



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  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

**CGI Windows & Doors, Inc.**  
**3780 W. 104<sup>th</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 "Sentinel 165 Balcony Breeze" Single Inswing Aluminum door w/ SHW – LMI**

**APPROVAL DOCUMENT:** Drawing No. **165-IS-FD-LM Rev A** (former **165FD-IS-NOA Rev A**), titled "Series Sentinel 165 Balcony Breeze Aluminum Inswing Door", sheets 1 through 10 of 10, prepared by manufacturer, 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 Revision 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**

**Limitations:**

1. See sheets 2 for Design Pressure ratings, max. DLO (day light opening) and Threshold types. See sheet 7 for the door and the SHW (Single Hung Window) glazing options and limitations.
2. ADA saddle threshold (item #E-24) **not** rated for water infiltration, unless protected by FBC compliant overhang.
3. The latch lock (item #M-20 & #M-22) and 3-point CGI lock mechanism w/ dead bolts (item #M-21 & M-23) are integral part of each door w/SHW. Also, the SHW is integral part of the single Door.
4. The Exterior lite of insulated laminated SHW using glazing option **F**, must be tempered, when used above 30' above the grade (Small Missile Impact area).

**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 #21-0510.05** consists of this page 1 and evidence pages E-1, E-2, E-3, E4, E-5 & E-6, as well as approval document mentioned above.

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



*Ishaq I. Chanda*

**NOA No. 23-0717.05**  
**Expiration Date: July 28, 2026**  
**Approval Date: August 03, 2023**  
**Page 1**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. Evidence submitted under previous approvals**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections (submitted under file below)
2. Drawing No.**AD16-04**, titled "Series Sentinel 165 Balcony Breeze Aluminum Inswing Door", sheets 1 through 13 of 13, prepared by MCY Engineering, Inc., dated JUL 05, 2016, signed and sealed by Yiping Wang, P.E.

**B. TESTS (submitted under files #16-0329.02)**

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 (Std Threshold # E-6)  
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 single aluminum Inswing door w/ SHW, prepared by Certified Testing Laboratories, Inc., Test Report No. **CTL 3076-1W**, dated 12/21/15 for specimen #4, 5, & 6, signed and sealed by Ramesh Patel, P.E.

Along with manufacturer's parts and section drawing marked-up drawings of single aluminum Outswing door w/ SHW, prepared by Certified Testing Laboratories, Inc., Test Report No. **CTL 3076W**, dated 12/20/15 for specimen #1, 2, & 3, signed and sealed by Ramesh Patel, P.E.

(Note: The above test reports have been revised by an addendum letter issued by Certified Testing lab dated June 27, 2016, signed and sealed by Ramesh Patel, P.E.)

2. REF test report HTL 0080-912-97 per SFBC PA 202, 201/203-94.

**C. CALCULATIONS (submitted under files #16-0329.02)**

1. Anchor verification calculations and structural analysis, complying with FBC-2014(**5<sup>th</sup> Edition**), prepared by MCY Engineering, Inc., dated MAR 18, 2016, signed and sealed by Yiping Wang, P.E.
2. Glazing complies w/ ASTM E-1300-02, -04 & -09.

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **14-0916.11** issued to Kuraray America, Inc. (former E.I. DuPont DeNemours & Co., Inc.) for the "**Sentry Glass ® Interlayer**", expiring on 07/4/17.
2. Notice of Acceptance No. **16-117.01** issued to **Kuraray America, Inc.** (Former E.I. DuPont DeNemours & Co., Inc. for the "Kuraray Trofossil Ultra clear and color PVB Interlayer (Former Kuraray **Butacite ® PVB interlayer**)", expiring on 07/08/19.
3. Notice of Acceptance No. **14-0423.15** 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 12/11/18.

*Ishaq I. Chanda*

---

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No 23-0717.05**  
**Expiration Date: July 28, 2026**  
**Approval Date: August 03, 2023**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**F. STATEMENTS**

1. Statement letter of conformance to FBC 2014(**5<sup>th</sup> Edition**) and letter of no financial interest, prepared by MCY Engineering, Inc., dated MAR 14, 2016, signed and sealed by Yiping Wang, P.E.
2. Lab compliance and addendum letters, as part of the above referenced test reports.

**G. OTHER**

1. This NOA **revises #16-0329.02**, expiring July 18, 2021.
2. Test proposal dated 03/21/15 approved by RER.

**2. Evidence submitted under previous approval.**

**A. DRAWINGS**

1. Drawing No.**18-26D Rev A**, titled "Series Sentinel 165 Balcony Breeze Aluminum Inswing Door", sheets 1 through 15 of 15, prepared by AL-Farooq Corporation, dated 01/23/18 and last revised on MAY 02, 2018, 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 (Std Threshold # E-6)
  - 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 In/out swing door w/sidelites, by Hurricane Testing Laboratory, Inc., Test Report No. **HTL-0080-0304-11** dated 08/03/2011 for specimens #2, 5, 9 12 & 15 (Inswing) and specimens #1, 4, 7 & 8 (outswing) tested per TAS 201, 202 & 203-94, signed and sealed by Vinu Abraham, P.E.

Along with manufacturer's parts and section drawing marked-up drawings of aluminum In/out swing door w/sidelites, by Hurricane Testing Laboratory, Inc., Test Report No. **HTL-97055 (0080-912-97)** dated 09/23/97 thru 02/27/98 for specimen #1, 2, 3, 4 tested per PA202-94, specimen #4, 5A, 5B, 5C tested per PA201-94 & PA203-94, signed and sealed by Timothy S. Marshall, P.E. (submitted under file # **09-0723.04**: Original tests conducted per SFBC, PA 201, 202 & 203-94 now known as FBC, TAS 201, 202 & 203-94)

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with **FBC 2017 (6<sup>th</sup> Edition)**, prepared by Al-Farooq Corporation, dated 02/28/18, signed and sealed by Javad Ahmad, P. E.

**D. QUALITY ASSURANCE**

1. Miami Dade Department of Regulatory and Economic Resources (RER). *Ishaq I. Chanda*

---

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No 23-0717.05**  
**Expiration Date: July 28, 2026**  
**Approval Date: August 03, 2023**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **14-0916.11** issued to Kuraray America, Inc. (former E.I. DuPont DeNemours & Co., Inc.) for the “**Sentry Glass ® Interlayer**”, expiring on 07/4/18.

**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 03/05/18, signed and sealed by Javad Ahmad, P.E.
2. Statement letter dated May 01, 2018, issued by Al-Farooq Corporation of “Adoption of another Engineer’s work” per FLA chapter 61G15-27, signed by Javad Ahmad, P.E.
3. Statement letter of ADA threshold evaluation dated FEB 21, 2017, prepared by MCY Engineering, Inc, signed and sealed by Yiping Wang, P.E.

**G. OTHER**

1. This NOA **revises NOA # 16-0329.02**, expiring 07/28/21.

**3. Evidence submitted under previous approval**

**A. DRAWINGS**

1. Drawing No.**165FD-IS-NOA Rev A** (former **18-26D Rev A**), titled “Series Sentinel 165 Balcony Breeze Aluminum Inswing Door”, sheets 1 through 10 of 10, prepared by manufacturer, 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.

**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.

*Ishaq I. Chanda*

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No 23-0717.05**  
**Expiration Date: July 28, 2026**  
**Approval Date: August 03, 2023**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**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 Trofossil 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 06/12/20, signed and sealed by A. Lynn Miller, P.E.

**G. OTHER**

1. This NOA **revises 17-0227.12** and updates FBC2020 expiring 10/25/22.
2. RER Test proposals **#19-1155** dated 01/10/20 approved by Ishaq I. Chanda, P.E.

*Ishaq I. Chanda*

---

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No 23-0717.05**  
**Expiration Date: July 28, 2026**  
**Approval Date: August 03, 2023**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**4. Evidence submitted under previous approval**

**A. DRAWINGS**

1. Drawing No. **165FD-IS-NOA Rev A** (former **18-26D Rev A**), titled “Series Sentinel 165 Balcony Breeze Aluminum Inswing Door”, sheets 1 through 10 of 10, prepared by manufacturer, dated 07/14/20, signed and sealed by Lynn A. Miller, P.E.

**B. TESTS**

1. None.

**C. CALCULATIONS**

1. None.

**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 Trofossil 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 (submitted under file #20-0722.15)**

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.

**G. OTHER**

1. This NOA **renews #20-0722.15**, expiring 07/28/26.

*Ishaq I. Chanda*

---

**Ishaq I. Chanda, P.E.**  
**Product Control Unit Supervisor**  
**NOA No 23-0717.05**  
**Expiration Date: July 28, 2026**  
**Approval Date: August 03, 2023**



**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**5. New Evidence submitted**

**A. DRAWINGS**

1. Drawing No. **165-IS-FD-LM Rev A** (former **165FD-IS-NOA Rev A**), titled “Series Sentinel 165 Balcony Breeze Aluminum Inswing Door”, sheets 1 through 10 of 10, prepared by manufacturer, 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 07/4/28.
2. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America, Inc.** (Former E.I. DuPont DE Nemours & Co., Inc. for the “Kuraray Trofossil 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.

**G. STATEMENTS**

1. Statement letter of conformance, complying with **FBC 7<sup>th</sup> Edition (2020)** and the **FBC 8<sup>th</sup> Edition (2023)**, dated 07-09-23, issued by manufacturer, signed and sealed by Anthony 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.

**G. OTHER**

1. This NOA **revises** NOA #**21-0510.05** and updates FBC 2023 (8<sup>th</sup> Edition), expiring 07/28/26.

\_\_\_\_\_ *Ishaq I. Chanda* \_\_\_\_\_  
Ishaq I. Chanda, P.E.  
Product Control Unit Supervisor  
NOA No 23-0717.05  
Expiration Date: July 28, 2026  
Approval Date: August 03, 2023

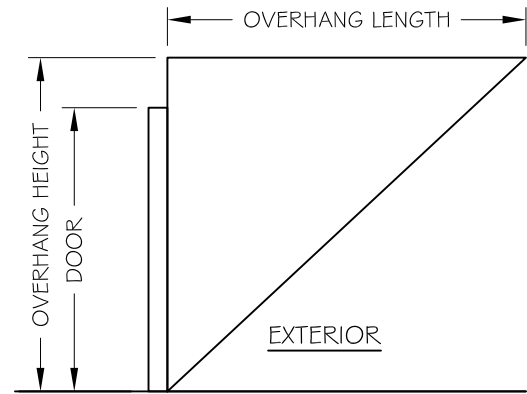
SENTINEL 165, "BALCONY BREEZE" INSWING DOOR  
ALUMINUM, IMPACT RESISTANT

GENERAL NOTES:

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 7TH AND 8TH EDITION FLORIDA BUILDING CODES (2020 / 2023) INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- PRODUCT IS RATED FOR LARGE MISSILE IMPACT AND SMALL MISSILE IMPACT.  
MIAMI-DADE COUNTY APPROVED HURRICANE PROTECTION SYSTEMS (SHUTTERS) ARE NOT REQUIRED.
- ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
- 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 BUILDING CODE AND ADOPTED STANDARDS.
- METAL STRUCTURES NOT BY CGI WINDOWS AND DOORS, INC. TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY THIS GLAZING SYSTEM AND TO TRANSFER SUCH LOADS TO THE BUILDING STRUCTURAL MEMBERS, TO BE REVIEWED BY BUILDING OFFICIAL.
- THE DESIGN LOADS SHOWN IN THIS DOCUMENT ARE ALLOWABLE DESIGN LOADS.
- DOORS ARE NOT APPROVED FOR AIR AND WATER INFILTRATION, SEE NOTE BELOW FOR OVERHANG REQUIREMENTS).

OVERHANG REQUIREMENT:

THE INSWING DOOR IS NOT APPROVED IN AREAS WHERE WATER INFILTRATION REQUIREMENT IS NEEDED. IT COULD BE INSTALLED AT LOCATIONS PROTECTED BY AN OVERHANG MEETING THE CRITERIA IN ILLUSTRATION BELOW OR IN NON-HABITABLE AREAS WHERE WATER INFILTRATION IS ACCEPTED, PER FBC REQUIREMENTS.



$$OH \text{ RATIO} = \frac{\text{OVERHANG LENGTH}}{\text{OVERHANG HEIGHT}} \geq 1$$

DESIGN PRESSURE RATING  
SEE TABLES ON SHEETS 2

IMPACT RATING  
RATED FOR LARGE & SMALL  
MISSILE IMPACT RESISTANCE.  
SHUTTERS ARE NOT REQUIRED

TYPICAL ANCHORS: (SEE ELEVATIONS, SHEET 2, FOR SPACING)

1/4" DIA. ULTRAACON+ BY 'DEWALT' (FU= 164 KSI, FY= 148 KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES  
1-3/8" MIN. PENETRATION INTO WOOD (HEAD, SILL OR JAMB)

THRU 1 BY WOOD BUCKS OR DIRECTLY INTO MASONRY OR CONCRETE  
1-1/4" MIN. EMBED INTO CONCRETE, FILLED BLOCK OR HOLLOW BLOCK

#14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES  
1-1/2" MIN. PENETRATION INTO WOOD (HEAD, SILL OR JAMB)

INTO MIAMI-DADE COUNTY APPROVED MULLIONS  
INTO METAL STRUCTURE.  
STEEL : 12 GA. MIN. (FY = 36 KSI MIN.)  
ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)  
STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ALL ANCHOR HEAD TYPES ARE ALLOWED

TYPICAL EDGE DISTANCE

INTO CONCRETE AND MASONRY = 2-1/2" MIN.  
INTO WOOD STRUCTURE = 1" MIN.  
INTO METAL STRUCTURE = 3/4" MIN.

CONCRETE  $f_c$  = 3000 PSI MIN.  
C-90 HOLLOW/FILLED BLOCK  $f_m$  = 2000 PSI MIN.

SEALANTS:

ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER GLAZING BEAD TO FRAME INSTALLATION FASTENERS SEALED WITH SILICON SEALANT.

WOOD BUCKS:

1X OR 2X WOOD BUCKS NOT BY CGI WINDOWS AND DOORS, INC.  
MUST BE PROPERLY SECURED TO SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.


CODES / STANDARDS USED:

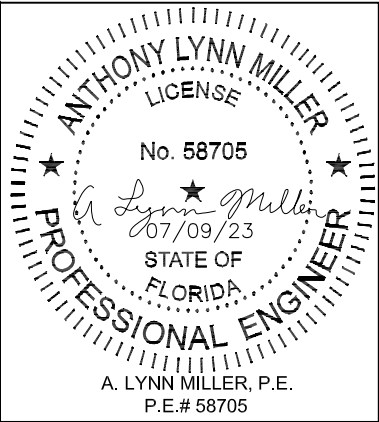
- 2023 FLORIDA BUILDING CODE (FBC), 8TH EDITION
- 2020 FLORIDA BUILDING CODE (FBC), 7TH EDITION
- ASTM E1300-09
- ANSI/AF&PA NDS-2018 FOR WOOD CONSTRUCTION
- ALUMINUM DESIGN MANUAL, ADM-2020
- AISI S100-16
- AISC 360-16

GENERAL NOTES.....1
ANCHOR TYPES.....1
ELEVATIONS.....2
VERTICAL SECTION.....3,4
HORIZONTAL SECTION.....5,6
GLAZING DETAILS.....7
BOM.....8
HARDWARE DETAILS.....8
BOM.....9,10
CORNER ASSEMBLY.....9,10

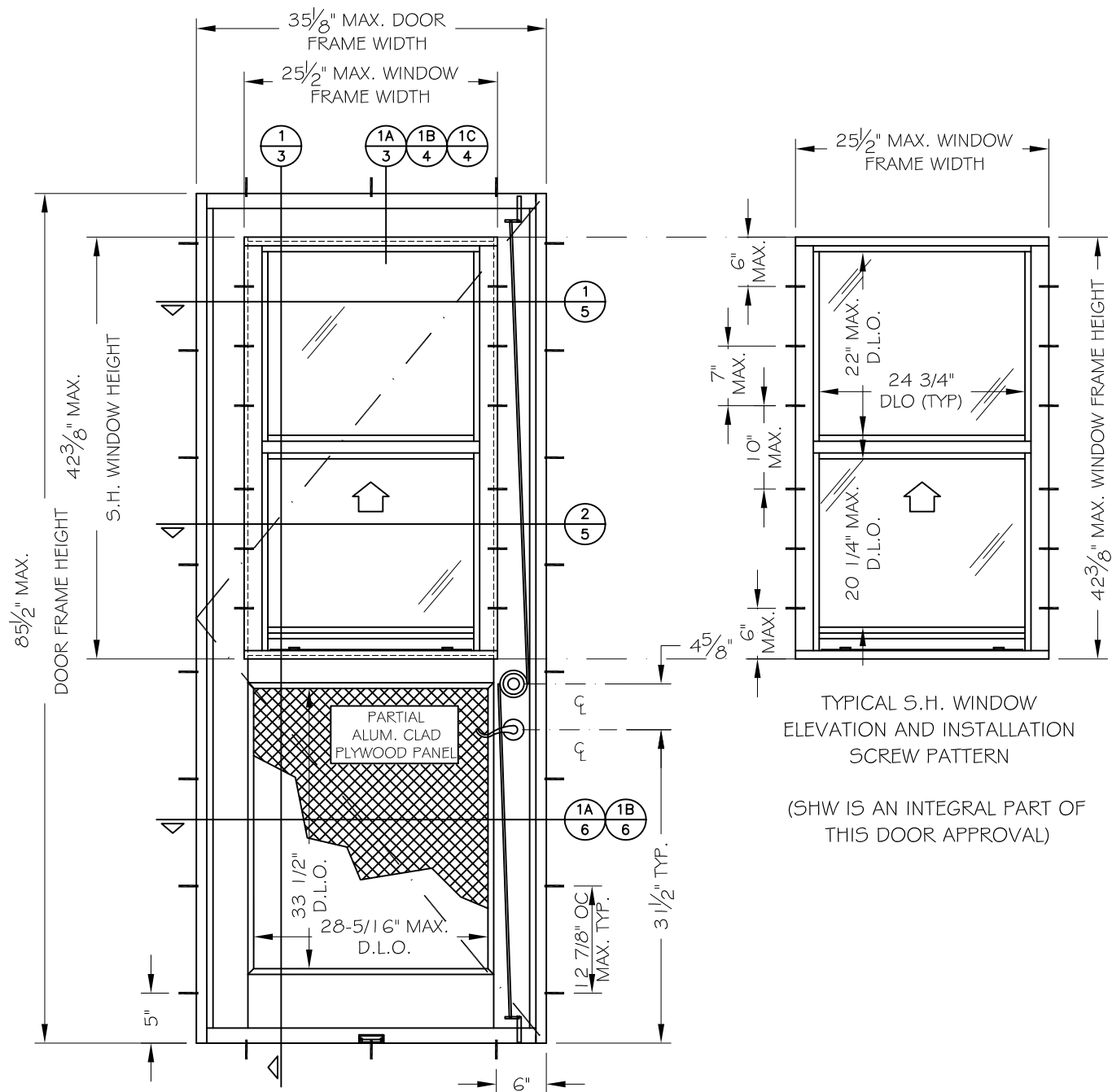
**PRODUCT REVISED**  
**as complying with the Florida**  
**Building Code**  
**NOA-No.** 23-0717.05  
**Expiration Date** 07/28/2026  
**By** *Ishaq I. Chande*  
**Miami-Dade Product Control**

Revision:  
UPDATED TO 2023  
BUILDING CODE.  
JR - 7/13/23

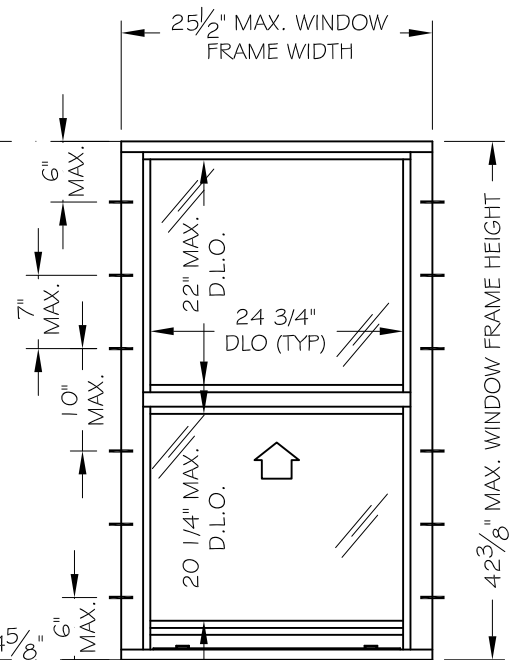
 <b>Impact Resistant Windows &amp; Doors</b>	3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590			PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275  (941) 480-1600		
	SENTINEL INSWING DOOR (LM)			REGISTRATION #29296		
				Date		
				6/17/20		
				By		
GENERAL NOTES			A. MORLESIN			
Series	Desc.	Title	Sheet	1 OF 10	DWG No.	Rev.
FD165-IS					165 IS FD-LM	A



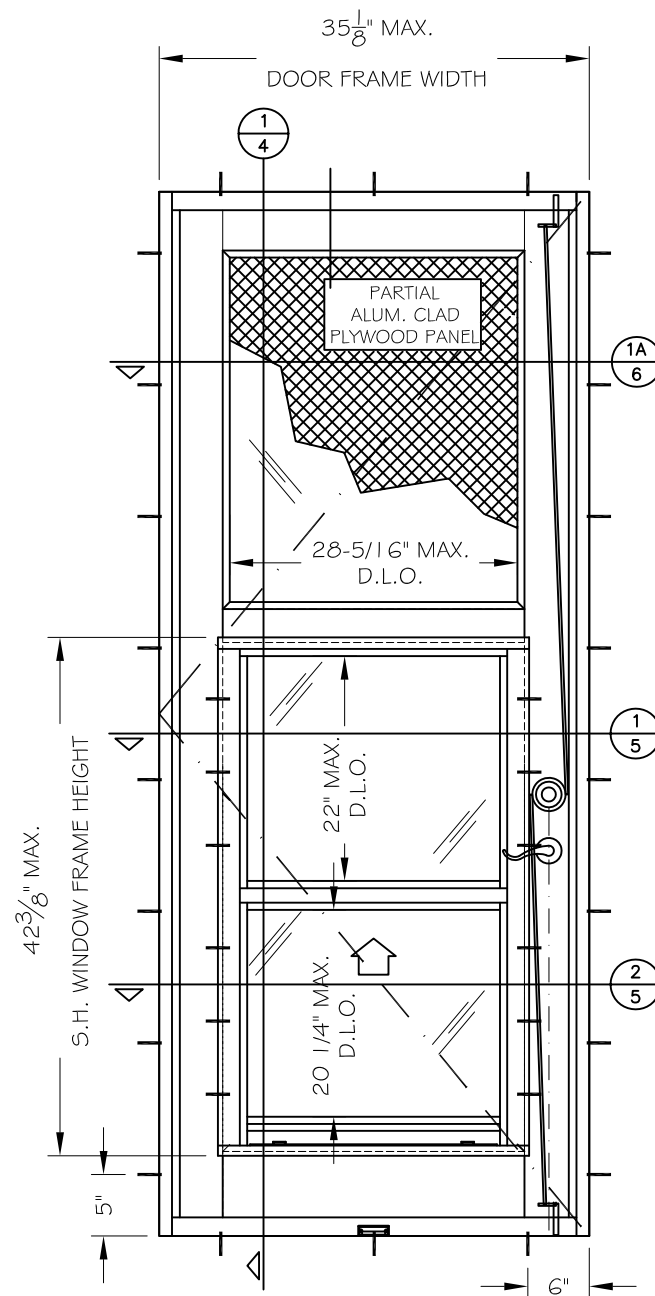




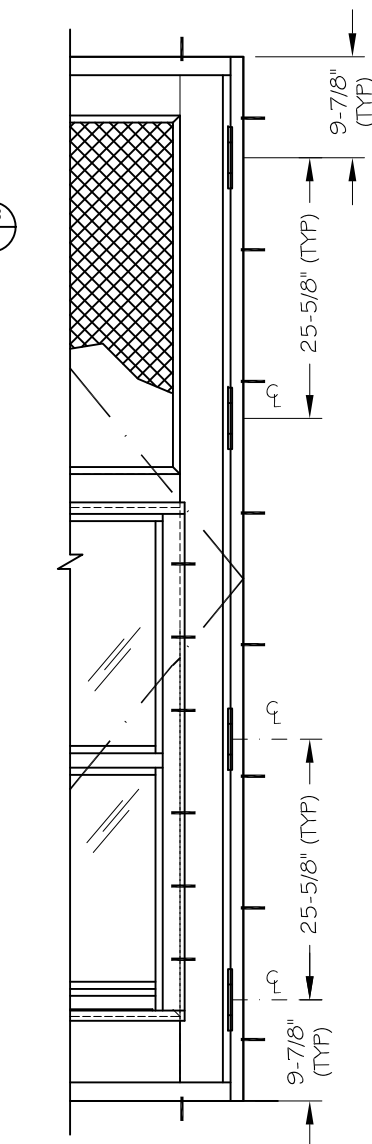
TYPICAL DOOR ELEVATION  
WITH INSTALLATION OF S.H. WINDOW AT  
DOOR UPPER SECTION



TYPICAL S.H. WINDOW  
ELEVATION AND INSTALLATION  
SCREW PATTERN  
(SHW IS AN INTEGRAL PART OF  
THIS DOOR APPROVAL)



TYPICAL DOOR ELEVATION  
WITH INSTALLATION OF S.H. WINDOW AT  
DOOR LOWER SECTION



PARTIAL DOOR ELEVATION  
TO SHOW HINGE LOCATION

PRODUCT IS ONLY APPROVED FOR WHERE WATER  
INFILTRATION REQUIREMENT IS NOT NEEDED.(SEE  
OVERHANG REQUIREMENTS IN SHEET #1)

ALLOWABLE DESIGN LOAD	
WITH STD. THRESHOLD (ITEM E6)	WITH ADA THRESHOLD (ITEM E24)
+90 -110 PSF WHERE WATER INFILTRATION IS <u>NOT</u> NEEDED	+90 -90 PSF WHERE WATER INFILTRATION IS <u>NOT</u> NEEDED
SEE OVERHANG REQUIREMENT (SHEET #1)	

#### WEEP HOLES

##### a) WINDOW

W1: 1/4 x 1-1/4\" LONG WEEP SLOT, 6\" FROM EACH END  
W2: 1/2\" LONG NOTCH, EACH END

##### b) DOOR (IN-SWING ONLY)

W1: 3/16 x 1/2\" LONG WEEP SLOT, ON THE EXTERIOR, AT SILL MIDSPAN  
W2: 3/16 x 1/2\" LONG NOTCH, ON THE INTERIOR, 6\" FROM EACH END


**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0717.05

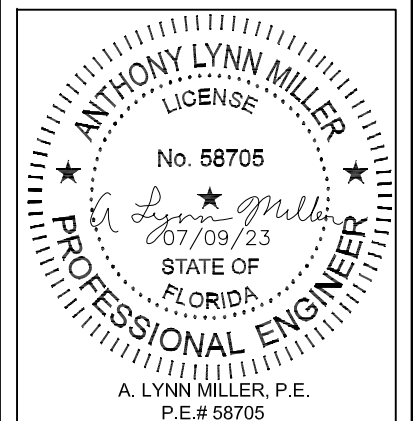
Expiration Date 07/28/2026

By Ishaq I. Chanda  
Miami-Dade Product Control

Revision:

UPDATED TO 2023  
BUILDING CODE.  
JR - 7/13/23

 <b>Impact Resistant Windows &amp; Doors</b>	3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		REGISTRATION #29296	
	SENTINEL INSWING DOOR (LM)		Date		6/17/20	
	ELEVATIONS		Drawn By		A. MORLESIN	
Series	FD165-IS	Sheet	2 OF 10		DWG No.	165 IS FD-LM
Rev.					A	



$\frac{1}{3}$ 

## STD. THRESHOLD OPTION




PRODUCT IS ONLY APPROVED FOR WHERE WATER INFILTRATION REQUIREMENT IS NOT NEEDED.(SEE OVERHANG REQUIREMENTS IN SHEET #1)

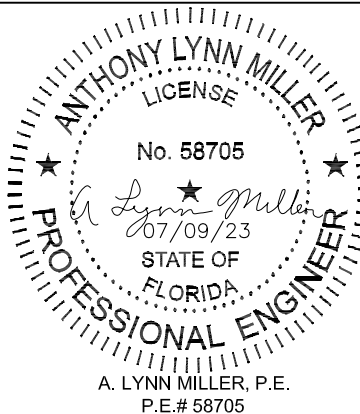
**PRODUCT REVISED**  
as complying with the Florida  
Building Code

**Expiration Date**07/28/2026

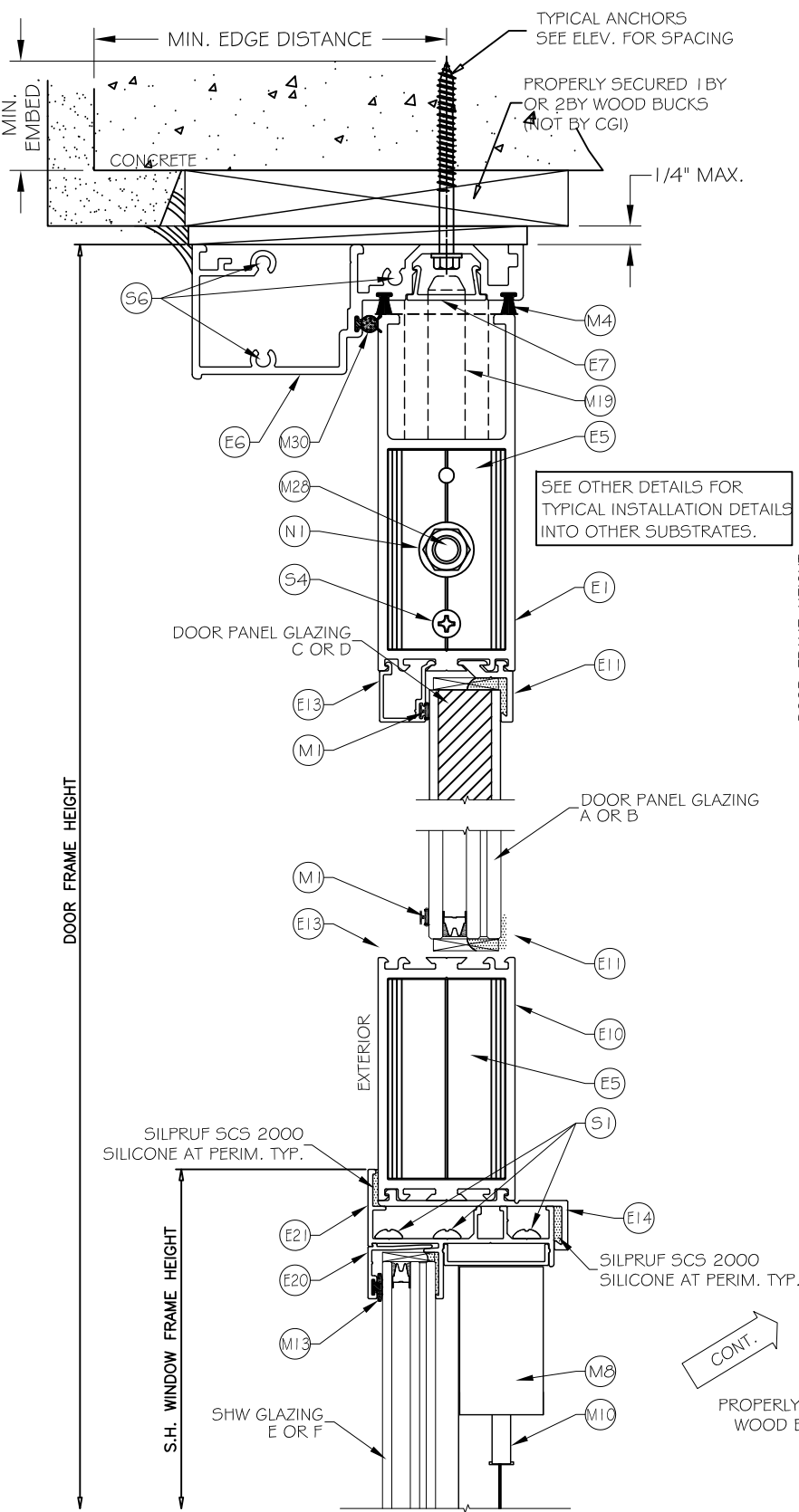
By Ishag I. Chande  
Miami-Dade Product Control

Revision:

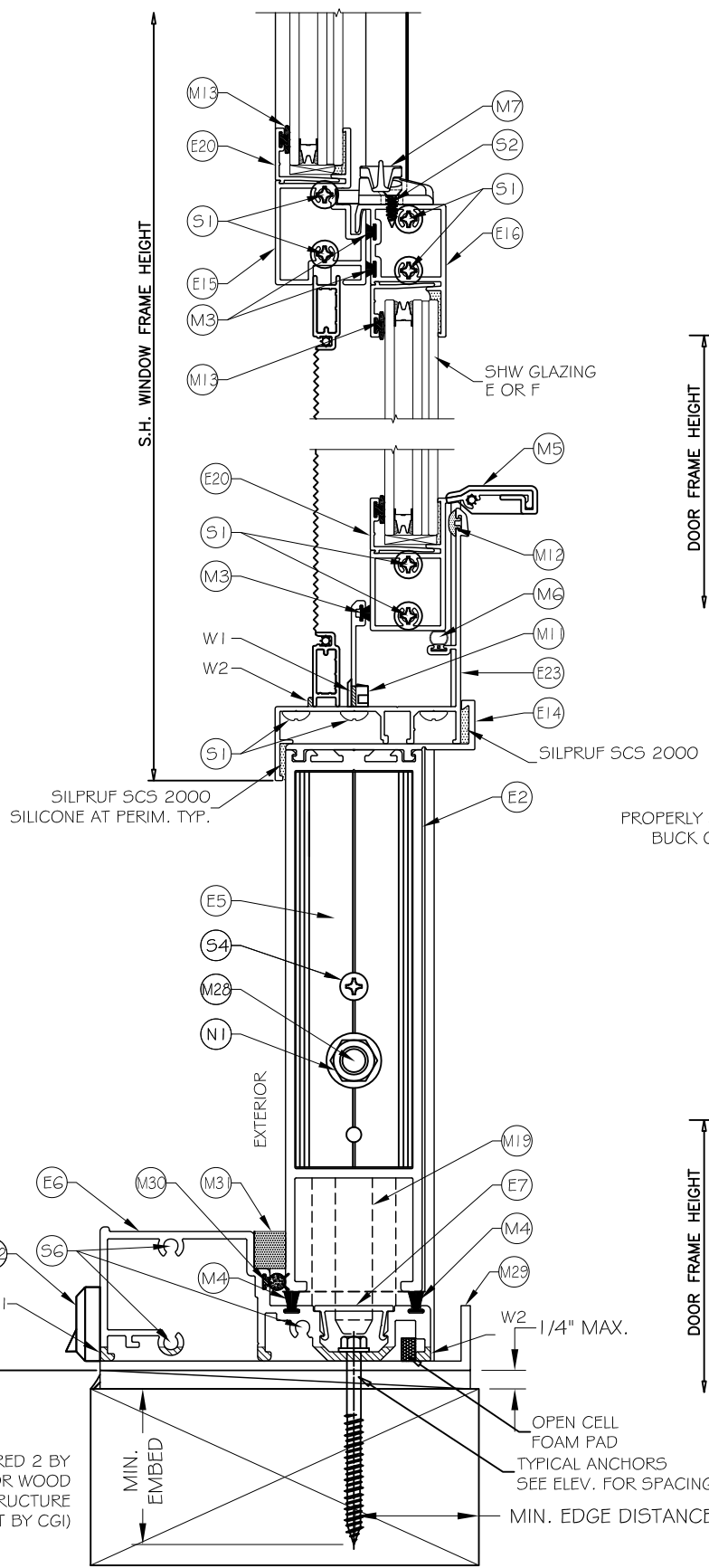
	3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275  (941) 480-1600	
	Impact Resistant Windows & Doors		REGISTRATION #29296	
Title	SENTINEL INSWING DOOR (LM)		Date	6/17/20
Less.	VERTICAL CROSS-SECTION		By	A. MORLESIN
Series	FD165-IS	3 OF 10	DWG No.	165 IS FD-LM
Sheet	3 OF 10		Rev.	A



VERTICAL CROSS SECTION 1/4

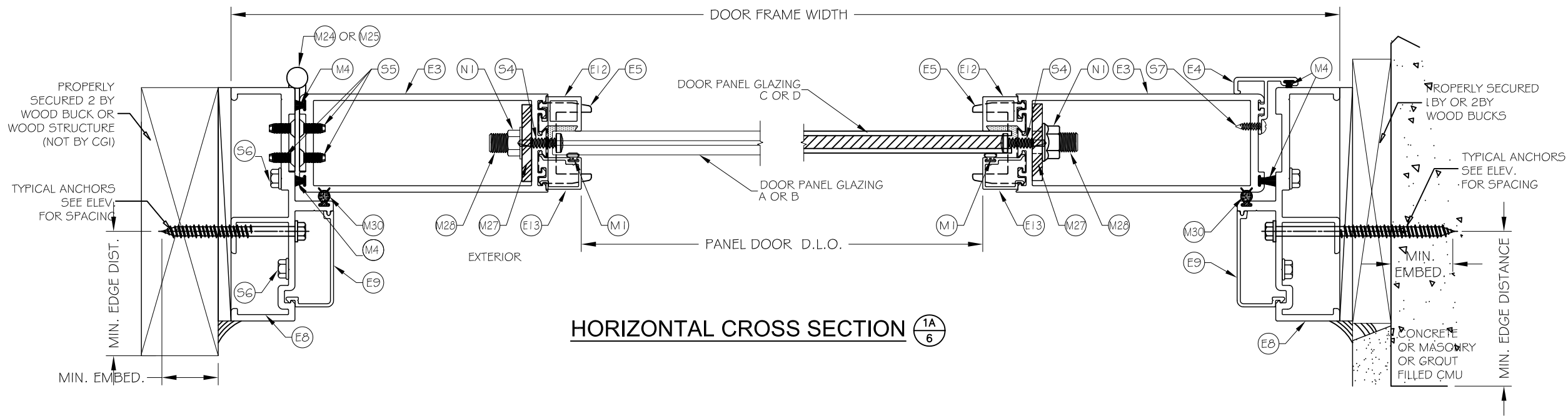


CONT.

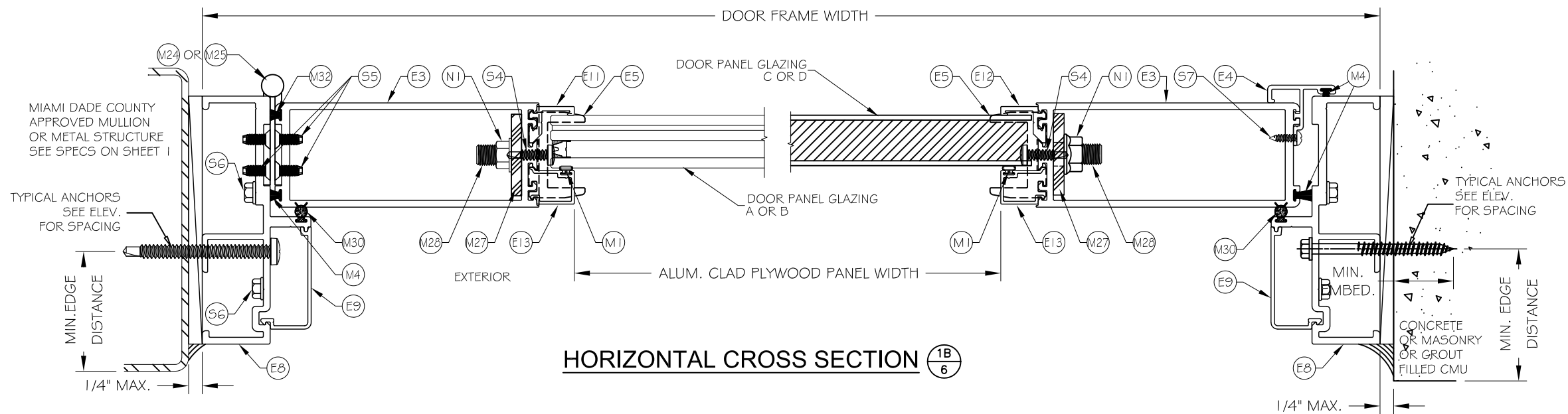








HORIZONTAL CROSS SECTION 1A  
6




HORIZONTAL CROSS SECTION 1B  
6

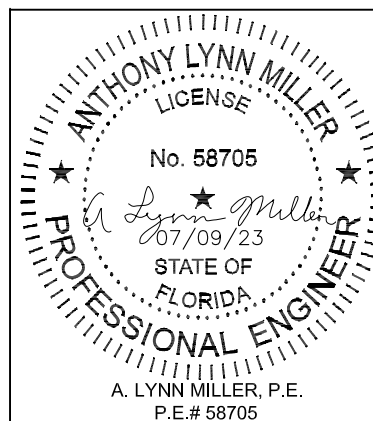
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0717.05

Expiration Date 07/28/2026

By *Ishaq I. Chanda*  
Miami-Dade Product Control

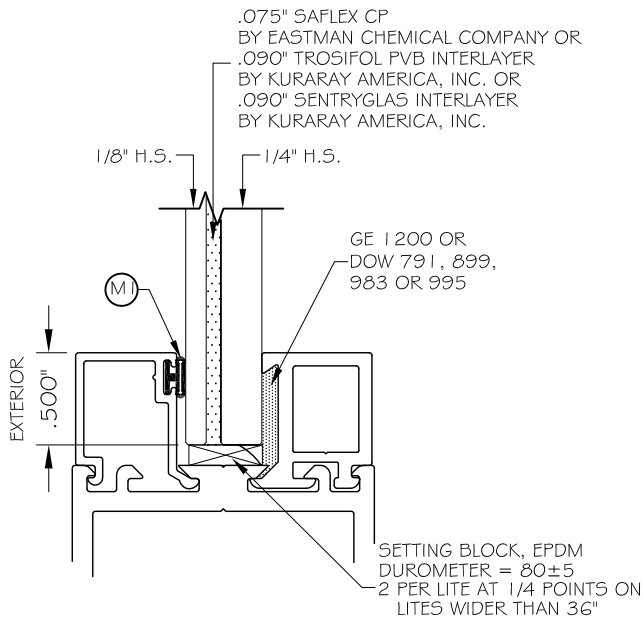
UPDATED TO 2023  
BUILDING CODE.  
JR - 7/13/23

 <b>Impact Resistant Windows &amp; Doors</b>	3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590			PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296			Rev. A
				SENTINEL INSWING DOOR (LM)		Date 6/17/20	
				HORIZONTAL CROSS-SECTION		By Drawn A. MORLESIN	
Series	FD165-IS	Sheet	6 OF 10	DWG No.	165 IS FD-LM		

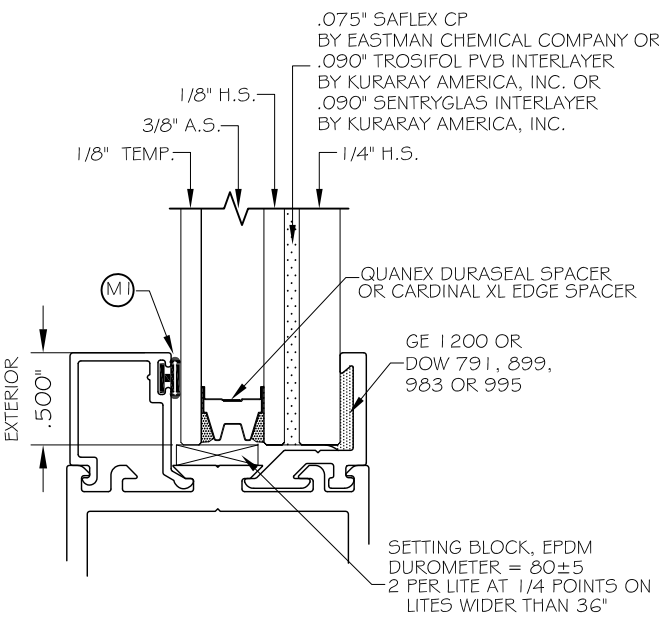




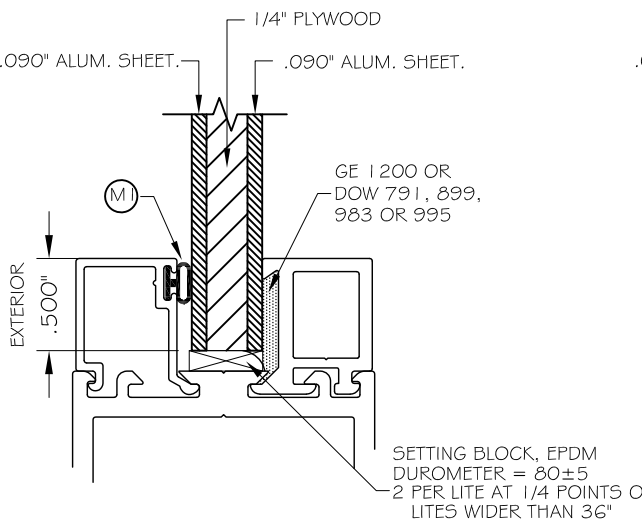
DOOR PANEL GLAZING  
DETAILS & OPTIONS



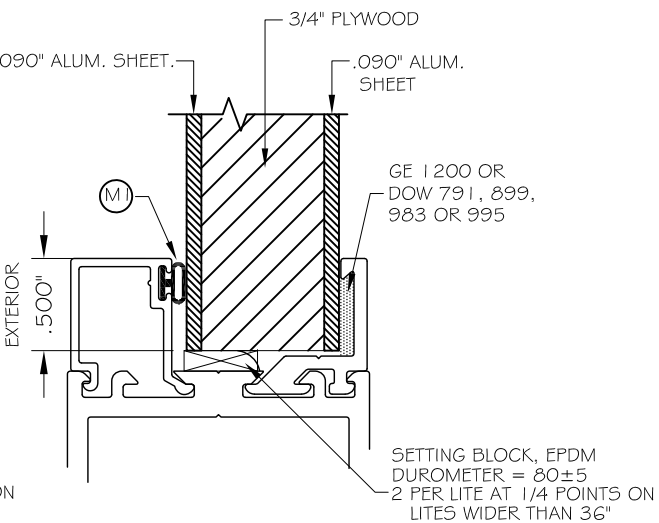
**GLASS TYPE A**  
7/16" OVERALL THICKNESS



**GLASS TYPE B**  
1" OVERALL THICKNESS

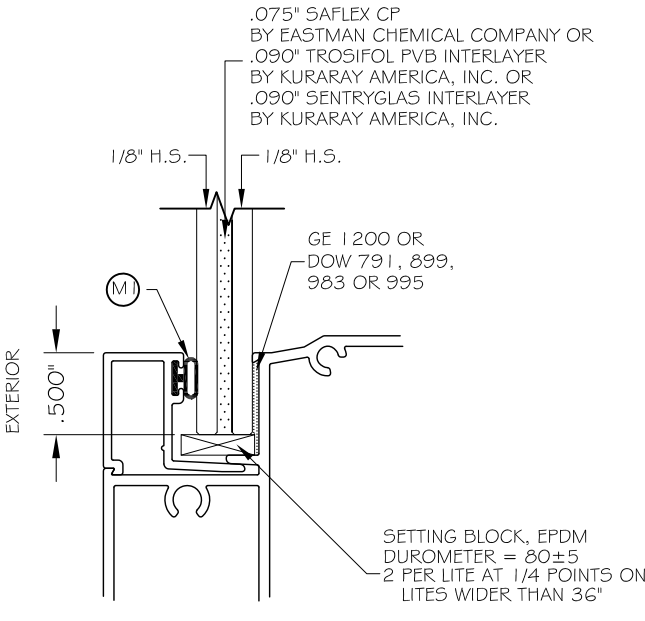


**ALUM. CLAD PLYWOOD TYPE C**  
7/16" OVERALL THICKNESS

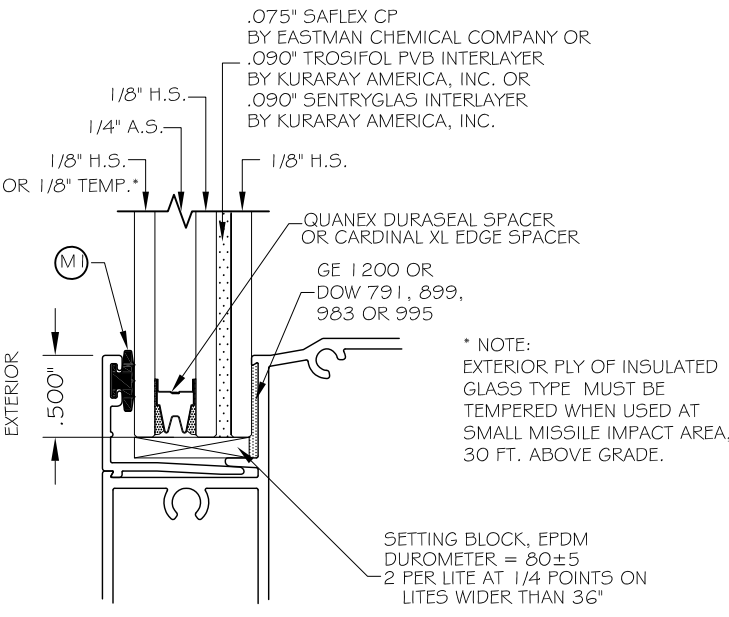


**ALUM. CLAD PLYWOOD TYPE D**  
1" OVERALL THICKNESS

SINGLE HUNG WINDOW GLAZING  
DETAILS & OPTIONS



**GLASS TYPE E**  
5/16" OVERALL THICKNESS



**GLASS TYPE F**  
11/16" OVERALL THICKNESS

NOTE:  
GLASS COMPLIES WITH ASTM E1300-09 (3 SEC. GUSTS).

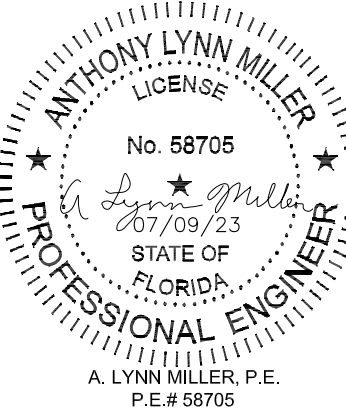
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0717.05

Expiration Date 07/28/2026

By Ishaq I. Chanda  
Miami-Dade Product Control

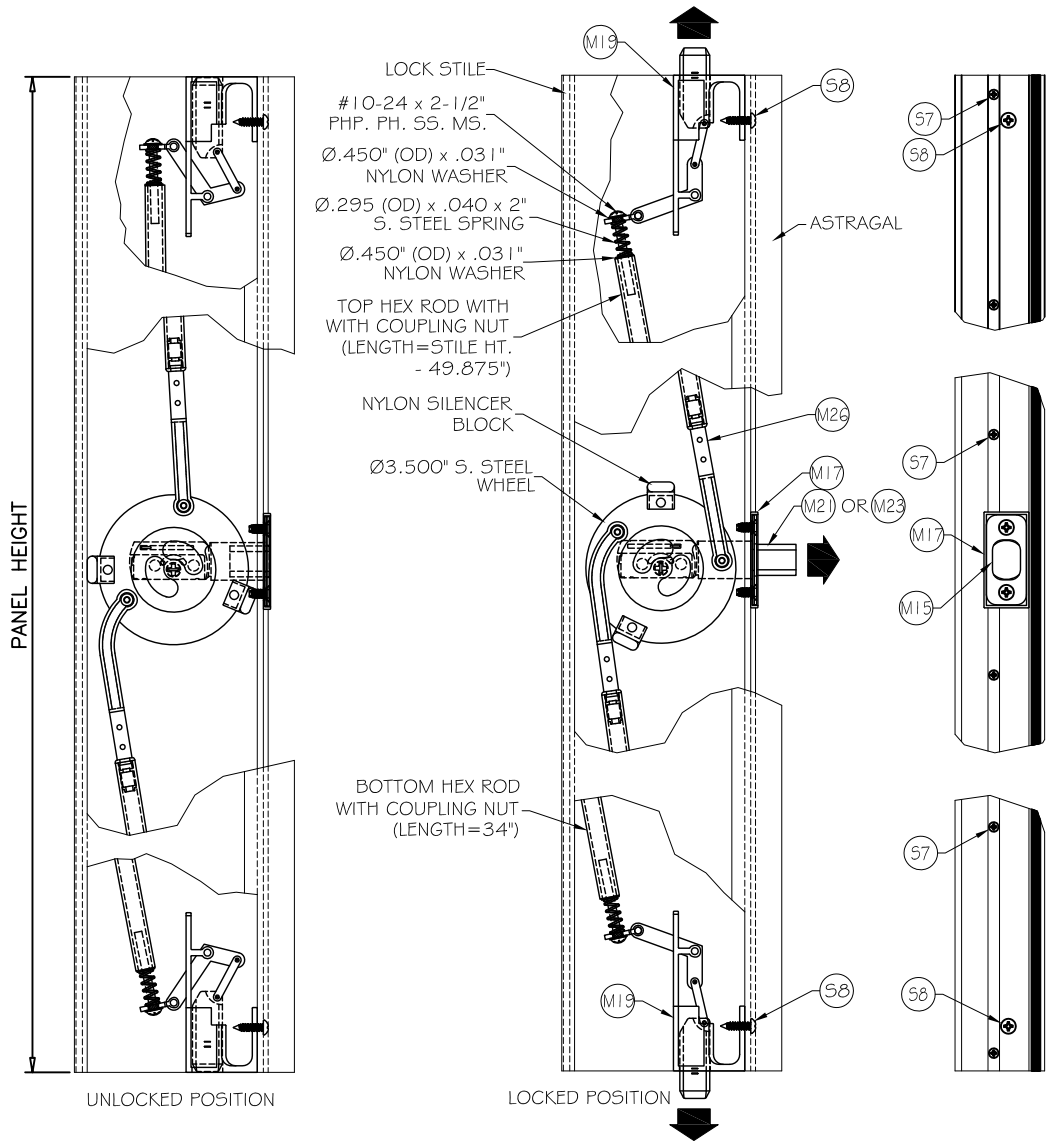
UPDATED TO 2023  
BUILDING CODE.  
JR - 7/13/23

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275	REGISTRATION #29296 (941) 480-1600	6/17/20 Date	A. MORLESIN By	165 IS FD-LM Rev.
Impact Resistant Windows & Doors	3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	SENTINEL INSWING DOOR (LM) Title	GLAZING DETAILS Desc.	FD165-IS Series



BILL OF MATERIALS					
ITEM	PART No.	QUANTITY	DESCRIPTION	MATERIAL	SUPPLIER
E1	AL-500A	1	DOOR PANEL TOP RAIL	6063-T6	KEYMARK
E2	AL-501	1	DOOR PANEL BOTTOM RAIL	6063-T6	KEYMARK
E3	AL-502	2	DOOR PANEL VERTICAL STILE	6063-T6	KEYMARK
E4	AL-505	1	ASTRAGAL	6063-T5	KEYMARK
E5	AL-506	6	SHEAR BLOCK	6063-T6	KEYMARK
E6	AL-507	2	DOOR FRAME HEAD / SILL	6063-T6	KEYMARK
E7	AL-508	2	DOOR FRAME HEAD / SILL SCREW CAP	6063-T5	KEYMARK
E8	AL-509	2	DOOR FRAME JAMB	6063-T6	KEYMARK
E9	AL-511	2	JAMB SCREW COVER	6063-T5	KEYMARK
E10	AL-514	1	TRUE MUNTIN (4-5/8")	6063-T5	KEYMARK
E11	AL-515	A5 REQD.	GLAZING ADAPTOR (INSUL.-LAM. GLASS)	6063-T6	KEYMARK
E12	AL-519	A5 REQD.	GLAZING ADAPTOR (7/16" LAM. / SOLID PANEL)	6063-T6	KEYMARK
E13	AL-396	A5 REQD.	GLAZING BEAD (7/16" LAM. / INSUL.-LAM. GLASS)	6063-T5	KEYMARK
E14	AL-1061	4/DOOR	WINDOW FILLER	6063-T6	KEYMARK
E15	AL-103	1	WINDOW FIXED MEETING RAIL	6063-T6	KEYMARK
E16	AL-104	1	WINDOW LOCK RAIL	6063-T6	KEYMARK
E17	AL-105	1	WINDOW HANDLE RAIL	6063-T6	KEYMARK
E18	AL-106	2	WINDOW SASH RAIL	6063-T6	KEYMARK
E19	AL-107	A5 REQD.	GLAZING BEAD (5/16" LAM. GLASS)	6063-T5	KEYMARK
E20	AL-108	A5 REQD.	GLAZING BEAD (3/4" INSUL.-LAM. GLASS)	6063-T5	KEYMARK
E21	AL-135	1	WINDOW FRAME HEAD	6063-T6	KEYMARK
E22	AL-136	2	WINDOW FRAME JAMB	6063-T6	KEYMARK
E23	AL-137	1	WINDOW FRAME SILL	6063-T6	KEYMARK
E24	AL-540	1	ADA SADDLE THRESHOLD	6063-T6	SCREEN TECH.
E25	HD-DOOR SWEEP	1	DOOR SWEEP (OPTIONAL)	ALUM.	SCREEN TECH.
M1	382V	A5 REQD.	GLAZING BULB (DUROMETER 75/80 SHORE A)	PVC	MELTPPOINT
M2	BL-110-2340	2/WINDOW	BLOCK & TACKLE BALANCE	-	BSI
M3	W23201	A5 REQD.	.187" x 200" ULTRA-FIN WEATHERSTRIP	-	ULTRAFAB
M4	W33321	A5 REQD.	.187" x 320" ULTRA-FIN WEATHERSTRIP	-	ULTRAFAB
M5	HD-131-R/L	1/EACH	HANDLE RAIL END CAP (R) RIGHT AND (L) LEFT	NYLON	M&M PLASTICS
M6	E26018WN	1/WINDOW	BULB WEATHERSTRIP, AT WINDOW SILL	PVC	ULTRAFAB
M7	HD-CAM LOCK	1/WINDOW	WINDOW CAM LOCK	ZINC	TRUTH
M8	HD-132	2/SASH	SASH STOP, 2" LONG	PVC	PROTOTYPE
M9	HD-125	2/SASH	SASH CAM	PVC	M&M PLASTICS
M10	HD-121	2/WINDOW	SASH TAKE OUT CLIP	-	BSI
M11	HD-146-G	2/WINDOW	WINDOW WEEP COVER	PVC	AMESBURY
M12	HD-134	1/WINDOW	SILL SPACER	PVC	PROTOTYPE
M13	HD-12-10106	A5 REQD.	GLAZING GASKET (INSUL.-LAM.)	PVC	MELTPPOINT
M14	HD-537	1	LATCH LOCK STRIKE PLATE	S.STEEL	BALDWIN
M15	HD-538	1	DEADBOLT STRIKE PLATE	S.STEEL	BALDWIN
M16	HD-536N	1	LATCH LOCK STRIKE PLATE SHIM	NYLON	-
M17	HD-390P	1/EACH	LATCH LOCK STRIKE & DEADBOLT PLATE SPACER	NYLON	-
M18	HD-STRIKE BOX	1/EACH	LATCH LOCK STRIKE & DEADBOLT DUST BOX	NYLON	-
M19	HD-525-9-REV	1	BOLT LOCK ASSEMBLY	S.STEEL	CGI
M20	HD-5455.056	1	WAVE SATIN NICKEL STRIKE LEVER	-	BALDWIN
M21	HD-8231.056	1	TRADITIONAL SATIN NICKEL DEADBOLT	-	BALDWIN
M22	HD-34-10116	1	WAVERLIE SATIN STRIKE LEVER	-	COPPER CREEK
M23	HD-DB241055	1	SATIN STAINLESS DEADBOLT	-	COPPER CREEK
M24	HD-CH-108-W	4/LEAF	4-1/2" x 4" x 0.140" THK. HINGE	ALUMINUM	SULLIVAN
M25	HD-AB800-US	4/LEAF	4-1/2" x 4" x 0.140" THK. HINGE	S.STEEL	HAGER
M26	-	1/LEAF	THREE POINT LOCK MECHANISM ASSEMBLY	-	CGI
M27	HD-SHEAR PLATE	4/LEAF	SHEAR PLATE FOR Ø3/8" THREADED ROD	6063-T6	EASTERN METAL
M28	HD-Ø3/8" ROD	2/LEAF	Ø3/8"-16 FULLY THREADED ROD (ZINC PLATED)	STEEL	-
M29	HD-SILL PAN	1 EACH	5 x 7/8 x 1/8" THK. SILL PAN (AT IN-SWING ONLY)	ALUMINUM	EASTERN METAL


BILL OF MATERIALS					
ITEM	PART No.	QUANTITY	DESCRIPTION	MATERIAL	SUPPLIER
M30	32084	A5 REQ.D	FOAM-TITE CLOSED CELL COMPRESSION SEAL	-	AMESBURY
M31	RE41	A5 REQ.D	1/2 x 1/2" SELF ADHESIVE CLOSED CELL FOAM SEAL	EPDM	FRANK LOWE
M32	HD-542P	1	IN-SWING DOOR WEEP COVER, AT MIDSPAN	PVC	-
M33	HD-CLIP	1	2" X 2" X 1/4" THK. ALUM. ANGLE, 2" LG.	ALUM.	-
S1	-	2 OR 3/CORNER	#10 x 1-1/4" PHP. PH. SMS. WINDOW ASSY.	S. STEEL	-
S2	-	2/LOCK	#6 x 1/2" PHP. FH. SMS. SWEEP LOCK ASSY.	S. STEEL	-
S3	-	A5 REQD.	#10 x 1" PHP. FH. SMS. WINDOW TO DOOR ATTACH	S. STEEL	-
S4	-	1/EACH	#10 x 3/4" PHP. PH. SMS. TEK SHEAR BLOCK ASSY.	S. STEEL	-
S5	-	8/HINGE	#12-24 x 1/2" PHP. FH. UC. TF. HINGE ASSY.	S. STEEL	-
S6	-	3/CORNER	#12 x 1-1/4" HH. SMS. DOOR FRAME ASSY.	S. STEEL	-
S7	-	5/LEAF	#6 x 1/2" PHP. TH. SMS. ASTRAGAL ASSY.	S. STEEL	-
S8	-	1/BOLT LOCK	#10 x 3/4" PHP. PH. SMS. BOLT LOCK ASSY.	S. STEEL	-
S9	-	2/LEG	#6 x 1/2" PHP. PH. SMS.	S. STEEL	-
S10	-	4/CLIP	#12-24 X 1/2" PHP. FH. UC.	S. STEEL	-
N1	-	4/LEAF	Ø3/8"-16 SERRATED-FLANGE LOCKNUT (ZINC PLATED)	STEEL	-

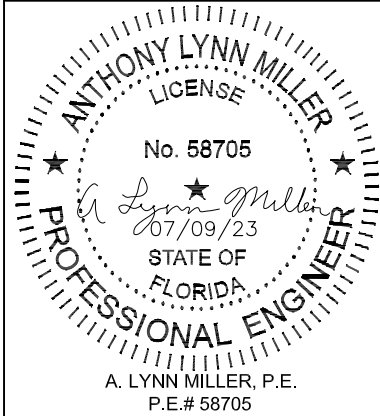


PROPRIETARY THREE-POINT LOCK MECHANISM DETAIL

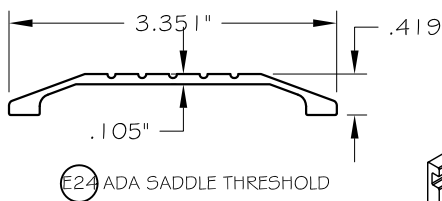
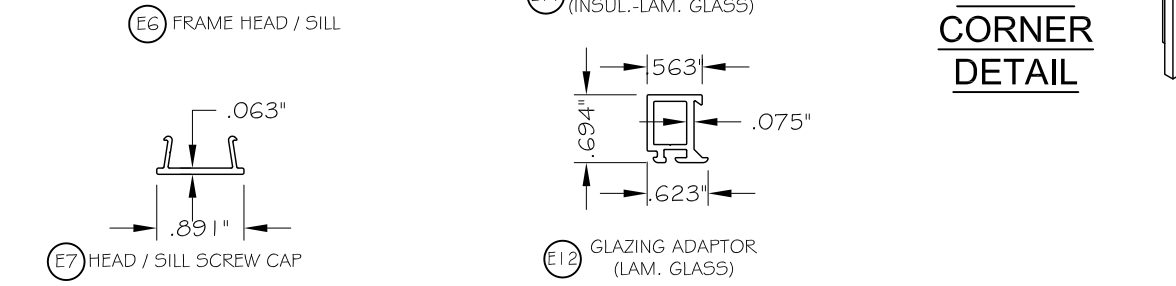
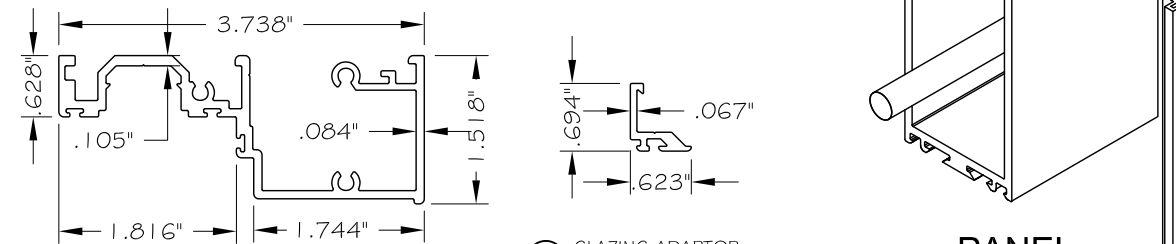
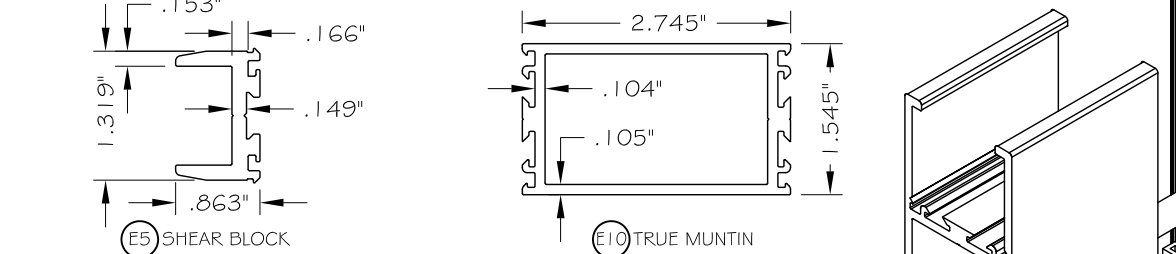
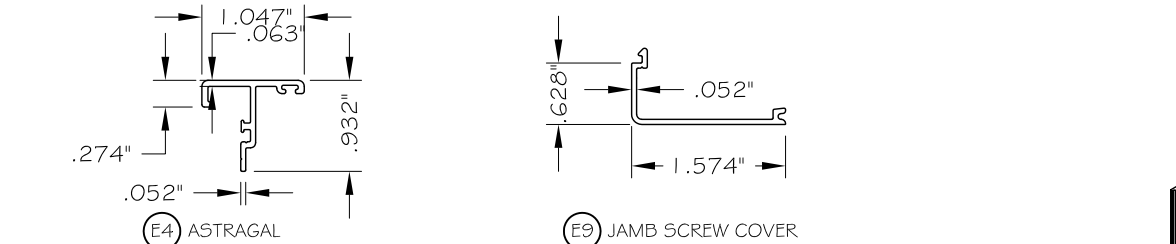
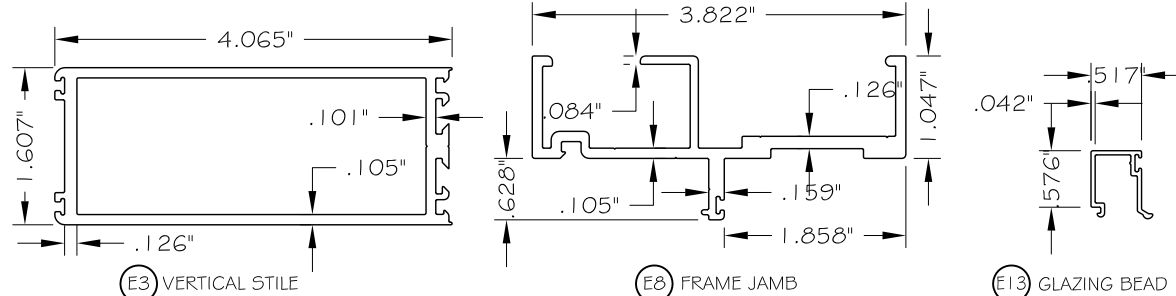
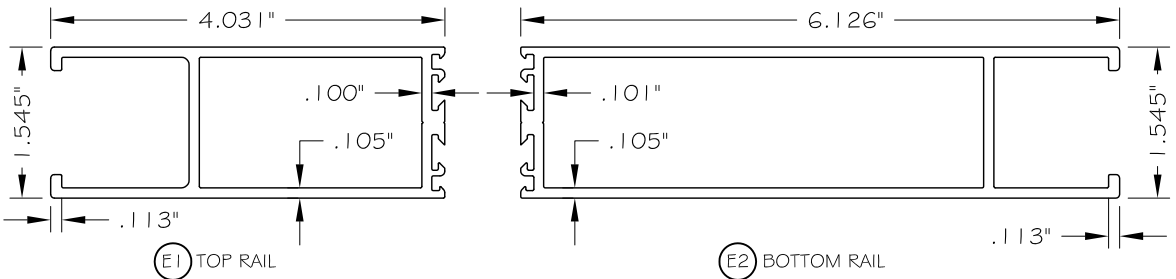
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0717.05  
Expiration Date 07/28/2026  
By Ishaq I. Chanda  
Miami-Dade Product Control

Revision:  
UPDATED TO 2023  
BUILDING CODE.  
JR - 7/13/23

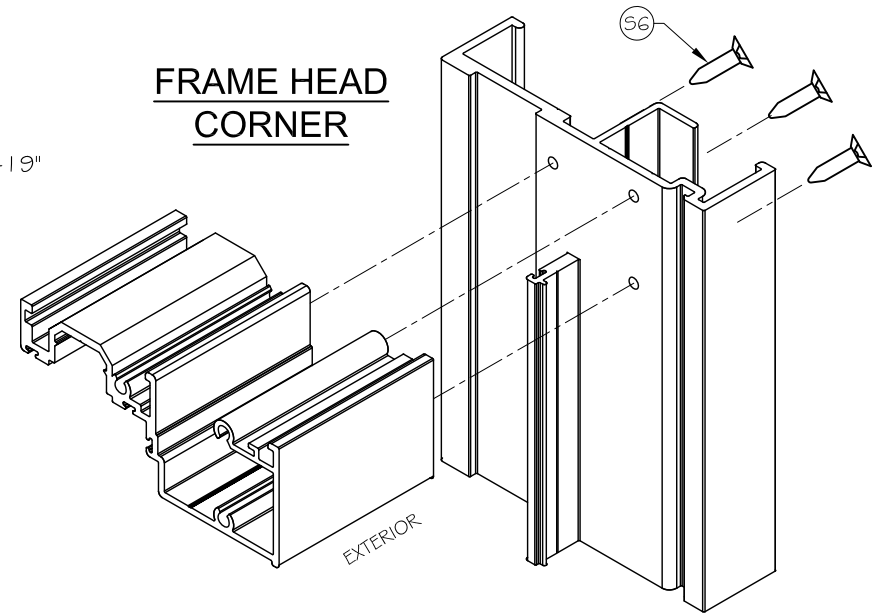
 <b>Impact Resistant Windows &amp; Doors</b>			PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275		
3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590			(941) 480-1600		
SENTINEL INSWING DOOR (LM)			REGISTRATION #29296		
			Date		6/17/20
BOM AND HARDWARE DETAILS			A. MORLESIN		
FD165-IS			8 OF 10		Rev. A
Sheet			DWG No.		165 IS FD-LM
Series			Desc.		Title



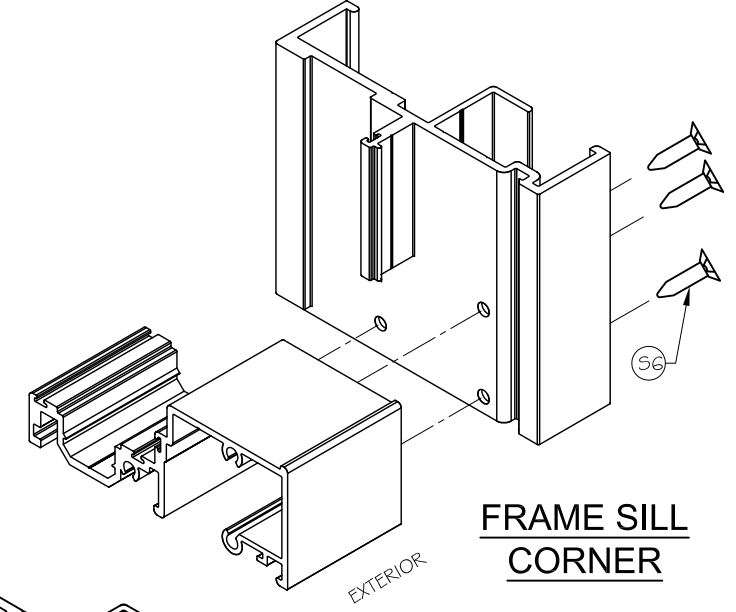
DOOR PANEL COMPONENTS



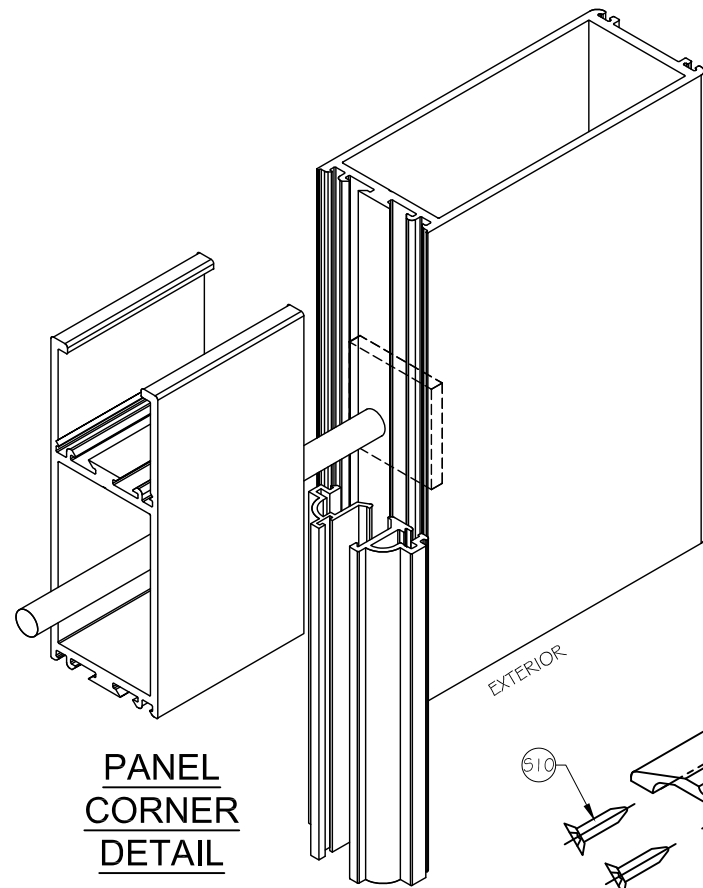
FRAME HEAD CORNER



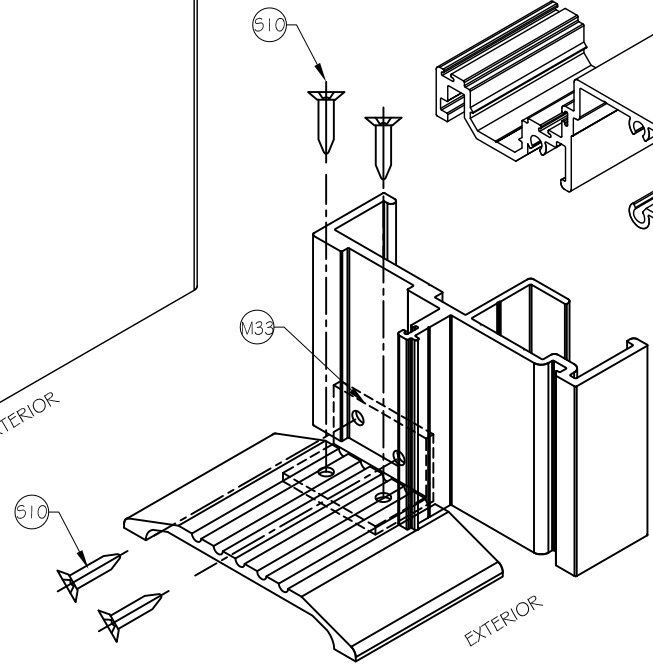
FRAME SILL CORNER



PANEL CORNER DETAIL



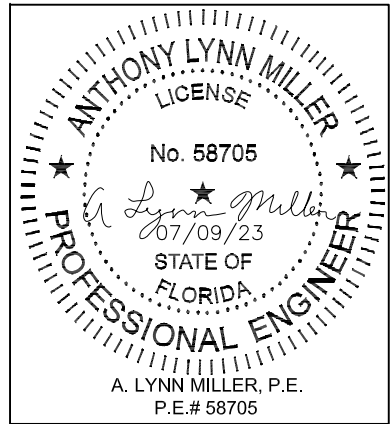
ADA SADDLE THRESHOLD CORNER DETAIL



**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0717.05  
Expiration Date 07/28/2026  
By *Ishaq I. Chanda*  
Miami-Dade Product Control

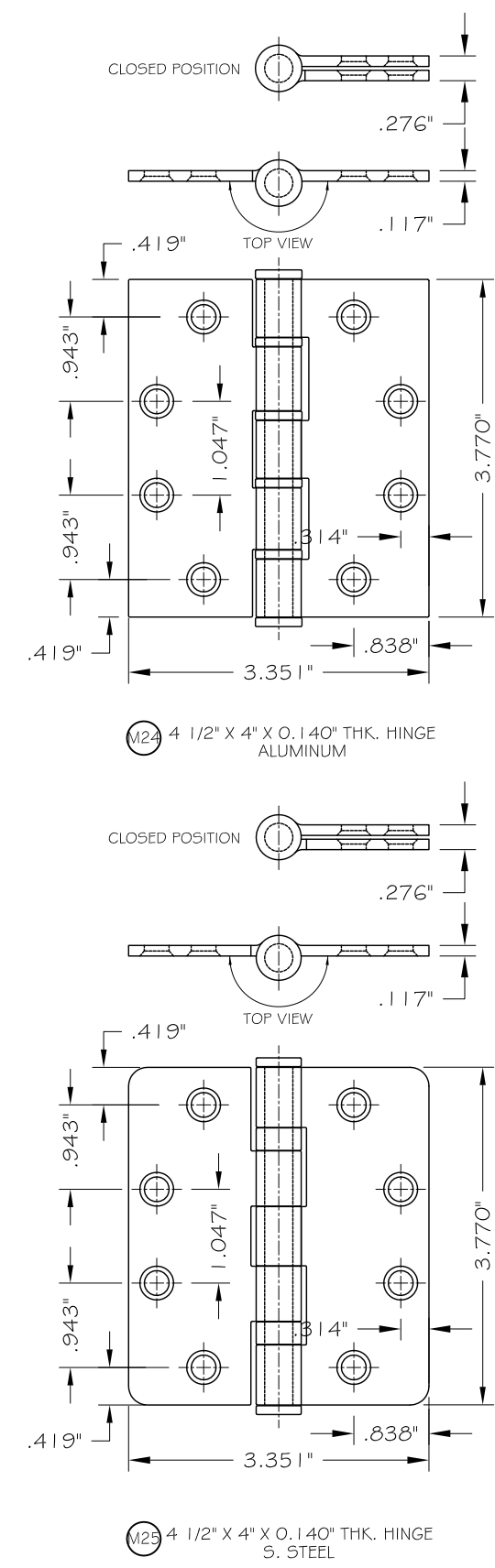
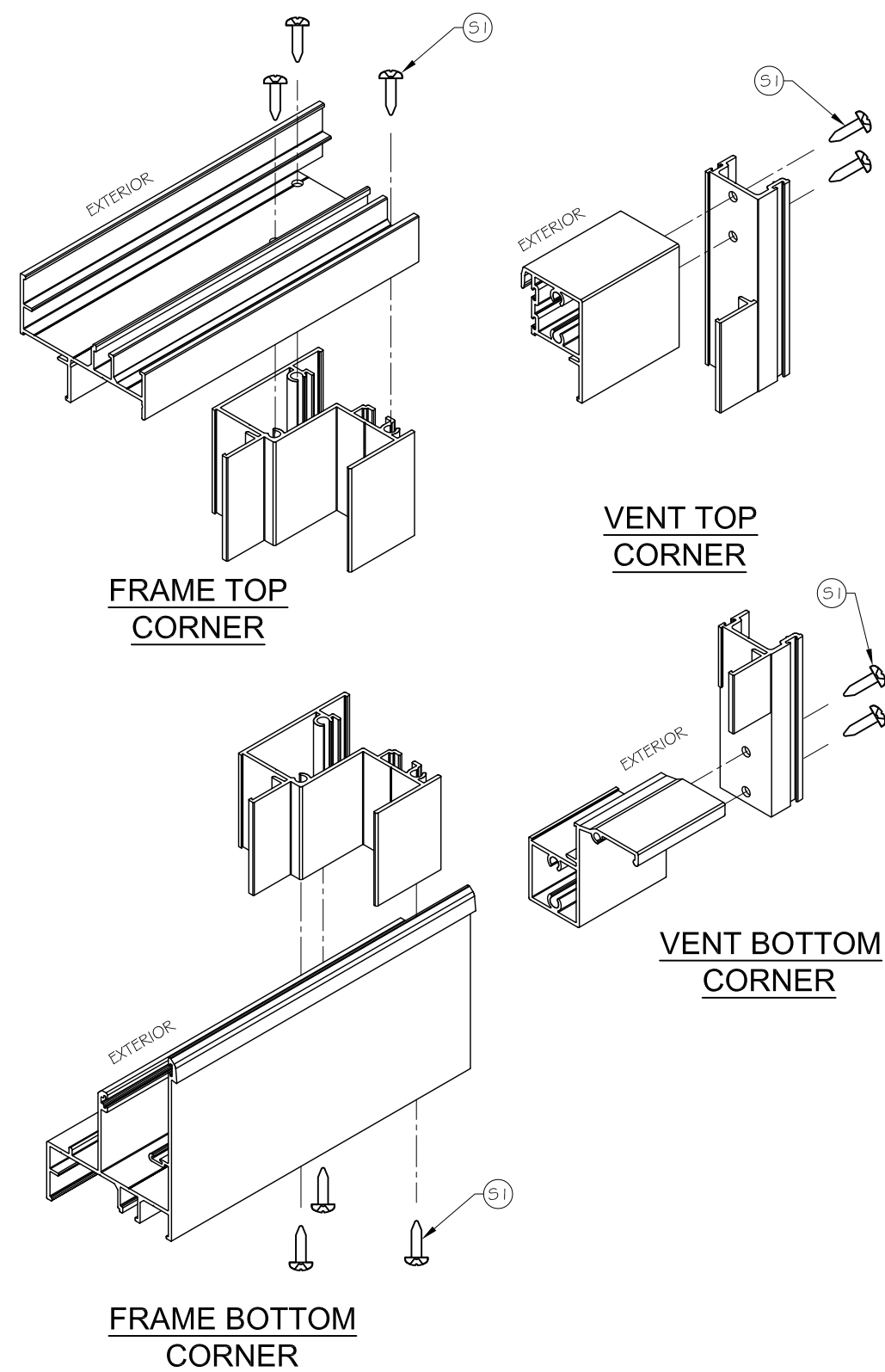
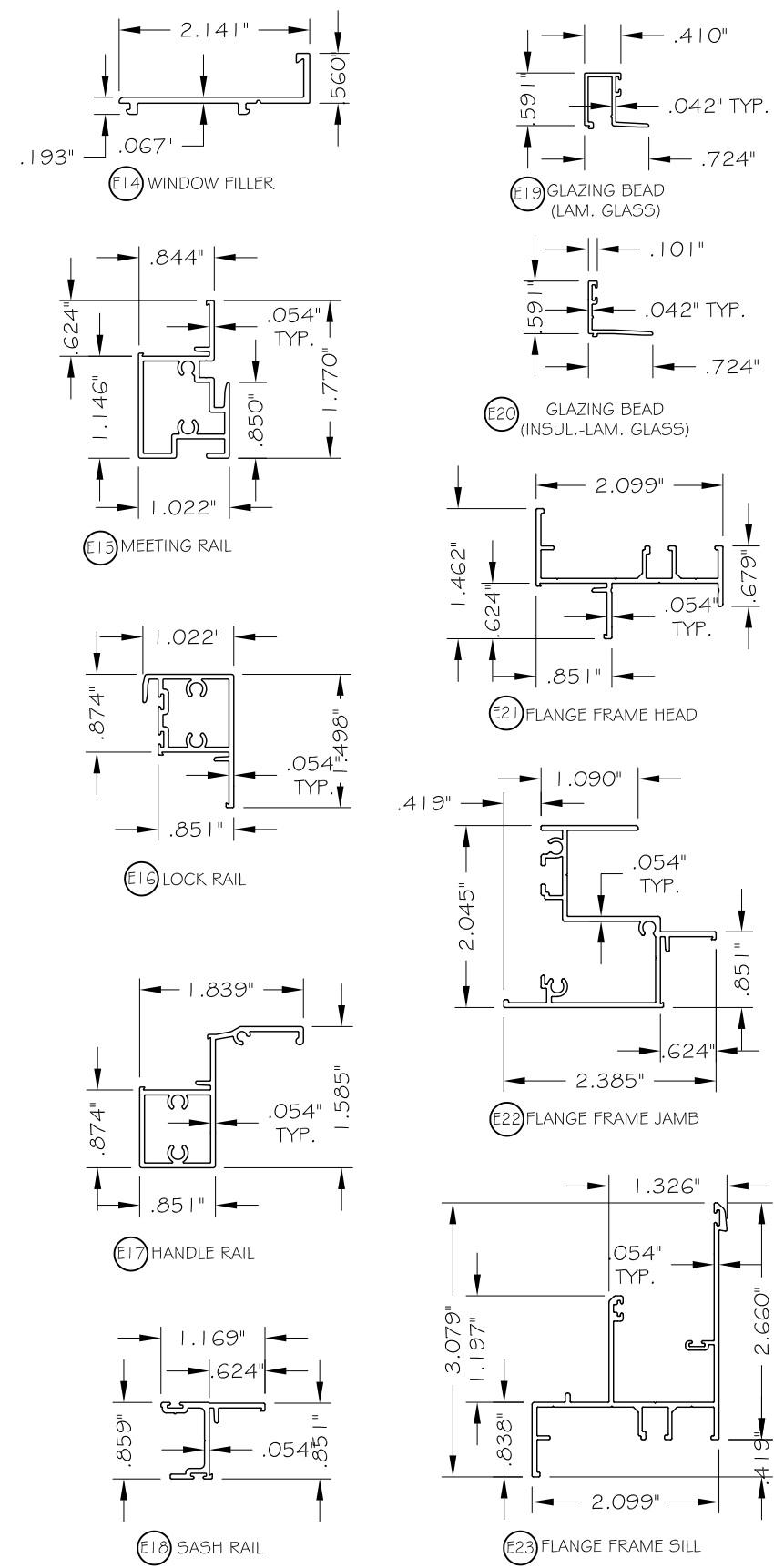
Revision:  
UPDATED TO 2023  
BUILDING CODE.  
JR - 7/13/23

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275	REGISTRATION #29296 (941) 480-1600	Date	6/17/20	Rev.	A
		By	A. MORLESIN	DWG No.	165 IS FD-LM
		Desc.	EXTRUSIONS & CORNER DETAILS	9 OF 10	Sheet
Impact Resistant Windows & Doors	3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	SENTINEL INSWING DOOR (LM)		FD165-IS	
		EXTRUSIONS & CORNER DETAILS		FD165-IS	





SINGLE HUNG WINDOW COMPONENTS



**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0717.05  
Expiration Date 07/28/2026  
By *Ishaq I. Chanda*  
Miami-Dade Product Control

Revision:  
UPDATED TO 2023  
BUILDING CODE.  
JR - 7/13/23

Prepared by A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275	REGISTRATION #29296 (941) 480-1600	Date	6/17/20	Rev.	A
		Drawn By	A. MORLESIN	DWG No.	165 IS FD-LM
		Title	SENTINEL INSWING DOOR (LM)	Sheet	10 OF 10
Impact Resistant Windows & Doors	3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590	EXTRUSIONS & CORNER DETAILS		FD165-IS	
		Series	Desc.		

