Engineering Evaluation Report

Prepared by:
A. Lynn Miller, P.E.
1070 Technology Dr.
N. Venice, FL 34275
(941) 480-1600
Registration Number: #29296

Manufacturer:
PGT Industries, LLC
3400 Precision Drive
North Venice, FL 34275

Product Description:
FD5555 Series Impact-Resistant with Diamond Glass, Vinyl, French Door/Transom/Sidelite, (LM), FL-331

Compliance:
The above-mentioned product has been evaluated for compliance with the requirements of the Florida Department of Business and Professional Regulation for Statewide Acceptance per Rule 61 G20-3.005 method 1(d). The product listed herein complies with the requirements of the current Florida Building Code.

This product has been evaluated and is in compliance with the current Florida Building Code, including the “High Velocity Hurricane Zone” (HVHZ).

Supporting Technical Documentation:
1. Approval Document: Drawing number FD-5555DG-LM, signed and sealed by A. Lynn Miller, P.E.
2. Test Reports:

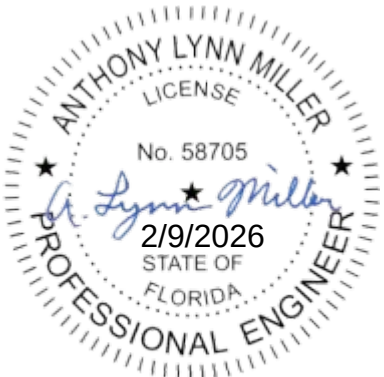
FT-8715 & 8716, Fenestration Testing Laboratories, Medley, FL
TAS 201-94, 202-94 and 203-94; Signed and sealed by Idalmis Ortega, P.E.

FTL-7339 & 7371, Fenestration Testing Laboratories, Medley, FL
TAS 201-94, 202-94 and 203-94; Signed and sealed by Jorge Naya Jr, P.E.

QAI NOK-0103, QAI Laboratories, Nokomis, FL
TAS 201-94, 202-94 & 203-94; Signed and sealed by Idalmis Ortega, P.E.

3. Miami-Dade RER Product Control Section NOA’s; PVB and/or SG Interlayer by Kuraray America, Inc.

Limitations and Conditions of use:
• Units must be glazed per ASTM E1300-09, refer to approval document for glazing details.
• This product is rated to be used in the HVHZ.
• This product is impact resistant and does not require impact protection in wind borne debris regions.
• Frame and Panel material to be extruded Vinyl.
• Units must be installed in accordance with approval document.



SERIES [illegible] WITH [illegible] GLASS
IMPACT-RESISTANT, VINYL, REINFORCED, OUTSWING FRENCH DOOR & SIDELITE/TRANSOM (SL/T,TR)

1) THIS PRODUCT HAS BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).

2) SHUTTERS ARE NOT REQUIRED WHEN USED IN WIND-BORNE DEBRIS REGIONS.

3) [illegible]

4) [illegible]

5) [illegible]

6) [illegible]

7) DESIGN PRESSURES:
A. NEGATIVE DESIGN LOADS BASED ON STRUCTURAL TEST PRESSURE, FRAME ANALYSIS AND GLASS PER ASTM E1300.
B. POSITIVE DESIGN LOADS BASED ON WATER TEST PRESSURE, STRUCTURAL TEST PRESSURE, FRAME ANALYSIS AND GLASS PER ASTM E1300.
C. DESIGN LOADS ARE BASED ON ALLOWABLE STRESS DESIGN (ASD).

8) [illegible]

9) [illegible]

10) [illegible]

DESIGN PRESSURE RATING	WATER PRESSURE RATING	IMPACT RATING
[illegible]	[illegible]	[illegible]

TABLE 1:

Group	Anchor	Substrate	Min. Edge Distance	Min. Embedment
A	[illegible]	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

SHEET INDEX	
[illegible]	[illegible]

TABLE 2:

Type #	Description	Where Used
1	[illegible]	Door
2	[illegible]	Door
3	[illegible]	Sidelite/Transom

[illegible]

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LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER

EXAMPLE CONFIGURATIONS

TYP. DOOR/SLAB

II

III

III (DIAGONAL OR III)

DOUBLE

QUAD

SINGLE II

SINGLE III

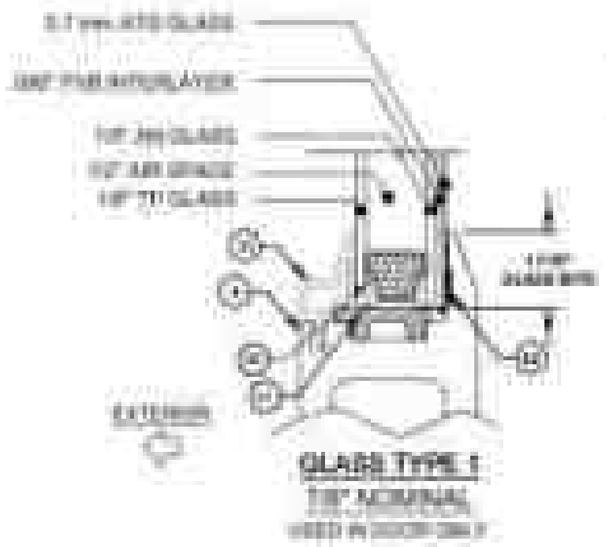
III (ADDITIONAL MULLION LOCATIONS)

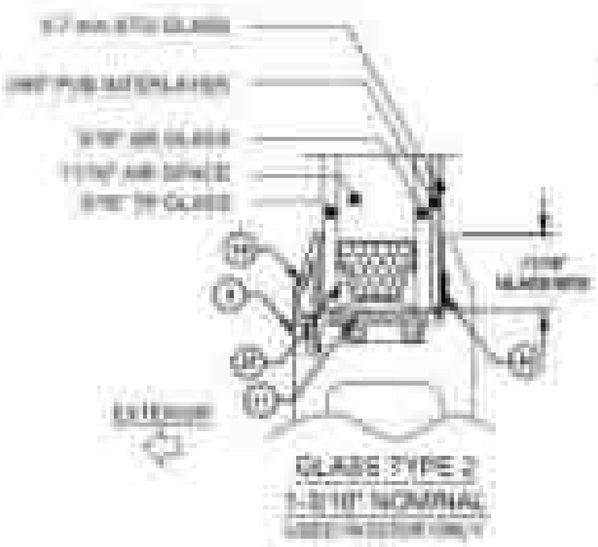
III WITH HORIZONTAL MULLION

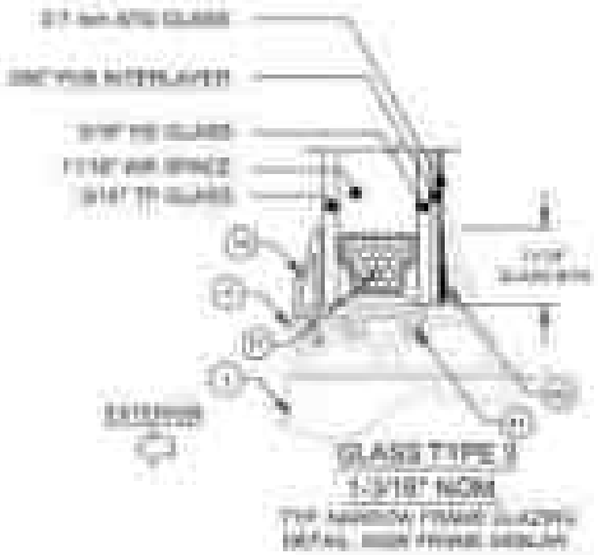
II WITH HORIZONTAL MULLION

NOTES:

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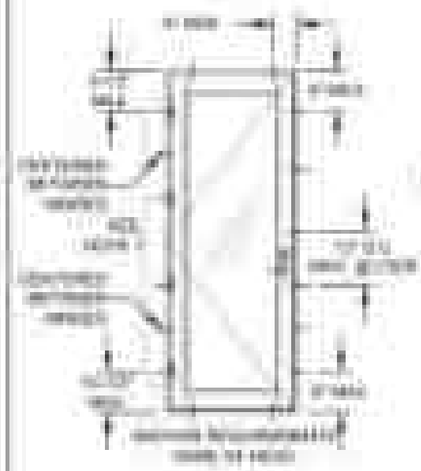

GLASS TYPE 1
7/8" NOMINAL


GLASS TYPE 2
1-3/16" NOMINAL

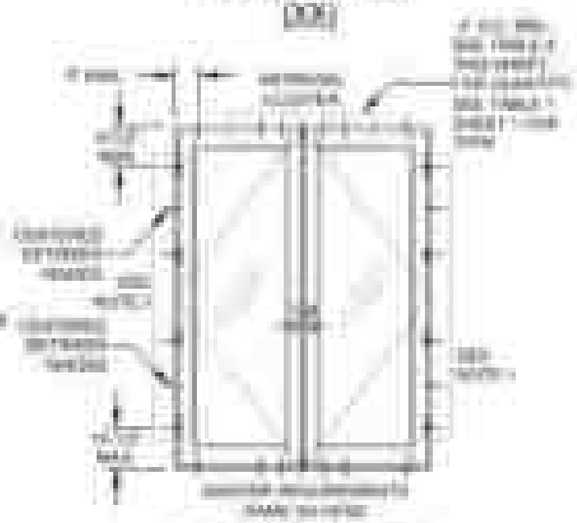

GLASS TYPE 3
1-3/16" NOM

IGT

SINGLE DOOR INSTALLATION (X)

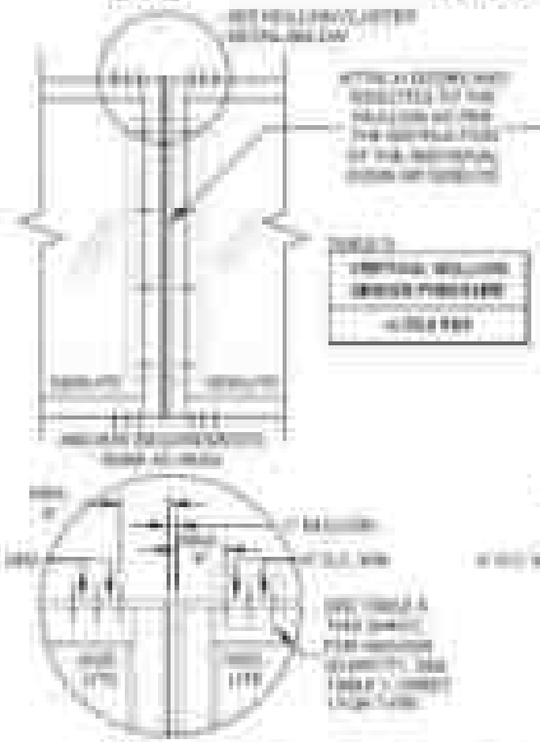


DOUBLE DOOR INSTALLATION (XX)

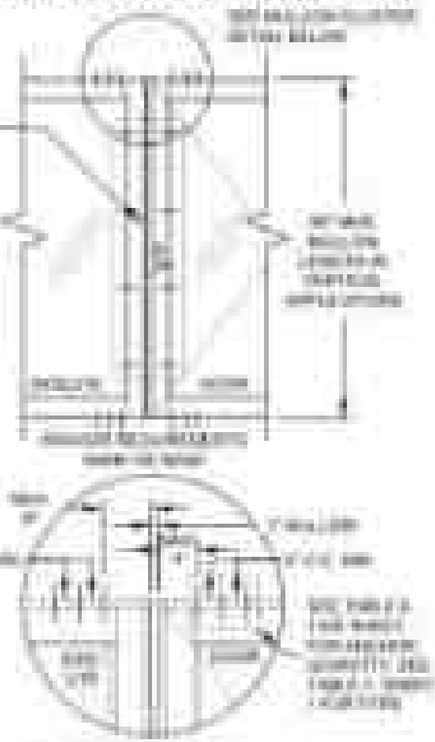


(XX, (2)SIMO ASTRAGAL)

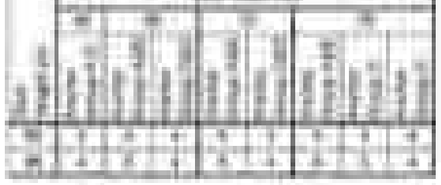
SIDELITE-TO-SIDELITE MULLION INSTALLATION (OXO)



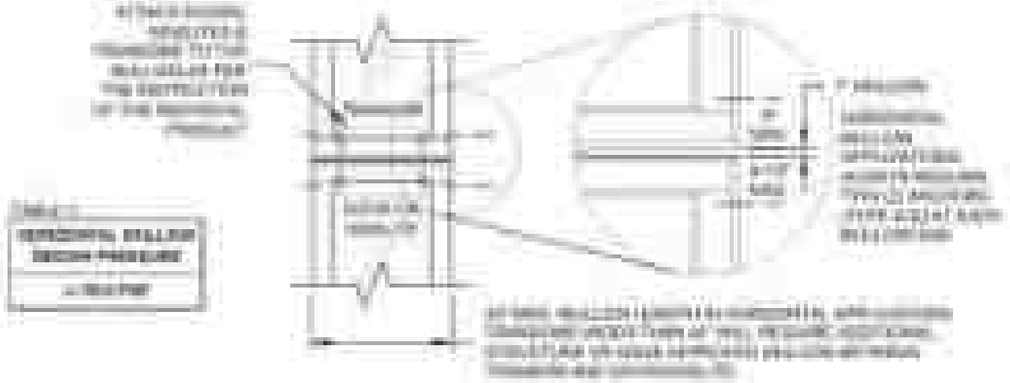
SIDELITE-TO-DOOR MULLION INSTALLATION (OXO, OXX, XXX, OXXXO, XXXX, OXXXO, ETC)

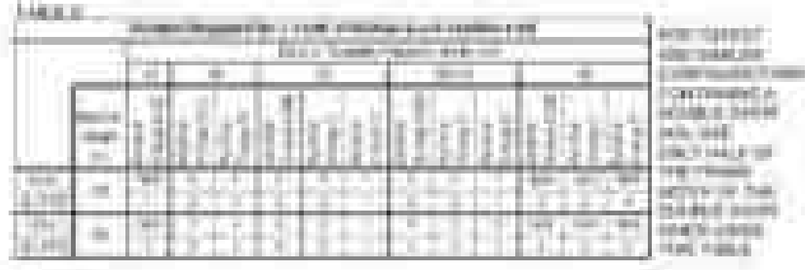






TRANSOM-TO-DOOR (U/O) OR TRANSOM-TO-SIDELITE (O/O) MULLION ATTACHMENT& INSTALLATION





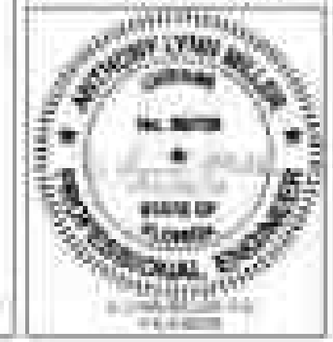
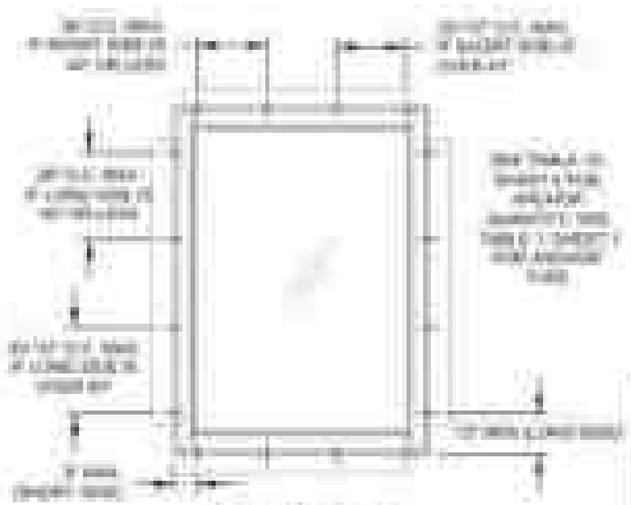
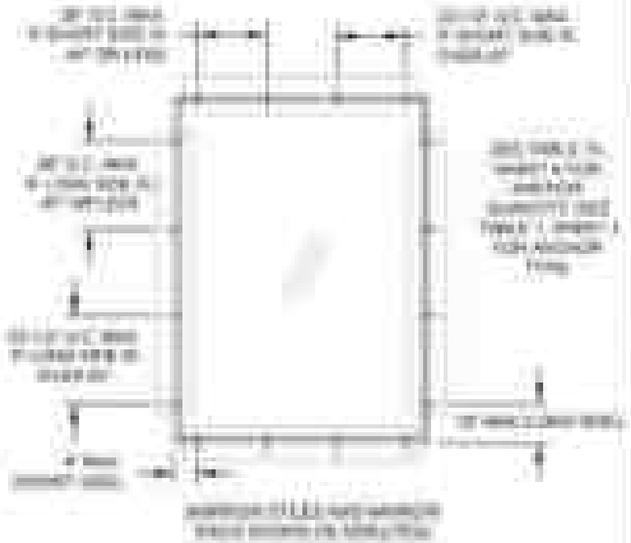


TABLE 3

Mast Height (m)	Ballistic Pressure Design Pressure (+/-, psf) for Mono Type 3																
	Luminaire Width (in)																
	12 or less	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108
10	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50
12	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50
14	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50
16	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50
18 or 18.5	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50
20	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50
22	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50		
24	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50			
26	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50				
28	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50					
30	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50						
32	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50							
34	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50								
36	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50									
38	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50										
40	+/-50	+/-50	+/-50	+/-50	+/-50	+/-50											

SIDE/LITE/TRANSOM INSTALLATION (D)





NOTES:
1. LUMINAIRES ON MAST ARMS SHALL NOT BE MOUNTED WITHIN THE SAME VERTICAL PLANE AS ANY SIGNS.
2. LEVEL EXTENSIONS MAY BE USED TO ENABLE ALIGNMENT.
3. FOR SIDE/LITE OPTIONAL FLANGE, SEE THE MAST CANTILEVER MOUNT DETAILS DRAWINGS.
4. SIDE/LITE TRANSOM MAY NOT BE USED WITH TYPE 5.

3	11-4-19	ADDED SIDE/LITE TRANSOM INSTALLATION (D)
2	11-4-19	ADDED TABLE 3
1	11-4-19	ADDED TABLE 2
		REVISIONS

DESIGNED BY: [illegible]
DRAWN BY: [illegible]
CHECKED BY: [illegible]
DATE: [illegible]

DCT

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TABLE 3

Mullion/Transom Anchor Quantity

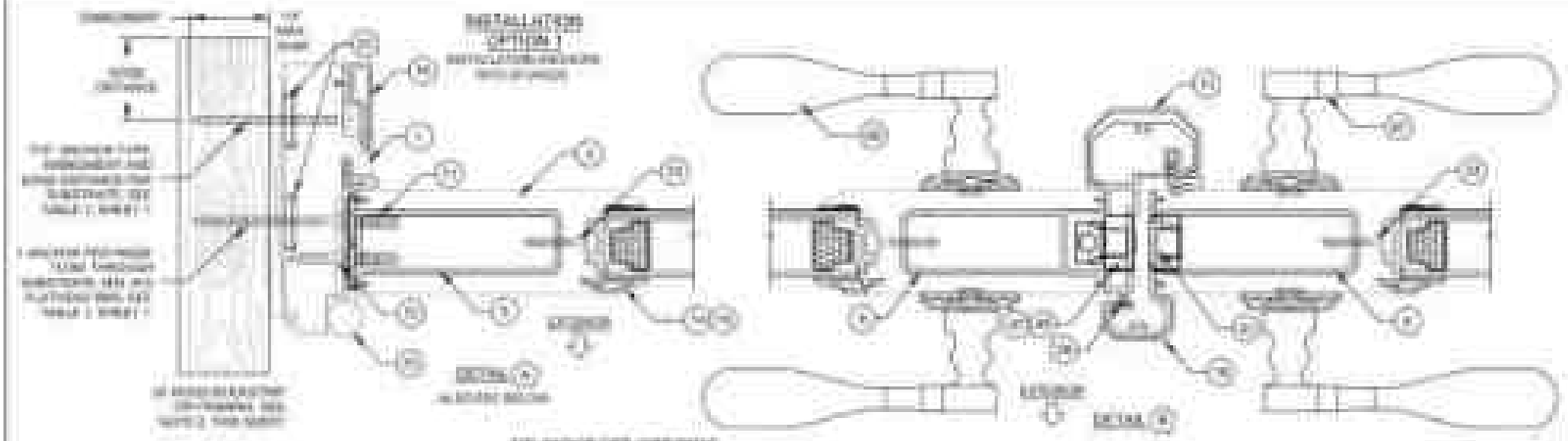
Long Side (in)

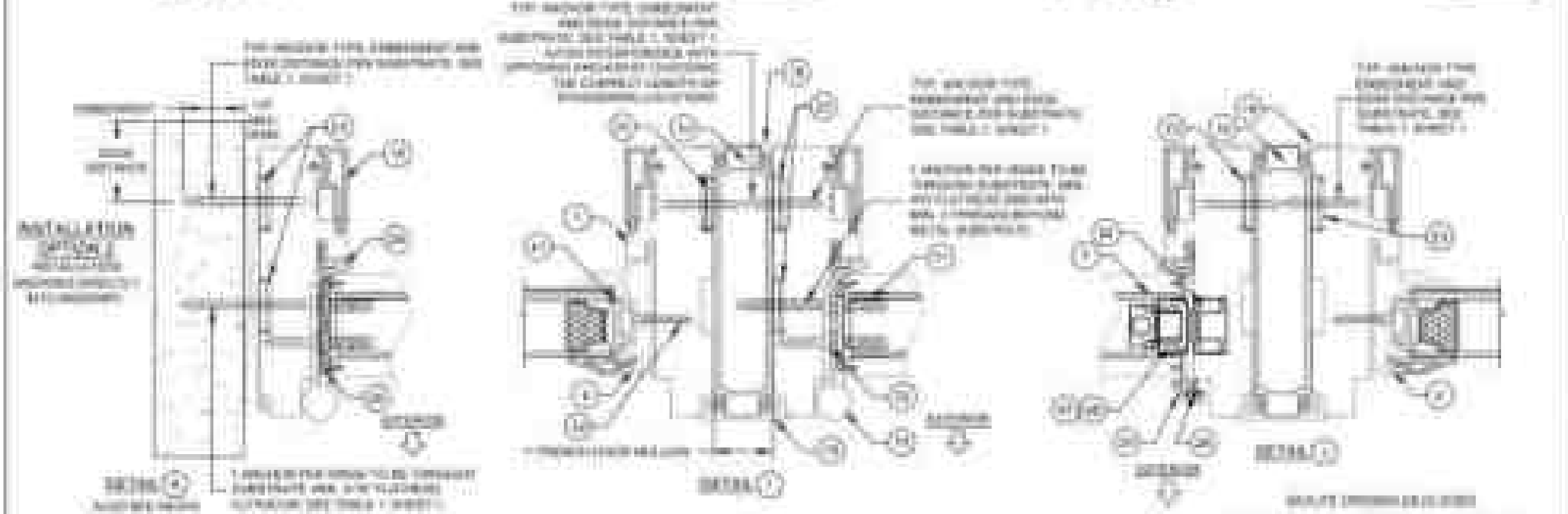
[illegible]	Short Side	[illegible]
	Long Side	[illegible]

NOTES:
[illegible]

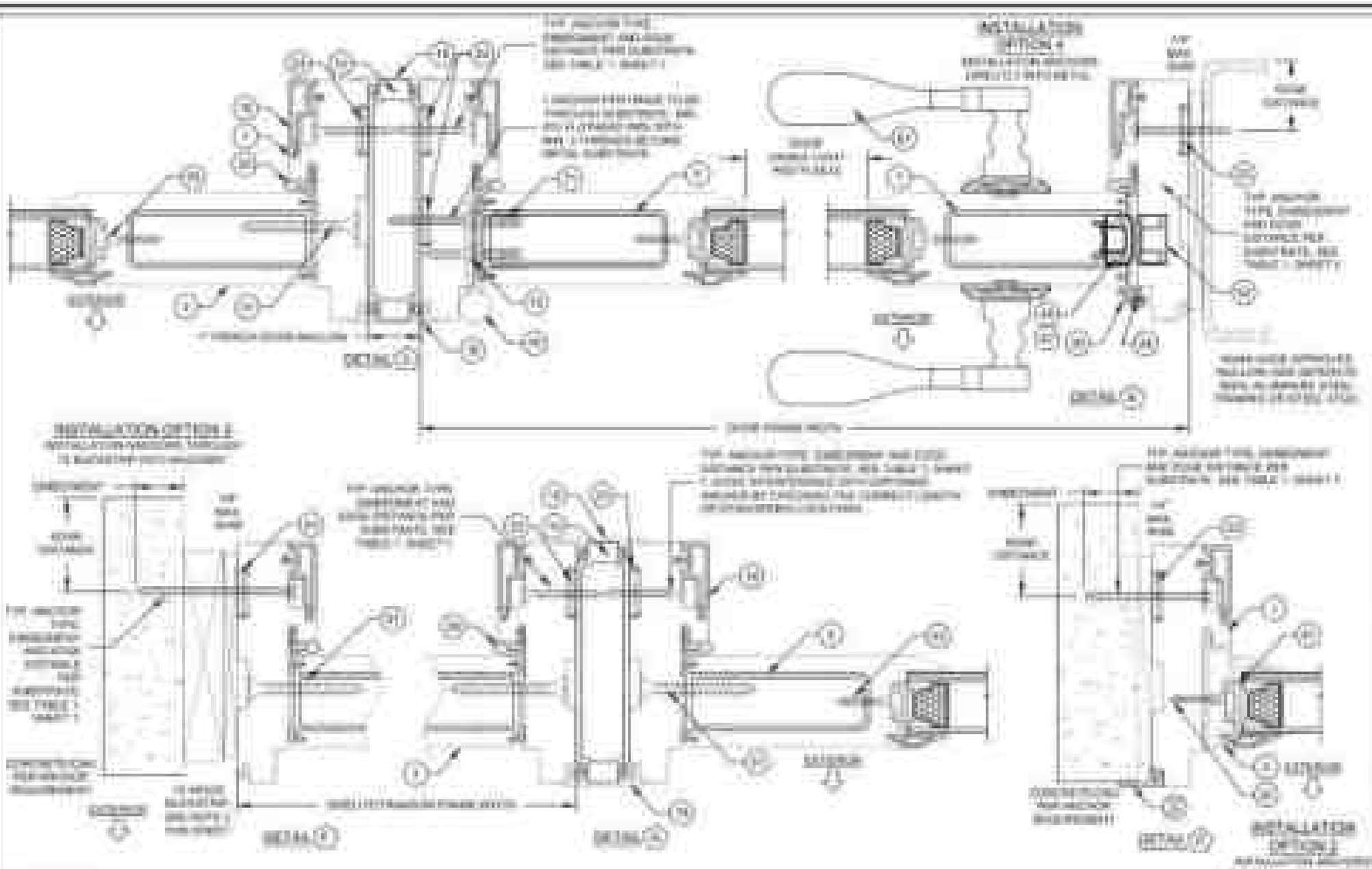
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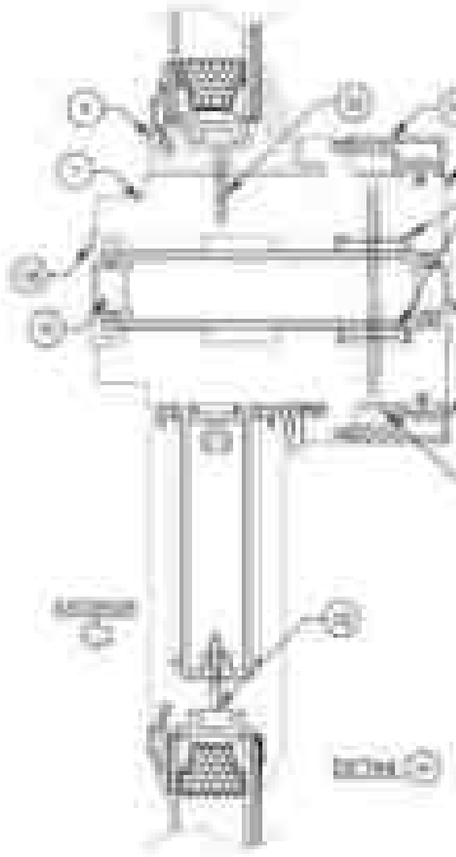


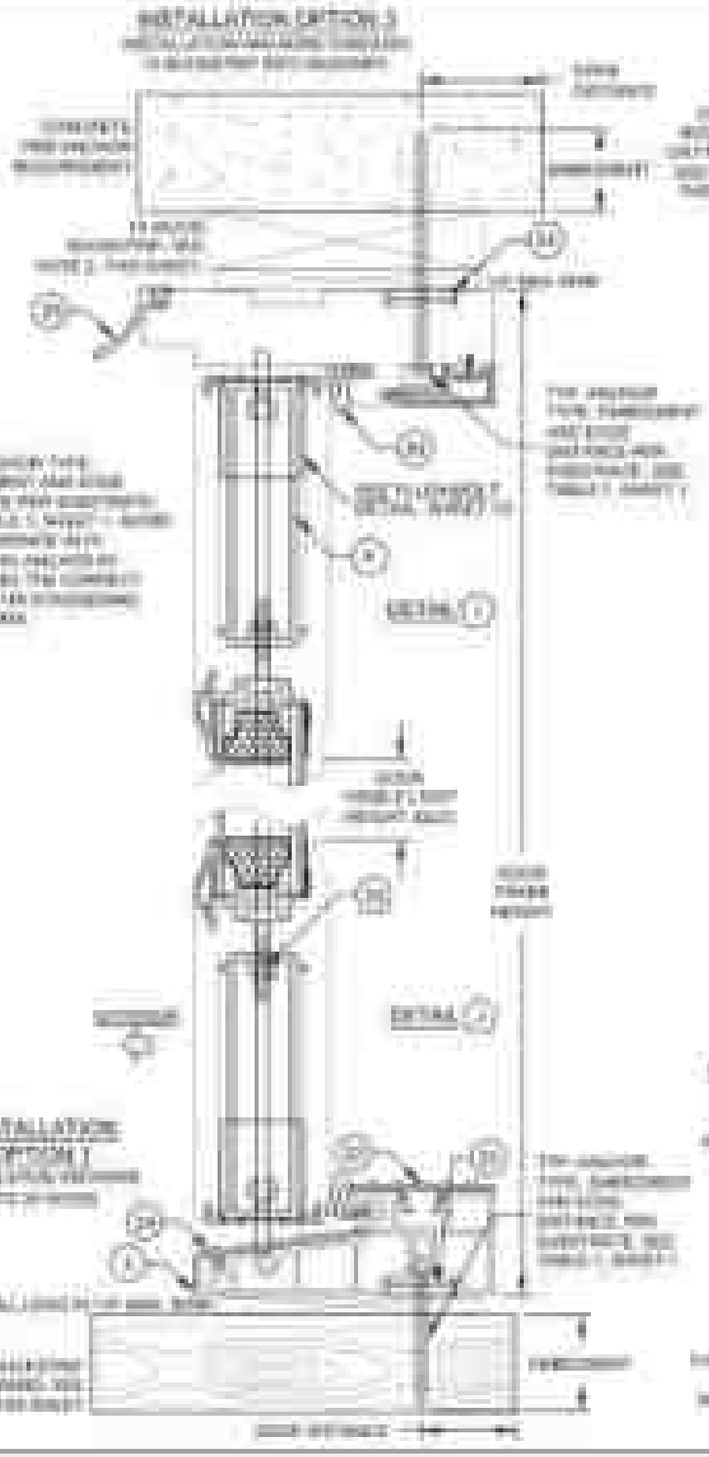


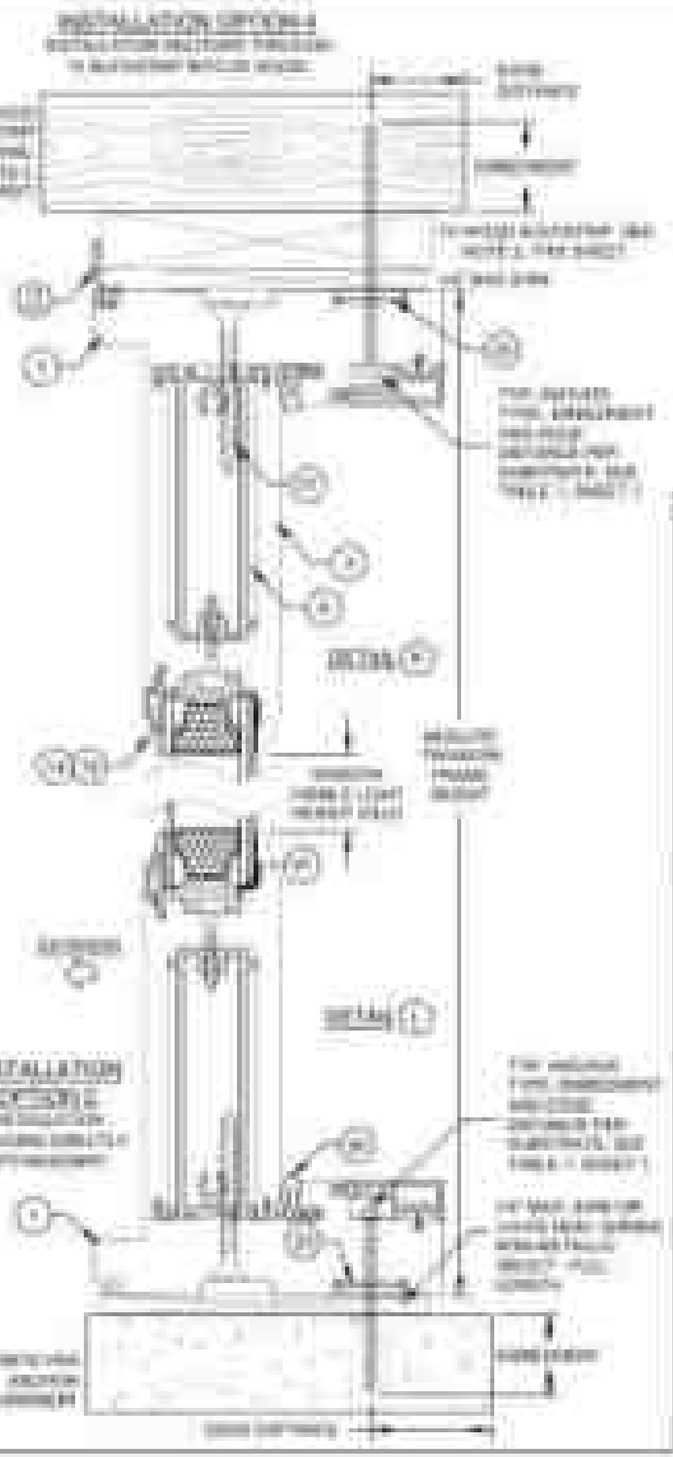


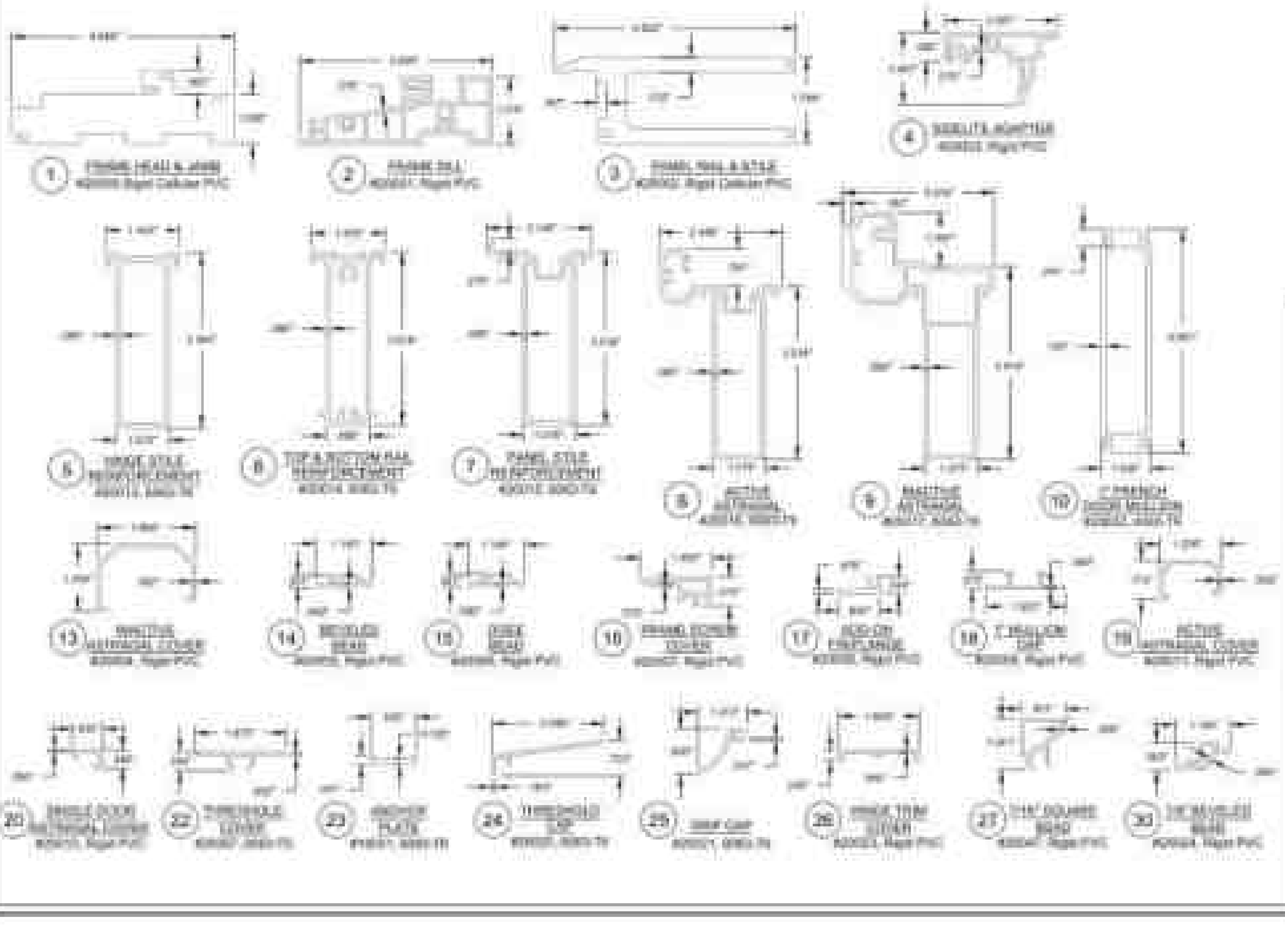
INSTALLATION NOTES

IDOT

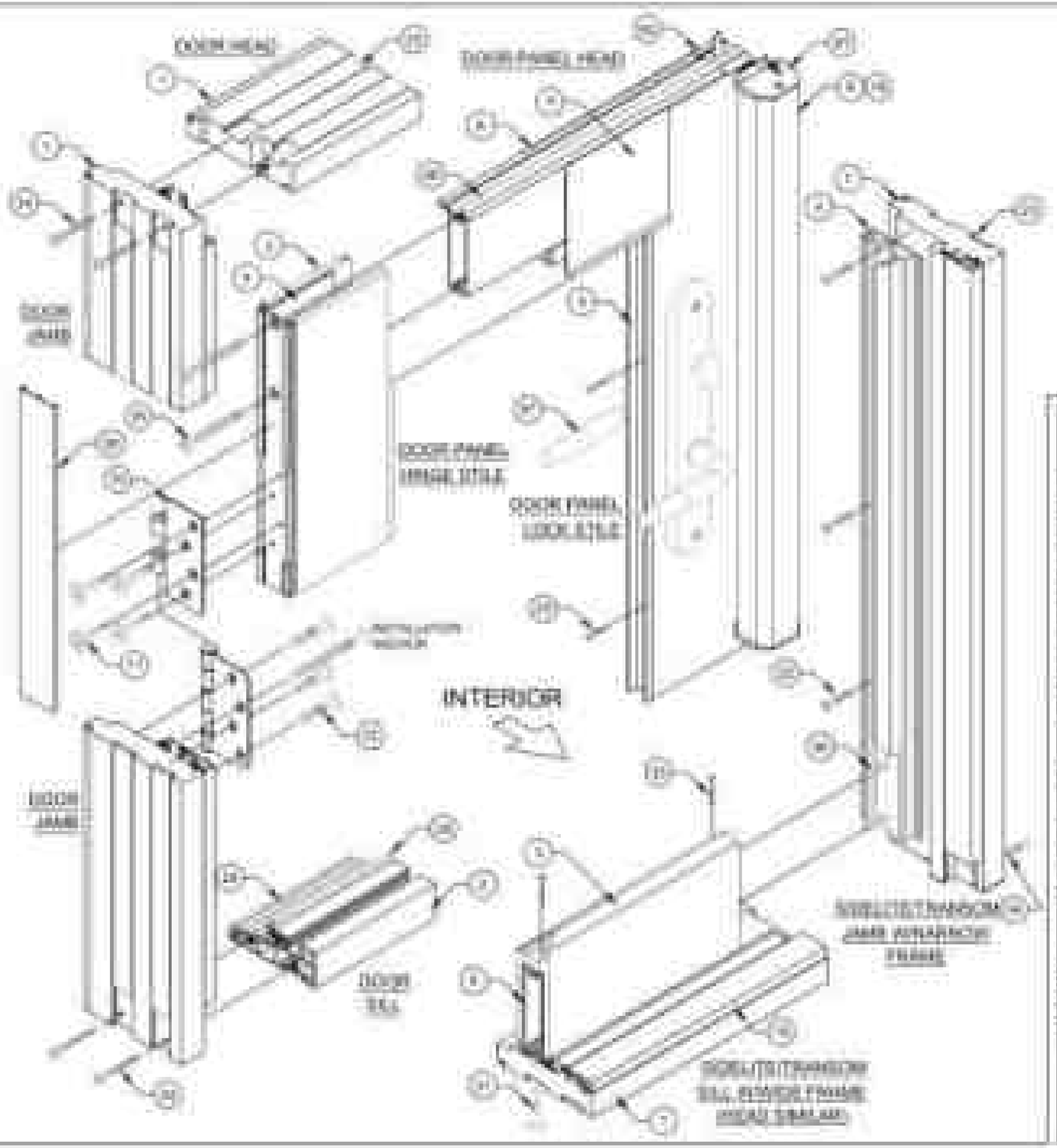








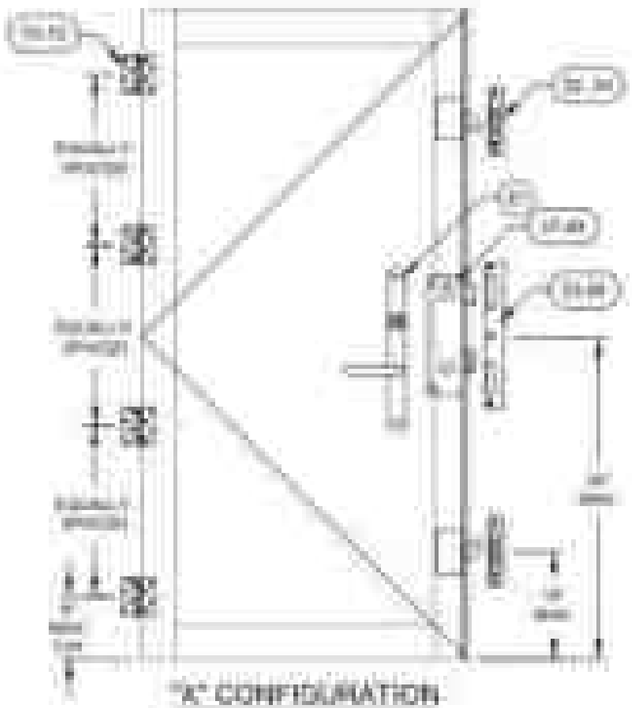
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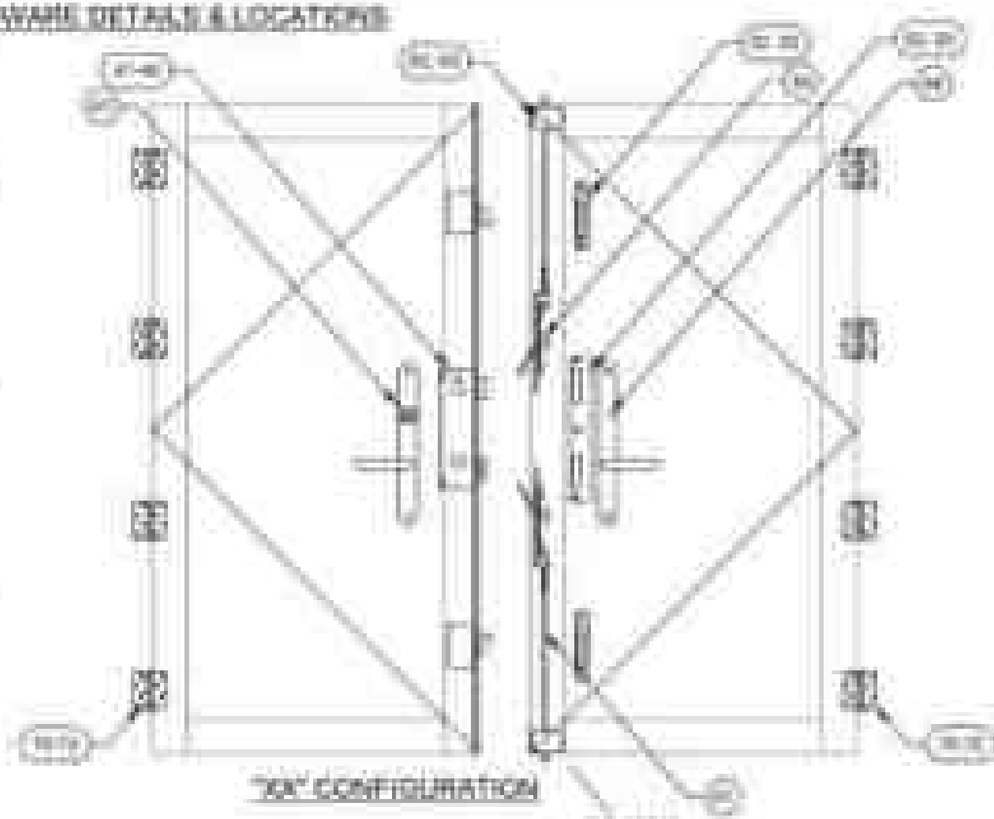
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ANTHONY LYNN MILLER
LICENSE
STATE OF FLORIDA
PROFESSIONAL ENGINEER

HARDWARE DETAILS & LOCATIONS

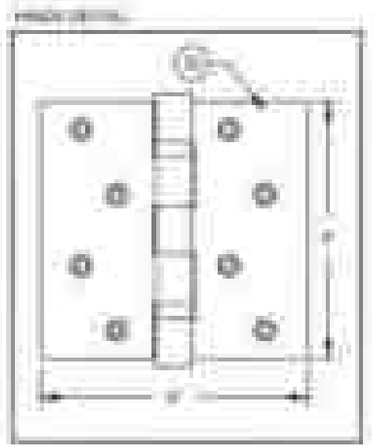


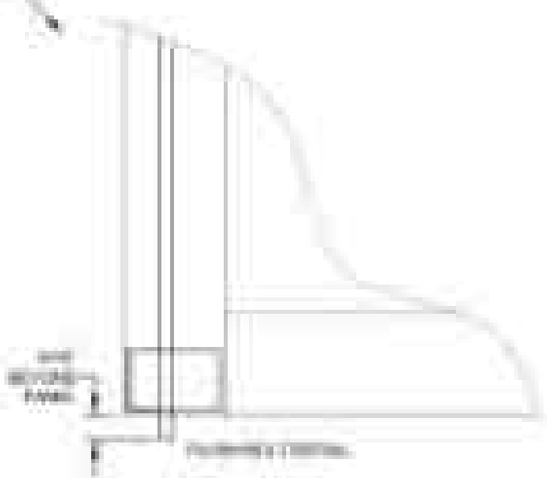
"A" CONFIGURATION



"XX" CONFIGURATION

#	REF. Part #	Description	Material
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3	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]





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