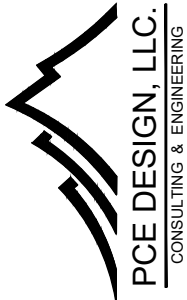


PRODUCT DEVELOPMENT

ALUMINIUM ENTRANCE DOOR

PRODUCT APPROVAL DRAWINGS



6135 NW 167th St. STE E-1
Miami Gardends, FL 33015
Ph. (305) 698-0550

SERIES "RD 45"
ALUMINIUM ENTRANCE DOOR
LARGE MISSILE IMPACT (L.M.I.)

RC BES WINDOWS LLC
12900 NW 38th AVE.
OPA-LOCKA, FL 33054
Ph. 305-203-0780
Contact@BESmiami.com

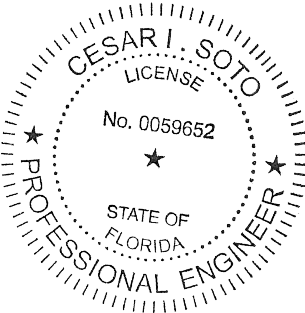
DRAWINGS NUMBER
24-01979.6

REVISIONS:

No.	Date	Description

DATE:
May 31st, 2024

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Sheet No. 00 OF 10	SHEET NO. Cover



Digitally signed by Cesar I Soto
Contact Info: PE #59652
cesar.soto@paramountce.com
Date: 2025.01.28 15:39:16-05'00'

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.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

01/28/2025

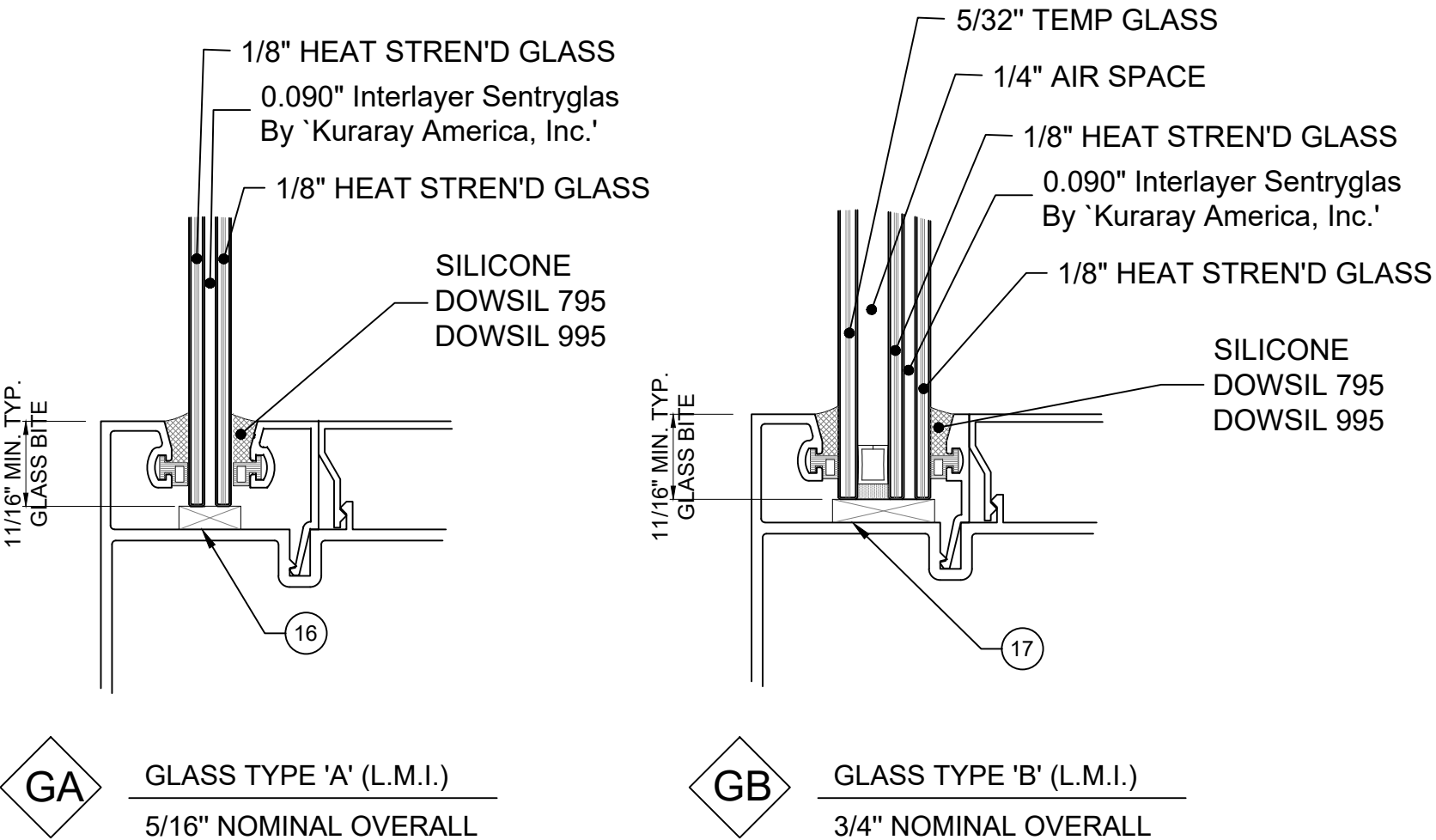
RD 45 ALUMINIUM ENTRANCE DOOR

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

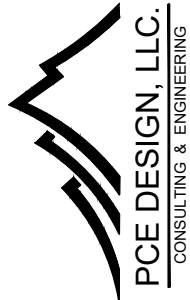
- A. SHEET 02 CONTAINS THE MAXIMUM ALLOWABLE DESIGN LOAD CAPACITY THE DOUBLE DOOR AND SINGLE DOOR.
- B. SHEET 03 & 04 CONTAINS THE MAXIMUM ALLOWABLE DESIGN LOAD CAPACITY FOR THE DOUBLE DOOR WITH A SIDELITE AND A SINGLE DOOR WITH A SIDELITE. THESE SHEETS SHOWS THE MAXIMUM ALLOWABLE DESIGN PRESSURE WHEN DOUBLE AND SINGLE DOORS ARE CONFIGURED WITH SIDELITES.
- C. ANCHORS SPACING ARE SHOWN IN ALL GLAZING ELEVATIONS.
- D. ANCHOR TYPES ARE SHOWN ON SHEET 05. THIS SHEET SHOWS THE EDGE DISTANCE, EMBEDMENT, TYPE OF ANCHOR, AND ALL REQUIREMENTS ANCHORES NEED TO COMPLY WITH THESE SPECIFIATIONS



GLASS CONFIGURATION FOR ALUMINIUM ENTRANCE 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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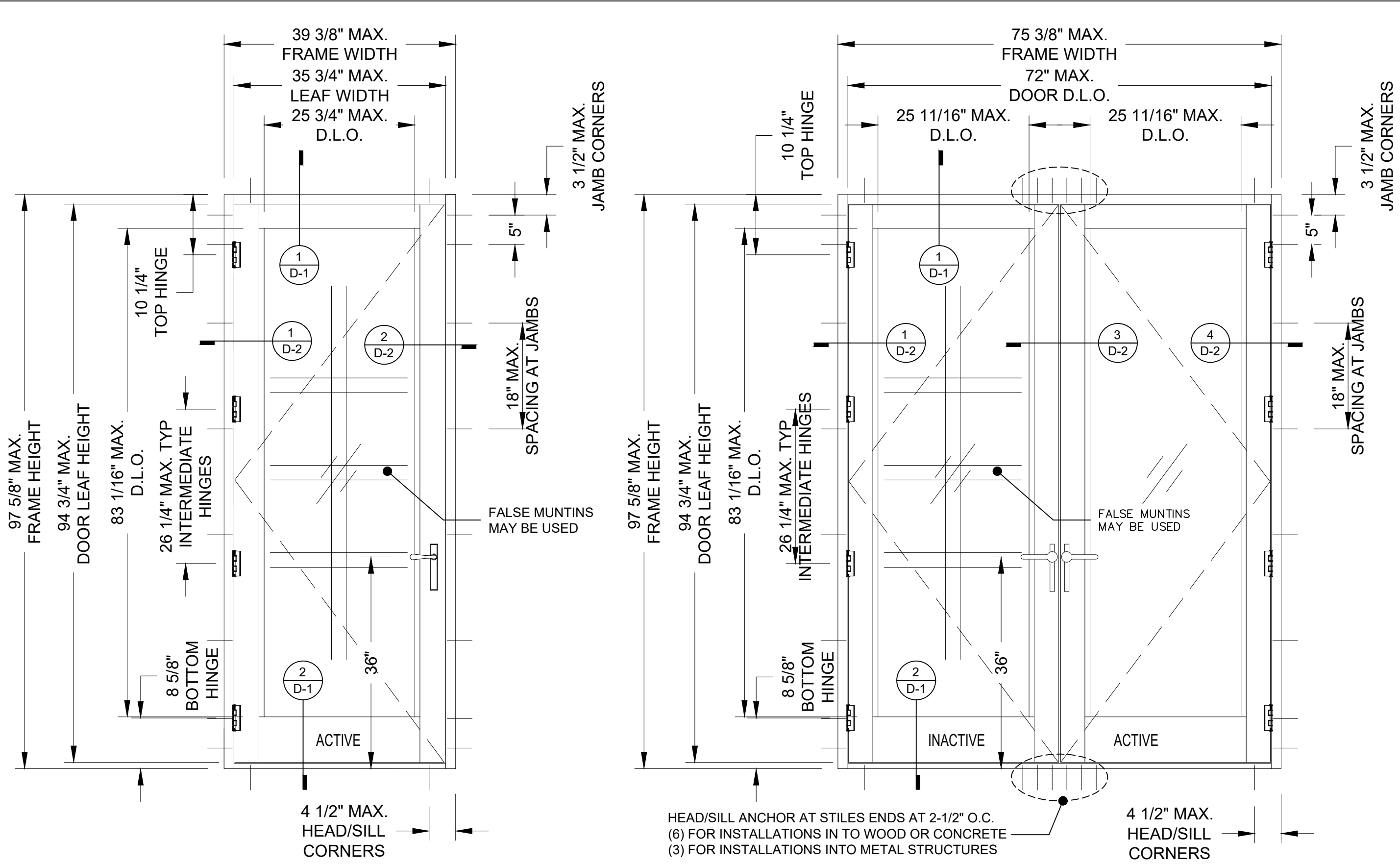
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Sheet No. 01 OF 10	SHEET NO. G-1



THIS MAXIMUM DESIGN LOAD RATING APPLIES TO THE MAXIMUM DIMENSION SHOWN OR SMALLER.

MAXIMUM DESIGN LOAD RATING	
EXT. (+)	EXT. (-)
80 PSF	80 PSF

THESE DOORS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.



PCE DESIGN, LLC.
CONSULTING & ENGINEERING

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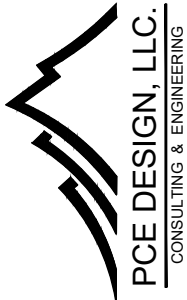
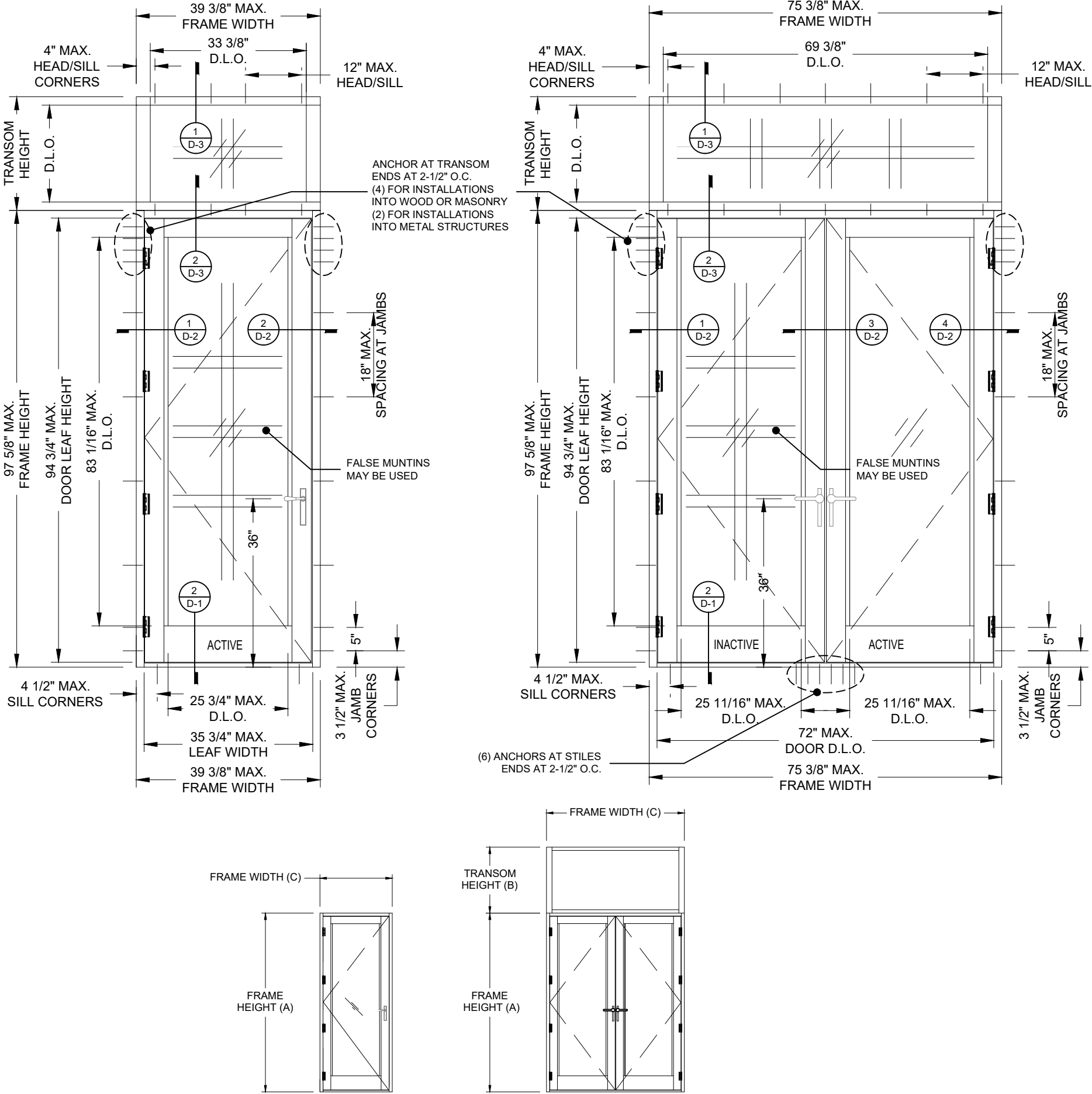
No.	Date	Description

DATE:
May 31st, 2024

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Sheet No. 02 OF 10	SHEET NO. WE-1

CHART 1

DESIGN LOAD CAPACITY PSF SIDELITES			
WIDTH C (IN)	WIDTH B (IN)	DOOR HEIGHT A (IN)	GLASS TYPE 'A' & 'B'
63"	24"	81-5/8"	80
	30"		80
	37-5/8"		80
	43-5/8"		80
69-3/8"	24"	81-5/8"	80
	30"		80
	37-5/8"		80
75-3/8"	24"	81-5/8"	80
	30"		80
	37-5/8"		80
63"	24"	85-5/8"	80
	30"		80
	37-5/8"		80
	43-5/8"		80
69-3/8"	24"	85-5/8"	80
	30"		80
	37-5/8"		80
75-3/8"	24"	85-5/8"	80
	30"		80
	37-5/8"		80
63"	24"	91-5/8"	80
	30"		80
	37-5/8"		80
	43-5/8"		80
69-3/8"	24"	91-5/8"	80
	30"		80
	37-5/8"		80
75-3/8"	24"	91-5/8"	80
	30"		80
	37-5/8"		80
63"	24"	97-5/8"	80
	30"		80
	37-5/8"		80
	43-5/8"		80
69-3/8"	24"	97-5/8"	80
	30"		80
	37-5/8"		80
75-3/8"	24"	97-5/8"	80
	30"		80
	37-5/8"		80



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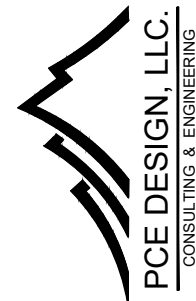
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1/2" = 1'-0"

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03 OF 10

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WE-2



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Sheet No.
04 OF 10

SHEET NO.
WE-3

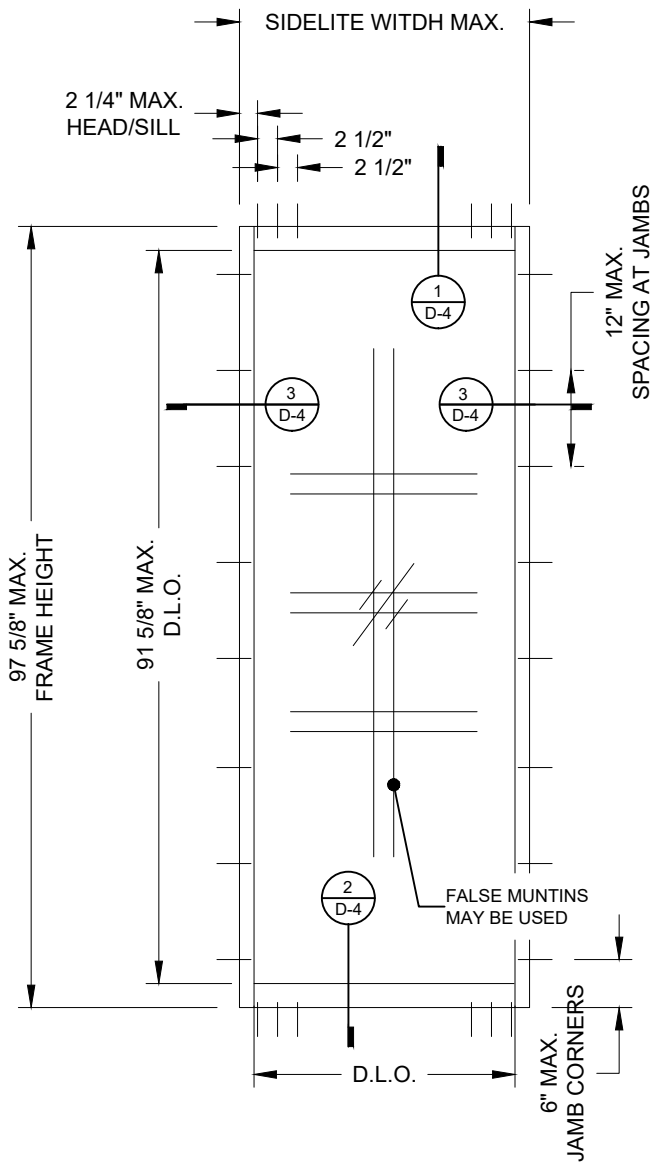


CHART 2

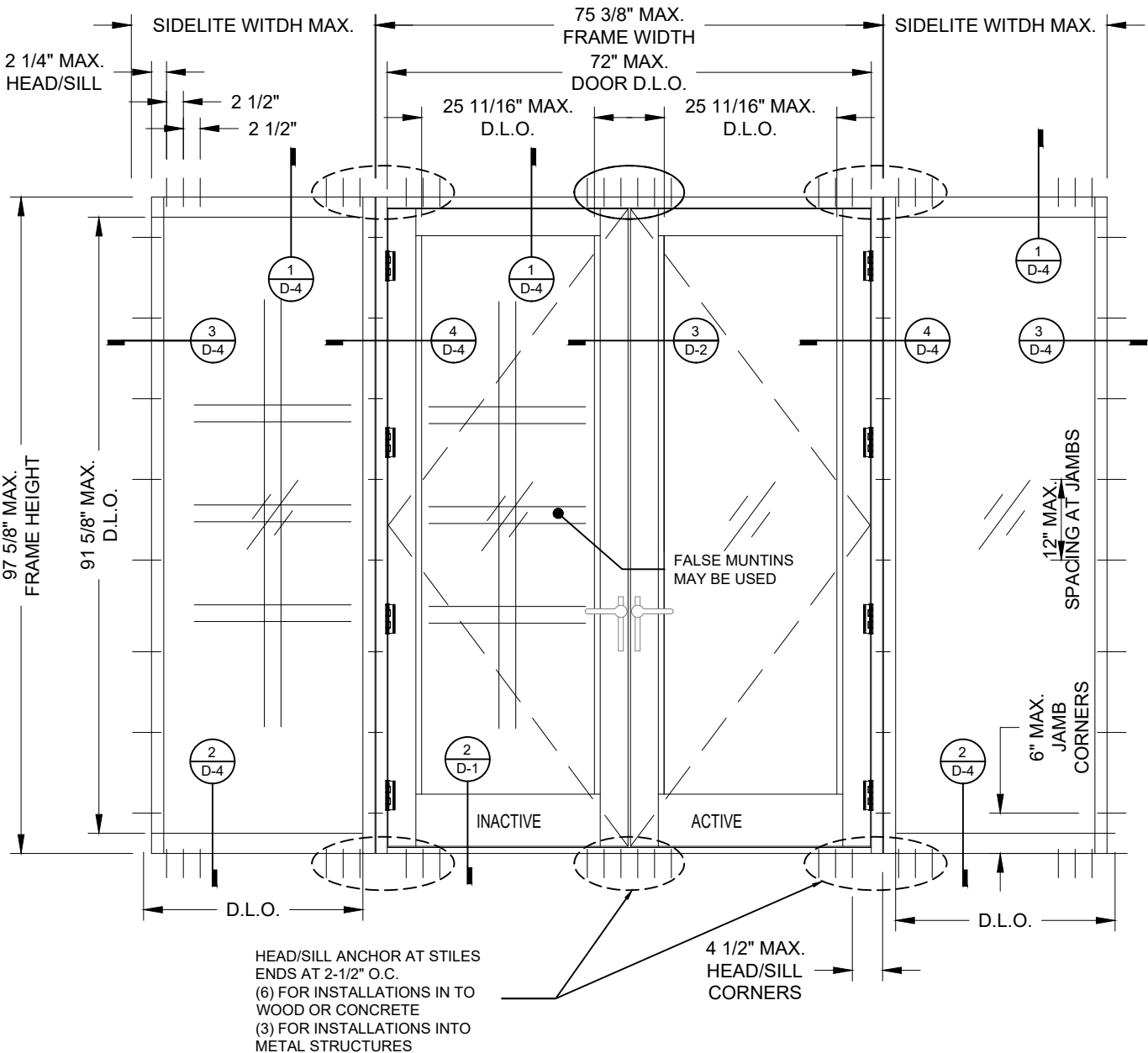
DESIGN LOAD CAPACITY PSF SIDELITES		
SIDELITES WIDTH (IN)	FRAME HEIGHT (IN)	GLASS TYPE 'A' & 'B'
36-1/4"	81-5/8"	80
38-5/8"		75
41-1/4"		70
43-1/4"		67
36-1/4"	85-5/8"	80
38-5/8"		75
41-1/4"		70
36-1/4"	91-5/8"	80
36-1/4"	97-5/8"	80

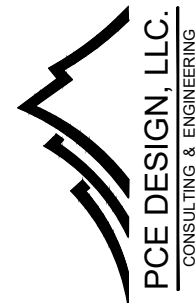
LOCK OPTIONS SINGLE DOORS:

OPTION #1:
3 POINT LOCK SYSTEM BY 'AMESBURY' WITH SURFACE MOUNT HANDLE AT 36" FROM BOTTOM AND DEAD BOLT LOCKSET AT 32" FROM BOTTOM KEY OPERATED ON EXTERIOR AND THUMB TURN ON INTERIOR.
OPTION #2:
3 POINT LOCK SYSTEM BY 'HOPPE' WITH SURFACE MOUNT HANDLE AT 36" FROM BOTTOM AND DEAD BOLT LOCKSET AT 32-1/2' FROM BOTTOM KEY OPERATED ON EXTERIOR AND THUMB TURN ON INTERIOR.

LOCK OPTIONS DOUBLE DOORS:

OPTION #1:
ACTIVE LEAF:
3 POINT LOCK SYSTEM BY 'AMESBURY' WITH SURFACE MOUNT HANDLE AT 36" FROM BOTTOM AND DEAD BOLT LOCKSET AT 32" FROM BOTTOM KEY OPERATED ON EXTERIOR AND THUMB TURN ON INTERIOR.
INACTIVE LEAF
2 POINT LOCK SYSTEM BY 'AMESBURY' SHOOT BOLTS ENGAGING SIMULTANEOUSLY AT HEAD 8 SILL SURFACE MOUNT ACTUATING HANDLE AT 36" FROM BOTTOM
OPTION #2:
ACTIVE LEAF:
3 POINT LOCK SYSTEM BY 'HOPPE' WITH SURFACE MOUNT HANDLE AT 36" FROM BOTTOM AND DEAD BOLT LOCKSET AT 32-1/2' FROM BOTTOM KEY OPERATED ON EXTERIOR ANEHUMB TURN ON INTERIOR.
INACTME LEAF
2 POINT LOCK SYSTEM BY 'HOPPE' SHOOT BOLTS ENGAGING SIMULTANEOUSLY AT HEAD & SILL SURFACE MOUNT ACTUATING HANDLE AT 36" FROM BOTTOM





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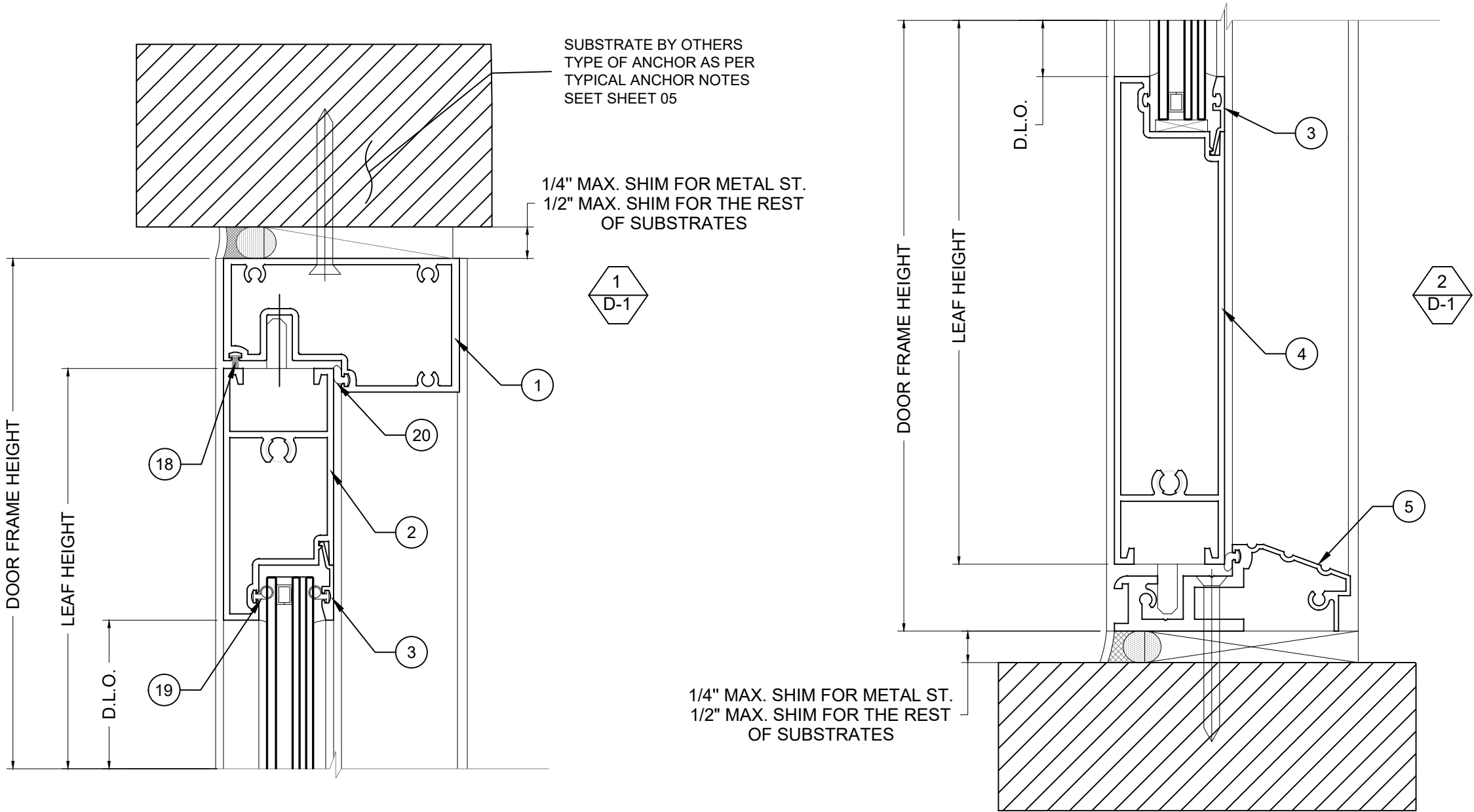
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D-1



TYPICAL ANCHORS:

TYPE 'A'- **1/4" DIA, TEKS OR SELF-DRILLING SCREWS (GRADE 5 CRS)**

INTO METAL STRUCTURES (HEAD/JAMBS) :

(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS

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

STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

3/4" MIN. EDGE DIST. INTO METAL STRUCTURE

INTO MIAMI DADE COUNTY APPROVED MULLIONS (HEAD/JAMBS) :

(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS

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

STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

3/4" MIN. EDGE DIST. INTO METAL STRUCTURE

TYPE 'B'- **1/4" DIA, KWIK-CON II+ BY 'HILTI' (Fu=138 KSI, Fy=137 KSI)**

INTO 2BY WOOD BUCK OR WOOD STRUCTURES:1-1/2" MIN. PENETRATION

INTO WOOD (HEAD/JAMBS)

1" MIN. EDGE DIST. INTO WOOD STRUCTURE

THRU 1BY BUCKS INTO CONCRETE:

1-1/4" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)

2-1/2" MIN. EDGE DIST. INTO CONCRETE

THRU 1BY BUCKS INTO BLOCKS:1-3/4" MIN. EMBED INTO BLOCKS (JAMBS)

2-1/2" MIN. EDGE DIST. INTO BLOCKS

DIRECTLY INTO CONCRETE OR BLOCKS:1-3/4" MIN. EMBED INTO CONCRETE

(HEAD/SILL/JAMBS)1-3/4" MIN. EMBED INTO GROUT FILLED BLOCKS (JAMBS)

2-1/2" MIN. EDGE DIST. INTO CONCRETE OR BLOCKS

ALL CONCRETE NEEDS TO HAVE 3000 PSI MIN.

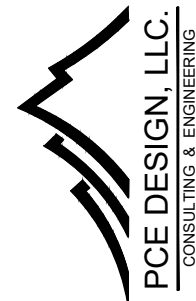
ALL HOLLOW/FILLED BLOCK SUBSTRATE NEEDS TO HAVE 2000 PSI MIN.

ALL WOOD SUBSTRATE NEEDS TO HAVE SG = 0.55 MIN.

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. CONCRETE THRU 1BY BUCK
 - c. HOLLOW/FILLED BLOCK
 - d. WOOD STRUCTURES OR BY WOOD BUCK
 - e. METAL (STEEL / ALUMINUM)

SELANT:
ALL FRAMES AND PANEL JOINT, INSTALLATION
SCREWS AND HEAD
OF ANCHOR SCREWS AT SILL TO BE SEALED WITH
WHITE/ALUM COLORED
SILICONE



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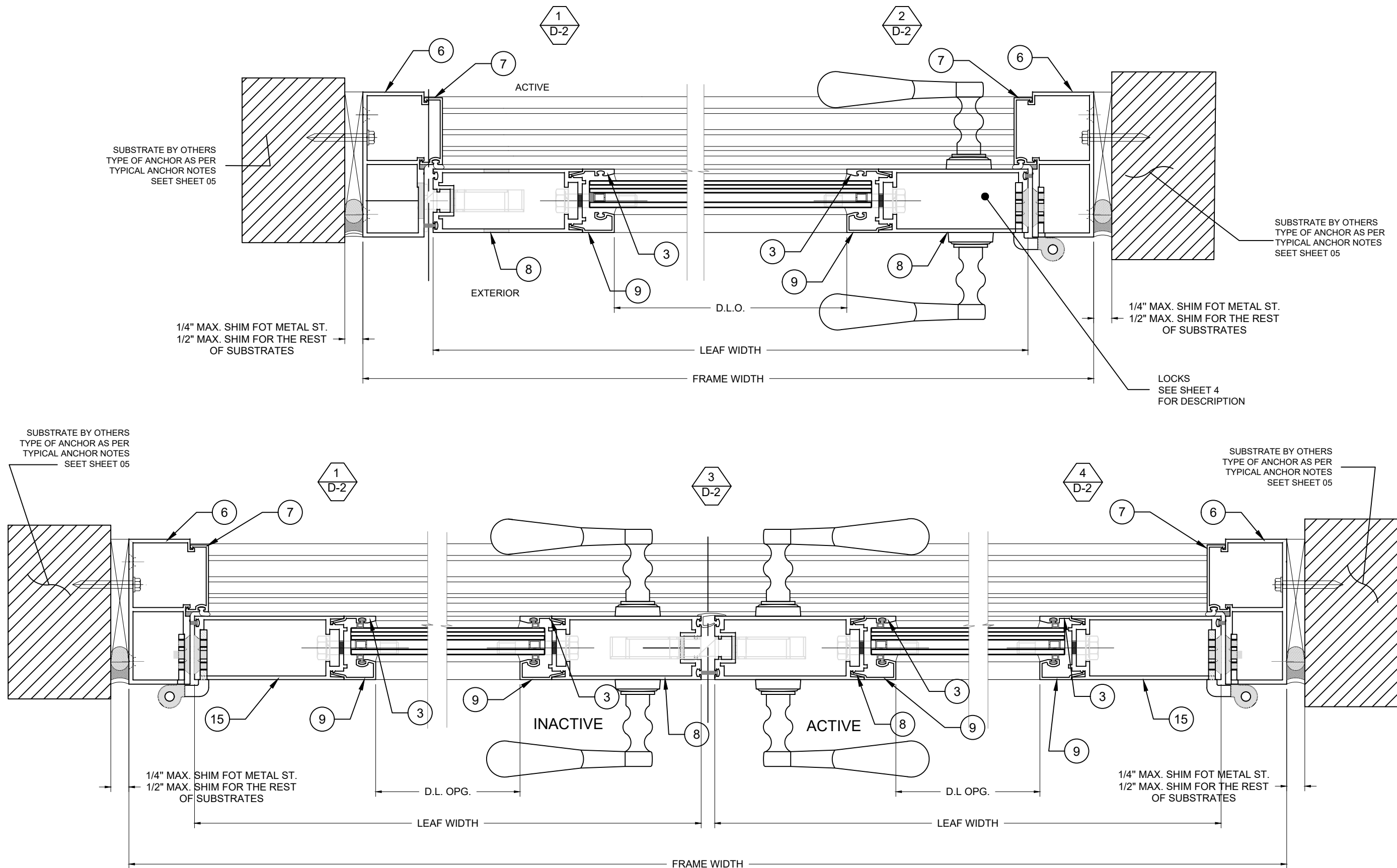
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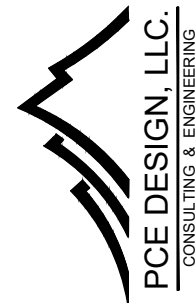
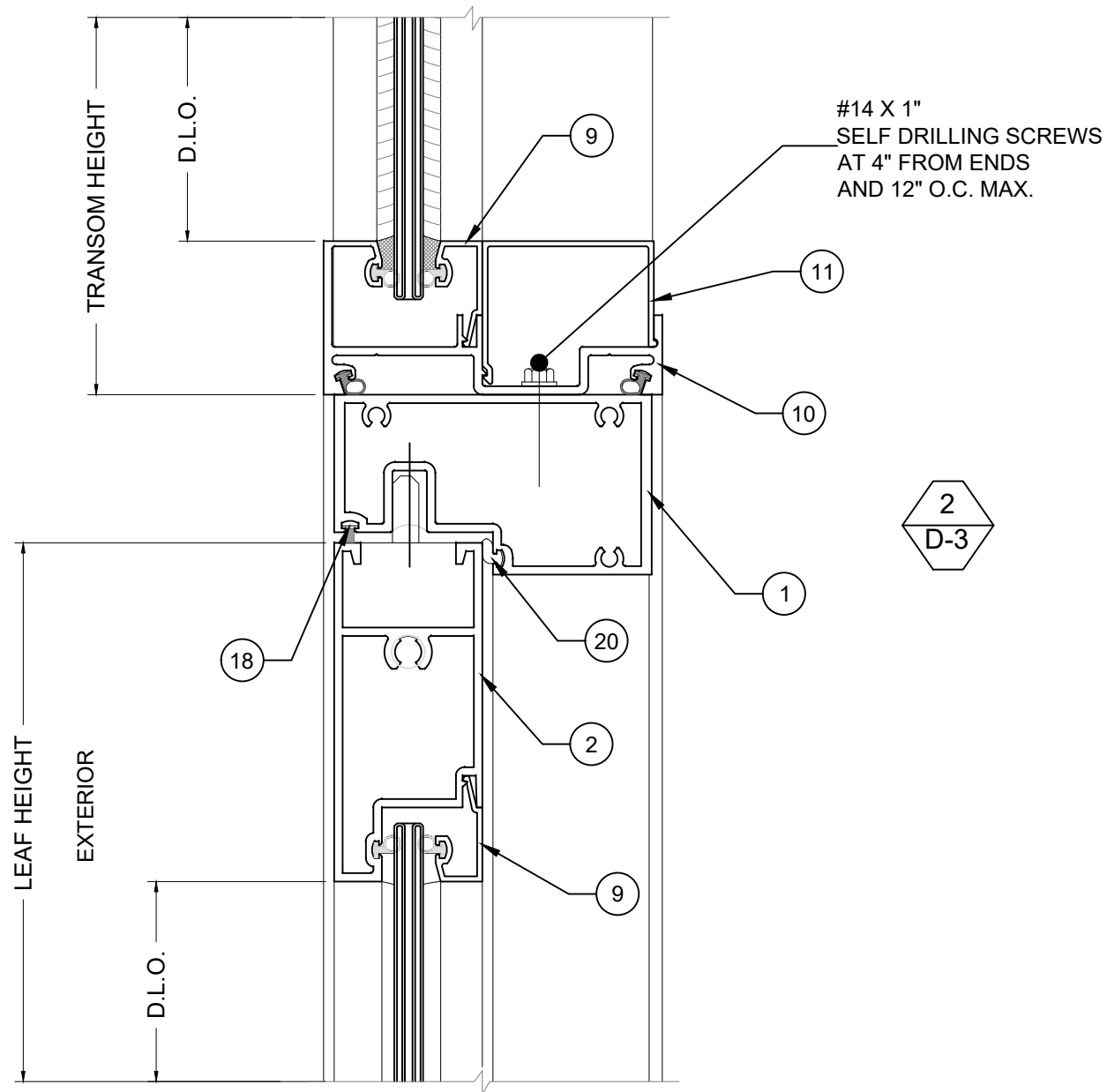
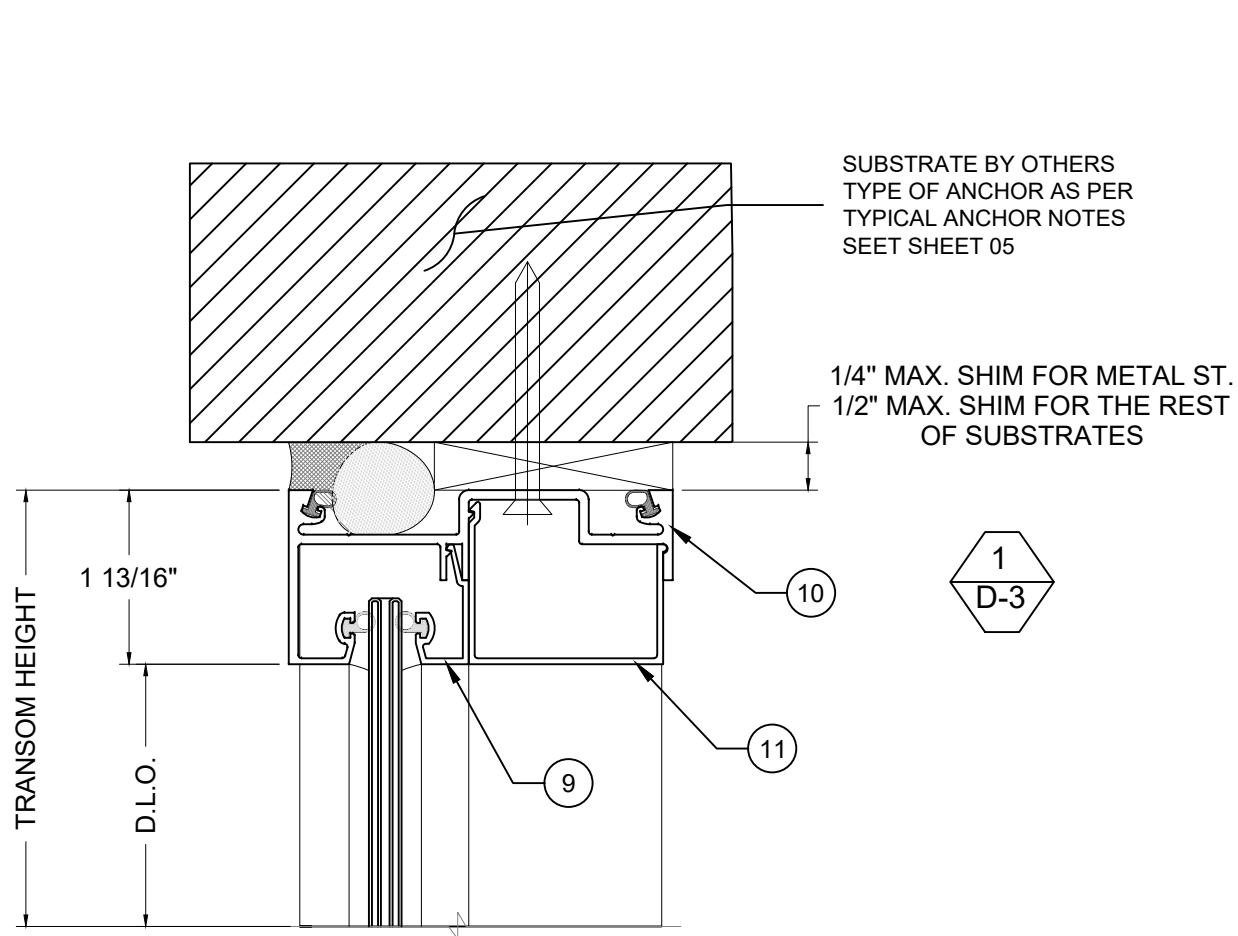
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3/8" = 1'-0"

Sheet No.
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D-2





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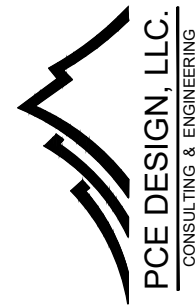
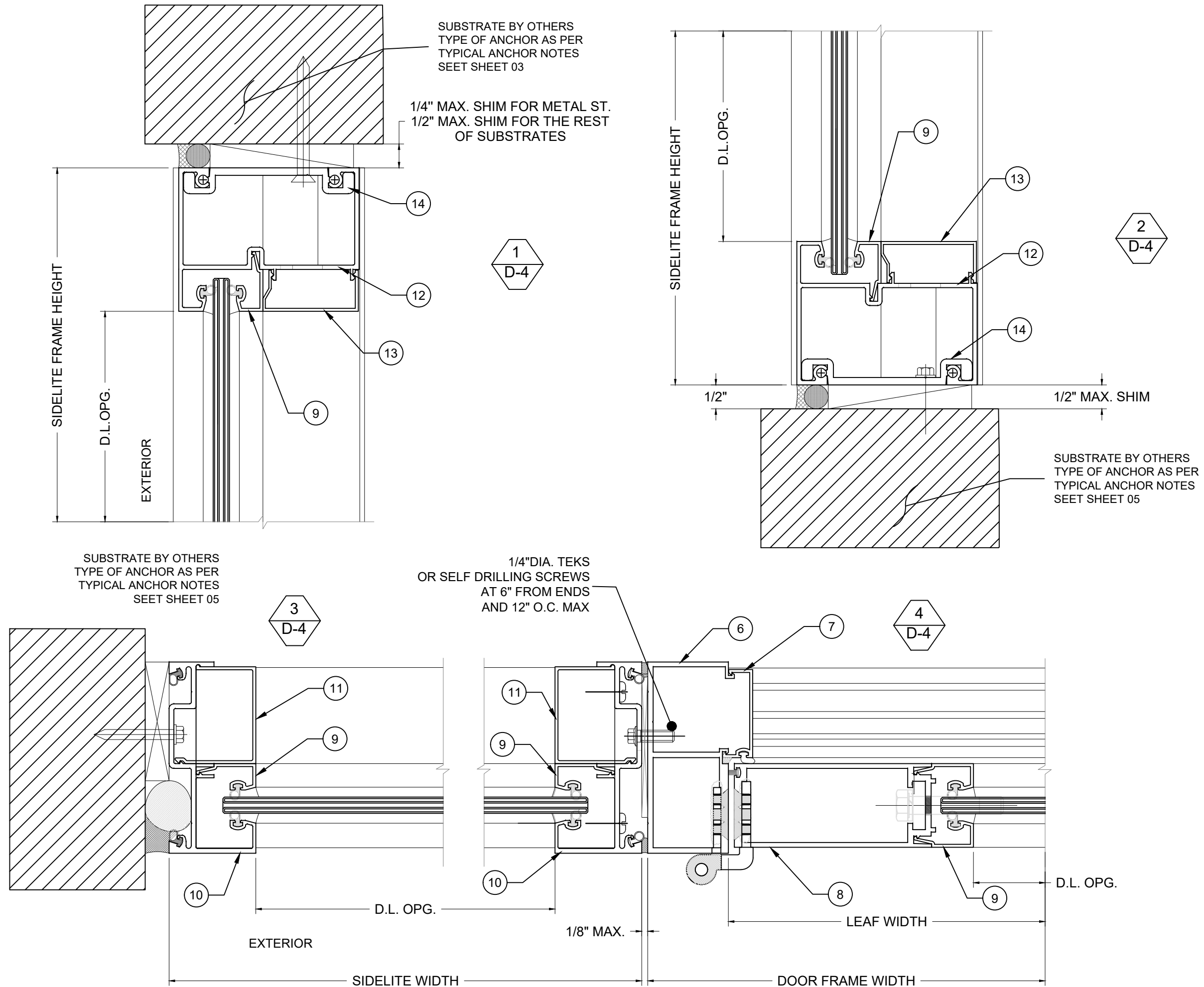
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6" = 1'-0"

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07 OF 10

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D-3



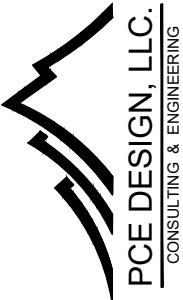
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Sheet No. 08 OF 10		SHEET NO. D-4

ITEM	PARTNo	DESCRIPCION	MATERIAL	MANUFACTURER/SUPPLIER
1	1	DOOR HEAD	6065-T5	-
2	2	TOP RAIL	6063-T6	-
3	3	GLAZING BEAD	6063-T6	-
4	4	BOTTOM SILL	6063-T6	-
5	5	FRAME SILL	6063-T6	-
6	6	FRAME JAMB	6063-T6	-
7	7	VERT. JAMB STOP	6063-T6	-
8	8	ACTIVE LEAF LOCK STILE	6063-T6	-
9	9	GLAZING BEAD	6063-T6	-
10	10	SIDELITE JAMB TRANSOM HEAD/SILL	6063-T6	-
11	11	SNAP COVER	-	-
12	12	SIDELITE HEAD/SILL TRANSOM JAMB	6063-T6	-
13	13	INTERIOR SNAP COVER	-	-
14	14	ANCHOR CLIP	6063-T6	-
15	15	HINGE STILE IN ACTIVE LOCK STILE	6063-T6	-
16	16	SETTING BLOCK 1/2" x 3/16" x 4"	NEOPRENE	6" FROM EACH END LOWE, DUROMETER 85 -/+ SHORE A
17	17	SETTING BLOCK 3/4" x 3/16" x 4"	NEOPRENE	6" FROM EACH END LOWE, DUROMETER 85 -/+ SHORE A
18	18	WEATHER STRIPPING	-	-
19	19	BULB W/STRIPPING, DUROMETER 75 -/+ 5 SHORE A	PVC	
20	20	DOOR W/STRIPPING	FOAM	Q-LON



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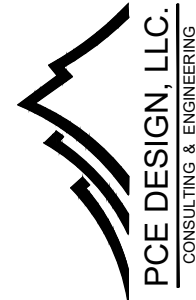
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DOOR EXTRUSIONS



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Sheet No.

SHEET NO.

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E-1

