17/20

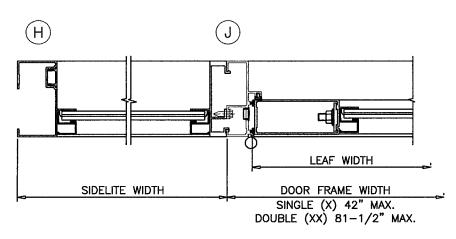


# NOTE:

GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

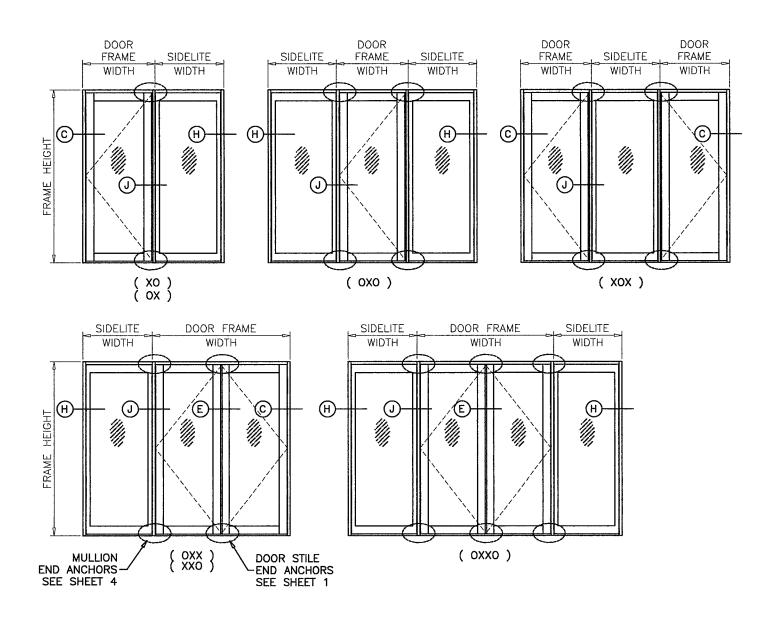


DESIGN LOAD CAPACITY - PSF							
SIOELITE	DOOR	SIDEUTE	SIDELITE TO DOOR				
WIDTH	LEAF	FRAME	MULLION				
INCHES	WIDTH INCHES	HEIGHT INCHES	(SEE NOTE BELOW)				
INCILES			EXT. (+)	INT.(-)			
24		84	80.0	80.0			
30			80.0	80.0			
33			80.0	80.0			
36	39-3/4		80.0	80.0			
37-1/8			80.0	80.0			
39			80.0	80.0			
42			80.0	80.0			
24		90	80.0	80.0			
30			80.0	80.0			
33			80.0	80.0			
36	39- 3/ 4		80.0	80.0			
37-1/8			80.0	80.0			
39			80.0	80.0			
42			80.0	80.0			
24	39-3/4	96	80.0	80.0			
30			80.0	80.0			
33			80.0	80.0			
36			78.3	78.3			
37-1/8			77.2	77.2			
39			75.4	75.4			
42			72.6	72.6			



#### SIDELITE TO DOOR

FOR DOORS CAPACITY SEE SHEET 3. FOR SIDELITE CAPACITIES SEE SHEET 4. FOR SIDELITE MULLION CAPACITY SEE CHART ABOVE. LOWER VALUES FROM DOORS, SIDELITE, DOOR/SIDELITE OR DOOR/DOOR MULLION CHART WILL APPLY TO ENTIRE SYSTEM.

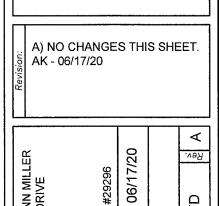


**PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 20-0722.16

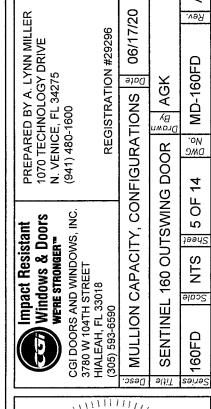
Expiration Date 08/23/2023

Ishaq I. Chands Miami-Dade Product Control

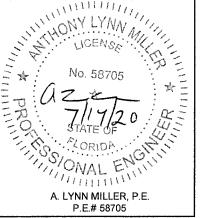
> GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

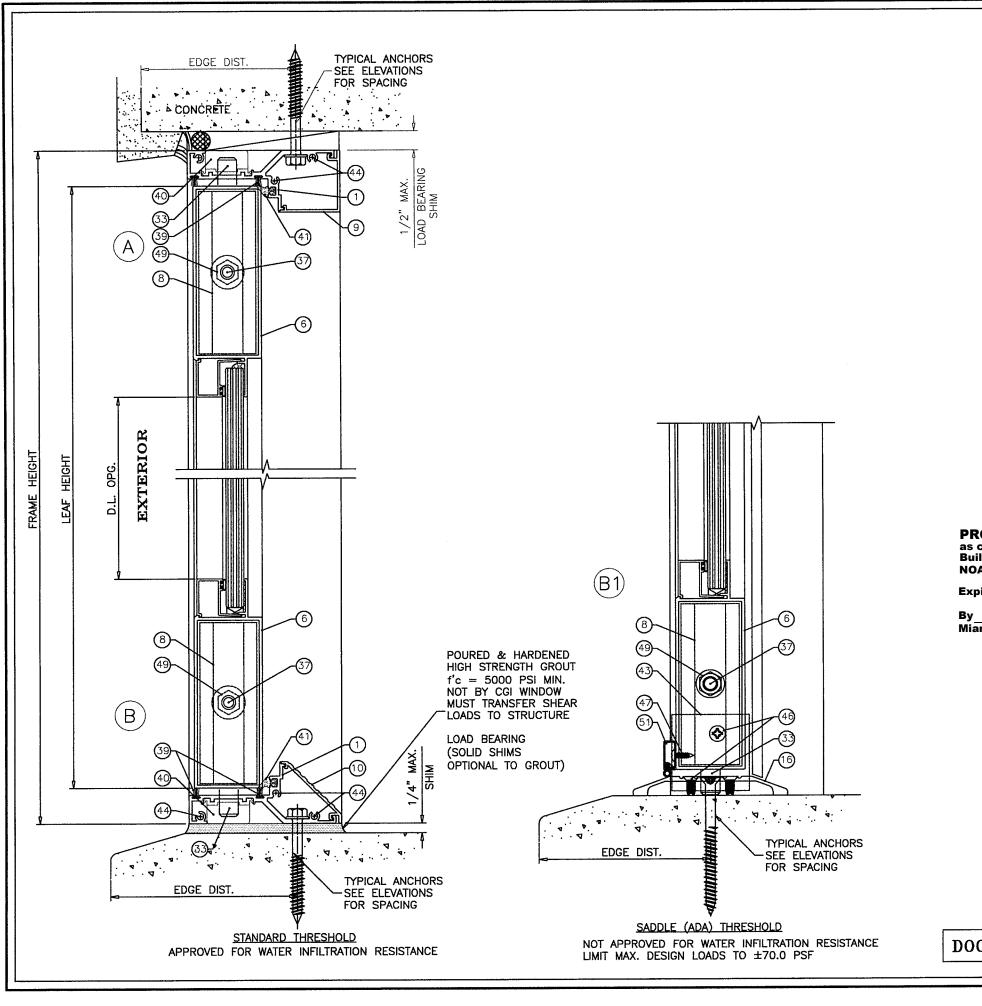


Rev.



Date





PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0722.16

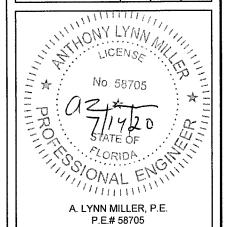
**Expiration Date** <u>08/23/2023</u>

By | Shang | Change
Miami-Dade Product Control

A) NO CHANGES THIS SHEET. AK - 06/17/20

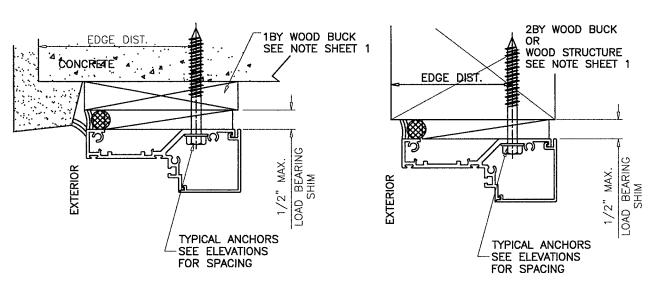
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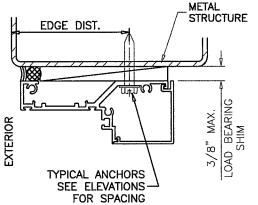
| Impact Resistant | PREPARED BY A. LYNN MILLER | 1070 TECHNOLOGY DRIVE | 1070

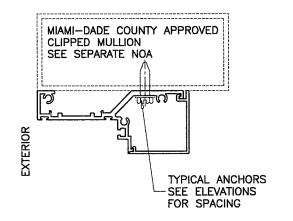


DOOR DETAILS

# DOOR DETAILS







## TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A'- 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI), 1/4" MAX. SHIM SPACE

1/4" DIA. KWIK CON II+ BY 'HILTI' (Fu=184 KSI, Fy=157 KSI)

MIN. LENGTH = 2-3/4"

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES

1-1/2" MIN. PENETRATION INTO WOOD (HEAD/JAMBS/SILL)

THRU 1BY BUCKS INTO CONC. OR BLOCKS

1-3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL)

1-1/4" MIN. EMBED INTO CONC. OR BLOCKS (JAMBS)

TYPE 'B'- 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI), 1/4" MAX. SHIM SPACE

1/4" DIA. KWIK CON II+ BY 'HILTI' (Fu=184 KSI, Fy=157 KSI)

MIN. LENGTH = 2-3/4"

DIRECTLY INTO CONC. OR BLOCKS

1-3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL)

1-1/4" MIN. EMBED INTO CONC. OR BLOCKS (JAMBS)

**PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 20-0722.16

**Expiration Date** <u>08/23/2023</u>

By Ishag 1. Chands

Miami-Dade Product Control

TYPE 'C'- 1/4" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS) INTO MIAMI-DADE COUNTY APPROVED MULLIONS

INTO METAL STRUCTURES (HEAD/JAMBS)

(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS

ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)

STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE

INTO CONCRETE AND MASONRY = 2-1/2" MIN.

INTO WOOD STRUCTURE = 1" MIN.

INTO METAL STRUCTURE = 3/4" MIN.

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.

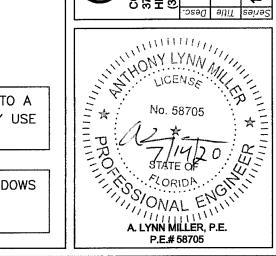
ANCHORS MAY BE HEX OR FLAT HEAD.

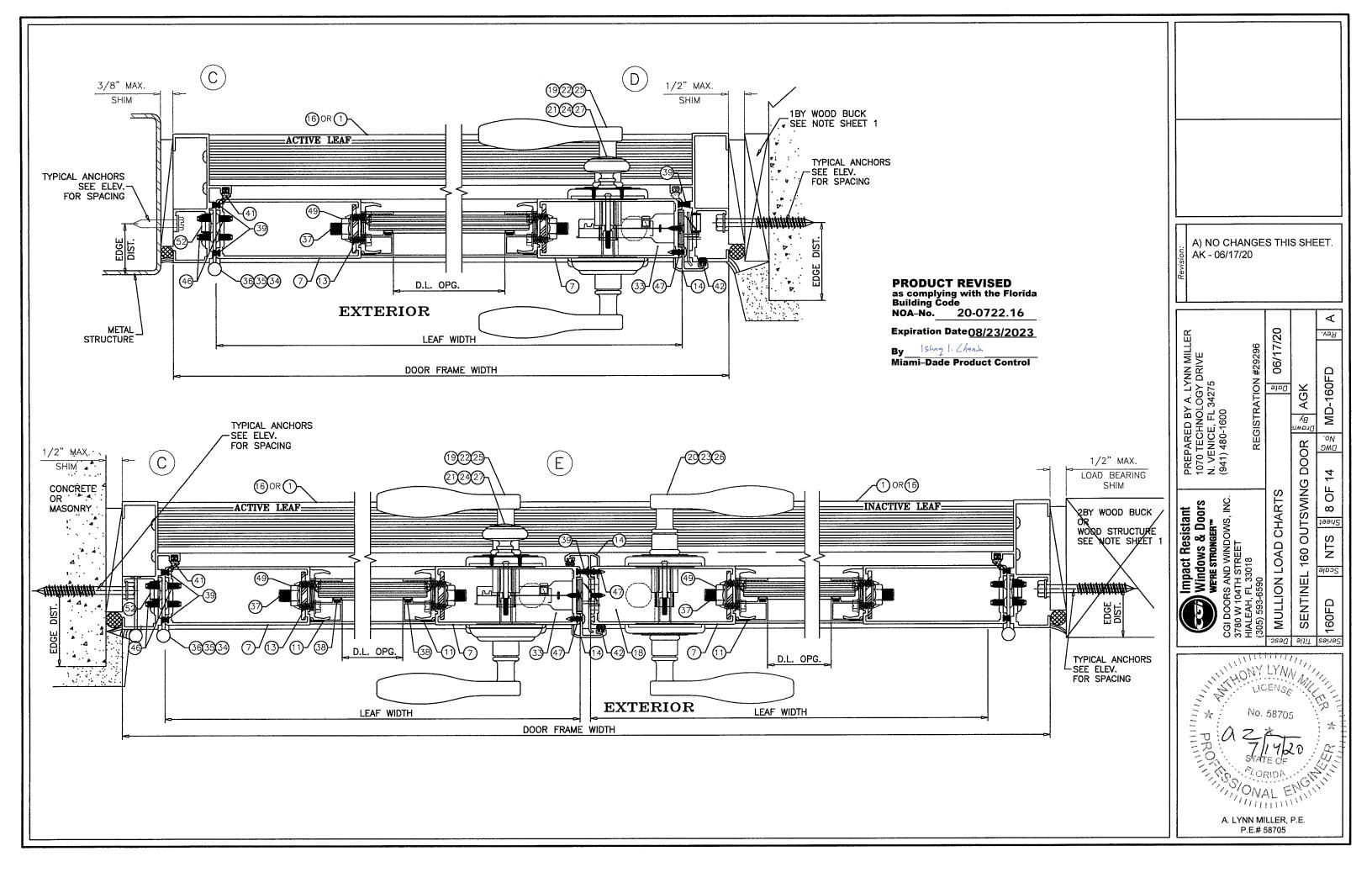
1/4" ULTRACON+ ANCHORS BY 'DEWALT' ARE LIMITED TO A MAXIMUM 1/4" SHIM SPACE. ALL OTHER ANCHORS MAY USE 1/4", 3/8" OR 1/2" SHIM SPACE.

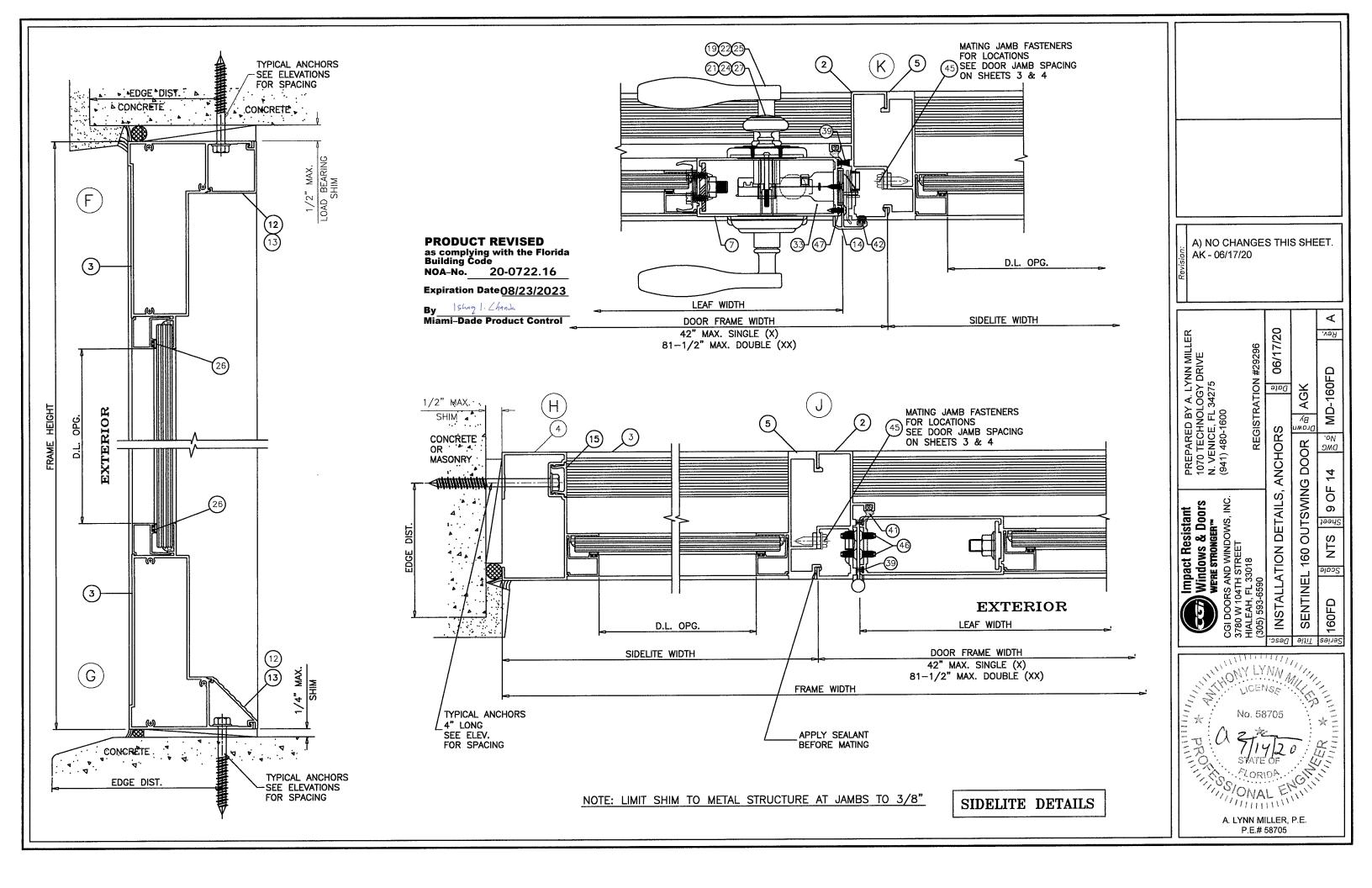
WOOD BUCKS AND METAL STRUCTURE NOT BY CGI WINDOWS MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

A) ADDED ULTRACON+ & KWIK CON II+ ANCHORS. AK - 06/17/20

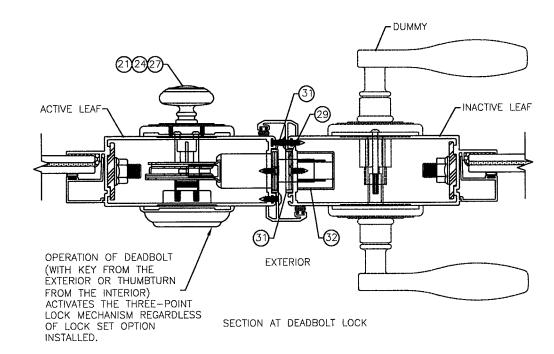
06/17/20 Rev. PREPARED BY A. LYNN MILLE 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296 MD-160FD Date AGK Drawn By DWG No. **OUTSWING DOOR** 14 7 OF MULLION LOAD CHARTS Impact Resistant
Windows & Doors
wene stronger\*\* Sheet NTS 160 SENTINEL 160FD Series Title Desc.

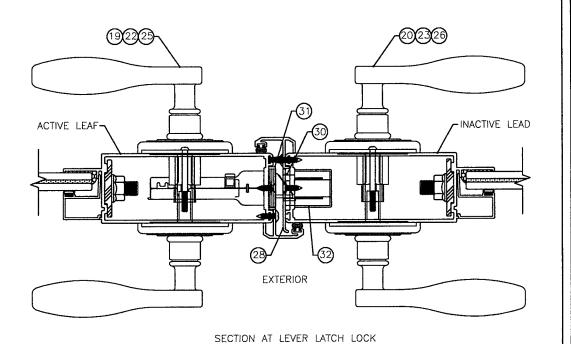






TEM	PART No.	QUANTITY	DESCRIPTION		MATERIAL	MFG. / REMARKS
1	AL-189	AS REQD.	FRAME HEAD & SILL	······	ALUM. 6063-T6	KEYMARK / SAPA
2	AL-190	AS REQD.	FRAME JAMB		ALUM, 6063-T6	KEYMARK / SAPA
3	AL-196	AS REQD.	SIDELITE HEAD & SILL FREE STANDING SIDELITE JAMB MATING SIDELITE JAMB		ALUM. 6063-T6	KEYMARK / SAPA
4	AL-197	AS REQD.			ALUM, 6063-T6	KEYMARK / SAPA
5	AL-198	AS REQD.			ALUM. 6063-T6	KEYMARK / SAPA
6	AL-193	AS REQD.	PANEL TOP & BOTTOM		ALUM. 6063-T6	KEYMARK / SAPA
7	AL-194	AS REQD.	PANEL VERTICAL STILE		ALUM. 6063-T6	KEYMARK / SAPA
8	AL-199	AS REQD.	SHEAR BLOCK		ALUM, 6063-T6	KEYMARK / SAPA
9	AL-191	AS REQD.	FRAME HEAD & SILL SCREW COVER		ALUM. 6063-T5	KEYMARK / SAPA
10	AL-192	AS REQD.	FRAME HEAD & SILL SLANTED SCREW COVER		ALUM. 6063-T5	KEYMARK / SAPA
11	AL-121	AS REQD.	GLAZING BEAD (7/16' LAM.)		ALUM. 6063-T5	KEYMARK / SAPA
12	AL-123	AS REQD.	GLAZING BEAD (1.000' INSULLAM.)		ALUM. 6063-T5	KEYMARK / SAPA
13	AL-200	AS REQD.	SHEAR PLATE		ALUM, 6063-T6	KEYMARK / SAPA
14	AL-195	AS REQD.	ASTRAGAL.		ALUM. 6063-T5	KEYMARK / SAPA
15	AL-508	as reqd.	FREE STAND JAMB SCREW COVER		ALUM, 6063-T5	KEYMARK / SAPA
16	AL-540	AS REQD.	SADDLE THRESHOLD (ADA COMPLIANT)		ALUM. 6063-T6	KEYMARK / SAPA
17	HD-4503PL	AS REQD.	THREE POINT LOCK ASSY. (AT ACTIVE PANEL, USED BY ALL	OPTIONS)	METAL	CGI PROPRIETARY
18	HD-1204	AS REQD.	FLUSHBOLT ASSEMBLY (AT INACTIVE PANEL, USED BY ALL E	IPTIONS)	ALLDY, STEEL	CGI PROPRIETARY
19	HD-5455 PASS	AS REQD.	LEVER LATCH LOCK, AT ACTIVE PANEL			
20	HD-5455	AS REQD.	DUMMY LEVER, AT INACTIVE PANEL	LOCK SET OPTION 1	BRASS	BALDWIN
21	HD-8231	AS REQD.	DEADBOLT (THUMBTURN), AT ACTIVE PANEL			
55	J10 TDR605	AS REQD.	LEVER LATCH LOCK, AT ACTIVE PANEL			
23	J10 TDR605	AS REQD.	DUMMY LEVER, AT INACTIVE PANEL	LOCK SET OPTION 2	BRASS	SCHLAGE
24	JD60	AS REQD.	DEADBOLT (THUMBTURN), AT ACTIVE PANEL			
25	HD-34-10116	AS REQD.	LEVER LATCH LIICK, AT ACTIVE PANEL	LOCK SET OPTION 3	BRASS, STEEL	Copper Creek
26	HD-34-10116	AS REQD.	DUMMY LEVER, AT INACTIVE PANEL			
27	HD- DB2410	AS REQD.	DEADBOLT (THUMBTURN), AT ACTIVE PANEL			
28	HD-537	AS REQD.	LATCH LOCK STRIKE PLATE, SECURED V/(2) #8 x 3/4" PHP	. FH. SMS.	S.STEEL	-
29	HD-538	AS REQD.	DEADBOLT STRIKE PLATE, SECURED W/(2) #8 x 3/4° PHP. F	H. SMS.	S.STEEL	-
30	HD-536N	AS REQD.	LATCH LOCK STRIKE PLATE SHIM		NYLON	CGI
31	HD-390P	AS REQD.	LATCH LOCK & DEADBOLT STRIKE PLATE TRIM		NYLON	CGI
32	HD-STRIKE BOX	AS REQD.	LATCH LOCK & DEADBOLT PROTECTIVE DUST BOX		NYLON	CGI
33	HD-525-9-REV	2 /LDCK MECH.	BOLT LOCK ASSEMBLY		S.STEEL	CGI
33A	HD-533C	1 /FLUSHBOLT	FLUSH BOLT GUIDE (TOP & BOTTOM)		CAST (ZINC)	CGI
34	HD-CH-108	4 /LEAF	4-1/12' x 4' HINGE		ALUMINUM	CGI PROPRIETARY
35	HD-AB800-US32D	4 /LEAF	4-1/12' x 4' HINGE		BRASS	HAGER
36	ZU-008¶A-ŒH	4 /LEAF	4-1/12' x 4' HINGE		S.STEEL	HAGER
37	ø3/8″-16 ROD	2 /LEAF	Ø3/8"-16 FULLY THREADED ROD (ZINC PLATED)	FULLY THREADED RUD (ZINC PLATED)		-
38	VS-382V	AS REQD.	GLAZING BULB CDURDMETER 75/80>		PVC	PROTOTYPE
39	VS-V33321	AS REQD.	.187' x 320' ULTRA SDFT FIN VEATHERSTRIP		-	ULTRAFAB
40	HD-203	2/LEAF	SHOOT BOLT PROTECTOR, AT DOOR FRAME HEAD & SILL		PVC	-
41	HD-12-10042	AS REQ.D	.350' REACH PLICKET SEAL (FRAME PERIMETER GASKET)		-	AMESBURY
42	WS-32011	AS REQ.D	FDAM-TITE CLOSED CELL FDAM COMPRESSION SEAL		_	AMESBURY
43	HD-CLIP ANGLE	2/EACH	$2 \times 2 \times 1/4$ CLIP ANGLE (ADA THRESHOLD TO JAMB ATTAC	HEMENT)	ALUMINUM	
44	_	3/CORNER	#10 x 1-1/4' PHP. PH. SMS. (PANEL & FRAME ASSEMBLY)		S. STEEL	<u> </u> -
45	-	SEE ELEV.	#14 x 3/4" HH, TEK (MULLION ATTACHMENT)		S. STEEL	
46	_	8/HINGE , 4/CLIP	#12-24 x 1/2" PHP. FH. UC. THREAD FORMING		S. STEEL	-
47	-	2/EACH	#6 x 1/2" PHP. TH. SMS. (ASTRAGAL ATTACHMENT)		S. STEEL	-
48	_	1/EACH	#10 x 3/4" PHP, PH, SMS, (BOLT LOCK / FLUSHBOLT GUIDE	C.Y22A	S. STEEL	-
49	ø3/8'-16 NUT	4/LEAF	Ø3/8'-16 SERRATED-FLANGE NUT (ZINC PLATED)		STEEL	-
50	-	2/FLUSHBOLT	#8-32 x 1/2" PHP. PH. MS. (FLUSHBOLT ASSEMBLY)		S.STEEL	_
51	HD-DOOR SVEEP	1/EACH	DOOR SWEEP (OPTIONAL), SECURED W/ #6 x 1/2" PHP. PH. SMS.		ALUMINUM	SCREEN TECH
52	HD-34-10003	1/SCREW HOLE	INSTALLATION SCREW HOLE PLUG (AT DOOR FRAME JAMBS D		NYLON	r .





# SEALANTS:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH GE SCS2000 SILICONE SEALANT

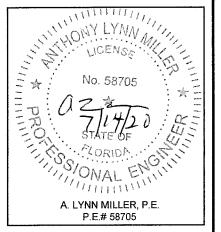
PRODUCT REVISED
as complying with the Florida
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NOA-No. 20-0722.16

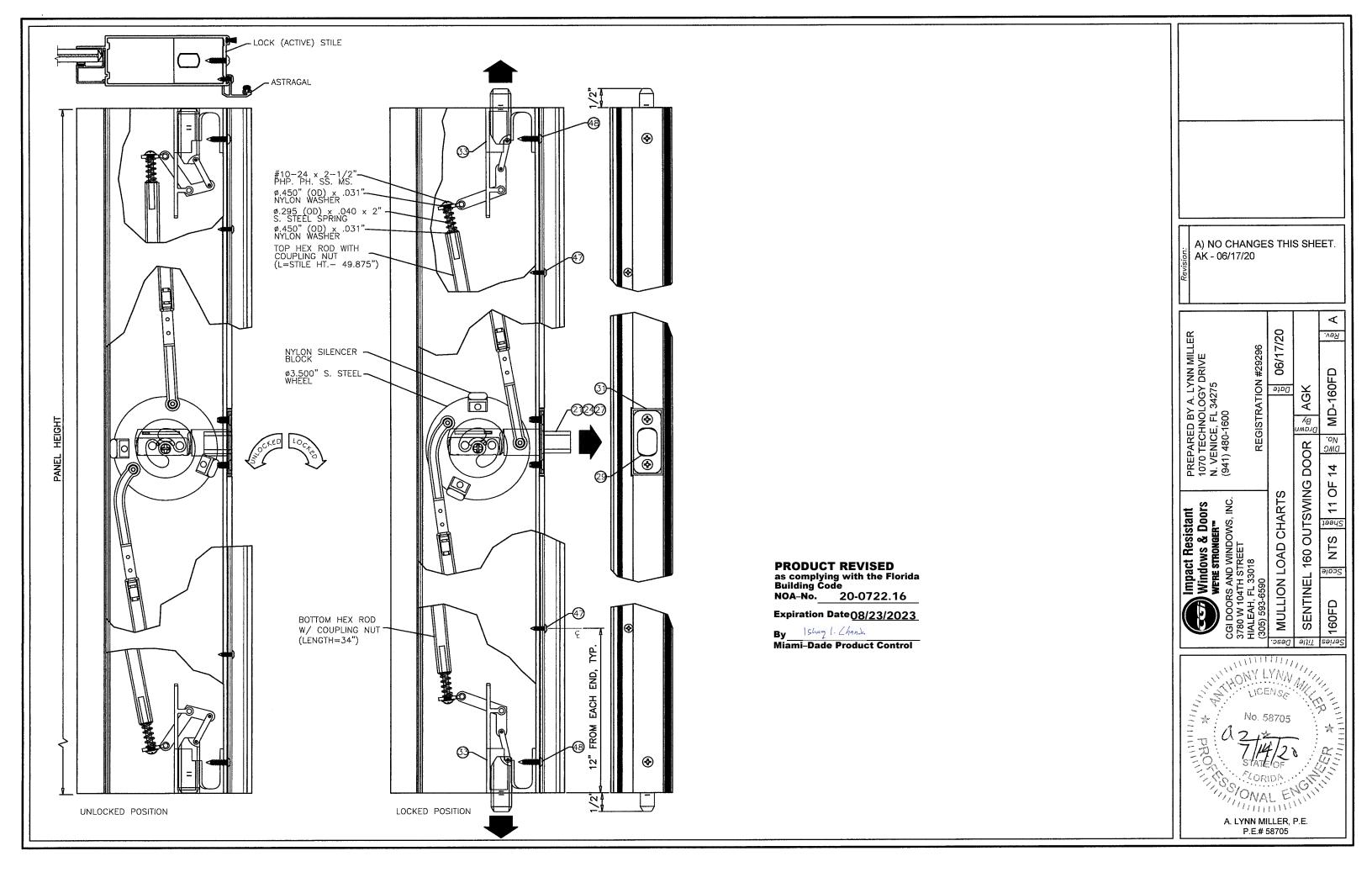
Expiration Date <u>08/23/2023</u>

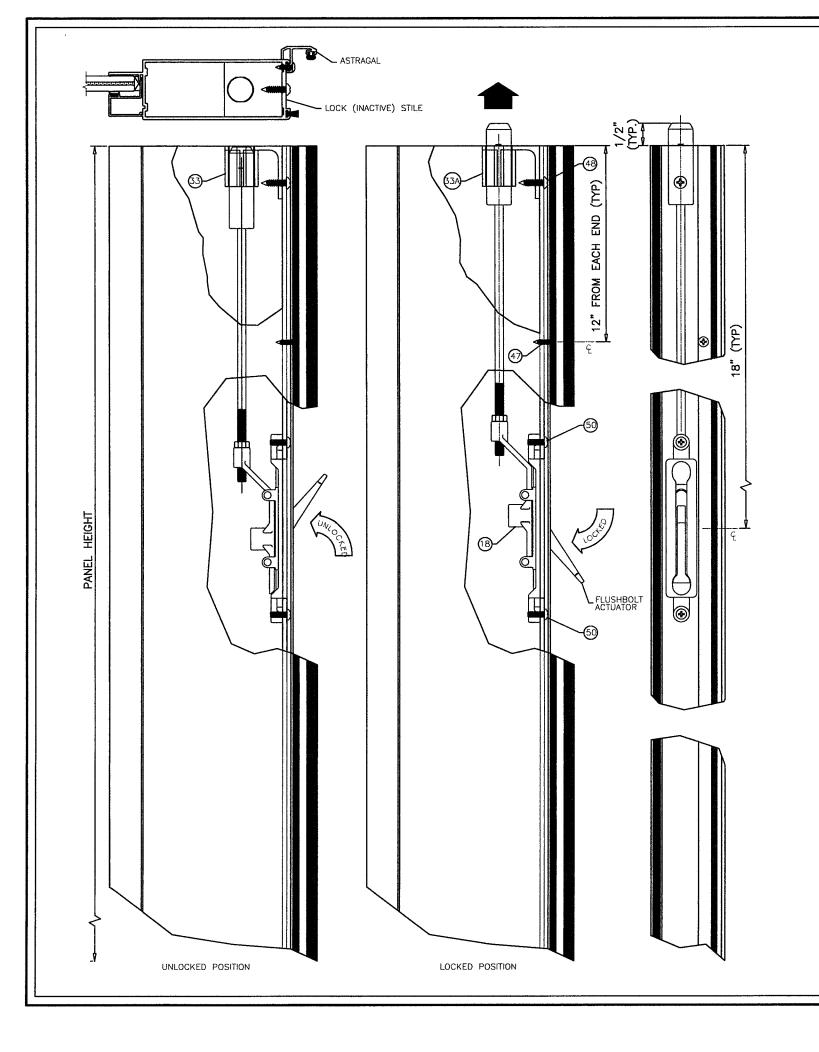
By Ishaq I. Chank
Miami-Dade Product Control

A) NO CHANGES THIS SHEET. AK - 06/17/20

ď	0.		Rev.
PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	e 06/17/20		
PREPARED BY A. LYNN MII 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #2928	Date	SENTINEL 160 OUTSWING DOOR OF AGK	NTS     10 OF 14     ND-160FD   ND-160FD
ED B CHNC CE, FI CIST		Drawn By	Σ
PREPARED BY 1070 TECHNOI N. VENICE, FL (941) 480-1600 REGISTR		A.	DWG No.
PRE 1070 N. V (941		8	4
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S, INC	ÅR	TSW	Sheet
Windows & Doors Windows & Doors Were stronger" ORS AND WINDOWS, INC 104TH STREET H, FL 33018	ㅎ	9	ST
dows dows stree	Q-	160	Z
Wind Wind We're S ANI S ANI S TH S	N C	NEL.	
Windows & Doors Windows & Doors Were Stronger" CGI DOORS AND WINDOWS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	MULLION LOAD CHARTS	ILL	Series 160FD
CGI (305)	Desc.	aliiT R	9 19 19 19 19
	1 3300	-11:T	20,205







PRODUCT REVISED as complying with the Florida Building Code NOA-No. 20-0722.16

**Expiration Date** <u>08/23/2023</u>

By Ishaq 1. Chank Miami-Dade Product Control A) NO CHANGES THIS SHEET. ÁK - 06/17/20

Date

ANCHORS

INSTALLATION DETAILS,

Rev.

MD-160FD

12 OF 14

NTS

Drawn By

DOOR

SENTINEL 160 OUTSWING

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600

A. LYNN MILLER, P.E. P.E.# 58705

NOTE: FLUSH BOLT AT INACTIVE STILE (PARTIAL TOP END SECTION SHOWN, BOTTOM END SIMILAR)

