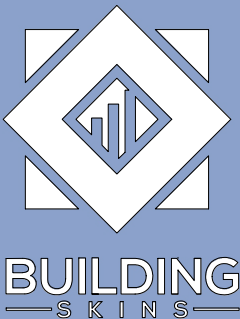


PRODUCT DEVELOPMENT



14 NE 1ST AVE. STE 815,
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PH. (+1) 786 553-2225

SERIES "SF2100"
STOREFRONT
(L.M.I.)

"SF 2100" -
STOREFRONT

PRODUCT APPROVAL
DRAWINGS

EMC WINDOWS AND
DOORS, LLC.
3695 NW. 74TH STREET
MIAMI, FL 33147
TEL. (305) 283-6280
EMCWINDOWSDOORS@GMAIL.COM

DRAWINGS NUMBER:
25-0158P.5

REVISIONS:

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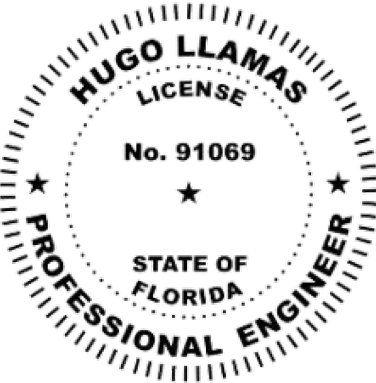
DATE: AUGUST 25TH, 2025

DRAWN BY: LR & AO
SCALE: NTS

SHEET No: 00 OF 08
SHEET NAME: COVER

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SF 2100 STOREFRONT

GENERAL NOTES:

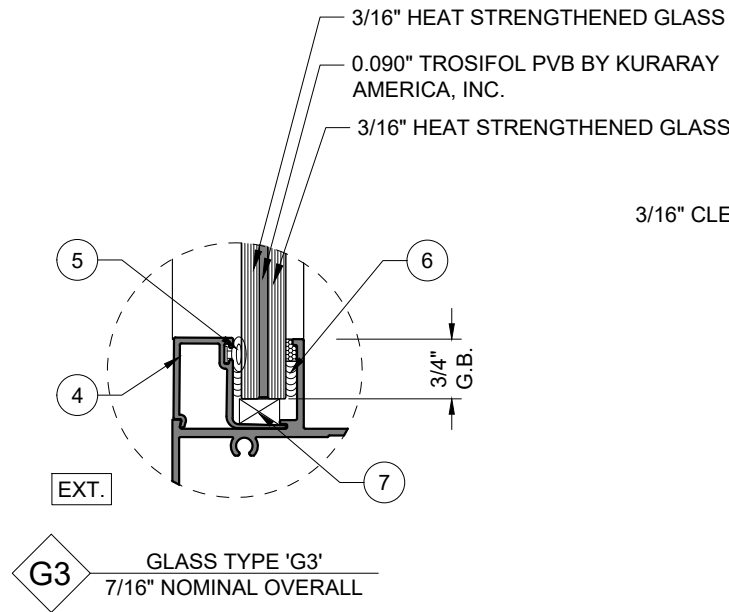
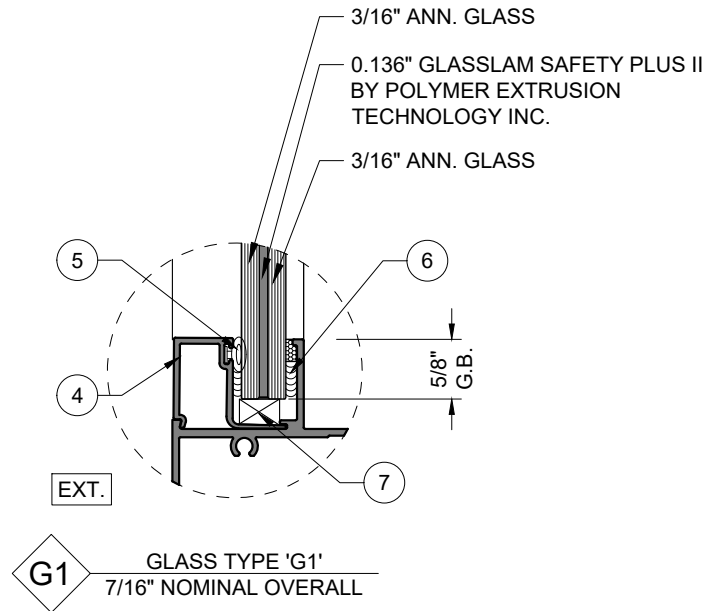
- A. THE PRODUCT SHOWN HEREIN IS DESIGNED AND TESTED TO COMPLY WITH THE FLORIDA BUILDING CODE 8TH EDITION 2023 (FBC 2023), INCLUDING HVHZ (HIGH VELOCITY HURRICANE ZONE)
- B. ADEQUACY OF THE EXISTING STRUCTURAL SUBSTRATE (METAL, CONCRETE, MASONRY, WOOD, ETC) NEEDS TO BE ABLE TO WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- C. WOODBUCKS EITHER 1BY OR 2BY (OPTIONAL) NEED TO BE DESIGNED AND SPECIFIED BY THE ARCHITECT OF RECORD OR THE ENGINEER OF RECORD AND NEED TO BE ABLE TO WITHSTAND ALL THE TRANSFERRED LOADS FROM THE GLAZING PRODUCT CORRECTLY.
- D. ALL ANCHORS NEED TO BE CORROSION RESISTANT, SEE PRODUCT APPROVAL FOR SPECIFIED ANCHORS REQUIRED.
- E. ALL DESIGN LOADS SHOWN IN APPROVAL ARE BASED ON ASD (ALLOWABLE STRESS DESIGN), TO GET ULTIMATE LOADS ASD LOADS NEED TO BE MULTIPLIED BY A FACTOR MULTIPLIER OF 1.6
- F. FINAL PRODUCT NEED TO HAVE LABEL.
- G. THESE GLAZING PRODUCTS ARE RATED FOR LARGE MISSILE IMPACT (L.M.I.)
- H. ALL SITE SPECIFIC CONDITIONS IN ANY PROJECT NEEDS TO BE PROCURED BY A LICENSED REGISTERED ENGINEERED OR ARCHITECT.
- I. WHEN USING THIS PRODUCT, SHUTTERS ARE NOT NECESSARY.
- J. SHIMS THAT ARE USED WITH THIS SYSTEM NEED TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.
- K. THIS PRODUCT APPROVAL COMPLIES WITH ALL WATER INFILTRATION REQUIREMENTS FOR IMPACT AND HVHZ SYSTEMS
- L. MANUFACTURER NEEDS TO SHOW PRODUCT LABEL IN ALL MANUFACTURED SYSTEMS.

MAXIMUM DESIGN LOADS:

- A. SHEET H1 CONTAINS THE MAXIMUM DESIGNED LOADS.
- B. ANCHORS SPACING ARE SHOWN IN SHEET E1 GLAZING ELEVATIONS.
- C. ANCHOR TYPES ARE SHOWN ON SHEET D1. THIS SHEET SHOWS THE EDGE DISTANCE, EMBEDMENT, TYPE OF ANCHOR, AND ALL REQUIREMENTS ANCHORES NEED TO COMPLY WITH THESE SPECIFICATIONS

GLASS DESIGN LOADS:

- A. ALL GLASS CAPACITIES ON THIS APPROVAL ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS)
- B. ALL GLASS SHOWN ON THIS APPROVAL HAS BEEN TESTED FOR LMI AND HVHZ REQUIREMENTS.
- C. ALL SETTING BLOCKS FOR THE GLASS TO BE LOCATED AT 25% OF THE SPAN WIDTH FOR GLASS WIDER THAN 36" AS PER FBC CHAPTER 24
- D. SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN FBC CHAPTER 24
- E. GLASS TYPE SHALL COMPLY WITH APPLICABLE GLAZING REQUIREMENTS PER CHAPTER 24 OF THE FBC.



GLASS CONFIGURATION FOR STOREFRONT FOR DESIGN CAPACITIES SEE CHART #1

USE CHARTS AS FOLLOWS:

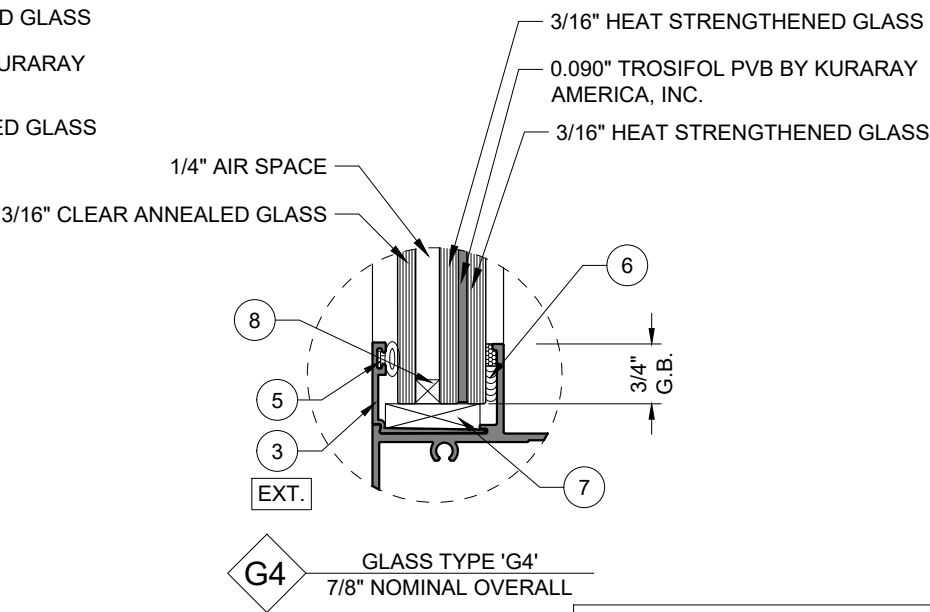
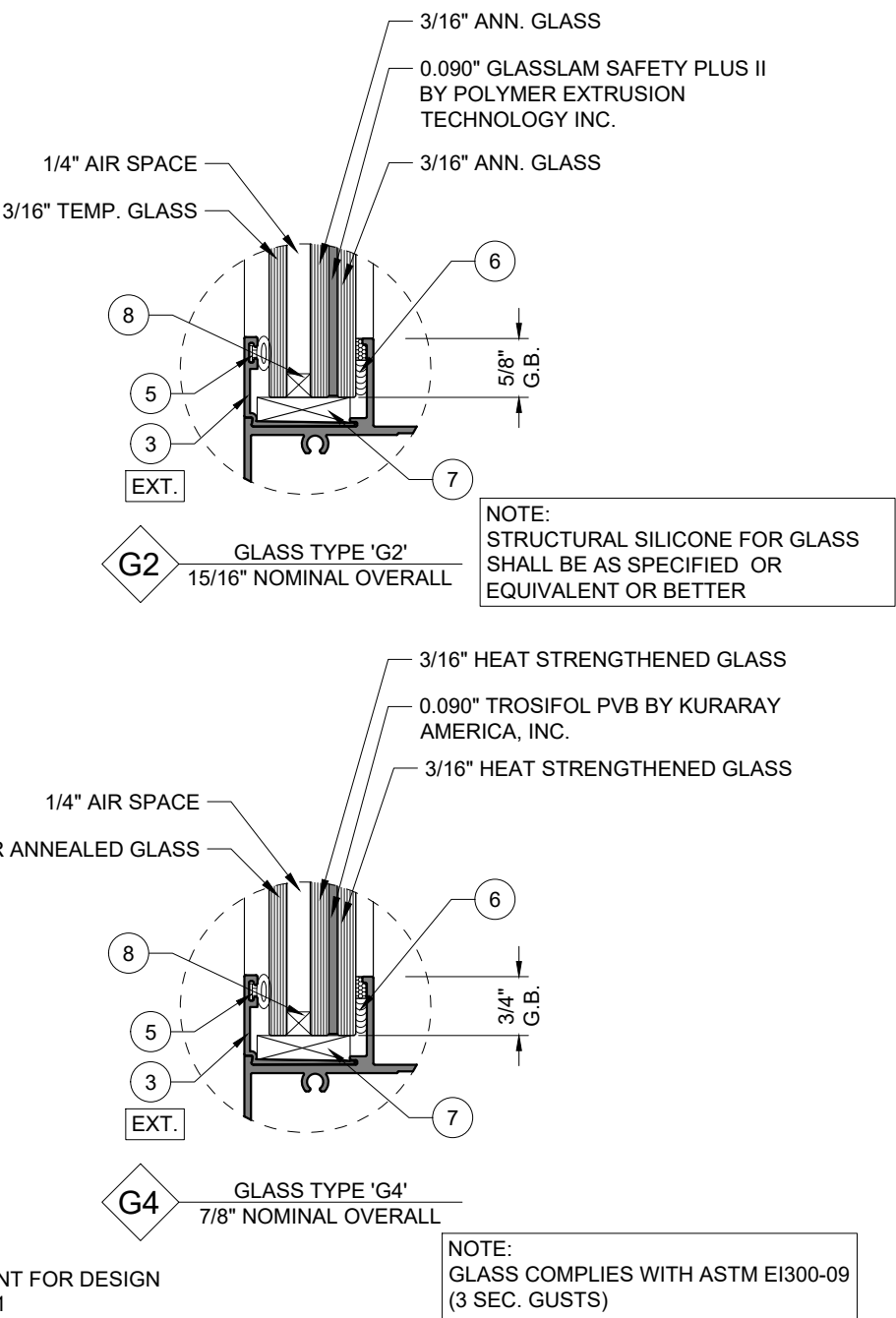
STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7-22 STANDARD OR WIND TUNNEL REPORTS

STEP 2: SEE SHEET E1 FOR APPROVED TYPICAL ELEVATION & CONFIGURATION

STEP 3: SEE SHEET H1 FOR ALLOWED WINDOW SIZE AND APPROVED DESIGN LOAD.

STEP 4: ANCHOR OPTION SEE SHEET D1. ANCHOR LAYOUT SEE SHEET E1

STEP 5: THE LOWEST VALUE RESULTING FROM STEP 3 THAT EXCEED THE DESIGN WIND PRESSURES DETERMINED THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM



ABBREVIATIONS AND SYMBOLS

D.L.O. - DAYLITE OPENING

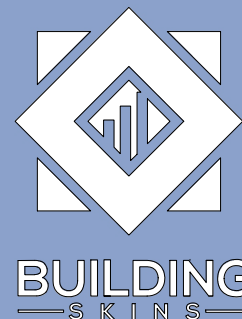
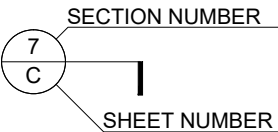
F.H. - FRAME HEIGHT

F.W. - FRAME WIDTH

W/ - WITH

W/O - WITHOUT

O.C. - ON CENTER



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3695 NW. 74TH STREET
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25-0158P.5

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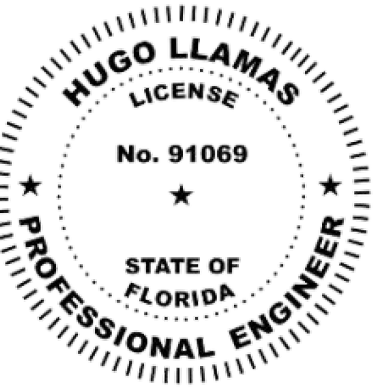
SCALE:
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SHEET No:

SHEET NAME:

01 OF 08

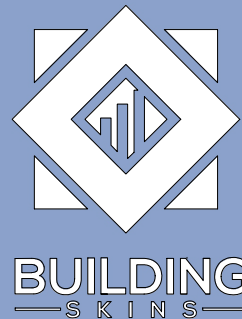
G1



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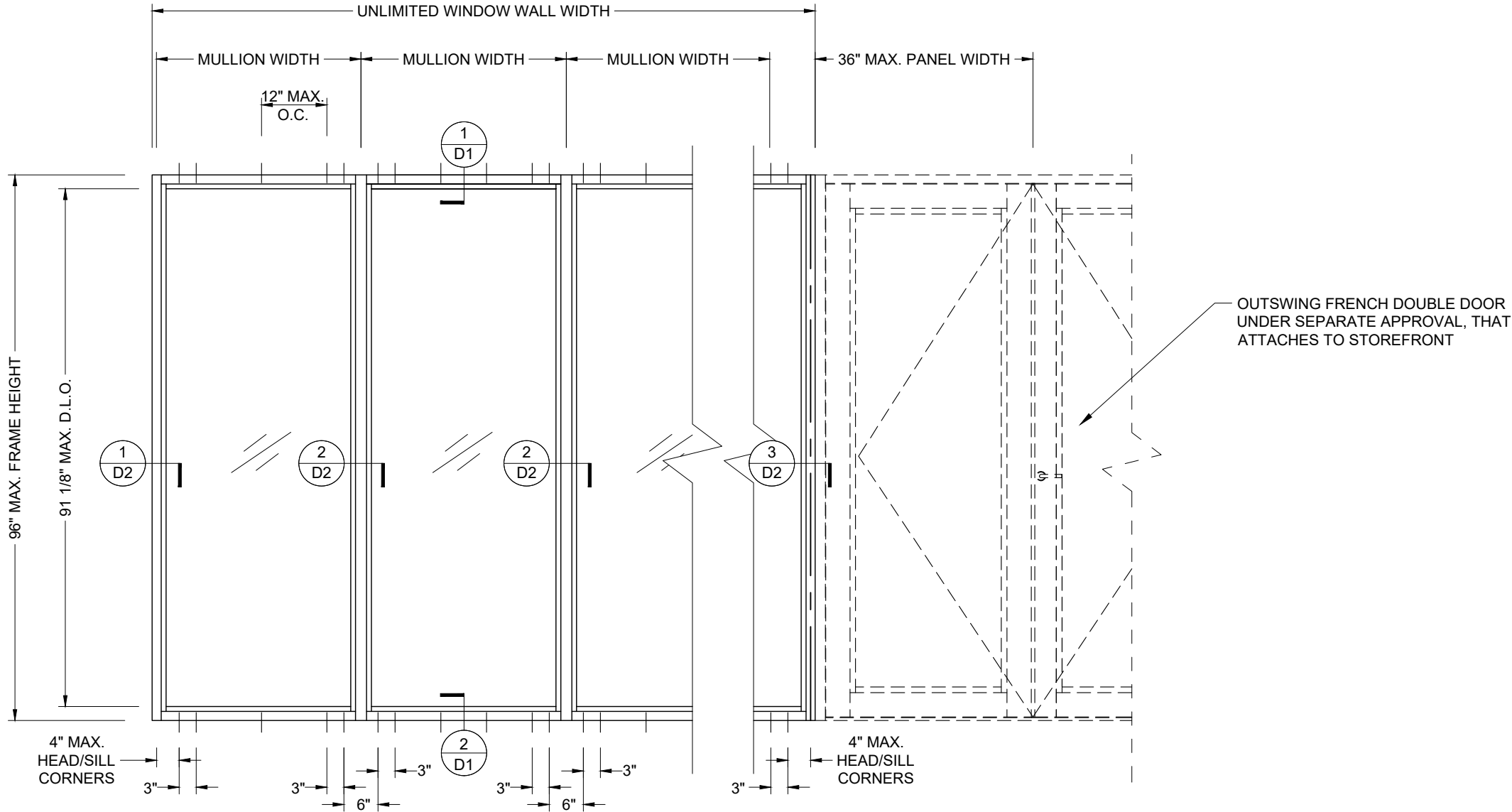
REVISIONS:

No.	DATE	DESCRIPTION

DATE: AUGUST 25TH, 2025

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SHEET No: 02 OF 08 SHEET NAME: E1



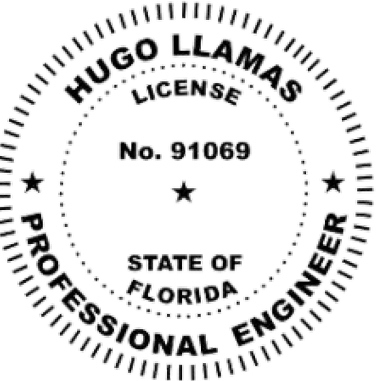
TYPICAL EXTERIOR ELEVATION

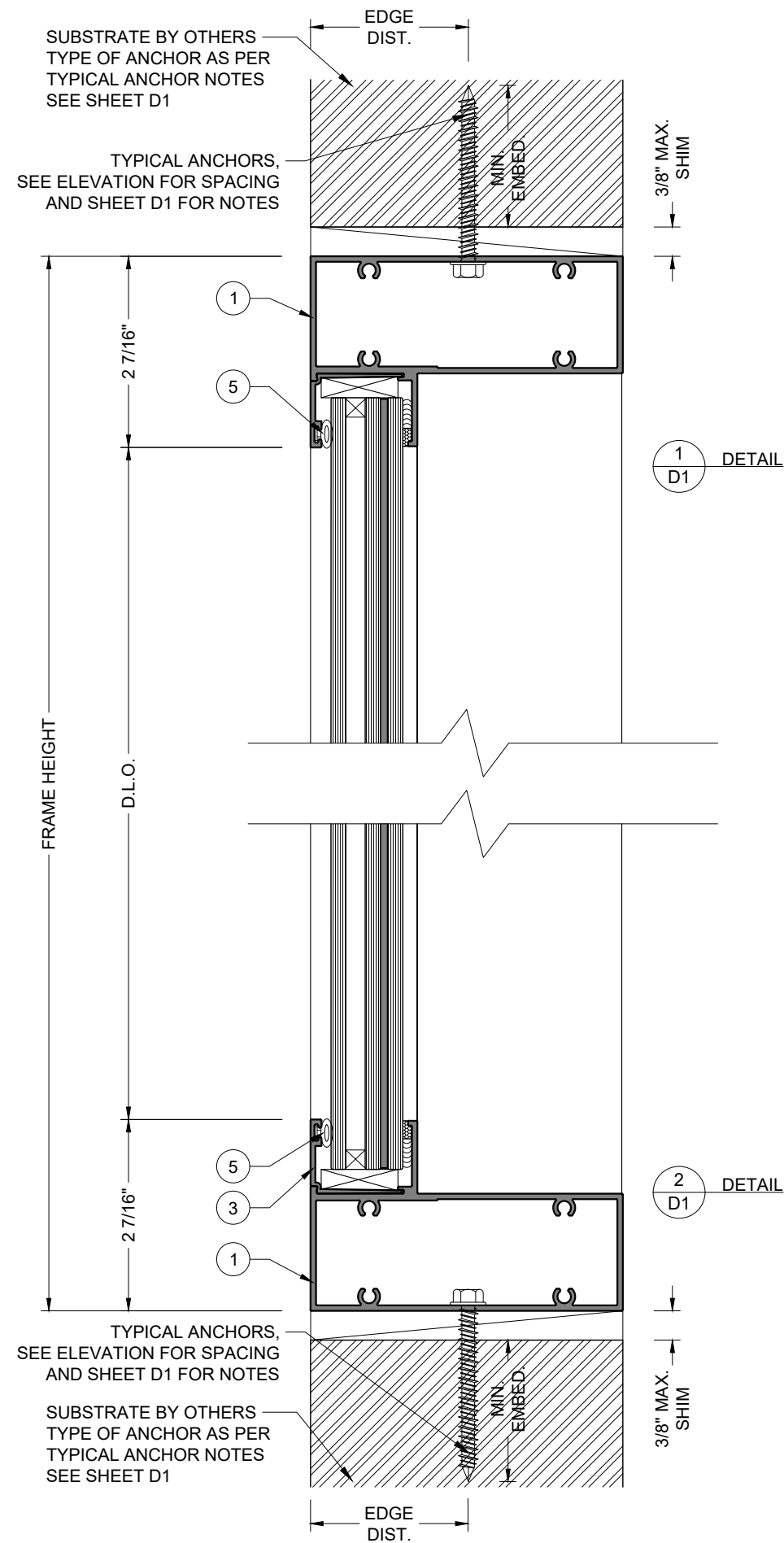
DESIGN LOAD
FOR SIZES SHOWN ABOVE OR SMALLER
MAX. DESIGN LOAD:
±65.0 PSF

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TYPICAL ANCHORS:

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

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

THRU 1BY OR 2BY BUCKS
1-3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)

DIRECTLY INTO CONCRETE OR BLOCKS
1-3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)

1/4" TEKS-SELF DRILLING SCREW (Fu=120 KSI, Fy= 92 KSI)

INTO METAL STRUCTURES (HEAD/SILL/JAMBS)
STEEL: 1/8" THK. MIN. (Fy=36KSI MIN.)
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS

CRITICAL EDGE DISTANCE
INTO CONCRETE AND MANSORY = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1-1/2" MIN.
INTO METAL STRUCTURE = 1" MIN.
WOOD AT HEAD, SILL 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.

SUBSTRATE NOTES:

- A. SUBSTRATE IS BY ENGINEER OF RECORD (E.O.R.) OR ARCHITECT OF RECORD (A.O.R.)
- B. THIS GLAZING SYSTEM IS APPROVED TO BE ANCHORED TO:
- B.1. CONCRETE
 - B.2. CONCRETE TROUGH 1BY OR 2BY WOOD BUCK
 - B.3. HOLLOW BLOCKS
 - B.4. GROUT FILLED BLOCKS
 - B.5. METAL (STEEL / ALUMINUM)
 - B.6. WOOD STRUCTURE

SEALANTS:

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

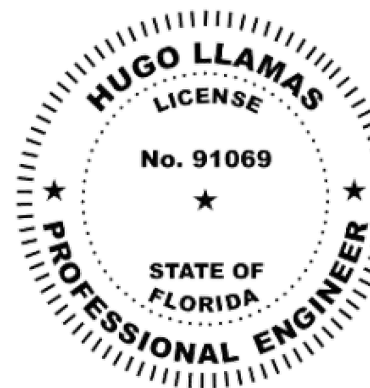
ANCHOR REQUIREMENTS:

AT MULLIONS OR JAMB ENDS

ULTRACON INTO WOOD STRUCTURES & THRU WOOD BUCKS:
(2) ANCHORS WITH 1/4" SHIM PER SIDE
(2) ANCHORS WITH 3/8" SHIM PER SIDE.

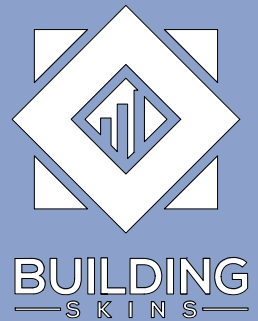
ULTRACON INTO CONCRETE AND TEKS:
(1) ANCHORS WITH 1/4" SHIM PER SIDE
(2) ANCHORS WITH 3/8" SHIM PER SIDE.

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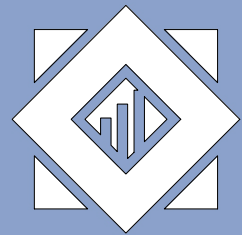
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No.	DATE	DESCRIPTION

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SHEET No: 03 OF 08 SHEET NAME: D1



BUILDING
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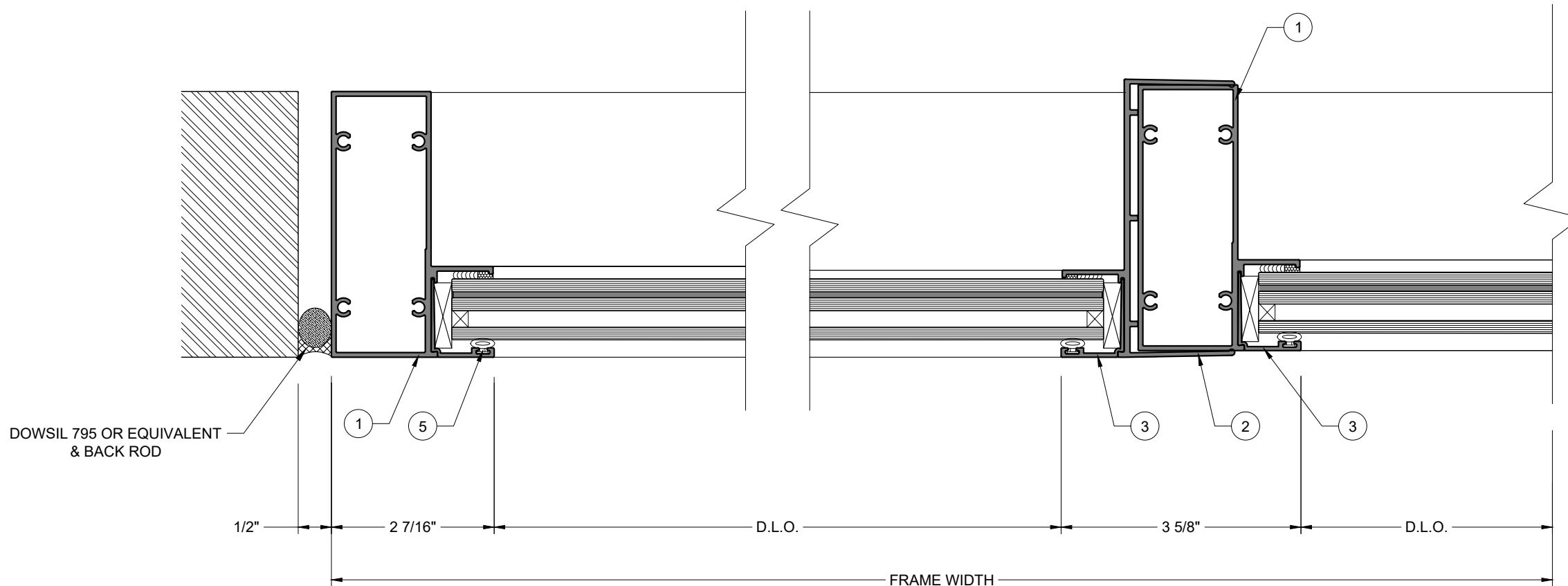
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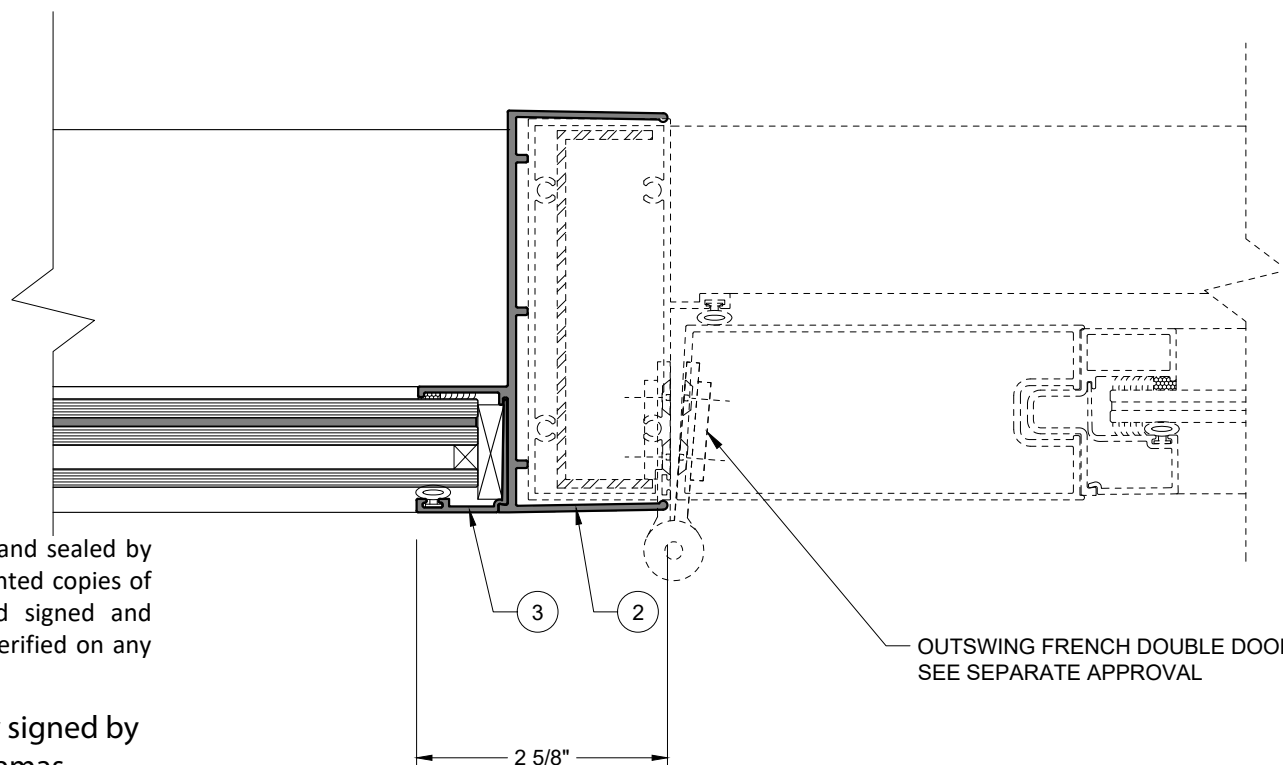
SHEET NAME:

D2



1
D2
DETAIL

2
D2
DETAIL



OUTSWING FRENCH DOUBLE DOOR
SEE SEPARATE APPROVAL

3
D2
DETAIL

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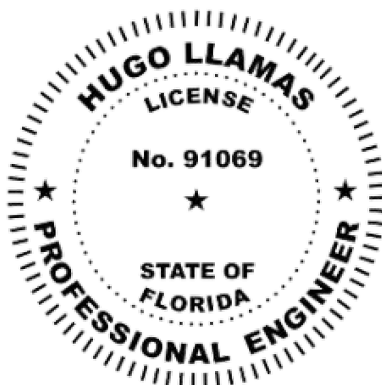
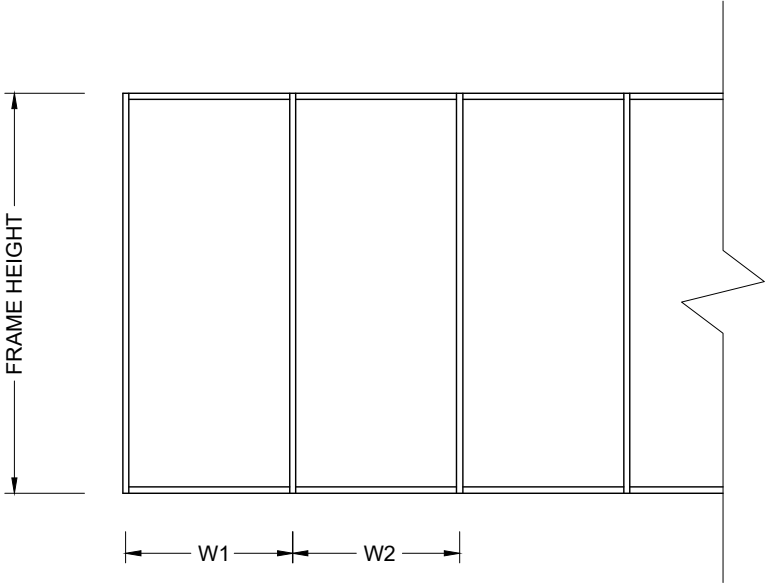
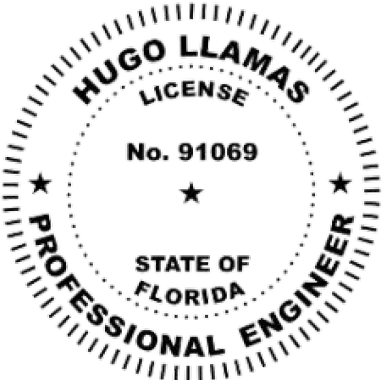
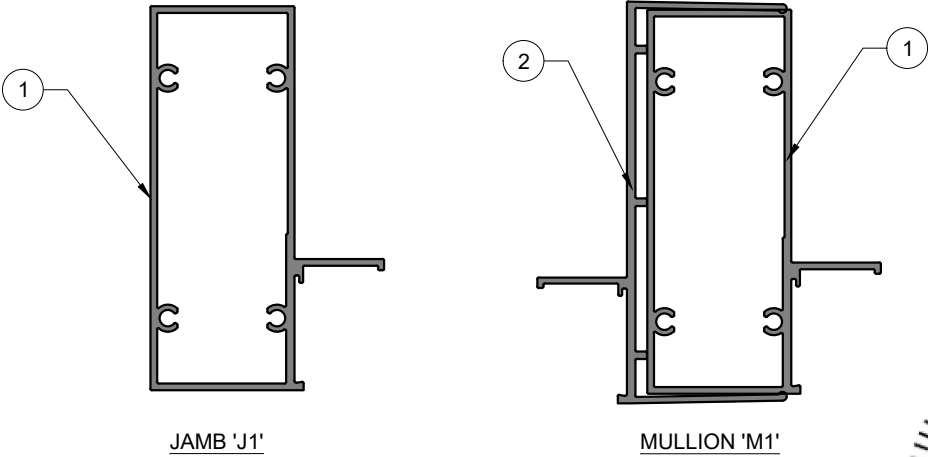


CHART #1

DESIGN LOAD CAPACITY W/O HORIZONTAL (PSF)			
WINDOW DIMS.		MULLION (M1,J1)	
HEIGHT(IN)	WIDTH (IN)	EXT(+)	INT(-)
60	36	65	65
	42	65	65
	48	65	65
	54	65	65
66	36	65	65
	42	65	65
	48	65	65
72	36	65	65
	42	65	65
	48	65	65
78	36	65	65
	42	65	65
84	36	65	65
90	36	65	65
96	36	65	65



NOTE:
WIDTH AT JAMB: W1
WIDTH AT MULLION: (W1+W2)/2
CHART APPLIES FOR ALL TYPES OF GLASS.



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SCALE:
NTS

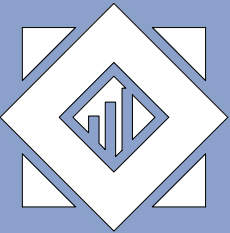
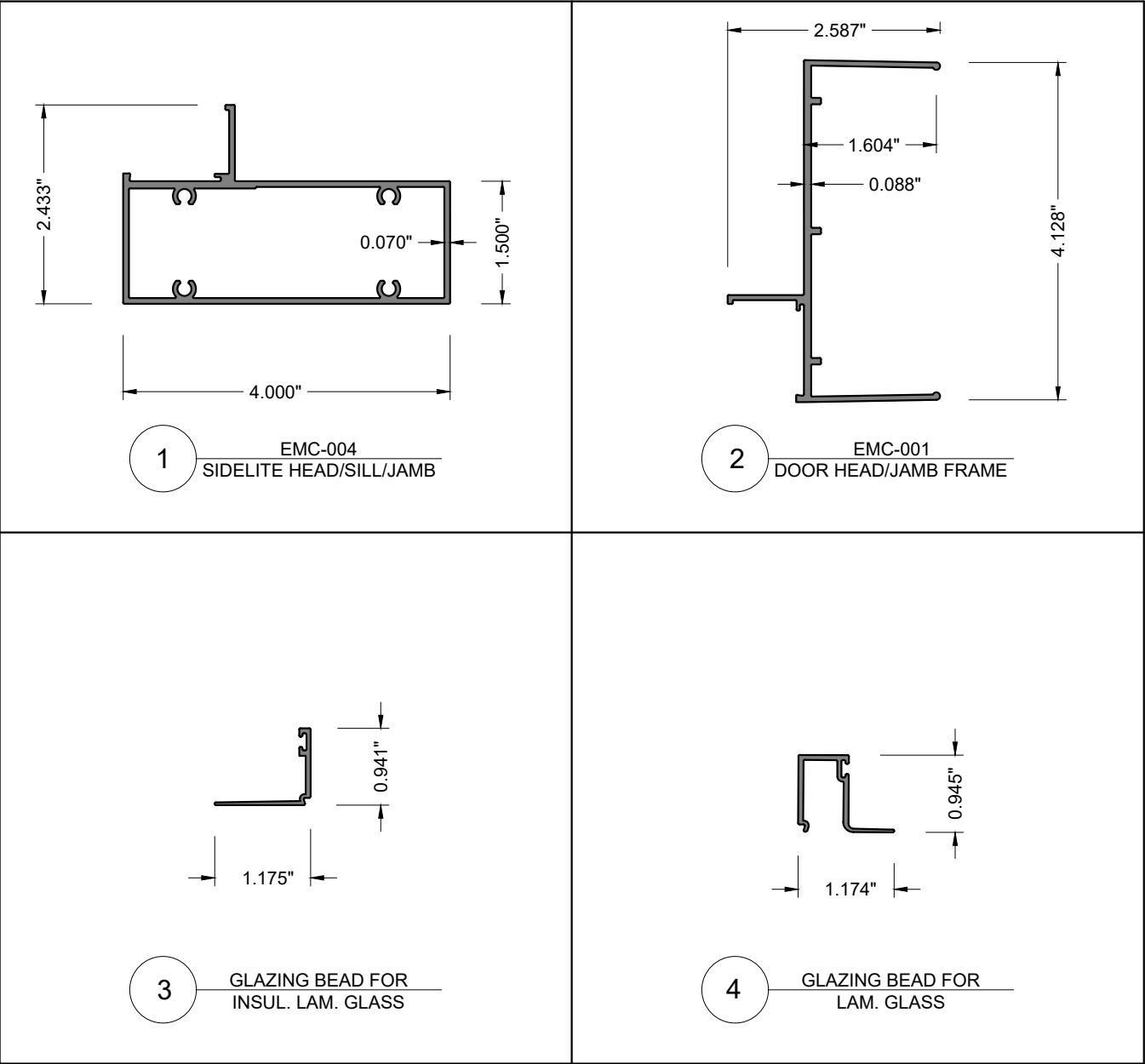
SHEET No:

SHEET NAME:

05 OF 08

H1

EXTRUSIONS



BUILDING
SKINS

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SCALE:

6"=1'-0"

SHEET No:

06 OF 08

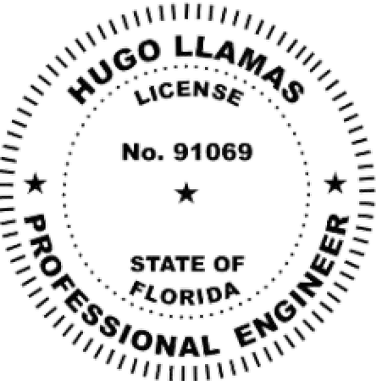
SHEET NAME:

P1

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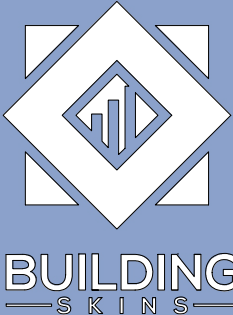
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BILL OF MATERIALS

ITEM	PART	DESCRIPTION	MATERIAL	MANUF. / REMARKS
1	EMC-004	SIDELITE HEAD/SILL/JAMB FRAME	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
2	EMC-005	SIDELITE OPEN JAMB	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
3	-	GLAZING BEAD FOR INSULATED LAMINATED GLASS	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
4	-	GLAZING BEAD FOR LAMINATED GLASS	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
5	NO.3252B	AIR SEAL GASKET	BUBL VINYL	MELTPPOINT PLASTICS
6	-	SILGLAZE PLUS II	SCS2800	GE
7	-	SETTING BLOCK	EPDM +/- 65	-
8	-	CRL GRAY EDGETECH SUPER SPACER - GLASS SPACER	SILICONE FOAM	C.R. LAURENCE CO., INC.



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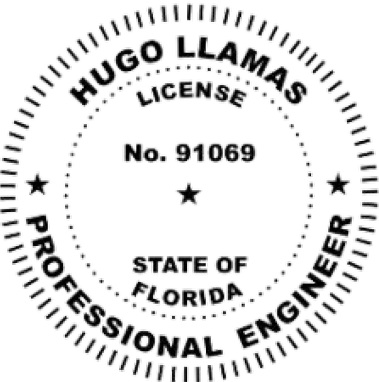
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No.	DATE	DESCRIPTION

DATE:

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SHEET No: 07 OF 08	SHEET NAME: P2

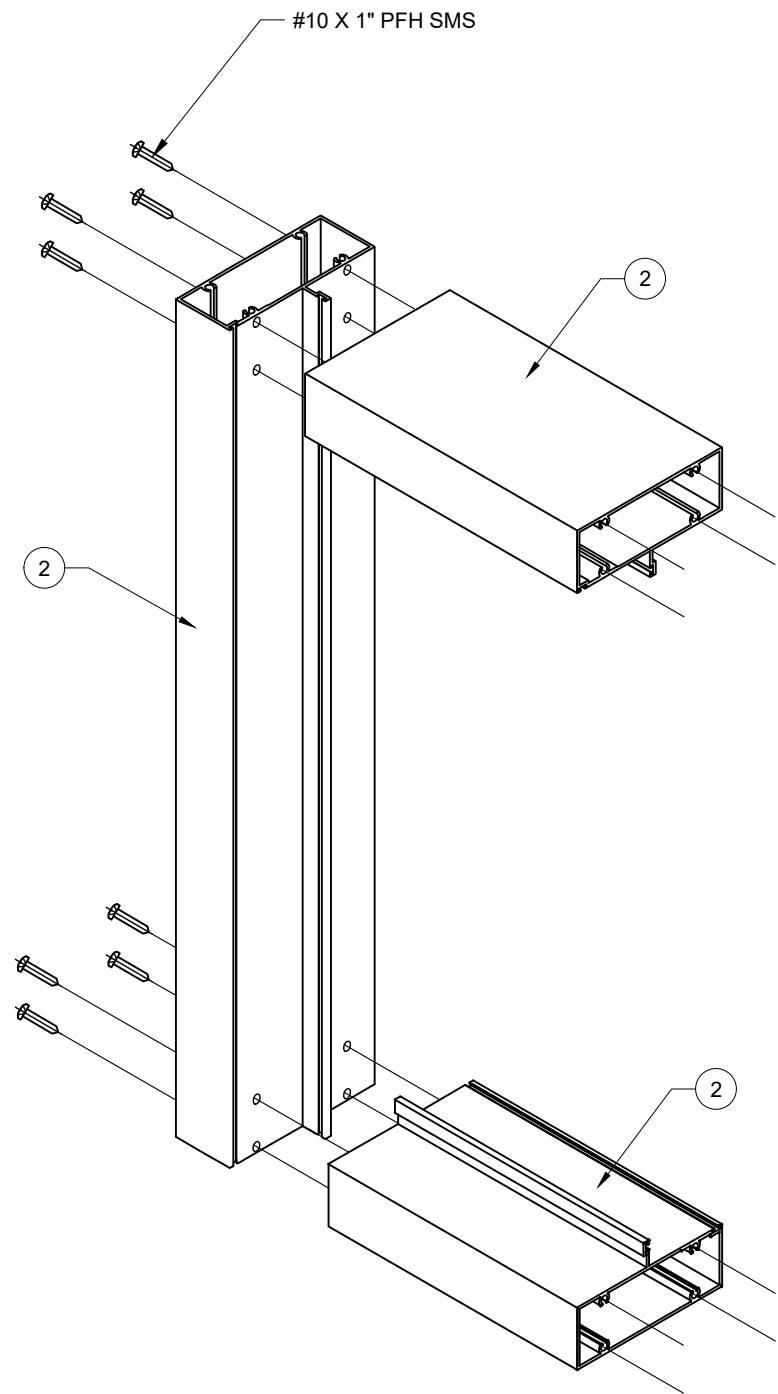


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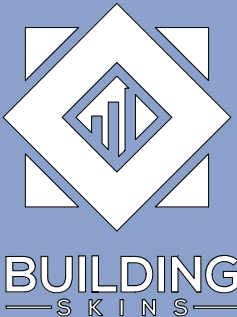
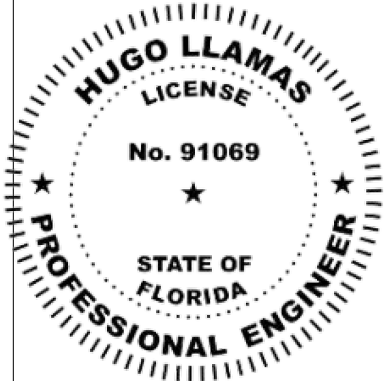
ISOMETRIC



FRAME CORNER ISOMETRIC DETAIL

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SCALE:
NTS

SHEET No:

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SHEET NAME:

P3