

# OLDCASTLE BUILDING ENVELOPE<sup>®</sup> MSD-375 & WSD-500 STORMMAX<sup>®</sup> ALUMINUM ENTRANCE DOORS (LARGE MISSILE IMPACT)

**GENERAL NOTES:**

- 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 INSIDE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- DOORS RATED FOR LARGE MISSILE IMPACT. IMPACT SHUTTERS ARE NOT REQUIRED.
- THESE DOORS ARE APPROVED FOR AIR INFILTRATION.
- 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 BY OTHERS TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY THIS GLAZING SYSTEM AND TO TRANSFER SUCH LOADS TO THE BUILDING MAIN STRUCTURE.
- ULTIMATE LOAD OBTAINED FROM ASCE 7-16, MULTIPLY BY 0.6 SHALL BE LESS THAN OR EQUAL TO MAX. DESIGN LOAD IN THIS DOCUMENT. THE DESIGN LOADS SHOWN IN THIS DOCUMENT ARE ALLOWABLE DESIGN LOADS.

**-SEALANTS:**

ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER GLAZING BEAD TO FRAME INSTALLATION FASTENERS SEALED WITH SILICON SEALANT.

**INSTRUCTIONS:**

USE CHARTS AS FOLLOWS.

- STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7-16 STANDARD.
- STEP 2: GLASS OPTIONS FOR DOOR PANEL & TRANSOM SEE SHEET G1
- STEP 3: SINGLE OR DOUBLE LEAF DOOR APPROVED SIZE & CAPACITIES BASED GLASS TYPES SEE SHEET E1.
- STEP 4: FOR DOOR WITH TRANSOM, SEE SHEET E2 FOR APPROVED SIZE AND CAPACITIES.
- STEP 5: ANCHOR OPTION SEE SHEET A1. ANCHOR LAYOUT SEE SHEET E1 & A2. FOR ANCHORS AT TRANSOM END, SEE SHEET A2.
- STEP 6: HINGE AND LOCKING HARDWARE OPTIONS SEE BOM.
- STEP 7: THE LOWEST VALUE RESULTING FROM STEPS 2-6 THAT EXCEED DESIGN WIND PRESSURES DETERMINED THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM.

<b>ABBREVIATIONS AND SYMBOLS</b>	
G.B.- GLASS BITE	D.O.H. - DOOR OPENING HEIGHT
D.L.O. - DAYLITE OPENING	D.O.W. - DOOR OPENING WIDHTH
F.H. - FRAME HEIGHT	
F.W. - FRAME WIDTH	
W/ - WITH	
W/O - WITHOUT	
O.C. - ON CENTER	
C.O. - CLEAR OPENING	

PRODUCT CONTROL APPROVAL



**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. Ste.301  
MIRAMAR, FL 33027 P: 305.271.0117

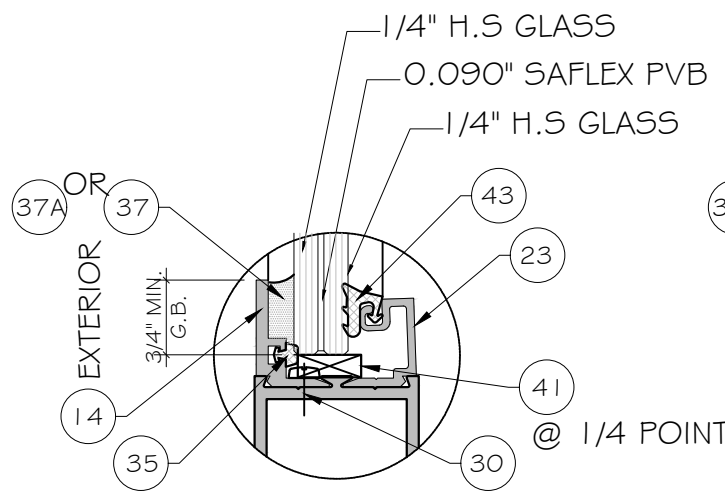
www.MCYEngineering.com MCY@mcyengineering.com

MSD-375 & WSD-500 STORMMAX<sup>®</sup> ALUMINUM ENTRANCE DOORS (L.M.I.)

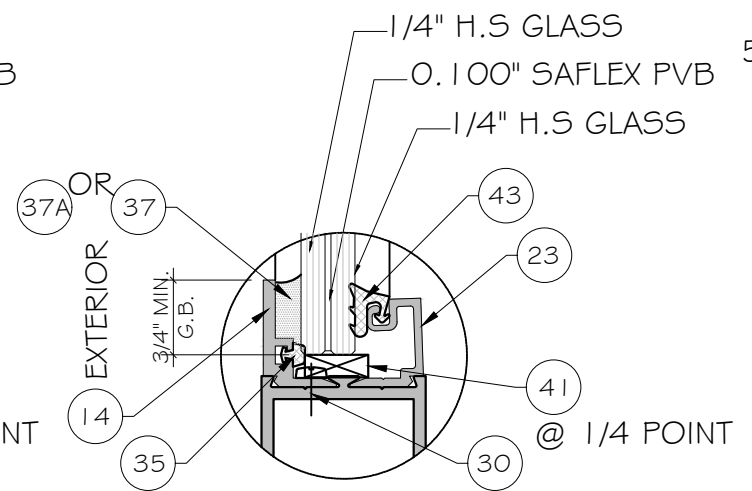
Oldcastle BuildingEnvelope<sup>®</sup>  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P:(972) 551-6100

Rev. No.	Date	Drawn By	Description

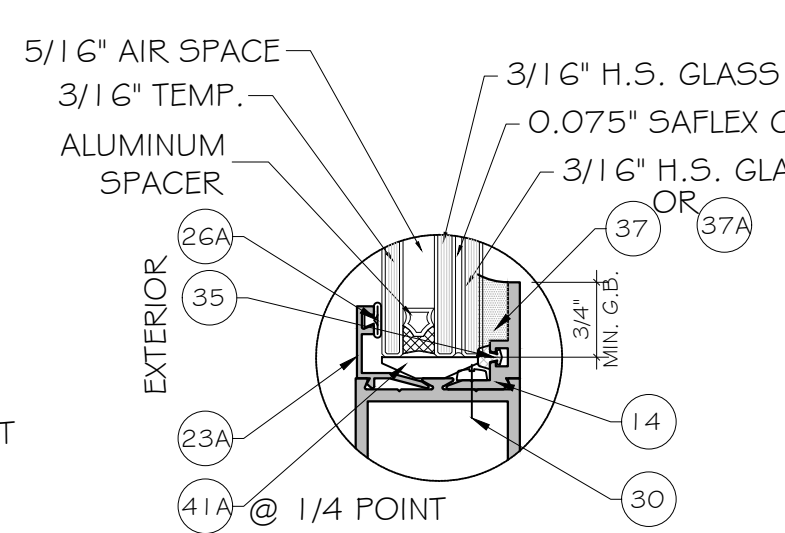
Drawn Date 01.05.2022	Scale AS SHOWN
DRAWING NO. <b>TD22-01</b>	
COVER	
Sheet No. 01 OF 20	



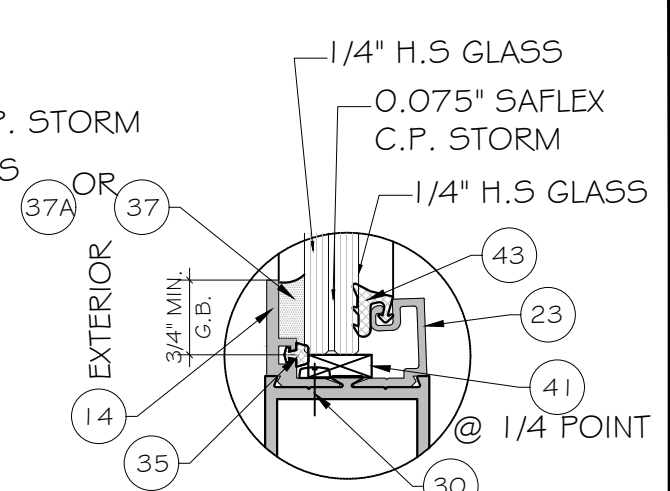
GLASS TYPE 'G31'  
9/16" NOMINAL OVERALL  
LAMINATED GLASS



GLASS TYPE 'G32'  
9/16" NOMINAL OVERALL  
LAMINATED GLASS

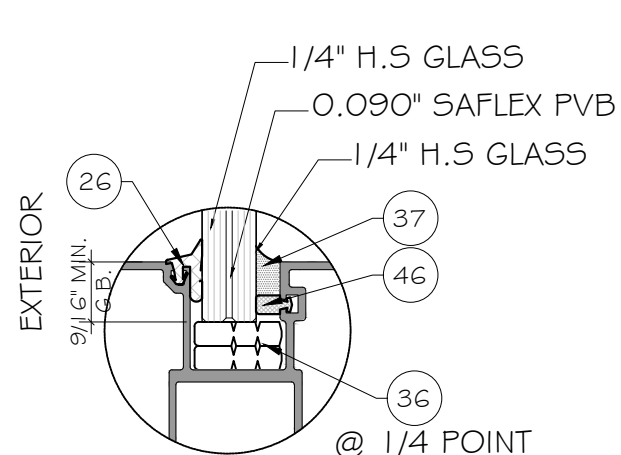


GLASS TYPE 'G15'  
1" NOMINAL OVERALL  
INSULATING LAMINATED GLASS

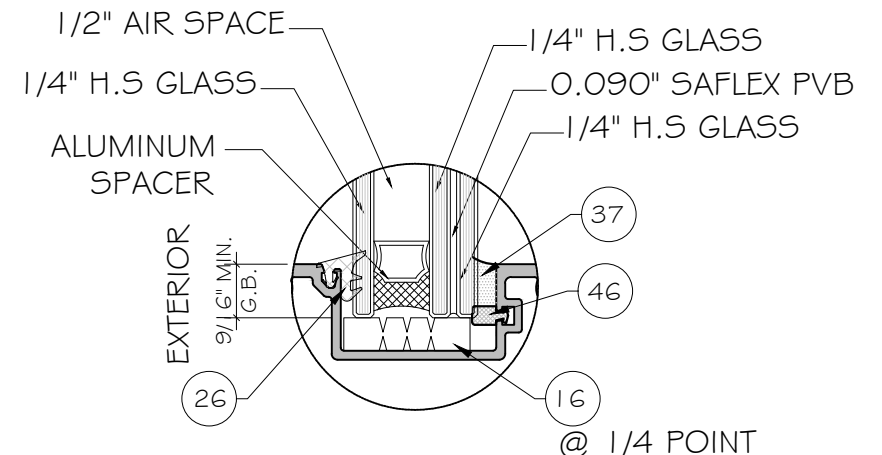


GLASS TYPE 'G33'  
9/16" NOMINAL OVERALL  
LAMINATED GLASS

GLAZING DETAIL FOR DOOR PANEL



GLASS TYPE 'G31'  
9/16" NOMINAL OVERALL  
LAMINATED GLASS

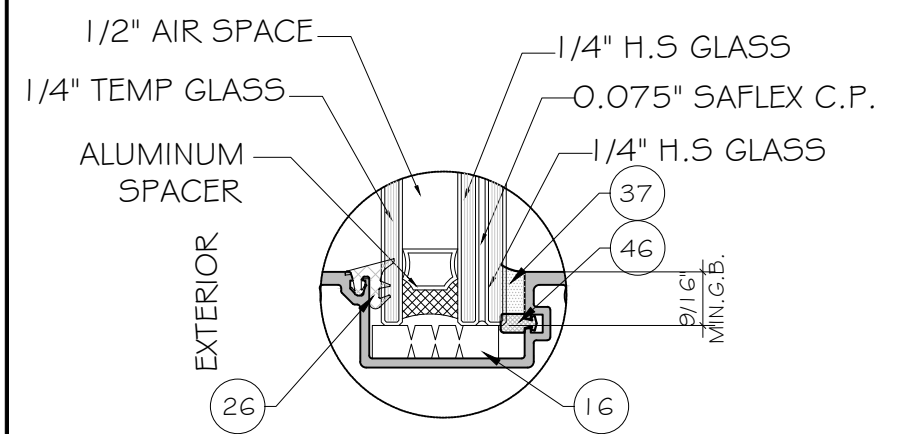


GLASS TYPE 'G34'  
1-5/16" NOMINAL OVERALL  
INSULATING LAMINATED GLASS

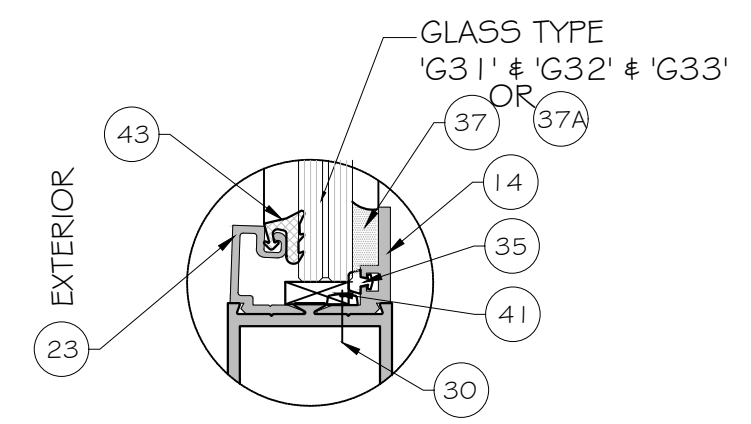
MAX. DLO SIZE = 94" X 45 1/4" = 29.54 FT<sup>2</sup>  
PdMAX = +/- 70PSF

GLAZING DETAIL FOR TRANSOM

NOTE:  
TYPICAL TRANSOM GLASS SIZE = D.L.O. + 1 1/8"



GLASS TYPE 'G12'  
1-5/16" NOMINAL OVERALL  
INSULATING LAMINATED GLASS



APPLICABLE ALTERNATE DETAIL WITH  
DOOR GLASS STOPS REVERSED FOR  
G31, G32 AND G33, VALID ONLY FOR  
3'-6" X 7'-0" OR 7'-0" X 7'-0" SINGLE /  
PAIR OF DOORS RESPECTIVELY

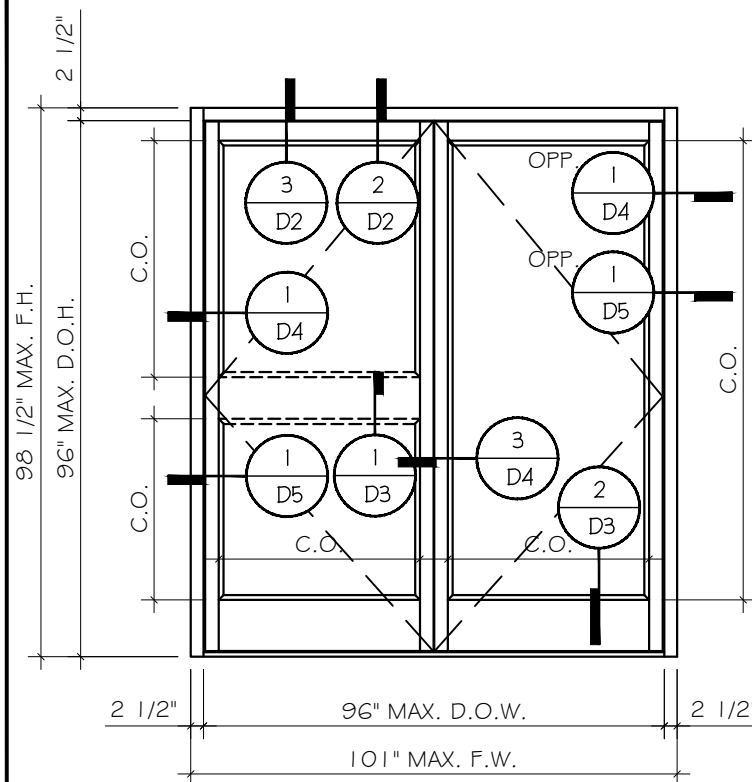
NOTE:  
TYPICAL DOOR GLASS SIZE = C.O. - 7/16"

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

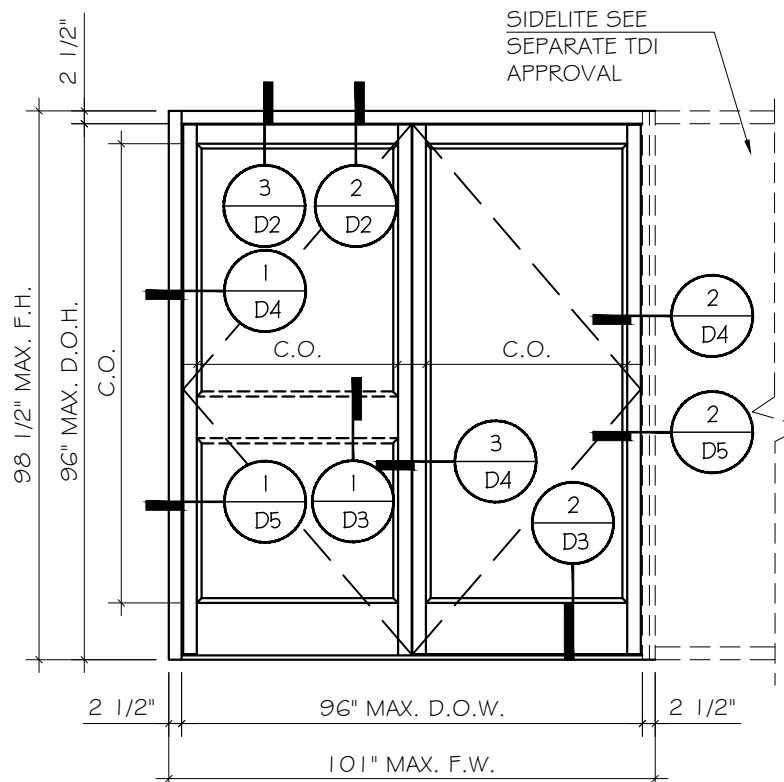
PRODUCT CONTROL APPROVAL



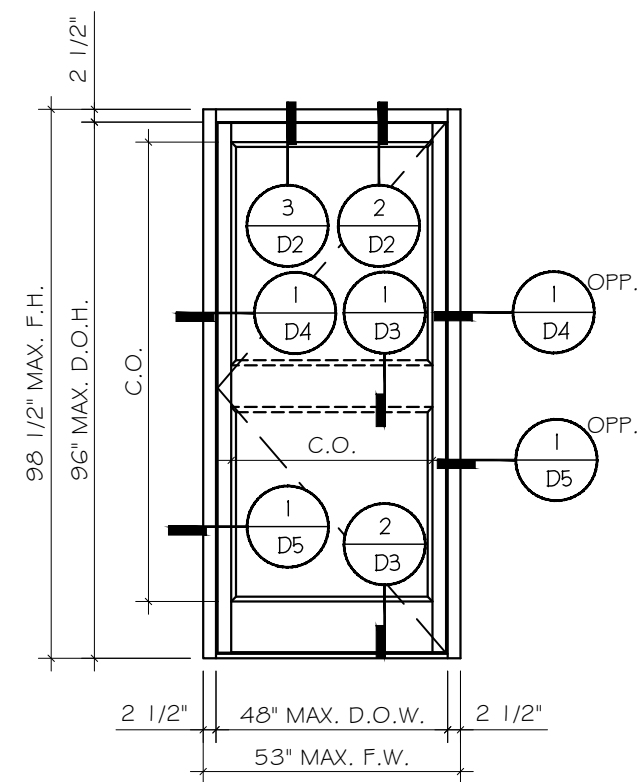
Rev. No.	Date	Drawn By	Description
Drawn Date	Scale		
01.05.2022	AS SHOWN		
DRAWING NO.			
TD22-01			
Sheet No.			
02 OF 20			



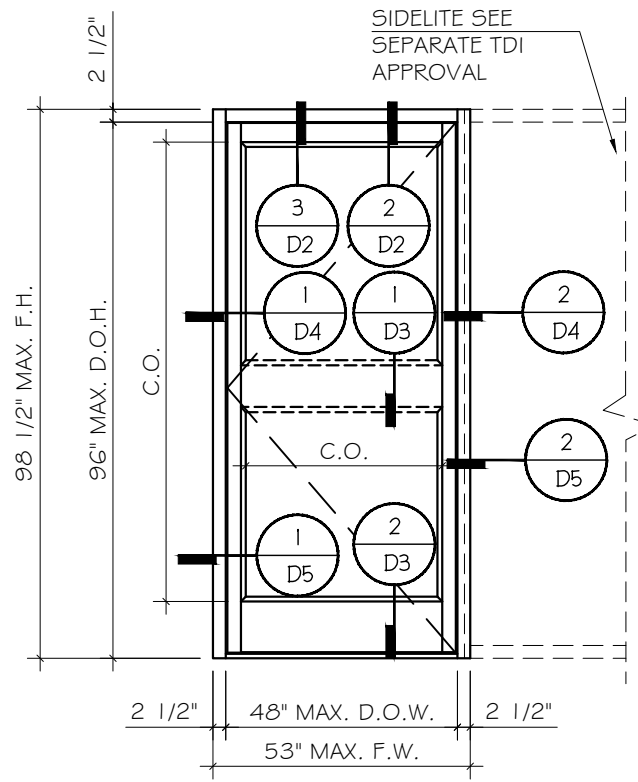
TYPICAL DOOR ELEVATIONS



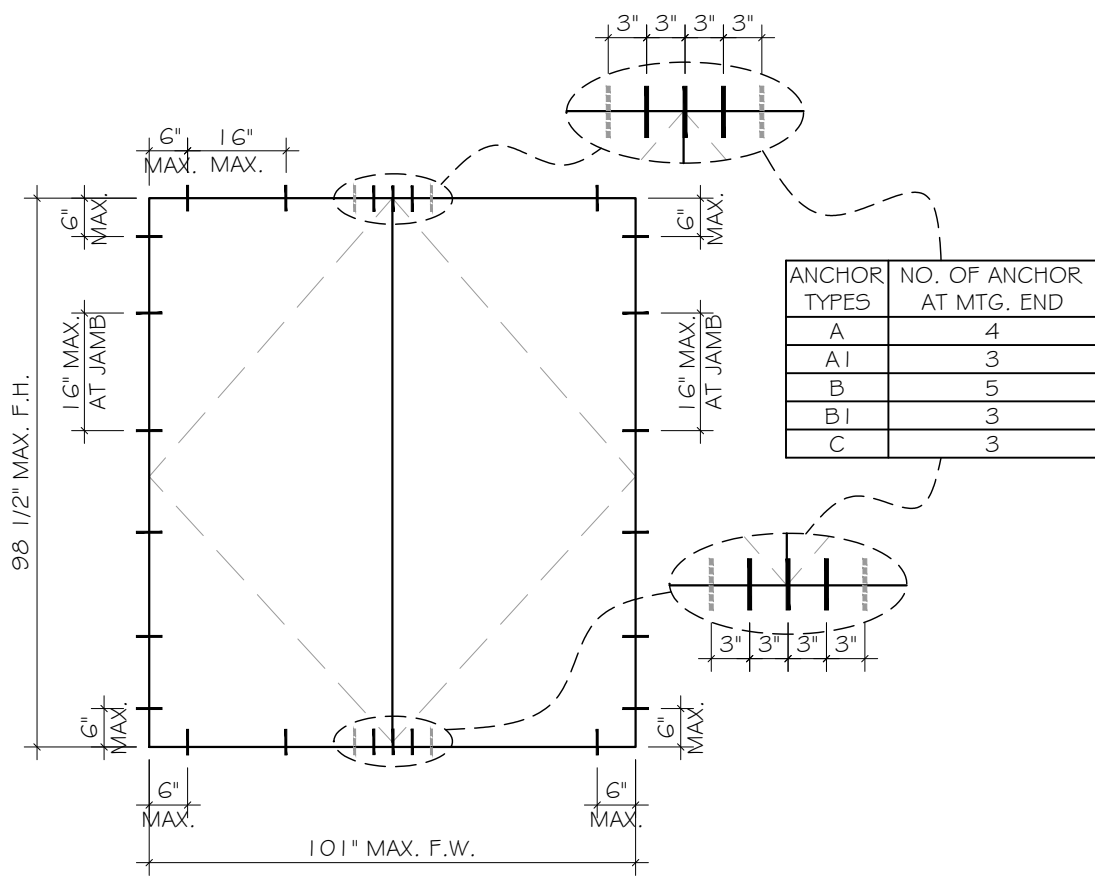
TYPICAL DOOR ELEVATIONS



TYPICAL DOOR ELEVATIONS

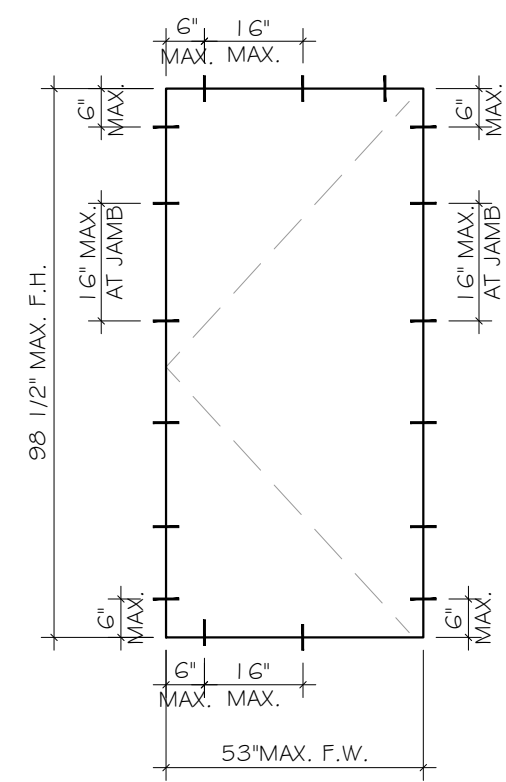


TYPICAL DOOR ELEVATIONS



ANCHOR LAY OUT FOR DOUBLE DOOR

ANCHOR TYPES	NO. OF ANCHOR AT MTG. END
A	4
A1	3
B	5
B1	3
C	3



ANCHOR LAY OUT FOR SINGLE DOOR

SINGLE(X) OR DOUBLE(XX) DOOR ALLOWABLE DESIGN LOAD - PSF					
D.O.W. (INCH)		D.O.H. (INCH)	GLASS TYPE	Pd ALLOW. (PSF)	
SINGLE	DOUBLE			(37) DOWSIL 795	(37A) PROGLAZE II
30"	60"	84"	G31,G32 G33,G15	+70/-80	+70/-70
36"	72"				
42"	84"				
48"	96"	96"	G33,G15	+70/-70	
30"	60"				
36"	72"				
42"	84"				
48"	96"				

NOTE:  
SEE ANCHOR OPTION ON SHEET A1

PRODUCT CONTROL APPROVAL



**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS  
12781 MIRAMAR PKWY. Ste.301  
MIRAMAR, FL 33027 P: 305.271.0117  
www.MCYEngineering.com MCY@mcyengineering.com

MSD-375 & WSD-500 STORMMAX® ALUMINUM ENTRANCE DOORS (L.M.I.)  
Oldcastle BuildingEnvelope®  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P:(972) 551-6100

Rev. No.	Date	Drawn By	Description

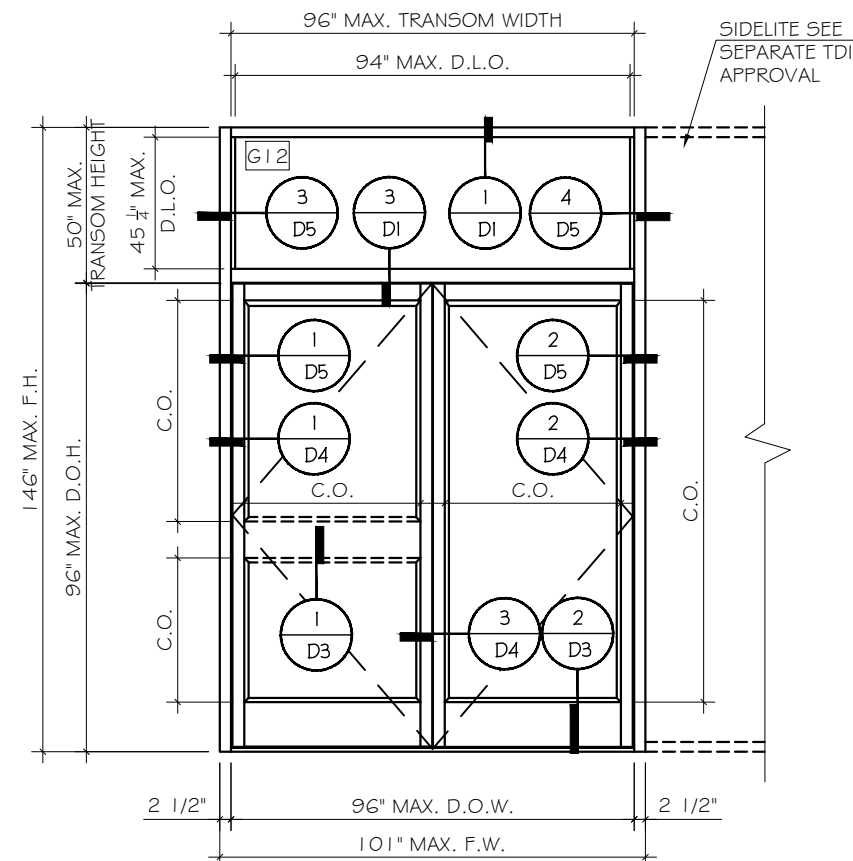
Drawn Date: 01.05.2022 Scale: AS SHOWN

DRAWING NO. TD22-01

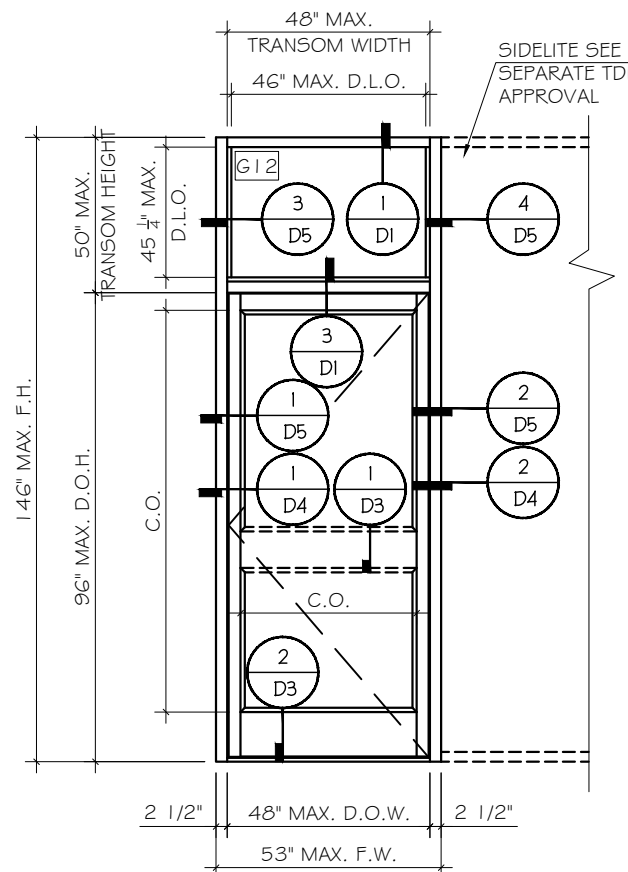
Sheet No. E1

03 OF 20





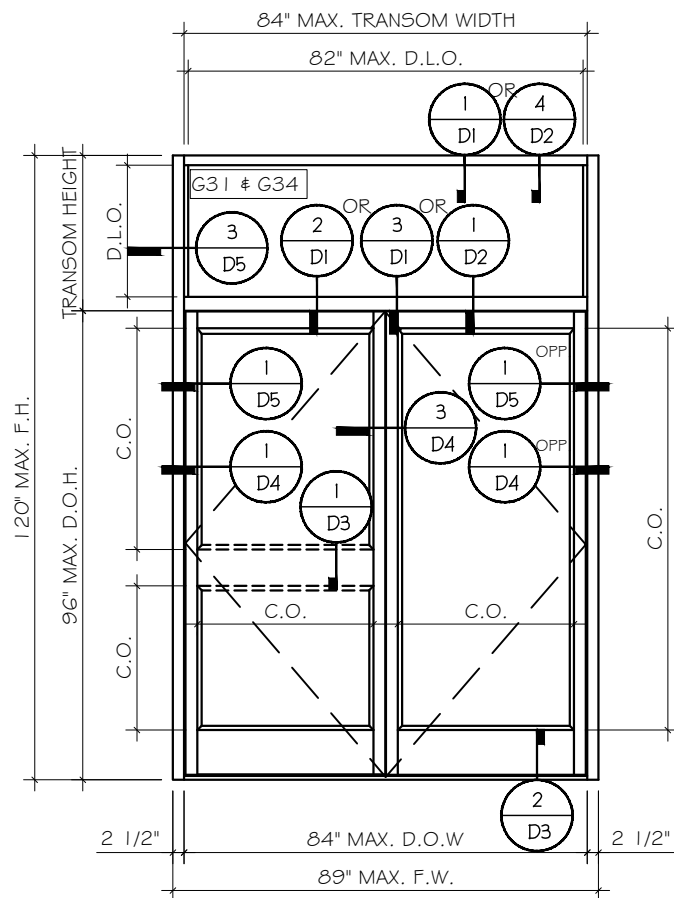
TYPICAL DOOR ELEVATIONS



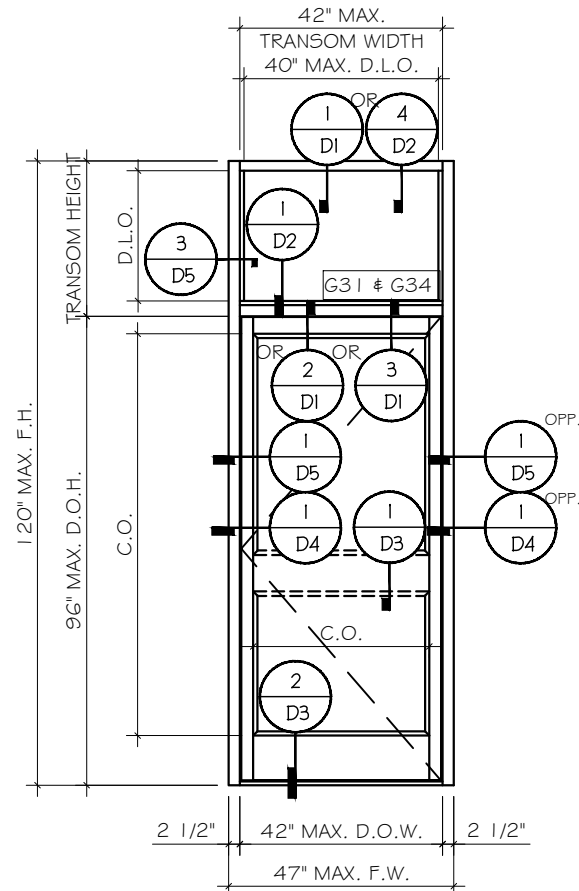
TYPICAL DOOR ELEVATIONS

SINGLE OR DOUBLE DOORS  
TRANSOM MULLION CAPACITY- PSF  
(120" < FRAME HEIGHT <= 146")

DOOR/ TRANSOM WIDTH (INCH)	D.O.H. (INCH)	TRANSOM HEIGHT (INCH)	MAX. PRESSURE (PSF)
36"	84"	50	+70/-70
42"		50	+70/-70
48"		50	+70/-70
36"	96"	50	+70/-70
42"		50	+70/-70
48"		50	+70/-70



TYPICAL DOOR ELEVATIONS



TYPICAL DOOR ELEVATIONS

SINGLE OR DOUBLE DOORS  
TRANSOM MULLION CAPACITY- PSF  
(FRAME HEIGHT <= 120")

DOOR/ TRANSOM WIDTH (INCH)	D.O.H. (INCH)	TRANSOM HEIGHT (INCH)	MAX. PRESSURE (PSF)		
				SINGLE	DOUBLE
30"	84"	24	+70/-80		
		30			
		36			
36"	84"	24	+70/-80		
		30			
		36			
42"	84"	24	+70/-80		
		30			
		36			
30"	96"	24	+70/-80		
		36"		24	+70/-80
		42"		24	

NOTE:  
SEE ANCHOR OPTION ON SHEET A1, SEE  
REQUIRED NUMBER OF ANCHORS &  
SPACING ON SHEET A2

PRODUCT CONTROL APPROVAL



MSD-375 & WSD-500 STORMMAX® ALUMINUM  
ENTRANCE DOORS (L.M.I.)

Oldcastle BuildingEnvelope®  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P: (972) 551-6100

**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS  
12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117  
www.MCYEngineering.com MCY@mcyengineering.com

Rev. No.	Date	Drawn By	Description

Drawn Date 01.05.2022 Scale AS SHOWN

DRAWING NO. TD22-01

E2

Sheet No. 04 OF 20



ANCHOR OPTIONS:

ANCHOR TYPE 'A' - 5/16" DIA. ULTRACON BY 'DEWALT'(Fu= 177KSI, Fy= 155KSI)  
INTO WOOD WOOD STRUCTURE  
 WITH 2" MIN. PENETRATION INTO WOOD

THROUGH 1X WOOD BUCKS INTO CONCRETE OR GROUT FILLED BLOCK  
 | 3/4" MIN. EMBEDMENT INTO CONCRETE  
 | 3/4" MIN. EMBEDMENT INTO GROUT FILLED BLOCK (JAMB ONLY)

ANCHOR TYPE 'A1' - 5/16" DIA. ULTRACON BY 'DEWALT'(Fu= 177KSI, Fy= 155KSI)  
DIRECTLY INTO CONCRETE  
 W/1 3/4" MIN. EMBEDMENT

ANCHOR TYPE 'B' - 1/4" DIA. ULTRACON+ BY 'DEWALT'(Fu= 164KSI, Fy= 148KSI)  
INTO 2BY WOOD BUCKS OR WOOD STRUCTURE,  
 | 1/2" MIN. PENETRATION INTO WOOD

THROUGH 1X WOOD BUCKS INTO CONCRETE OR GROUT FILLED BLOCK  
 | 3/4" MIN. EMBEDMENT INTO CONCRETE  
 | 3/4" MIN. EMBEDMENT INTO GROUT FILLED BLOCK (JAMB ONLY)

ANCHOR TYPE 'B1' - 1/4" DIA. ULTRACON+ BY 'DEWALT'(Fu= 164KSI, Fy= 148KSI)  
DIRECTLY INTO CONCRETE  
 W/1 3/4" MIN. EMBEDMENT

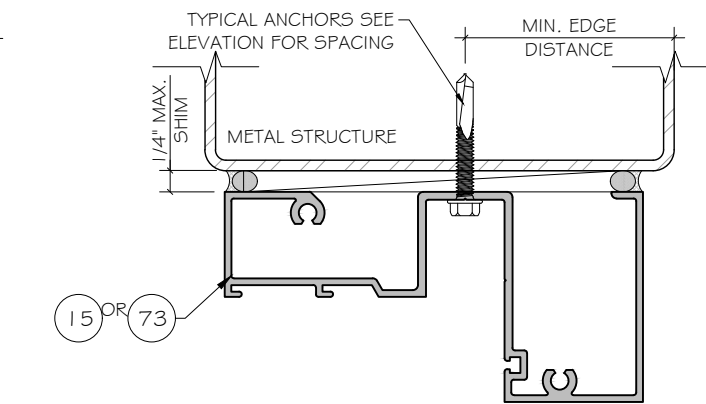
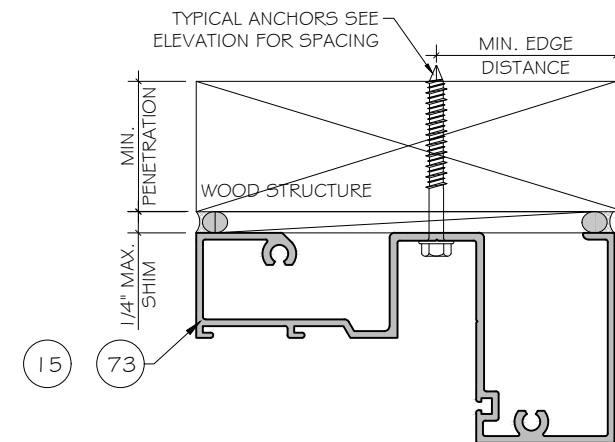
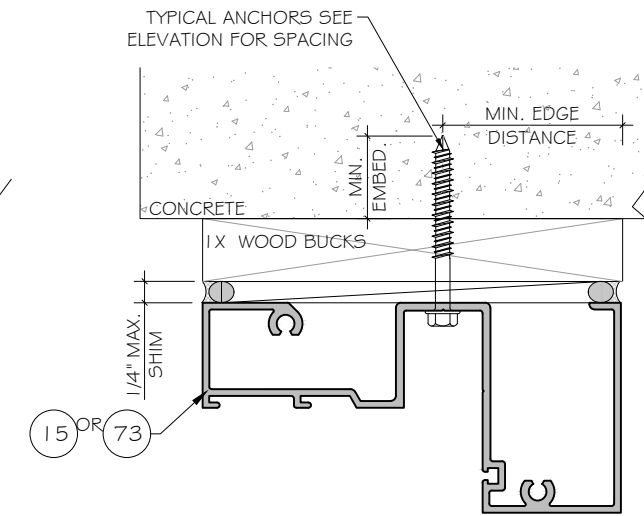
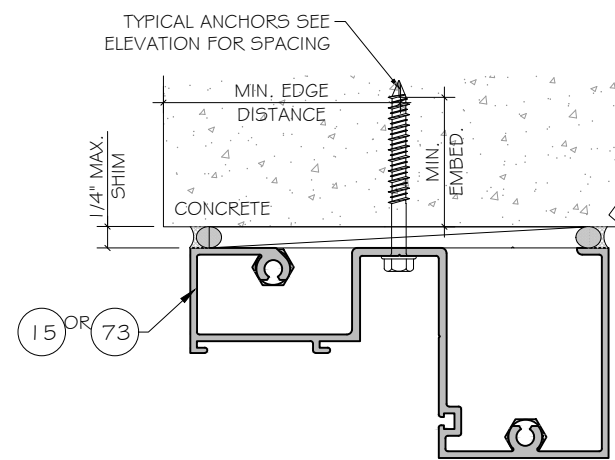
ANCHOR TYPE 'C' - 1/4" DIA. TEKS/SELF DRILLING SCREW (GRADE 5 CRS)  
INTO F.B.C. APPROVED MULLIONS  
OR INTO METAL STRUCTURES.  
 (3) THREADS MIN. PENETRATION BEYOND METAL SUBSTRATE

ALUMINUM: 1/8" THK. MIN. (6063-T5, MIN)  
 STEEL: 1/8" THK. MIN. (Fy=36KSI MIN)  
 STEEL: 1 GGA THK. MIN. ASTM A653 GRADE 33(Fy=33KSI)  
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ANCHOR EDGE DISTANCE:  
 INTO WOOD STRUCTURE: 1-1/4" MIN. FOR ANCHOR TYPE A  
 1" MIN.FOR ANCHOR TYPE B  
 INTO CONCRETE OR GROUT FILLED BLOCK: 2-1/2" MIN.

ANCHOR CL TO CL DISTANCE:  
 INTO WOOD STRUCTURE: 3" MIN.  
 INTO CONCRETE: 3" MIN.  
 INTO GROUT FILLED BLOCK: 4" MIN.

SUBSTRATE:  
 WOOD AT HEAD OR JAMB, SG = 0.55 MIN.  
 CONCRETE AT HEAD/SILL/JAMB, f'c = 3000 PSI MIN.  
 GROUT FILLED BLOCK AT JAMB, f'm = 2000 PSI MIN.



PRODUCT CONTROL APPROVAL



**MCY ENGINEERING, INC.**  
 GLAZING CONSULTANTS  
 12781 MIRAMAR PKWY. Ste.301  
 MIRAMAR, FL 33027 P: 305.271.0117  
 www.MCYEngineering.com MCY@mcyengineering.com

MSD-375 & WSD-500 STORMMAX® ALUMINUM  
 ENTRANCE DOORS (L.M.I.)  
 Oldcastle BuildingEnvelope®  
 803 AIRPORT ROAD  
 TERRELL, TX 75160  
 P:(972) 551-6100

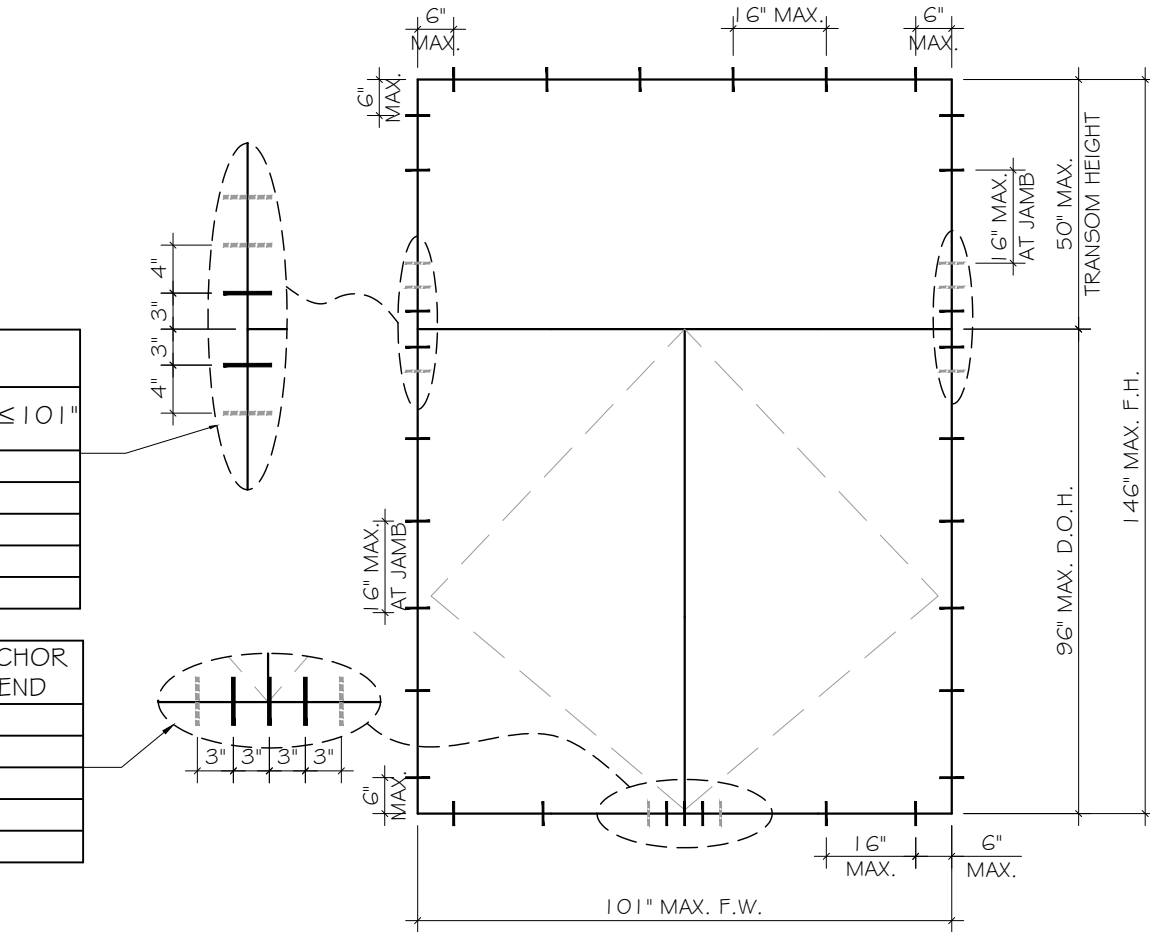
Rev. No.	Date	Drawn By	Description

Drawn Date 01.05.2022	Scale AS SHOWN
DRAWING NO. TD22-01	
Sheet No. A1	
05 OF 20	

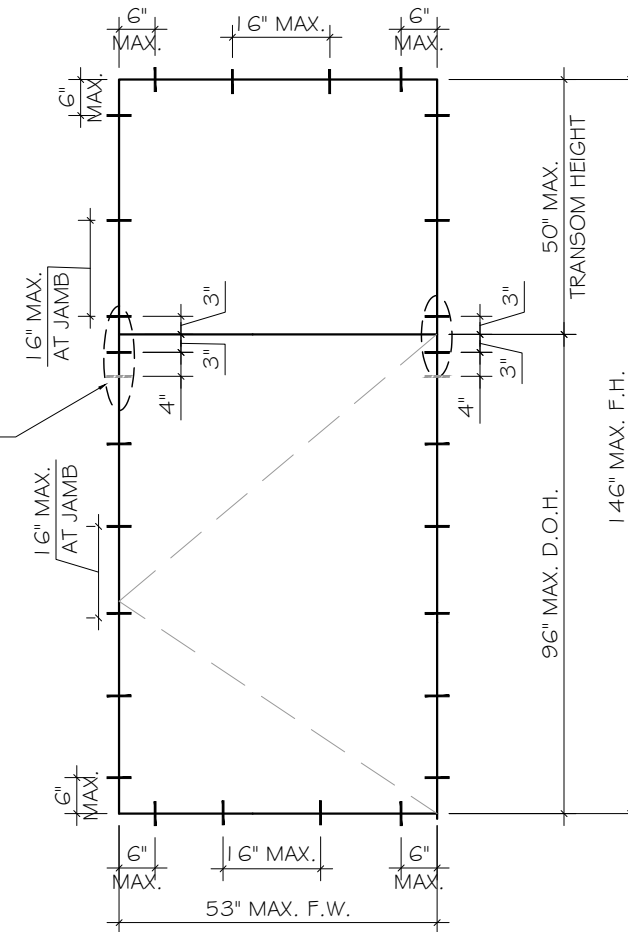
ANCHOR LAYOUT

ANCHOR TYPES	NO. OF ANCHOR AT TRANSOM END	
	F.W. ≤ 89"	89" < F.W. ≤ 101"
A	4	5
AI	2	2
B	5	5
BI	3	3
C	3	3

ANCHOR TYPES	NO. OF ANCHOR AT MTG. END
A	4
AI	3
B	5
BI	3
C	3

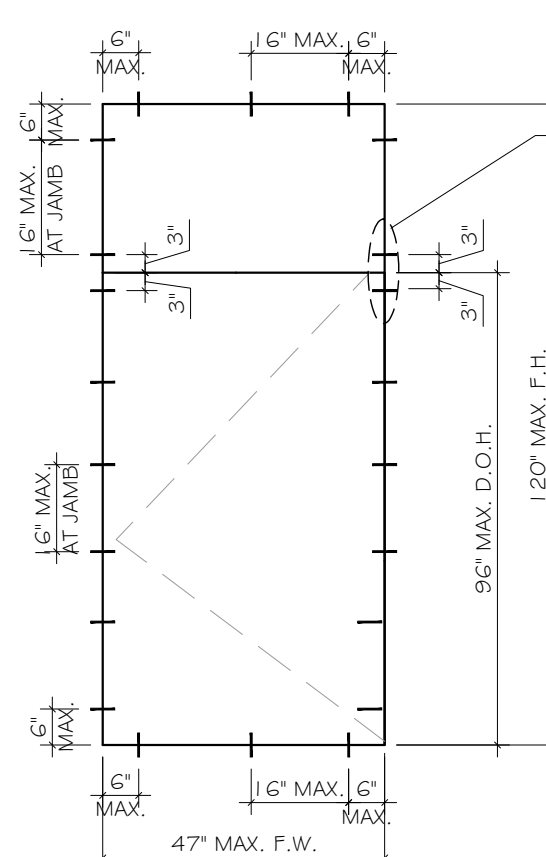
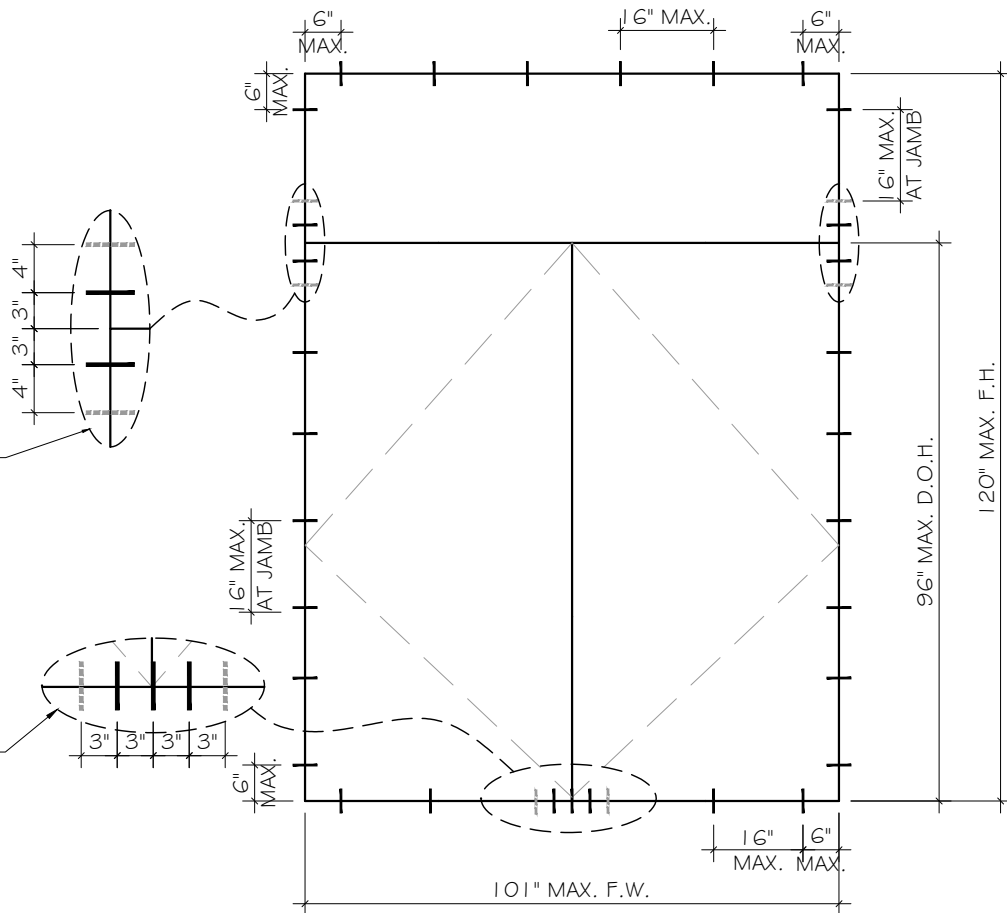


ANCHOR TYPES	NO. OF ANCHOR AT TRANSOM END
A	2
AI	2
B	3
BI	2
C	2



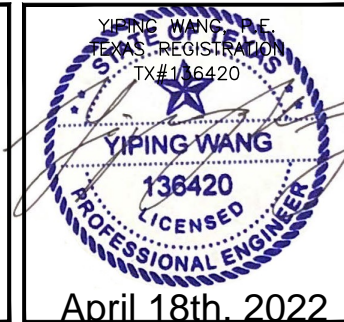
ANCHOR TYPES	NO. OF ANCHOR AT TRANSOM END
A	4
AI	2
B	4
BI	3
C	3

ANCHOR TYPES	NO. OF ANCHOR AT MTG. END
A	4
AI	3
B	5
BI	3
C	3



ANCHOR TYPES	NO. OF ANCHOR AT TRANSOM END
A	2
AI	2
B	2
BI	2
C	2

PRODUCT CONTROL APPROVAL



Drawn Date 01.05.2022	Scale AS SHOWN
DRAWING NO. TD22-01	
Sheet No. 06 OF 20	

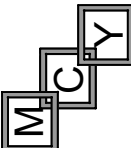
MSD-375 & WSD-500 STORMMAX® ALUMINUM ENTRANCE DOORS (L.M.I.)

Oldcastle BuildingEnvelope®  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P: (972) 551-6100

MCY ENGINEERING, INC.

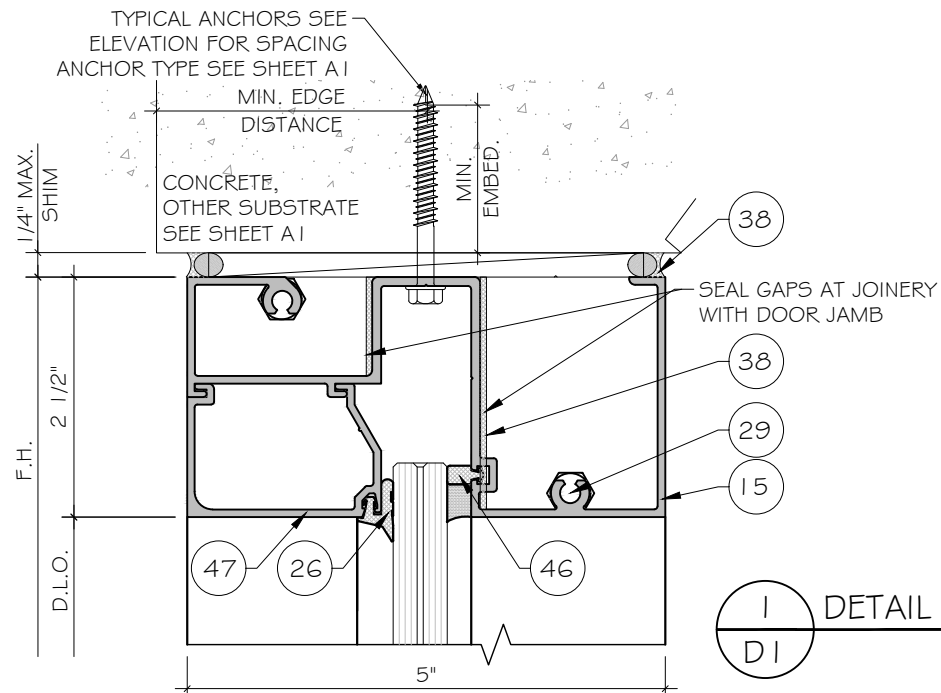
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117

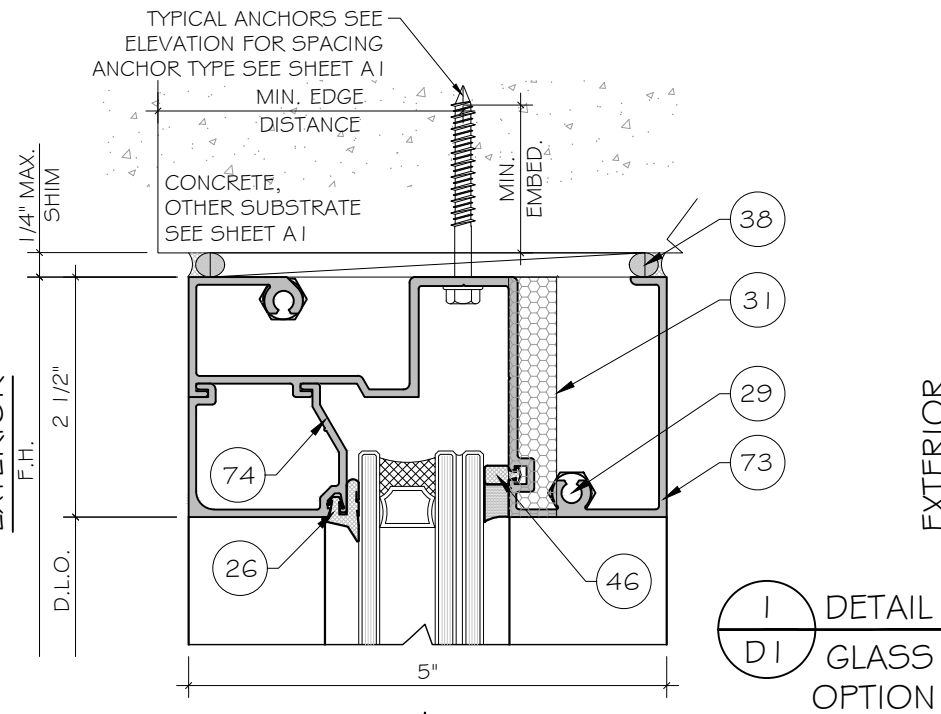


www.MCYEngineering.com MCY@mcyengineering.com

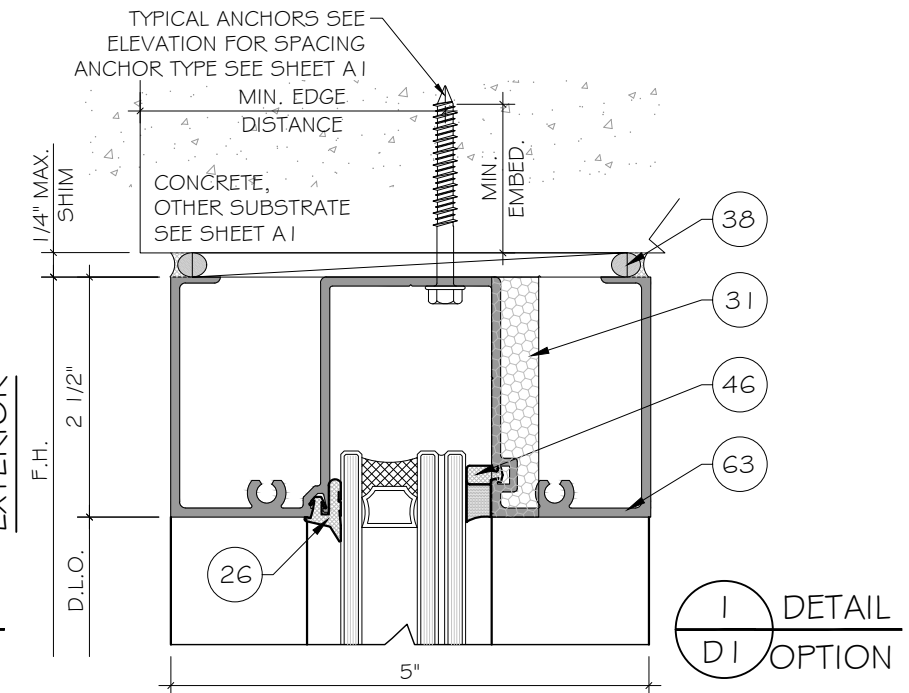
EXTERIOR



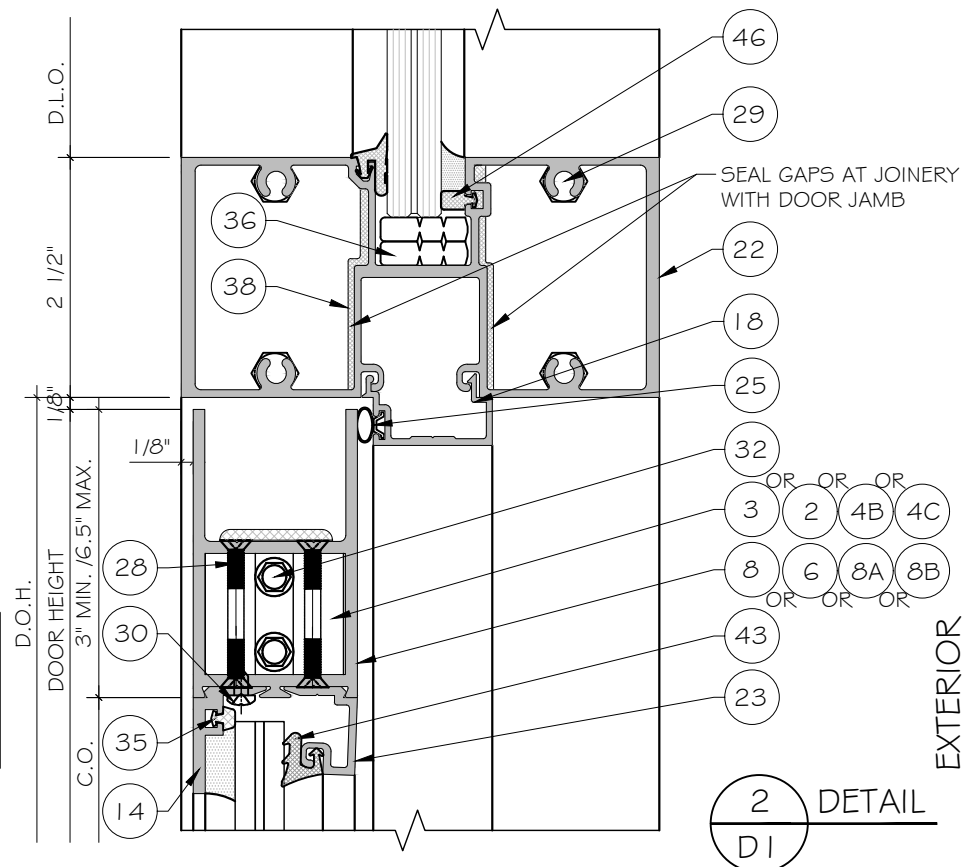
EXTERIOR



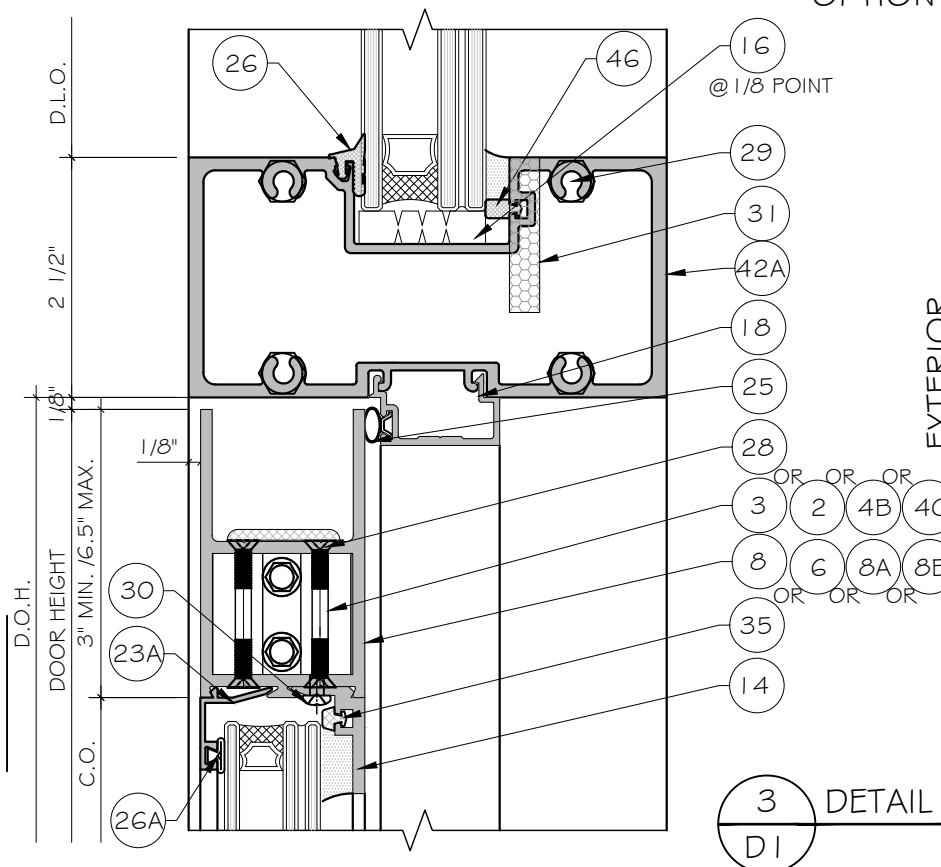
EXTERIOR



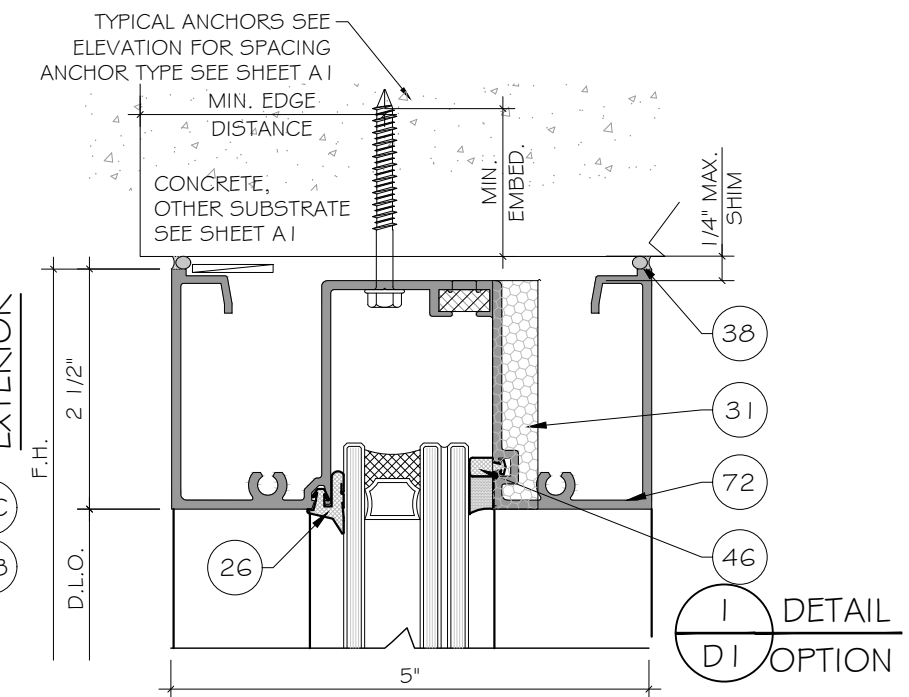
EXTERIOR



EXTERIOR



EXTERIOR



PRODUCT CONTROL APPROVAL



Drawn Date 01.05.2022	Scale AS SHOWN
DRAWING NO. TD22-01	
Sheet No. 07 OF 20	

MSD-375 & WSD-500 STORMMAX® ALUMINUM ENTRANCE DOORS (L.M.I.)

Oldcastle BuildingEnvelope®

803 AIRPORT ROAD  
TERRELL, TX 75160

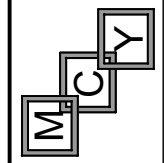
P: (972) 551-6100

MCY ENGINEERING, INC.

GLAZING CONSULTANTS

12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027

P: 305.271.0117



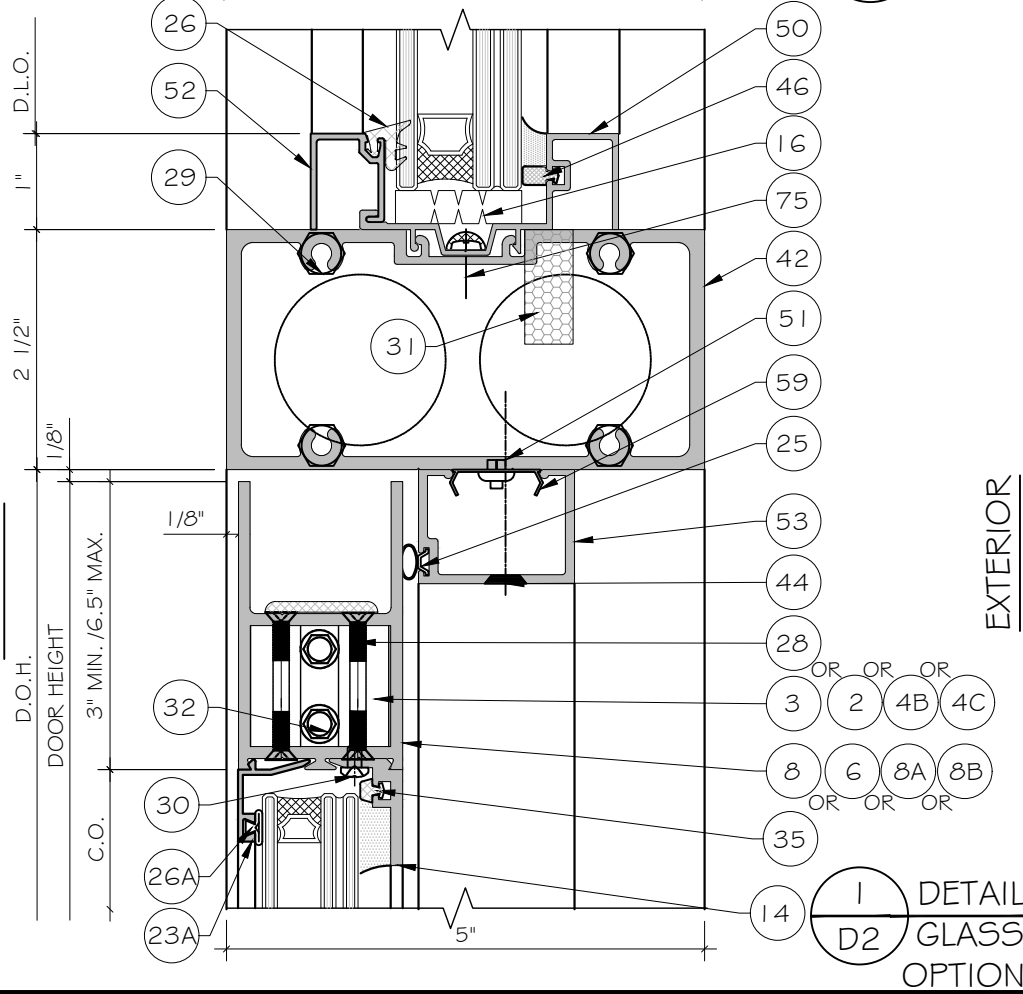
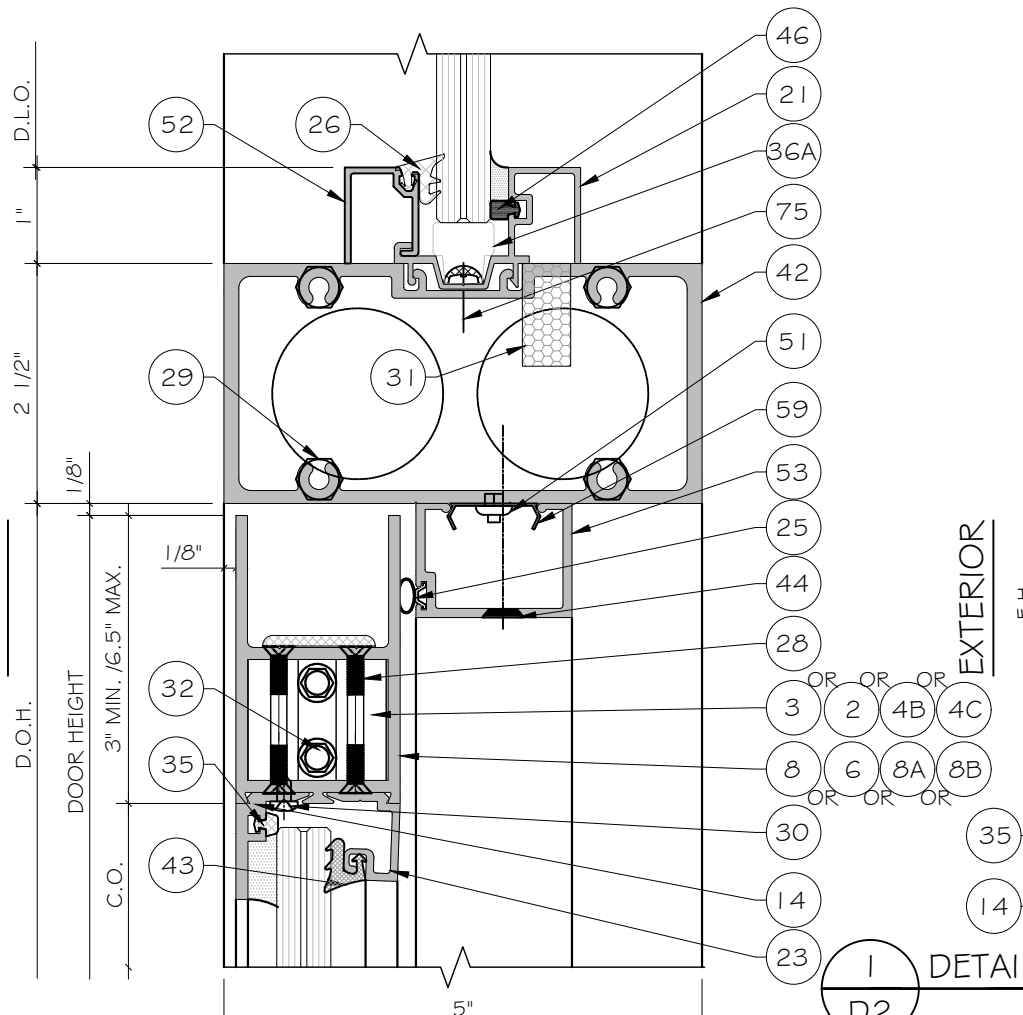
www.MCYEngineering.com

MCY@mcyengineering.com



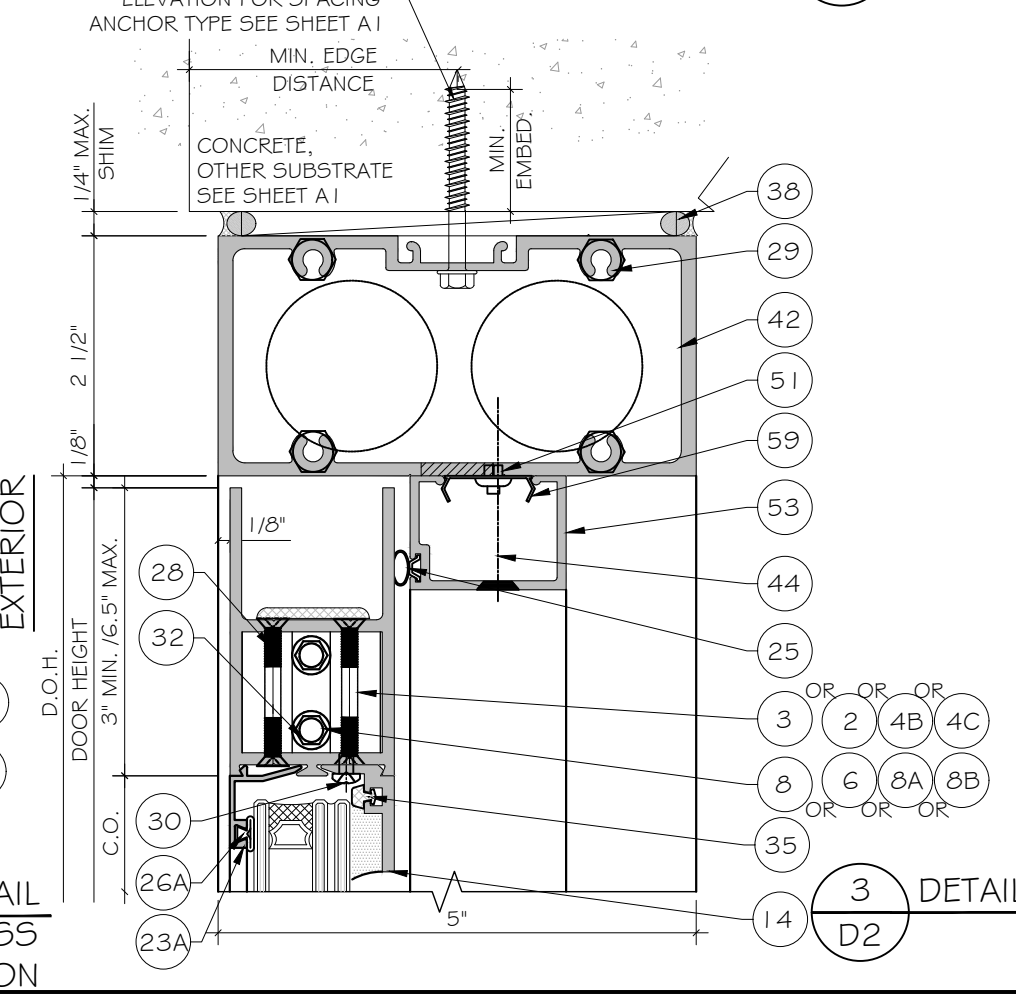
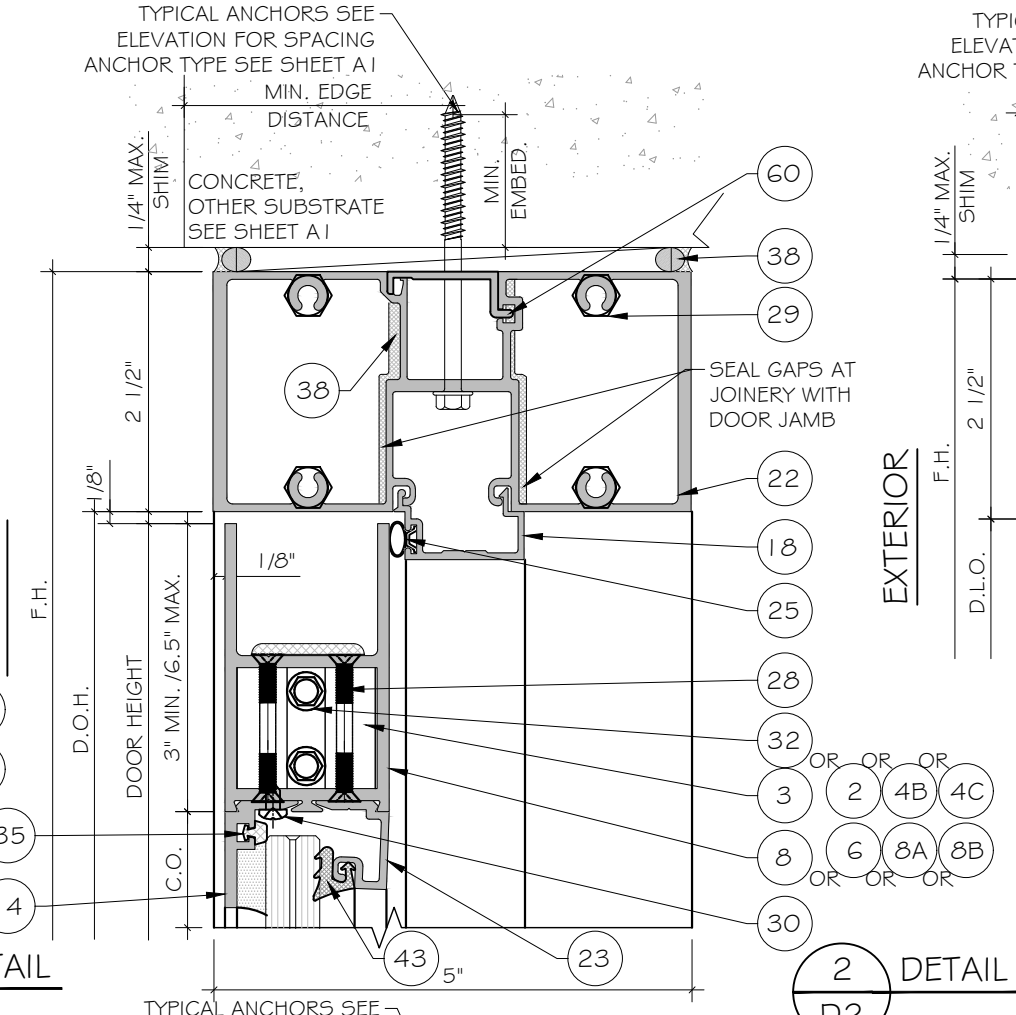
EXTERIOR

EXTERIOR

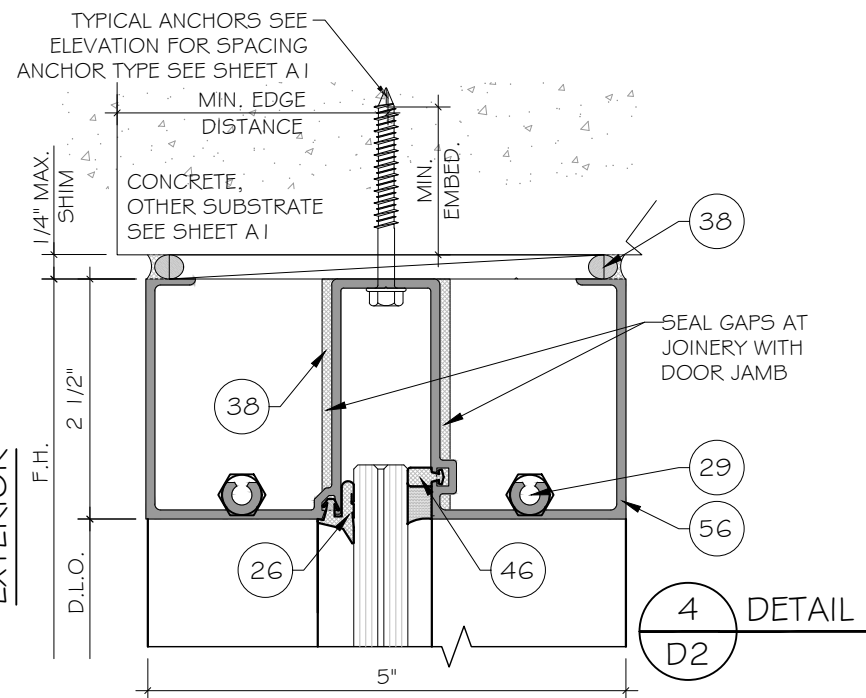


EXTERIOR

EXTERIOR



EXTERIOR



PRODUCT CONTROL APPROVAL

YIPING WANG  
136420  
LICENSED PROFESSIONAL ENGINEER

April 18th, 2022

**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS

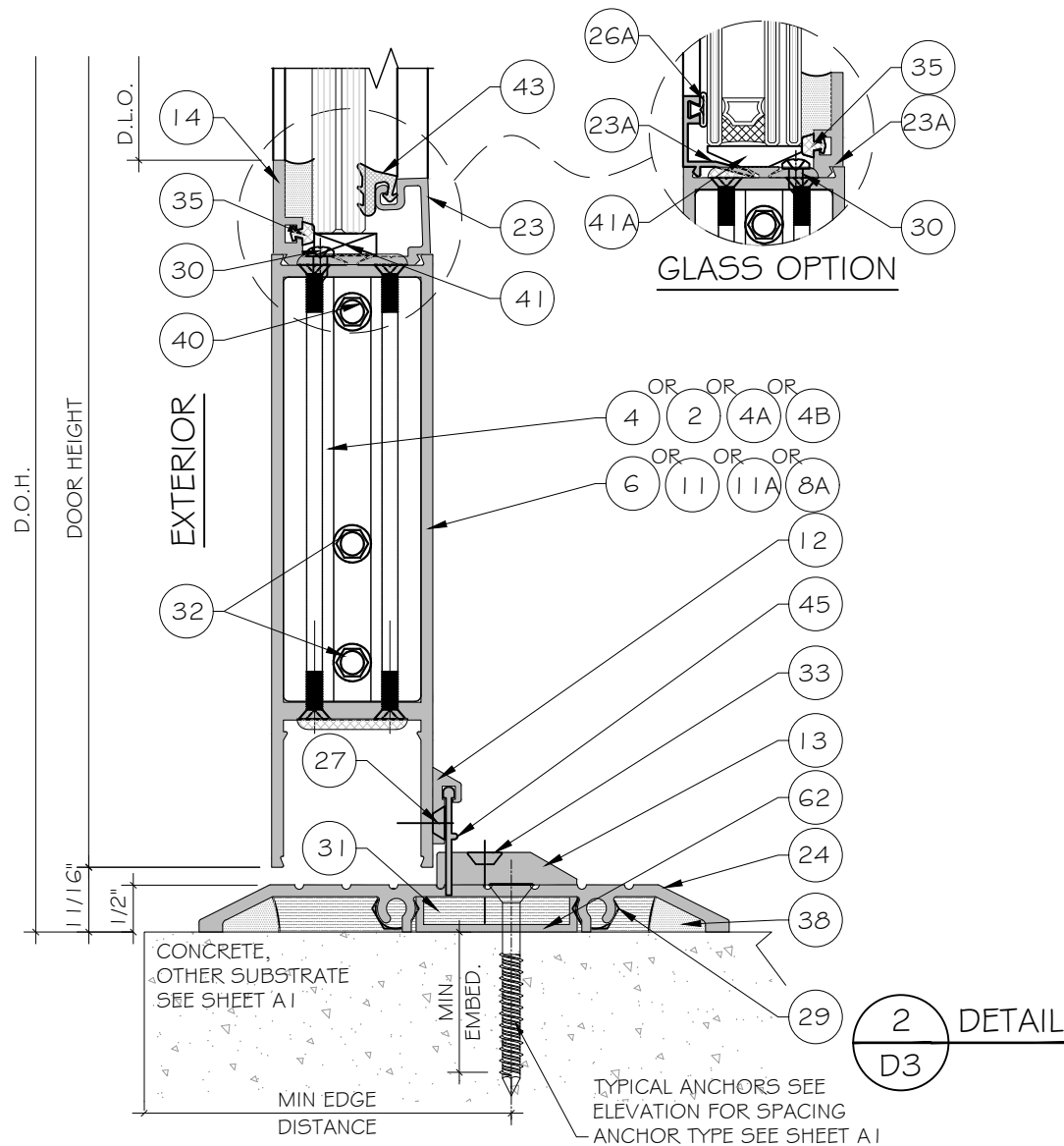
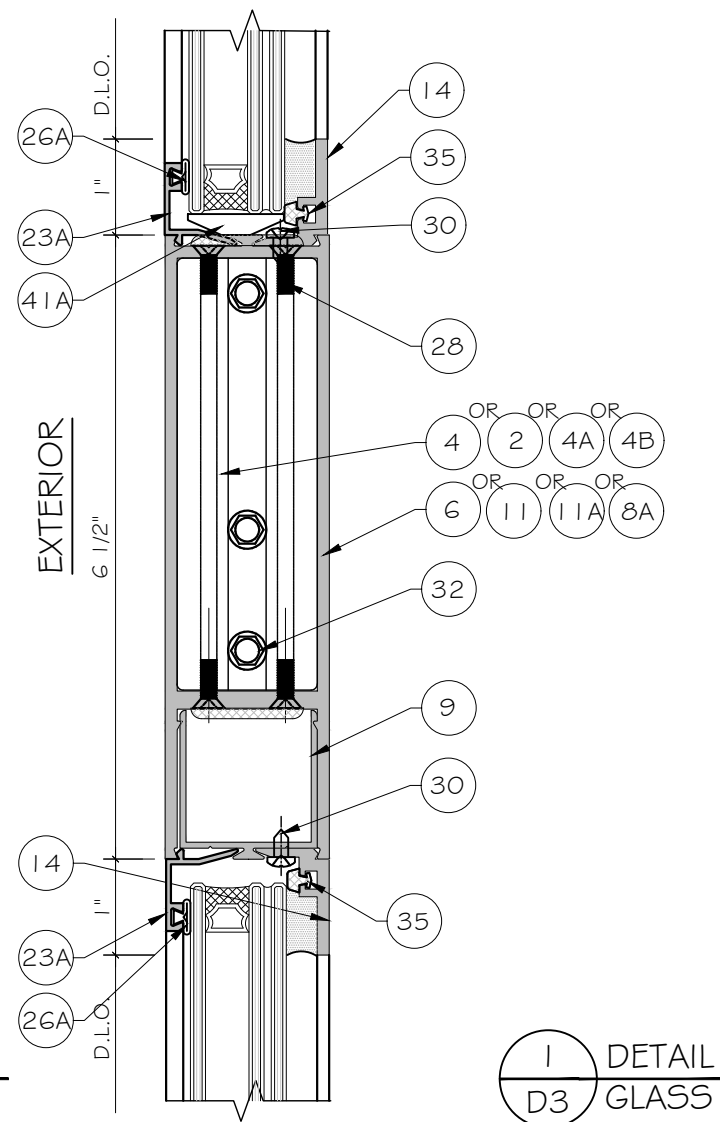
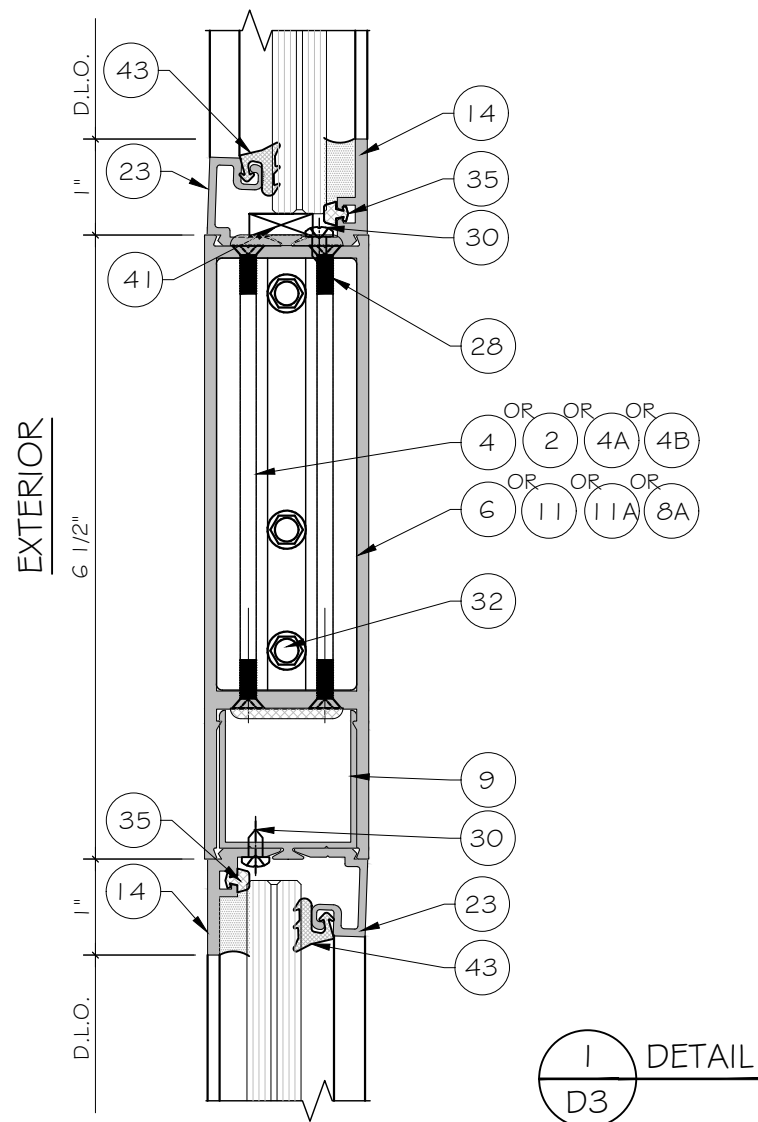
12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117

www.MCYEngineering.com MCY@mcyengineering.com

MSD-375 & WSD-500 STORMMAX® ALUMINUM ENTRANCE DOORS (L.M.I.)

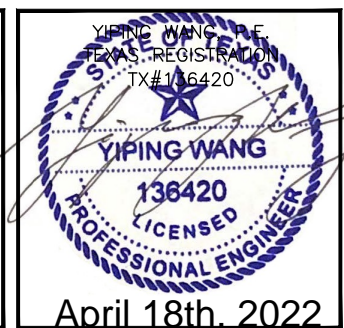
Oldcastle BuildingEnvelope®  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P: (972) 551-6100

Drawn Date	Scale
01.05.2022	AS SHOWN
Drawn By	Description
Rev. No.	Date
DRAWING NO.	TD22-01
Sheet No.	D2
	08 OF 20



\*NOTE:  
BOTTOM RAIL 11A IT'S ONLY ALLOWED AT 3'-6" WIDE DOOR PANELS

PRODUCT CONTROL APPROVAL



**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117

www.MCYEngineering.com MCY@mcyengineering.com

---

MSD-375 & WSD-500 STORMMAX® ALUMINUM  
ENTRANCE DOORS (L.M.I.)

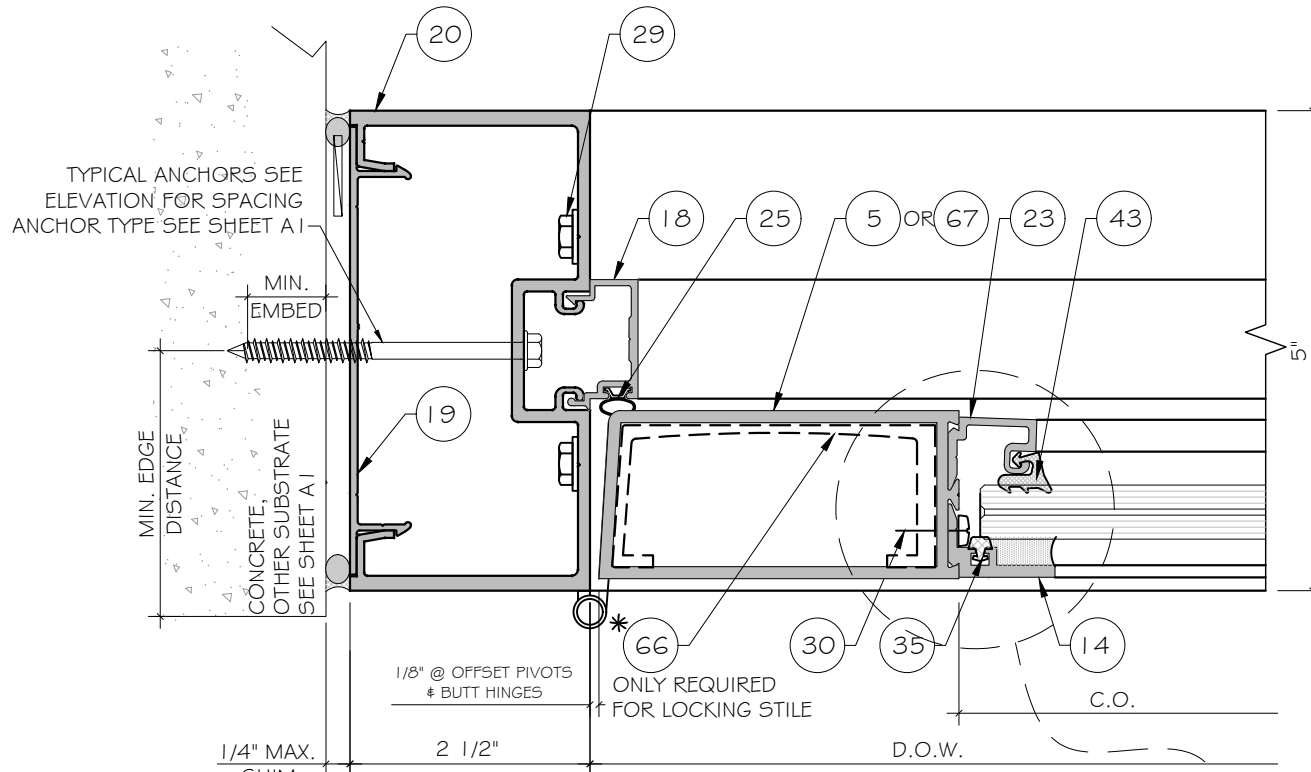
Oldcastle BuildingEnvelope®  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P: (972) 551-6100

Rev. No.	Date	Drawn By	Description

Drawn Date: 01.05.2022 Scale: AS SHOWN

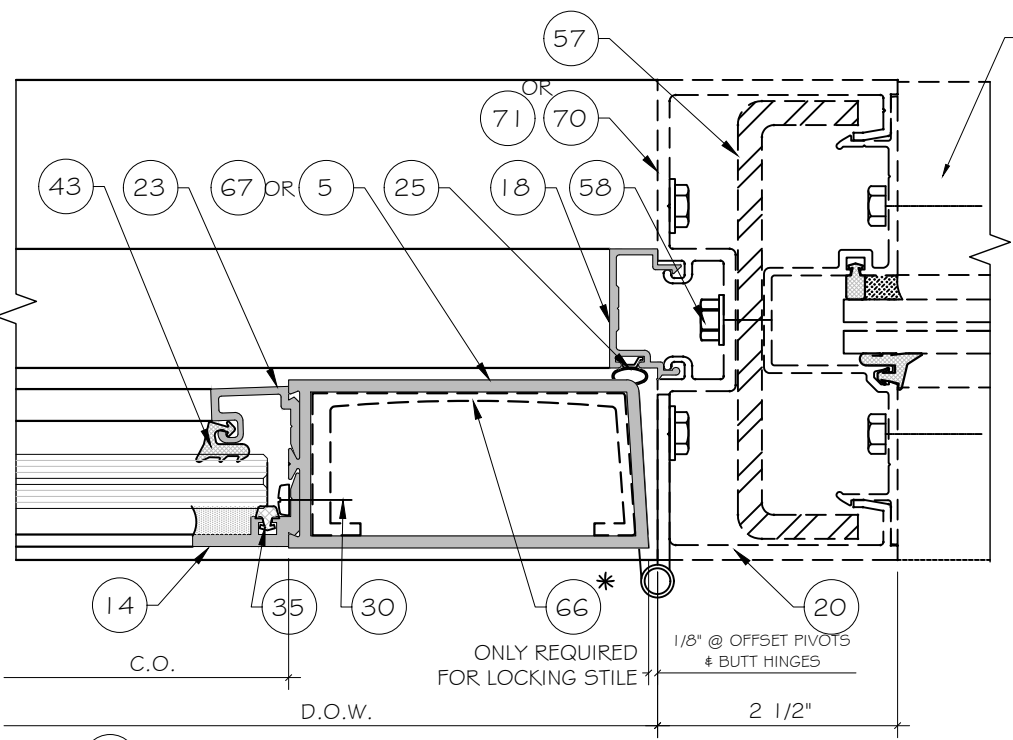
DRAWING NO. TD22-01

Sheet No. D3 09 OF 20



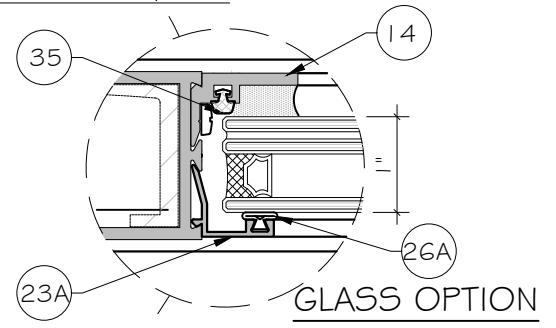
EXTERIOR

1  
D4  
DETAIL

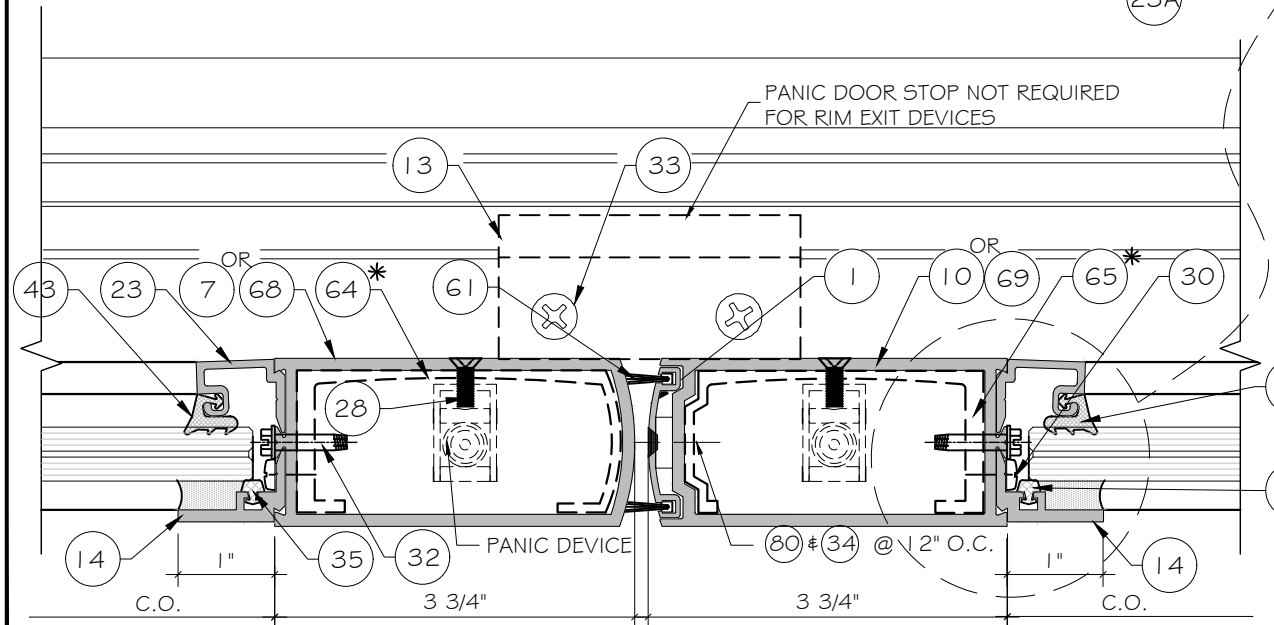


EXTERIOR

2  
D4  
DETAIL

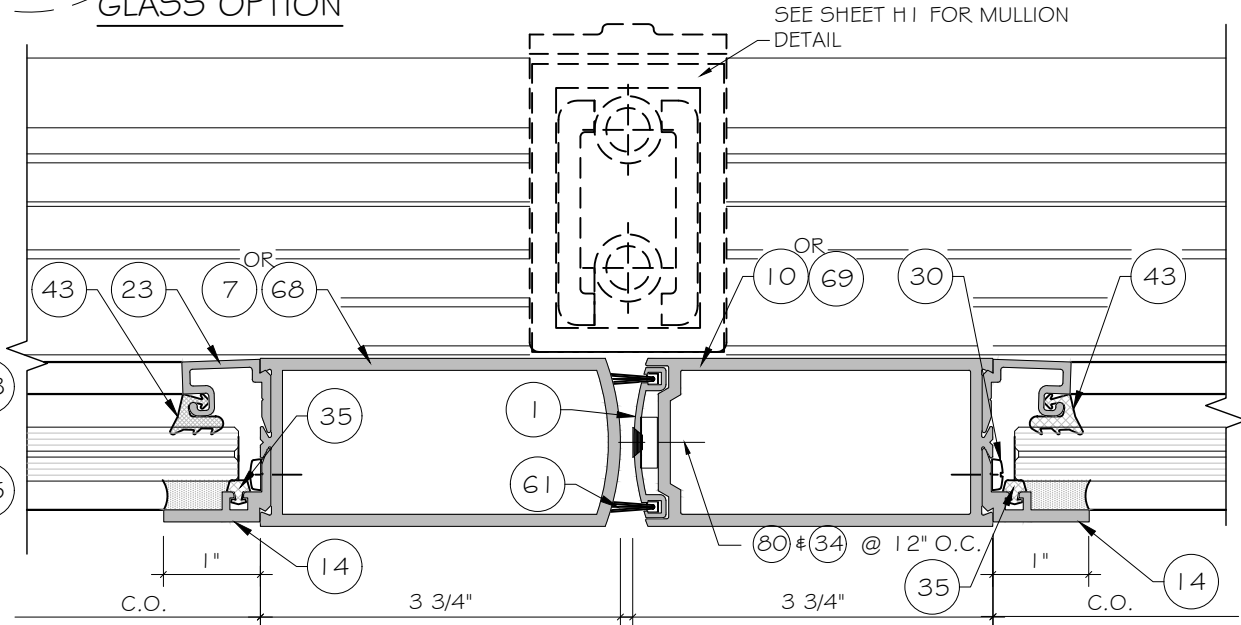


GLASS OPTION



EXTERIOR

3  
D4  
DETAIL  
DOOR W/ CONCEALED  
VERTICAL ROD PANIC  
DEVICE



EXTERIOR

3  
D4  
DETAIL  
DOOR W/ REMOVABLE  
MULLION AND RIM  
PANIC DEVICE

\*NOTE:  
REINFORCEMENT (64), (65) & (66) ARE ONLY REQUIRED  
AND APPLICABLE WHEN A REGENT 5770 CONCEALED  
PANIC DEVICE IS USED.

PANIC DEVICE OPTION  
SEE HARDWARE BOM

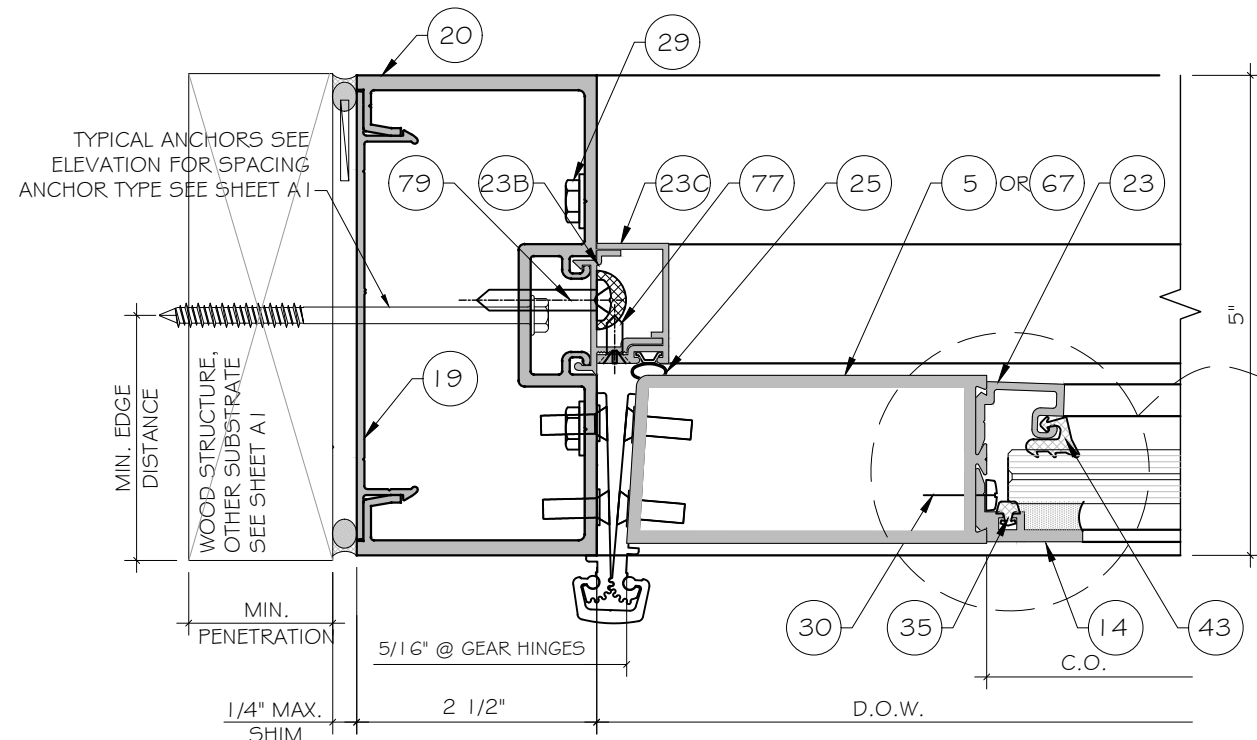
STOREFRONT SEE SEPARATE  
FLORIDA APPROVAL

PRODUCT CONTROL APPROVAL

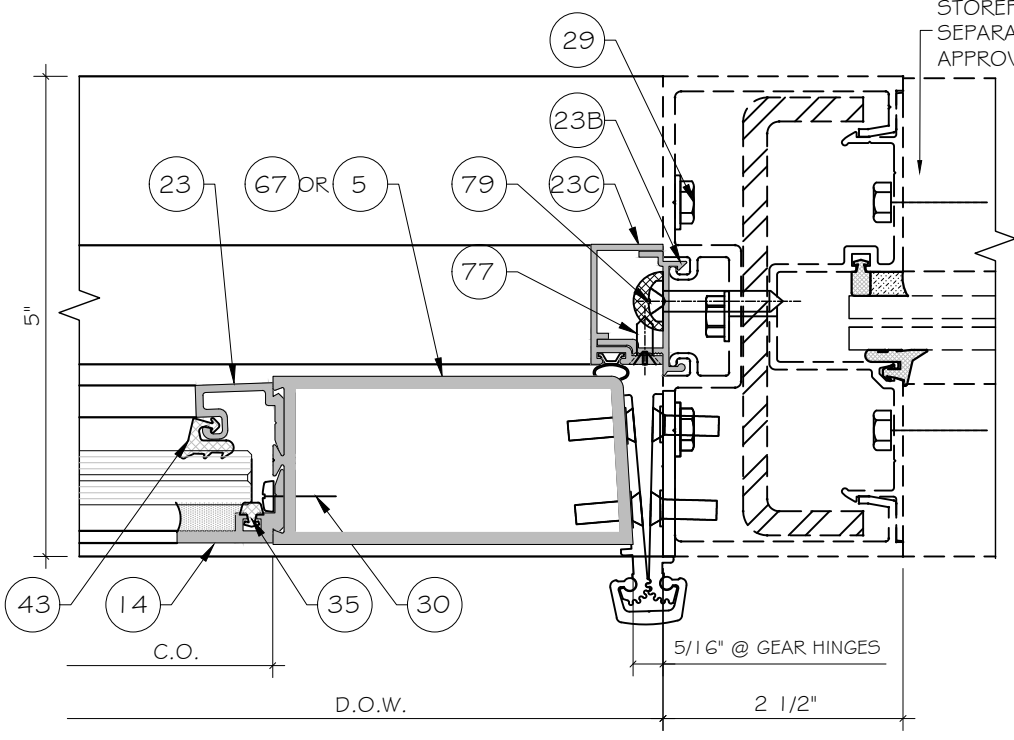
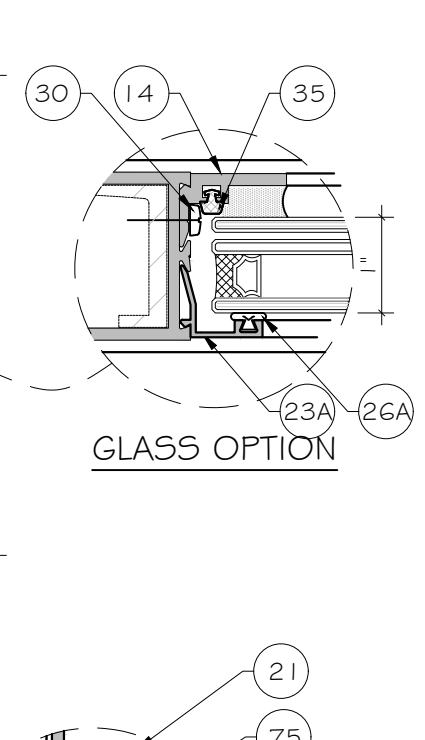


Drawn Date	Scale
01.05.2022	AS SHOWN
Drawn By	Description
Date	
Rev. No.	
DRAWING NO.	TD22-01
SHEET NO.	D4
	10 OF 20

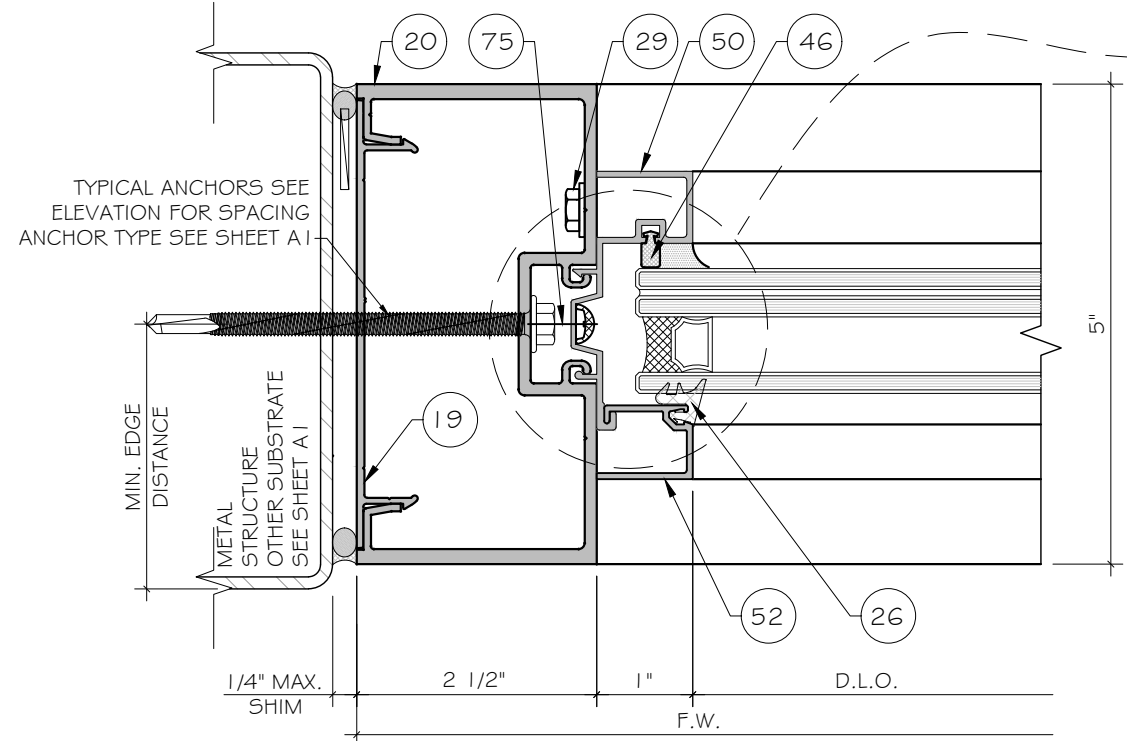




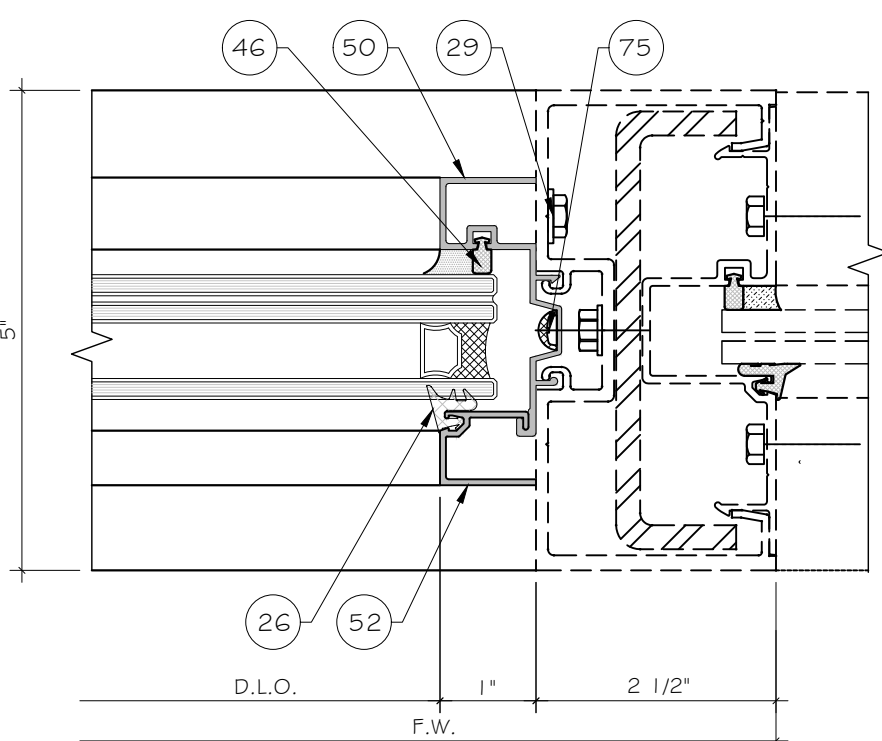
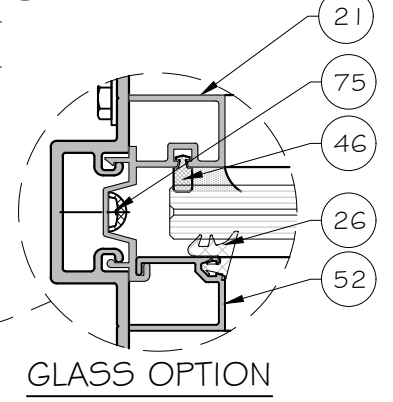
EXTERIOR  
1  
D5  
DETAIL



EXTERIOR  
2  
D5  
DETAIL



EXTERIOR  
3  
D5  
DETAIL



EXTERIOR  
4  
D5  
DETAIL

PRODUCT CONTROL APPROVAL

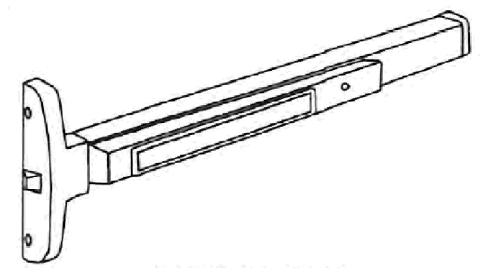
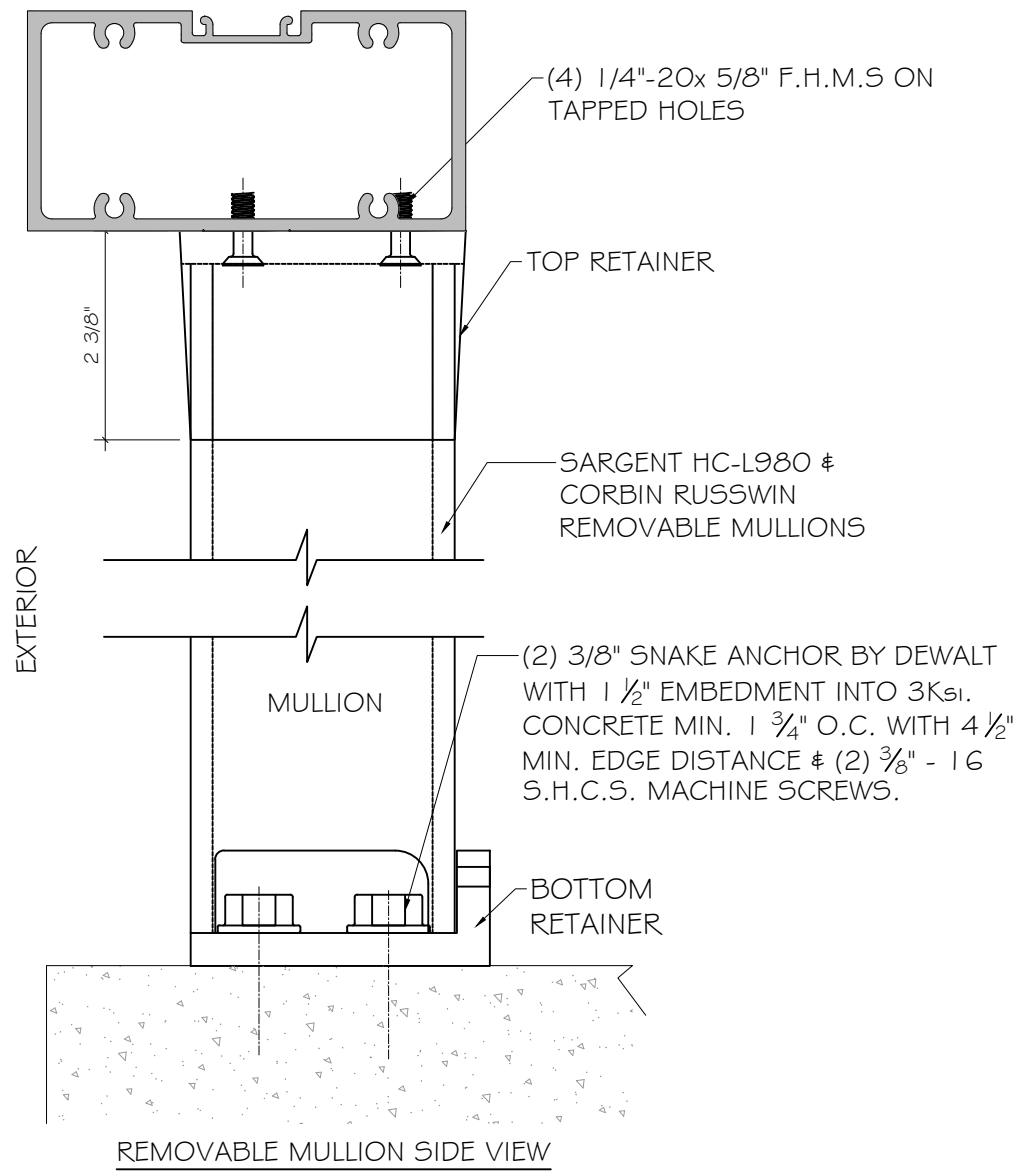
YIPING WANG  
TEXAS REGISTRATION  
TX#136420  
136420  
LICENSED  
PROFESSIONAL ENGINEER  
April 18th, 2022

**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS  
12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117  
www.MCYEngineering.com MCY@mcyengineering.com

MSD-375 & WSD-500 STORMMAX<sup>®</sup> ALUMINUM  
ENTRANCE DOORS (L.M.I.)  
Oldcastle BuildingEnvelope<sup>®</sup>  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P:(972) 551-6100

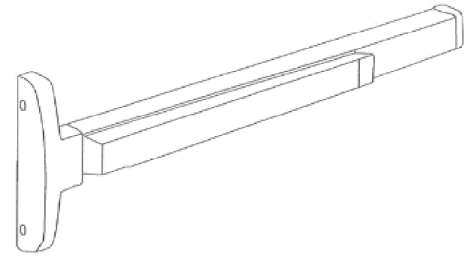
Rev. No.	Date	Drawn By	Description
Drawn Date	Scale		
01.05.2022	AS SHOWN		
DRAWING NO.			
TD22-01			
D5			
Sheet No.			
11 OF 20			

# REMOVEABLE MULLION ASSEMBLY DETAILS FOR SARGENT, CORBIN RUSSWIN & VON DUPRIN RIM EXIT DEVICE.



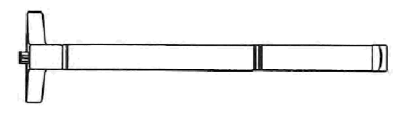
SARGENT AD8500 NARROW RIM EXIT WITH HC-L980 REMOVEABLE MULLION WITH 649 STRIKES

MAX. DOOR. SIZE	ALLOWABLE LOAD
42"X96"(X)	±60 PSF
84"X96"(XX)	±60 PSF



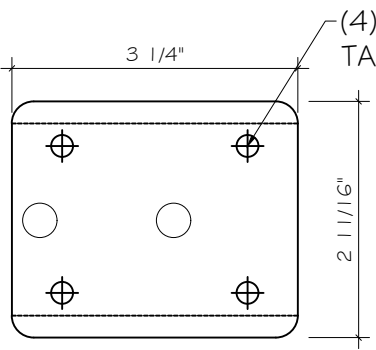
VON DUPRIN 99 WITH 425 SNB RIM PANIC DEVICE

MAX. DOOR. SIZE	ALLOWABLE LOAD
36"X96" (XX)	±50 PSF
72"X96" (XX)	±50 PSF

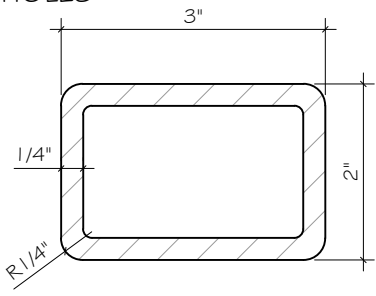


CORBIN RUSSWIN ED42005 NARROW EXIT WITH WS 708AKM REMOVEABLE MULLION

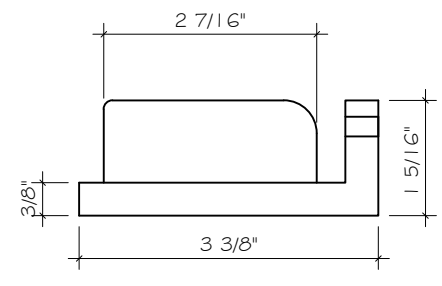
MAX. DOOR. SIZE	ALLOWABLE LOAD
42"X96"(X)	±60 PSF
84"X96"(XX)	±60 PSF



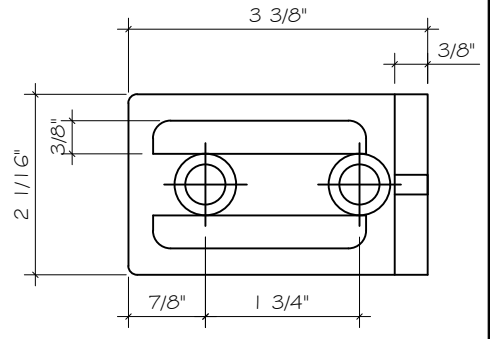
BOTTOM VIEW OF TOP RETAINER



MULLION HC-L980



BOTTOM RETAINER SIDE VIEW



BOTTOM RETAINER TOP VIEW

**MATERIALS:**  
 MULLION BODY: CARBON STEEL HOT ROLLED, WELDED SEAM PER ASTM A500 GRADE B.  
 FINISH: PRIME COAT RED PAINT  
 TOP & BOTTOM RETAINERS: CAST IRON, PRIMED.

REFER TO MANUFACTURER'S INSTRUCTIONS FOR DETAILS OF VON DUPRIN 9954 REMOVEABLE MULLION

PRODUCT CONTROL APPROVAL

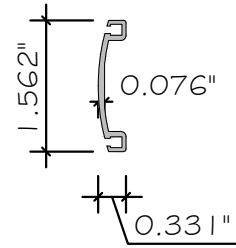
YIPING WANG  
 TEXAS REGISTERED  
 TX#136420  
**YIPING WANG**  
 136420  
 LICENSED  
 PROFESSIONAL ENGINEER  
 April 18th, 2022

Drawn Date 01.05.2022	Scale AS SHOWN
DRAWING NO. TD22-01	
Sheet No. H1	
12 OF 20	

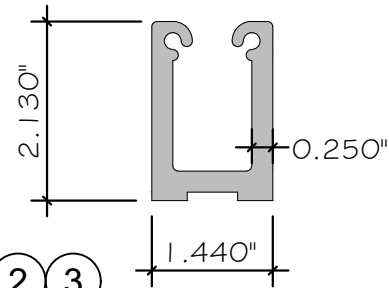
**MCY ENGINEERING, INC.**  
 GLAZING CONSULTANTS  
 12781 MIRAMAR PKWY. Ste.301  
 MIRAMAR, FL 33027 P: 305.271.0117  
 www.MCYEngineering.com MCY@mcyengineering.com

MSD-375 & WSD-500 STORMMAX® ALUMINUM ENTRANCE DOORS (L.M.I.)  
 Oldcastle BuildingEnvelope®  
 803 AIRPORT ROAD  
 TERRELL, TX 75160  
 P:(972) 551-6100

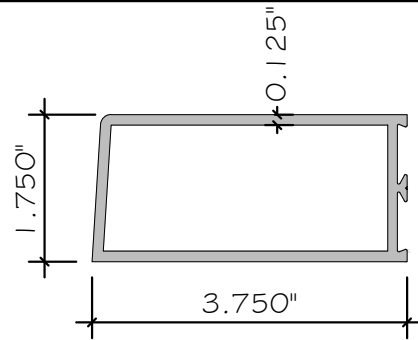
**1** ADJUSTABLE ASTRAGAL ASSEMBLY  
AS-6 ALUM.6063-T6



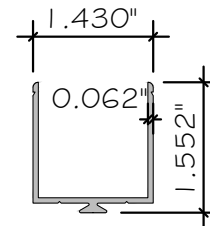
**2 3**  
**4 4A** CORNER BLOCKS  
CB-2,8,21, 38, 61 & 71  
**4B 4C** ALUM.6063-T5



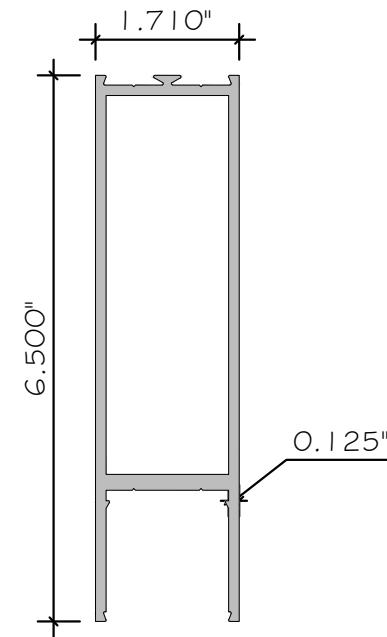
**5** MEDIUM STILE MS-375  
D-6 ALUM.6063-T5



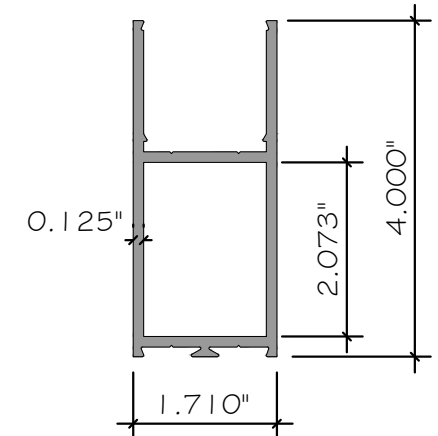
**9** MID RAIL ADAPTER  
D-62 ALUM.6063-T5



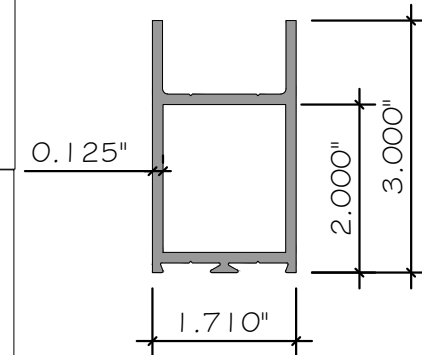
**6** HORIZONTAL MID-RAIL/TOP RAIL  
D-21 ALUM.6063-T5



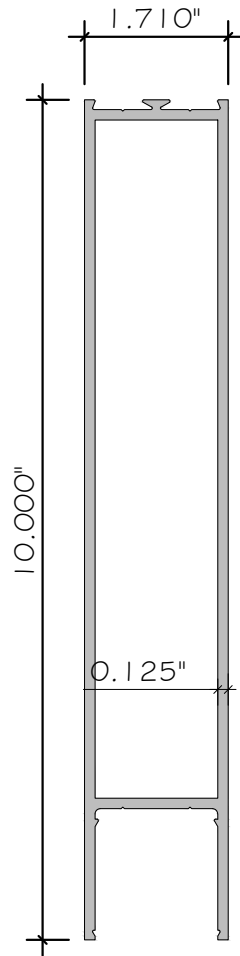
**8A** 4" DOOR TOP/ MID/  
BOTTOM RAIL  
D-2 ALUM.6063-T5



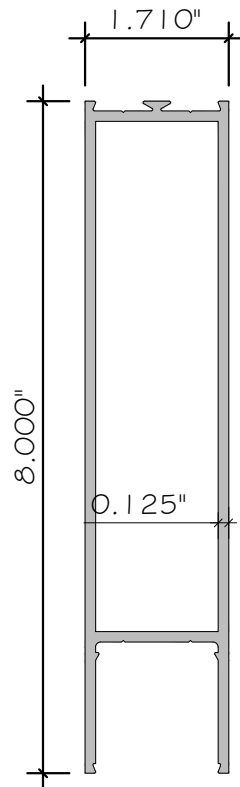
**8B** 3" DOOR TOP RAIL  
D-8 ALUM.6063-T5



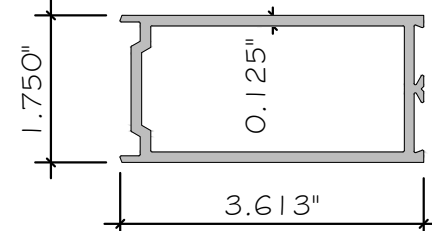
**11** 10" BOTTOM RAIL  
D-61 ALUM.6063-T6



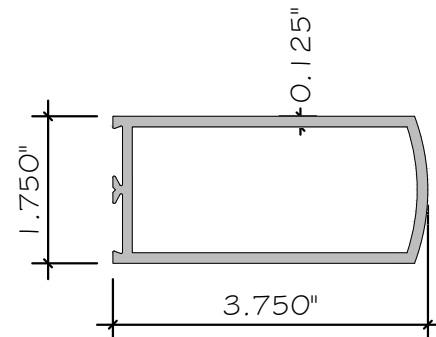
**11A** 8" BOTTOM RAIL  
D-71 ALUM.6063-T6



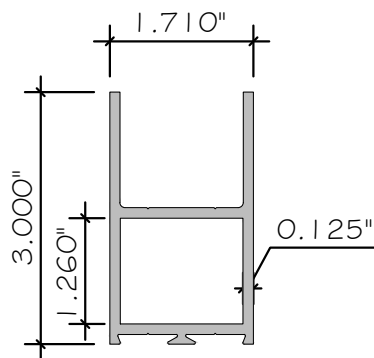
**10** MEDIUM ACTIVE MEETING STILE MS-375  
D-69 ALUM.6063-T5



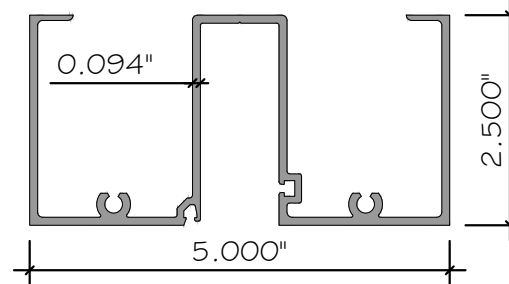
**7** MEDIUM INACTIVE MEETING  
STILE MS-375  
D-24 ALUM.6063-T5



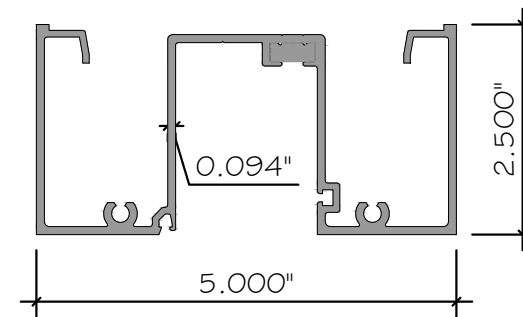
**8** DOOR TOP RAIL  
D-38 ALUM.6063-T5



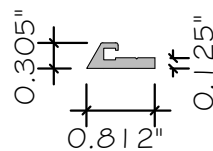
**56** HEAD/JAMB MULLION  
FG5700 ALUM.6063-T6



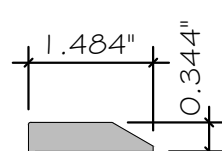
**72** JAMB MULLION  
FG5770 ALUM.6063-T6



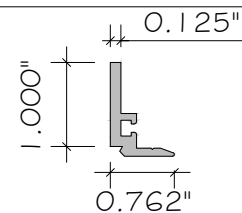
**12** DOOR BOTTOM RAIL  
SWEEP ASSEMBLY  
D-118 ALUM.6063-T5



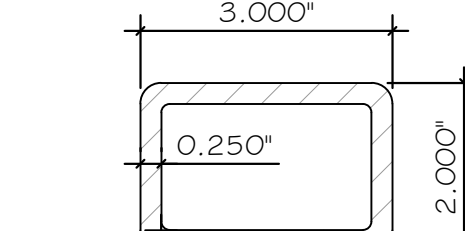
**13** PANIC DOOR STOP  
D-134-3 ALUM.6063-T5



**14** SCREW ATTACHED  
DOOR GLASS STOP  
D-152 ALUM.6063-T6



**82** REMOVABLE MULLIONS  
HC-L980 STEEL



PRODUCT CONTROL APPROVAL

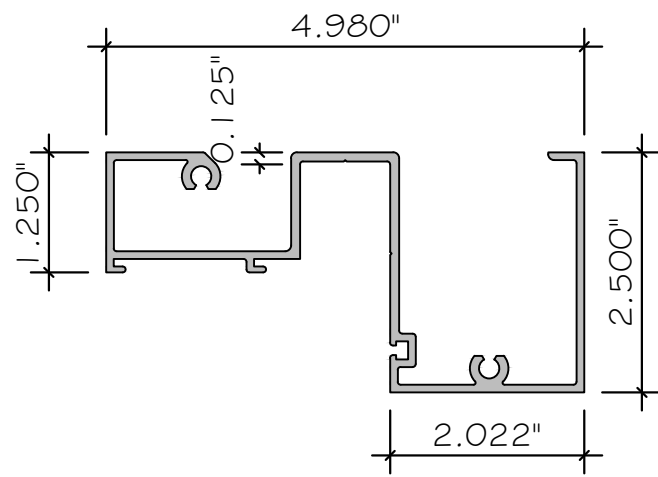


Drawn Date	Scale
01.05.2022	AS SHOWN
DRAWING NO.	
TD22-01	
PARTS	
Sheet No.	13 OF 20

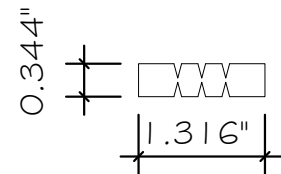
MSD-375 & WSD-500 STORMMAX<sup>®</sup> ALUMINUM  
ENTRANCE DOORS (L.M.I.)  
Oldcastle BuildingEnvelope<sup>®</sup>  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P:(972) 551-6100

**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS  
12781 MIRAMAR PKWY. Ste.301  
MIRAMAR, FL 33027 P: 305.271.0117  
www.MCYEngineering.com MCY@mcyengineering.com

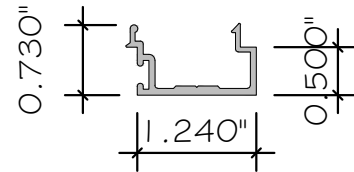




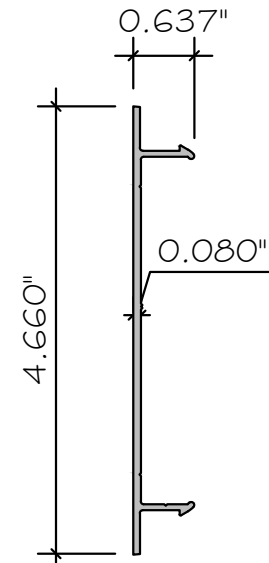
**15** HEAD HORIZONTAL / TRANSOM  
HEADER FOR FG-5700  
FG-5701 ALUM.6063-T5



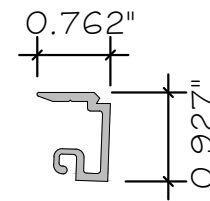
**16** SETTING BLOCK  
HP-92 EPDM



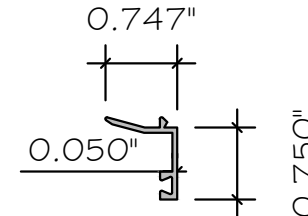
**18** SNAP-IN DOOR STOP  
FG-5163 ALUM.6063-T6



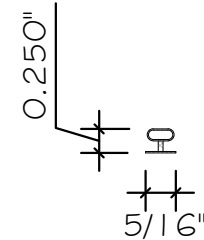
**19** FLAT FILLER  
FG-5715  
ALUM.6063-T6



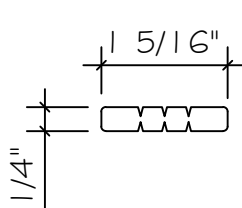
**23** SNAP-IN DOOR LAMINATED  
GLASS STOP  
5-83 ALUM.6063-T6



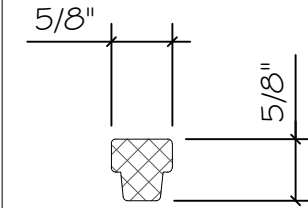
**23A** SNAP-IN DOOR INSULATING  
GLASS STOP  
5-81 ALUM.6063-T6



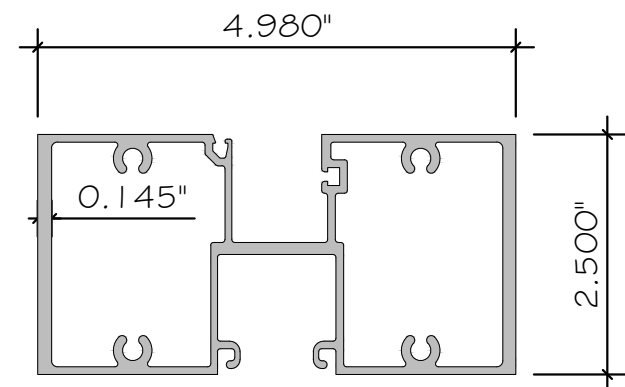
**25** DOOR STOP WEATHERING  
D-125 SANTOPRENE



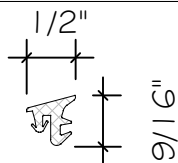
**36** SETTING BLOCK  
HP-17 EPDM



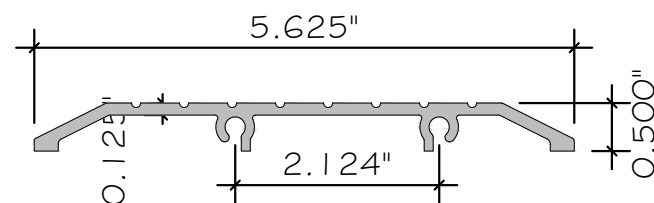
**36A** SETTING BLOCK  
FG-5229 EPDM



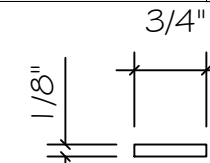
**22** DOOR HEADER  
FG-5766 ALUM.6063-T6



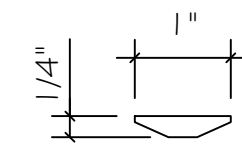
**26** L.G. DRY GLAZING GASKET  
FG-5730 EPDM



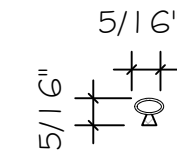
**24** THRESHOLD  
TH-57 ALUM.6063-T5



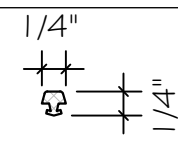
**41** L.G. SETTING BLOCK  
FG5000-PP-1 EPDM



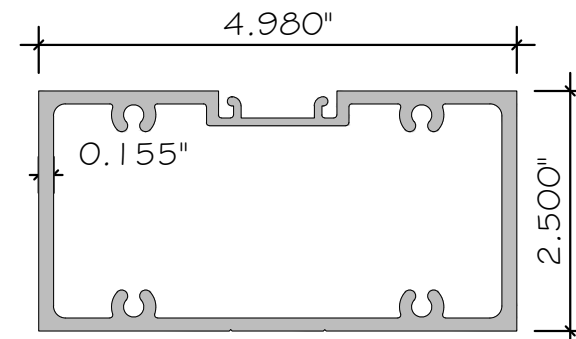
**41A** I.G. SETTING BLOCK  
D-123 RIGID PVC



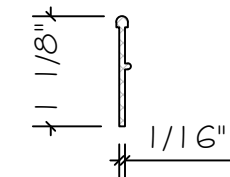
**26A** I.G. GLAZING GASKET  
V-28 PVC



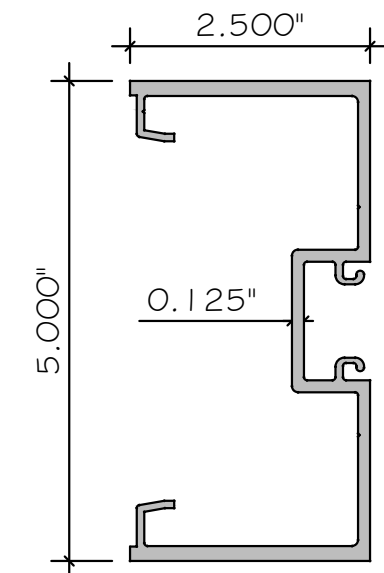
**35** SPACER GASKET  
FG-5188 SILICONE



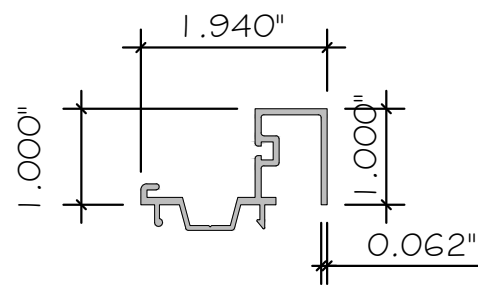
**42** DOOR HEADER - OFFSET ARM  
FG-5765 6063-T6



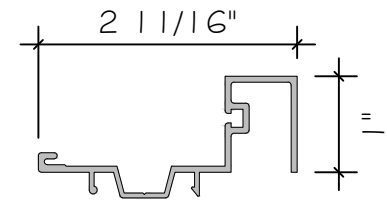
**45** DOOR SWEEP  
D-120 SILICONE



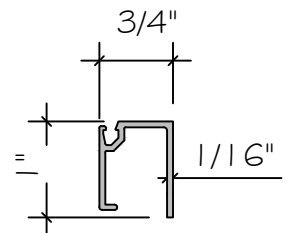
**20** DOOR JAMB AT FG-5750T  
FG-5713 ALUM.6063-T6



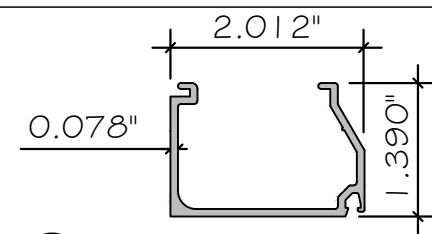
**21** TRANSOM SASH  
FG-5198 ALUM.6063-T6



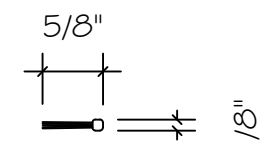
**50** TRANSOM SASH  
FG-5181 ALUM. 6063-T5



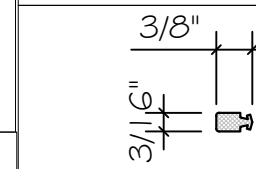
**52** TRANSOM GLASS STOP  
FG-5769 ALUM. 6063-T5



**47** GLASS STOP  
FG-5710 ALUM. 6063-T6



**61** ASTRAGAL WEATHERSTRIP  
WP-085

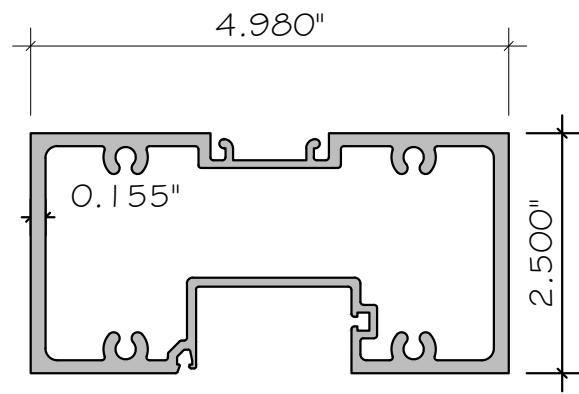


**46** SPACER GASKET  
FG-5731 SILICONE

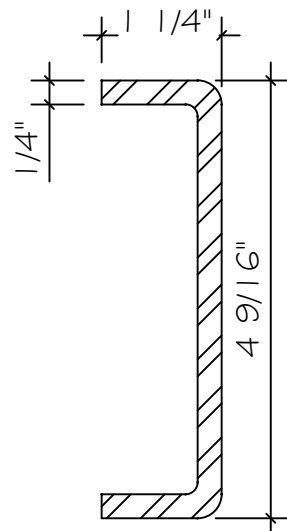
PRODUCT CONTROL APPROVAL

YIPING WANG  
REGISTERED PROFESSIONAL ENGINEER  
TX#136420  
136420  
APRIL 18TH, 2022

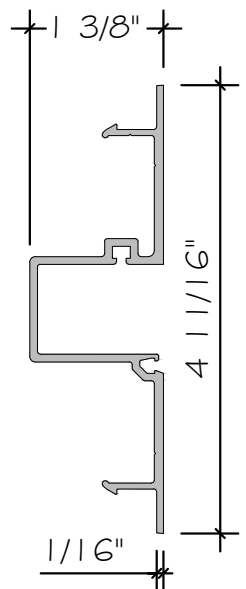
Rev. No.	Date	Drawn By	Description



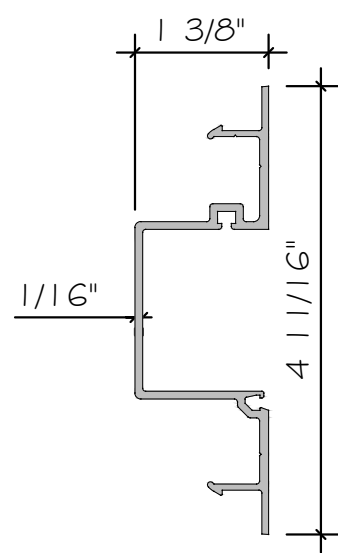
**42A** DOOR HEADER / TRANSOM BAR  
FG-5767



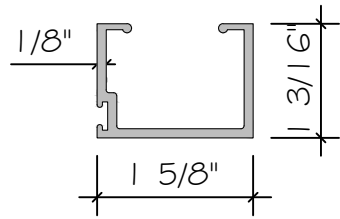
**57** DOOR JAMB STEEL REINFORCEMENT  
FG-5000-PP-8 A36 STEEL



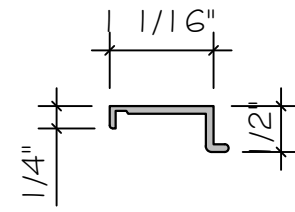
**70** POCKET FILLER  
FG-5711  
ALUM. 6063-T5



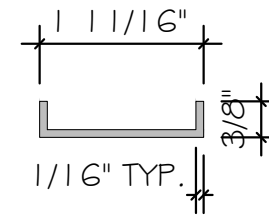
**71** POCKET FILLER  
FG-5761  
ALUM. 6063-T5



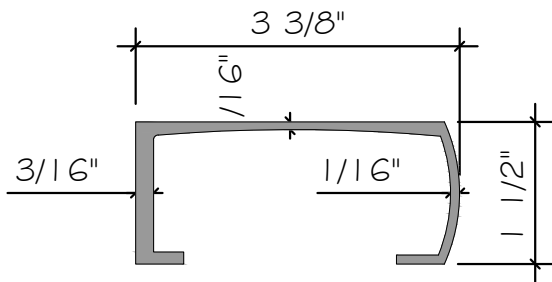
**53** DOOR STOP  
DS-104



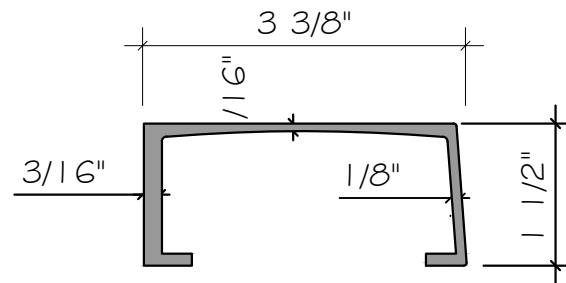
**60** ANCHOR PLATE  
FG-5716



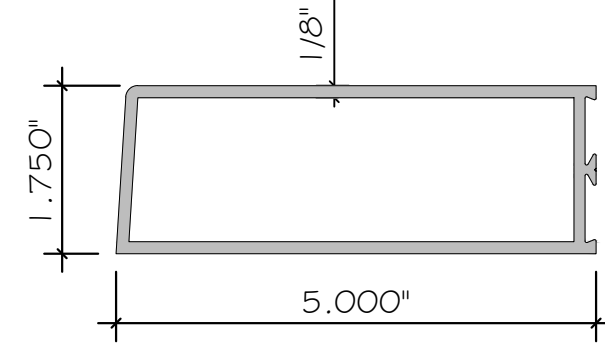
**62** ANCHOR PLATE  
FG-5000-FP-19, 8" LONG  
OR TH-60 (CONTINUOUS)



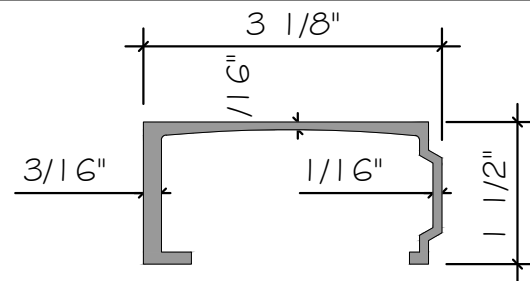
**64** STILE REINFORCEMENT SLEEVE  
D-243-01 5.26" LONG  
ALUM. 6063-T6



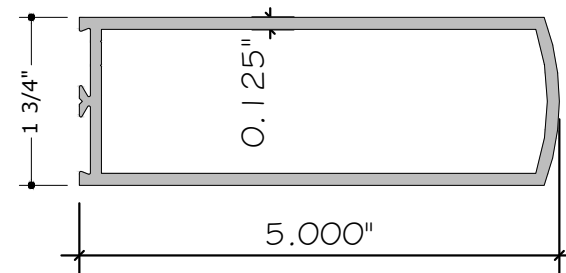
**66** STILE REINFORCEMENT SLEEVE  
D-247-01 5.26" LONG  
ALUM. 6063-T6



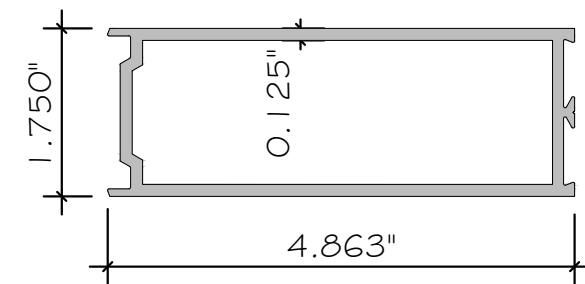
**67** WIDE STILE WS-500  
D-13 ALUM. 6063-T5



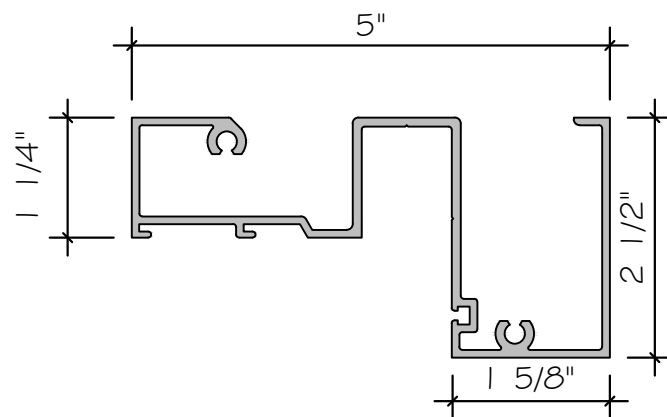
**65** STILE REINFORCEMENT SLEEVE  
D-244-01 5.26" LONG  
6063-T6 ALUM.



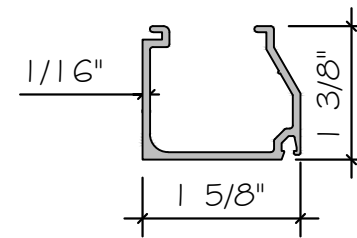
**68** INACTIVE MEETING WIDE STILE WS-500  
D-25 ALUM. 6063-T5



**69** ACTIVE MEETING WIDE STILE WS-500  
D-70 ALUM. 6063-T5

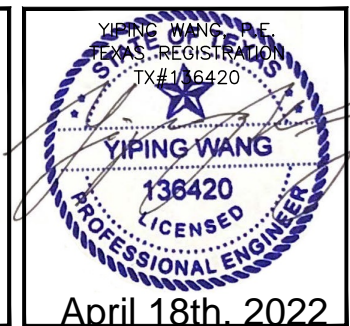


**73** HEAD/ TRANSOM HEADER  
FG5751  
ALUM. 6063-T6



**74** GLASS STOP FOR  
FG-5760  
ALUM. 6063-T6

PRODUCT CONTROL APPROVAL



MSD-375 & WSD-500 STORMMAX® ALUMINUM  
ENTRANCE DOORS (L.M.I.)

Oldcastle BuildingEnvelope®

803 AIRPORT ROAD  
TERRELL, TX 75160

P: (972) 551-6100

MCY ENGINEERING, INC.  
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117

www.MCYEngineering.com MCY@mcyengineering.com

Rev. No.	Date	Drawn By	Description

Drawn Date: 01.05.2022 Scale: AS SHOWN

DRAWING NO. TD22-01

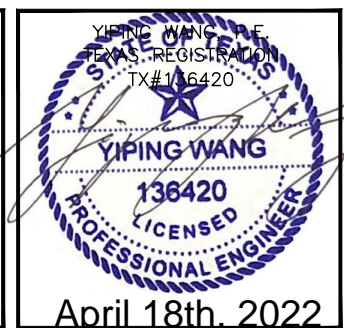
PARTS

Sheet No. 15 OF 20

# BILL OF MATERIALS

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	MANF. / SUPPLIER / REMARKS
1	AS-6	ADJUSTABLE ASTRAGAL ASSEMBLY	6063-T6 ALUMINUM	OBE
2	CB-21	CORNER BLOCK	6063-T5 ALUMINUM	OBE / 4.437" LONG
3	CB-38	DOOR CORNER BLOCK	6063-T5 ALUMINUM	OBE / 1.23" LONG
4	CB-61	DOOR CORNER BLOCK	6063-T5 ALUMINUM	OBE / 8" LONG
4A	CB-71	DOOR CORNER BLOCK	6063-T5 ALUMINUM	OBE / 6" LONG
4B	CB-2	DOOR CORNER BLOCK	6063-T5 ALUMINUM	OBE / 2" LONG
4C	CB-8	DOOR CORNER BLOCK	6063-T5 ALUMINUM	OBE / 1.5" LONG
5	D-6	MEDIUM STILE MS-375	6063-T5 ALUMINUM	OBE
6	D-21	6-1/2" HORIZONTAL MID-RAIL/ TOP RAIL/ BOTTOM RAIL	6063-T5 ALUMINUM	OBE
7	D-24	INACTIVE MEETING MEDIUM STILE MS-375	6063-T5 ALUMINUM	OBE
8	D-38	3" DOOR TOP RAIL	6063-T5 ALUMINUM	OBE
8A	D-2	4" DOOR TOP RAIL/ MID RAIL/ BOTTOM RAIL	6063-T5 ALUMINUM	OBE
8B	D-8	3" DOOR TOP RAIL	6063-T5 ALUMINUM	OBE
9	D-62	MID RAIL ADAPTER	6063-T5 ALUMINUM	OBE
10	D-69	ACTIVE MEETING MEDIUM STILE MS-375	6063-T5 ALUMINUM	OBE
11	D-61	10" ADA BOTTOM RAIL/ MID RAIL	6063-T6 ALUMINUM	OBE
11A	D-71	8" BOTTOM RAIL/ MID RAIL	6063-T6 ALUMINUM	OBE
12	D-118	DOOR BOTTOM RAIL SWEEP ASSEMBLY	6063-T6 ALUMINUM	OBE / CUT TO DOOR WIDTH MINUS 5/8"
13	D-134-3	PANIC DOOR STOP	6063-T6 ALUMINUM	OBE
14	D-152	SCREW ATTACHED DOOR GLASS STOP	6063-T6 ALUMINUM	OBE / ATTACH W/ 30 1/2" ON CENTER
15	FG-5701	HEAD HORIZONTAL/TRANSOM HEADER	6063-T6 ALUMINUM	OBE / FOR FG-5700 SYSTEMS
16	HP-92	SETTING BLOCK	EPDM	VARIES / 90 DUROMETER
18	FG-5163	SNAP-IN DOOR STOP	6063-T6 ALUMINUM	OBE
19	FG-5715	FLAT FILLER	6063-T6 ALUMINUM	OBE / RUNS FULL LENGTH
20	FG-5713	DOOR JAMB FG-5700, FG-5750 & FG-5750T	6063-T6 ALUMINUM	OBE
21	FG-5198	TRANSOM SASH	6063-T5 ALUMINUM	OBE
22	FG-5766	DOOR HEADER/TRANSOM BAR	6063-T6 ALUMINUM	OBE
23	S-83	SNAP-IN DOOR LAMINATED GLASS STOP	6063-T6 ALUMINUM	OBE
23A	S-81	SNAP-IN DOOR INSULATING GLASS STOP	6063-T5 ALUMINUM	OBE
23B	FG-5222	DOOR STOP BASE	6063-T5 ALUMINUM	OBE
23C	FG-5223	DOOR STOP COVER	6063-T5 ALUMINUM	OBE
24	TH-57	THRESHOLD	6063-T5 ALUMINUM	OBE
25	D-125	DOOR STOP WEATHERING	SANTOPRENE / POLYPROPYLENE	UNIVERSAL RUBBER
26	FG-5730	GLAZING GASKET	EPDM	VARIES / 70 DUROMETER, USE AT LAMINATED GLASS
26A	V-28	GLAZING GASKET	PVC	OBE / USE AT INSULATED GLASS
27	FS-2	ATTACH D-118 SWEEP TO DOOR BOTTOM, #8 X 1/2" PFH SMS	STEEL	VARIES
28	FS-7	ATTACH RAILS TO CORNER BLOCK, #10 X 3/4" PFH	STEEL, GEOMET 720L	VARIES
29	FS-8	SPLINE ASSEMBLY SCREW, #14 X 1" HH STS	STEEL, GEOMET 720L	VARIES
30	FS-114	ATTACH D-152 TO DOOR #8 X 3/8" PPH SMS	STEEL, ZINC PLATED	VARIES / SPACED @ 12" O.C
31	SM-5601	JOINT SEALANT TAPE	BUTYL	SCHNEE-MOREHEAD
32	FS-139	1/4"-20 X 1" HWH SERRATED TYPE F	STEEL, GEOMET 750L	VARIES
32A	FS-145	1/4"-20 X 3/4" SERRATED HEX WASHER HEAD MACHINE SCREW	STEEL	ANCHOR OPTION FOR ITEM 32
33	FS-235	1/4"-20 x 5/8" PFH MS, ATTACH D-134-3 TO THRESHOLD	STEEL	VARIES
34	FS-49	#8 X 3/4" POH SMS, ADJUSTABLE ASTRAGAL SCREW	STEEL, GEOMET 720L	VARIES
35	FG-5188	SPACER GASKET	SILICONE	VARIES / 85 DUROMETER
36	HP-17	SETTING BLOCK	EPDM	VARIES / 90 DUROMETER
36A	FG-5229	SETTING BLOCK	EPDM	VARIES / 85 DUROMETER
37	DOWSIL 995	STRUCTURAL SILICONE	SILICONE	DOWSIL
37A	PROGLAZE II	STRUCTURAL SILICONE	SILICONE	TREMCO
38	DYMONIC 100/ DOWSIL 795	USED AS PERIMETER SEALANT	POLYURETHANE/ SILICONE	TREMCO/ DOWSIL
39	NOT USED			

PRODUCT CONTROL APPROVAL



**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS  
12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117  
www.MCYEngineering.com MCY@mcyengineering.com

MSD-375 & WSD-500 STORMMAX® ALUMINUM  
ENTRANCE DOORS (L.M.I.)  
Oldcastle BuildingEnvelope®  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P: (972) 551-6100

Rev. No.	Date	Drawn By	Description

Drawn Date: 01.05.2022      Scale: AS SHOWN  
DRAWING NO. TD22-01  
BOM  
Sheet No. 16 OF 20



# BILL OF MATERIALS

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	MANF. / SUPPLIER / REMARKS
40	FS-140	1/4"-20 X 3/4" HWH SERRATED TYPE F	STEEL, GEOMET 720L	VARIES
41	FG-5000-PP1	SETTING BLOCK	EPDM 85 DURO	VARIES / USE FOR LAMINATED GLASS
41A	D-123	SETTING BLOCK	RIGID PVC	VARIES / USE FOR INSULATED GLASS
42	FG-5765	DOOR HEADER-OFFSET ARM	6063-T6 ALUMINUM	OBE
42A	FG-5767	DOOR HEADER/TRANSOM BAR	6063-T6 ALUMINUM	OBE
43	FG-1133	GASKET	EPDM	VARIES
44	FS-201	ATTACH DS-104 TO FG-5765, #10 X 2" PFH SMS	STEEL	VARIES / SINGLE DOOR: 1 EA 6" FROM LOCK STILE. PAIR OF DR5: 1 EA 6" EACH SIDE OF DR C/L
45	D-120	DOOR WEATHERING STRIP	SILICONE 50 DURO	OBE / DOOR WIDTH MINUS 5/8"
46	FG-5731	SPACER GASKET	SILICONE 70 DURO	VARIES
47	FG-5710	GLASS STOP	6063-T6 ALUMINUM	OBE / FOR FG-5700 SYSTEMS
50	FG-5181	TRANSOM SASH	6063-T5 ALUMINUM	OBE
51	FS-15	ATTACH SC-1 CLIP, 3/16" X 1/8" UNIVERSAL HEAD DRIVE PIN ALUM.	STEEL	VARIES / 9" O.C
52	FG-5769	TRANSOM GLASS STOP	6063-T5 ALUMINUM	OBE
53	DS-104	DOOR STOP FOR COC COVER	6063-T6 ALUMINUM	OBE / USES SC-1 CLIP
56	FG-5700	HEAD/JAMB MULLION	6063-T6 ALUMINUM	OBE
57	FG-5000-PP-8	1-1/4" X 4-9/16" X 1/4" STEEL CHANNEL	A-36 STEEL (ZINC PLATED)	VARIES / FULL LENGH OF MULLION. COAT RICH PRIMER
58	FS-354	1/4-20 X 3/8" HH TYPE F, ATTACH STL. REINFORCEMENT	STEEL, GEOMET 720L	VARIES
59	SC-1	STAINLESS STEEL CLIP	STAINLESS STEEL	OBE / 9" O.C
60	FG-5716	ANCHOR PLATE	6063-T5 ALLUMINUM	OBE / USED @ 22
61	WP-085	ASTRAGAL WEATHERSTRIP	WOOL PILE	VARIES
62	FG-5000-FP-19 OR TH-60	ANCHOR PLATE, 8" LONG FOR FG-5000-FP-19, CONTINUOUS FOR TH-60	6063-T5 ALLUMINUM	OBE / USED ALIGN WITH ANCHOR BOLTS IN THRESHOLD
63	FG-5750	JAMB MULLION	6063-T6 ALLUMINUM	OBE
64	D-243-01	STILE REINFORCEMENT SLEEVE	6063-T6 ALUMINUM	USED AT DOOR STILE SILL WITH REGENT HARDWARE
65	D-244-01	STILE REINFORCEMENT SLEEVE	6063-T6 ALUMINUM	USED AT DOOR STILE SILL WITH REGENT HARDWARE
66	D-247-01	STILE REINFORCEMENT SLEEVE	6063-T6 ALUMINUM	USED AT DOOR STILE SILL WITH REGENT HARDWARE
67	D-13	WIDE STILE WS-500	6063-T5 ALUMINUM	OBE
68	D-25	INACTIVE MEETING WIDE STILE WS-500	6063-T5 ALUMINUM	OBE
69	D-70	ACTIVE MEETING WIDE STILE WS-500	6063-T5 ALUMINUM	OBE
70	FG-5711	POCKET FILLER FOR FG-5700	6063-T6 ALUMINUM	OBE
71	FG-5761	POCKET FILLER FOR FG-5750	6063-T6 ALUMINUM	OBE
72	FGT-5770	JAMB MULLION	6063-T6 ALUMINUM	OBE
73	FG-5751	HEAD/ TRANSOM HEADER	6063-T6 ALUMINUM	OBE / FOR FG-5750, FG-5750T SYSTEMS
74	FG-5760	GLASS STOP	6063-T6 ALUMINUM	OBE / FOR FG-5750, FG-5750T SYSTEMS
75	FS-6	ATTACH FG-5181 SASH, #10 X 3/4" PPH SMS	STEEL, ZINC PLATED	OBE / FOR FG-5750, FG-5750T SYSTEMS
76	FS-22	ATTACH BUTT HINGES AND BACK UP PLATES, #12 X 1/2" PFHMS	STEEL, GEOMET 720L	OBE
77	FS-57	#8 X 3/8" PFHUC, ATTACH FG-5223	STEEL, ZINC PLATED	OBE
78	BH-26	BACKUP PLATE - BUTT HINGES	6063-T6 ALUMINUM	OBE
79	FS-115	#10 X 1" B POINT PHILLIPS PAN HEAD	STEEL, ZINC PLATED	VARIES
80	SC-12	ASTRAGAL SPRING CLIP	25 GA SPRING STEEL	OBE
81	36395	DOOR CORNER BACK UP PLATE	10 GA GLAZED STEEL	VARIES
82	HC L980	HC L980 REMOVABLE MULLION WITH 649 STRIKES, 7'-0" X 8'-0"	STEEL	SARGENT, TO BE USED WITH AD8500 RIM DEVICE EXCLUSIVELY, MAX. DESIGN PRESSURE: ±60 PSF

PRODUCT CONTROL APPROVAL



**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117

www.MCYEngineering.com MCY@mcyengineering.com

**MSD-375 & WSD-500 STORMMAX® ALUMINUM  
ENTRANCE DOORS (L.M.I.)**

Oldcastle BuildingEnvelope®  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P: (972) 551-6100

Rev. No.	Date	Drawn By	Description

Drawn Date: 01.05.2022 Scale: AS SHOWN

DRAWING NO. TD22-01

BOM

Sheet No. 17 OF 20

# HARDWARE SCHEDULE FOR SINGLE MSD-375 & WSD-500 DOORS

HARDWARE TYPE	HARDWARE MODEL AND DESCRIPTION	MANUFACTURER	MAX. DESIGN PRESSURE	MAX. DOOR SIZE	NOTES
3-POINT LOCK	MS 1850 DEADLOCK	ADAMS RITE	+70 / -80 PSF	3'-6" X 8'-0"	
3-POINT LOCK	MS 1850S + 4015 + 4016 DEADLOCK	ADAMS RITE	+70 / -70 PSF	4'-0" X 8'-0"	USE ADAMS RITE 41-028 LOCK ROD BRACKET
RIM PANIC	ED4200S RIM PANIC	CORBIN RUSSWIN	+60 / -60 PSF	3'-6" X 8'-0"	USE CORBIN RUSSWIN ED4200S STRIKE
CONCEALED PANIC	1285 CONCEALED VERTICAL ROD PANIC	JACKSON	+70 / -80 PSF	3'-6" X 8'-0"	
CONCEALED PANIC	2086 CONCEALED VERTICAL ROD PANIC	JACKSON	+70 / -80 PSF	3'-6" X 8'-0"	
CONCEALED PANIC	5770 CONCEALED VERTICAL ROD PANIC	REGENT	+70 / -80 PSF	3'-6" X 8'-0"	ONLY ALLOWED TO USED FOR MEDIUM STILES (5), (7) & (10)
CONCEALED PANIC	AD8410 CONCEALED VERTICAL ROD PANIC	SARGENT	+70 / -80 PSF	3'-6" X 8'-0"	OPTION FOR 4' X 8' ALLOWED UP TO +70 / -70 PSF
RIM PANIC	AD8500 RIM PANIC	SARGENT	+60 / -60 PSF	3'-6" X 8'-0"	USE SARGENT 649 STRIKE
SURFACE PANIC	9927 SURFACE PANIC VERTICAL ROD	VON DUPRIN	+70 / -80 PSF	3'-6" X 8'-0"	
CONCEALED PANIC	9947 CONCEALED PANIC VERTICAL ROD	VON DUPRIN	+70 / -80 PSF	3'-6" X 8'-0"	
SURFACE CLOSER	MODEL VARIES BY MANUFACTURER	VARIES	N/A	N/A	
CONCEALED CLOSER	21-211 HVY DUTY W/OFFSET SWING ARM	JACKSON	N/A	N/A	
BUTT HINGES 4" X 4 1/2"	4001 BALL BEARING STAINLESS STEEL	REGENT	+70 / -80 PSF	3'-6" X 8'-0"	(3) PER DOOR LEAF OPTION FOR 4" X 8" ALLOWED UP TO +70/-70 PSF WITH (4) PER DOOR LEAF
BUTT HINGES 4" X 4 1/2"	BB1199 BALL BEARING STAINLESS STEEL	HAGER	+70 / -80 PSF	4'-0" X 8'-0"	(4) PER DOOR LEAF
BUTT HINGES 4" X 4 1/2"	RCTA2314 BALL BEARING STAINLESS	MC KINNEY	+60 / -60 PSF	3'-6" X 8'-0"	(3) PER DOOR LEAF
CYLINDER	CY-1	OBE	N/A	N/A	
KEY CONTROL	106 KEY CONTROL FOR SARGENT	SARGENT	N/A	N/A	
THUMB TURN	CY-3	OBE	N/A	N/A	
CYLINDER	CY-5	OBE	N/A	N/A	
LOCK INDICATOR	AR-4089 OPTIONAL DEVICE	ADAMS RITE	N/A	N/A	
TOP PIVOTS	OP-6 / OP-7	OBE	+70 / -80 PSF	3'-6" X 8'-0"	
INTERMEDIATE PIVOTS	M-19	RIXON	+70 / -80 PSF	3'-6" X 8'-0"	
BOTTOM PIVOTS	OP-9 / OP-10	OBE	+70 / -80 PSF	3'-6" X 8'-0"	
CONT. GEAR HINGE	780-224 HD CONTINUOUS GEAR HINGES	ROTON	+70 / -80 PSF	3'-0" X 8'-0"	
CONT. GEAR HINGE	CFM835LI HDI CONTINUOUS GEAR HINGES	PEMKO	+70 / -70 PSF	4'-0" X 8'-0"	
RIM PANIC	VON DUPRIN 99 WITH 425 SNB RIM PANIC DEVICE	VON DUPRIN	+50 / -50 PSF	3'-0" X 8'-0"	USE VON DUPRIN 299F STRIKE ONLY ALLOWED TO USE FOR WIDE STILES, (67), (68), (69)
PUSH/ PULL HANDLES	VARIES	VARIES	N/A	N/A	
CONTINUOUS HINGE	IVES 224 CONTINUOUS HINGE	IVES 224	+50 / -50 PSF	3'-0" X 8'-0"	
FL3690	SERIES 3600 CVR EXIT DEVICE	FIRST CHOICE	+70 / -80 PSF	3'-6" X 8'-0"	

**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117

www.MCYEngineering.com MCY@mcyengineering.com

**MSD-375 & WSD-500 STORMMAX® ALUMINUM  
ENTRANCE DOORS (L.M.I.)**

Oldcastle BuildingEnvelope®  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P: (972) 551-6100

Rev. No.	Date	Drawn By	Description

Drawn Date: 01.05.2022      Scale: AS SHOWN

DRAWING NO. TD22-01

BOM

Sheet No. 18 OF 20

PRODUCT CONTROL APPROVAL



# HARDWARE SCHEDULE FOR PAIR MSD-375 & WSD-500 DOORS

HARDWARE TYPE	HARDWARE MODEL AND DESCRIPTION	MANUFACTURER	MAX. DESIGN PRESSURE	MAX. DOOR SIZE	NOTES
FLUSH BOLTS	FB-1201-VRM TOP & BOTTOM-STEEL TIPS	OBE	+70 / -80 PSF	7'-0" X 8'-0"	INACTIVE DOOR
3-POINT LOCK	M5 18505 + 4015 + 4016 DEADLOCK	ADAMS RITE	+70 / -70 PSF	8'-0" X 8'-0"	ACTIVE DOOR, USE WITH ADAMS RITE 41-028 LOCK ROD BRACKET
2-POINT LOCK	M5 2180 AUTO RELEASE FLUSH BOLT	ADAMS RITE	+70 / -70 PSF	8'-0" X 8'-0"	INACTIVE DOOR
RIM PANIC	ED42005 RIM PANIC	CORBIN RUSSWIN	+60 / -60 PSF	7'-0" X 8'-0"	USE WITH WS708AKM REMOVABLE MULLION AND CORBIN RUSSWIN ED42005 STRIKE
RIM PANIC	99 RIM PANIC WITH 425 SNB	VON DUPRIN	+50 / -50 PSF	6'-0" X 8'-0"	USE VON DUPRIN 299F STRIKE ONLY ALLOWED TO USE WITH 9954 REMOVEABLE MULLION FOR WIDE STILES, (67), (68), (69)
REMOVABLE MULLION	WS708AKM REMOVABLE MULLION	CORBIN RUSSWIN	+60 / -60 PSF	7'-0" X 8'-0"	TO BE USED WITH ED42005 RIM DEVICE EXCLUSIVELY
REMOVABLE MULLION	9954 REMOVABLE MULLION AND 154 MULLION STABILIZERS	VON DUPRIN	+50 / -50 PSF	6'-0" X 8'-0"	TO BE USED WITH VON DUPRIN 99 RIM PANIC DEVICE
CONCEALED PANIC	1285 CONCEALED VERTICAL ROD PANIC	JACKSON	+70 / -80 PSF	7'-0" X 8'-0"	
CONCEALED PANIC	2086 CONCEALED VERTICAL ROD PANIC	JACKSON	+70 / -80 PSF	7'-0" X 8'-0"	
CONCEALED PANIC	5770 CONCEALED VERTICAL ROD PANIC	REGENT	+70 / -80 PSF	7'-0" X 8'-0"	ONLY ALLOWED TO USED FOR MEDIUM STILES (5), (7) & (10)
CONCEALED PANIC	AD8410 CONCEALED VERTICAL ROD PANIC	SARGENT	+70 / -80 PSF	7'-0" X 8'-0"	OPTION FOR 8' X 8' ALLOWED UP TO +70 / -70 PSF
RIM PANIC	AD8500 RIM PANIC	SARGENT	+60 / -60 PSF	7'-0" X 8'-0"	USE WITH SARGENT HC L980 REMOVEABLE MULLION AND SARGENT 649 STRIKE
REMOVABLE MULLION	HC L980 REMOVABLE MULLION	SARGENT	+60 / -60 PSF	7'-0" X 8'-0"	TO BE USED WITH AD8500 RIM DEVICE EXCLUSIVELY
SURFACE PANIC	9927 SURFACE PANIC VERTICAL ROD	VON DUPRIN	+70 / -80 PSF	7'-0" X 8'-0"	
CONCEALED PANIC	9947 CONCEALED PANIC VERTICAL ROD	VON DUPRIN	+70 / -80 PSF	7'-0" X 8'-0"	
SURFACE CLOSER	MODEL VARIES BY MANUFACTURER	VARIES	N/A	N/A	
CONCEALED CLOSER	21-211 HVY DUTY W/OFFSET SWING ARM	JACKSON	N/A	N/A	
BUTT HINGES 4" X 4 1/2"	4001 BALL BEARING STAINLESS STEEL	REGENT	+70 / -80 PSF	7'-0" X 8'-0"	(3) PER DOOR LEAF OPTION FOR 4' X 8', ALLOWED UP TO +70/-70 PSF WITH (4) PER DOOR LEAF
BUTT HINGES 4" X 4 1/2"	BB1199 BALL BEARING STAINLESS STEEL	HAGER	+70 / -80 PSF	8'-0" X 8'-0"	(4) PER DOOR LEAF
BUTT HINGES 4" X 4 1/2"	RCTA2314 BALL BEARING STAINLESS	MC KINNEY	+60 / -60 PSF	7'-0" X 8'-0"	(3) PER DOOR LEAF
PULL HANDLES	PH-20 FORMED ALUMINUM	OBE	N/A	N/A	
PUSH BARS	PB-21 FORMED ALUMINUM	OBE	N/A	N/A	
CYLINDER	CY-1 LOCK CYLINDER	OBE	N/A	N/A	
KEY CONTROL	106 KEY CONTROL FOR SARGENT	SARGENT	N/A	N/A	
THUMB TURN	CY-3	OBE	N/A	N/A	
CYLINDER	CY-5 FOR VON DUPRIN DEVICES	OBE	N/A	N/A	
LOCK INDICATOR	AR-4089 OPTIONAL DEVICE	ADAMS RITE	N/A	N/A	
PANIC STOP	D-134-3 LOCATED AT THRESHOLD	OBE	N/A	N/A	REQUIRED FOR ALL HARDWARE EXCEPT RIM PANIC DEVICES WITH REMOVEABLE MULLION
TOP PIVOTS	OP-6 / OP-7	OBE	+70 / -80 PSF	7'-0" X 8'-0"	
INTERMEDIATE PIVOTS	M-19	RIXON	+70 / -80 PSF	7'-0" X 8'-0"	
BOTTOM PIVOTS	OP-9 / OP-10	OBE	+70 / -80 PSF	7'-0" X 8'-0"	
CONT. GEAR HINGE	780-224 HD CONTINUOUS GEAR HINGES	ROTON	+70 / -80 PSF	7'-0" X 8'-0"	
CONT. GEAR HINGE	CFM835LI HDI CONTINUOUS GEAR HINGES	PEMKO	+70 / -70 PSF	8'-0" X 8'-0"	
PULL HANDLES	PH-12	OBE	+70 / -80 PSF	7'-0" X 8'-0"	
FL3690	SERIES 3600 CVR EXIT DEVICE	FIRST CHOICE	+70 / -80 PSF	7'-0" X 8'-0"	
CONTINUOUS HINGE	IVES 224 CONTINUOUS HINGE	IVES 224	+50 / -50 PSF	6'-0" X 8'-0"	

**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117

www.MCYEngineering.com MCY@mcyengineering.com

**MSD-375 & WSD-500 STORMMAX® ALUMINUM ENTRANCE DOORS (L.M.I.)**

Oldcastle BuildingEnvelope®  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P: (972) 551-6100

Rev. No.	Date	Drawn By	Description

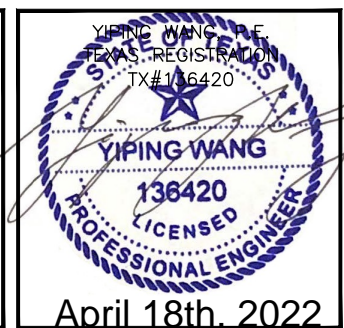
Drawn Date: 01.05.2022      Scale: AS SHOWN

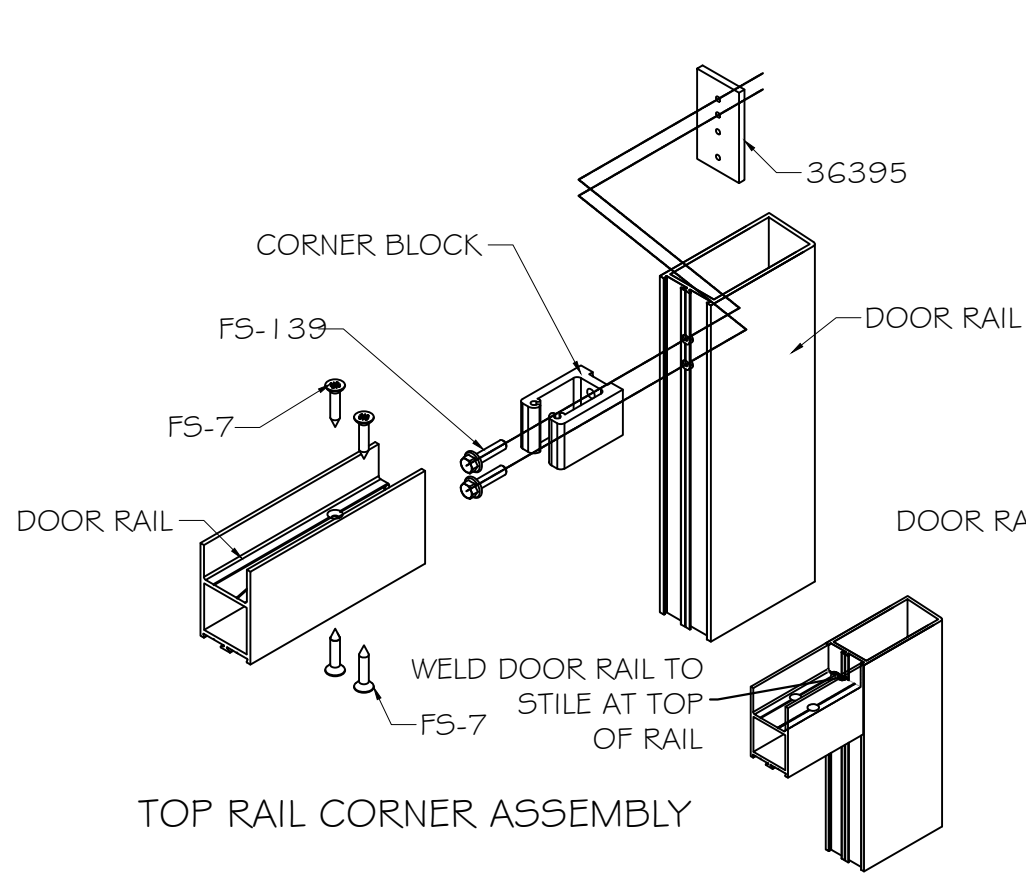
DRAWING NO. **TD22-01**

**BOM**

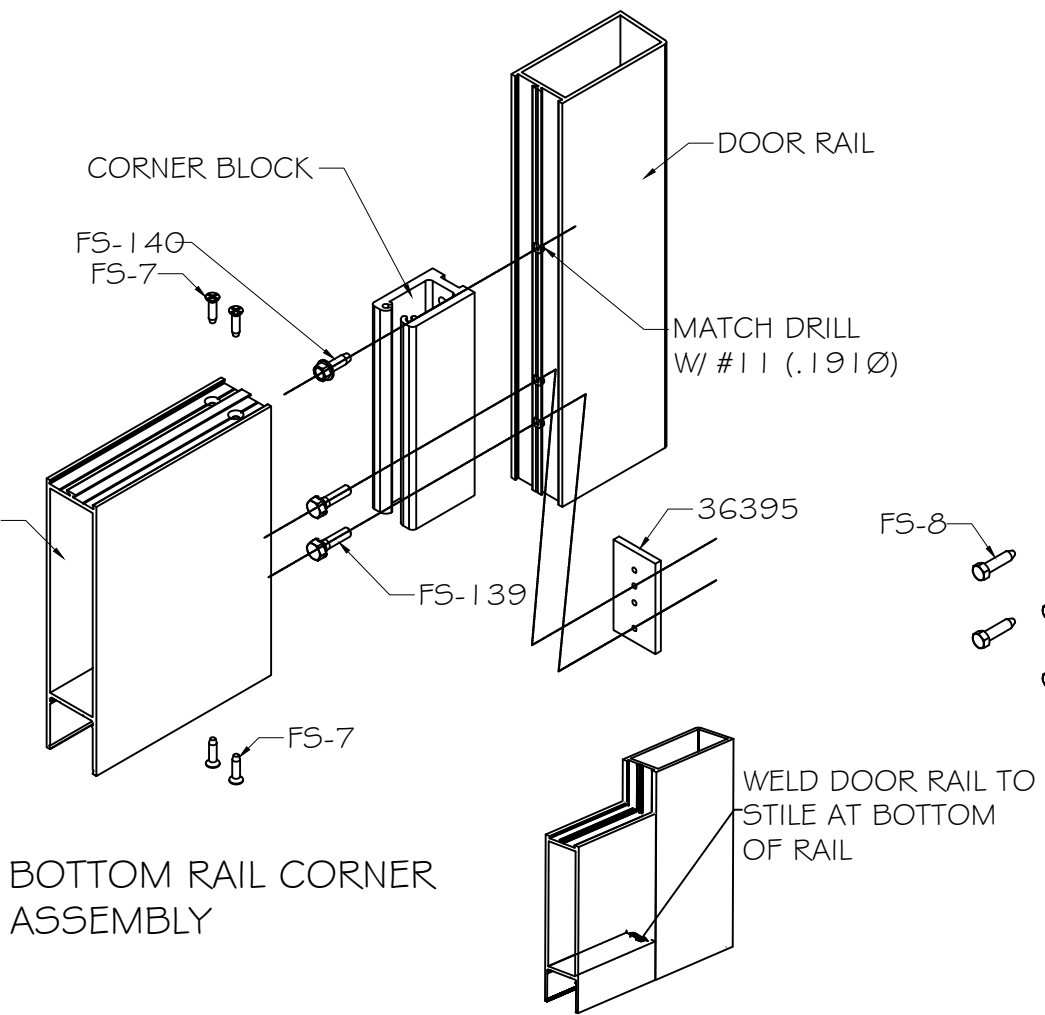
Sheet No. **19 OF 20**

PRODUCT CONTROL APPROVAL

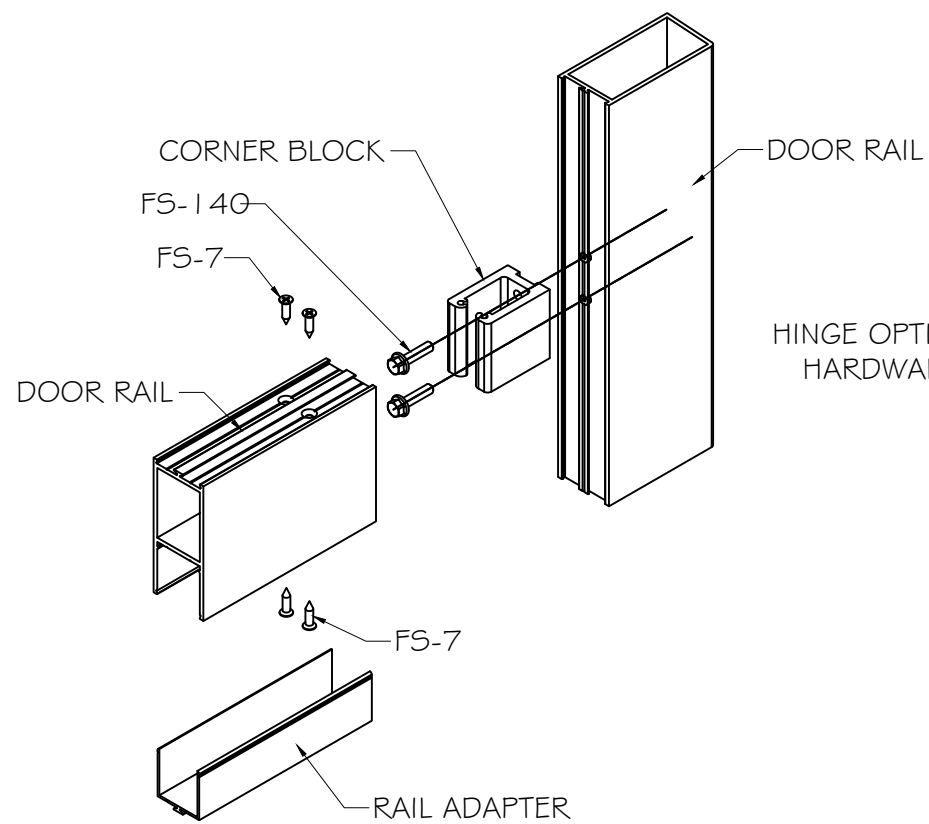




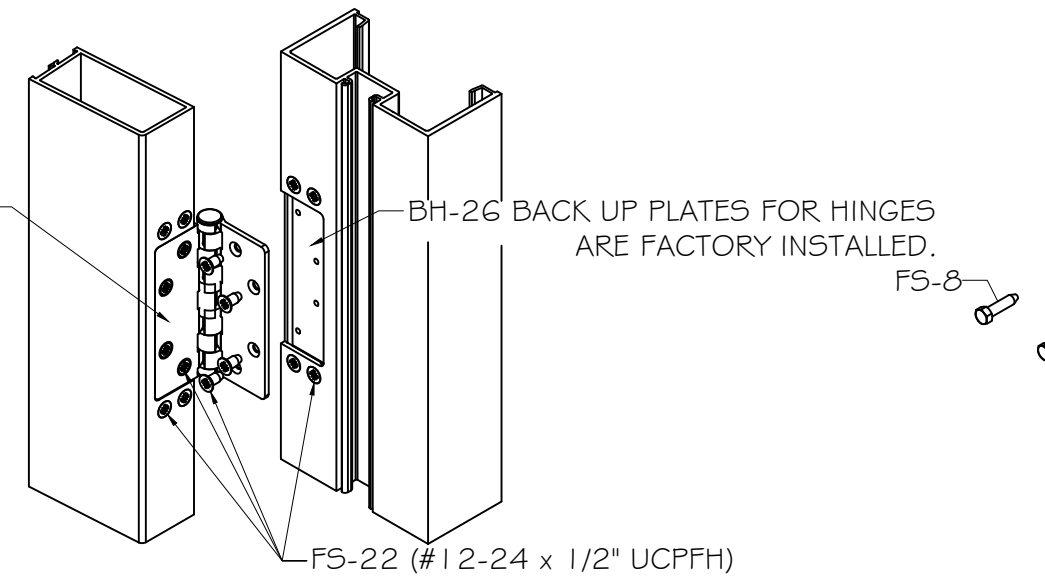
TOP RAIL CORNER ASSEMBLY



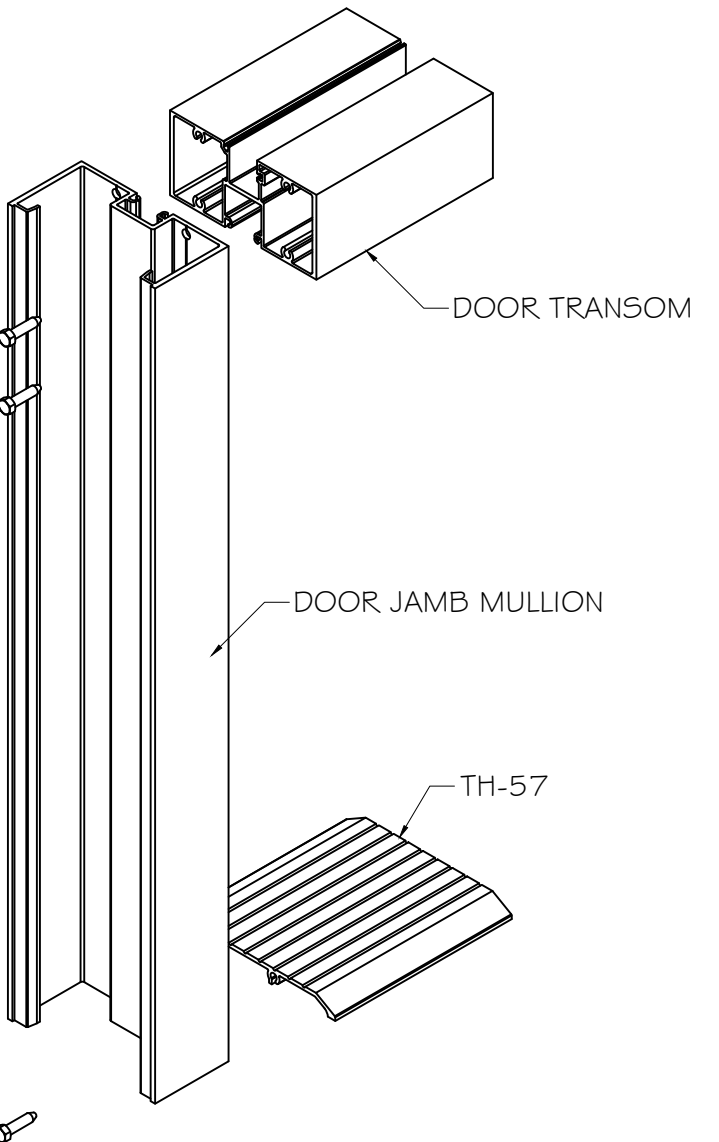
BOTTOM RAIL CORNER ASSEMBLY



MID RAIL CORNER ASSEMBLY



BUTT HINGE ASSEMBLY



DOOR JAMB ASSEMBLY

PRODUCT CONTROL APPROVAL



**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS  
12781 MIRAMAR PKWY. Ste. 301  
MIRAMAR, FL 33027 P: 305.271.0117  
www.MCYEngineering.com MCY@mcyengineering.com

MSD-375 & WSD-500 STORMMAX<sup>®</sup> ALUMINUM  
ENTRANCE DOORS (L.M.I.)  
Oldcastle BuildingEnvelope<sup>®</sup>  
803 AIRPORT ROAD  
TERRELL, TX 75160  
P: (972) 551-6100

Rev. No.	Date	Drawn By	Description

Drawn Date: 01.05.2022 Scale: AS SHOWN  
DRAWING NO.: TD22-01  
ASSEMBLY  
Sheet No.: 20 OF 20