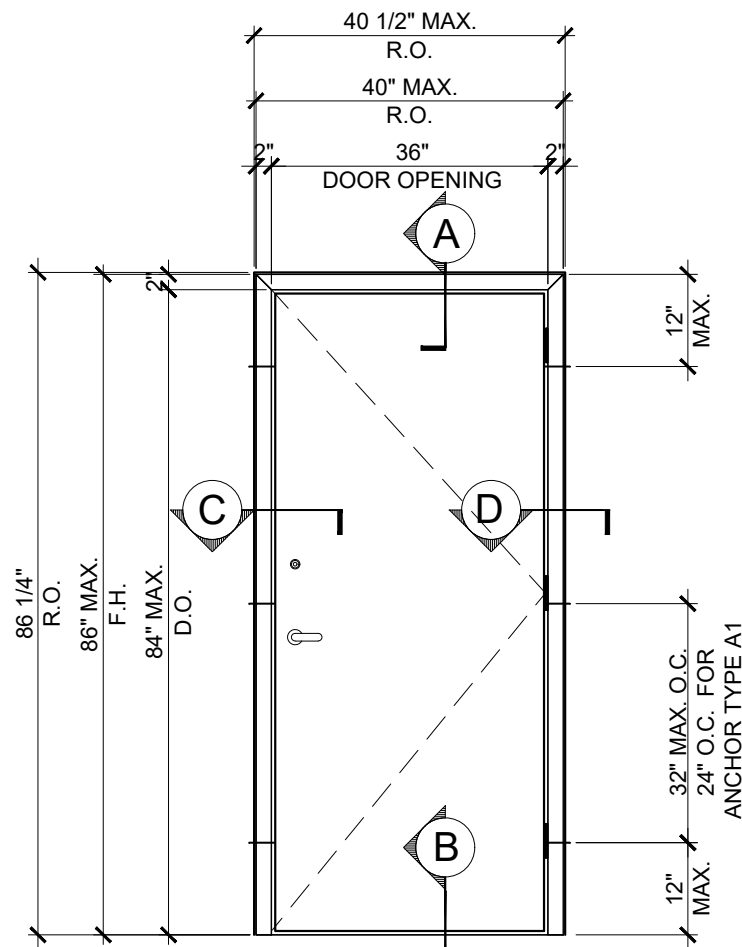
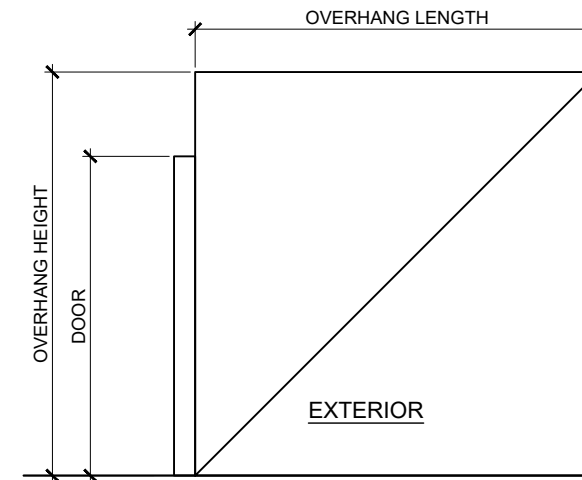


HINGE LAYOUT



TYPICAL EXTERIOR ELEVATION (X)



$$\text{OH RATIO} = \frac{\text{OVERHANG LENGTH}}{\text{OVERHANG HEIGHT}} \geq 1$$

NOTE:
UNITS NOT APPROVED FOR WATER INFILTRATION MUST BE INSTALLED AT LOCATIONS PROTECTED BY AN OVERHANG MEETING CRITERIA AS PER ILLUSTRATION BELOW OR IN NON-HABITABLE AREAS WHERE WATER INFILTRATION IS ACCEPTABLE.

DESIGN LOADS (FOR SIZES SHOWN ABOVE OR SMALLER) AS PERMITTED BY IBC/IRC
+75.0 PSF
- 75.0 PSF

SERIES AF220 3070 FIBERGLASS OUTSWING DOOR (LMI & SMI)

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE AND THE 2018 INTERNATIONAL RESIDENTIAL CODE, TO BE USED AT NON HIGH VELOCITY HURRICANE ZONE (NON-HVHZ).
- DOORS RATED FOR LARGE AND SMALL MISSILE IMPACT AND DO NOT REQUIRE SHUTTERS.
- DOORS APPROVED FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED.
- 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 2018 INTERNATIONAL BUILDING CODE AND THE 2018 INTERNATIONAL RESIDENTIAL CODE SECTION AS APPLICABLE.

- METAL STRUCTURES NOT BY SPECIAL-LITE, INC. MUST SUPPORT LOADS IMPOSED BY DOOR SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.
- WOOD BUCKS BY OTHERS MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
- A LOAD DURATION FACTOR IN ALLOWABLE STRESS IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
- DOOR PANEL: 0.120" FRP FIBERGLASS TEXTURED PANEL
DOOR FRAME: PULTRUDED FIBERGLASS
- ULTIMATE DESIGN LOAD OBTAINED FROM ASCE 7-16, MULTIPLY BY 0.6, SHALL BE LESS THAN OR EQUAL TO MAX. DESIGN LOAD IN THIS DOCUMENT.

NOTES:
EGRESS REQUIREMENTS TO BE REVIEWED BY BUILDING OFFICIAL.

HARDWARE:
SCHLAGE L9453-03A MORTISE LOCK, 38 1/2" FROM SILL.
SCHLAGE B660 CYLINDRICAL DEADBOLT, 48" FROM SILL.

PRODUCT CONTROL APPROVAL:

YIPING WANG, P.E.
TEXAS REGISTRATION # 136420

November 4th, 2021

NO.	DATE	DESCRIPTION

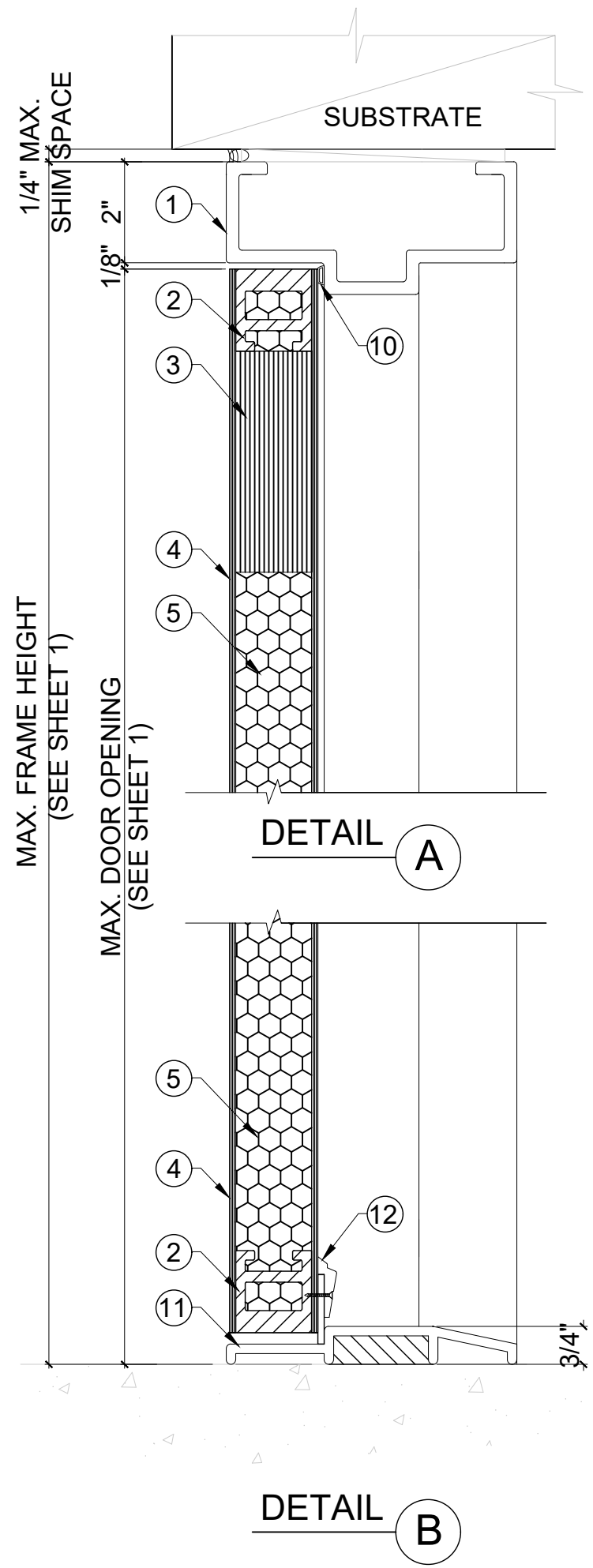
MCY ENGINEERING, INC.
GLAZING CONSULTANTS

MIRAMAR PARKWAY #301
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P: 305.271.0117
www.MCYEngineering.com

SPECIAL-LITE, INC.
860 SOUTH WILLIAMS STREET
P.O. BOX 6
DECATUR, MI 49045
WWW.SPECIAL-LITE.COM

Special-Lite
Doors with more life.

AF220 3070 FIBERGLASS OUTSWING DOOR (LMI & SMI)	
TEXAS APPROVAL: DR797	
DATE	11/03/21
SCALE	AS SHOWN
DRAWN	James
PROJECT	16-006
DRAWING NO. TA16-01	



**TYPICAL ANCHORS @ JAMB:
(REFER TO ELEVATION FOR SPACING)**

- TYPE A** **1/4" DIA. ULTRACON+ BY 'DEWALT'** (Fy=148 ksi Fu = 164 ksi)
* DIRECTLY INTO fc'=3000 PSI CONCRETE MIN.
1-1/2" MIN. EMBED. INTO MASONRY OR CONCRETE, 2-1/2" MIN. EDGE DISTANCE
- TYPE A1** **1/4" DIA. ULTRACON+ BY 'DEWALT'** (Fy=148 ksi Fu = 164 ksi)
* DIRECTLY INTO SG=0.55 WOOD
WITH 1-1/2" MIN. EMBEDMENT, 1" MIN. EDGE DISTANCE,
OR THRU WOOD INTO CONCRETE OR MASONRY
WITH 1-1/2" MIN. EMBEDMENT, 2-1/2" MIN. EDGE DISTANCE
- TYPE B** **3/8" DIA. HLC SLEEVE ANCHOR BY 'HILTI'**
* DIRECTLY INTO fc'=3000 PSI CONCRETE MIN.
1-1/4" MIN. EMBED INTO MASONRY OR CONCRETE, 3" MIN. EDGE DISTANCE
* DIRECTLY INTO fm'=1500 PSI FILLED GROUT FILLED CONCRETE BLOCK
1-1/4" MIN. EMBED INTO FILLED CONC. BLOCK, 3-1/2" MIN. EDGE DISTANCE
- TYPE C** **3/8" DIA. SLEEVE ANCHOR BY "WEJ-IT"**
* DIRECTLY INTO fc'=4000 PSI CONCRETE MIN.
2-3/8" MIN. EMBED, 3-1/2" MIN. EDGE DISTANCE
* DIRECTLY INTO fc'=2000 PSI CONCRETE. BLOCK MIN.
1-1/4" MIN. EMBED, 3-1/2" MIN. EDGE DISTANCE
- TYPE D** **3/8" DIA. POWER BOLTS**
* DIRECTLY INTO fc'=3000 PSI CONCRETE
2-1/2" MIN. EMBED, 3" MIN. EDGE DISTANCE
* DIRECTLY INTO fc'=1500 PSI GROUT FILLED CONCRETE BLOCK
2" MIN. EMBED, 3" MIN. EDGE DISTANCE
- TYPE E** **5/16" DIA. SMS OR MACHINE BOLTS GRADE 2 CRS OR ST/ST**
* DIRECTLY INTO 1/8" THK. STEEL/ALUMINUM 6063-T5

HINGES:
STEEL BUTT HINGES 3 PER LEAF.
FOR HINGE LOCATION SEE SHEET 1.
TO BE FASTENED BY (4) #12-24 x 1/2" FLATHEAD
MACHINE SCREWS TO THE DOOR PANEL AND TO
THE FRAME. TOTAL OF (8) SCREWS.

NOTE:
SUBSTRATE CAN BE CONCRETE, 2X WOOD BUCKS,
WOOD STRUCTURAL MEMBER(S), CONCRETE BLOCK
WALL AND METAL STRUCTURE (STEEL OR ALUMINUM).
ANCHOR TYPE SHOWN ABOVE SHOULD BE CHOSEN
BASED ON SUBSTRATE TYPE IN THE PROJECT. ANY
TYPE OF ANCHOR NOT SPECIFIED HERE SHOULD BE
ENGINEERED SEPARATELY.

PRODUCT CONTROL APPROVAL:



November 4th, 2021

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MCY

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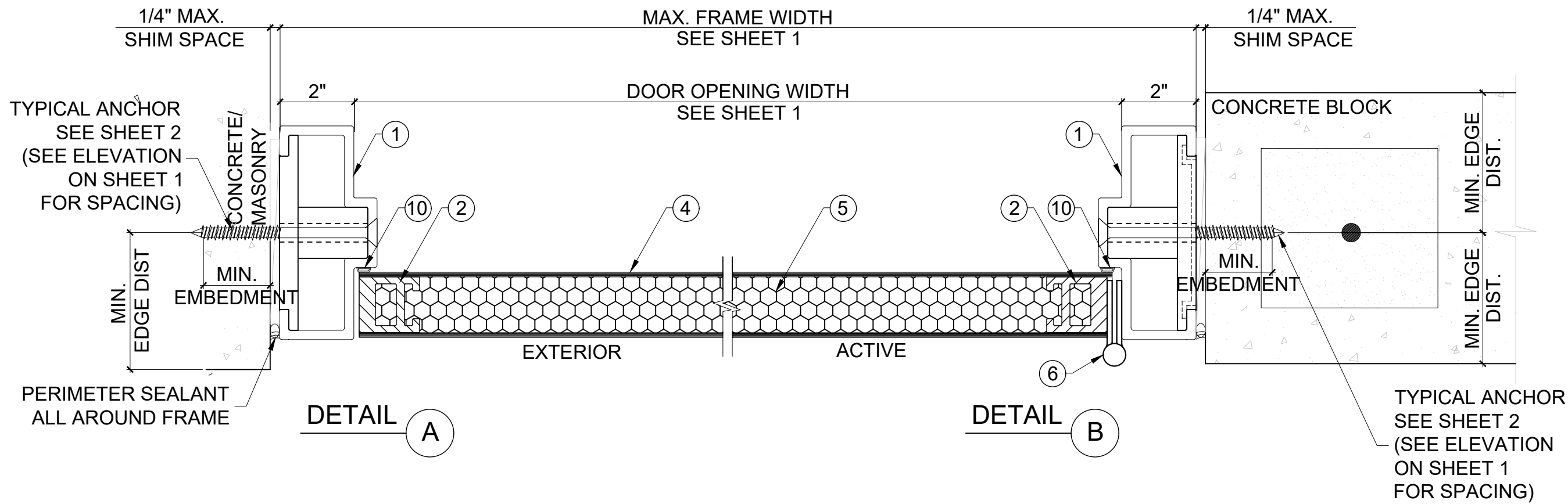
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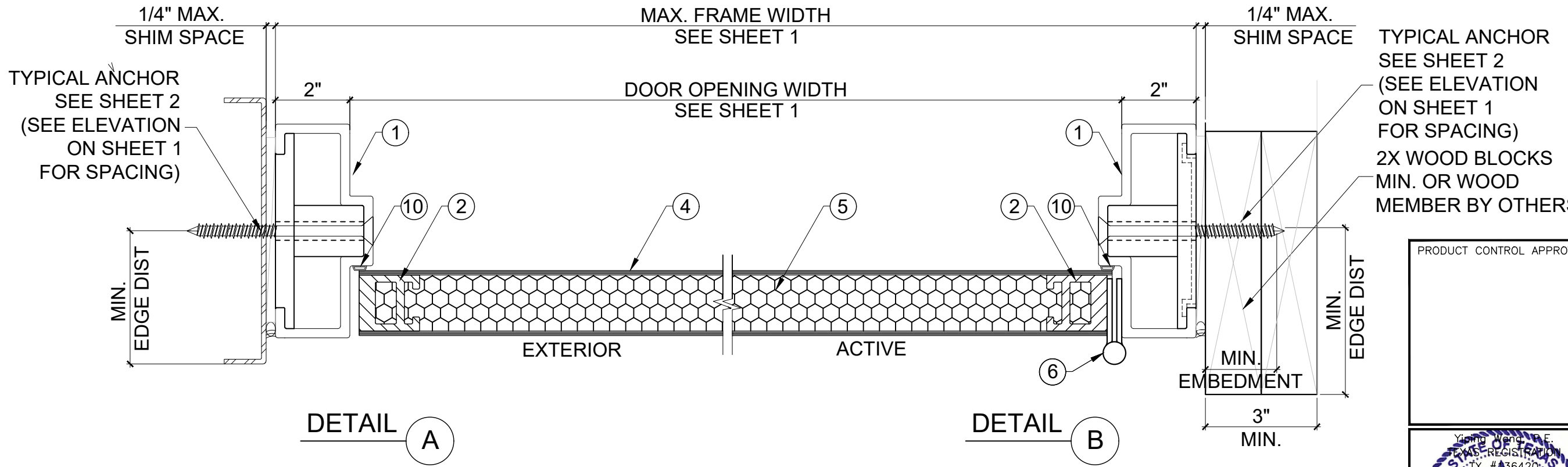


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TA16-01	
2 OF 4	



DETAIL A

DETAIL B



DETAIL A

DETAIL B

TYPICAL ANCHOR
SEE SHEET 2
(SEE ELEVATION
ON SHEET 1
FOR SPACING)
2X WOOD BLOCKS
MIN. OR WOOD
MEMBER BY OTHERS

PRODUCT CONTROL APPROVAL:



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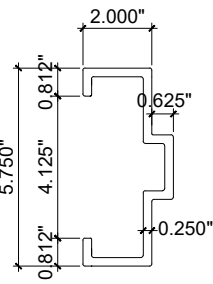
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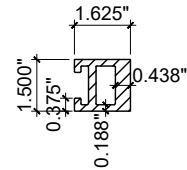
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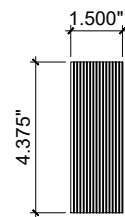
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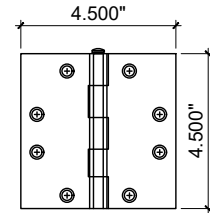
① FRAME HEAD AND JAMB
0.120" FRP PULTRUDED FIBERGLASS



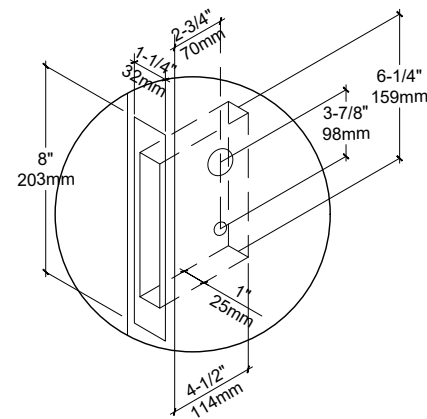
② SOLID FIBERGLASS STILE



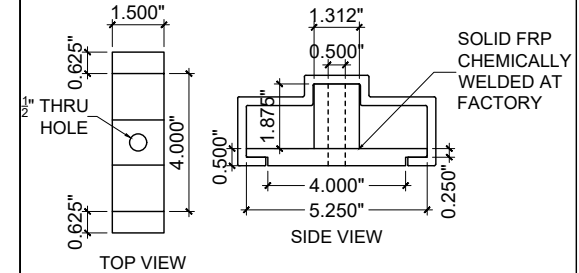
③ CLOSER REINFORCEMENT
HIGH DENSITY POLYURETHANE



⑥ HAGER BB1191 HINGE
0.134" THK. STEEL



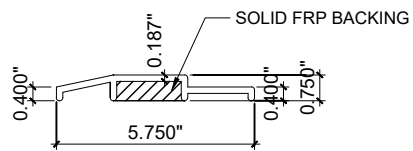
⑦ CYLINDRICAL LOCK PREPARATION



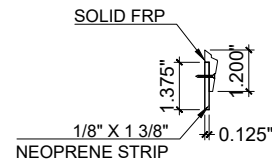
⑬ FRP ANCHOR BRACKET



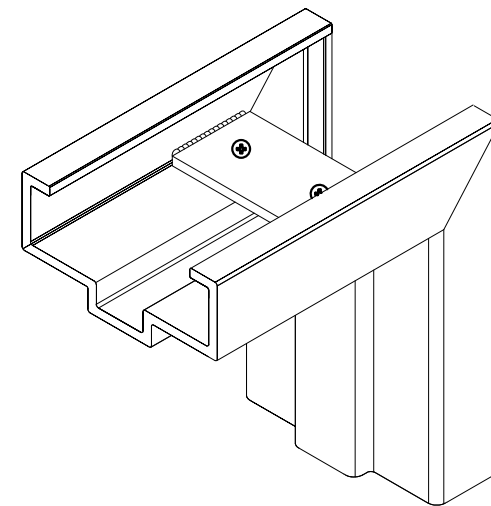
⑩ TRIMLOK RUBBER SEAL



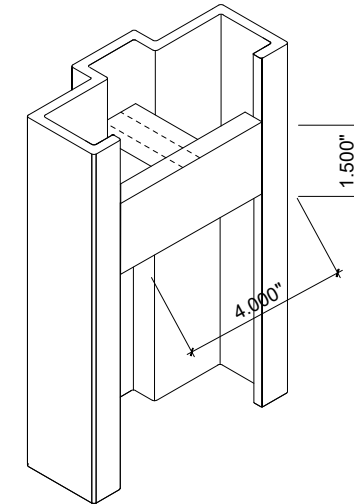
⑪ STANDARD BUMPER THRESHOLD
0.120" FRP PULTRUDED FIBERGLASS



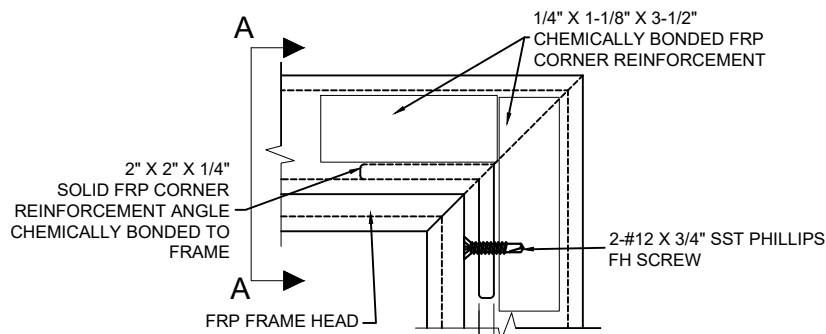
⑫ FRP DOOR SWEEP
FRP PULTRUDED FIBERGLASS



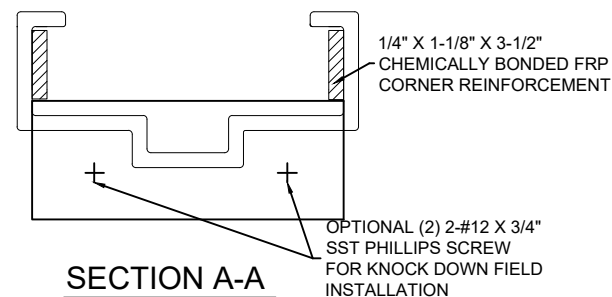
FRAME CORNER CONSTRUCTION



FRP ANCHOR BRACKET



SIDE VIEW
TYP. CORNER REINFORCEMENT



SECTION A-A

BILL OF MATERIALS

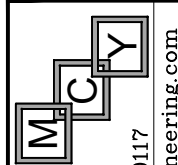
ITEM	PART NO.	MATERIAL	QTY.	DESCRIPTION	MANUFACTURER / SUPPLIER / REMARKS
1	-	PULTRUDED FIBERGLASS	AS REQD.	FRAME JAMB / HEAD (5 3/4" X 2")	SPECIAL-LITE INC. (0.250" THK.) Fy=40.8 KSI MIN.
2	-	PULTRUDED FIBERGLASS	AS REQD.	SOLID FIBERGLASS STILE	SPECIAL-LITE INC.
3	NATUICAL 20	POLYURETHANE	AS REQD.	HIGH DENSITY POLYURETHANE CLOSER REINFORCEMENT (1.5" x 4.375")	COOSA COMPOSITES
4	-	FIBERGLASS	AS REQD.	0.120" SANDSTONE TEXTURED FACE SHEET	SPECIAL-LITE INC.
5	PP8-80	POLYPROPYLENE	AS REQD.	AIR-COMB POLYPROPYLENE HONEYCOMB DOOR PANEL CORE	POLY-U-MAC
6	BB1191	ST/ST	3	FIVE KNUCKLE BALL BEARING STANDARD WEIGHT HINGE	HAGER
7	L9453P-03A	ST/ST	1	MORTISE LOCK SET	SCHLAGE
8	L9453P-03A	STEEL	1	CYLINDRICAL LOCK PREPARATION	SCHLAGE
9	B660	STEEL	1	CYLINDRICAL DEADBOLT	SCHLAGE
10	-	RUBBER	AS REQD.	WEATHERSTRIPPING	TRIM-LOK
11	-	PULTRUDED FIBERGLASS	AS REQD.	STANDARD BUMPER THRESHOLD	SPECIAL-LITE INC.
12	-	PULTRUDED FIBERGLASS	AS REQD.	FRP DOOR SWEEP	SPECIAL-LITE INC.
13	-	PULTRUDED FIBERGLASS	AS REQD.	FRP ANCHOR BRACKET	SPECIAL-LITE INC.

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November 4th, 2021 4 OF 4

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