



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

CGI Windows & Doors, Inc.
3780 W. 103rd 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 "450" Aluminum Outswing Opaque Doors w/wo Sidelites - Impact

APPROVAL DOCUMENT: Drawing No. 450FD2-NOA Rev A (former W12-22 Rev C), titled "Series 450 Outswing Door & Sidelites", sheets 1 thru 17 of 17, prepared by manufacture, dated 06/12/20, signed and sealed by Lynn Miller, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact

Limitations:

1. Lock **10D** or **10E** is limited to max 38-9/16 W x 94-7/8 H door.
2. Sills (threshold) types SS-1 & SS-2 are not rated for water infiltration. See thresholds (sills) **9** & **12**.
3. Narrow stile sidelites are limited to **18"** or less.
4. The frame of alternate sizes must **not** exceed **125 ft²**, nor panel tested area and max. panel height.

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 # 17-1011.14** 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.**



Ishaq I. Chanda

NOA No. 20-0619.06
Expiration Date: October 25, 2022
Approval Date: November 05, 2020
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S

A. DRAWINGS

1. Manufacturer's die drawings and sections (Submitted under files below).
2. Drawing No. **W12-22 Rev B**, titled "Series 450 Outswing Doors & Sidelites", sheets 1, 1.1, 1.2, 1.3, 2, 2.1, 2.2, 2.3, 3, 3.1, 4, 5, 6, 7 7.1 and 7.2 of 7, prepared by Al-Farooq Corporation, dated 05-22-12 and last revised on SEP 02, 2015, signed and sealed by Javad Ahmad, P.E.

B. TESTS (Submitted under files #12-0706.02)

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(+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 swing / Inswing door w/wo sidelites, by Hurricane Testing Laboratory, Inc., Test Report No. **HTL-0080-0304-11** dated 11/28/2011 and **HTL-0080-0902-11**, signed and sealed by Vinu J. Abraham, P.E.

Note: This test report has been revised by addendum letters, issued by Architectural Testing (Former Hurricane Testing Lab), dated 01/20/12 and 04/03/12, both signed and sealed by Vinu J. Abraham, P.E.

Along with manufacturer's parts and section drawing marked-up drawings of double aluminum outswing doors, issued by Architectural Testing, Test Report No(s) **B-5234.02-450-18** dated 12/19/2011, signed and sealed by Vinu J. Abraham, P.E.

2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) 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/In 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.

Along with manufacturer's parts and section drawing marked-up drawings of aluminum out swing door w/sidelites, by Hurricane Testing Laboratory, Inc., Test Report No. **HTL-01071 (0080-0402-02)** dated 04/01/2002 tested per PA201-94 & PA203-94, signed and sealed by Vinu J. Abraham, P.E. (submitted in file # **09-0723.04**). Original tests conducted per SFBC, PA 201, 202 & 203-94 now known as FBC, TAS 201, 202 & 203-94.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 20-0619.06
Expiration Date: October 25, 2022
Approval Date: November 05, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (continued):

3. Reference Certified Testing Laboratories test report # CTLA **3056WA**, issued to CGI Windows & Door, Inc. per TAS 201, 202 and 203-94 for specimen #1 thru #30 for laminated PVB glass, insulated PVB laminated glass with Duraseal and super spacers, signed and sealed by Ramesh C. Patel, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2014(**5th Edition**), prepared by Al Farooq Corporation, dated 10/27/14 and last revised on AUG 27, 2015, signed and sealed by Javad Ahmad, P.E.
2. Additional intermediate horizontal mull calculations, prepared by Al Farooq Corporation, dated JUN 29, 2012, signed and sealed by Javad Ahmad, P.E. (Submitted under file # **11-1025.02**)

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None

F. STATEMENTS

1. Statement letter of conformance to FBC 2014(**5th Edition**) and letter of no financial interest, prepared by Al Farooq Corporation, dated 09/30/14, 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 NOA **revises # 12-0706.02**, expiring on 10/25/17.
2. Hardware cut sheets verified and marked-up by the Architectural Testing (former Hurricane Testing lab).
3. Test proposals dated 12/16/14 approved by RER & Test proposal # **10-0940**, dated 11/17/10 approved by BNC.

2. EVIDENCE SUBMITTED under previous NOA(s)

A. DRAWINGS

1. Drawing No. **W12-22 Rev C**, titled "Series 450 Outswing Doors & Sidelites", sheets 1, 1.1, 1.2, 1.3, 2, 2.1, 2.2, 2.3, 3, 3.1, 4, 5, 6, 7 7.1 and 7.2 of 7, prepared by Al-Farooq Corporation, dated 05/22/17 and last revised on 09/21/17, signed and sealed by Javad Ahmad, P.E.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 20-0619.06
Expiration Date: October 25, 2022
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B. TESTS

1. None.

C. CALCULATIONS

1. Mullion analysis, complying with **FBC 5th Edition (2014)** and **FBC 6th Edition (2017)**), prepared by Al Farooq Corporation, dated 09/29/17, signed and sealed by Javad Ahmad, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of conformance with **FBC 5th Edition (2014)** and **FBC 6th Edition (2017)**, and of no financial interest, dated 08/30/17, signed and sealed by Javad Ahmad, P. E.

G. OTHERS

1. This NOA revises and renews NOA # **17-1011.14**, expiring on 10/25/22.

3. New Evidence submitted

A. DRAWINGS

1. Drawing No. **450FD2-NOA Rev A** (former **W12-22 Rev C**), titled "Series 450 Outswing Doors & Sidelites", sheets 1 thru 17 of 17, prepared by manufacture, dated 06/12/20, signed and sealed by Lynn 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.:

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 20-0619.06
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B. TESTS (continue)

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.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 2020, 7th Edition**, prepared by manufacturer, dated 04/20/20, 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. None.

F. STATEMENTS

1. Statement letter of conformance to FBC 2020 (7th Edition), issued by manufacturer, dated 6/20/20, 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

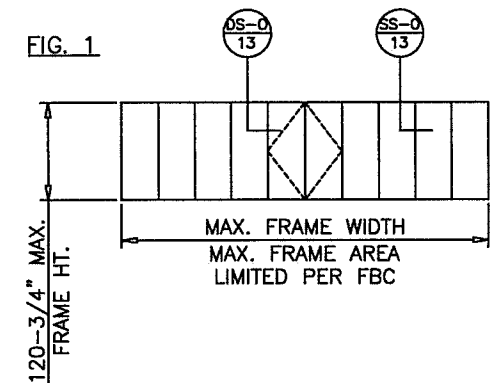
1. This NOA **revises # 17-1011.13** and updates to FBC 2020, **expiring 10/25/22**.
2. RER Test proposals **#19-1155** dated 01/10/20 approved by Ishaq I. Chanda, P.E.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 20-0619.06
Expiration Date: October 25, 2022
Approval Date: November 05, 2020

SERIES 450 ALUM. OUTSWING OPAQUE DOORS WITH OR WITHOUT SIDELITES, LARGE & SMALL MISSILE

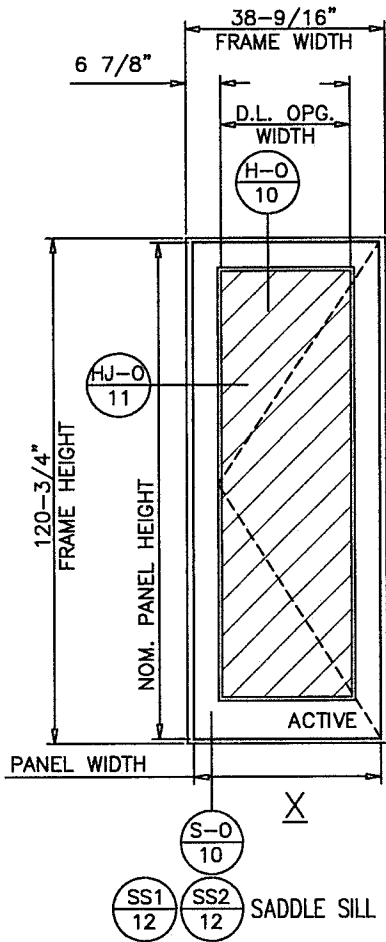
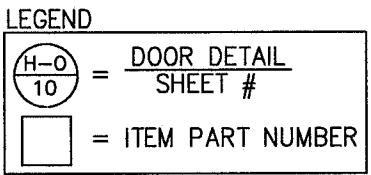
- 1) THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2017 (6TH EDITION)/2020 (7TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 2) 1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.
- 3) 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.
- 4) A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
- 5) ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.
- 6) 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 & ADOPTED STANDARDS.
- 7) 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.
- 8) EGRESS REQUIREMENTS TO BE REVIEWED BY BUILDING OFFICIAL.
FRAME HEIGHT = PANEL HEIGHT + 1-7/8" (STD. THRESHOLD)
FRAME HEIGHT = PANEL HEIGHT + 1-5/8" (ADA THRESHOLD)
FRAME WIDTH = PANEL WIDTH + 2-13/16"



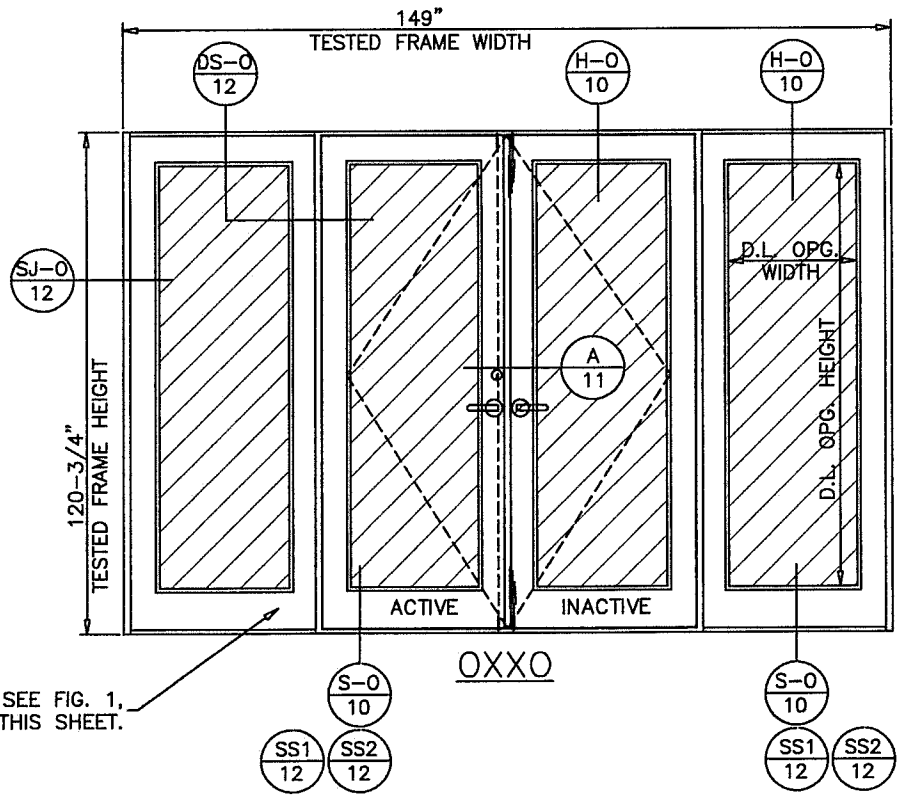
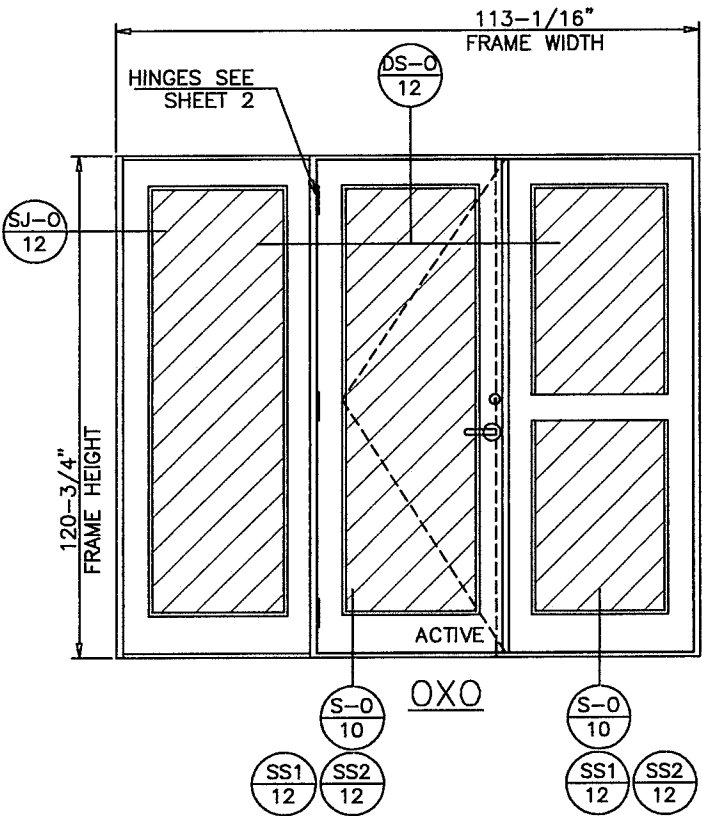
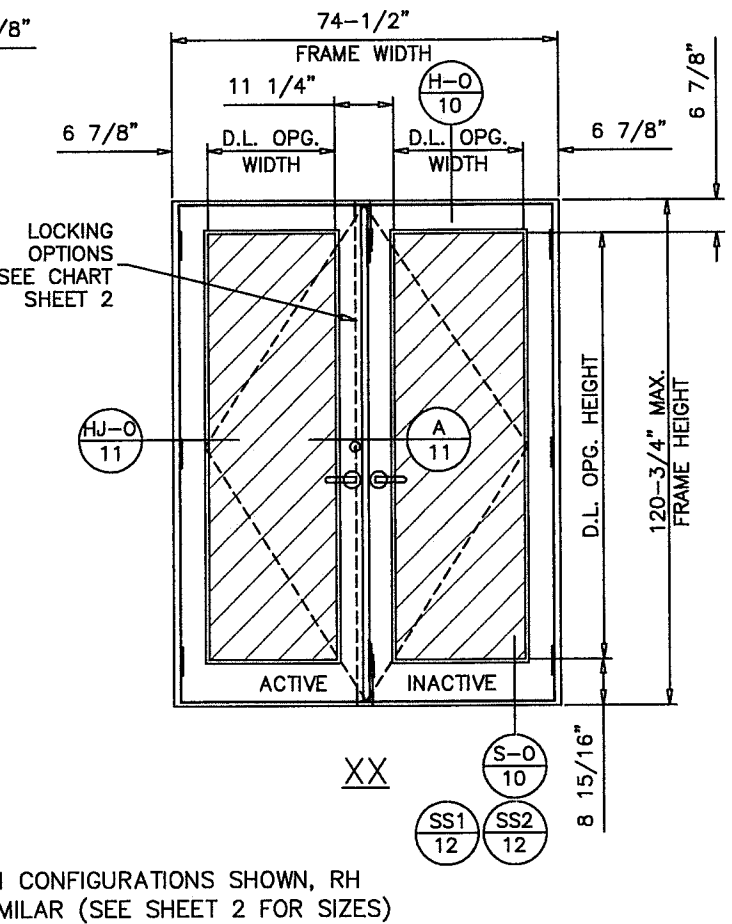
MULTIPLE SIDELITES W/ DOORS
WITHIN TESTED FRAME AREA ARE
AVAILABLE (SEE SHEET 14) 125 SQ.
FT. TESTED FRAME AREA

STEPS TO USE CHARTS:

- 1) DETERMINE WIND LOAD BASED ON PROVISIONS OF 2017/2020 FLORIDA BLDG. CODE.
- 2) DETERMINE WATER INFILTRATION REQUIREMENTS BASED ON PROVISIONS OF FBC.
- 3) SELECT A DOOR SYSTEM I.E. OUTSWING AND TYPE OF THRESHOLD FROM SHEET 14 AND LOCK OPTIONS FROM SHEET 2.
- 4) CHECK THE ALLOWABLE EXTERIOR AND INTERIOR LOADS FROM APPROPRIATE CHARTS ON SHEETS 2, 13 & 14. THE ALLOWABLE LOADS MUST MEET OR EXCEED THE DESIGN LOADS REQUIREMENTS.
- 5) SELECT AND CHECK ANCHORS TO MEET LOAD. (SEE SHEETS 15 & 16)
- 6) FOR MULLED SIDELITE REFER TO MULLION CAPACITY ON SHEET 13.
- 7) LOWER DESIGN PRESSURE FROM LOCKS CHART, PANEL PERFORMANCE CHART, MULLION PERFORMANCE CHART AND ANCHOR CAPACITY CHARTS AT MULLION AND MTG. STILE ENDS SHALL CONTROL THE ENTIRE SYSTEM.
- 8) MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE.



TYPICAL ELEVATIONS



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06
Expiration Date 10/25/2022
By Ishag I. Chank
Miami-Dade Product Control

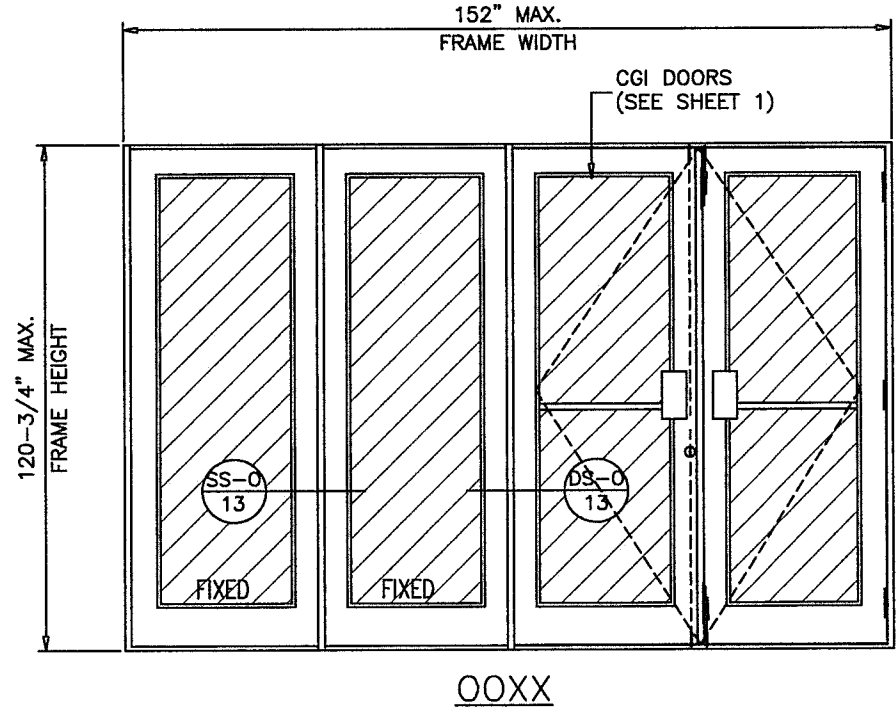
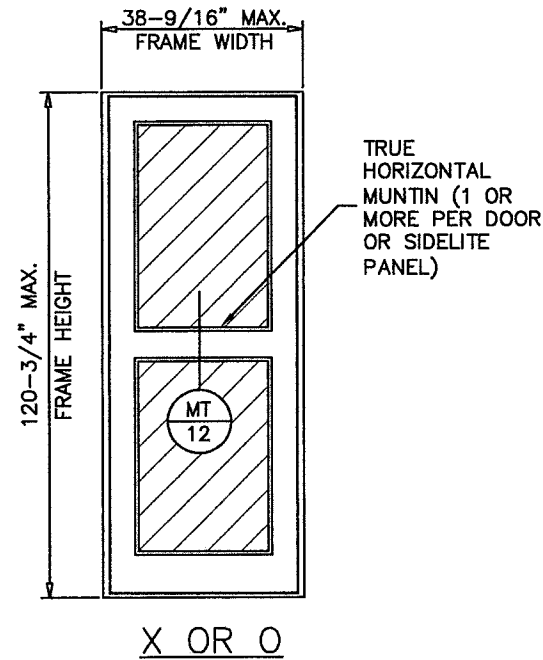
REVISION:
REVISED FOR 2020 FBC,
ADDED GEN. NOTES,
ANCHOR TYPE,
BACKBEDDING TYPES &
REFORMATTED - JR - 6/11/20

| | | | | |
|---|---|--|---------------------------|--|
| PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296 | 06/12/2020 Date J ROSOWSKI By 450FD2-NOA No. 1 OF 17 DWG 1 OF 17 Sheet NTS Scale FD450 OUTSWING Series Desc. Title | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | GEN. NOTES AND ELEVATIONS | 1 OF 17 Sheet NTS Scale FD450 OUTSWING Series Desc. Title |
| | | | | |
| | | | | |
| | | | | |

Impact Resistant
Windows & Doors
WERE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

ANTHONY LYNN MILLER
LICENSE
No. 58705
6/12/20
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705

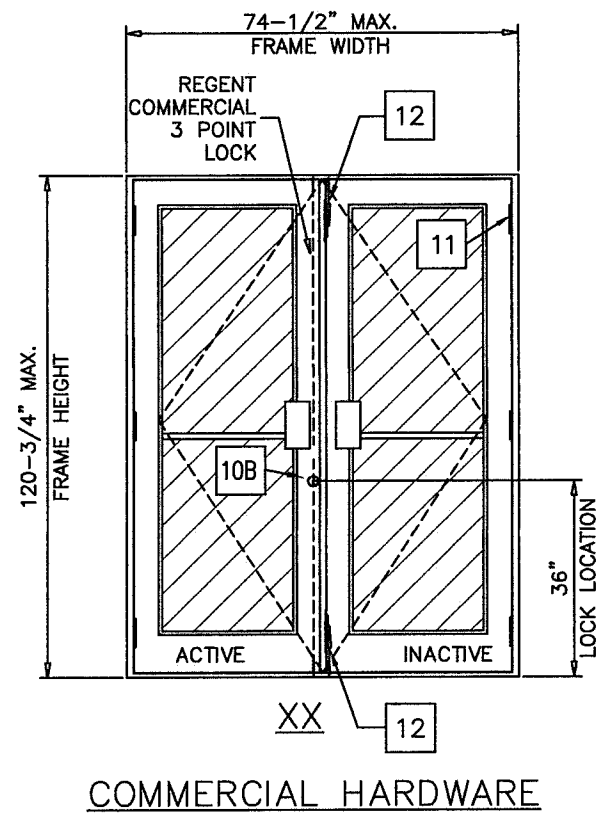
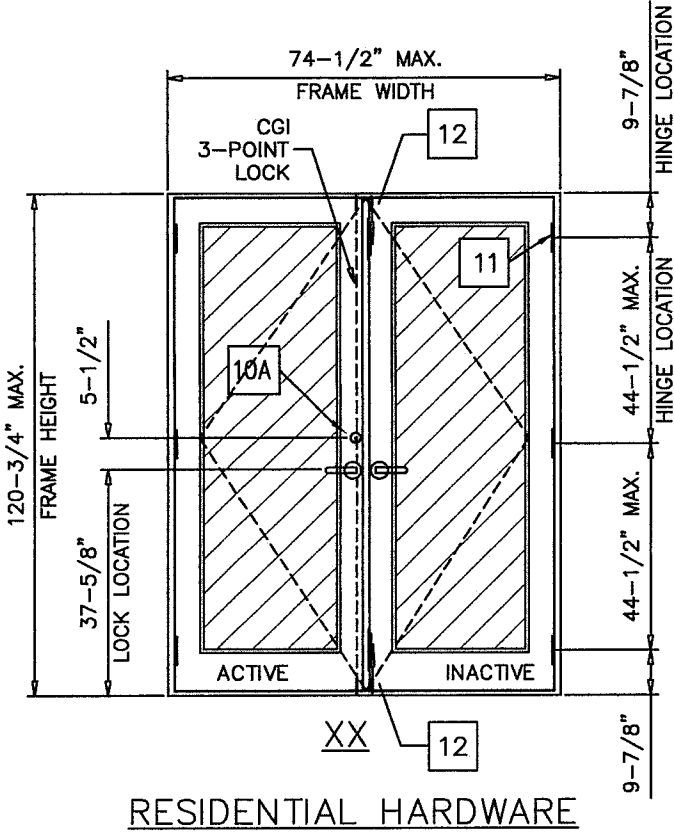
HARDWARE DESCRIPTION, TYPICAL ELEVATIONS



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06
Expiration Date 10/25/2022
By Ishag I. Chank
Miami-Dade Product Control

| HINGE LOCATIONS | | |
|-----------------------------|-----------|--------------|
| MAX. FRAME HEIGHT | NO. REQD. | MAX. SPACING |
| UP TO 90-3/4" | 3 | 35 1/2" |
| ABOVE 90-3/4" UPTO 120-3/4" | 4 | 44 1/2" |

DOORS WITH 3 HINGES LIMITED TO 100 PSF



| FRAME HEIGHT | | 10A | | 10AA | | 10B | | 10C & 10CC | | 10D & 10E | | 10 F | |
|--------------|--|---------|---------|---------|---------|---------|---------|------------|---------|-----------|---------|---------|---------|
| | | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) |
| 84-3/4" | | 90.0 | 90.0 | 100.0 | 110.0 | 100.0 | 110.0 | 65.0 | 65.0 | 80.0 | 80.0 | 100.0 | 110.0 |
| 96-3/4" | | 90.0 | 90.0 | 100.0 | 110.0 | 100.0 | 110.0 | 65.0 | 65.0 | 70.0 | 70.0 | 90.0 | 90.0 |
| 108-3/4" | | - | - | 100.0 | 110.0 | 100.0 | 110.0 | - | - | - | - | 90.0 | 90.0 |
| 120-3/4" | | - | - | 70.0 | 70.0 | 70.0 | 70.0 | - | - | - | - | 70.0 | 70.0 |

- 10A : COPPER CREEK W/ CGI 3 POINT
10AA : BALDWIN W/ CGI 3 POINT
10B : REGENT COMMERCIAL 3 POINT
10C : BALDWIN SINGLE POINT LOCK
10CC : COPPER CREEK SINGLE POINT LOCK
10D : DOR-O-MATIC SERIES 1690
10E : JACKSON SERIES 2085/2065
10F : SURFACE MOUNTED LOCK

| FRAME WIDTH (X) | FRAME WIDTH (XX) | DOOR/SIDELITE PANEL WIDTH | D.L. OPG. WIDTH |
|-----------------|------------------|---------------------------|-----------------|
| 26-9/16" | 50-1/2" | 23-3/4" | 12-3/4" |
| 32-9/16" | 62-1/2" | 29-3/4" | 18-3/4" |
| 38-9/16" | 74-1/2" | 35-3/4" | 24-3/4" |
| 44-9/16" | 86-1/2" | 41-3/4" | 30-3/4" |

| FRAME HEIGHT | DOOR/SIDELITE PANEL * HEIGHT | D.L. OPG. HEIGHT |
|--------------|------------------------------|------------------|
| 82-3/4" | 80-7/8" | 67-3/8" |
| 84-3/4" | 82-7/8" | 69-3/8" |
| 90-3/4" | 88-7/8" | 75-3/8" |
| 96-3/4" | 94-7/8" | 81-3/8" |
| 102-3/4" | 100-7/8" | 87-3/8" |
| 108-3/4" | 106-7/8" | 93-3/8" |
| 114-3/4" | 112-7/8" | 99-3/8" |
| 120-3/4" | 118-7/8" | 105-3/8" |

* HEIGHTS FOR STD. THRESHOLD

LEGEND
 $\frac{H-O}{10}$ = DOOR DETAIL SHEET #
□ = ITEM PART NUMBER

LH CONFIGURATIONS SHOWN, RH
SIMILAR (SEE SHEET 2 FOR SIZES)

FRAME HEIGHT = PANEL HEIGHT + 1-7/8" (STD. THRESHOLD)
FRAME HEIGHT = PANEL HEIGHT + 1-5/8" (ADA THRESHOLD)
FRAME WIDTH = PANEL WIDTH + 2-13/16"

Revision:

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

REGISTRATION #29296

Impact Resistant
Windows & Doors
WE'RE STRONGER™

CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

450 ALUM. FRENCH DOOR - OPAQUE & OS (LM)

DESIGN PRESSURES AND ELEVATIONS

FD450 OUTSWING

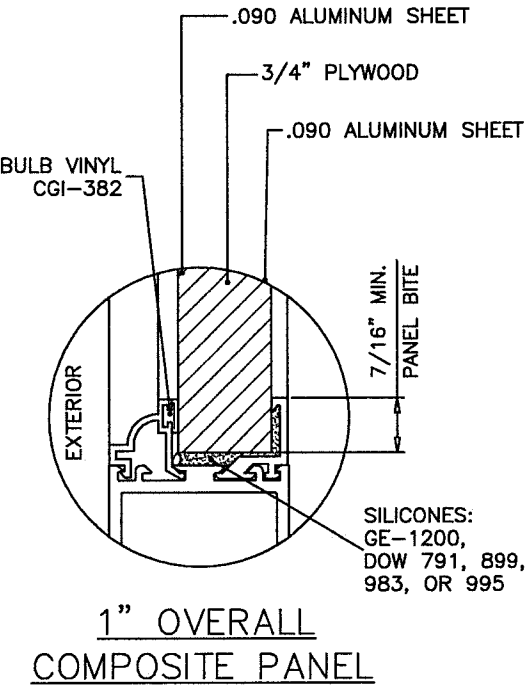
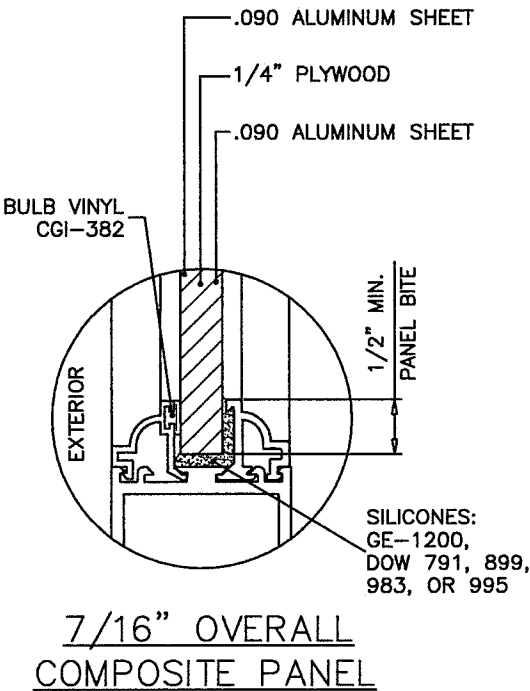
Date 06/12/2020
By J ROSOWSKI
Drawn 450FD2-NOA
Rev. A

Sheet 2 OF 17
Scale NTS

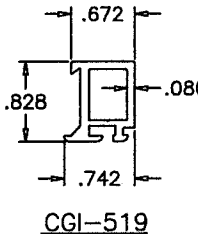
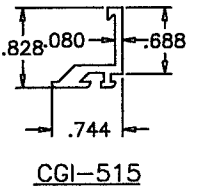
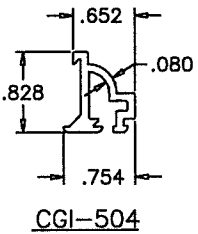
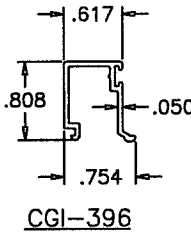
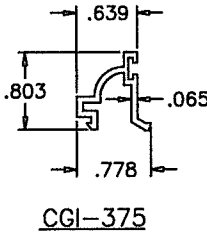
ANTHONY LYNN MILLER
LICENSE
No. 58705
6/12/20
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

GLAZING OPTIONS




GLAZING STOP
OPTIONS

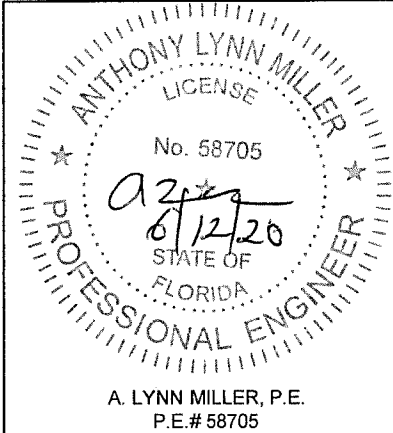


PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06
Expiration Date 10/25/2022
By Ishag I. Chank
Miami-Dade Product Control

DOORS AND SIDELITES CAN BE
GLAZED USING SQUARE OR
OGEE GLAZING BEADS/ADAPTERS

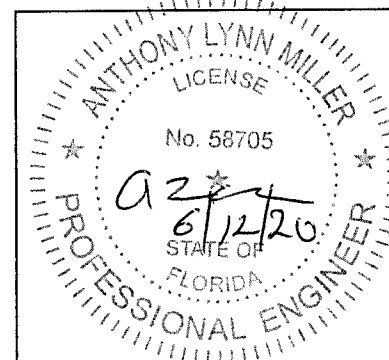
Revision: ADDED BACKBEDDING
TYPES - JR - 6/11/20

| | | | | | | | | |
|--|---|--|---------|---------------------|------------|------------|------|---|
|  Impact Resistant Windows & Doors WE'RE STRONGER™ | CGI WINDOWS AND DOORS, INC. 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 | | | | |
| | | | | Date | 06/12/2020 | | | |
| | | | | By | J ROSOWSKI | | | |
| | | | | Drawn | | | | |
| Title | | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | | | | | | |
| Desc. | | GLAZING DETAILS | | | | | | |
| Series | Scale | Sheet | 3 OF 17 | | DWG No. | 450FD2-NOA | Rev. | A |
| FD450 OUTSWING | | NTS | | | | | | |



38 9/16" FRAME WIDTH
 4 1/4"
 3"
 24" MAX.
 H-0 10
 9 7/8"
 25 5/8" MAX.
 HJ-0 11
 96 1/2" FRAME HEIGHT
 94 7/8" PANEL HEIGHT
 25 5/8" MAX.
 9 5/8"
 7 1/4"
 SS1 12
 7 1/4"
 6"
 6"
 CONCEALED VERTICAL ROD
 10D OR 10E
 JAMB ANCHOR SPACING
 SEE DETAIL HJ-0 ON SHEET 10
 ACTIVE

JACKSON SERIES 2085/2086 CONCEALED VERTICAL
ROD EXIT DEVICE

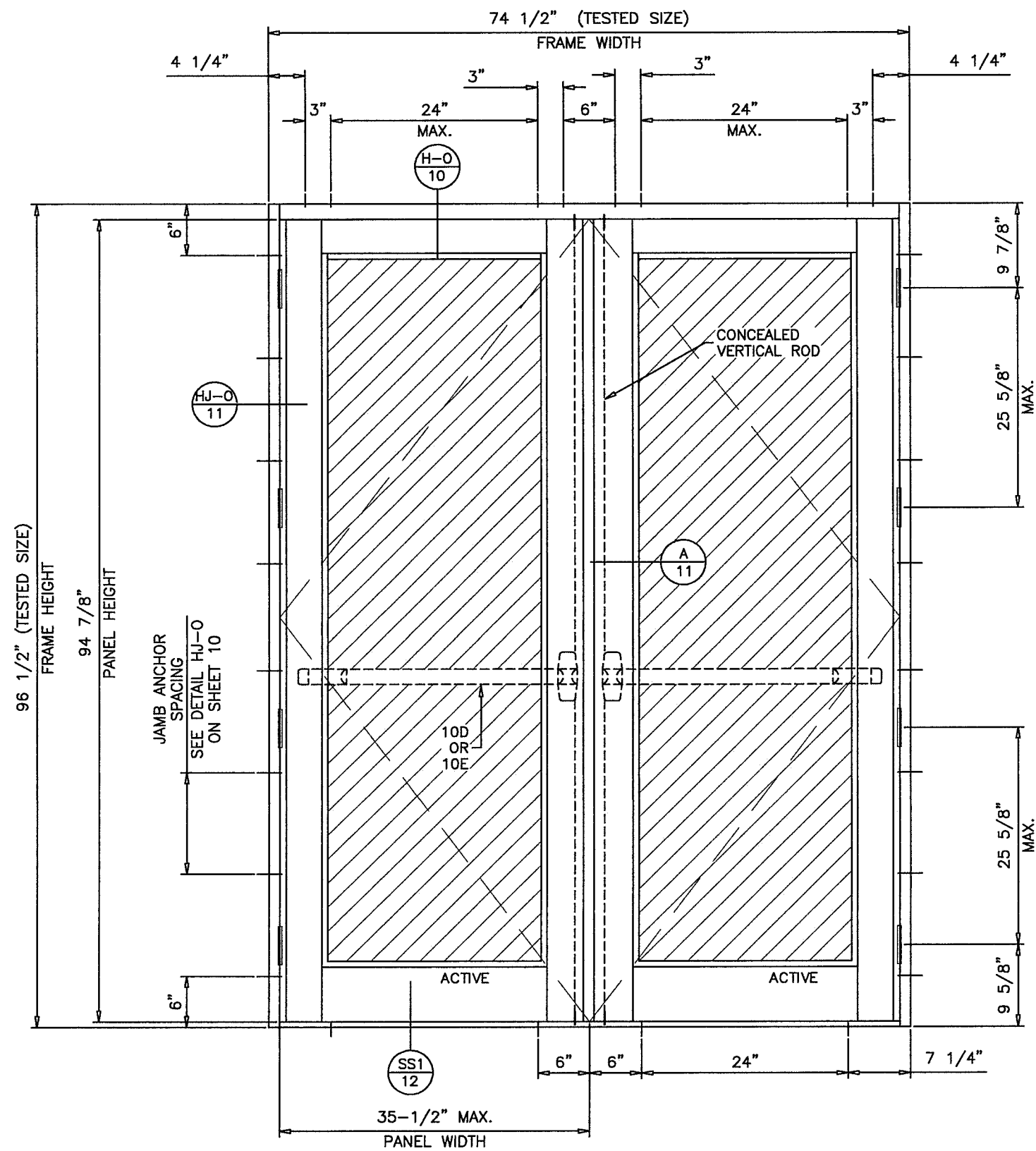


A. LYNN MILLER, P.E.
P.E.# 58705

vision: SEPERATED X AND XX
ELEVATIONS, ADDED NEW
PAGE - JR - 6/11/20

FD450 OUTSWING

CVR PANIC HARDWARE




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Expiration Date 10/25/2022
By Ishag I. Chanik
Miami-Dade Product Control

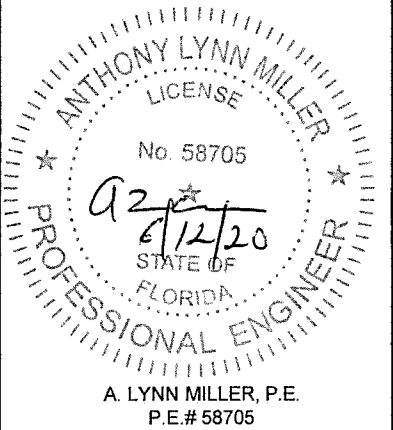
APPROVED PANIC HARDWARE FOR DOORS
DOR-O-MATIC SERIES 1690 TOUCHBAR EXIT DEVICE
JACKSON SERIES 2085/2086 CONCEALED VERTICAL
ROD EXIT DEVICE

| DOORS LOAD CAPACITY - PSF | | | |
|---------------------------|-------------|---------|---------|
| FRAME HEIGHT | FRAME WIDTH | EXT.(+) | INT.(-) |
| 96-1/2" | 74-1/2" | 70.0 | 70.0 |
| 84-1/2" | 74-1/2" | 80.0 | 80.0 |

DOOR NOT RATED FOR WATER INFILTRATION RESISTANCE.
LOCK OPTIONS 10D AND 10E

Revision:

| | | | | | | | | | |
|--|---|---------|--|---------------------|-------|------------|--|------|--|
|  Impact Resistant Windows & Doors WE'RE STRONGER™ | CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590 | | | REGISTRATION #29296 | | | PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 | | |
| | Title | | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | | Date | | 06/12/2020 | | |
| | Series | | PANIC HARDWARE ANCHOR LAYOUT | | By | | J ROSOWSKI | | |
| | Desc. | | FD450 OUTSWING | | Drawn | | 450FD2-NOA | | |
| Scale | | NTS | | Sheet | | No. | | Rev. | |
| | | 5 OF 17 | | DWG | | 450FD2-NOA | | A | |



| ITEM | DESCRIPTION |
|------|-------------|
|------|-------------|

HAGER 4 1/2" X 4" HINGE IN SOLID BRASS OR STAINLESS STEEL
CGI 4-1/2" X 4" HINGE IN ALUMINUM
SECURED WITH (8) #12-24 X 1/2" F.H. M.S.
(3 PER PANEL UP TO 7'-6 3/4" HIGH)
(4 PER PANEL OVER 7'-6 3/4")
CGI FLUSHBOLT AT TOP & BOTTOM OF INACTIVE LEAF, HOUSING ATTACHED
TO PANEL STILE WITH #10 X 3/4" PH SMS, ACTIVATOR ATTACHED WITH
#8 X 1/2" PH SMS.
SEE SHEET 3 FOR GLAZING OPTIONS
SILICONES: GE-1200, DOW 791, 899, 983, OR 995
1/2" X 1/2" CONTINUOUS CLOSED CELL FOAM
TAPE WITH ONE SIDE ADHESIVE
PLASTIC WEEP BAFFLE
7/8" X 5" X 1/8" THK. CONTINUOUS ALUMINUM SILL ANGLE ADAPTER

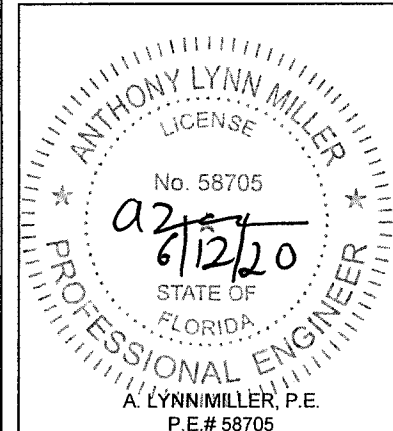
EXTRUSION LIST: 500A, 501, 502, 503, 504, 507, 509, 510, 514,
515, 519, 539, & 540 ALL EXTRUSIONS ARE 6063-T6.
375, 396, 505, 508, 511 EXTRUSIONS ARE 6063-T5.


PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06

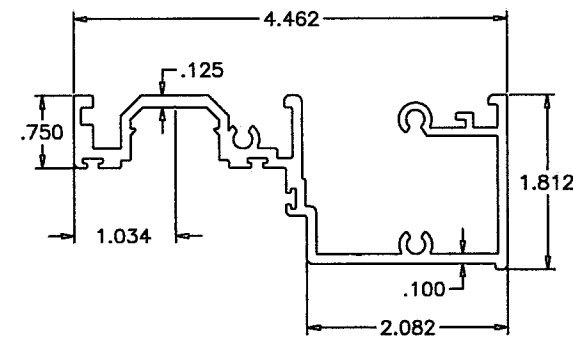
Expiration Date 10/25/2022

By Ishaq I. Chande
Miami-Dade Product Control

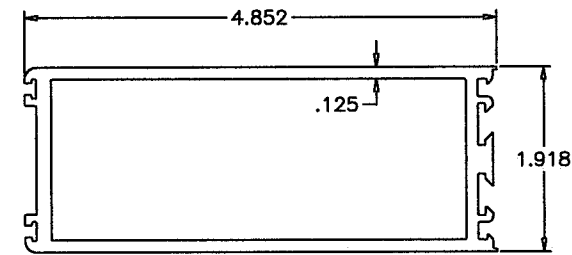
| Material | Min. F _y | Min. F |
|------------------------|---------------------|---------|
| #14 Steel Screw, Gr 5 | 81 ksi | 105 ksi |
| 1/4" Elco UltraCon | 155 ksi | 177 ksi |
| 1/4" DeWalt UltraCon+ | 148 ksi | 164 ksi |
| 5/16" Elco UltraCon | 155 ksi | 177 ksi |
| 5/16" DeWalt UltraCon+ | 155 ksi | 177 ksi |
| 6063-T5 Aluminum | 16 ksi | 22 ksi |
| A36 Steel | 36 ksi | 58 ksi |
| Gr. 33 Steel Stud | 33 ksi | 45 ksi |



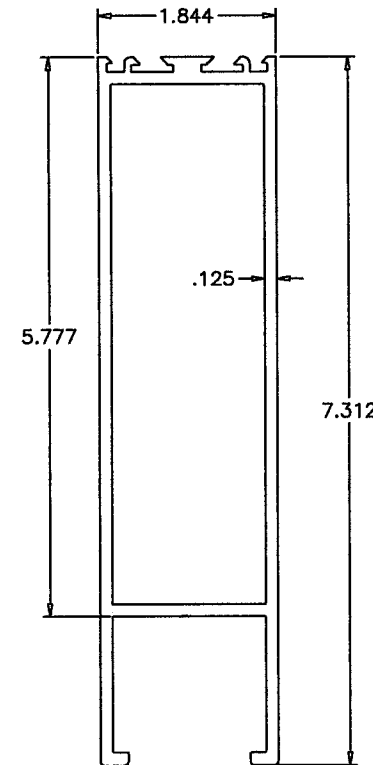
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|---|---|---------------------|--|---------|---------------------|
|  Impact Resistant Windows & Doors WE'RE STRONGER™ | CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590 | | PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 | | REGISTRATION #29296 |
| | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | | Date 06/12/2020 | | |
| BILL OF MATERIALS | | Drawn By J ROSOWSKI | | | |
| Series Desc. | Scale | NTS | sheet | 6 OF 17 | DWG No. 450FD2-NOA |
| FD450 OUTSWING | | | | Rev. A | |



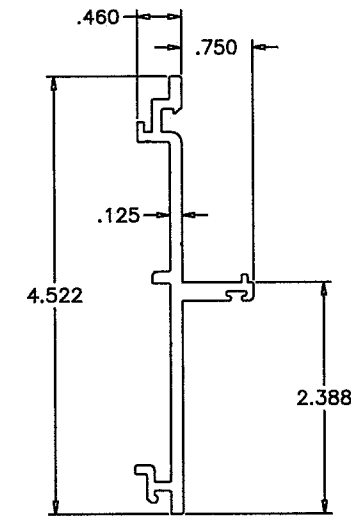
CGI-507
DOOR FRAME HEAD/SILL



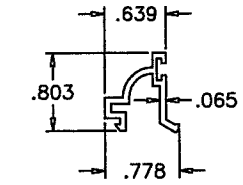
CGI-502
JAMB/LOCK/SIDELITE STILE



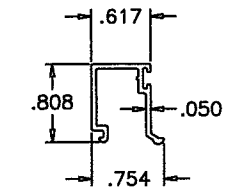
CGI-501
BOTTOM RAIL



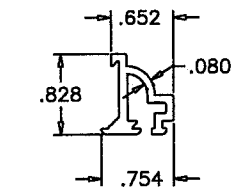
CGI-510
SIDELITE MULLION



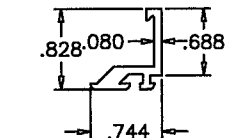
CGI-375



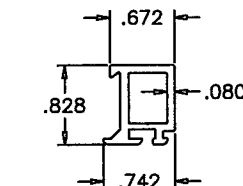
CGI-396



CGI-504

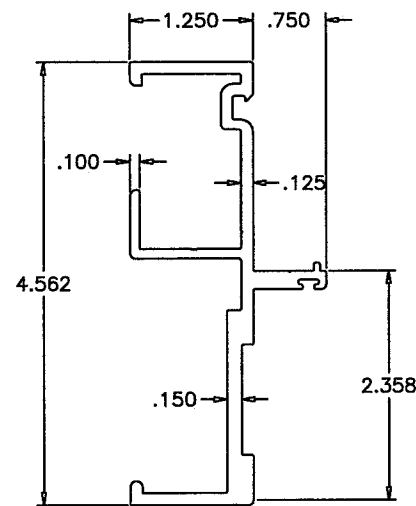


CGI-515

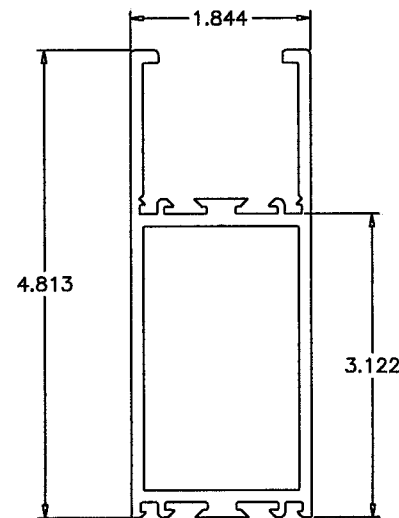


CGI-519

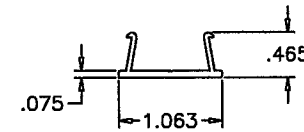
GLAZING STOP OPTIONS



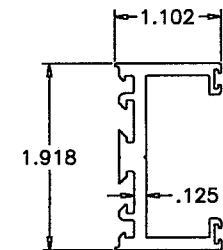
CGI-509
FRAME JAMB/MULLION



CGI-500A
TOP RAIL



CGI-508
FRAME COVER

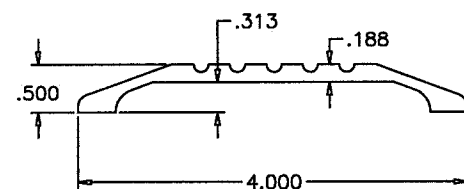


CGI-503
NARROW SIDELITE STILE

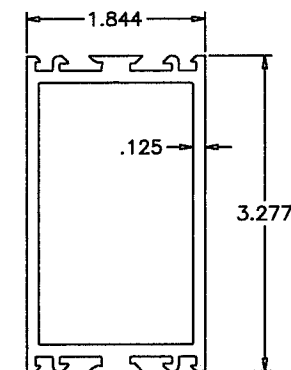
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06

Expiration Date 10/25/2022

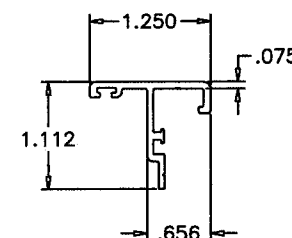
By Ishaq I. Chandra
Miami-Dade Product Control



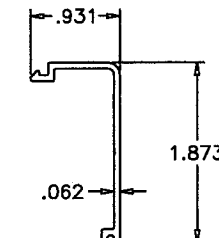
CGI-540
COM. SADDLE/ADA THRESHOLD



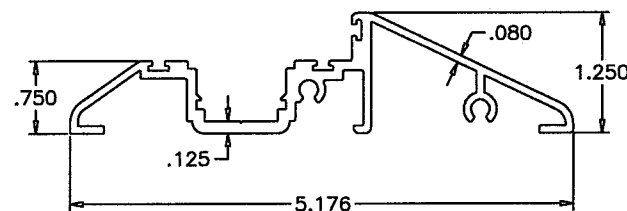
CGI-514
HORIZONTAL MUNTIN



CGI-505
ASTRAGAL



CGI-511
JAMB COVER

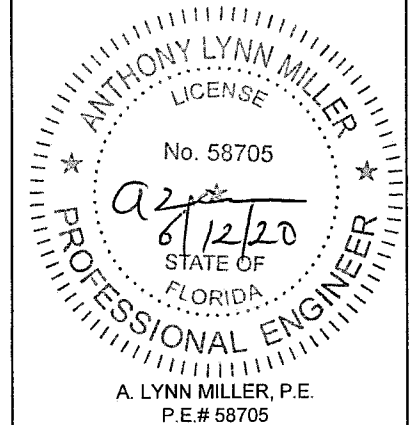


CGI-539
RES. SADDLE THRESHOLDS

Revision:

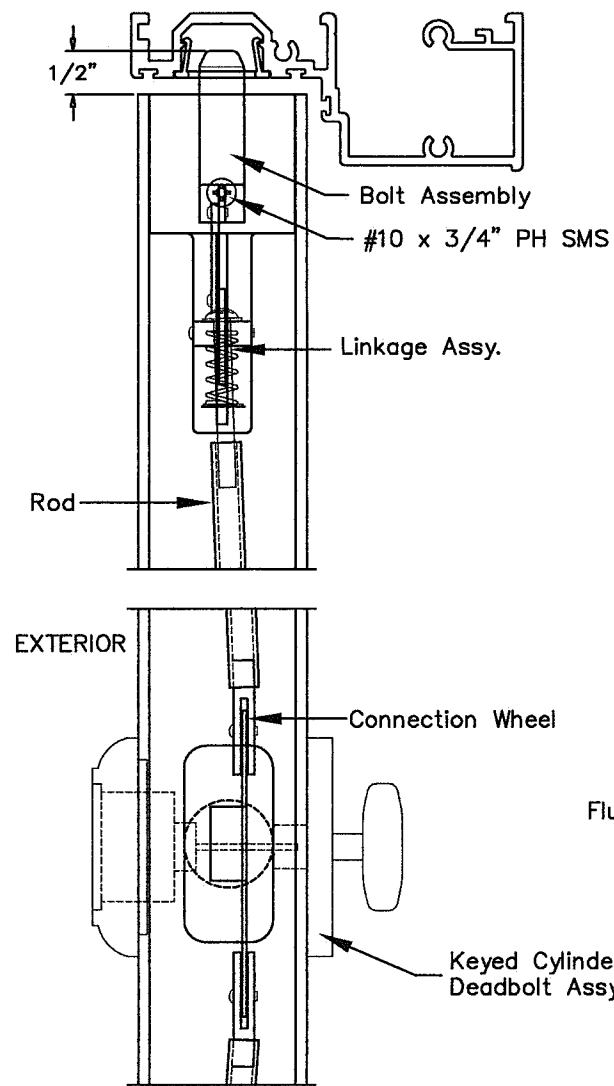
PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

Impact Resistant
Windows & Doors
WE'RE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

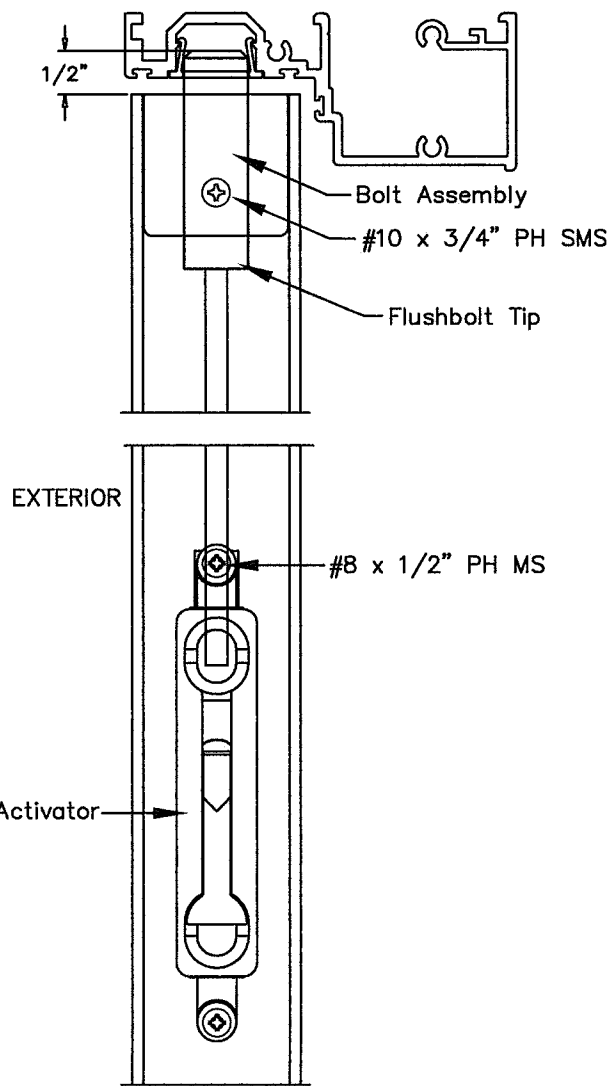


A. LYNN MILLER, P.E.
P.E.# 58705

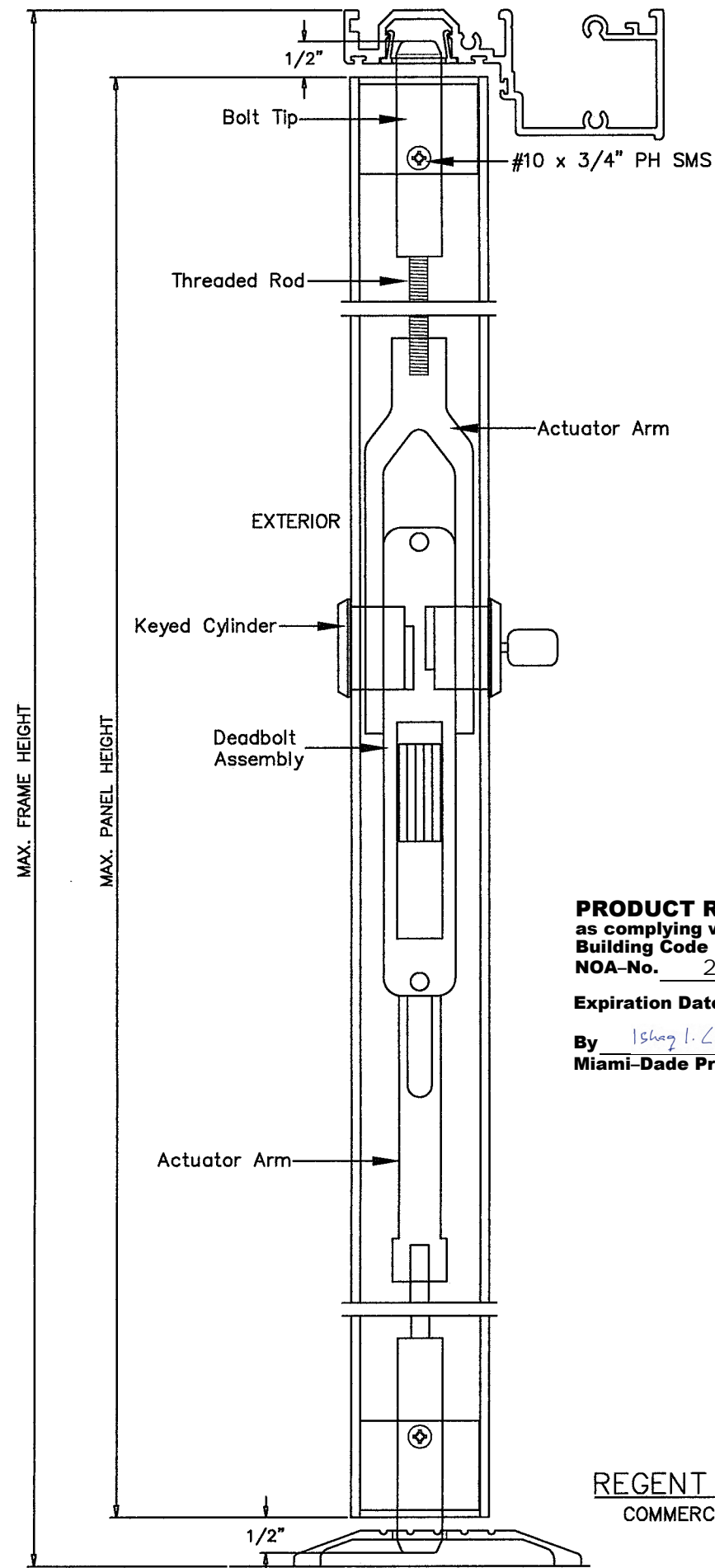
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| REGISTRATION #29296 | | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | | Date | 06/12/2020 |
| FD450 OUTSWING | | EXTRUSIONS | | By | J ROSOWSKI |
| Series | Desc. | Title | | Rev. | |
| | | Scale | Sheet | 7 OF 17 | 450FD2-NOA |
| | | DWG | No. | | |



CGI CUSTOM
3-POINT LOCK
TOP SECTION SHOWN
(BOTTOM SIMILAR)




12 FLUSHBOLTS
(INACTIVE PANEL)
TOP SECTION SHOWN
(BOTTOM SIMILAR)

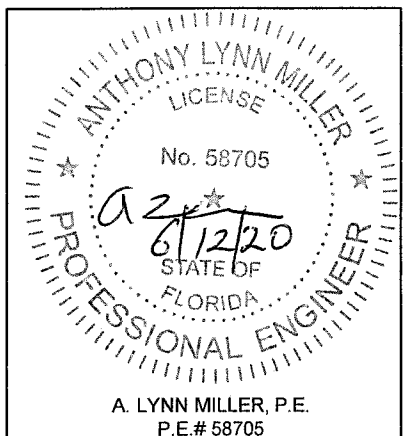


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NOA-No. 20-0619.06
Expiration Date 10/25/2022
By Isaac I. Chanda
Miami-Dade Product Control

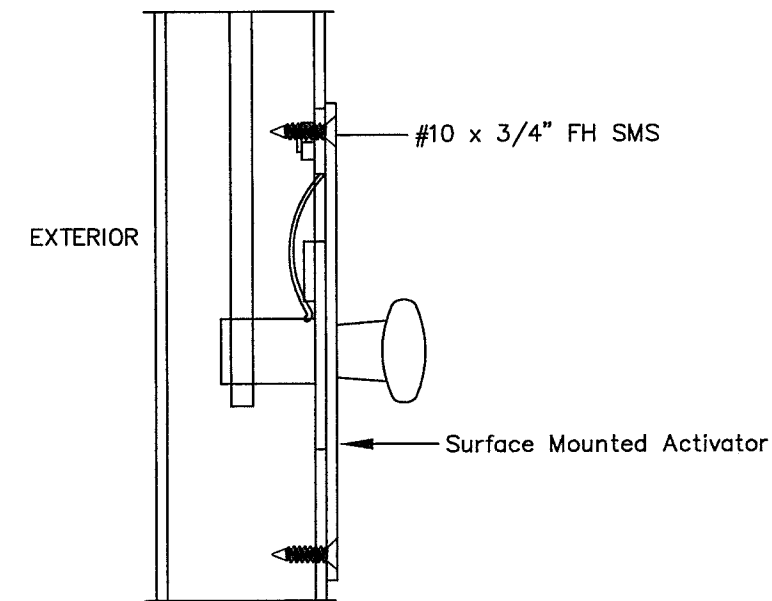
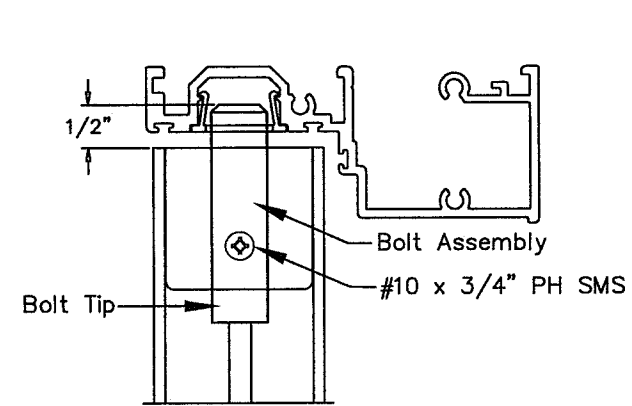
REGENT 3 POINT
COMMERCIAL LOCK

Revision:

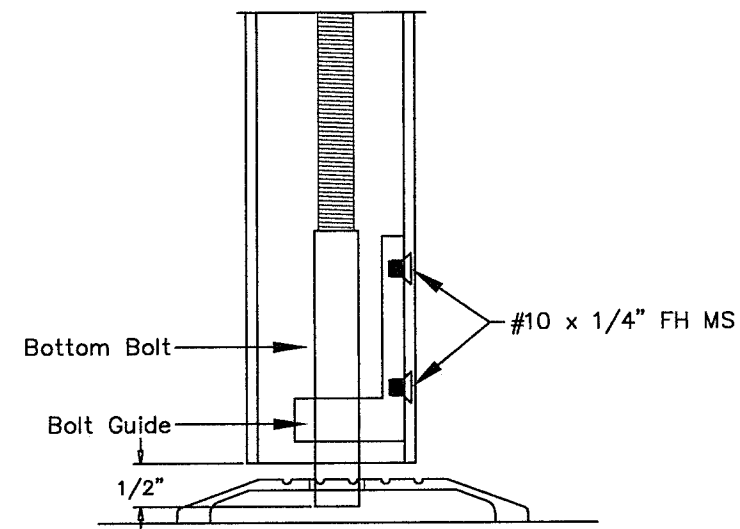
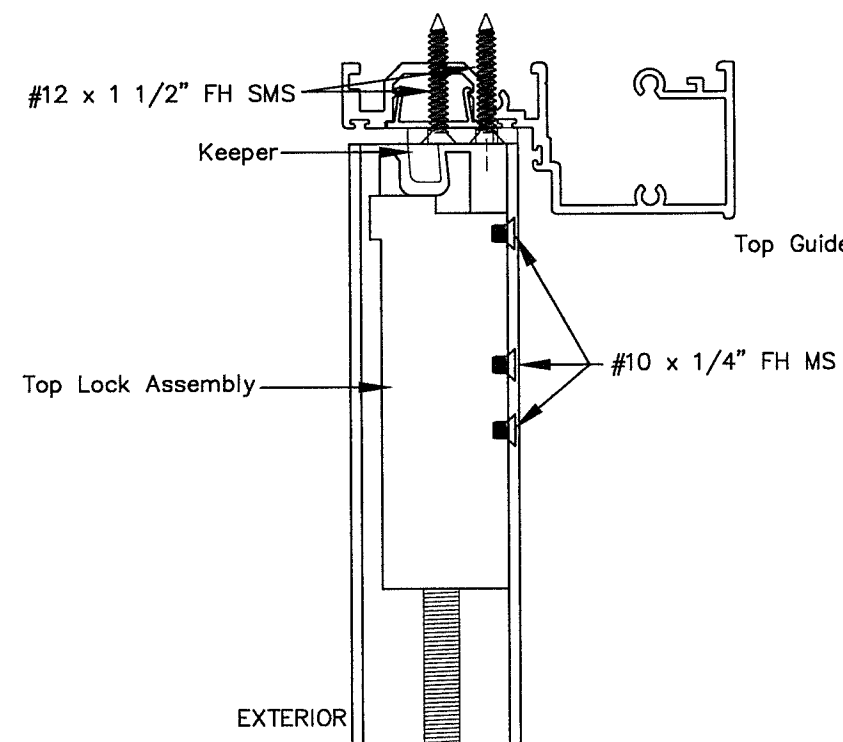
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|  Impact Resistant Windows & Doors WE'RE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590 | PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 | | | | |
| | REGISTRATION #29296 | | | | |
| | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | | Date | 06/12/2020 | |
| | HARDWARE DETAILS 1 | | Drawn By | J ROSOWSKI | |
| | FD450 OUTSWING | | Scale | NTS | Sheet |
| | 8 OF 17 | | DWG No. | 450FD2-NOA | |
| | Rev. A | | | | |
| | Series: Desc. Title | | | | |
| | 06/12/2020 | | | | |
| | J ROSOWSKI | | | | |
| | 450FD2-NOA | | | | |



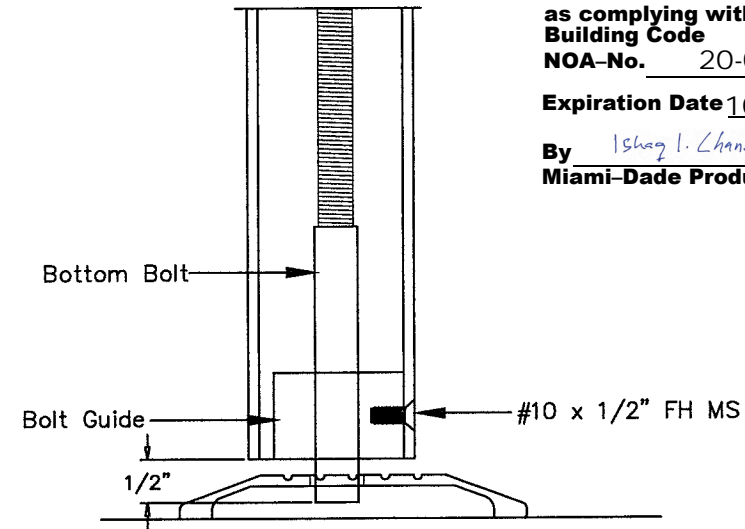
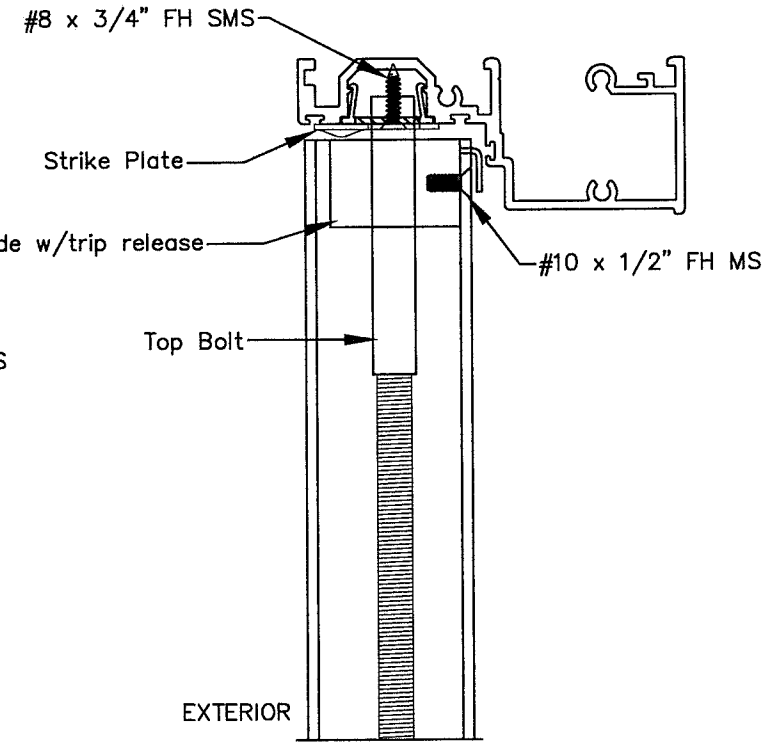
A. LYNN MILLER, P.E.
P.E.# 58705



**SURFACE MOUNT SLIDE
BOLT WITH BALDWIN
DEAD BOLT**
TOP SECTION SHOWN
(BOTTOM SIMILAR)



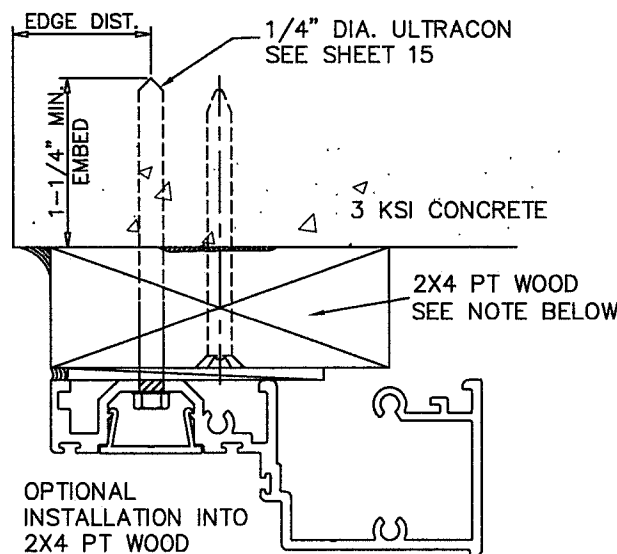
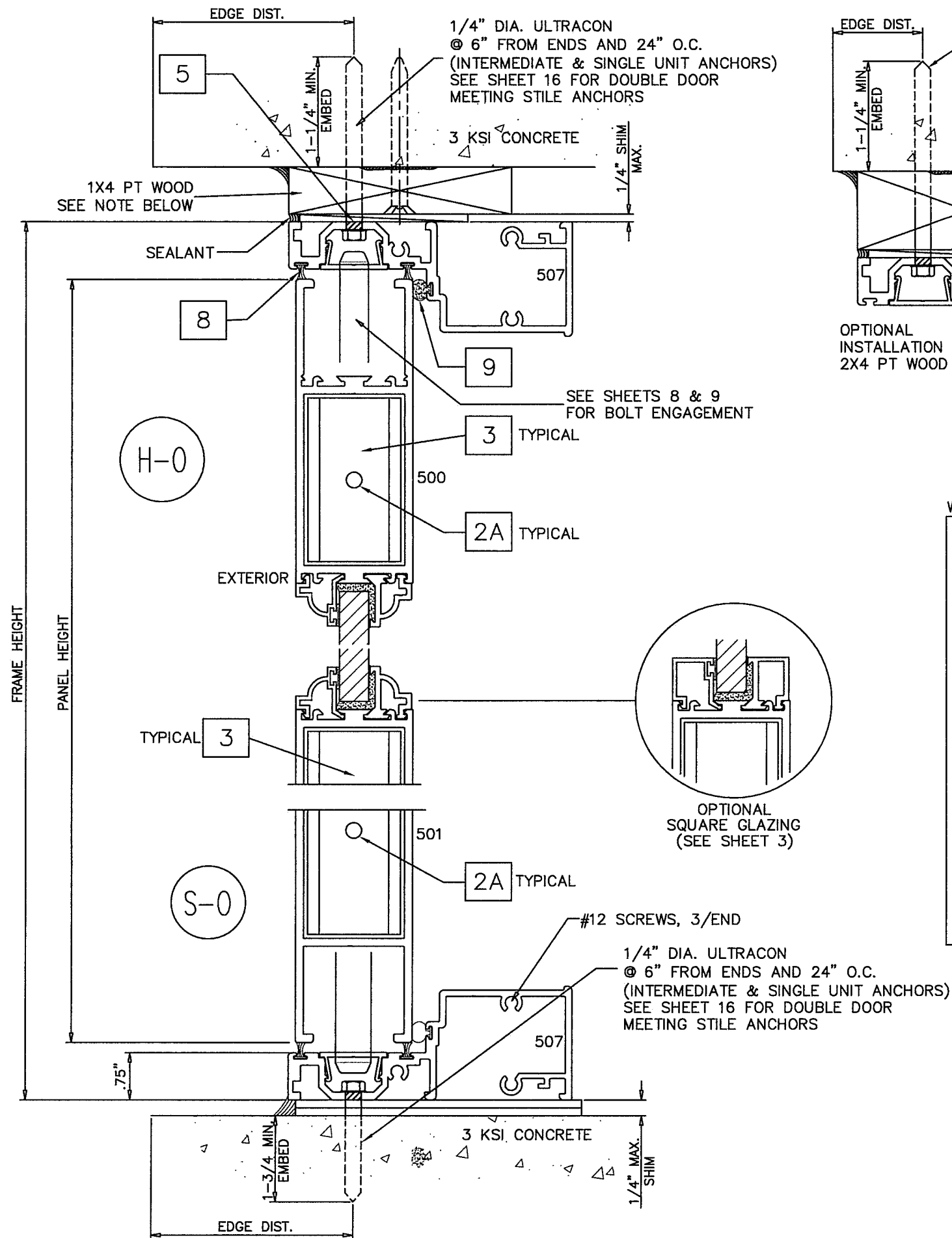
DOR-O-MATIC 1690



JACKSON 2086I

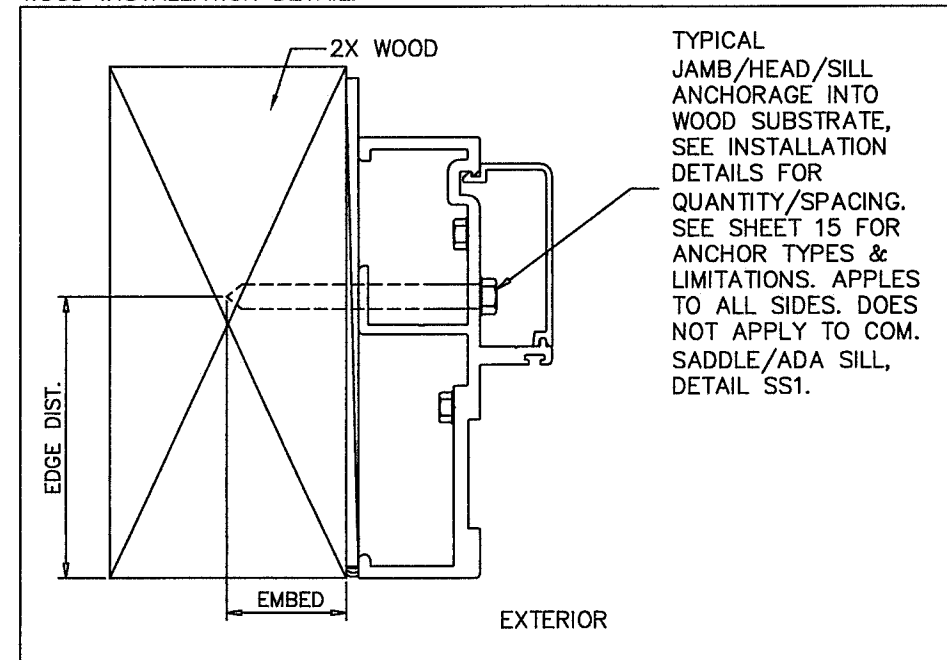
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06
Expiration Date 10/25/2022
By *Ishag I. Chande*
Miami-Dade Product Control

| | | | |
|---|--|--------------------|------------------|
| Revision: | | A | |
| PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296 | | Date 06/12/2020 | By J ROSOWSKI |
| Impact Resistant Windows & Doors WE'RE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590 | | No. 450FD2-NOA | DWG 9 OF 17 |
| 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) HARDWARE DETAILS 2 FD450 OUTSWING | | Scale NTS | Sheet 9 OF 17 |
| ANTHONY LYNN MILLER LICENSE No. 58705 6/12/20 STATE OF FLORIDA A. LYNN MILLER, P.E. P.E.# 58705 | | | |



PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. 20-0619.06
 Expiration Date 10/25/2022
 By Ishag I. Chank
 Miami-Dade Product Control


WOOD INSTALLATION DETAIL:

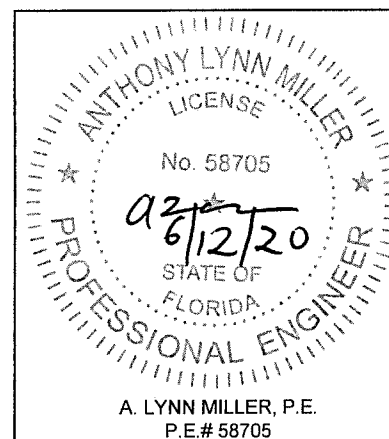


OPTIONAL INSTALLATION
 DIRECTLY INTO 2X WOOD

- NOTES:**
- 1) ALL JAMB ANCHOR CONDITIONS SHOWN ON SHEETS 10, 12 AND 13 MAY BE DIRECTLY TO MASONRY WITH 1/4" MAX. SHIM SPACE WITHOUT VARIATION IN CAPACITY.
 - 2) 1X OR 2X WOOD BUCKS NOT BY CGI MUST BE PROPERLY SECURED AND MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM.

Revision: ADDED WOOD
 INSTALLATION DETAIL - JR -
 6/11/20

| | | | | |
|---|--|----------|---------------------|------------|
|  Impact Resistant Windows & Doors WE'RE STRONGER™ CGI WINDOWS AND DOORS, INC. 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 | |
| | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | | | |
| INSTALLATION DETAILS 1 | | By | Date | 06/12/2020 |
| FD450 OUTSWING | NTS | 10 OF 17 | 450FD2-NOA | A |





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as complying with the Florida
Building Code
NOA-No. 20-0619.06

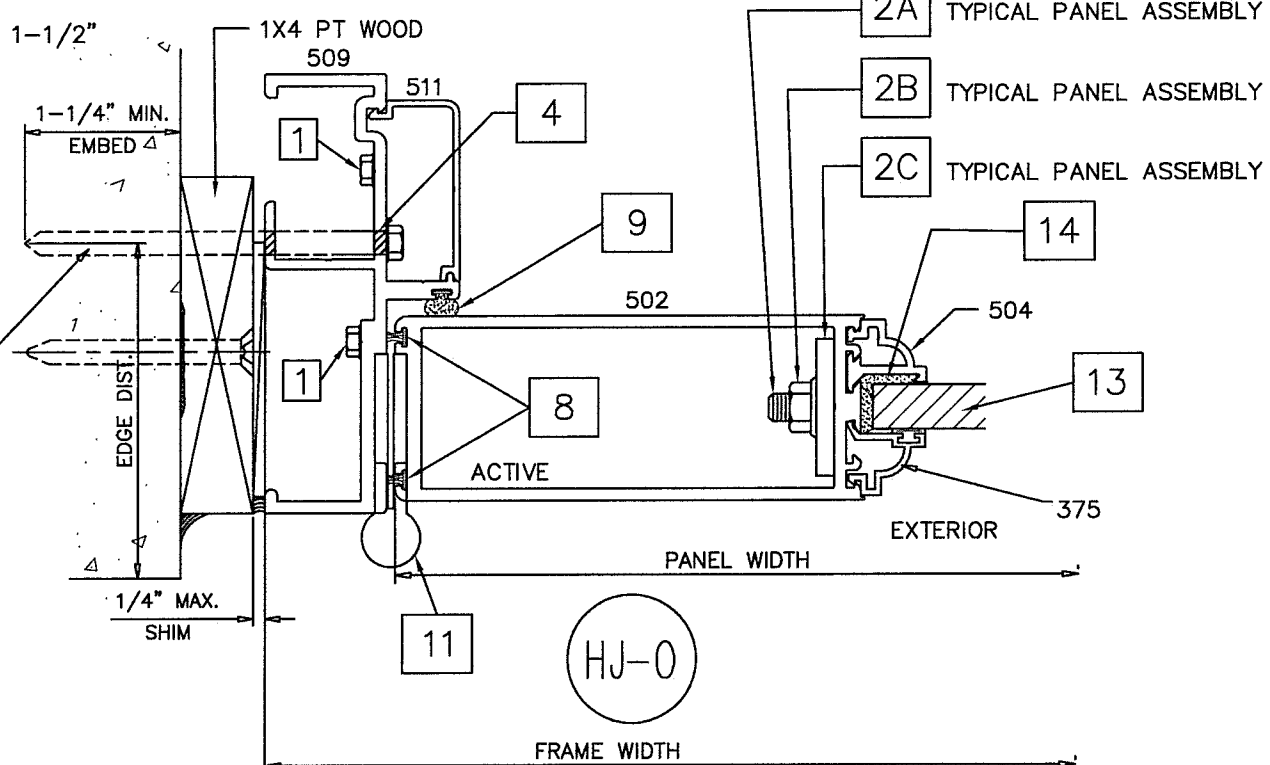
Expiration Date 10/25/2022

By Ishag I. Chande
Miami-Dade Product Control



TYPICAL JAMB ANCHORS
1/4" DIA. ULTRACON
© 6" FROM ENDS AND
19-3/8" O.C. FOR LOADS UPTO 70 PSF
14-1/2" O.C. FOR LOADS ABOVE 70 PSF
2-1/2" EDGE DIST.
EMBEDMENT INTO 2BY WOOD BUCK = 1-1/2"

TYPICAL JAMB ANCHORS
1/4" DIA. ULTRACON
@ 6" FROM ENDS AND
19-3/8" O.C. FOR LOADS UPTO 70 PSF
14-1/2" O.C. FOR LOADS UPTO 110 PSF
12" O.C. FOR LOADS ABOVE 110 PSF
(SEE SHEET 15)
2-1/2" MIN. EDGE DIST.



NOTE:
1X OR 2X WOOD BUCKS NOT BY CGI MUST BE
PROPERLY SECURED AND MUST SUSTAIN
LOADS IMPOSED BY GLAZING SYSTEM.

Revision:

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

REGISTRATION #29296

| | |
|------------|--|
| 06/12/2020 | |
|------------|--|

| | |
|----------|------------|
| Drawn By | J ROSOWSKI |
|----------|------------|

| | |
|------|---|
| Rev. | A |
|------|---|

**Impact Resistant
Windows & Doors
WE'RE STRONGER™**



CGI WINDOWS
33780 W 104TH AVE
HIALEAH, FL 33015
(305) 593-6555

450 ALUM. FRENCH DOOR - OPAQUE & OS (LM)

INSTALLATION DETAILS 2

NTS

NO.
GMC

17

FO

11

1994

TS

2

①

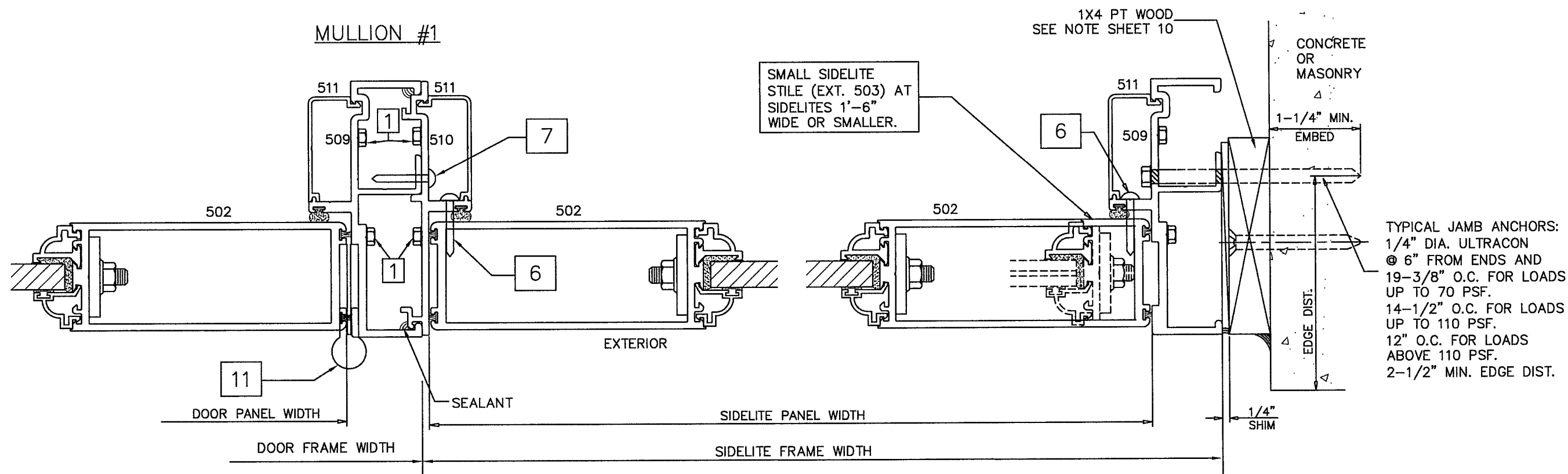
VIN

ST

10

450

7



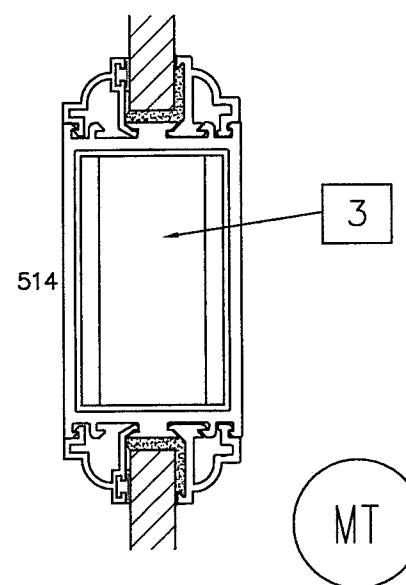
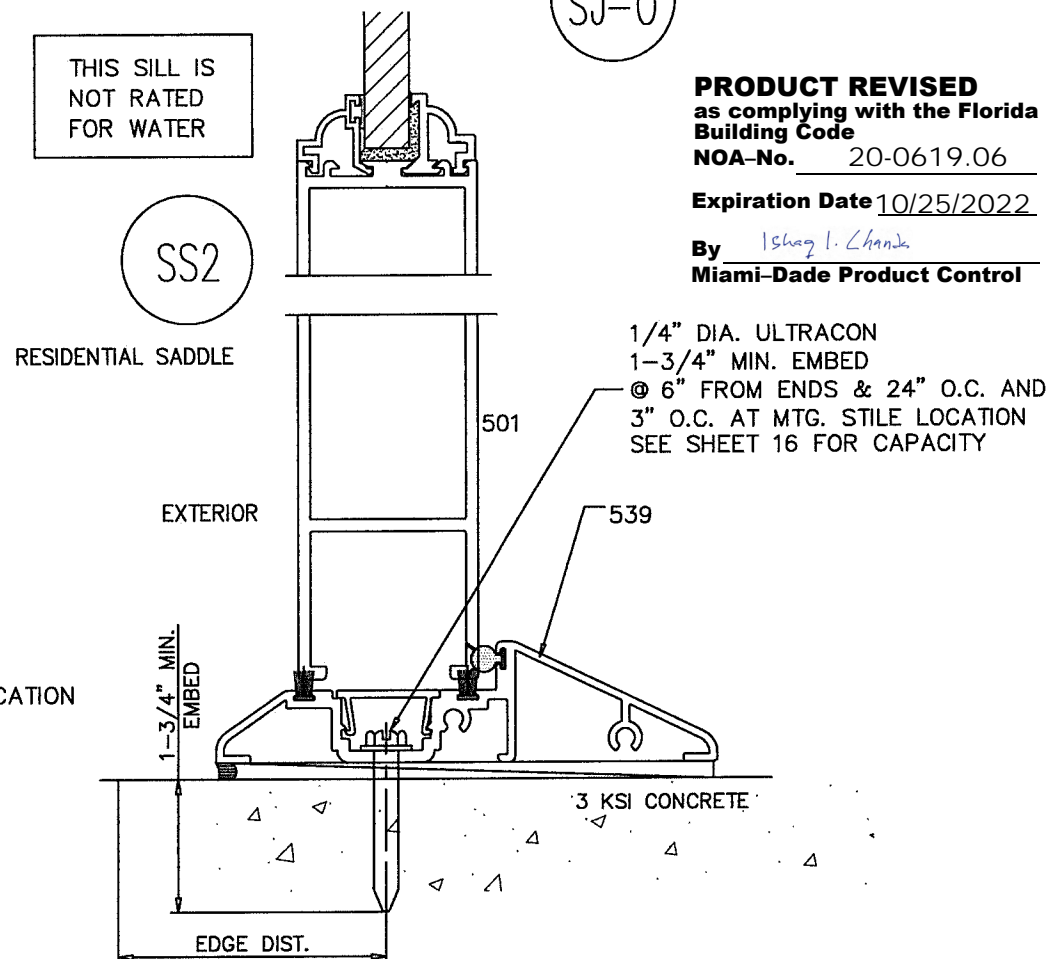
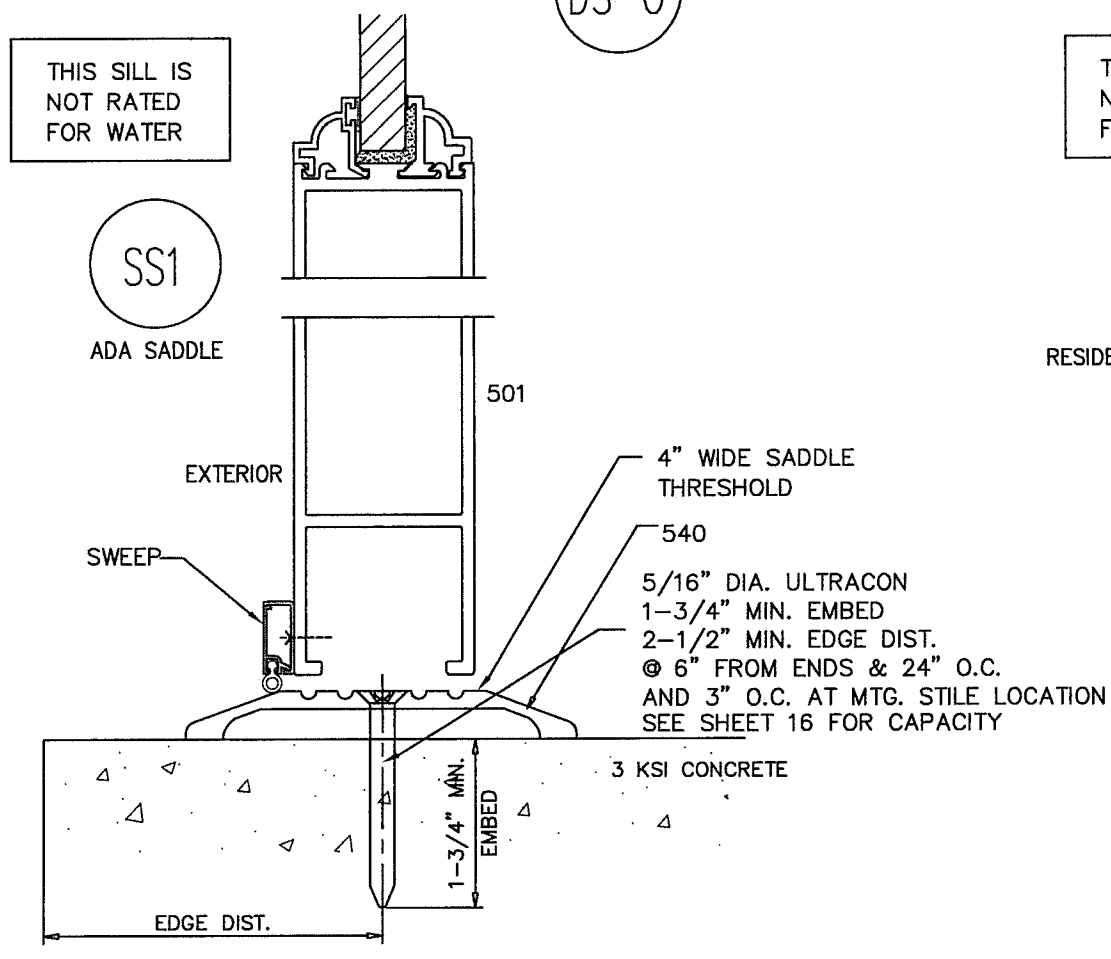
DS-0

SJ-0

THIS SILL IS
NOT RATED
FOR WATER

THIS SILL IS
NOT RATED
FOR WATER

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06
Expiration Date 10/25/2022
By *Ishag I. Chande*
Miami-Dade Product Control

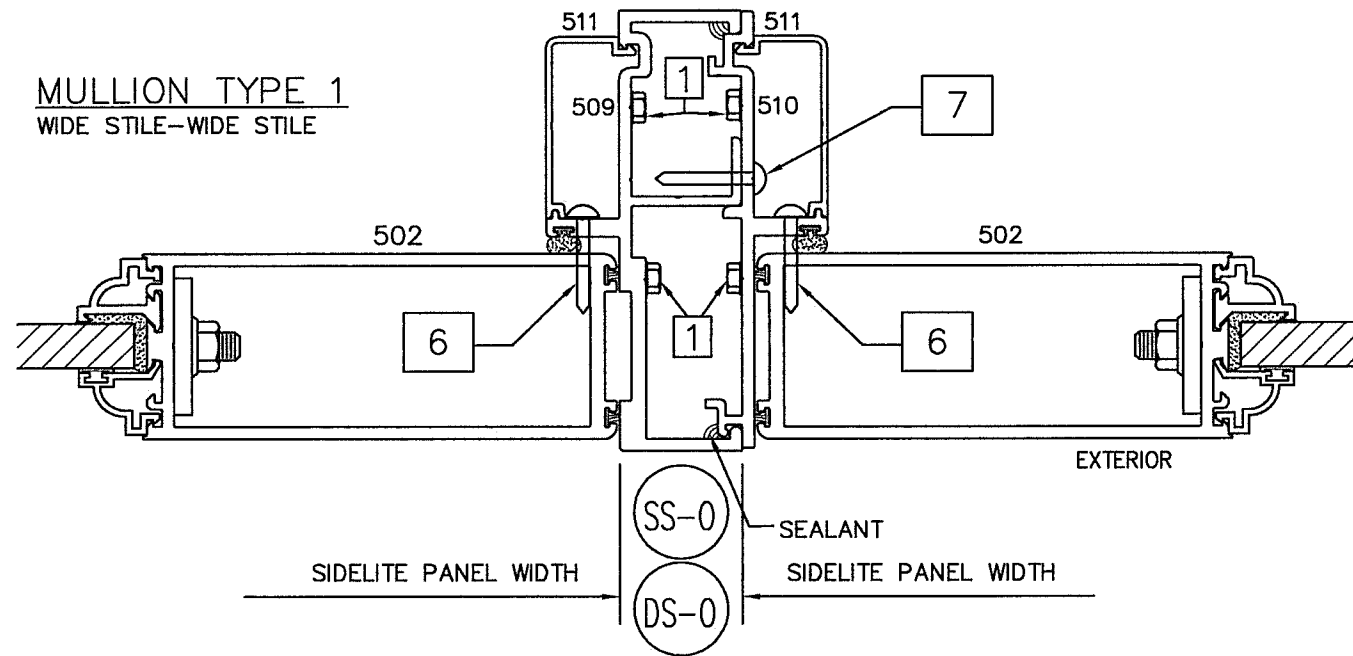


REFER TO SHEET 6 OF 17 FOR
TYPICAL BILL OF MATERIALS

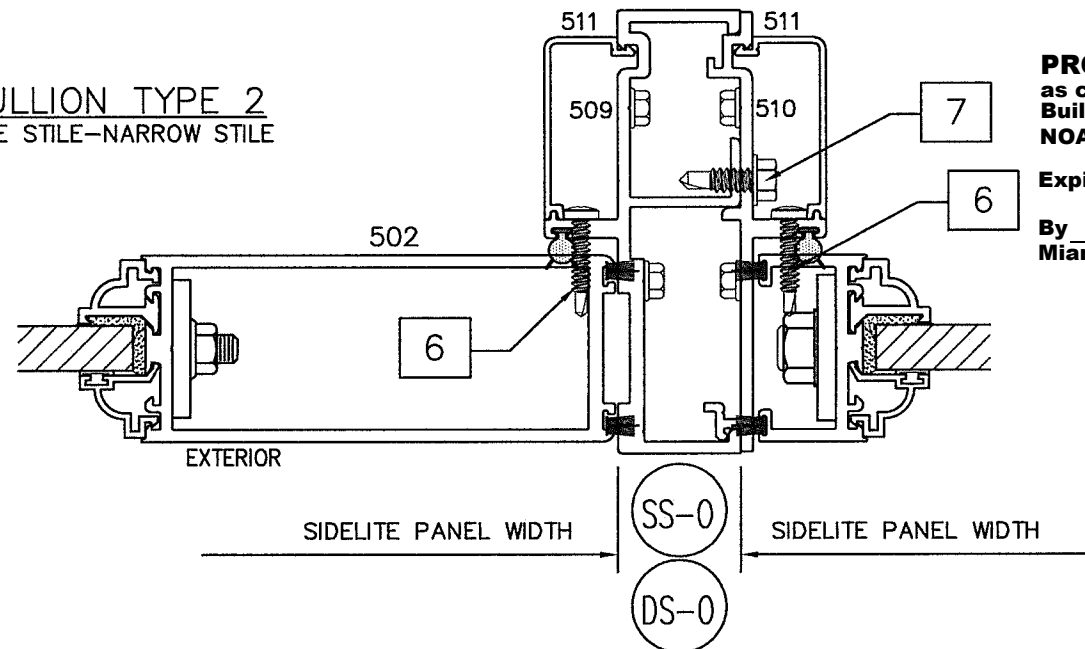
| | | | | | |
|---|--|--|--|-----------------------------------|--|
| PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 | | REGISTRATION #29296 06/12/2020 J. ROSOWSKI | | A 450FD2-NOA | |
| Impact Resistant Windows & Doors WE'RE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590 | | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) INSTALLATION DETAILS 3 | | 12 OF 17 NTS FD450 OUTSWING | |

ANTHONY LYNN MILLER
LICENSE
No. 58705
a2
6/12/20
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705

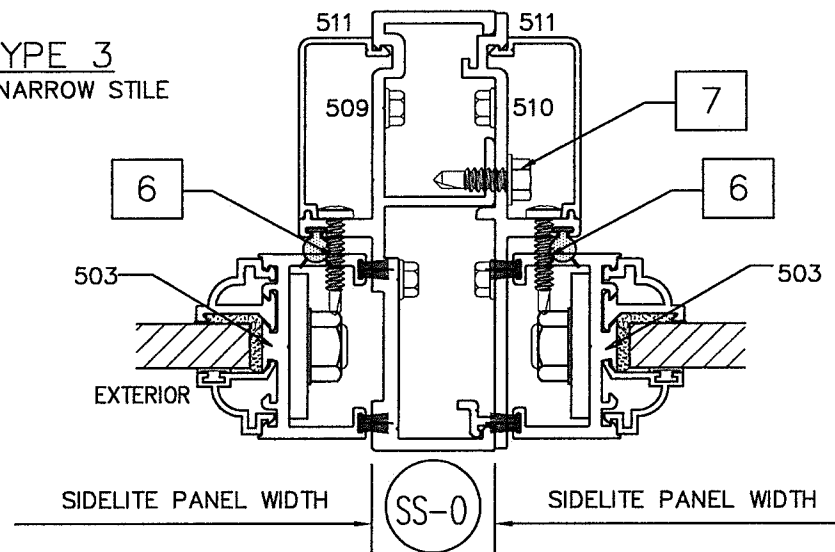
MULLION TYPE 1
WIDE STILE-WIDE STILE



MULLION TYPE 2
WIDE STILE-NARROW STILE



MULLION TYPE 3
NARROW STILE-NARROW STILE



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06
Expiration Date 10/25/2022
By Ishag I. Chank
Miami-Dade Product Control

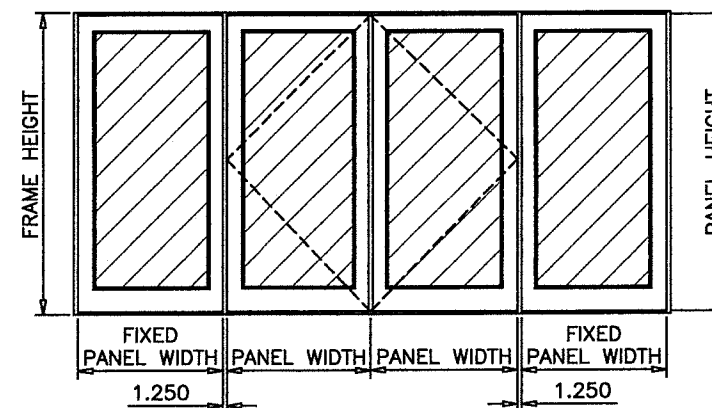
NOTES:
1) LOWER DESIGN LOAD FROM PANEL
PERFORMANCE CHART ON SHEET 14
OR MULLION PERFORMANCE CHART
ABOVE SHALL CONTROL.

2) REFER TO SHEET 6 OF 17 FOR
TYPICAL BILL OF MATERIALS.

MULLION PERFORMANCE CHART
DESIGN LOAD CAPACITY - PSF

| NOMINAL DIMS. | | MULL TYPE 1 | | MULL TYPE 2 | | MULL TYPE 3 | |
|---------------|--------------|-------------|---------|-------------|---------|-------------|---------|
| WIDTH (W) | FRAME HEIGHT | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) |
| 1/6 | 82-3/4" | 100.0 | 110.0 | 100.0 | 110.0 | 100.0 | 110.0 |
| 2/0 | | 100.0 | 110.0 | 100.0 | 110.0 | 100.0 | 110.0 |
| 2/6 | | 100.0 | 110.0 | 100.0 | 110.0 | - | - |
| 3/0 | | 100.0 | 110.0 | 100.0 | 110.0 | - | - |
| 3/6 | | 94.2 | 94.2 | 70.0 | 70.0 | - | - |
| 1/6 | 84-3/4" | 100.0 | 110.0 | 100.0 | 110.0 | 100.0 | 110.0 |
| 2/0 | | 100.0 | 110.0 | 100.0 | 110.0 | 100.0 | 110.0 |
| 2/6 | | 100.0 | 110.0 | 100.0 | 110.0 | - | - |
| 3/0 | | 100.0 | 110.0 | 100.0 | 110.0 | - | - |
| 3/6 | | 94.2 | 94.2 | - | - | - | - |
| 1/6 | 90-3/4" | 100.0 | 110.0 | 100.0 | 110.0 | 100.0 | 110.0 |
| 2/0 | | 100.0 | 110.0 | 100.0 | 110.0 | 70.0 | 70.0 |
| 2/6 | | 100.0 | 110.0 | 100.0 | 110.0 | - | - |
| 3/0 | | 100.0 | 110.0 | 70.0 | 70.0 | - | - |
| 3/6 | | 94.2 | 94.2 | - | - | - | - |
| 1/6 | 96-3/4" | 100.0 | 110.0 | 100.0 | 110.0 | 100.0 | 110.0 |
| 2/0 | | 100.0 | 110.0 | 100.0 | 110.0 | 70.0 | 70.0 |
| 2/6 | | 100.0 | 110.0 | 100.0 | 110.0 | - | - |
| 3/0 | | 100.0 | 110.0 | - | - | - | - |
| 3/6 | | 59.9 | 59.9 | - | - | - | - |
| 1/6 | 102-3/4" | 100.0 | 110.0 | 100.0 | 110.0 | 100.0 | 110.0 |
| 2/0 | | 100.0 | 110.0 | 100.0 | 110.0 | - | - |
| 2/6 | | 100.0 | 110.0 | 100.0 | 100.4 | - | - |
| 3/0 | | 98.9 | 98.9 | - | - | - | - |
| 3/6 | | 59.9 | 59.9 | - | - | - | - |
| 1/6 | 108-3/4" | 100.0 | 110.0 | 100.0 | 110.0 | 100.0 | 110.0 |
| 2/0 | | 100.0 | 110.0 | 100.0 | 104.1 | - | - |
| 2/6 | | 98.1 | 98.1 | 70.0 | 70.0 | - | - |
| 3/0 | | 82.9 | 82.9 | - | - | - | - |
| 1/6 | 114-3/4" | 70.0 | 70.0 | 70.0 | 70.0 | 100.0 | 110.0 |
| 2/0 | | 70.0 | 70.0 | 70.0 | 70.0 | - | - |
| 2/6 | | 70.0 | 70.0 | - | - | - | - |
| 3/0 | | 70.0 | 70.0 | - | - | - | - |
| 1/6 | 120-3/4" | 70.0 | 70.0 | 70.0 | 70.0 | 70.0 | 70.0 |
| 2/0 | | 70.0 | 70.0 | 70.0 | 70.0 | - | - |
| 2/6 | | 70.0 | 70.0 | - | - | - | - |
| 3/0 | | 59.9 | 59.9 | - | - | - | - |

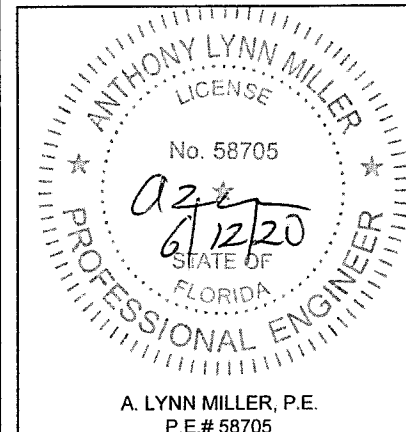
$$\text{WIDTH (W)} = \frac{\text{DOOR PANEL} + \text{FIXED PANEL}}{2} + 1.250$$



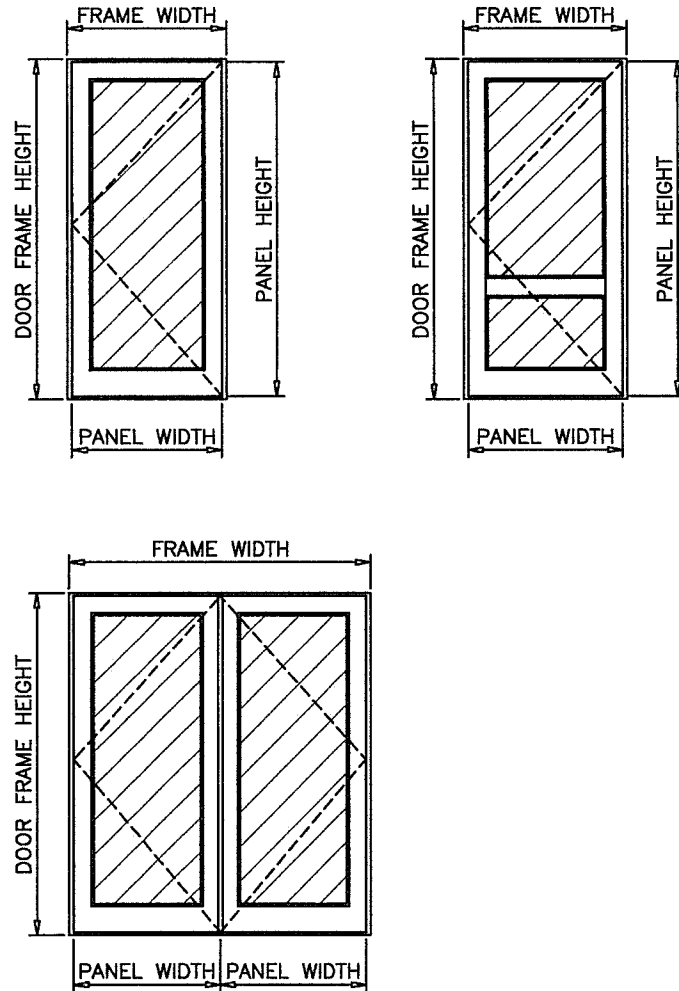
Revision:

| | | | | | | | |
|--|---------------------|-------|------------|-------|---------------------------|--------|----------------|
| PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 | REGISTRATION #29296 | Date | 06/12/2020 | By | J ROSOWSKI | Rev. | A |
| | | No. | 450FD2-NOA | DWG | 450FD2-NOA | No. | 13 OF 17 |
| | | Scale | NTS | Sheet | MULLION X-SECTION AND DPS | Series | FD450 OUTSWING |

Impact Resistant
Windows & Doors
WE'RE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590



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

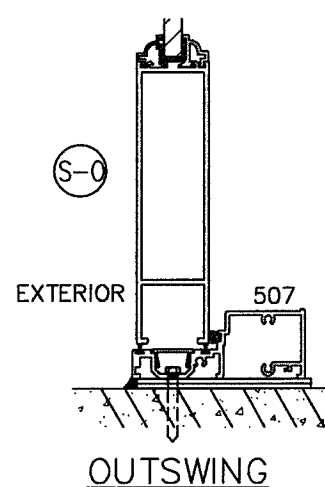


PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06
Expiration Date 10/25/2022
By Ishaq I. Chandra
Miami-Dade Product Control

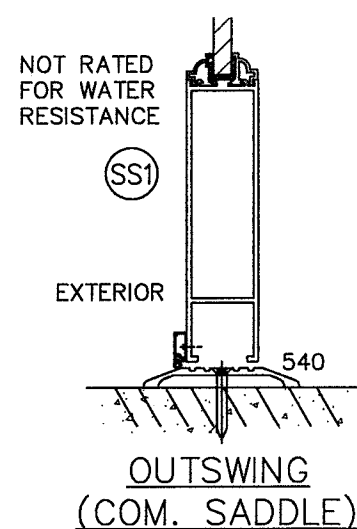
NOTES:

- 1) FOR SINGLE OR DOUBLE LEAF DOORS AND SINGLE SIDELITES CAPACITY SEE CHART ON THIS SHEET.
- 2) SEE BELOW FOR THRESHOLD TYPES.
- 3) SEE SHEET 2 FOR LOCK CAPACITIES FOR SINGLE AND DOUBLE DOORS.
- 4) SEE SHEET 13 FOR MULLION TYPES AND DESIGN LOAD CAPACITY.
- 5) SEE CHART ON SHEET 15 FOR MULLION ANCHORS CAPACITY.
- 6) SEE CHART ON SHEET 16 FOR MTG. STILE ANCHORS AT DOUBLE DOOR.
- 7) LOWEST VALUE FROM THESE CHARTS WILL APPLY TO ENTIRE ASSEMBLY.

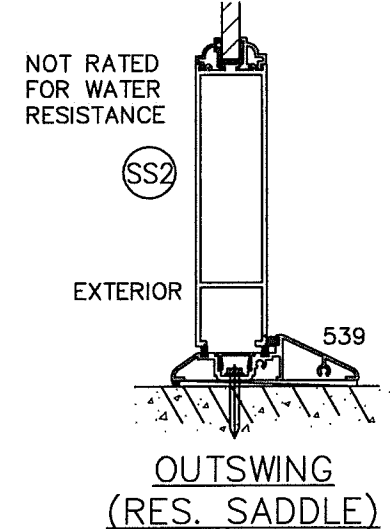
| PANEL PERFORMANCE CHART FOR SINGLE & DOUBLE DOORS & SINGLE SIDELITES (NARROW STILE SIDELITES LIMITED TO 18" OR LESS) DESIGN LOAD CAPACITY - PSF | | | | | |
|---|---------------------|-----------------|---|----------|------|
| NOMINAL DIMS. | | | 7/16" COMPOSITE PANELS 1" COMPOSITE PANELS | | |
| FRAME WIDTH (X) | FRAME WIDTH (XX) | FRAME HEIGHT | EXT. (+) | INT. (-) | |
| 26-9/16" | 50-1/2" | 82-3/4" | 100.0 | 110.0 | |
| 32-9/16" | 62-1/2" | | 100.0 | 110.0 | |
| 38-9/16" | 74-1/2" | | 100.0 | 110.0 | |
| 44-9/16" | 86-1/2" | | 94.2 | 94.2 | |
| 26-9/16" | 50-1/2" | 84-3/4" | 100.0 | 110.0 | |
| 32-9/16" | 62-1/2" | | 100.0 | 110.0 | |
| 38-9/16" | 74-1/2" | | 100.0 | 110.0 | |
| 44-9/16" | 86-1/2" | | 94.2 | 94.2 | |
| 26-9/16" | 50-1/2" | 90-3/4" | 100.0 | 110.0 | |
| 32-9/16" | 62-1/2" | | 100.0 | 110.0 | |
| 38-9/16" | 74-1/2" | | 100.0 | 110.0 | |
| 44-9/16" | 86-1/2" | | 94.2 | 94.2 | |
| 26-9/16" | 50-1/2" | 96-3/4" | 100.0 | 110.0 | |
| 32-9/16" | 62-1/2" | | 100.0 | 110.0 | |
| 38-9/16" | 74-1/2" | | 100.0 | 110.0 | |
| 44-9/16" | 86-1/2" | | 59.9 | 59.9 | |
| 26-9/16" | 50-1/2" | 102-3/4" | 100.0 | 110.0 | |
| 32-9/16" | 62-1/2" | | 100.0 | 110.0 | |
| 38-9/16" | 74-1/2" | | 100.0 | 110.0 | |
| 44-9/16" | 86-1/2" | | 59.9 | 59.9 | |
| 26-9/16" | 50-1/2" | 108-3/4" | 100.0 | 110.0 | |
| 32-9/16" | 62-1/2" | | 100.0 | 110.0 | |
| 38-9/16" | 74-1/2" | | 100.0 | 110.0 | |
| 26-9/16" | 50-1/2" | | 114-3/4" | 70.0 | 70.0 |
| 32-9/16" | 62-1/2" | 70.0 | | 70.0 | |
| 38-9/16" | 74-1/2" | 70.0 | | 70.0 | |
| 26-9/16" | 50-1/2" | 120-3/4" | | 70.0 | 70.0 |
| 32-9/16" | 62-1/2" | | 70.0 | 70.0 | |
| 38-9/16" | 74-1/2" | | 70.0 | 70.0 | |
| LOADS SHOWN ABOVE ARE FOR DOORS USING THRESHOLDS S-O IN ANY CONDITION AND SS1 & SS2 WHERE WATER INFILTRATION REQUIREMENTS ARE NOT APPLICABLE. | | | | | |



OUTSWING

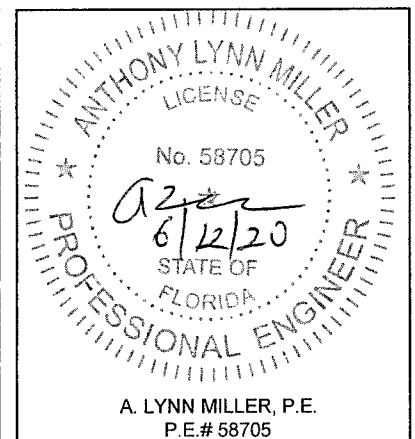


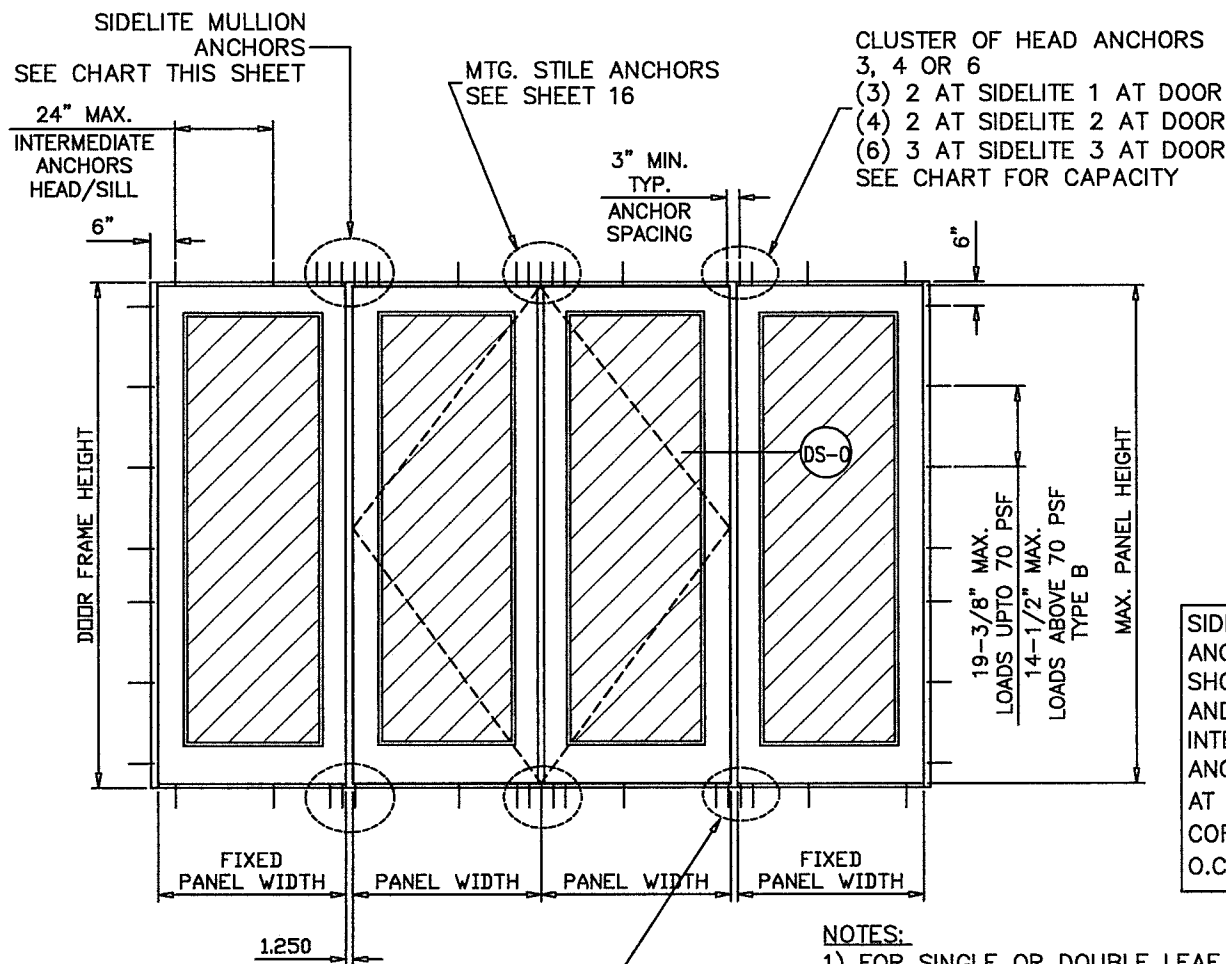
OUTSWING
(COM. SADDLE)



OUTSWING
(RES. SADDLE)

| | | | | | | | | | |
|---|--|--|--|--------------------|------------|----------------|------------|----------|---|
| PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 | | REGISTRATION #29296 | | Date | 06/12/2020 | By | J ROSOWSKI | Rev. | A |
| Impact Resistant Windows & Doors WE'RE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590 | | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | | COMPOSITE PANEL DP | | FD450 OUTSWING | | 14 OF 17 | |
| Impact Resistant Windows & Doors WE'RE STRONGER™ | | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | | COMPOSITE PANEL DP | | FD450 OUTSWING | | 14 OF 17 | |
| CGI | | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | | COMPOSITE PANEL DP | | FD450 OUTSWING | | 14 OF 17 | |
| CGI | | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | | COMPOSITE PANEL DP | | FD450 OUTSWING | | 14 OF 17 | |





SIDELITE MULLION ANCHORS AS SHOWN IN DETAILS AND CHARTS. INTERMEDIATE ANCHORS TO BE AT 6\"/>

NOTES:

- 1) FOR SINGLE OR DOUBLE LEAF DOORS AND SINGLE SIDELITES CAPACITY SEE CHART ON SHEET 14.
- 2) SEE SHEET 2 FOR LOCK CAPACITIES FOR SINGLE AND DOUBLE DOORS.
- 3) SEE BELOW FOR THRESHOLD TYPES.
- 4) SEE SHEET 13 FOR MULLION TYPES AND DESIGN LOAD CAPACITY.
- 5) SEE CHART ON THIS SHEET FOR MULLION ANCHORS CAPACITY.
- 6) SEE CHART ON SHEET 16 FOR MTG. STILE ANCHORS AT DOUBLE DOOR.
- 7) LOWEST VALUE FROM THESE CHARTS WILL APPLY TO ENTIRE ASSEMBLY.

CLUSTER OF SILL ANCHORS

- 3 OR 4
(3) 2 AT SIDELITE 1 AT DOOR
(4) 2 AT SIDELITE 2 AT DOOR
SEE CHART FOR CAPACITY

ANCHORS:

TYPE 'B' - 1/4\"/>

TYPE 'B+' - 1/4\"/>

WOOD AT HEAD OR JAMBS 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.

TYPE 'C' - 1/4\"/>

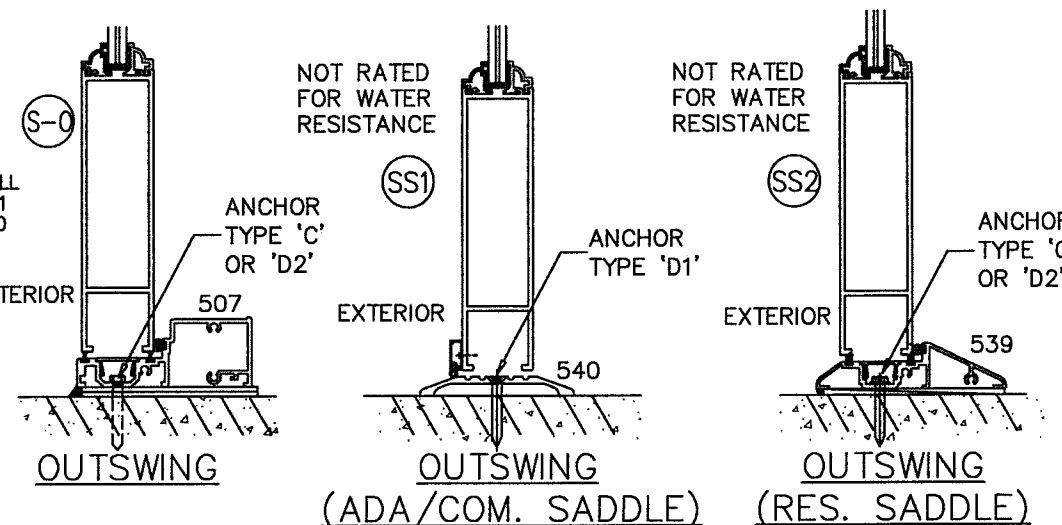
TYPE 'D1' - 5/16\"/>

TYPE 'D2' - #14 SMS (GRADE 5 CRS)
INTO WOOD STRUCTURES WITH 1-3/8\"/>

| MULLION ANCHORS AT SIDELITES | | | | | | | | |
|------------------------------|--------------|--------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|--|
| NOMINAL DIMS. | | DESIGN LOAD CAPACITY-PSF | | | | | | |
| | | TYPE 'B' OR 'B+' AT HEAD | | | TYPE 'C' AT HEAD | | TYPE 'C' AT HEAD | |
| | | CLUSTER OF 3 ANCHORS | CLUSTER OF 4 ANCHORS | CLUSTER OF 6 ANCHORS | TYPE 'C' AT S-I & SS2 SILL | CLUSTER OF 3 ANCHORS | CLUSTER OF 4 ANCHORS | TYPE 'D1' AT SS1 SILL OR TYPE 'D2' AT S-I & SS2 SILL |
| WIDTH (W) | FRAME HEIGHT | | | | | | | |
| 2/0 | 82-3/4" | 106.7 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 2/6 | | 86.2 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 3/0 | | 72.3 | 96.4 | 110.0 | 109.3 | 110.0 | 101.0 | 110.0 |
| 3/6 | | 62.3 | 83.0 | 110.0 | 94.2 | 110.0 | 87.0 | 110.0 |
| 2/0 | 84-3/4" | 104.2 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 2/6 | | 84.2 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 3/0 | | 70.6 | 94.1 | 110.0 | 106.7 | 110.0 | 98.7 | 110.0 |
| 3/6 | | 60.8 | 81.1 | 110.0 | 91.9 | 110.0 | 85.0 | 108.7 |
| 2/0 | 90-3/4" | 97.3 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 2/6 | | 78.6 | 104.8 | 110.0 | 110.0 | 110.0 | 109.8 | 110.0 |
| 3/0 | | 65.9 | 87.9 | 110.0 | 99.7 | 110.0 | 92.1 | 110.0 |
| 3/6 | | 56.8 | 75.7 | 110.0 | 85.9 | 110.0 | 79.4 | 101.5 |
| 2/0 | 96-3/4" | 91.2 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 2/6 | | 73.7 | 98.3 | 110.0 | 110.0 | 110.0 | 103.0 | 110.0 |
| 3/0 | | 61.9 | 82.5 | 110.0 | 93.5 | 110.0 | 86.4 | 110.0 |
| 3/6 | | 53.3 | 71.0 | 106.5 | 80.5 | 107.4 | 74.4 | 95.2 |
| 2/0 | 102-3/4" | 85.9 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 2/6 | | 69.4 | 92.6 | 110.0 | 104.9 | 110.0 | 97.0 | 110.0 |
| 3/0 | | 58.2 | 77.7 | 110.0 | 88.0 | 110.0 | 81.4 | 104.1 |
| 3/6 | | 50.2 | 66.9 | 100.3 | 75.8 | 101.1 | 70.1 | 89.6 |
| 2/0 | 108-3/4" | 81.2 | 108.2 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 2/6 | | 65.6 | 87.5 | 110.0 | 99.2 | 110.0 | 91.7 | 110.0 |
| 3/0 | | 55.0 | 73.4 | 110.0 | 83.2 | 110.0 | 76.9 | 98.3 |
| 3/6 | | 47.9 | 66.1 | 99.1 | 74.9 | 99.9 | 69.2 | 88.6 |
| 2/0 | 114-3/4" | 76.9 | 102.6 | 110.0 | 110.0 | 110.0 | 107.5 | 110.0 |
| 2/6 | | 62.2 | 82.9 | 110.0 | 94.0 | 110.0 | 86.9 | 110.0 |
| 3/0 | | 52.2 | 69.5 | 104.3 | 78.8 | 105.1 | 72.9 | 93.2 |
| 3/6 | | 45.1 | 61.1 | 99.1 | 70.9 | 99.9 | 65.2 | 88.6 |
| 2/0 | 120-3/4" | 73.1 | 97.5 | 110.0 | 110.0 | 110.0 | 102.2 | 110.0 |
| 2/6 | | 59.1 | 78.8 | 110.0 | 89.3 | 110.0 | 82.5 | 105.6 |
| 3/0 | | 49.6 | 66.1 | 99.1 | 74.9 | 99.9 | 69.2 | 88.6 |
| 3/6 | | 42.5 | 58.8 | 94.2 | 67.0 | 94.2 | 61.1 | 81.1 |

LOADS SHOWN ABOVE ARE FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED. LIMIT EXT.(+) LOADS TO 50.0 PSF FOR THRESHOLDS S-I WHERE WATER INFILTRATION RESISTANCE IS REQUIRED. THRESHOLDS SS1 AND SS2 ARE NOT RATED FOR WATER INFILTRATION.

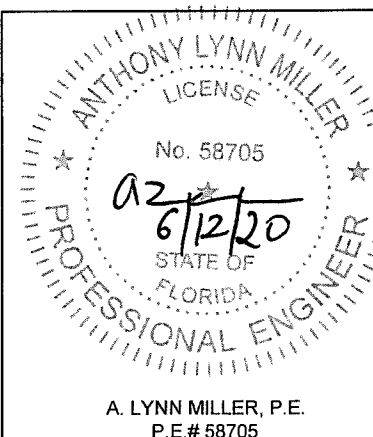
$$\text{WIDTH (W)} = \frac{\text{DOOR PANEL} + \text{FIXED PANEL}}{2} + 1.250$$

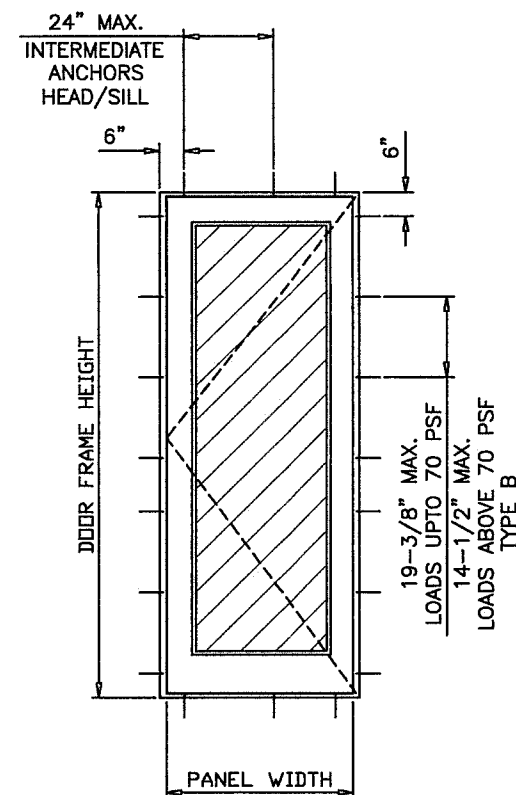


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Expiration Date 10/25/2022
By *Isaac L. Chank*
Miami-Dade Product Control

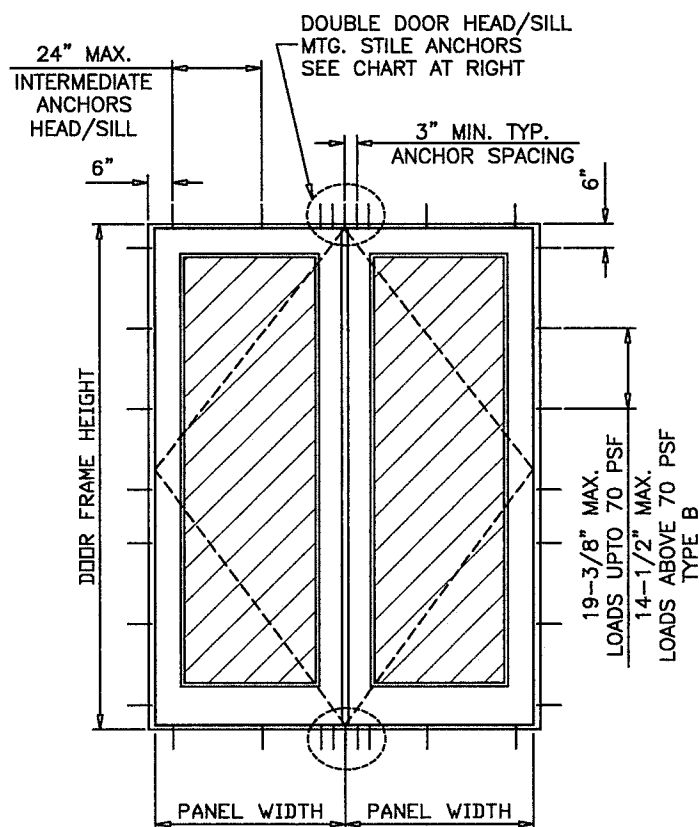
ADDED ANCHOR TYPE, &
REFORMATTED - JR - 6/11/20

| | | | | | |
|---|--|------------|----------------|-------|----------------|
| PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 | REGISTRATION #29296 | 06/12/2020 | J ROSOWSKI | Rev. | A |
| | | | | Date | 06/12/2020 |
| | | | | By | J ROSOWSKI |
| | | | | Drawn | 450FD2-NOA |
| Impact Resistant Windows & Doors WE'RE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590 | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) | ANCHOR DP | FD450 OUTSWING | No. | 15 OF 17 |
| | | | | DWG | 15 OF 17 |
| | | | | Sheet | NTS |
| | | | | Scale | FD450 OUTSWING |

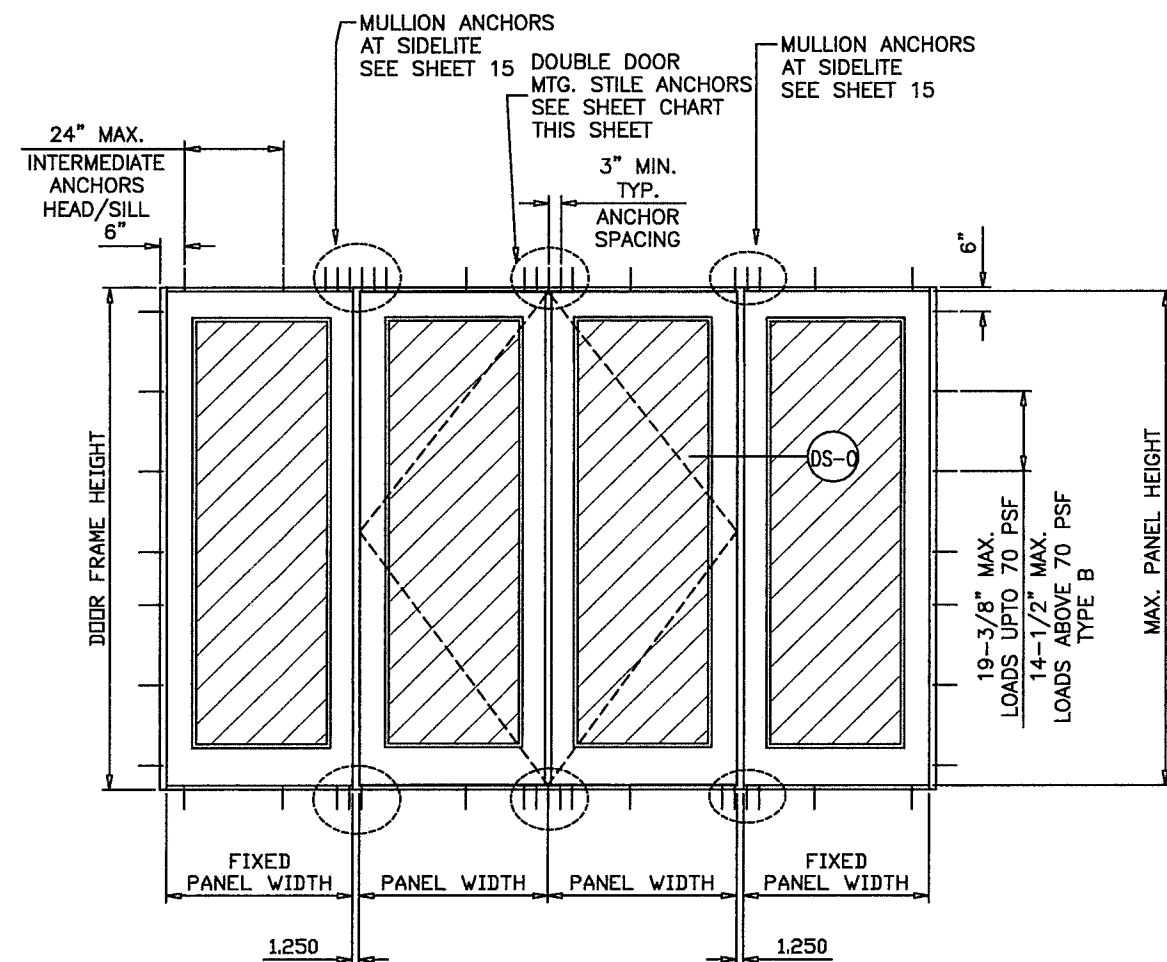




SINGLE DOOR OR SIDELITE



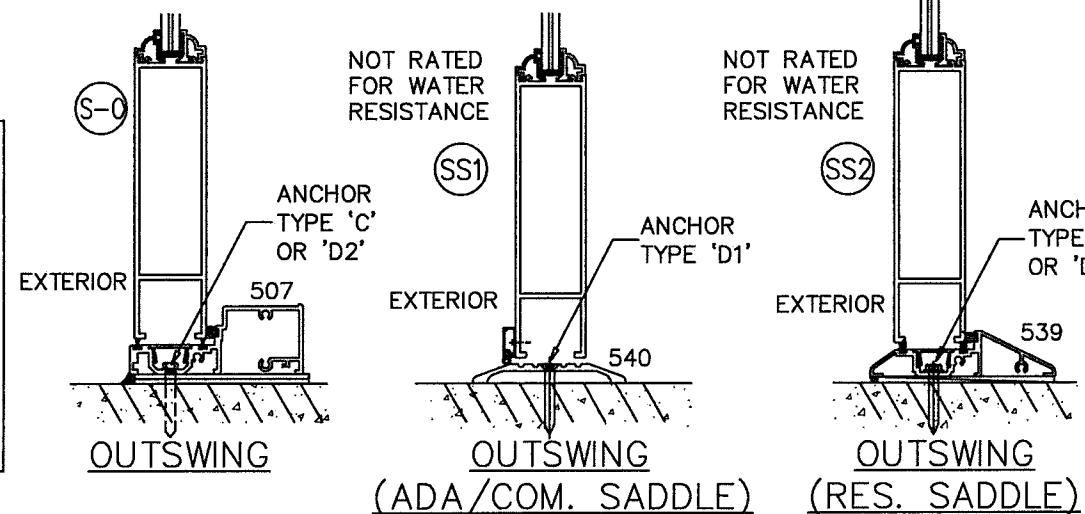
DOUBLE DOOR



MEETING STILE ANCHORS AS SHOWN IN DETAILS AND CHARTS
INTERMEDIATE ANCHORS TO BE AT 6" FROM CORNERS AND 24" O.C. AT HEAD/SILL.

| MTG. STILE ANCHORS AT DOUBLE DOORS | | | | | | | | |
|------------------------------------|------------------|--------------|--------------------------|----------------------|----------------------|--|----------------------|---|
| DESIGN LOAD CAPACITY-PSF | | | | | | | | |
| NOMINAL DIMS. | FRAME WIDTH (XX) | FRAME HEIGHT | TYPE 'B' OR 'B+' AT HEAD | | | TYPE 'C' AT HEAD TYPE 'C' AT S-I & SS2 SILL | | TYPE 'C' AT HEAD TYPE 'D1' AT SS1 SILL OR TYPE 'D2' AT S-I & SS2 SILL |
| | | | CLUSTER OF 3 ANCHORS | CLUSTER OF 4 ANCHORS | CLUSTER OF 5 ANCHORS | CLUSTER OF 3 ANCHORS | CLUSTER OF 4 ANCHORS | CLUSTER OF 3 ANCHORS |
| 50-1/2" | 82-3/4" | 62-1/2" | 106.7 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 62-1/2" | | 74-1/2" | 86.2 | 110.0 | 110.0 | 110.0 | 110.0 | 100.7 |
| 74-1/2" | | 86-1/2" | 72.3 | 96.4 | 110.0 | 109.3 | 110.0 | 84.5 |
| 86-1/2" | | 98-1/2" | 62.3 | 83.0 | 103.8 | 94.2 | 110.0 | 72.8 |
| 50-1/2" | 84-3/4" | 62-1/2" | 104.2 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 62-1/2" | | 74-1/2" | 84.2 | 110.0 | 110.0 | 110.0 | 110.0 | 98.4 |
| 74-1/2" | | 86-1/2" | 70.6 | 94.1 | 110.0 | 106.7 | 110.0 | 82.5 |
| 86-1/2" | | 98-1/2" | 60.8 | 81.1 | 101.4 | 91.9 | 110.0 | 71.1 |
| 50-1/2" | 90-3/4" | 62-1/2" | 97.3 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |
| 62-1/2" | | 74-1/2" | 78.6 | 104.8 | 110.0 | 110.0 | 110.0 | 91.9 |
| 74-1/2" | | 86-1/2" | 65.9 | 87.9 | 109.9 | 99.7 | 110.0 | 77.1 |
| 86-1/2" | | 98-1/2" | 56.8 | 75.7 | 94.7 | 85.9 | 110.0 | 66.4 |
| 50-1/2" | 96-3/4" | 62-1/2" | 91.2 | 110.0 | 110.0 | 110.0 | 110.0 | 106.6 |
| 62-1/2" | | 74-1/2" | 73.7 | 98.3 | 110.0 | 110.0 | 110.0 | 86.2 |
| 74-1/2" | | 86-1/2" | 61.9 | 82.5 | 103.1 | 93.5 | 110.0 | 72.3 |
| 86-1/2" | | 98-1/2" | 53.3 | 71.0 | 88.8 | 80.5 | 107.4 | 62.3 |
| 50-1/2" | 102-3/4" | 62-1/2" | 85.9 | 110.0 | 110.0 | 110.0 | 110.0 | 100.4 |
| 62-1/2" | | 74-1/2" | 69.4 | 92.6 | 110.0 | 104.9 | 110.0 | 81.1 |
| 74-1/2" | | 86-1/2" | 58.2 | 77.7 | 97.1 | 88.0 | 110.0 | 68.1 |
| 86-1/2" | | 98-1/2" | 50.2 | 66.9 | 83.6 | 75.8 | 101.1 | 58.6 |
| 50-1/2" | 108-3/4" | 62-1/2" | 81.2 | 108.2 | 110.0 | 110.0 | 110.0 | 94.9 |
| 62-1/2" | | 74-1/2" | 65.6 | 87.5 | 109.3 | 99.2 | 110.0 | 76.7 |
| 74-1/2" | | 86-1/2" | 55.0 | 73.4 | 91.7 | 83.2 | 110.0 | 64.3 |
| 86-1/2" | | 98-1/2" | 46.9 | 62.6 | 82.6 | 74.9 | 99.9 | 57.9 |
| 50-1/2" | 114-3/4" | 62-1/2" | 76.9 | 102.6 | 110.0 | 110.0 | 110.0 | 89.9 |
| 62-1/2" | | 74-1/2" | 62.2 | 82.9 | 103.6 | 94.0 | 110.0 | 72.6 |
| 74-1/2" | | 86-1/2" | 52.2 | 69.5 | 86.9 | 78.8 | 105.1 | 60.9 |
| 86-1/2" | | 98-1/2" | 43.1 | 57.5 | 71.0 | 63.0 | 110.0 | 51.4 |
| 50-1/2" | 120-3/4" | 62-1/2" | 59.1 | 78.8 | 98.5 | 89.3 | 110.0 | 69.0 |
| 62-1/2" | | 74-1/2" | 49.6 | 66.1 | 82.6 | 74.9 | 99.9 | 57.9 |
| 74-1/2" | | 86-1/2" | 40.1 | 54.1 | 67.6 | 59.9 | 110.0 | 46.9 |
| 86-1/2" | | 98-1/2" | 31.1 | 43.1 | 52.6 | 45.9 | 110.0 | 37.9 |

- 1) SEE SHEET 15 FOR ANCHORS DESCRIPTION AND SILL ANCHOR OPTIONS.
- 2) FOR SINGLE OR DOUBLE LEAF DOORS, SINGLE SIDELITES AND THRESHOLD CAPACITY SEE CHART ON SHEET 14.
- 3) SEE SHEET 2 FOR LOCK CAPACITIES FOR SINGLE AND DOUBLE DOORS.
- 4) SEE SHEET 13 FOR MULLION TYPES AND DESIGN LOAD CAPACITY.
- 5) SEE CHART ON SHEET 15 FOR MULLION ANCHORS CAPACITY.
- 6) SEE CHART ON THIS SHEET FOR MTG. STILE ANCHORS AT DOUBLE DOOR.
- 7) LOWEST VALUE FROM THESE CHARTS WILL APPLY TO ENTIRE ASSEMBLY.



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06
Expiration Date 10/25/2022
By *Ishag I. Chank*
Miami-Dade Product Control

ADDED ANCHOR TYPE, &
REFORMATTED - JR - 6/11/20

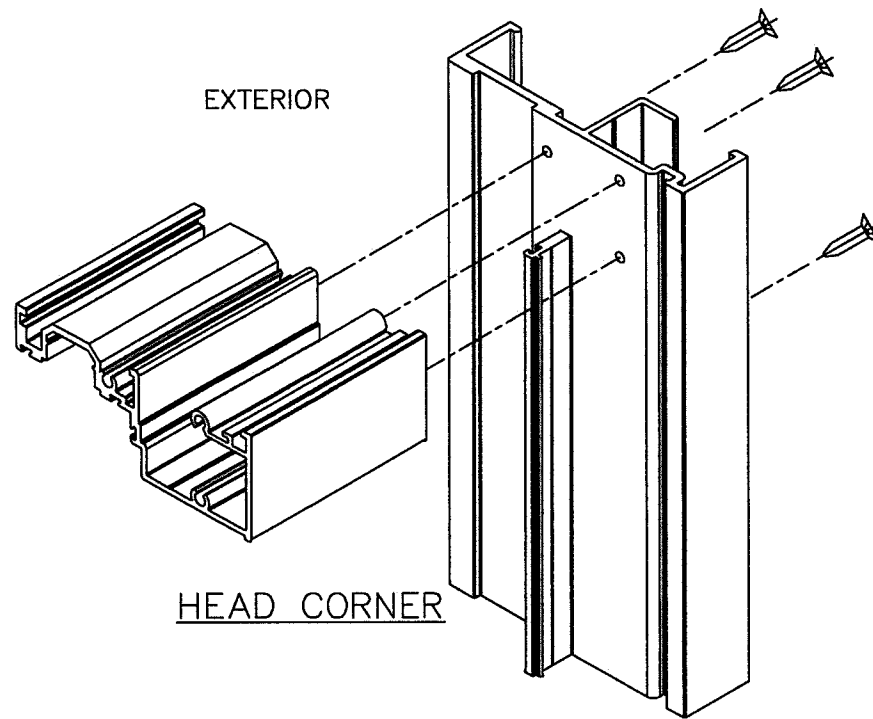
PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

Impact Resistant
Windows & Doors
WE'RE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

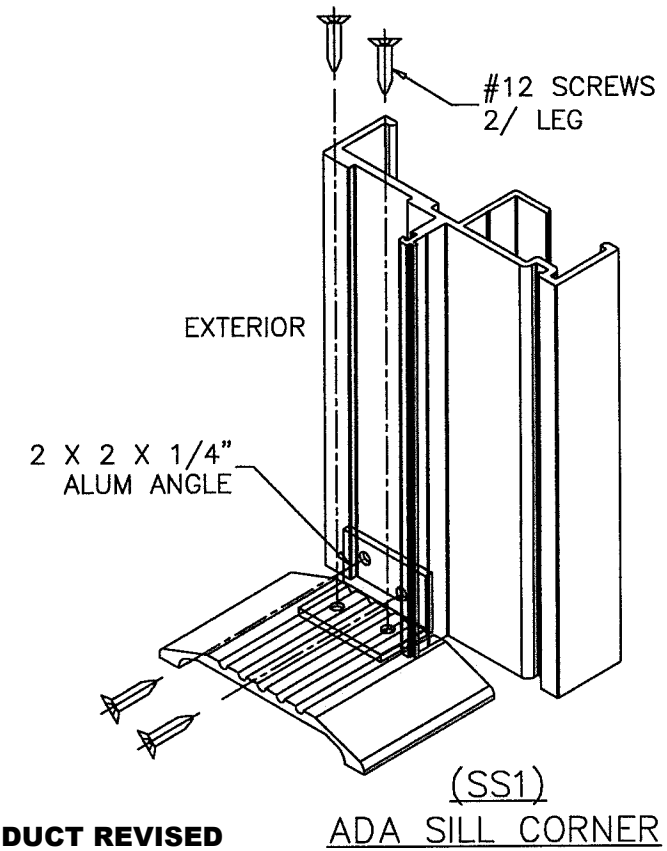
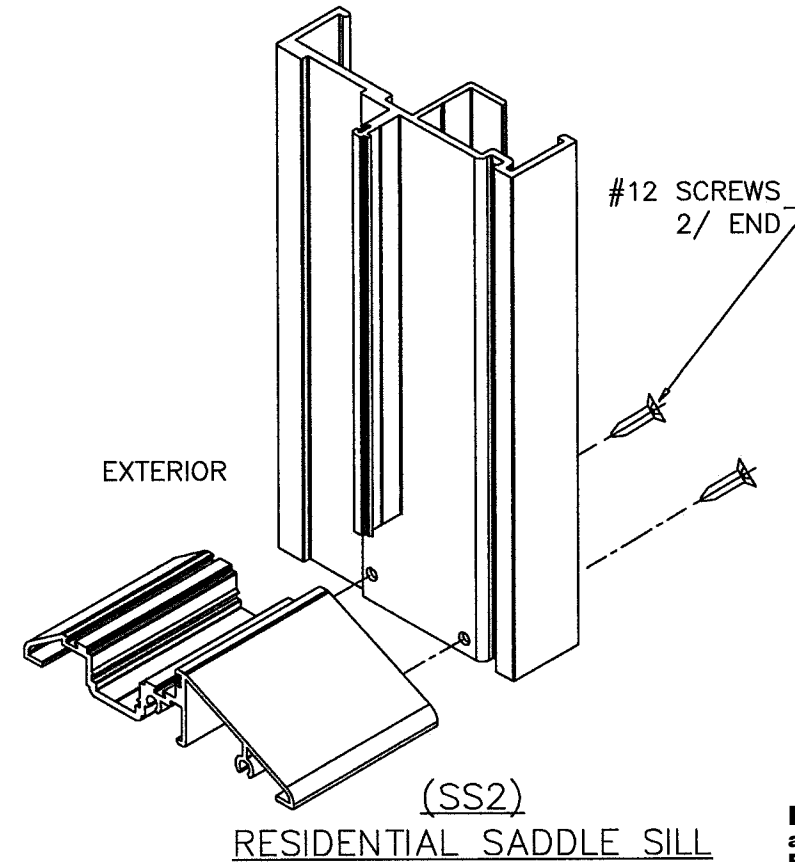
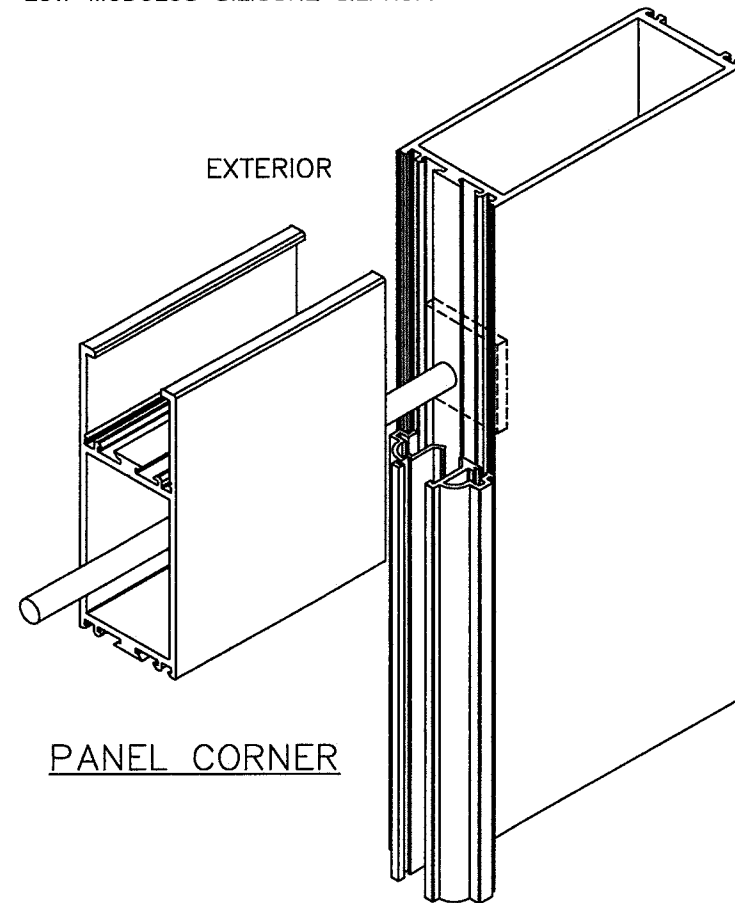
REGISTRATION #29296
06/12/2020
J ROSOWSKI
ANCHOR DP
FD450 OUTSWING
16 OF 17
450FD2-NOA
A

ANTHONY LYNN MILLER
LICENSE
No 58705
6/12/20
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705

CORNER DETAILS



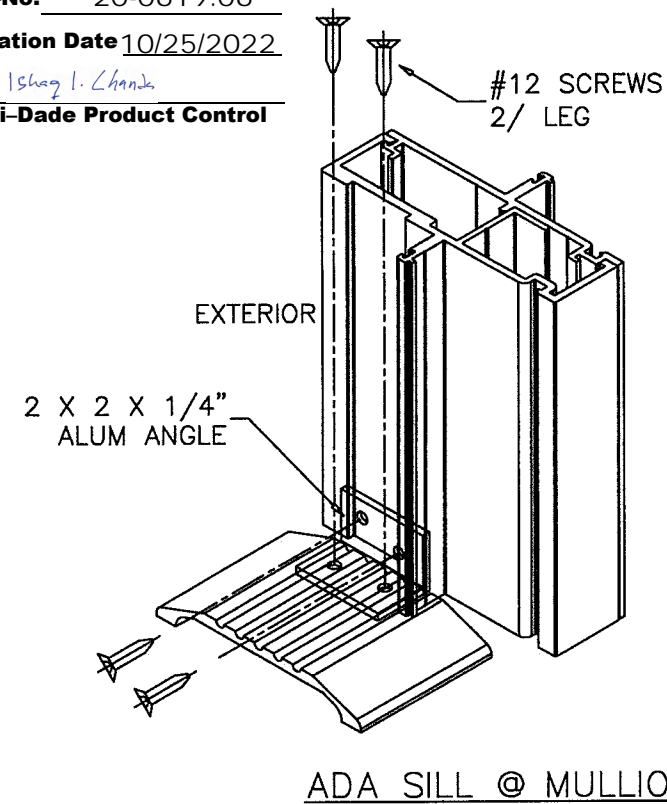
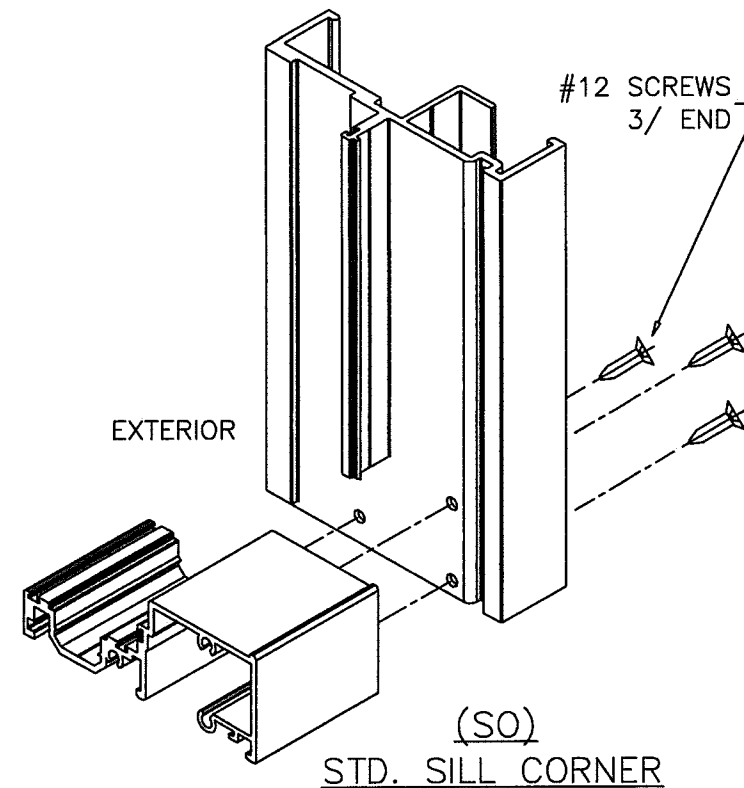
CORNERS TO BE SEALED WITH LOW MODULUS SILICONE SILPRUF.



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0619.06

Expiration Date 10/25/2022

By *Ishag I. Chande*
Miami-Dade Product Control



| | | | | |
|---|--|--|--|--------------------------|
| PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 | | REGISTRATION #29296 06/12/2020 J ROSOWSKI 450FD2-NOA | | A |
| Impact Resistant Windows & Doors WE'RE STRONGER™ CGI WINDOWS AND DOORS, INC. 3780 W 104TH STREET HIALEAH, FL 33018 (305) 593-6590 | | 450 ALUM. FRENCH DOOR - OPAQUE & OS (LM) CORNER DETAILS FD450 OUTSWING | | 17 OF 17 NTS Scale |
| No. 58705 6/12/20 STATE OF FLORIDA PROFESSIONAL ENGINEER A. LYNN MILLER, P.E. P.E.# 58705 | | Revision: | | |