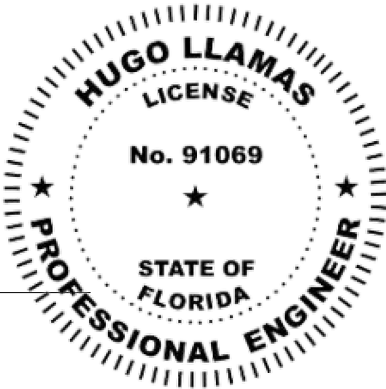


PRODUCT DEVELOPMENT

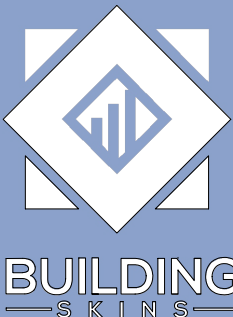


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"FX 2100" - ALUMINUM FIXED WINDOW

PRODUCT APPROVAL DRAWINGS



14 NE 1ST AVE. STE 815,
MIAMI, FL 33132
PH. (+1) 786 553-2225

SERIES "FX 2100"
ALUMINUM FIXED WINDOW
(L.M.I.)

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

DRAWINGS NUMBER:

25-0158P.2

REVISIONS:

No.	DATE	DESCRIPTION

DATE: AUGUST 25TH, 2025

DRAWN BY: LR & AO	SCALE: NTS
SHEET No: 00 OF 07	SHEET NAME: COVER

FX2100 ALUMINUM FIXED WINDOW

GENERAL NOTES:

- 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)
- 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.
- 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.
- ALL ANCHORS NEED TO BE CORROSION RESISTANT, SEE PRODUCT APPROVAL FOR SPECIFIED ANCHORS REQUIRED.
- 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
- FINAL PRODUCT NEED TO HAVE LABEL.
- THESE GLAZING PRODUCTS ARE RATED FOR LARGE IMPACT (L.M.I.)
- ALL SITE SPECIFIC CONDITIONS IN ANY PROJECT NEEDS TO BE PROCURED BY A LICENSED REGISTERED ENGINEERED OR ARCHITECT.
- WHEN USING THIS PRODUCT, SHUTTERS ARE NOT NECESSARY.
- SHIMS THAT ARE USED WITH THIS SYSTEM NEED TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.
- THIS PRODUCT APPROVAL COMPLIES WITH ALL WATER INFILTRATION REQUIREMENTS FOR IMPACT AND HVHZ SYSTEMS
- MANUFACTURER NEEDS TO SHOW PRODUCT LABEL IN ALL MANUFACTURED SYSTEMS.

MAXIMUM DESIGN LOADS:

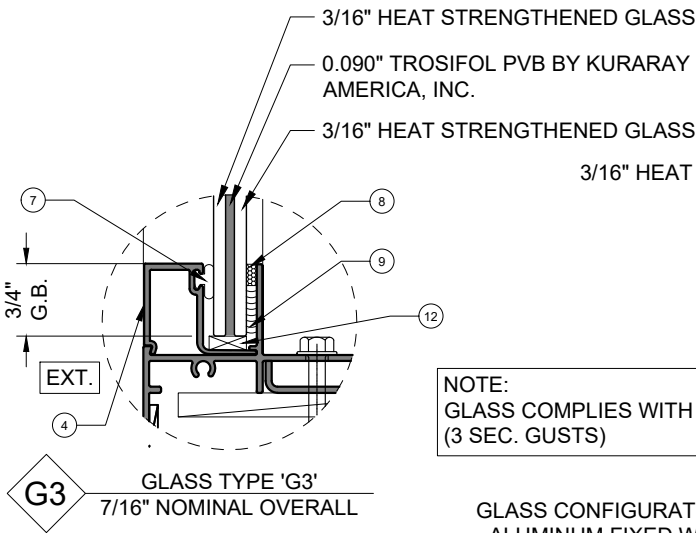
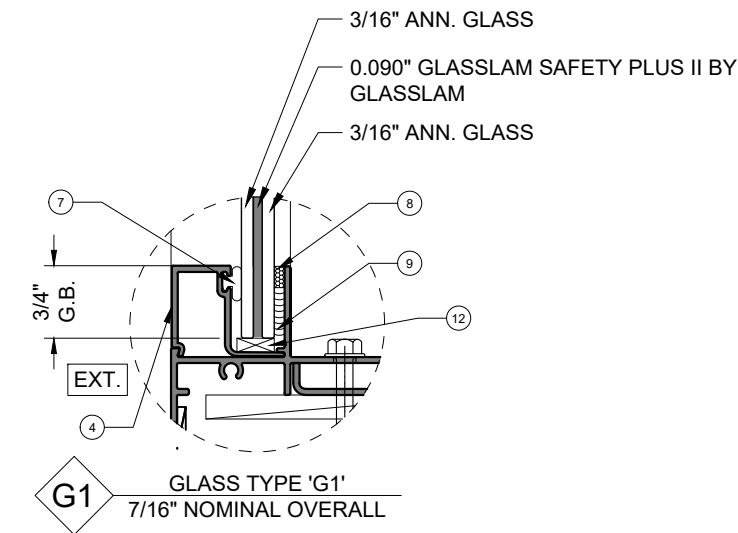
- SHEET P1 CONTAINS THE MAXIMUM DESIGNED LOADS.
- ANCHORS SPACING ARE SHOWN IN SHEET E1 GLAZING ELEVATIONS.
- ANCHOR TYPES ARE SHOWN ON SHEET D1. THIS SHEET SHOWS THE EDGE DISTANCE, EMBEDMENT, TYPE OF ANCHOR, AND ALL REQUIREMENTS ANCHORES NEED TO COMPLY WITH THESE SPECIFICATIONS

GLASS DESIGN LOADS:

- ALL GLASS CAPACITIES ON THIS APPROVAL ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS)
- ALL GLASS SHOWN ON THIS APPROVAL HAS BEEN TESTED FOR LMI AND HVHZ REQUIREMENTS.
- 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
- SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN FBC CHAPTER 24
- GLASS TYPE SHALL COMPLY WITH APPLICABLE GLAZING REQUIREMENTS PER CHAPTER 24 OF THE FBC.

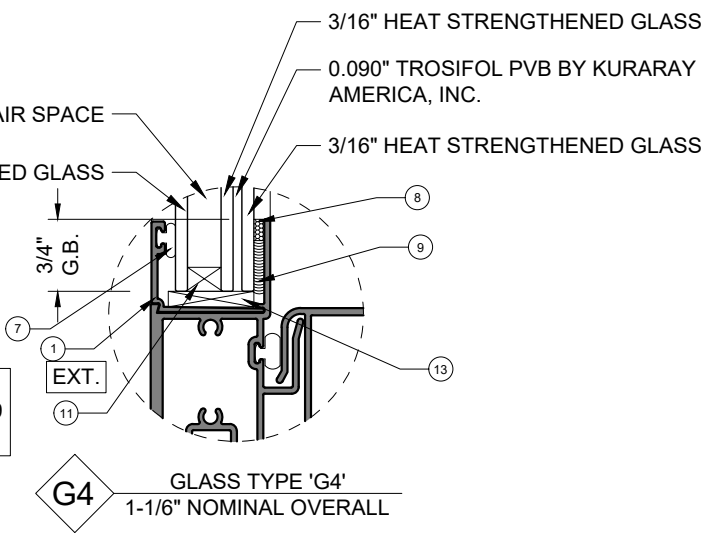
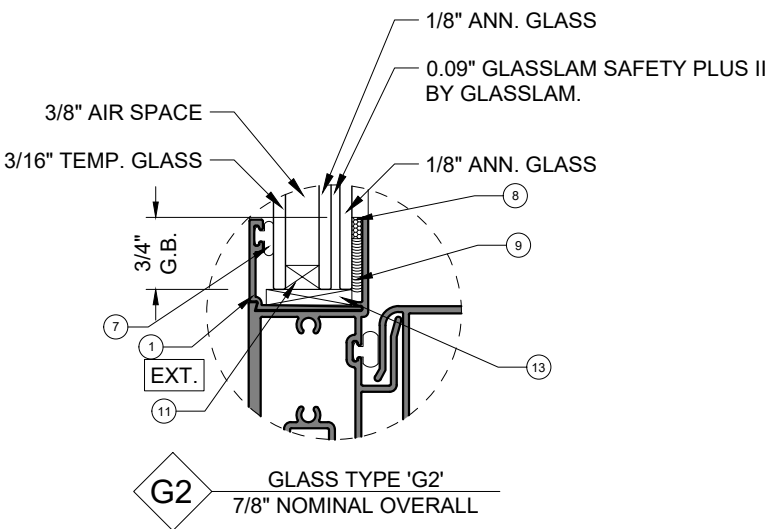
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NOTE:
GLASS COMPLIES WITH ASTM E1300-09
(3 SEC. GUSTS)

GLASS CONFIGURATION FOR
ALUMINUM FIXED WINDOW



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

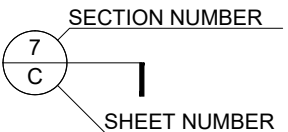
STEP 3: SEE SHEET P1 FOR ALLOWED WINDOW SIZE AND APPROVED DESIGN LOAD.

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



BUILDING
—SKINS—

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DRAWINGS NUMBER:

25-0158P.2

REVISIONS:

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DATE:

AUGUST 25TH, 2025

DRAWN BY:
LR & AO

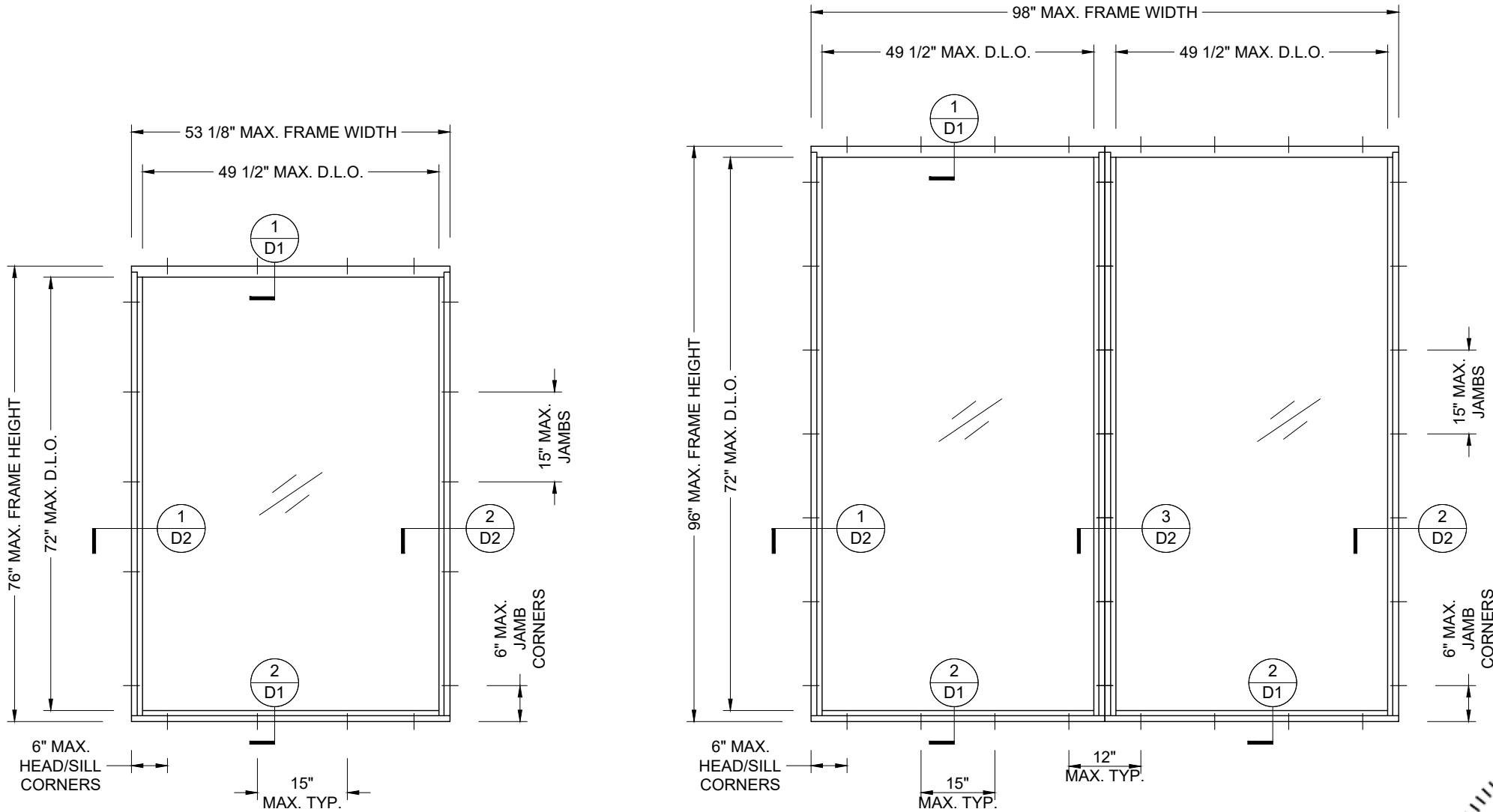
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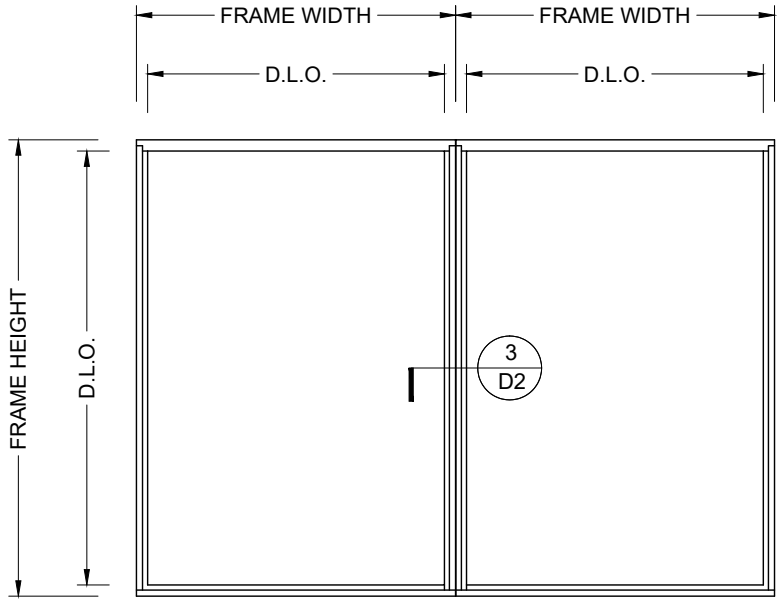
SHEET NAME:

01 OF 07

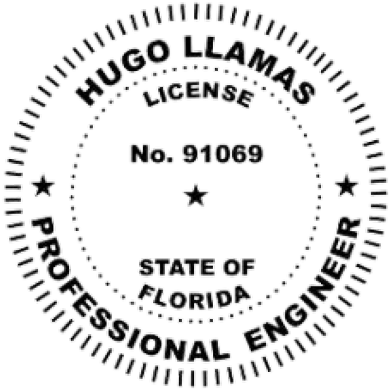
G-1



TYPICAL EXTERIOR ELEVATIONS
SEE DIMENSIONS ON CHART #1

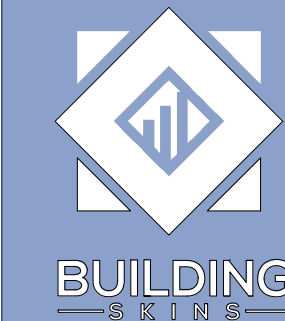


TYPICAL EXTERIOR ELEVATIONS
SEE DIMENSIONS ON CHART #1



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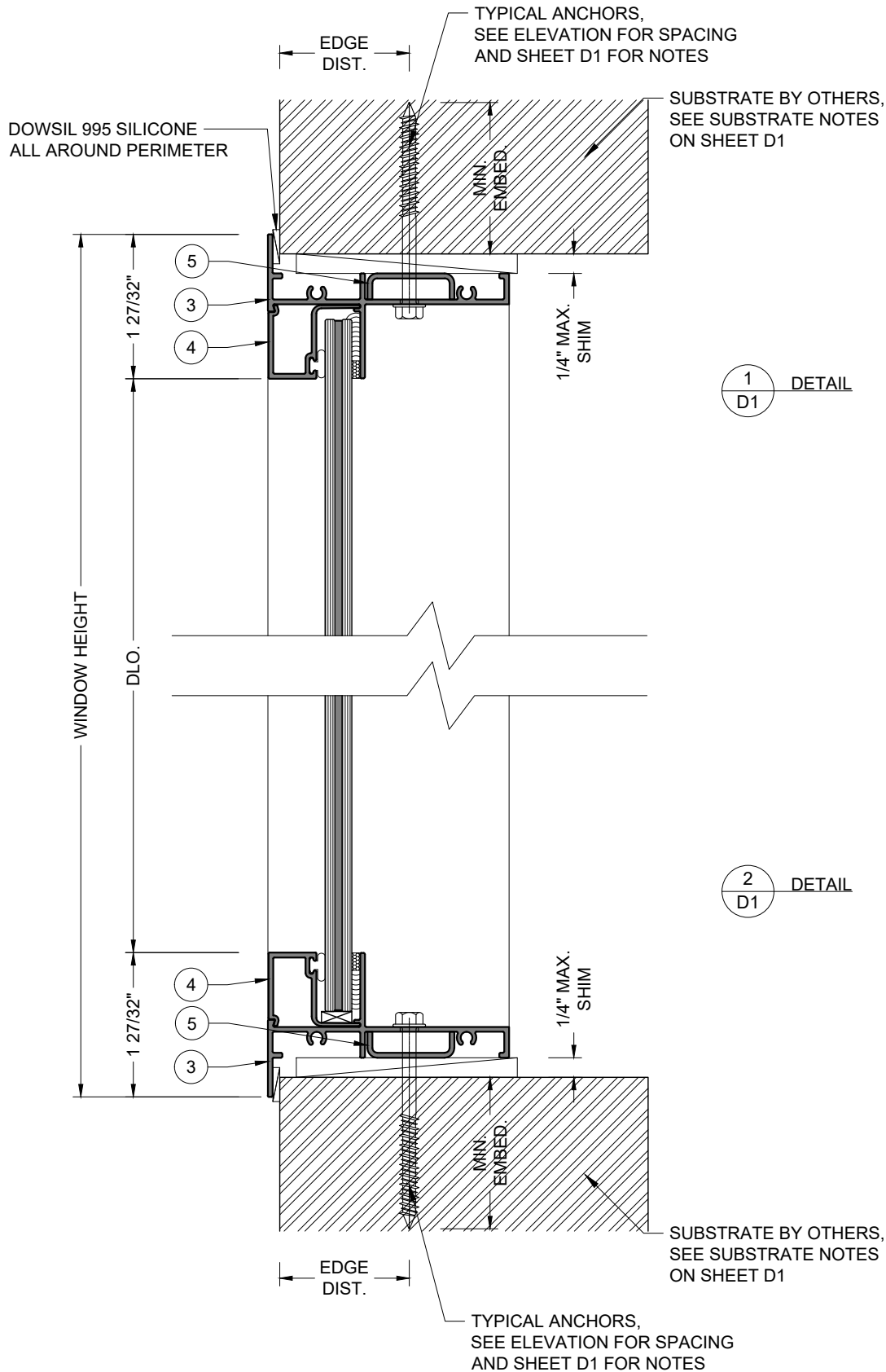
SCALE:
1/2"=1'-0"

SHEET No:

SHEET NAME:

02 OF 07

E1



TYPICAL ANCHORS

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

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

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

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

1/4" TEKS-SELF DRILLING SCREW (GRADE 5 CRSI)

INTO METAL STRUCTURES (HEAD/SILL/JAMBS)

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

INTO FLORIDA STATE APPROVED MULLIONS

STEEL: 16 GA. THK. MIN. (Fy=36KSI MIN.)

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

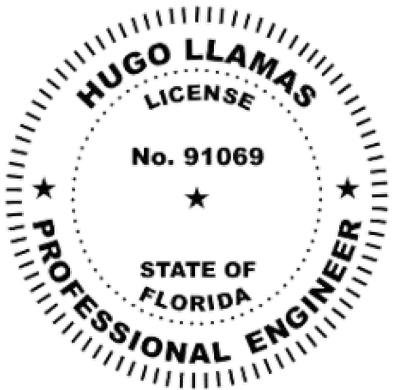
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS

CRITICAL EDGE DISTANCE
INTO CONCRETE AND MANSORY = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

CONCRETE: f_c = 3000 PSI MIN.
ASTM C-90 HOLLOW/GROUT FILLED BLOCK

SUBSTRATE NOTES:

- SUBSTRATE IS BY ENGINEER OF RECORD (E.O.R.) OR ARCHITECT OF RECORD (A.O.R.)
- THIS GLAZING SYSTEM IS APPROVED TO BE ANCHORED TO:
 - a. CONCRETE
 - b. CONCRETE TROUGH 1BY WOOD BUCK
 - c. HOLLOW AND FILLED BLOCKS
 - d. METAL (STEEL / ALUMINUM)
 - e. WOOD STRUCTURE
 - f. MIAMI-DADE COUNTY APPROVED MULLION



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LR & AO

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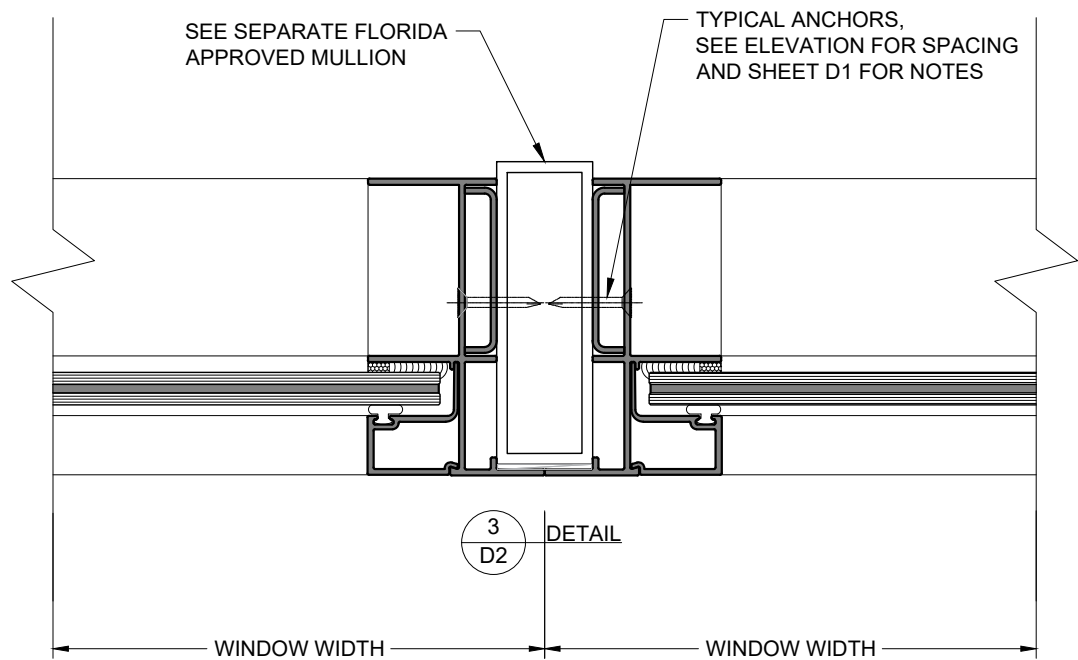
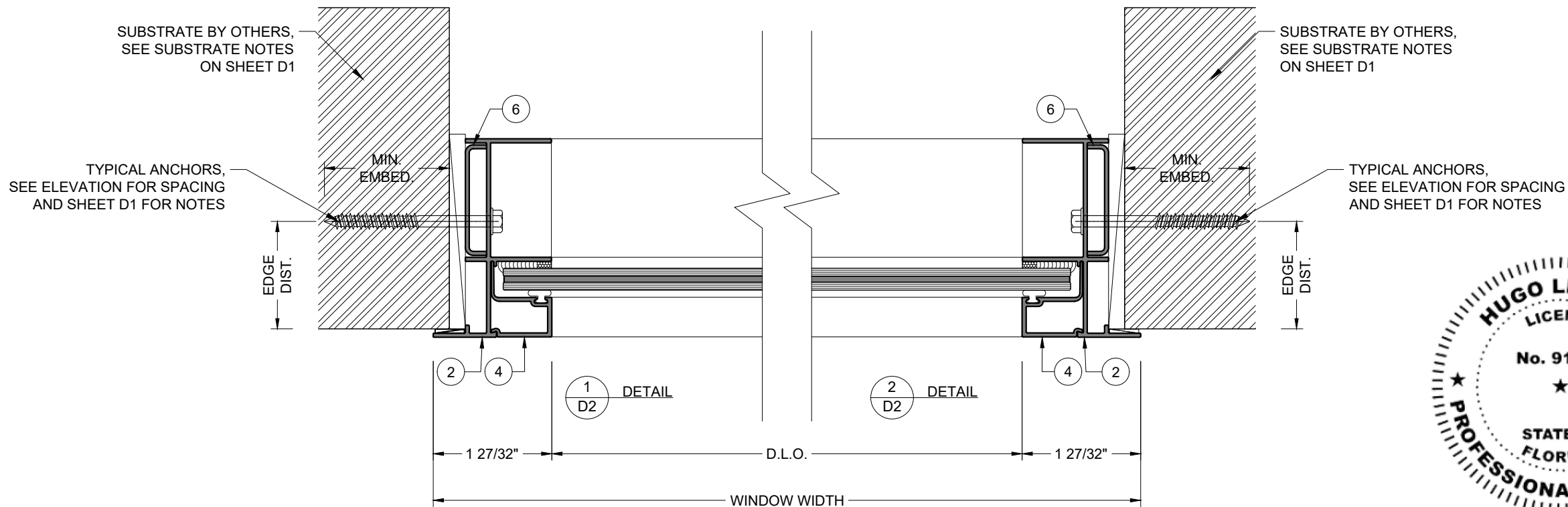
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SHEET No:

03 OF 07

SHEET NAME:

D1



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SCALE:

6"=1'-0"

SHEET No:

04 OF 07

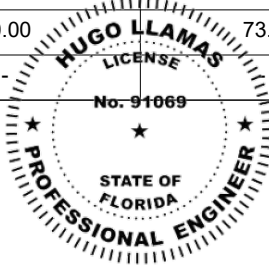
SHEET NAME:

D2

CHART #1

FIXED WINDOW WITH JAMB ANCHORS									
WINDOW ALLOWED DESIGN LOAD (PSF)									
WINDOW DIMS.		GLASS TYPE "G1"		GLASS TYPE "G2"		GLASS TYPE "G3"		GLASS TYPE "G4"	
FRAME HEIGHT (H)	FRAME WIDTH (W)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
26"	19 1/8"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	26 1/2"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	37"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	53 1/8"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	70"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	84 1/2"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
38-3/8"	19 1/8"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	26 1/2"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	37"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	53 1/8"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	70"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	84 1/2"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
50-5/8"	19 1/8"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	26 1/2"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	37"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	53 1/8"	73.5	89.20	70.00	85.00	65.00	75.00	65.00	75.00
	70"	-	-	70.00	85.00	65.00	75.00	65.00	75.00
	84 1/2"	-	-	70.00	85.00	65.00	75.00	65.00	75.00
63"	19 1/8"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	26 1/2"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	37"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	53 1/8"	70.00	85.00	70.00	71.60	65.00	75.00	65.00	75.00
	70"	-	-	70.00	85.00	65.00	75.00	65.00	75.00
76"	19 1/8"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	26 1/2"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	37"	90.00	98.60	70.00	73.00	65.00	75.00	65.00	75.00
	53 1/8"	70.00	75.10	60.20	60.20	65.00	75.00	65.00	75.00
	60"	-	-	-	-	65.00	75.00	65.00	75.00
84"	19 1/8"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	26 1/2"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	37"	90.00	98.60	70.00	73.00	65.00	75.00	65.00	75.00
	53 1/8"	70.00	75.10	60.20	60.20	65.00	75.00	65.00	75.00
96"	19 1/8"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	26 1/2"	90.00	100.00	70.00	85.00	65.00	75.00	65.00	75.00
	37"	90.00	98.60	70.00	73.00	65.00	75.00	65.00	75.00
	48"	-	-	-	-	65.00	75.00	65.00	75.00

NOTES:
WINDOW WIDTH AND HEIGHT DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY.



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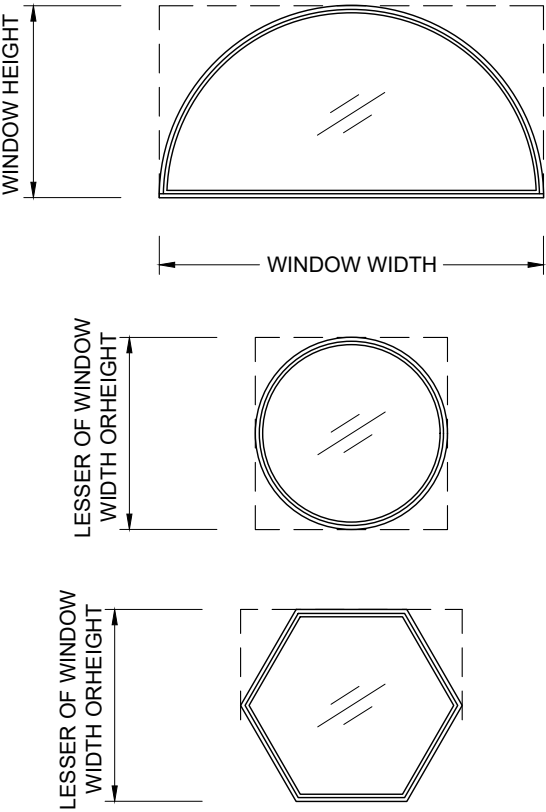
No.	DATE	DESCRIPTION

DATE:

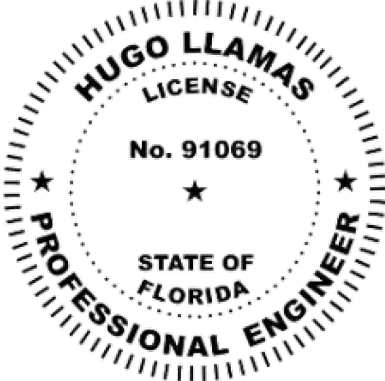
AUGUST 25TH, 2025

DRAWN BY: LR & AO	SCALE: NTS
SHEET No: 05 OF 07	SHEET NAME: P1

EXTRUSIONS



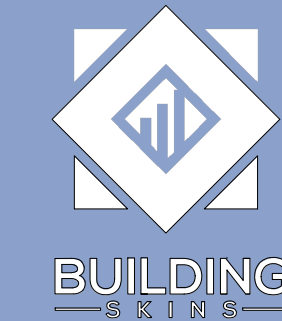
NOTES:
ALLOWABLE LOADS FOR ALTERNATE SHAPES CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN A SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING LOADS FROM CHART #1 (SEE SHEET 05)



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1 GLAZING CHANNEL ALUMINUM 6063-T6	2 FRAME JAMB ALUMINUM 6063-T6
3 FRAME HEAD/SILL ALUMINUM 6063-T6	4 GLAZING CHANNEL ALUMINUM 6063-T6
5 ANCHOR CLIP ALUMINUM 6063-T6	6 ANCHOR CLIP ALUMINUM 6063-T6



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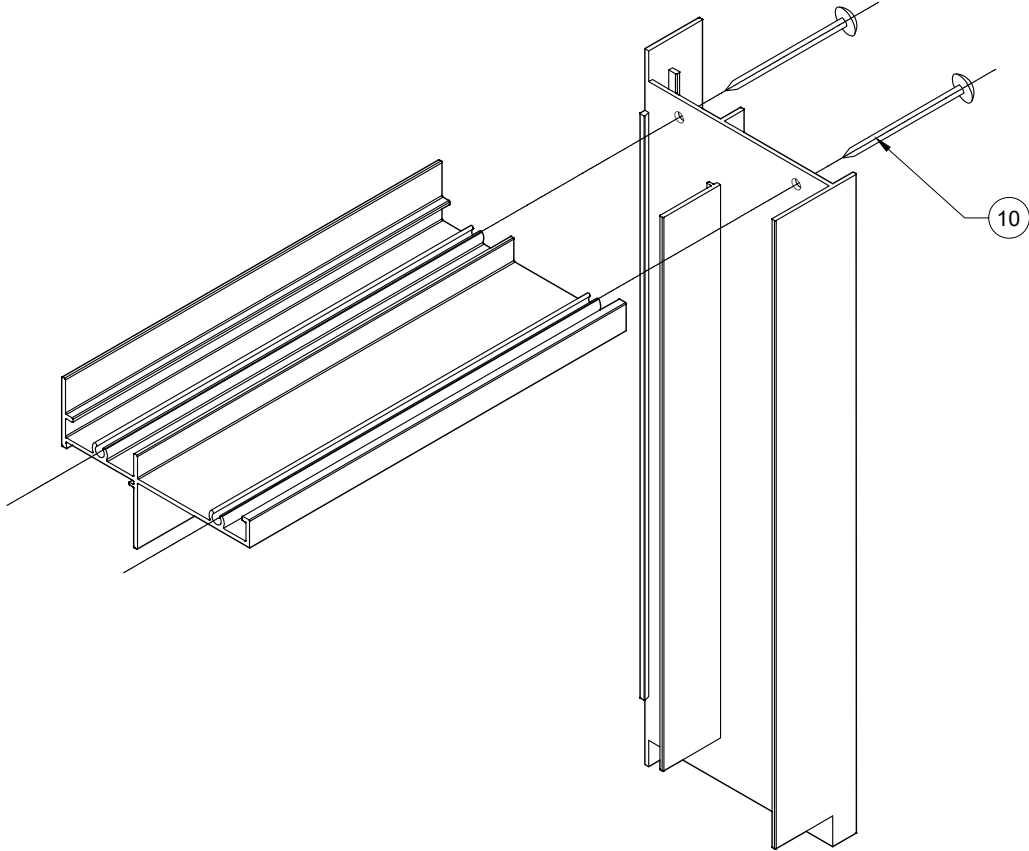
06 OF 07

P2

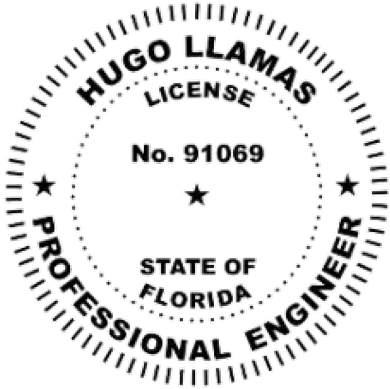
BILL OF MATERIALS

ITEM #	QTY.	PROFILE	DESCRIPTION	MATERIAL	MANUFACTURER/REMARKS
1	AS REQD.	E121	ALUM. INSULATED GLAZING CHANNEL	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
2	2	E102	FRAME JAMB, PC WHITE	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
3	2	E103	FRAME HEAD/ SILL, PCWHITE	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
4	4	E110	GLAZING CHANNEL, PC WHITE	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
5	AS REQD.	E118	ANCHOR CLIP 16 GA	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
6	AS REQD.	E119	ANCHOR CLIP 16 GA	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
7	AS REQD.	V0021	E202 VINYL BULB, GLAZING STOP	VINYL	FENESTRATION GLASS PRODUCTS
8	AS REQD.	W0019	.125 X .25 GLAZNG TAPE, 2 SIDED	TAPE	FRANK LOWED
9	AS REQD.	SEAL01-1	DOWSIL 995 BACK SILICONE	SILICONE	DOWSIL
10	AS REQD.	# 8 X 1	FRAME ASSEMBLY SCREWS	STEEL	SPH SHEET METAL SCREW
11	AS REQD.	-	CRL GRAY EDGETECH SUPER SPACER - GLASS SPACER	SILICONE FOAM	C.R. LAURENCE CO., INC.
12	1/ QUARTER POINT	-	1/8" X 3/8" X 2" SETTING BLOCKS, DUROMETER 70 ± 5	EPDM	-
13	1/ QUARTER POINT	-	1/8" X 7/8" X 2" SETTING BLOCKS, DUROMETER 70 ± 5	EPDM	-

ISOMETRICS



FRAME CORNER DETAIL



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ALUMINUM FIXED WINDOW
(L.M.I.)

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