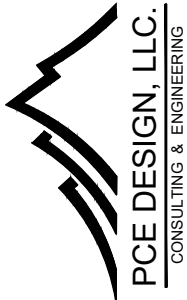


PRODUCT DEVELOPMENT

IN-SWING/OUT-SWING
ALUMINIUM DOOR

PRODUCT APPROVAL DRAWINGS



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Ph. (305) 698-0550

SERIES "HC 5000"
IN-SWING/OUT-SWING
ALUMINIUM DOOR
LARGE MISSILE IMPACT (L.M.I.)

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OPA-LOCKA, FL 33054
Ph. 305-203-0780
Contact@BESmiami.com

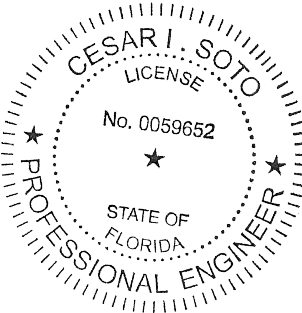
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DATE:
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Sheet No. 00 OF 07	SHEET NO. Cover



Digitally signed by Cesar I Soto
Contact Info: PE #59652
cesar.soto@paramountce.com
Date: 2025.01.28 15:39:08-05'00'

CONTACT: (305)698-0550 OR (786)877-2699

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY CESAR I. SOTO P.E. ON THE DATE ADJACENT TO THE SEAL.

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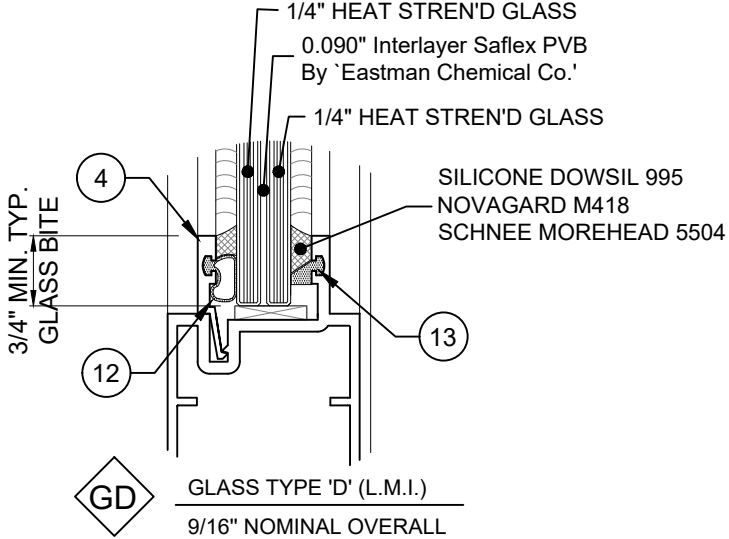
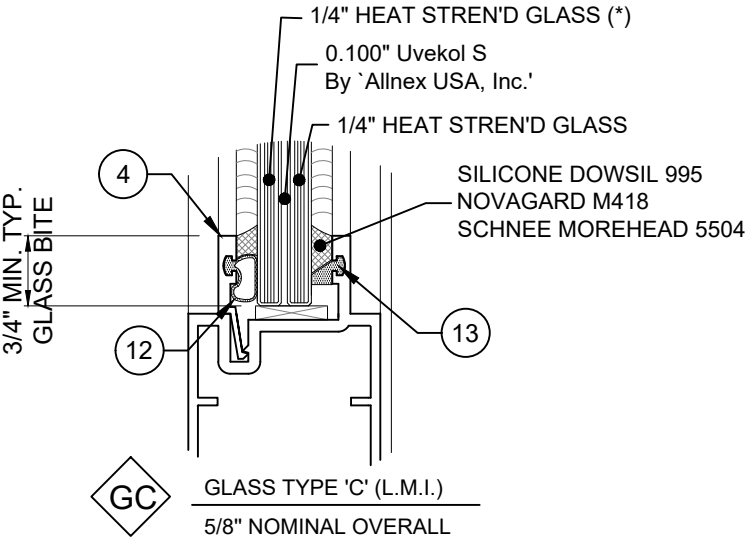
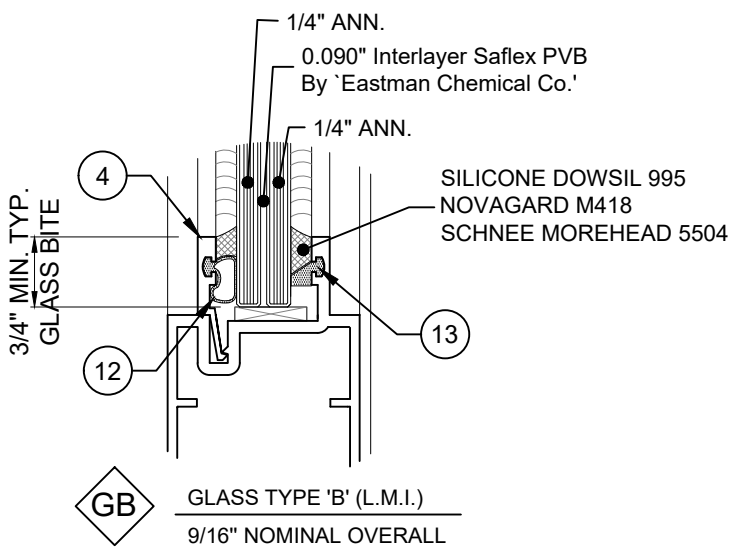
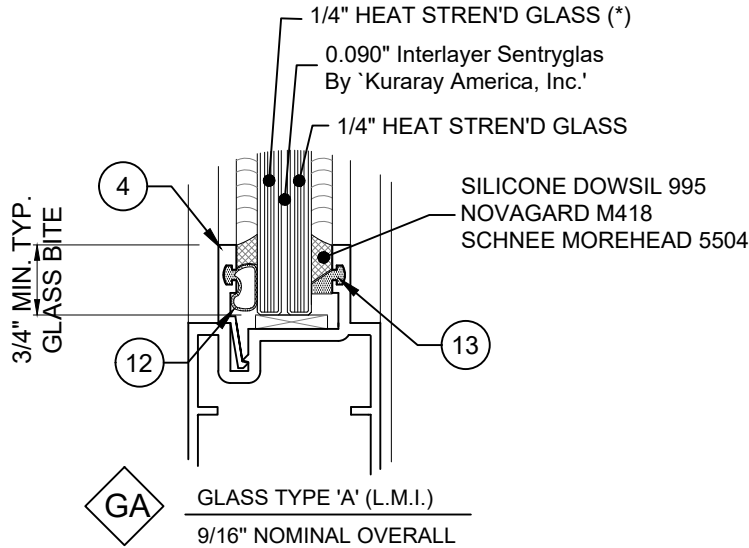
HC 5000 IN-SWING/OUT-SWING ALUMINIUM DOOR

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.) & SMALL MISSILE IMPACT (S.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

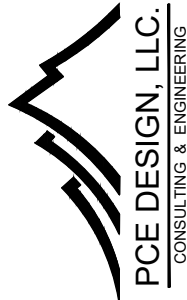
- A. SHEET 02 CONTAINS THE MAXIMUM ALLOWABLE DESIGN LOAD CAPACITY AND NUMBER OF ANCHORS REQUIRED FOR THE DOUBLE DOOR AND SINGLE DOOR.
- B. SHEET 05 CONTAINS THE MAXIMUM ALLOWABLE DESIGN LOAD CAPACITY FOR A DOUBLE DOOR AND A SINGLE DOOR REINFORCE AND NON REINFORCE.
- C. ANCHORS SPACING ARE SHOWN IN ALL GLAZING ELEVATIONS.
- D. ANCHOR TYPES ARE SHOWN ON SHEET 03. THIS SHEET SHOWS THE EDGE DISTANCE, EMBEDMENT, TYPE OF ANCHOR, AND ALL REQUIREMENTS ANCHORES NEED TO COMPLY WITH THESE SPECIFIATIONS



GLASS CONFIGURATION FOR IN-SWING / OUT-SWING ALUMINIUM DOOR

GLASS DESIGN NOTES

- 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.



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SCALE
6" = 1'-0"

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SHEET NO.

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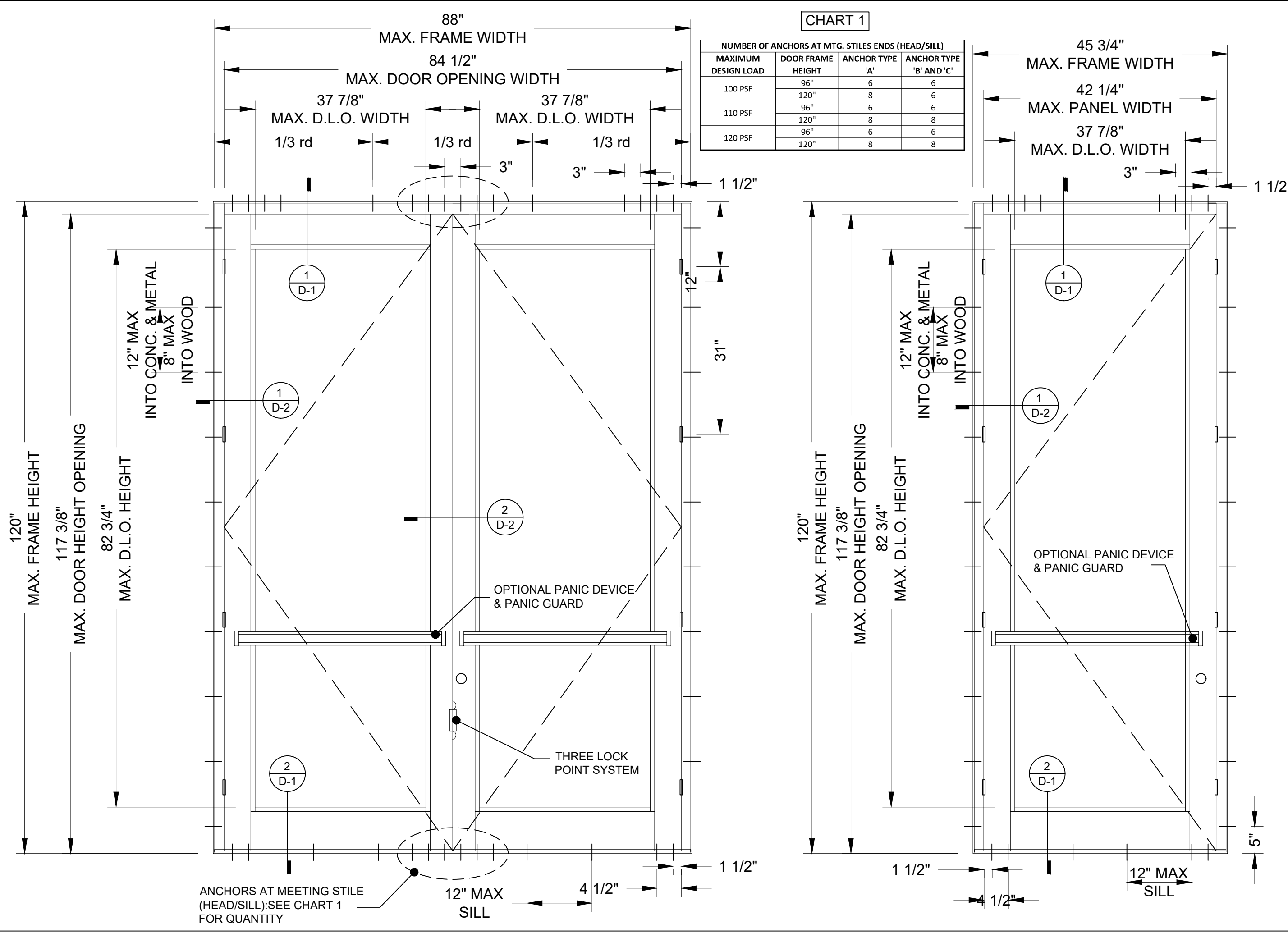
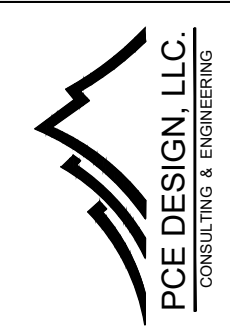


CHART 1

NUMBER OF ANCHORS AT MTG. STILES ENDS (HEAD/SILL)			
MAXIMUM DESIGN LOAD	DOOR FRAME HEIGHT	ANCHOR TYPE 'A'	ANCHOR TYPE 'B' AND 'C'
100 PSF	96"	6	6
	120"	8	6
110 PSF	96"	6	6
	120"	8	8
120 PSF	96"	6	6
	120"	8	8



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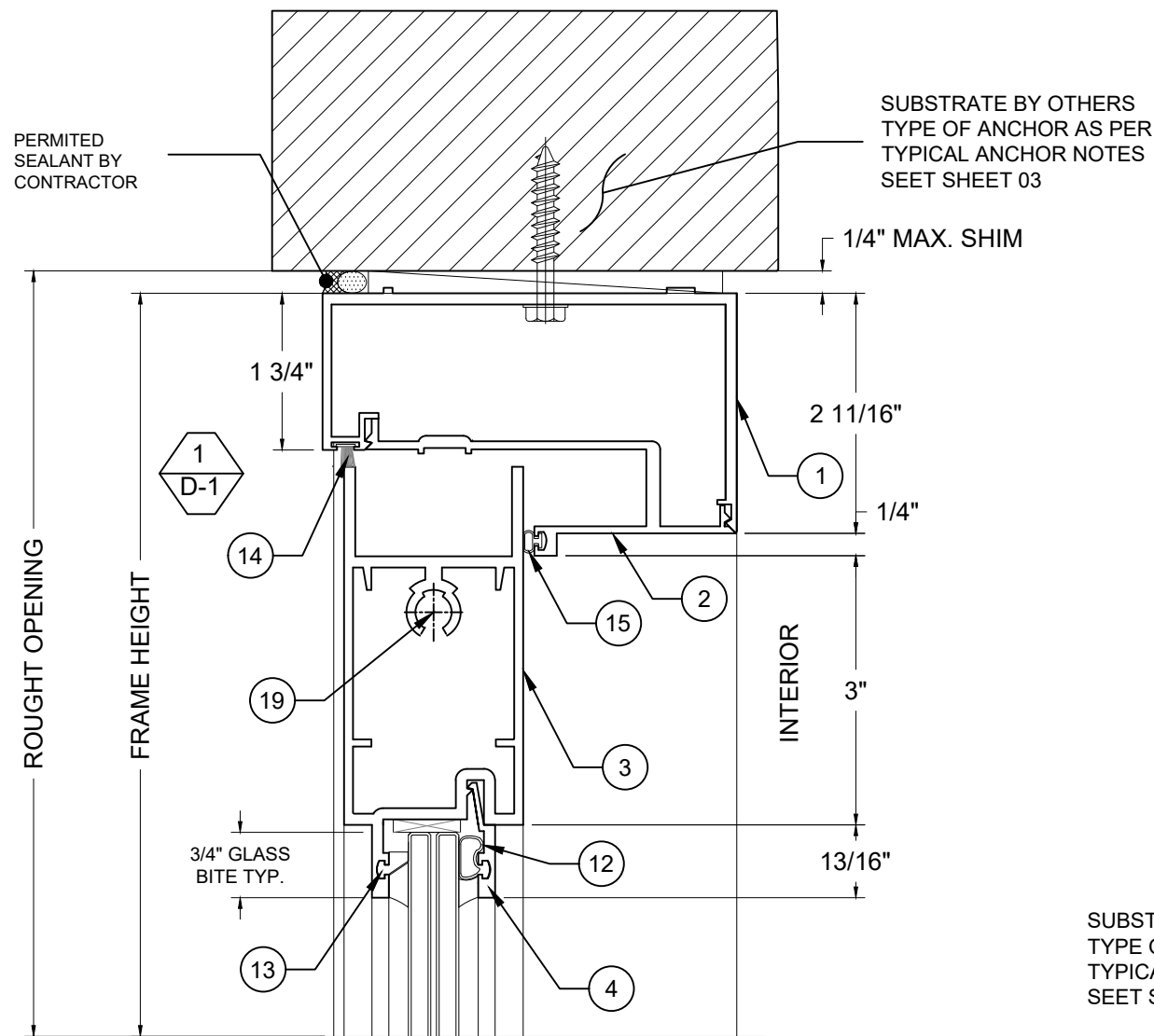
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TYPICAL ANCHORS:

TYPE 'A'- **1/4" DIA, ULTRACON BY 'DEWALT'**
DIRECTLY INTO CONCRETE
1-3/4" MIN. EMBED INTO CONCRETE

THRU 1X WOOD BUCKS INTO CONCRETE OR MANSORY
1-1/4" MIN. EMBED INTO CONCRETE OR MANSORY

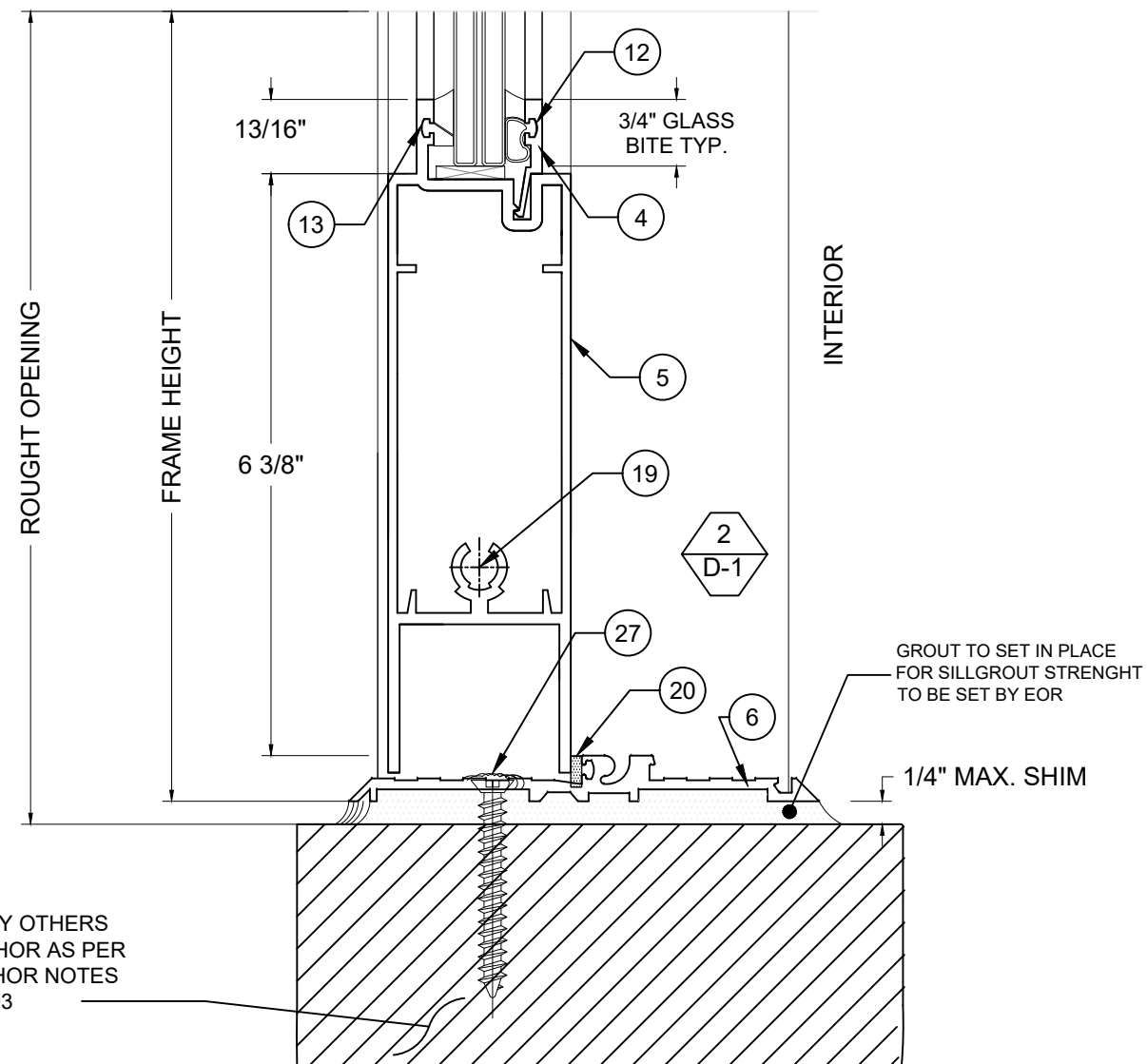
TYPE 'B'- **1/4" DIA, ULTRACON BY 'DEWALT'**
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES (SYP #2 G=0.55 MIN)
1-1/2" MIN. EMBED INTO WOOD

TYPE 'C'- **1/4" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)**
INTO METAL STRUCTURE (3 PICHES PASS THE THREAD PLANE MIN.)
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
ALUMINIUM: 1/8" THK. MIN (6063-T5)
STEEL: 1/8" THK. MIN. (Fy=36 KSI MIN)
(STEEL IN CONTACT WITH ALUMINIUM TO BE PLATED OR PAINTED)

EDGE DISTANCE

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

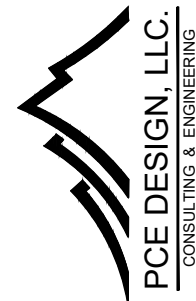
ALL CONCRETE NEEDS TO HAVE 3000 PSI MIN.
ALL HOLLOW/FILLED BLOCK SUBSTRATE NEEDS TO HAVE 2000 PSI MIN.
ALL WOOD SUBSTRATE NEEDS TO HAVE SG = 0.55 MIN.



NOTE:
DOOR FRAME CAN BE INSTALLED EITHER WAY TO ALLOW INSWING
OR OUTSWING CONFIGURATION.

SUBSTRATE NOTES:

- SUBSTRATE IS BY ENGINEER OF RECORD (E.O.R.)
OR ARCHITECT OF RECORD (A.O.R.)
- THIS GLAZING SYSTEM CAN IS APPROVED TO BE
ANCHORED TO:
 - a. CONCRETE
 - b. WOOD STRUCTURES
 - c. METAL (STEEL / ALUMINUM)



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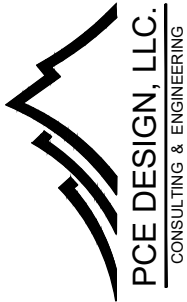
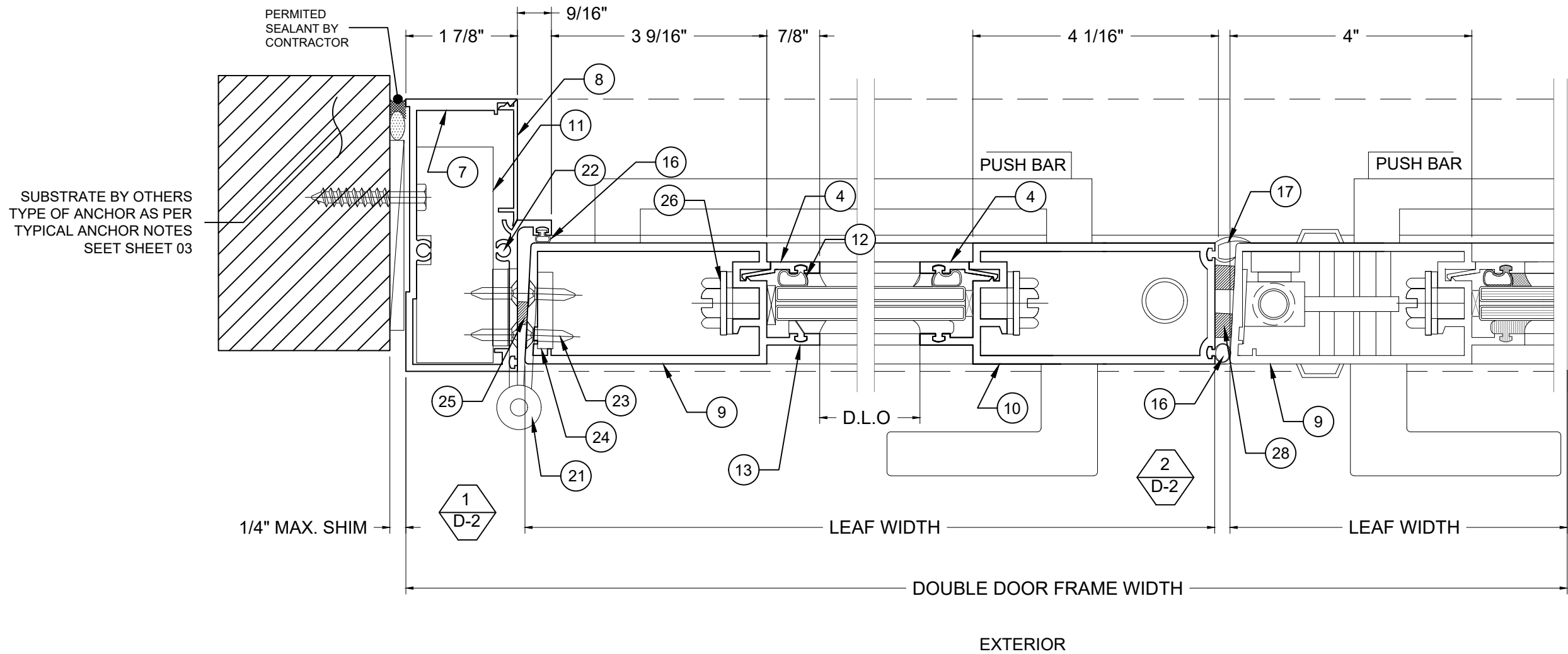
SCALE
6" = 1'-0"

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CHART 2

DESIGN LOAD CAPACITY - PSF			
DOUBLE DOOR & SINGLE DOOR NON-REINFORCED			
DOOR DIMS.		GLASS TYPE 'A'	GLASS TYPE 'B'
FRAME HEIGHT	PANEL WIDTH	EXT. (+)	EXT. (+)
		INT. (-)	INT. (-)
80"	30"	100 PSF	100 PSF
	36"	100 PSF	100 PSF
	42"	100 PSF	100 PSF
84"	30"	100 PSF	100 PSF
	36"	100 PSF	100 PSF
	42"	100 PSF	100 PSF
90"	30"	100 PSF	100 PSF
	36"	100 PSF	100 PSF
	42"	100 PSF	100 PSF
96"	30"	100 PSF	100 PSF
	36"	100 PSF	100 PSF
	42"	100 PSF	100 PSF

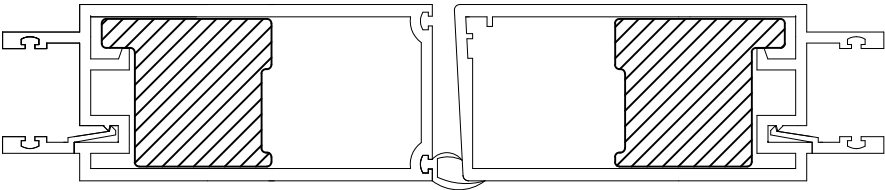
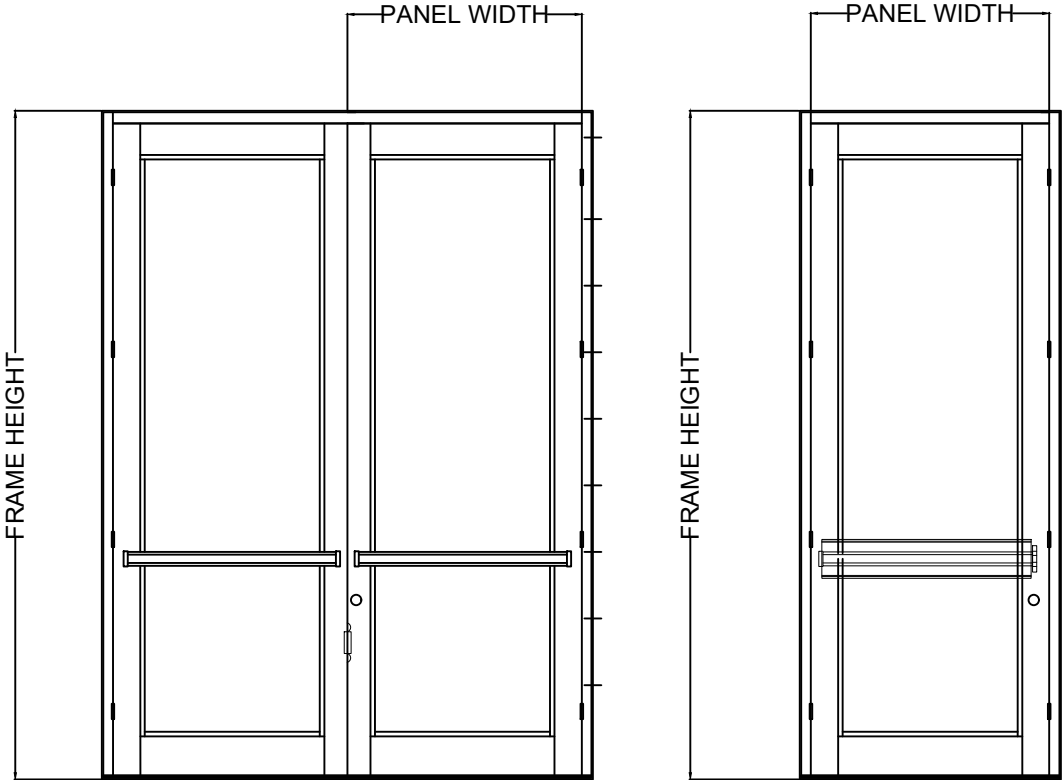
MAXIMUM DESIGN PRESSURE FOR ALL INSWING DOORS
ARE +/- 90 PSF

DESIGN LOAD CAPACITY - PSF			
DOUBLE DOOR & SINGLE DOOR REINFORCED			
DOOR DIMS.		GLASS TYPE 'C'	GLASS TYPE 'D'
FRAME HEIGHT	PANEL WIDTH	EXT. (+)	EXT. (+)
		INT. (-)	INT. (-)
80"	30"	110 PSF	120 PSF
	36"	110 PSF	120 PSF
	42"	110 PSF	120 PSF
84"	30"	110 PSF	120 PSF
	36"	110 PSF	120 PSF
	42"	110 PSF	120 PSF
90"	30"	110 PSF	120 PSF
	36"	110 PSF	120 PSF
	42"	110 PSF	120 PSF
96"	30"	110 PSF	120 PSF
	36"	110 PSF	120 PSF
	42"	110 PSF	120 PSF
102"	30"	110 PSF	120 PSF
	36"	110 PSF	120 PSF
	42"	110 PSF	120 PSF
108"	30"	110 PSF	120 PSF
	36"	110 PSF	120 PSF
	42"	110 PSF	120 PSF
114"	30"	110 PSF	120 PSF
	36"	110 PSF	120 PSF
	42"	110 PSF	120 PSF
120"	30"	110 PSF	120 PSF
	36"	110 PSF	120 PSF
	42"	110 PSF	120 PSF

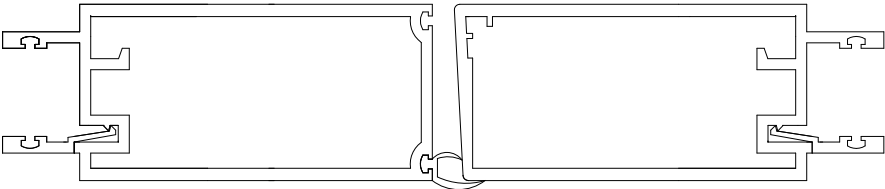
MAXIMUM DESIGN PRESSURE FOR ALL INSWING DOORS
ARE +/- 90 PSF

DESIGN PRESSURE RATING
IMPACT RATING
MISSILE LEVEL D
IN-SWING +90.00 PSF / -90.00 PSF
OUT-SWING SEE CHART 2

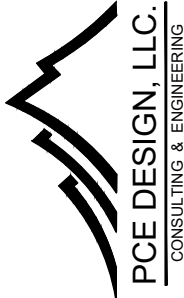
THESE CALCULATIONS ARE BASED ON THE ASTM
E1300-09, ASTM E1300-12 AND ASTM E1300-16



REINFORCED STILES



NON-REINFORCED STILES



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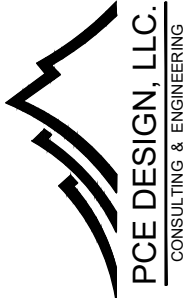
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ITEM	PARTNo	DESCRIPCION	MATERIAL
1	1	FRAME HEAD	6063- T6
2	2	FRAME HEAD INSERT	6063- T6
3	3	GLAZING BEAD	6063- T6
4	4	GLASS STOP	6063- T6
5	5	BOTTOM RAIL	6063- T6
6	6	THRESHOLD	6063- T6
7	7	FRAME JAMB	6063- T6
8	8	FRAME JAMB INSERT	6063- T6
9	9	HINGE STILE/ ACTIVE LOCK STILE	6063- T6
10	10	INACTIVE LOCK STILE	6063- T6
11	11	HINGE BACK UP TUBE	6063- T5
12	12	GLAZING BEAD GASKET	VINYL
13	13	GLAZING LEG SPACER	VINYL
14	14	PILE W STRIPPING WITH FIN (.300H)	-
15	15	BULB W STRIPPING (.195x.375)	VINYL
16	16	BULB W STRIPPING (.195x.570)	VINYL
17	17	PEROXIDE THEAD-IN FINGER (VINYL FLAP)	VINYL
18	18	ASSEMBLY SCREW	-
19	19	LEAF ASSEMBLY SCREW	ST. STEEL
20	20	1/4" x 7/16" CLOSED CELL FOAM	-
21	21	HINGE	ST. STEEL
22	22	FRAME ASSEMBLY SCREWS	STEEL
23	23	HINGE INSTALATION SCREWS	STEEL
24	24	HINGE BACK UP PLATE	6063- T5
25	25	1/4" x 3/8" CLOSED CELL FOAM	-
26	26	LEAF ASSEMBLY SCREW	ST. STEEL
27	27	THRESHOLD INSTALATION SCREW	-
28	28	1/4" x 3/8" x 7-1/12" CLOSED CELL FOAM	-

DOOR HARDWARE		
DESCRIPTION	QUANTITY	LOCATION
ALUMIUM HANDLE	2 PER LEAF	52" FROM PANEL BOTTOMS
ACTIVE LEAF ADAMS RITE THREE POINT LOCK SYSTEM (MS-1880)	1	29" FROM PANEL BOTTOM AND TOP AND BOTTOM OF LOCKING STILE
INACTIVE LEAF ADAMS RITE TWO POINT LOCK (MS-1880)	1	TOP AND BOTTOM OF LOCKING STILE
GLOBAL DOOR 4.5x4.5 STAINLESS STEEL HINGES CS454BNRP 32-1/4	4 PER JAMB	12" FROM ENDS AND 31" ON CENTER
JACKSON PANIC SYSTEM WITH CONCEALED ROD (#2085)	2	41" FROM PANEL BOTTOMS OF BOTH PANELS



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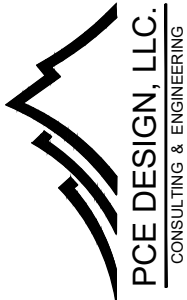
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DOOR EXTRUSIONS



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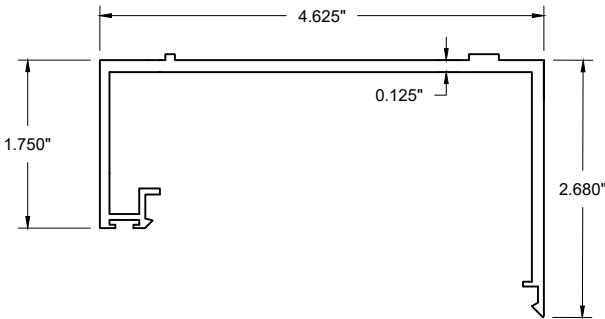
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E-1

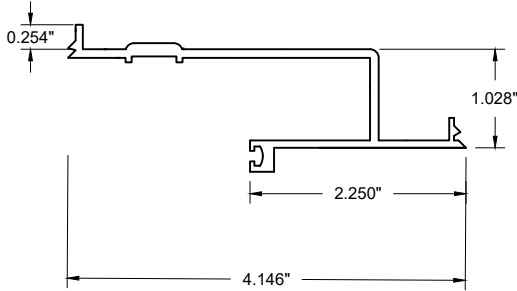
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FRAME HEAD



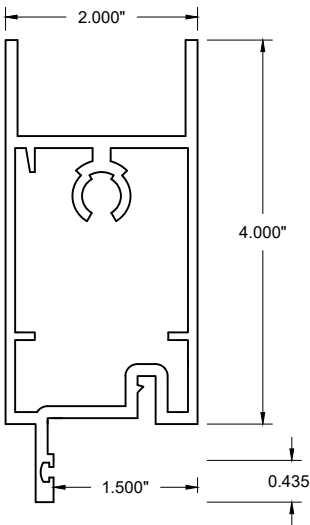
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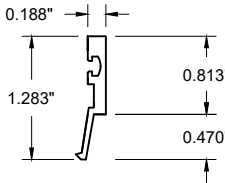
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GLAZING BEAD



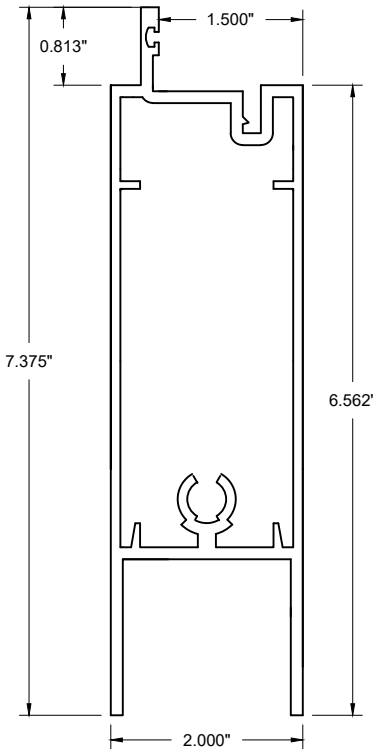
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GLASS STOP



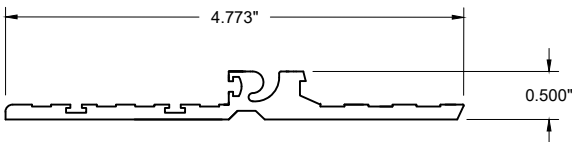
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BOTTOM RAIL



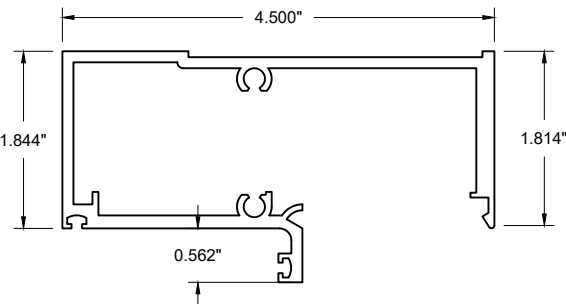
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THRESHOLD



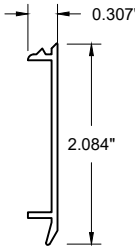
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FRAME JAMB



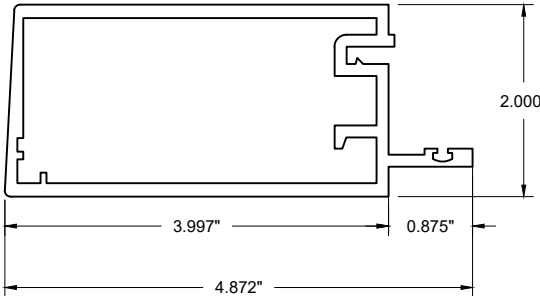
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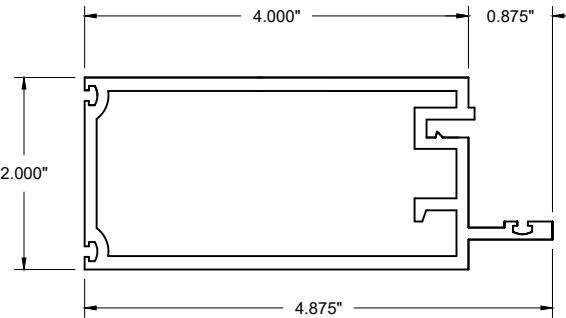
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HINGE STILE / ACTIVE LOCK STILE



10

INACTIVE LOCK STILE



18

ASSEMBLY SCREW

