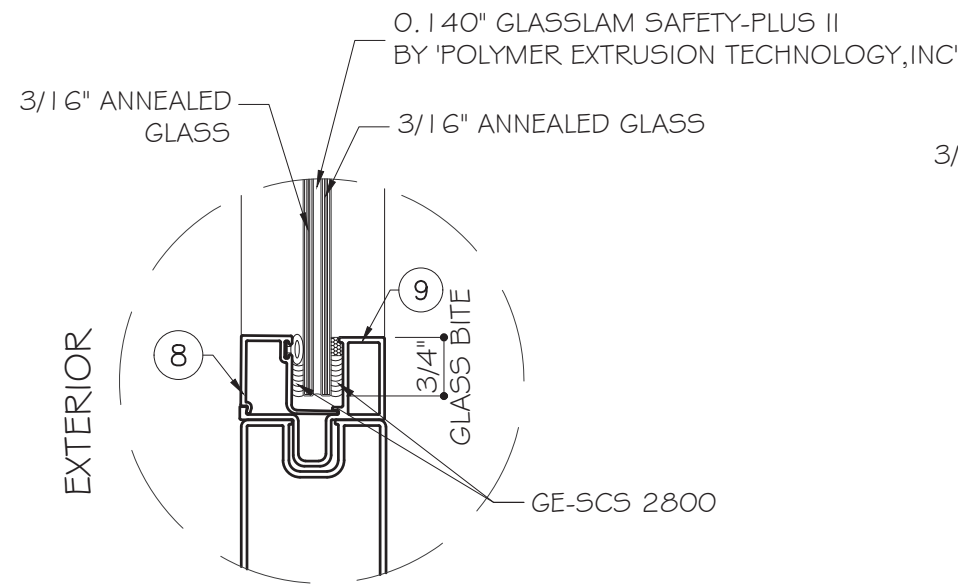
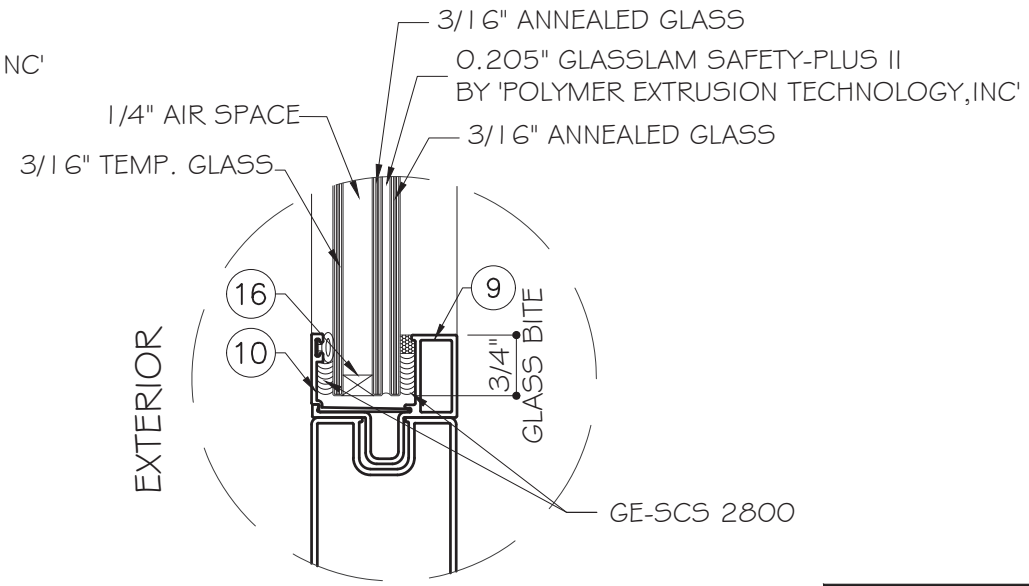


# SERIES FD 2100 OUTSWING FRENCH DOOR LARGE MISSILE IMPACT (LMI)



**GLASS TYPE "G1"**  
**7/16" OVERALL LAM. GLASS**



**GLASS TYPE "G2"**  
**1" OVERALL INSUL. LAM. GLASS**

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

**GENERAL NOTES:**

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 7 TH EDITION FLORIDA BUILDING CODE (2020) INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- DOORS RATED FOR LARGE MISSILE IMPACT. IMPACT SHUTTERS ARE NOT REQUIRED.
- THESE DOORS ARE APPROVED FOR AIR AND WATER INFILTRATION.
- 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 7TH EDITION FLORIDA BUILDING CODE (2020) SECTION AS APPLICABLE.
- METAL STRUCTURES NOT BY EMC WINDOWS AND DOORS TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY THIS GLAZING SYSTEM AND TO TRANSFER SUCH LOADS TO THE BUILDING MAIN STRUCTURE.
- ULTIMATE LOAD OBTAINED FROM ASCE 7-16, MULTIPLY BY 0.6 SHALL BE LESS THAN OR EQUAL TO MAX. DESIGN LOAD IN THIS DOCUMENT. THE DESIGN LOADS SHOWN IN THIS DOCUMENT ARE ALLOWABLE DESIGN LOADS.

**INSTRUCTIONS:**

USE CHARTS AS FOLLOWS.

- STEP 1:** DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7-16 STANDARD.
- STEP 2:** SEE TYPICAL ELEVATION ON SHEET E1 & E2 FOR MAXIMUM SIZE AND DESIGN LOAD.
- STEP 3:** SEE ANCHOR TYPE ON SHEET A1. SEE SHEET E1 & E2 FOR ANCHOR SPACING.

| <b>ABBREVIATIONS AND SYMBOLS</b> |  |
|----------------------------------|--|
| D.L.O. - DAYLITE OPENING         |  |
| F.H. - FRAME HEIGHT              |  |
| F.W. - FRAME WIDTH               |  |
| W/ - WITH                        |  |
| W/O - WITHOUT                    |  |
| O.C. - ON CENTER                 |  |

**LIMITATIONS OF USE**

A- THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT. I.E. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

B- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

C- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

D- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D.

E- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

FLORIDA APPROVAL:  
**FL # 29477.1**

December 15th, 2020

**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS

12781 MIRAMAR PKWY, STE. 301  
MIRAMAR, FL 33027 P: 305.271.0117

www.MCYEngineering.com MCY.Engineering@Att.net

SERIES SF 2100 OUTSWING FRENCH DOOR - L.M.I.

**EMC WINDOWS AND DOORS, LLC.**  
1356 W. 76TH STREET  
HIALEAH, FL 33014  
TEL: (305) 283-6280 EMCWindowsDoors@gmail.com

| Y/A | 2020 FBC | Description | Drawn By | Date | Rev. No. |
|-----|----------|-------------|----------|------|----------|
| 01  |          |             |          |      |          |

Drawn Date: 08/08/2019

Scale: AS SHOWN

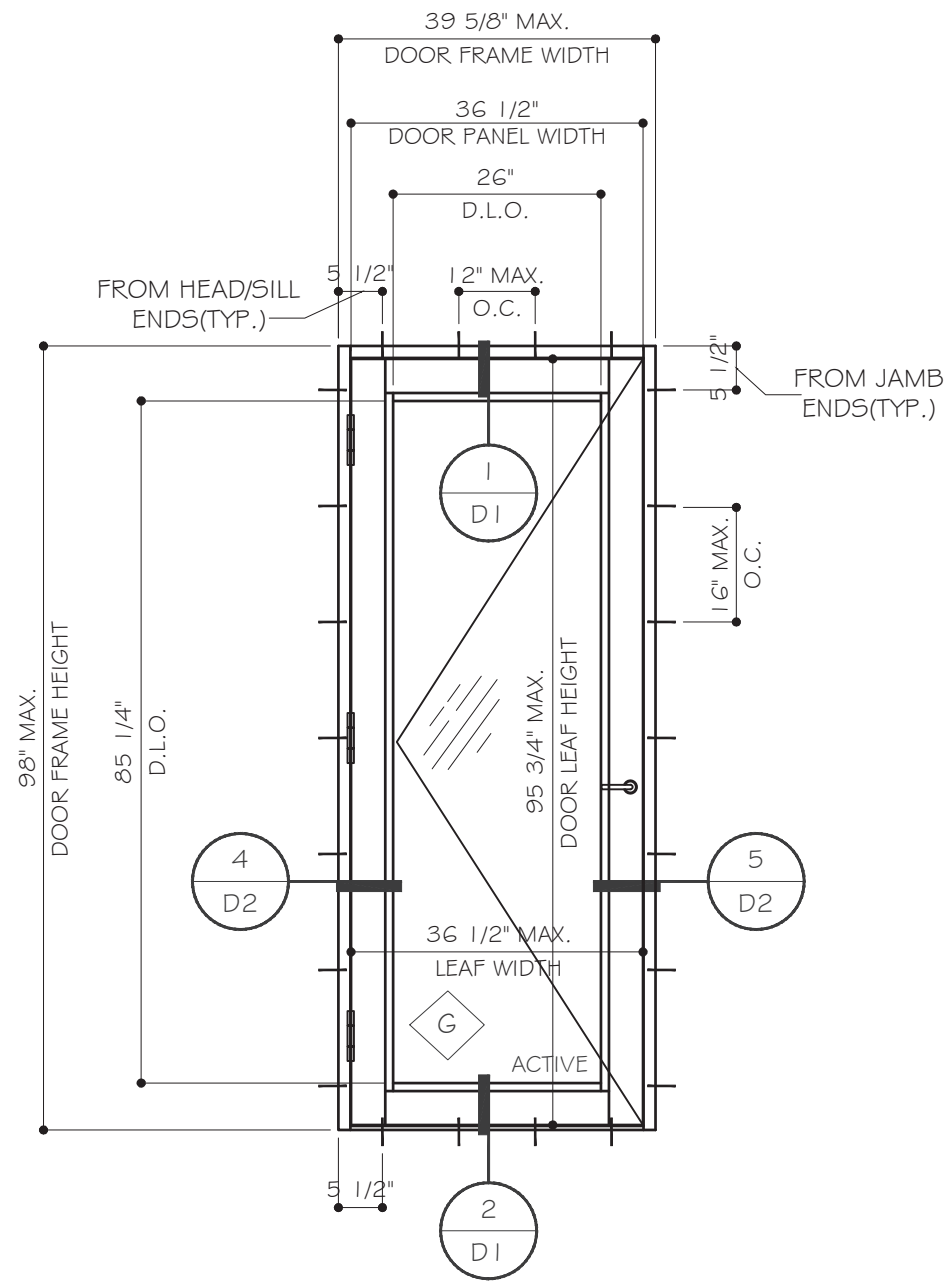
DRAWING NO.

**AD19-16**

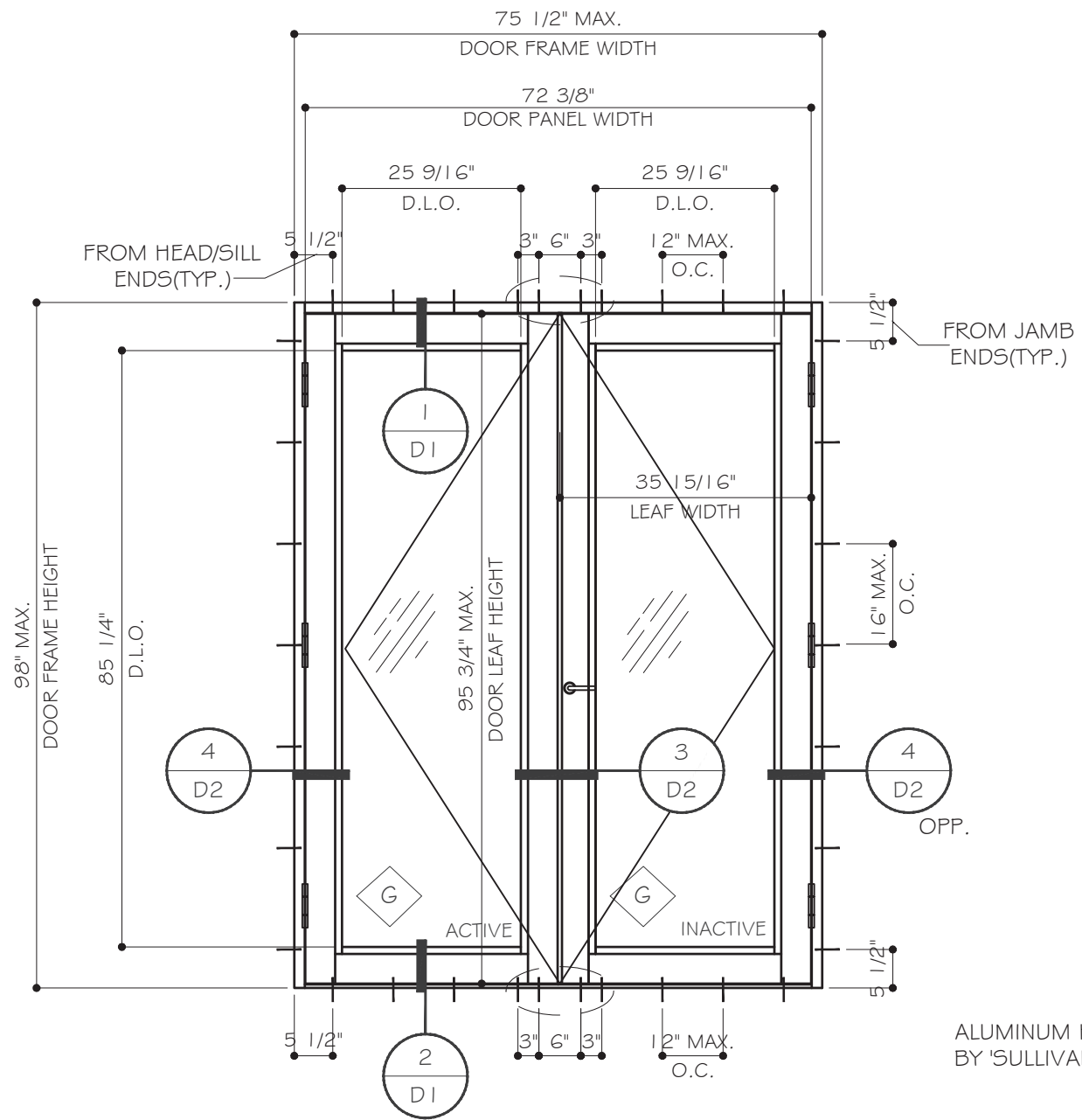
Sheet No.

**01 OF 08**

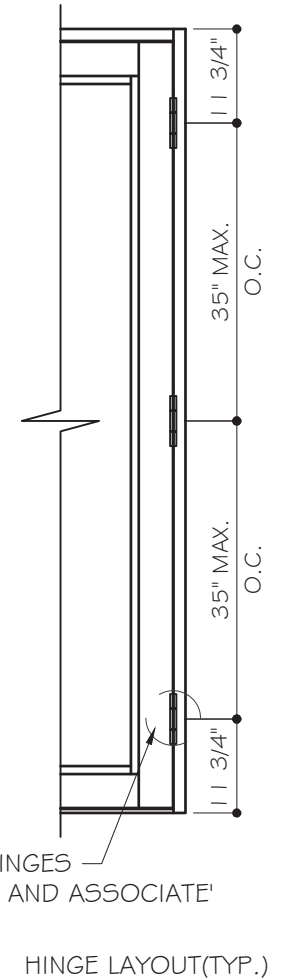
COVER



SINGLE DOOR W/O SIDELITE (X)  
TYPICAL EXTERIOR ELEVATION

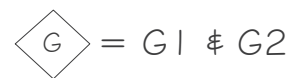


DOUBLE DOOR W/O SIDELITE (XX)  
TYPICAL EXTERIOR ELEVATION

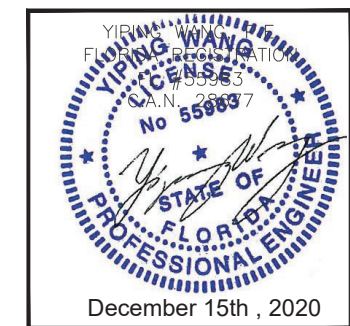


|                     |
|---------------------|
| MAX.<br>DESIGN LOAD |
| + 65 PSF            |
| - 65 PSF            |

NOTE:



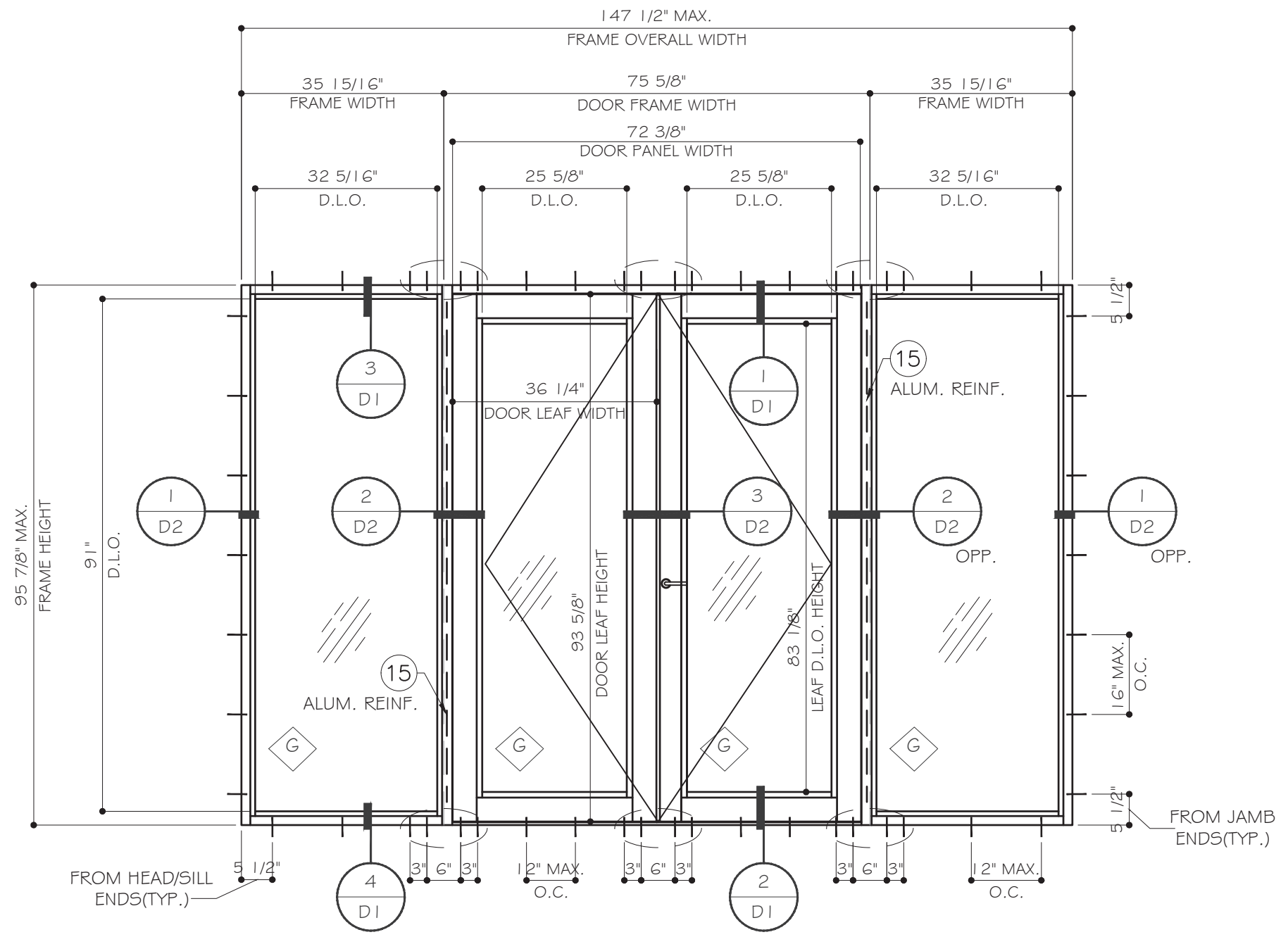
FLORIDA APPROVAL:  
FL # 29477.1




**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS  
12781 MIRAMAR PKWY, STE. 301  
MIRAMAR, FL 33027 P: 305.271.0117  
www.MCYEngineering.com MCYEngineering@Att.net

SERIES SF 2100 OUTSWING FRENCH DOOR - L.M.I.  
**EMC WINDOWS AND DOORS, LLC.**  
1356 W. 76TH STREET  
HIALEAH, FL 33014  
TEL: (305) 283-6280 EMCWindowsDoors@gmail.com

|                        |     |          |    |            |            |       |          |
|------------------------|-----|----------|----|------------|------------|-------|----------|
| 2020 FBC               | Y/A | 12.15.20 | 01 | Drawn Date | 08/08/2019 | Scale | AS SHOWN |
|                        |     |          |    | Drawn By   |            |       |          |
|                        |     |          |    | Date       |            |       |          |
|                        |     |          |    | Rev. No.   |            |       |          |
| DRAWING NO.<br>AD19-16 |     |          |    |            |            |       |          |
| E1                     |     |          |    |            |            |       |          |
| Sheet No.<br>02 OF 08  |     |          |    |            |            |       |          |

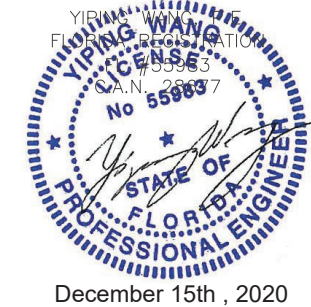


TYPICAL EXTERIOR ELEVATION W/ SIDELITE (OXXO)

NOTE:  
 = G1 & G2

| MULLION  | MAX. DESIGN LOAD     |
|----------|----------------------|
| UNREINF. | + 60 PSF<br>- 60 PSF |
| REINF.   | + 65 PSF<br>- 65 PSF |

FLORIDA APPROVAL:  
 FL # 29477.1



December 15th, 2020

**MCY ENGINEERING, INC.**  
 GLAZING CONSULTANTS  
 12781 MIRAMAR PKWY. STE. 301  
 MIRAMAR, FL 33027 P: 305.271.0117  
 www.MCYEngineering.com MCY.Engineering@Att.net

SERIES SF 2100 OUTSWING FRENCH DOOR - L.M.I.  
**EMC WINDOWS AND DOORS, LLC.**  
 1356 W. 76TH STREET  
 HIALEAH, FL 33014  
 TEL: (305) 283-6280 EMCWindowsDoors@gmail.com

| Y/A | 2020 FBC | Date     | Drawn By | Description |
|-----|----------|----------|----------|-------------|
| 01  |          | 12.15.20 |          |             |

|            |          |
|------------|----------|
| Drawn Date | Scale    |
| 08/08/2019 | AS SHOWN |

DRAWING NO.  
 AD19-16

Sheet No.  
 E2  
 03 OF 08

**TYPICAL ANCHOR TYPES:**  
SEE ELEVATIONS FOR SPACING

TYPE "A": 1/4" DIA. ULTRACON BY 'ELCO' (Fu= 177 KSI, Fy= 155 KSI)  
INTO WOOD STRUCTURE  
WITH 1 1/2" MIN. EMBED

THRU 1 BY OR 2BY WOOD BUCKS INTO CONCRETE  
WITH 1 3/4" MIN. EMBED

THRU 1 BY OR 2BY WOOD BUCKS  
WITH 1 1/4" MIN. EMBED INTO HOLLOW BLOCK(JAMB ONLY)  
WITH 1 3/4" MIN. EMBED INTO GROUT FILLED BLOCK

DIRECTLY INTO CONCRETE(3000 psi MIN.)  
WITH 1 1/2" MIN. EMBED INTO CONCRETE

TYPE "B": 1/4" TEKS OR SELF DRILLING SCREW(GRADE 5) (Fu= 120 KSI, Fy=92 KSI)  
INTO METAL STRUCTURE

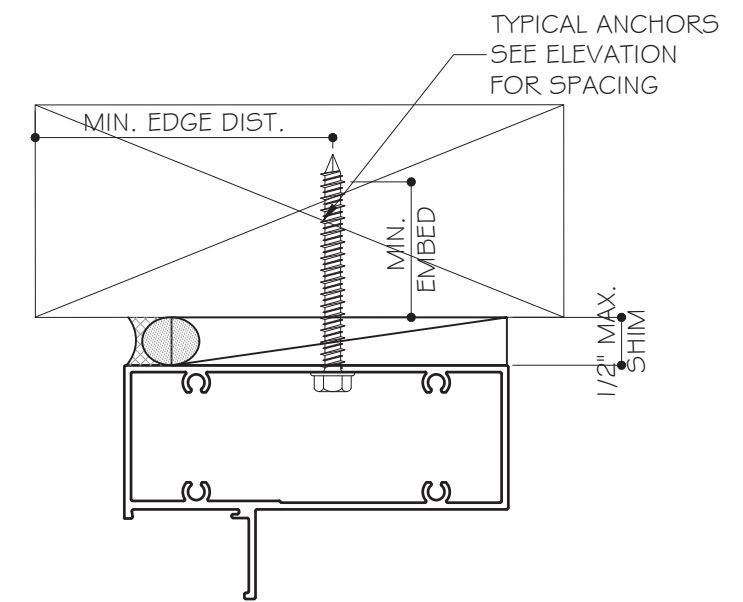
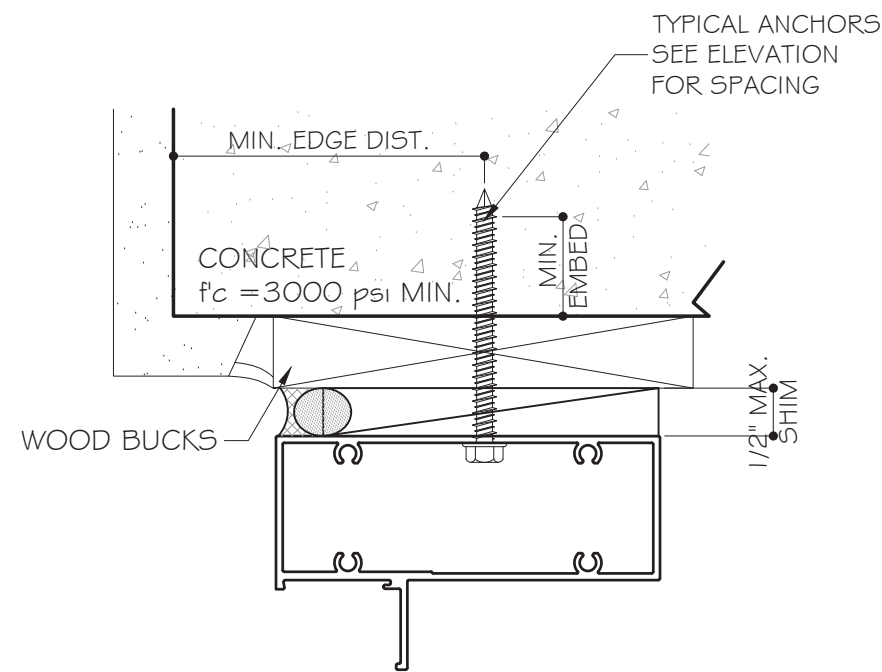
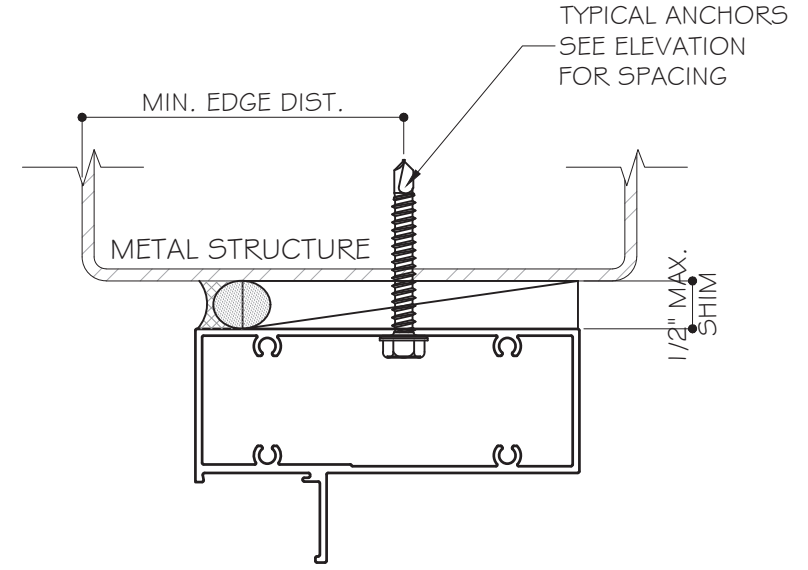
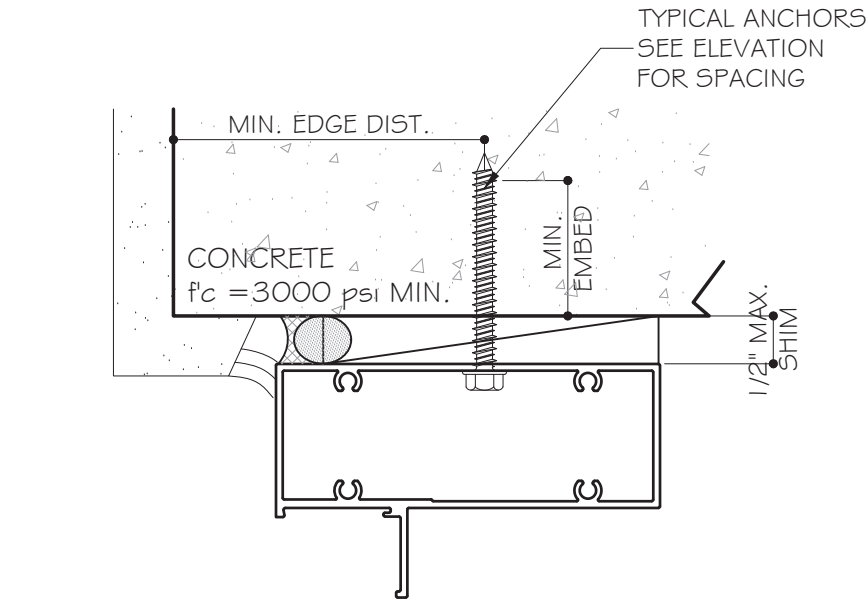
STEEL: 1/8" THK. MIN. (Fy=36 KSI MIN.)  
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)

TYPICAL ANCHOR EDGE DISTANCE:  
INTO CONCRETE OR GROUT FILLED & MASONRY = 2 1/2" MIN.  
INTO WOOD STRUCTURE = 1-1/2" MIN.  
INTO METAL STRUCTURE = 1" MIN.

WOOD STRUCTURE / BUCK HEAD, SILL & JAMB: SG = 0.55 MIN.  
CONCRETE AT HEAD, SILL & JAMB: f'c = 3000 psi MIN.  
C-90 HOLLOW/FILLED BLOCK(JAMB ONLY): f'm = 2000 psi MIN.

SEALANTS:  
ALL FRAME CIBERS, JOINTS, MULLION SEMAS AND PERIMETER OF GLAZING  
BEAD TO FRAME SEALED WITH SILICONE SEALANT (DOWSIL 775)

1X OR 2X WOOD BUCKS AND METAL STRUCTURES NOT BY EMC WINDOWS AND DOORS MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.



FLORIDA APPROVAL:  
FL # 29477.1

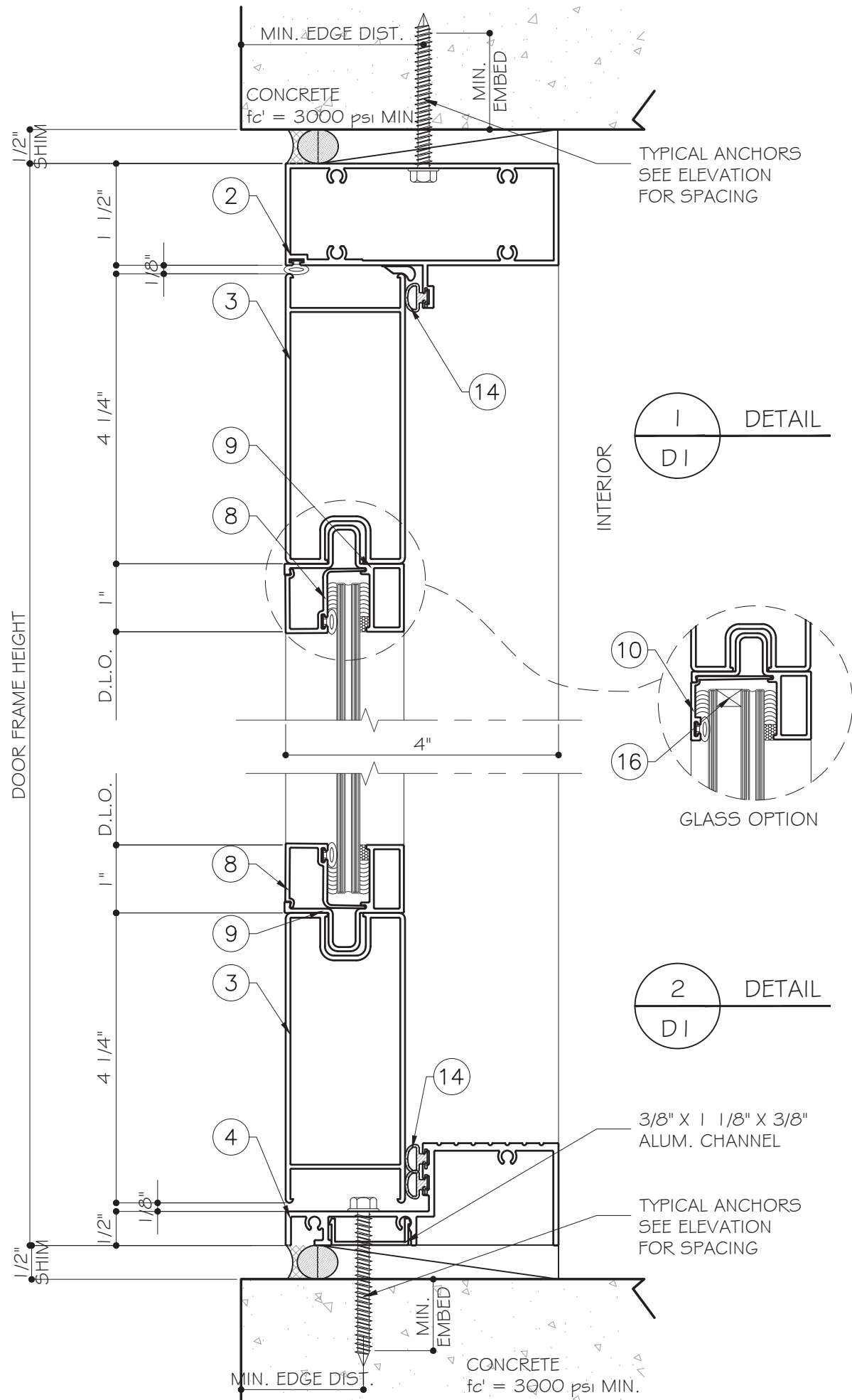
YIPING WANG  
REGISTERED PROFESSIONAL ENGINEER  
FLORIDA  
No 55983  
December 15th, 2020

|   |  |  |  |
|---|--|--|--|
| <b>MCY ENGINEERING, INC.</b><br>GLAZING CONSULTANTS | 12781 MIRAMAR PKWY. STE. 301<br>MIRAMAR, FL 33027<br>P: 305.271.0117<br>www.MCYEngineering.com | <b>EMC WINDOWS AND DOORS, LLC.</b><br>1356 W. 76TH STREET<br>HIALEAH, FL 33014<br>TEL: (305) 283-6280<br>EMCWindowsDoors@gmail.com | SERIES SF 2100 OUTSWING FRENCH DOOR - L.M.I. |
| 2020 FBC  | Y/A  | Date   | Description                                  |
| 01  | 12.15.20   | Rev. No.   | Drawn By                                     |
| Drawn Date<br>08/08/2019                            | Scale<br>AS SHOWN  | DRAWING NO.<br>AD19-16   |  |
| A1  |  | Sheet No.<br>04 OF 08  |  |



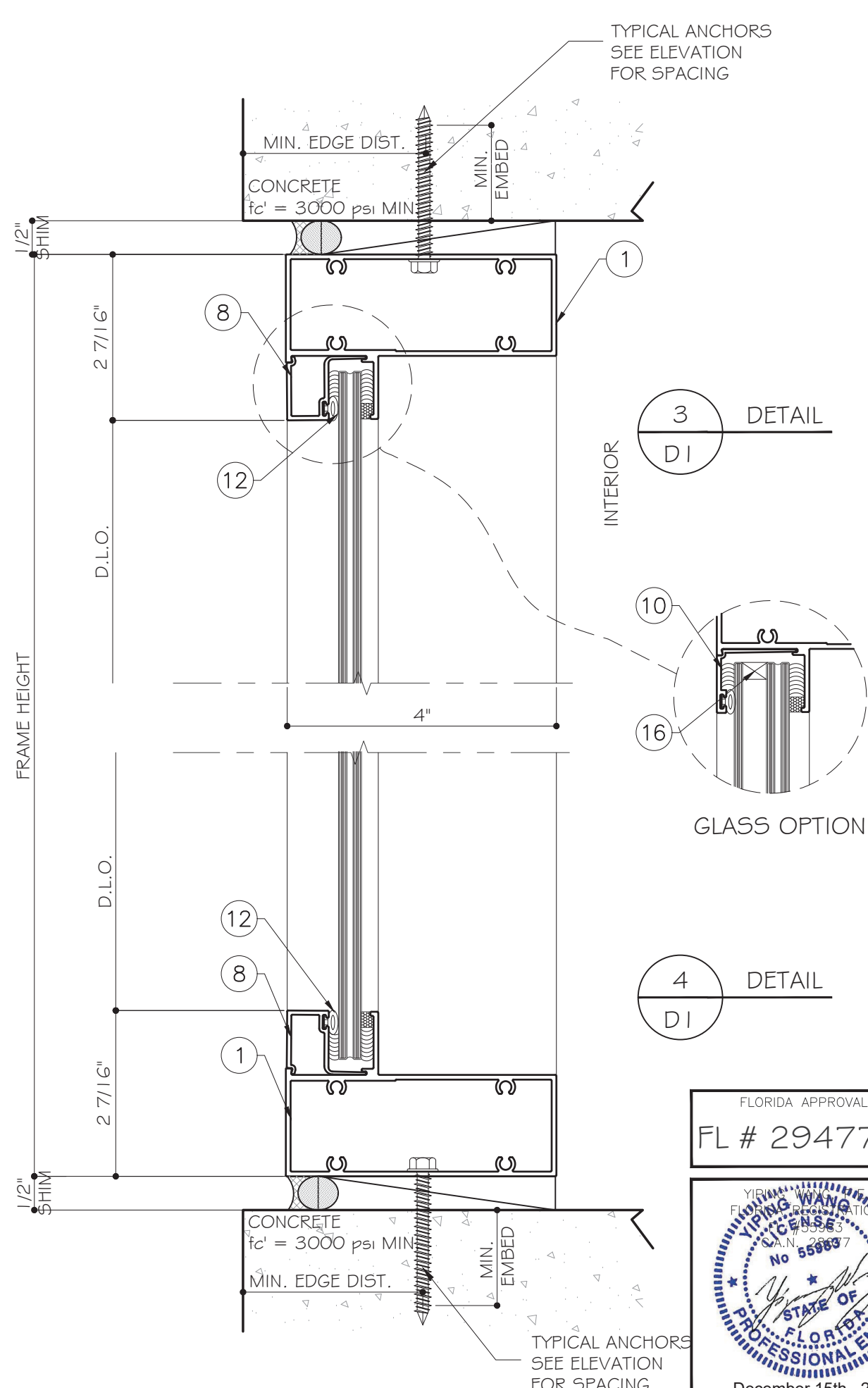
EXTERIOR

DOOR FRAME HEIGHT

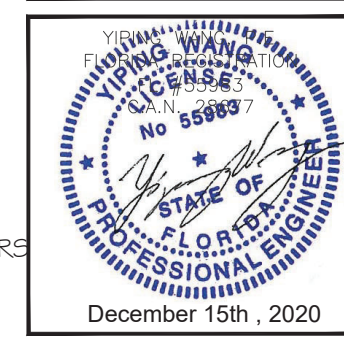


EXTERIOR

FRAME HEIGHT



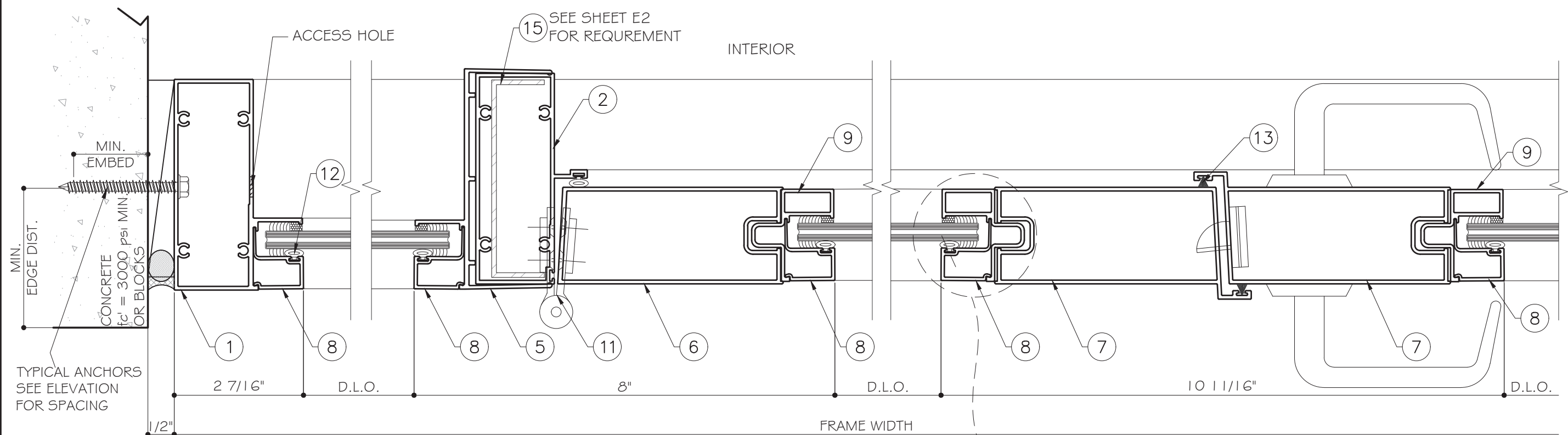
FLORIDA APPROVAL:  
FL # 29477.1



**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS  
12781 MIRAMAR PKWY, STE. 301  
MIRAMAR, FL 33027  
P: 305.271.0117  
www.MCYEngineering.com MCY.Engineering@Att.net

SERIES SF 2100 OUTSWING FRENCH DOOR - L.M.I.  
**EMC WINDOWS AND DOORS, LLC.**  
1356 W. 76TH STREET  
HIALEAH, FL 33014  
TEL: (305) 283-6280 EMCWindowsDoors@gmail.com

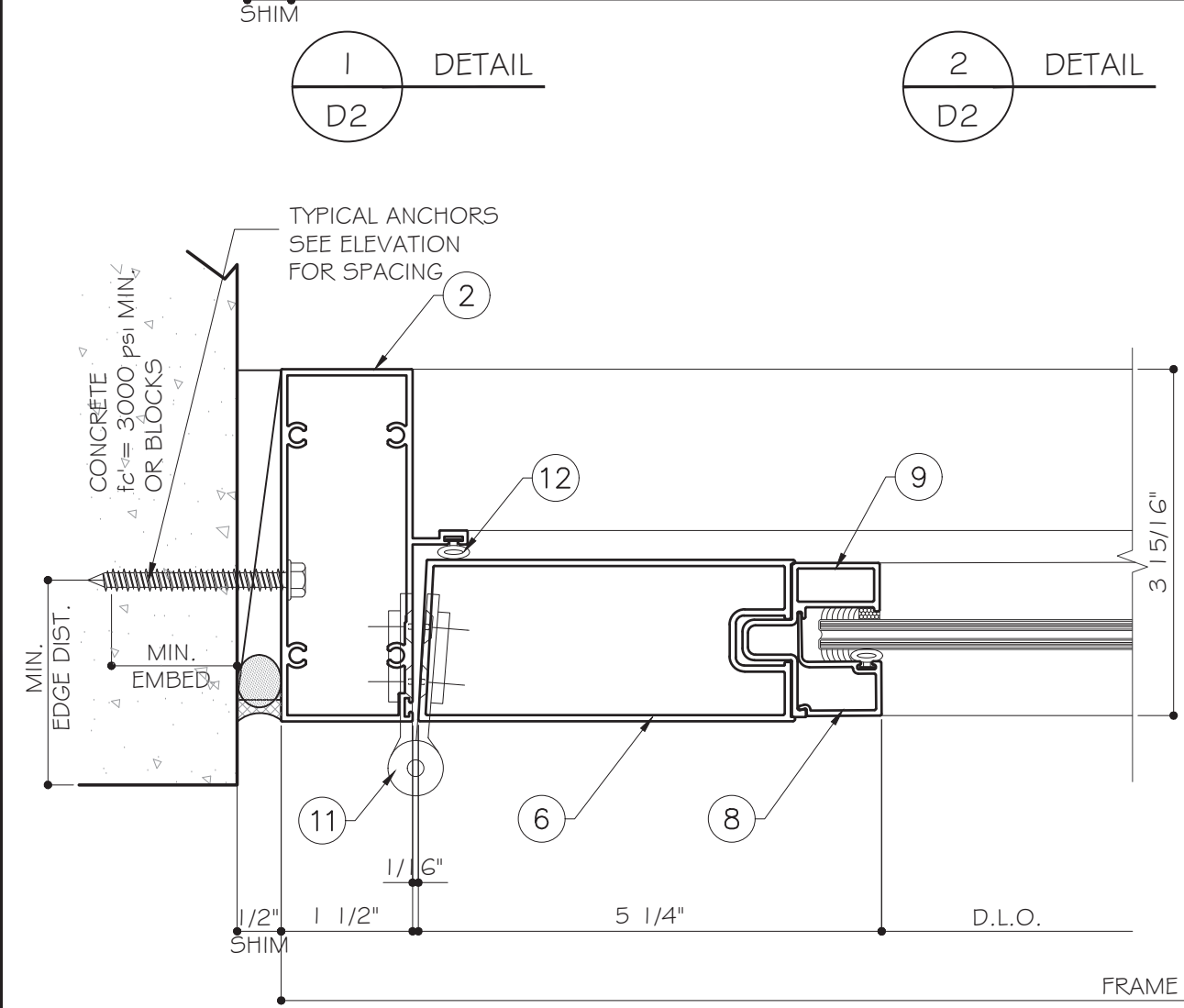
|                     |            |      |          |          |             |
|---------------------|------------|------|----------|----------|-------------|
| 01                  | 12.15.20   | Y.A. | 2020 FBC | Drawn By | Description |
|                     | 08/08/2019 |      |          | Date     |             |
|                     |            |      |          | Rev. No. |             |
|                     |            |      |          | Scale    | AS SHOWN    |
| DRAWING NO. AD19-16 |            |      |          |          |             |
| Sheet No. 05 OF 08  |            |      |          |          |             |



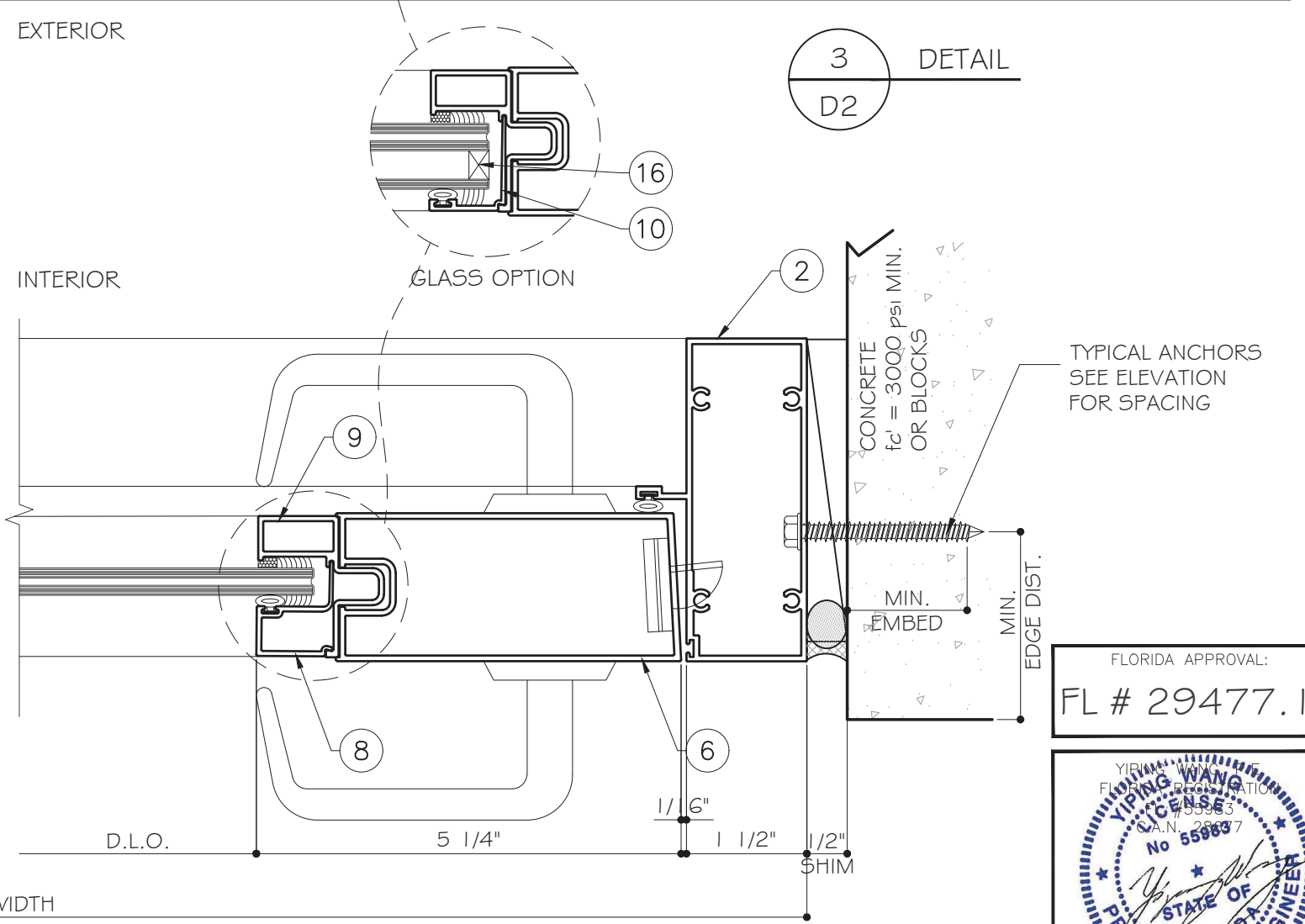
1 DETAIL  
D2

2 DETAIL  
D2

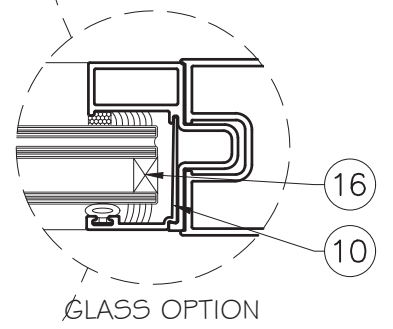
3 DETAIL  
D2



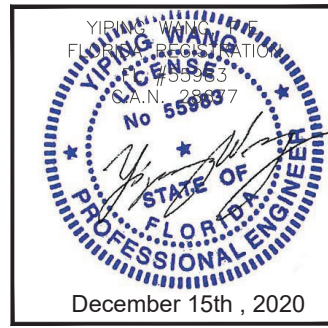
4 DETAIL  
D2



5 DETAIL  
D2



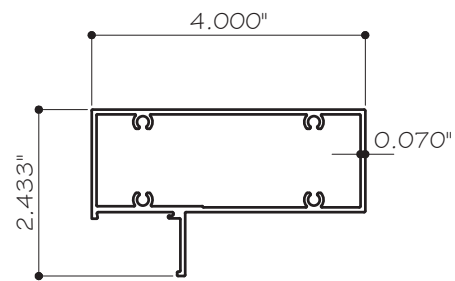
FLORIDA APPROVAL:  
FL # 29477.1



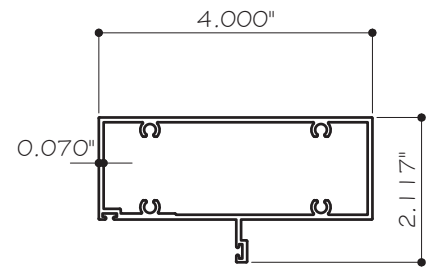
**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS  
12781 MIRAMAR PKWY, STE. 301  
MIRAMAR, FL 33027 P: 305.271.0117  
www.MCYEngineering.com MCY.Engineering@Att.net

SERIES SF 2100 OUTSWING FRENCH DOOR - L.M.I.  
**EMC WINDOWS AND DOORS, LLC.**  
1356 W. 76TH STREET  
HIALEAH, FL 33014  
TEL: (305) 283-6280 EMCWindowsDoors@gmail.com

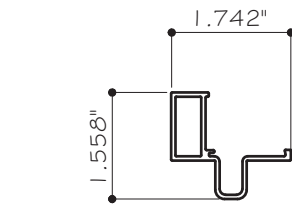
| Rev. No.               | Date     | Drawn By        | Description |
|------------------------|----------|-----------------|-------------|
| 01                     | 12.15.20 |                 |             |
| Drawn Date: 08/08/2019 |          | Scale: AS SHOWN |             |
| DRAWING NO. AD19-16    |          |                 |             |
| Sheet No. 06 OF 08     |          |                 |             |



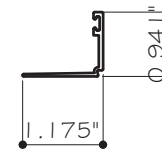
① SIDELITE HEAD/SILL/JAMB  
EMC-004 ALUM. 6063-T6



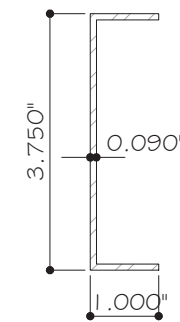
② DOOR HEAD/JAMB FRAME  
EMC-001 ALUM. 6063-T6



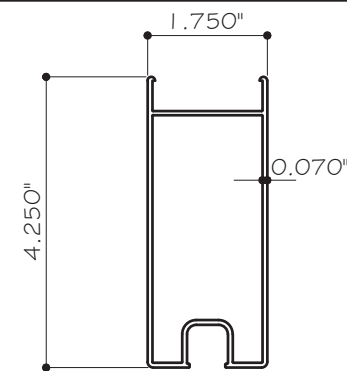
⑨ GLAZING ADAPTOR  
EMC-003 ALUM. 6063-T6



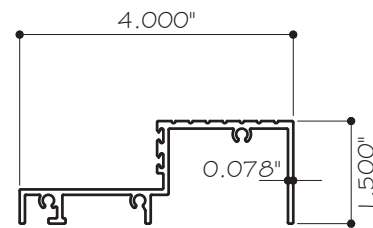
⑩ GLAZING BEAD FOR INSUL.-LAM. GLASS  
EMC-002 ALUM. 6063-T6



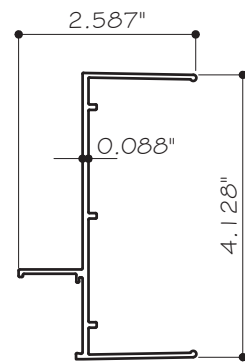
⑮ ALUM. CHANNEL REINFORCEMENT  
EMC-005 ALUM. 6063-T6



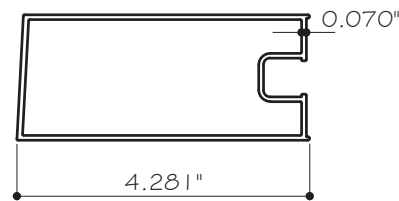
③ TOP/BOTTOM RAIL  
EMC-002 ALUM. 6063-T6



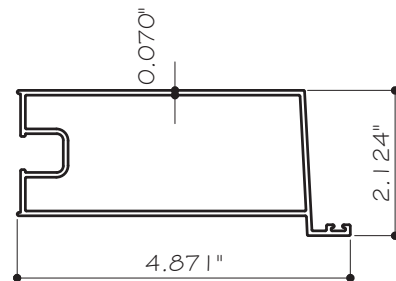
④ THRESHOLD  
EMCFD1 ALUM. 6063-T6



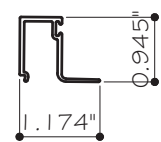
⑤ SIDELITE OPEN JAMB  
EMC-005 ALUM. 6063-T6



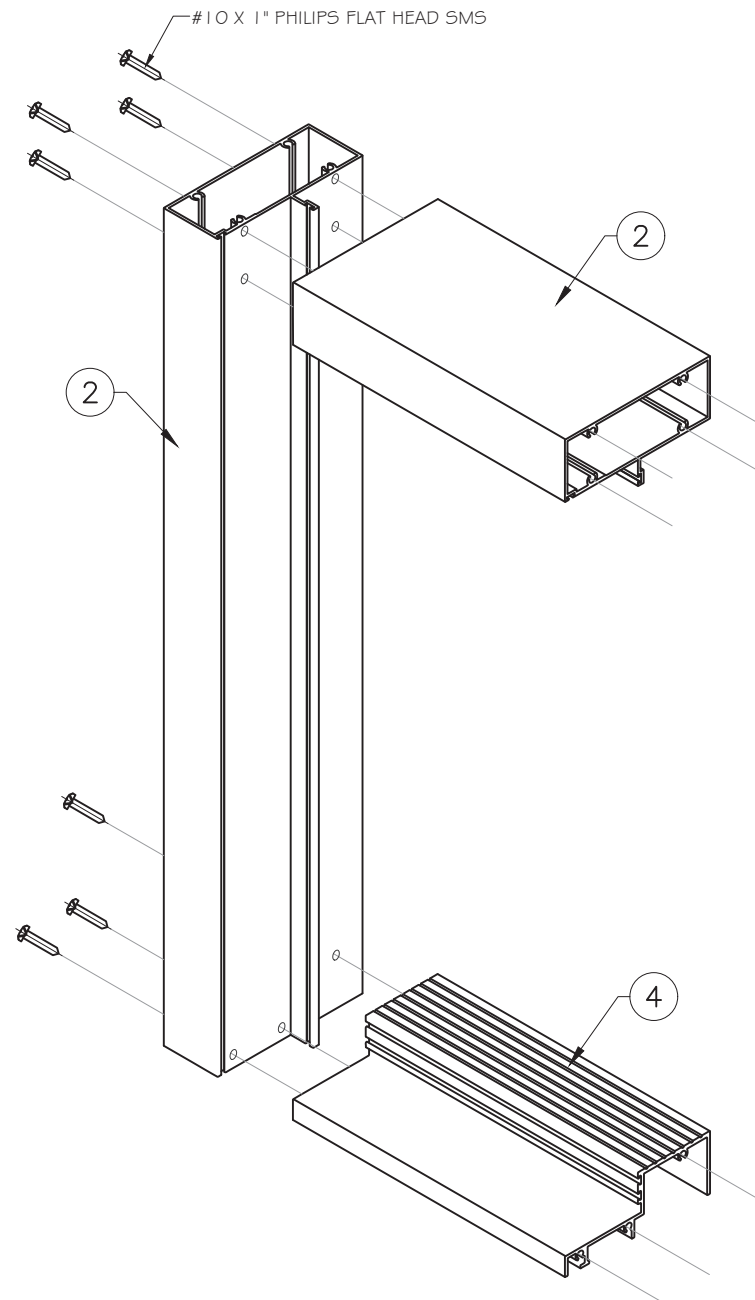
⑥ HINGE STILE  
EMCFD2 ALUM. 6063-T6



⑦ MEETING STILE  
EMCFD3 ALUM. 6063-T6

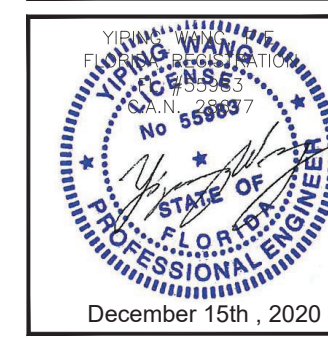


⑧ GLAZING BEAD FOR LAM. GLASS  
EMC-003 ALUM. 6063-T6



DOOR FRAME CORNER ISOMETRIC DETAIL

FLORIDA APPROVAL:  
FL # 29477.1



**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS  
12781 MIRAMAR PKWY. STE. 301  
MIRAMAR, FL 33027 P: 305.271.0117  
www.MCYEngineering.com MCY.Engineering@Att.net

SERIES SF 2100 OUTSWING FRENCH DOOR - L.M.I.  
**EMC WINDOWS AND DOORS, LLC.**  
1356 W. 76TH STREET  
HIALEAH, FL 33014  
TEL: (305) 283-6280 EMCWindowsDoors@gmail.com

| Rev. No.               | Date     | Drawn By        | Description |
|------------------------|----------|-----------------|-------------|
| 01                     | 12.15.20 |                 |             |
| Drawn Date: 08/08/2019 |          | Scale: AS SHOWN |             |
| DRAWING NO. AD19-16    |          |                 |             |
| Sheet No. D2           |          |                 |             |
| 07 OF 08               |          |                 |             |

# BILL OF MATERIALS

| ITEM | PART      | DESCRIPTION  | MATERIAL      | MANUF. / REMARKS           |
|------|-----------|--|---------------|----------------------------|
| 1    | EMC-004   | SIDELITE HEAD/SILL/JAMB FRAME                              | ALUM. 6063-T6 | EMC WINDOWS AND DOORS, LLC |
| 2    | EMC-001   | DOOR HEAD/JAMB FRAME                                       | ALUM. 6063-T6 | EMC WINDOWS AND DOORS, LLC |
| 3    | EMC-002   | TOP BOTTOM RAIL  | ALUM. 6063-T6 | EMC WINDOWS AND DOORS, LLC |
| 4    | EMCFD1    | THRESHOLD  | ALUM. 6063-T6 | EMC WINDOWS AND DOORS, LLC |
| 5    | EMC-005   | SIDELITE OPEN JAMB   | ALUM. 6063-T6 | EMC WINDOWS AND DOORS, LLC |
| 6    | EMCFD2    | HINGE STILE  | ALUM. 6063-T6 | EMC WINDOWS AND DOORS, LLC |
| 7    | EMCFD3    | MEETING STILE  | ALUM. 6063-T6 | EMC WINDOWS AND DOORS, LLC |
| 8    | -         | GLAZING BEAD FOR LAMINATED GLASS                           | ALUM. 6063-T6 | EMC WINDOWS AND DOORS, LLC |
| 9    | -         | GLAZING ADAPTOR  | ALUM. 6063-T6 | EMC WINDOWS AND DOORS, LLC |
| 10   | -         | GLAZING BEAD FOR INSULATED LAMINATED GLASS                 | ALUM. 6063-T6 | EMC WINDOWS AND DOORS, LLC |
| 11   | -         | ALUMINUM BUTT HINGE  | -             | SULLIVAN AND ASSOCIATES    |
| 12   | NO. 3252B | BULB VINYL AIR SEAL GASKET(BLACK)                          | -             | MELTPOINT PLASTICS         |
| 13   | -         | WEATHER STRIPPING  | -             | -                          |
| 14   | -         | GASKET   | -             | -                          |
| 15   | -         | 1" X 3 3/4" X 1" X 0.090" THK. ALUM. CHANNEL REINFORCEMENT | ALUM. 6063-T6 | -                          |
| 16   | -         | CRL GRAY EDGETECH SUPER SPACER - GLASS SPACER              | SILICONE FOAM | C.R. LAURENCE CO., INC.    |

**LOCKS:**

**ACTIVE LEAF:**

3 POINT LOCK BY 'SULLIVAN & ASSOCIATES' AT 42 1/4" FROM BOTTOM OF THE LEAF  
 A 1" X 1 1/4" X 1 5/8" ALUM. 7-RIB FLUSH BOLT GUIDE WAS FASTENED TO INACTIVE LEAF LOCKSTILE WITH  
 (2) #10 X 3/4" PFH SELF-DRILLING SMS

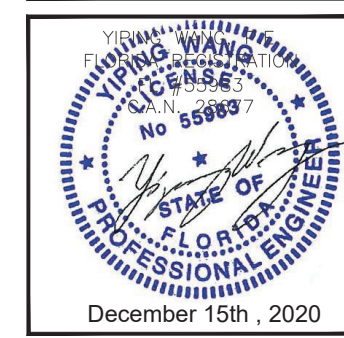
**INACTIVE LEAF:**

A SETS OF LEVER-ACITIVATED MANUAL SHOOT BOLTS BY 'SULLIVAN & ASSOCIATES' AT TOP/BOTTOM  
 A 1" X 1 1/4" X 1 5/8" ALUM. 7-RIB FLUSH BOLT GUIDE WAS FASTENED TO INACTIVE LEAF LOCKSTILE WITH  
 (2) #10 X 3/4" PFH SELF-DRILLING SMS

**HINGES:**

(3) ALUM. HINGES BY 'SULLIVAN AND ASSOCIATES'  
 AT 11 3/4" FROM TOP AND BOTTOM, 35" O.C.  
 FASTEN TO FRAME WITH  
 (3) #12 X 1" PFH SELF-DRILLING SMS  
 FASTEN TO LEAF WITH  
 (3) #12 X 1" PFH SELF-DRILLING SMS

FLORIDA APPROVAL:  
**FL # 29477.1**



**MCY ENGINEERING, INC.**  
 GLAZING CONSULTANTS

12781 MIRAMAR PKWY. STE. 301  
 MIRAMAR, FL 33027 P: 305.271.0117  
 www.MCYEngineering.com MCY.Engineering@Att.net

SERIES SF 2100 OUTSWING FRENCH DOOR - L.M.I.  
**EMC WINDOWS AND DOORS, LLC.**  
 1356 W. 76TH STREET  
 HIALEAH, FL 33014  
 TEL. (305) 283-6280 EMCWindowsDoors@gmail.com

|            |          |             |          |             |
|------------|----------|-------------|----------|-------------|
| 2020 FBC   | Y.A.     | Date        | Drawn By | Description |
| 01         | 12.15.20 |             |          |             |
| Drawn Date | Scale    | DRAWING NO. |          |             |
| 08/08/2019 | AS SHOWN | AD19-16     |          |             |
| Sheet No.  |          |             |          | ISO         |
| 08 OF 08   |          |             |          |             |