

GENERAL NOTES: SS-3500 IMPACT-RESISTANT STOREFRONT WINDOW SYSTEM

FLORIDA PRODUCT APPROVAL # 25574

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FBC, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
2. SHUTTERS ARE NOT REQUIRED PER FBC REQUIREMENTS, WHEN USED IN WIND-BORNE DEBRIS REGIONS.
3. GLAZING TYPE: SEE GLAZING DETAILS ON SHEET 15.
4. DESIGN PRESSURES:

A) NEGATIVE DESIGN LOADS BASED ON STRUCTURAL & CYCLE TESTING AND GLASS PER ASTM E1300.

B) POSITIVE DESIGN LOADS BASED ON WATER INFILTRATION, STRUCTURAL & CYCLE TESTING AND GLASS PER ASTM E1300.

C) DESIGN LOADS ARE BASED ON ALLOWABLE STRESS DESIGN, ASD.
5. THE ANCHORAGE METHODS SHOWN HAVE BEEN DESIGNED TO RESIST THE WINDLOADS CORRESPONDING TO THE REQUIRED DESIGN PRESSURE. THE 33-1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. THE 1.6 LOAD DURATION FACTOR WAS USED FOR THE EVALUATION OF ANCHORS INTO WOOD.
6. FRAME CORNERS TO BE SEALED WITH NARROW JOINT SEALANT. OVERALL SEALING/FLASHING STRATEGY FOR WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS AND IS BEYOND THE SCOPE OF THESE INSTRUCTIONS.
7. DISSIMILAR MATERIALS THAT COME INTO CONTACT, INCLUDING PRODUCT FRAMING, ANCHORAGE AND OPENING SUBSTRATES, SHALL BE COATED OR PROTECTED TO PREVENT CORROSIVE REACTIONS AS REQUIRED BY THE FLORIDA BUILDING CODE.
8. REFERENCES: DEWALT ULTRACON & CRETEFLEX NOA'S; TEST REPORTS FTL-7137, 7208, 8717 & 17-7007

ANCHOR NOTES:

1. FOR CONCRETE/CMU SUBSTRATE APPLICATIONS IN MIAMI-DADE COUNTY, USE ONLY MIAMI-DADE COUNTY APPROVED ANCHORS. SEE TABLE 1 ON THIS SHEET FOR EMBEDMENT, EDGE DISTANCE AND SUBSTRATE REQUIREMENTS.
2. FOR SUBSTRATE APPLICATIONS SEE TABLE 1 ON THIS SHEET.
3. WOOD BUCKS DEPICTED AS 1X ARE LESS THAN 1-1/2" THICK. PROPERLY SECURED, 1X WOOD BUCKS ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SOLID CONCRETE OR CMU. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED TO PROPERLY TRANSFER LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD & TO BE REVIEWED BY THE BUILDING OFFICIAL.
4. SHIMS ARE REQUIRED AT EACH ANCHOR LOCATION WHERE THE PRODUCT IS NOT FLUSH TO THE SUBSTRATE. USE SHIMS CAPABLE OF TRANSFERRING APPLIED LOADS. WOOD BUCKS, BY OTHERS, MUST BE SUFFICIENTLY ANCHORED TO RESIST LOADS IMPOSED ON THEM BY THE WINDOW.
5. METAL SUBSTRATE TO MEET MIN. STRENGTH AND THICKNESS REQUIREMENTS PER THE FBC AND TO BE REVIEWED BY THE AUTHORITY HAVING JURISDICTION.
6. IF SILL IS TIGHT TO SUBSTRATE, GROUT OR OTHER MATERIAL IS NOT REQUIRED. IF USED, NON-SHRINK, NON-METALLIC GROUT, MAX. 1/4" THICK & 3400 PSI MIN., (DONE BY OTHERS) MUST FULLY SUPPORT THE ENTIRE LENGTH OF THE SILL THAT IS NOT TIGHT TO THE SUBSTRATE, AND TRANSFER SHEAR LOAD TO SUBSTRATE. IF SUBSTRATE IS WOOD, 30# FELT PAPER OR MASTIC IS REQUIRED BETWEEN THE GROUT AND WOOD SUBSTRATE, OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

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ALL TEMPERED AND/OR LAMINATED GLASS OPTIONS IN THIS APPROVAL HAVE BEEN CERTIFIED BY THE SGCC FOR COMPLIANCE TO ANSI Z97.1, CLASS A AND CPSC 16 CFR 1201, CATEGORY II. THIS INCLUDES LAMINATED GLASS THAT IS MANUFACTURED WITH ANNEALED GLASS PLIES. FOR APPLICATIONS WHERE THE WINDOW IS BEING USED AS A GUARD, HEAT STRENGTHENED OR TEMPERED LAMINATED GLASS MUST BE USED.

TABLE 1:

Group	Anchor	Substrate	Min. Edge Distance	Min. Embedment	Min. O.C. Distance
A	#14 Steel or 410 SS SMS (G5)	Southern Pine (SG=0.55)	1"	1-3/8"	1"
B	#14 Steel or 410 SS SMS (G5)	Aluminum, 6063-T5* (0.125" min. thickness)	3/8"	1/8"	5/8"
		Steel, A36* (0.125" min. thickness)	3/8"	1/8"	5/8"
C	1/4" DeWalt Ultracon+	Concrete (min. 3.00 ksi)	2-1/2"	1-3/4"	3"
		Concrete (min. 3.00 ksi)	2-1/2"	1-3/8"	4"
		Grout-Filled CMU, (ASTM C-90)	2-1/2"	1-3/4"	4"
		UngROUTED CMU, (ASTM C-90)	2-1/2"	1-1/4"	3"
	1/4" DeWalt 410 S.S. Crete-Flex	UngROUTED CMU, (ASTM C-90)	2-1/2"	1-1/4"	6"
	5/16" DeWalt Ultracon	UngROUTED CMU, (ASTM C-90)	3-1/8"	1-1/4"	6"
D	1/4" DeWalt 410 S.S. CreteFlex	Concrete (min. 3.35 ksi)	2-1/2"	1-3/4"	3"
		Concrete (min. 3.52 ksi)	3-1/8"	2"	3"
	5/16" DeWalt Ultracon	Grout-Filled CMU, (ASTM C-90)	2-1/2"	2-1/4"	5"
E	3/8" Large Diameter ITW Tapcon	Concrete (min. 3 ksi)	3"	1-1/2"	4"
		UngROUTED CMU, (ASTM C-90)	3"	1-1/2"	6"

INSTRUCTIONS:

- 1) DETERMINE THE BUILDING'S REQUIRED DESIGN PRESSURE USING THE ASCE-7 STANDARD. THE PRODUCT'S DESIGN PRESSURE MUST MEET OR EXCEED THIS VALUE.
- 2) DETERMINE THE ANCHOR TYPE FROM TABLE 1, SHEET 1.
- 3) DETERMINE THE GLASS DESIGN PRESSURE FROM TABLE 2, SHEET 4.
- 4) JAMB ANCHOR SPACING IS GIVEN IN TABLES 5 & 6, SHEETS 7 & 8 AND HAVE BEEN CALCULATED FOR THE PRODUCT'S MAXIMUM DP.
- 5) MID-PANEL ANCHOR QUANTITIES ARE GIVEN IN TABLES 7 & 8, SHEETS 9 & 10 AND HAVE BEEN CALCULATED FOR THE PRODUCT'S MAXIMUM DP.
- 6) IF THE STOREFRONT WINDOW IS ATTACHED TO ANOTHER WINDOW THROUGH A COMMON MULLION: A) DETERMINE THE MULLION DESIGN PRESSURE FROM TABLE 9, SHEET 11; B) DETERMINE THE MAXIMUM DESIGN PRESSURE DUE TO MULLION CLUSTER ANCHORAGE FROM TABLES 3 OR 4, SHEETS 5-6 BASED ON YOUR SHIM SPACE, ANCHOR TYPE AND THE QUANTITY OF ANCHORS REQUIRED TO ATTAIN THE REQUIRED DESIGN PRESSURE.
- 7) THE LOWEST DESIGN PRESSURE FROM 3 & 6 ABOVE, SHALL BE USED FOR THE ENTIRE ASSEMBLY.
- 8) IF COMBINED WITH ANOTHER ASSEMBLY WITH A SEPARATE APPROVAL, (STOREFRONT ENTRANCE DOOR, PTAC LOUVER OR WINDOW INSERT) THE LESSER DESIGN PRESSURE VALUE OF ANY ASSEMBLY OR THE STOREFRONT WINDOW SHALL BE THE DESIGN PRESSURE FOR THE ENTIRE SYSTEM.

DESIGN PRESSURE RATING
SEE TABLES 2, 3, 4 & 9
IMPACT RATING
RATED FOR LARGE & SMALL MISSILE IMPACT RESISTANCE

* MIN. OF 3 THREADS BEYOND THE METAL SUBSTRATE. METAL SUBSTRATE TO MEET MIN. STRENGTH AND THICKNESS REQUIREMENTS PER CURRENT FLORIDA BUILDING CODE AND TO BE REVIEWED BY THE AUTHORITY HAVING JURISDICTION.

FOR STEEL STUDS: MIN. FU=45 KSI & MIN. FY=33 KSI.

"UNGROUTED CMU" VALUES MAY BE USED FOR GROUTED CMU APPLICATIONS.

ALL ANCHOR HEAD TYPES ARE ALLOWED.

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STOREFRONT WINDOW SYSTEM DETAILS - LM

GENERAL NOTES

SS-3500

NTS

1 OF 16

No. DWG

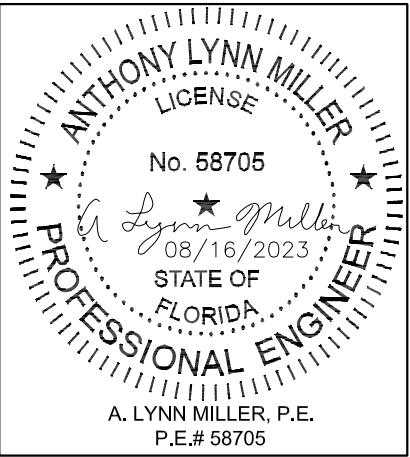
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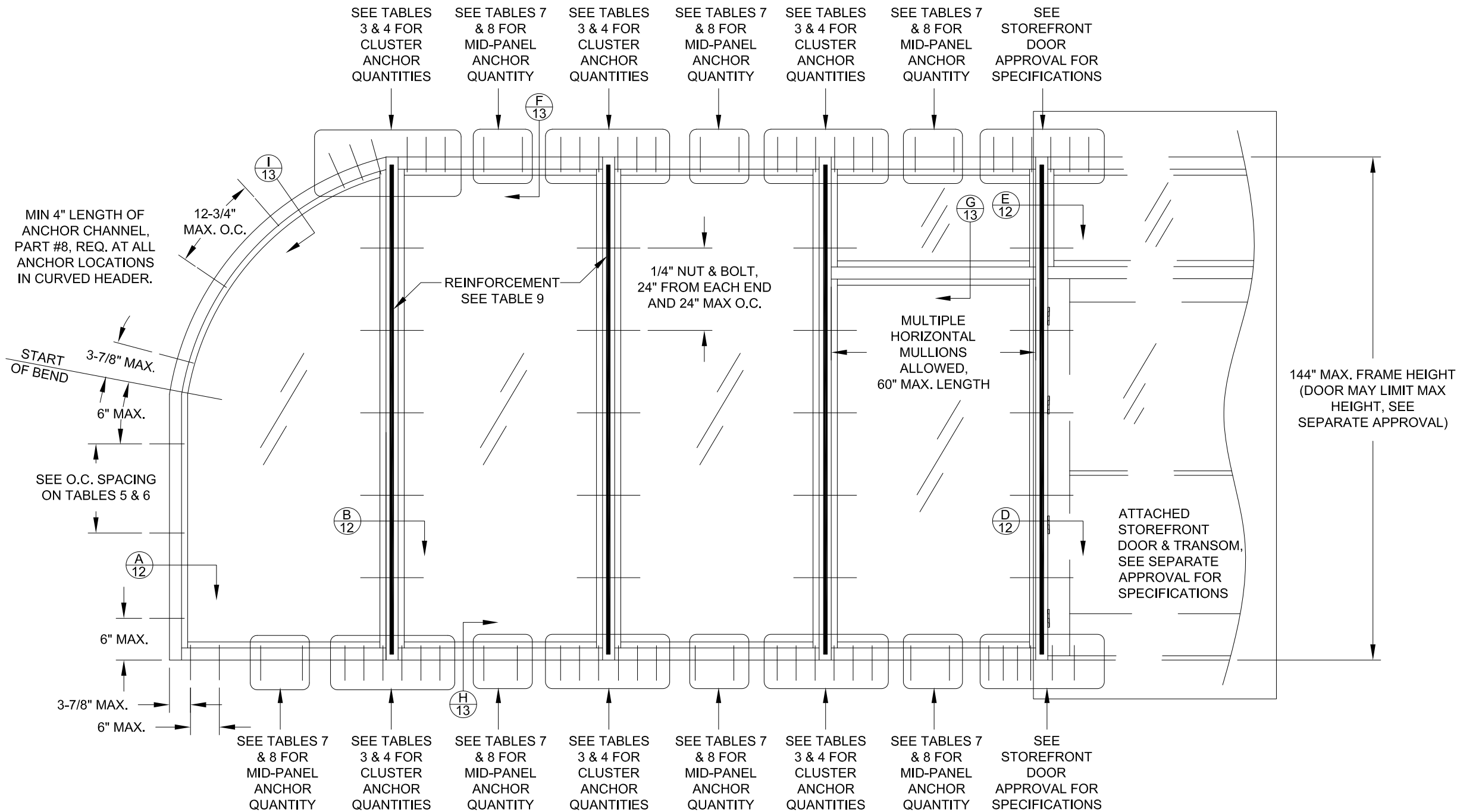
J ROSOWSKI

03/23/16

Date

Rev. Description





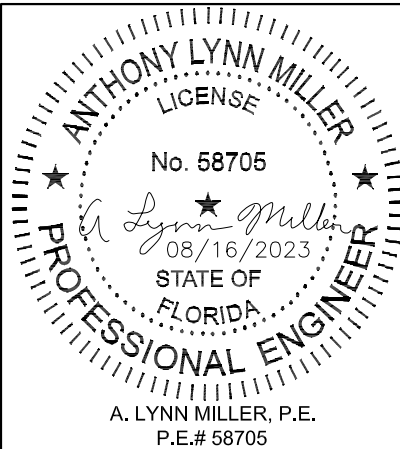
TYP. ELEVATION OF STOREFRONT WINDOW SYSTEM
WITH EXAMPLES OF CURVED HEADER, HORIZONTAL
MULLION & STOREFRONT DOOR

NOTES:

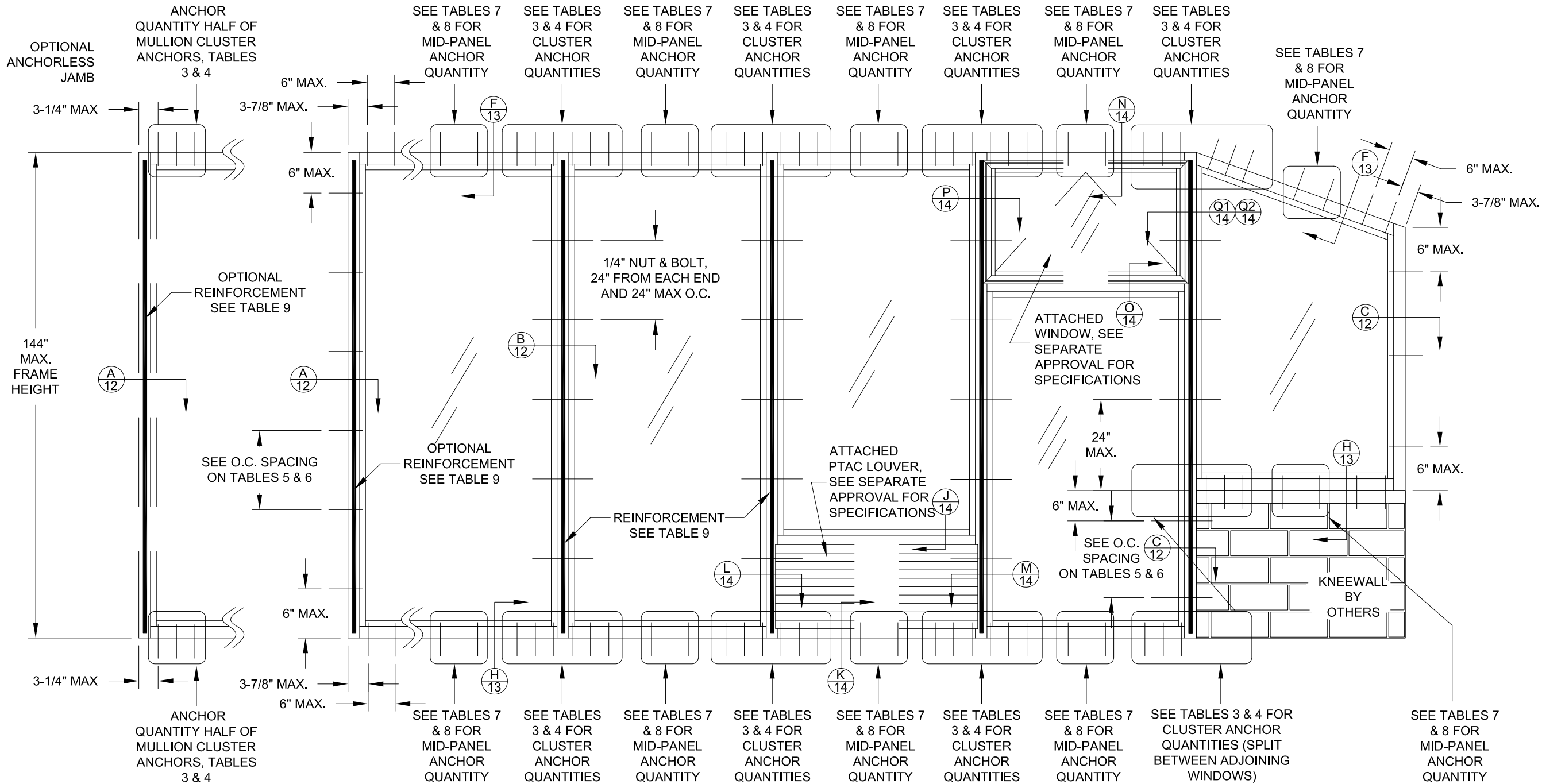
1. IF COMBINED WITH ANOTHER ASSEMBLY WITH A SEPARATE APPROVAL, (STOREFRONT ENTRANCE DOOR, PTAC LOUVER OR WINDOW INSERT) THE LESSER DESIGN PRESSURE VALUE OF ANY ASSEMBLY OR THE STOREFRONT WINDOW SHALL BE THE DESIGN PRESSURE FOR THE ENTIRE SYSTEM.
2. SEE TABLES FOR MAXIMUM ALLOWED SIZES.
3. SEE SHEET 4 FOR DAYLIGHT OPENING (DLO) FORMULAS.



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Rev. Description		Date	By	No.	Sheet	Scale	Series
NO CHANGES THIS SHEET. - JR - 8/16/23		03/23/16	J ROSOWSKI	MD-3500-2-LM	2 OF 16	NTS	SS-3500
STOREFRONT WINDOW SYSTEM DETAILS - LM							
ELEVATION A							

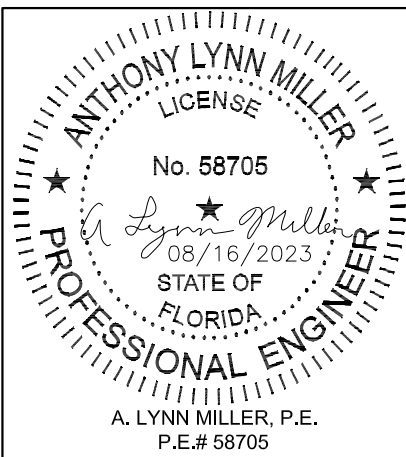


NOTES:

1. IF COMBINED WITH ANOTHER ASSEMBLY WITH A SEPARATE APPROVAL, (STOREFRONT ENTRANCE DOOR, PTAC LOUVER OR WINDOW INSERT) THE LESSER DESIGN PRESSURE VALUE OF ANY ASSEMBLY OR THE STOREFRONT WINDOW SHALL BE THE DESIGN PRESSURE FOR THE ENTIRE SYSTEM.
2. SEE TABLES FOR MAXIMUM ALLOWED SIZES.
3. AWNING WINDOW INSERT SHOWN BUT MAY BE ANY APPROVED WINDOW WITH A FLANGED FRAME.
4. SEE SHEET 4 FOR DAYLIGHT OPENING (DLO) FORMULAS.
5. MULTIPLE INSERTS WITHIN THE SAME STOREFRONT WINDOW ALLOWED.

TYP. ELEVATION OF STOREFRONT WINDOW SYSTEM
WITH EXAMPLES OF WINDOW INSERT, PTAC INSERT,
KNEEWALL, ANGLED HEADER, & ANCHORLESS JAMB

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Rev.	D
Rev. Description	NO CHANGES THIS SHEET. - JR - 8/16/23
Drawn By	J ROSOWSKI
Date	03/23/16
DWG No.	MD-3500-2-LM
Sheet	3 OF 16
Scale	NTS
Series	SS-3500
Title	STOREFRONT WINDOW SYSTEM DETAILS - LM
Desc.	ELEVATION B

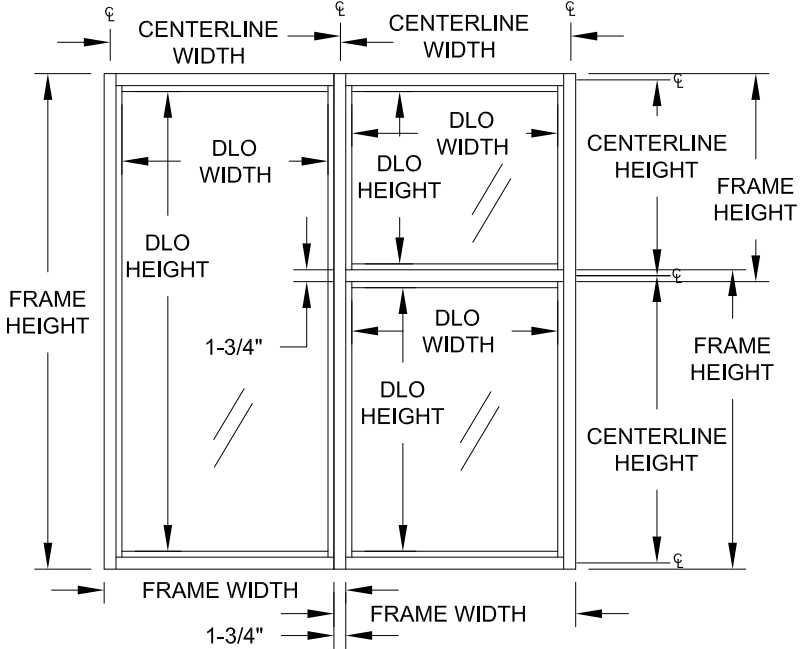
TABLE 2:

Glass DP, (psf) & Maximum Size							
Centerline Width	Frame Height	DLO Width	DLO Height	Glass Type A & D	Glass Type B, E & E1	Glass Type C, F & F1	Glass Type G, H & H1
24"	48"	20-1/4"	42-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
48"		44-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
60"		56-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
72"		68-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
84"		80-1/4"		+84.5/-84.5	+70/-80	+90/-120	+90/-100
96"		92-1/4"		+80.5/-80.5	+70/-80	+90/-120	+60/-75
108"		104-1/4"				+90/-120	+60/-75
120"		116-1/4"				+90/-120	+60/-75
132"		128-1/4"				+90/-100	+60/-75
144"		140-1/4"				+90/-100	+60/-75
24"	60"	20-1/4"	54-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
48"		44-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
60"		56-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
72"		68-1/4"		+82.8/-82.8	+70/-80	+90/-120	+60/-75
84"		80-1/4"				+90/-119.5	+60/-75
90"		86-1/4"				+90/-115.2	+60/-75
92"		88-1/4"				+90/-114	+60/-75
96"		92-1/4"				+90/-111.7	+60/-75
108"		104-1/4"				+90/-100	+60/-75
120"		116-1/4"				+90/-100	+60/-75
132"		128-1/4"				+60/-65	+60/-75
24"	72"	20-1/4"	66-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
48"		44-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
60"		56-1/4"		+82.8/-82.8	+70/-80	+90/-120	+89.7/-99.7
72"		68-1/4"				+90/-120	+60/-75
84"		80-1/4"				+90/-100	+60/-75
96"		92-1/4"				+90/-100	+60/-75
108"		104-1/4"				+60/-65	+60/-75
24"	78"	20-1/4"	72-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
48"		44-1/4"		+87.2/-87.2	+70/-80	+90/-120	+90/-100
60"		56-1/4"		+78.5/-78.5	+70/-78.5	+90/-120	+60/-75
70"		66-1/4"				+90/-119.4	+60/-75
72"		68-1/4"				+90/-118.9	+60/-75
84"		80-1/4"				+90/-100	+60/-75
92"		88-1/4"				+90/-100	+60/-75
96"		92-1/4"				+60/-65	+60/-75
102"		98-1/4"				+60/-65	+60/-75
24"	84"	20-1/4"	78-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
48"		44-1/4"		+84.5/-84.5	+70/-80	+90/-120	+88.3/-98.1
54"		50-1/4"		+79.1/-79.1	+70/-79.1	+90/-120	+60/-75
60"		56-1/4"				+90/-119.5	+60/-75
70"		66-1/4"				+90/-100	+60/-75
72"		68-1/4"				+90/-100	+60/-75
84"		80-1/4"				+90/-100	+60/-75
96"		92-1/4"				+60/-65	+60/-75
92"		88-1/4"				+60/-65	+60/-75
24"	90"	20-1/4"	84-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
42"		38-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
48"		44-1/4"		+82.3/-82.3	+70/-80	+90/-120	+60/-75
54"		50-1/4"				+90/-120	+60/-75
60"		56-1/4"				+90/-115.2	+60/-75
72"		68-1/4"				+90/-100	+60/-75
84"		80-1/4"				+60/-65	+60/-75
92"		88-1/4"				+60/-65	+60/-72.7
92"		88-1/4"				+60/-65	+60/-72.7

Glass DP, (psf) & Maximum Size							
Centerline Width	Frame Height	DLO Width	DLO Height	Glass Type A & D	Glass Type B, E & E1	Glass Type C, F & F1	Glass Type G, H & H1
24"	97-3/4"	20-1/4"	92-1/4"	+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
42"		38-1/4"		+87.9/-87.9	+70/-80	+90/-120	+60/-75
48"		44-1/4"		+80/-80	+70/-80	+90/-120	+60/-75
54"		50-1/4"				+90/-117.9	+60/-75
66"		66-1/4"				+90/-100	+60/-72.8
72"		68-1/4"				+90/-98.9	+60/-71.9
84"		80-1/4"				+60/-65	+60/-68.3
24"	102"	20-1/4"	96-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
30"		26-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
42"		38-1/4"		+86.9/-86.9	+70/-80	+90/-120	+60/-75
48"		44-1/4"				+90/-120	+60/-75
54"		50-1/4"				+90/-116.1	+60/-75
60"		56-1/4"				+90/-100	+60/-75
70"		66-1/4"				+90/-97.9	+60/-71.2
72"		68-1/4"				+60/-65	+60/-70.2
24"	108"	20-1/4"	102-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
30"		26-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
42"		38-1/4"		+85.6/-85.6	+70/-80	+90/-120	+60/-75
48"		44-1/4"				+90/-120	+60/-75
60"		56-1/4"				+90/-100	+60/-75
72"		68-1/4"				+60/-65	+60/-68.2
24"	114"	20-1/4"	108-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
30"		26-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+60/-75
48"		44-1/4"				+90/-120	+60/-75
60"		56-1/4"				+90/-100	+60/-74
72"		68-1/4"				+60/-65	+60/-66.4
24"	120"	20-1/4"	114-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
30"		26-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+60/-75
46.25"		42-1/2"				+90/-120	+60/-75
48"		44-1/4"				+90/-120	+60/-75
60"		56-1/4"				+90/-100	+60/-72.7
24"	126"	20-1/4"	120-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
30"		26-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"		+90/-90	+70/-80	+90/-120	+60/-75
42"		38-1/4"				+90/-120	+60/-75
48"		44-1/4"				+90/-100	+60/-75
54"		50-1/4"				+90/-100	+60/-75
60"		56-1/4"				+60/-65	+60/-71.6
24"	132"	20-1/4"	126-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
30"		26-1/4"		+90/-90	+70/-80	+90/-120	+90/-100
36"		32-1/4"				+90/-120	+60/-75
42"		38-1/4"				+90/-120	+60/-75
48"		44-1/4"				+90/-100	+60/-75
54"		50-1/4"				+90/-100	+60/-75
60"		56-1/4"				+60/-65	+60/-70.6
24"	138"	20-1/4"	132-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
30"		26-1/4"		+90/-90	+70/-80	+90/-120	+60/-75
36"		32-1/4"				+90/-120	+60/-75
42"		38-1/4"				+90/-100	+60/-75
48"		44-1/4"				+90/-100	+60/-75
60"		56-1/4"				+60/-65	+60/-69.7
24"	144"	20-1/4"	138-1/2"	+90/-90	+70/-80	+90/-120	+90/-100
30"		26-1/4"		+90/-90	+70/-80	+90/-120	+60/-75
36"		32-1/4"				+90/-120	+60/-75
42"		38-1/4"				+90/-100	+60/-75
48"		44-1/4"				+90/-100	+60/-75
58.25"		54-1/2"				+60/-65	+60/-68.9

TABLE 2A:

Glass Types (Listed Exterior to Interior)	
A	Lami: 1/4"A, .090" SG, 1/4"A
B	Lami: 1/4"HS, .090" PVB, 1/4"HS
C	Lami: 1/4"HS, .090" SG, 1/4"HS
D	Lami IG: 1/4"A, .090" SG, 1/4"A, AIRSPACE, 1/4"T CAP
E	Lami IG: 1/4"HS, .090" PVB, 1/4"HS, AIRSPACE, 1/4"T CAP
E1	Reversed Lami IG: 1/4"T CAP, AIRSPACE, 1/4" HS, .090" PVB, 1/4"HS
F	Lami IG: 1/4"HS, .090" SG, 1/4"HS, AIRSPACE, 1/4"T CAP
F1	Reversed Lami IG: 1/4"T CAP, AIRSPACE, 1/4" HS, .090" SG, 1/4"HS
G	Lami IG: 1/4"HS, .090" PVB PLUS, 1/4"HS
H	Lami IG: 1/4"HS, .090" PVB PLUS, 1/4"HS, AIRSPACE, 1/4"T CAP
H1	Reversed Lami IG: 1/4"T CAP, AIRSPACE, 1/4" HS, .090" PVB PLUS, 1/4"HS



DLO (DAYLIGHT OPENING) FORMULAS:

FRAME WIDTH - 5-1/2" = DLO WIDTH
FRAME HEIGHT - 5-1/2" = DLO HEIGHT

CENTERLINE WIDTH - 3-3/4" = DLO WIDTH
CENTERLINE HEIGHT - 3-3/4" = DLO HEIGHT

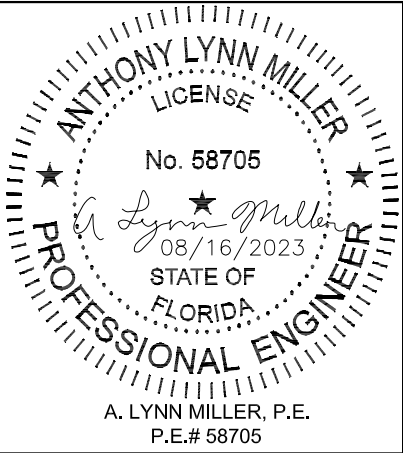
CENTERLINE WIDTH - 2-1/4" = GLASS WIDTH
CENTERLINE HEIGHT - 2-1/4" = GLASS HEIGHT
FRAME WIDTH - 4" = GLASS WIDTH
FRAME HEIGHT - 4" = GLASS HEIGHT

NOTES:

- IF COMBINED WITH ANOTHER ASSEMBLY WITH A SEPARATE APPROVAL, (STOREFRONT ENTRANCE DOOR, PTAC LOUVER OR WINDOW INSERT) THE LESSER DESIGN PRESSURE VALUE OF ANY ASSEMBLY OR THE STOREFRONT WINDOW SHALL BE THE DESIGN PRESSURE FOR THE ENTIRE SYSTEM.
- DLO = DAYLIGHT OPENING
- SEE SHEET 15 FOR DESCRIPTIONS OF GLASS TYPES.



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Rev. Description

ADDED GLASS TYPES
G, H & H1.
- JR - 8/16/23

Rev.

D

TABLE 2

J ROSOWSKI

MD-3500-2-LM

03/23/16

4 OF 16

NTS

SS-3500

Scale

Sheet

Series

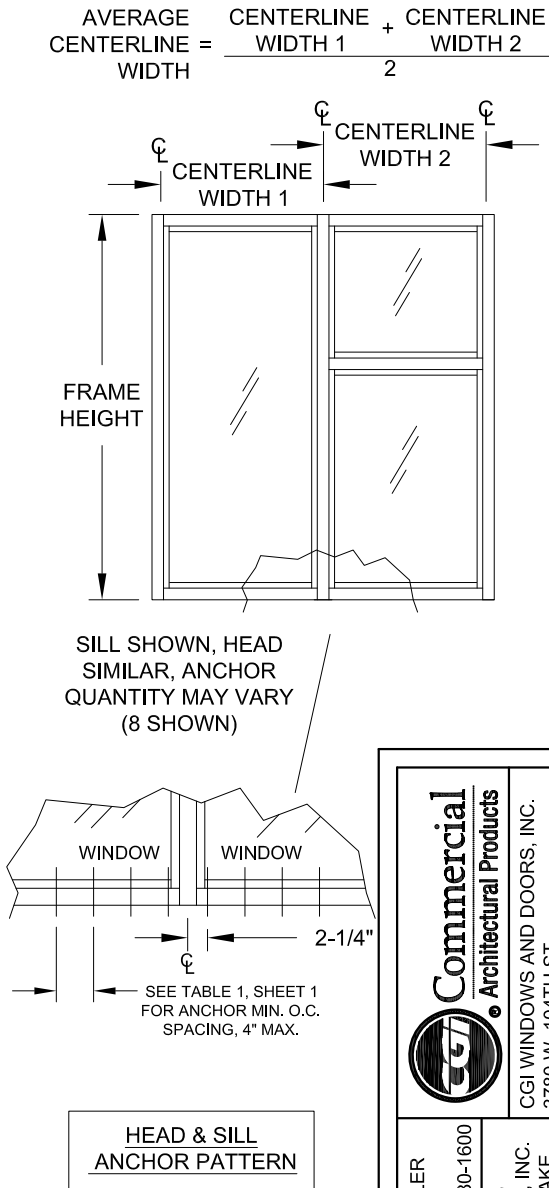
Desc.

Title

TABLE 3:

[illegible]

Mullion Anchor Cluster Design Pressure at Head/Sill, (+/- psf)													Shim Thickness: 1/4"			
Average Centerline Width	Frame Height	Group "A" Anchor Quantity			Group "B" Anchor Quantity			Group "C" Anchor Quantity			Group "D" Anchor Quantity			Group "E" Anchor Quantity		
		4	6	8	4	6	8	4	6	8	4	6	8	4	6	8
24"	97-3/4"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36"		118.5	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
42"		105.5	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
48"		96.1	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
54"		89.0	120.0	120.0	120.0	120.0	120.0	119.1	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
70"		77.4	116.2	120.0	107.2	120.0	120.0	103.6	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
72"		76.5	114.8	120.0	105.9	120.0	120.0	102.3	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
84"		72.6	109.0	120.0	100.6	120.0	120.0	97.2	120.0	120.0	114.9	120.0	120.0	120.0	120.0	120.0
24"	102"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36"		112.5	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
42"		100.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
48"		90.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
54"		84.0	120.0	120.0	116.3	120.0	120.0	112.4	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
60"		78.7	118.1	120.0	109.0	120.0	120.0	105.3	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
70"		72.5	108.8	120.0	100.4	120.0	120.0	97.0	120.0	120.0	114.7	120.0	120.0	120.0	120.0	120.0
72"	71.6	107.4	120.0	99.1	120.0	120.0	95.8	120.0	120.0	113.2	120.0	120.0	119.5	120.0	120.0	
24"	108"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36"		105.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
42"		93.1	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
48"		84.4	120.0	120.0	116.8	120.0	120.0	112.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
60"		72.7	109.0	120.0	100.7	120.0	120.0	97.2	120.0	120.0	115.0	120.0	120.0	120.0	120.0	120.0
72"		65.6	98.4	120.0	90.9	120.0	120.0	87.8	120.0	120.0	103.8	120.0	120.0	109.6	120.0	120.0
84"		60.6	90.9	120.0	83.9	120.0	120.0	81.0	120.0	120.0	95.8	120.0	120.0	101.1	120.0	120.0
24"	114"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
30"		114.5	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36"		98.4	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
48"		78.7	118.1	120.0	109.0	120.0	120.0	105.3	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
60"		67.5	101.2	120.0	93.5	120.0	120.0	90.3	120.0	120.0	106.7	120.0	120.0	112.7	120.0	120.0
72"		60.6	90.9	120.0	83.9	120.0	120.0	81.0	120.0	120.0	95.8	120.0	120.0	101.1	120.0	120.0
84"		60.6	90.9	120.0	83.9	120.0	120.0	81.0	120.0	120.0	95.8	120.0	120.0	101.1	120.0	120.0
96"		60.6	90.9	120.0	83.9	120.0	120.0	81.0	120.0	120.0	95.8	120.0	120.0	101.1	120.0	120.0
24"	120"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
30"		108.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36"		92.6	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
46.25"		81.8	120.0	120.0	113.3	120.0	120.0	109.4	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
48"		73.8	110.7	120.0	102.2	120.0	120.0	98.8	120.0	120.0	116.8	120.0	120.0	120.0	120.0	120.0
60"		63.0	94.5	120.0	87.2	120.0	120.0	84.3	120.0	120.0	99.6	120.0	120.0	105.2	120.0	120.0
72"		63.0	94.5	120.0	87.2	120.0	120.0	84.3	120.0	120.0	99.6	120.0	120.0	105.2	120.0	120.0
84"		63.0	94.5	120.0	87.2	120.0	120.0	84.3	120.0	120.0	99.6	120.0	120.0	105.2	120.0	120.0
24"	126"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
30"		102.2	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36"		87.5	120.0	120.0	120.0	120.0	120.0	117.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
42"		77.1	115.7	120.0	106.8	120.0	120.0	103.2	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
48"		69.5	104.2	120.0	96.2	120.0	120.0	92.9	120.0	120.0	109.9	120.0	120.0	116.0	120.0	120.0
54"		63.6	95.5	120.0	88.1	120.0	120.0	85.1	120.0	120.0	100.6	120.0	120.0	106.2	120.0	120.0
60"		59.1	88.6	118.1	81.8	120.0	120.0	79.0	118.5	120.0	93.4	120.0	120.0	98.6	120.0	120.0
72"		59.1	88.6	118.1	81.8	120.0	120.0	79.0	118.5	120.0	93.4	120.0	120.0	98.6	120.0	120.0
24"	132"	118.1	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
30"		96.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36"		82.9	120.0	120.0	114.8	120.0	120.0	110.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
42"		73.0	109.5	120.0	101.0	120.0	120.0	97.6	120.0	120.0	115.4	120.0	120.0	120.0	120.0	120.0
48"		65.6	98.4	120.0	90.9	120.0	120.0	87.8	120.0	120.0	103.8	120.0	120.0	109.6	120.0	120.0
54"		60.0	90.0	120.0	83.1	120.0	120.0	80.3	120.0	120.0	94.9	120.0	120.0	100.2	120.0	120.0
60"		55.6	83.4	111.2	77.0	115.5	120.0	74.4	111.5	120.0	87.9	120.0	120.0	92.8	120.0	120.0
72"		55.6	83.4	111.2	77.0	115.5	120.0	74.4	111.5	120.0	87.9	120.0	120.0	92.8	120.0	120.0
24"	138"	112.5	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
30"		92.2	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36"		78.7	118.1	120.0	109.0	120.0	120.0	105.3	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
42"		69.2	103.8	120.0	95.9	120.0	120.0	92.6	120.0	120.0	109.5	120.0	120.0	115.6	120.0	120.0
48"		62.2	93.3	120.0	86.1	120.0	120.0	83.2	120.0	120.0	98.3	120.0	120.0	103.8	120.0	120.0
60"		52.5	78.7	105.0	72.7	109.0	120.0	70.2	105.3	120.0	83.0	120.0	120.0	87.6	120.0	120.0
72"		52.5	78.7	105.0	72.7	109.0	120.0	70.2	105.3	120.0	83.0	120.0	120.0	87.6	120.0	120.0
84"		52.5	78.7	105.0	72.7	109.0	120.0	70.2	105.3	120.0	83.0	120.0	120.0	87.6	120.0	120.0
24"	144"	107.4	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
30"		87.9	120.0	120.0	120.0	120.0	120.0	117.6	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36"		75.0	112.5	120.0	103.8	120.0	120.0	100.3	120.0	120.0	118.6	120.0	120.0	120.0	120.0	120.0
42"		65.9	98.8	120.0	91.2	120.0	120.0	88.1	120.0	120.0	104.1	120.0	120.0	109.9	120.0	120.0
48"		59.1	88.6	118.1	81.8	120.0	120.0	79.0	118.5	120.0	93.4	120.0	120.0	98.6	120.0	120.0
58.25"		50.8	76.3	101.7	70.4	105.6	120.0	68.0	102.0	120.0	80.4	120.0	120.0	84.9	120.0	120.0



NOTES:

1. IF COMBINED WITH ANOTHER ASSEMBLY WITH A SEPARATE APPROVAL, (STOREFRONT ENTRANCE DOOR, PTAC LOUVER OR WINDOW INSERT) THE LESSER DESIGN PRESSURE VALUE OF ANY ASSEMBLY OR THE STOREFRONT WINDOW SHALL BE THE DESIGN PRESSURE FOR THE ENTIRE SYSTEM.

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Rev.	D
NO CHANGES THIS SHEET. - JR - 8/16/23	
Rev. Description	
STOREFRONT WINDOW SYSTEM DETAILS - LM	
TABLE 3	
J ROSOWSKI	
By	
MD-3500-2-LM	
Date	
03/23/16	
SS-3500	
Scale	
NTS	
Sheet	
5 OF 16	
DWG No.	
MD-3500-2-LM	
Drawn By	
J ROSOWSKI	
Series Desc.	
Title	

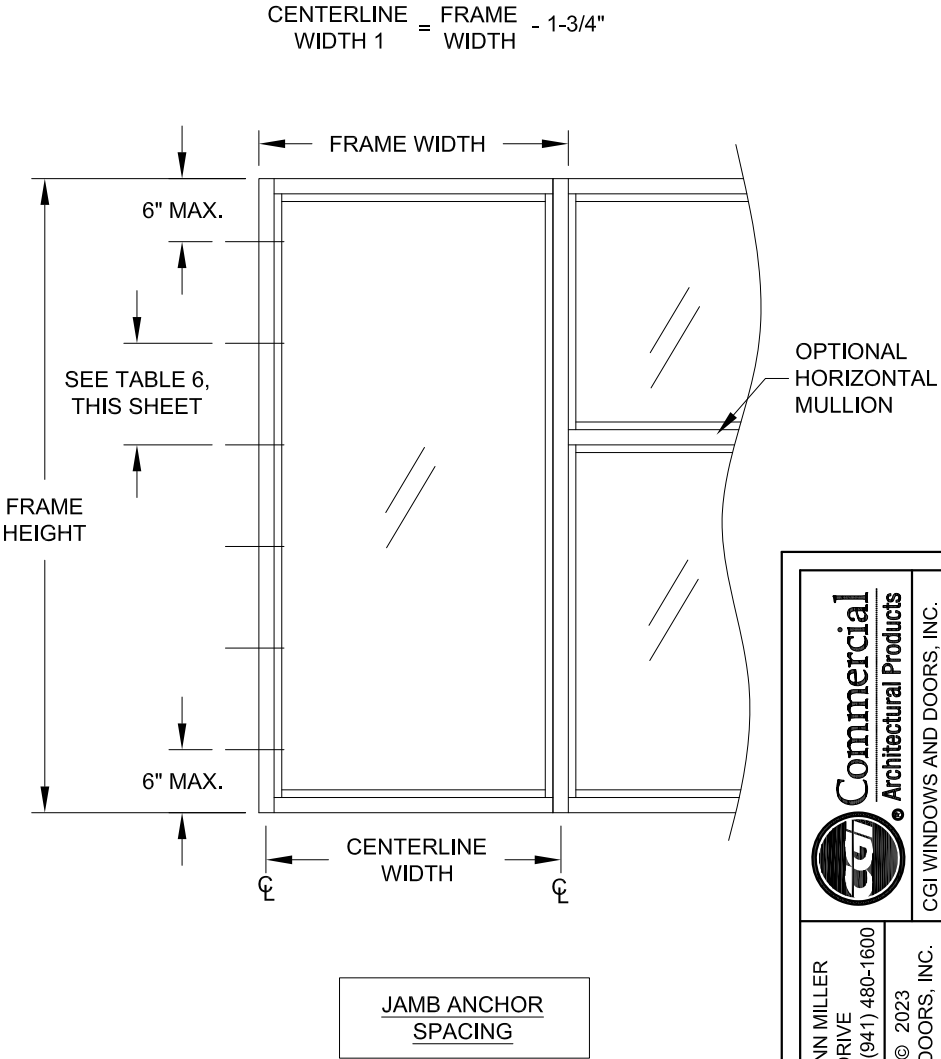
TABLE 4:

Mullion Anchor Cluster Design Pressure at Head/Sill, (+/- psf)														Shim Thickness: 1/2"			
Average Centerline Width	Frame Height	Group "A" Anchor Quantity			Group "B" Anchor Quantity			Group "C" Anchor Quantity			Group "D" Anchor Quantity			Group "E" Anchor Quantity			
		4	6	8	4	6	8	4	6	8	4	6	8	4	6	8	
24"	48"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
36"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
48"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
60"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
72"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
84"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
96"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
108"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
120"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
132"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
144"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0		
24"	60"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
36"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
48"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
60"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
72"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
84"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
90"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
92"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
96"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
108"		120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
120"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0		
24"	72"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
36"		112.9	120.0	120.0	112.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
48"		95.3	120.0	120.0	95.3	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
60"		87.1	120.0	120.0	87.1	120.0	120.0	119.2	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
72"		84.7	120.0	120.0	84.7	120.0	120.0	115.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
84"		84.7	120.0	120.0	84.7	120.0	120.0	115.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
96"		84.7	120.0	120.0	84.7	120.0	120.0	115.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
108"		84.7	120.0	120.0	84.7	120.0	120.0	115.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
24"	78"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
36"		101.7	120.0	120.0	101.7	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
48"		84.7	120.0	120.0	84.7	120.0	120.0	115.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
60"		76.2	114.4	120.0	76.2	114.4	120.0	104.3	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
70"		72.9	109.4	120.0	72.9	109.4	120.0	99.8	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
72"		72.6	108.9	120.0	72.6	108.9	120.0	99.3	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
84"		72.2	108.3	120.0	72.2	108.3	120.0	98.7	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
92"		72.2	108.3	120.0	72.2	108.3	120.0	98.7	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
96"		72.2	108.3	120.0	72.2	108.3	120.0	98.7	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
102"		72.2	108.3	120.0	72.2	108.3	120.0	98.7	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
24"	84"	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
36"		92.4	120.0	120.0	92.4	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
48"		76.2	114.4	120.0	76.2	114.4	120.0	104.3	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
54"		71.3	107.0	120.0	71.3	107.0	120.0	97.6	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
60"		67.8	101.7	120.0	67.8	101.7	120.0	92.7	120.0	120.0	118.1	120.0	120.0	120.0	120.0	120.0	
70"		64.0	96.0	120.0	64.0	96.0	120.0	87.5	120.0	120.0	111.6	120.0	120.0	120.0	120.0	120.0	
72"		63.5	95.3	120.0	63.5	95.3	120.0	86.9	120.0	120.0	110.7	120.0	120.0	120.0	120.0	120.0	
84"		62.2	93.4	120.0	62.2	93.4	120.0	85.1	120.0	120.0	108.5	120.0	120.0	120.0	120.0	120.0	
96"		62.2	93.4	120.0	62.2	93.4	120.0	85.1	120.0	120.0	108.5	120.0	120.0	120.0	120.0	120.0	
24"	90"	117.3	120.0	120.0	117.3	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
36"		84.7	120.0	120.0	84.7	120.0	120.0	115.9	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
42"		75.8	113.6	120.0	75.8	113.6	120.0	103.6	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
48"		69.3	104.0	120.0	69.3	104.0	120.0	94.8	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	
54"		64.5	96.8	120.0	64.5	96.8	120.0	88.3	120.0	120.0	112.5	120.0	120.0	120.0	120.0	120.0	
60"		61.0	91.5	120.0	61.0	91.5	120.0	83.4	120.0	120.0	106.3	120.0	120.0	120.0	120.0	120.0	
72"		56.5	84.7	112.9	56.5	84.7	112.9	77.2	115.9	120.0	98.4	120.0	120.0	120.0	120.0	120.0	
84"		54.5	81.7	108.9	54.5	81.7	108.9	74.5	111.7	120.0	94.9	120.0	120.0	120.0	120.0	120.0	
92"	54.2	81.3	108.4	54.2	81.3	108.4	74.1	111.2	120.0	94.5	120.0	120.0	120.0	120.0	120.0		

TABLE 5:

Jamb Anchor Spacing						Shim Thickness = 1/4"
Nominal Dim.		Installed with Group "A" Anchors	Installed with Group "B" Anchors	Installed with Group "C" Anchors	Installed with Group "D" Anchors	Installed with Group "E" Anchors
Centerline Width	Frame Height					
24"	48"	18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
48"		18"	18"	18"	18"	18"
60"		18"	18"	18"	18"	18"
72"		18"	18"	18"	18"	18"
84"		18"	18"	18"	18"	18"
96"		18"	18"	18"	18"	18"
108"		18"	18"	18"	18"	18"
120"		18"	18"	18"	18"	18"
132"		18"	18"	18"	18"	18"
144"		18"	18"	18"	18"	18"
24"	60"	18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
48"		18"	18"	18"	18"	18"
60"		18"	18"	18"	18"	18"
72"		18"	18"	18"	18"	18"
84"		18"	18"	18"	18"	18"
90"		18"	18"	18"	18"	18"
92"		18"	18"	18"	18"	18"
96"		18"	18"	18"	18"	18"
108"		18"	18"	18"	18"	18"
120"		18"	18"	18"	18"	18"
132"		18"	18"	18"	18"	18"
24"	72"	18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
48"		18"	18"	18"	18"	18"
60"		18"	18"	15"	18"	18"
72"		18"	18"	15"	18"	18"
84"		18"	18"	15"	18"	18"
96"	72"	18"	18"	15"	18"	18"
108"		18"	18"	15"	18"	18"
24"	78"	18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
48"		18"	18"	16-1/2"	18"	18"
60"		16-1/2"	18"	16-1/2"	18"	18"
70"		16-1/2"	18"	13-3/16"	18"	18"
72"		16-1/2"	18"	13-3/16"	18"	18"
84"		16-1/2"	18"	13-3/16"	18"	18"
92"		16-1/2"	18"	13-3/16"	18"	18"
96"		16-1/2"	18"	13-3/16"	18"	18"
102"		16-1/2"	18"	13-3/16"	18"	18"
24"	84"	18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
48"		18"	18"	18"	18"	18"
54"		18"	18"	14-3/8"	18"	18"
60"		18"	18"	14-3/8"	18"	18"
70"		18"	18"	14-3/8"	18"	18"
72"		18"	18"	14-3/8"	18"	18"
84"		18"	18"	14-3/8"	18"	18"
96"		18"	18"	14-3/8"	18"	18"
24"	90"	18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
42"		18"	18"	18"	18"	18"
48"		18"	18"	15-5/8"	18"	18"
54"		18"	18"	15-5/8"	18"	18"
60"		15-5/8"	18"	15-5/8"	18"	18"
72"		15-5/8"	18"	13"	18"	18"
84"		15-5/8"	18"	13"	18"	18"
92"		15-5/8"	18"	13"	18"	18"

Jamb Anchor Spacing						Shim Thickness = 1/4"
Nominal Dim.		Installed with Group "A" Anchors	Installed with Group "B" Anchors	Installed with Group "C" Anchors	Installed with Group "D" Anchors	Installed with Group "E" Anchors
Centerline Width	Frame Height					
24"	97-3/4"	18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
42"		18"	18"	17-1/8"	18"	18"
48"		18"	18"	17-1/8"	18"	18"
54"		17-1/8"	18"	14-5/16"	18"	18"
70"		14-5/16"	18"	12-1/4"	18"	18"
72"		14-5/16"	18"	12-1/4"	18"	18"
84"		14-5/16"	18"	12-1/4"	17-1/8"	18"
24"	102"	18"	18"	18"	18"	18"
30"		18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
42"		18"	18"	18"	18"	18"
48"		18"	18"	15"	18"	18"
54"		18"	18"	15"	18"	18"
60"		15"	18"	12-7/8"	18"	18"
70"		15"	18"	12-7/8"	18"	18"
72"		15"	18"	12-7/8"	18"	18"
24"	108"	18"	18"	18"	18"	18"
30"		18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
42"		18"	18"	16"	18"	18"
48"		18"	18"	16"	18"	18"
60"		16"	18"	13-11/16"	18"	18"
72"	114"	13-11/16"	18"	12"	18"	18"
24"		18"	18"	18"	18"	18"
30"		18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
48"		17"	18"	14-9/16"	18"	18"
60"		14-9/16"	18"	12-3/4"	18"	18"
72"	120"	14-9/16"	18"	11-5/16"	17"	18"
24"		18"	18"	18"	18"	18"
30"		18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
46.25"		18"	18"	18"	18"	18"
48"		18"	18"	15-7/16"	18"	18"
60"	126"	15-7/16"	18"	13-1/2"	18"	18"
24"		18"	18"	18"	18"	18"
30"		18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
42"		18"	18"	16-5/16"	18"	18"
48"		18"	18"	14-1/4"	18"	18"
54"	132"	16-5/16"	18"	14-1/4"	18"	18"
60"		14-1/4"	18"	12-11/16"	18"	18"
24"	138"	18"	18"	18"	18"	18"
30"		18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
42"		18"	18"	18"	18"	18"
48"		17-1/8"	18"	15"	18"	18"
54"	144"	15"	18"	13-5/16"	18"	18"
60"		15"	18"	12"	18"	18"
24"	144"	18"	18"	18"	18"	18"
30"		18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
42"		18"	18"	18"	18"	18"
48"	144"	16-1/2"	18"	14-11/16"	18"	18"
58.25"		14-11/16"	18"	12"	18"	18"

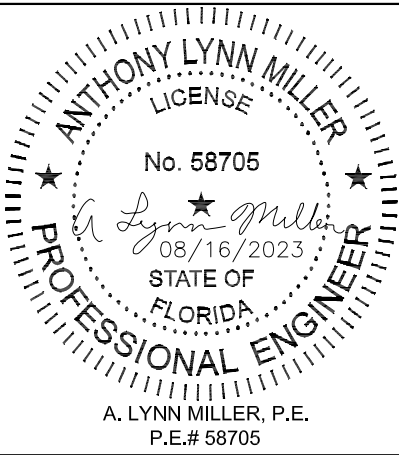


**Commercial**
Architectural Products

CGI WINDOWS AND DOORS, INC.
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NO CHANGES THIS SHEET. - JR - 8/16/23

Rev. Description

Rev.

TABLE 5

SS-3500

NTS

7 OF 16

DWG No.

MD-3500-2-LM

Date

03/23/16

By

J ROSOWSKI

Storefront Window System Details - LM

Series

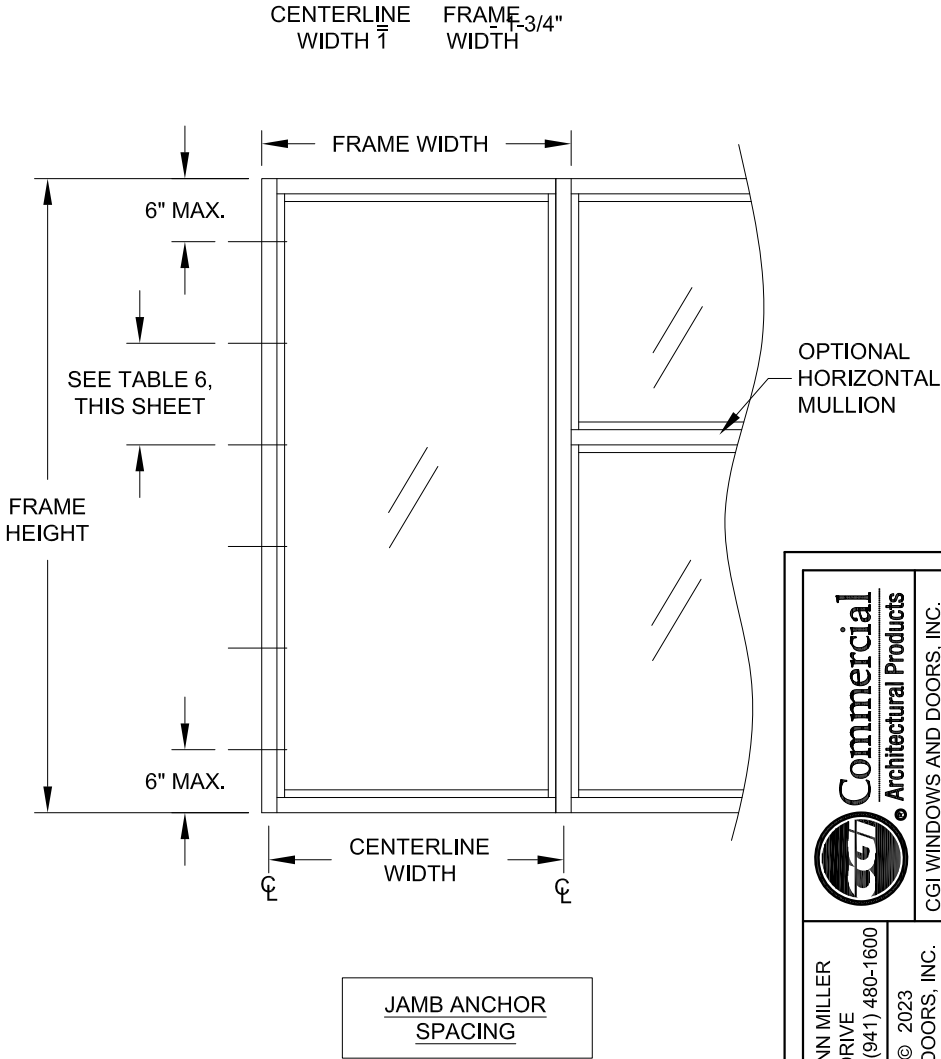
Desc.

Title

TABLE 6:

Jamb Anchor Spacing						Shim Thickness = 1/2"
Nominal Dim.		Installed with Group "A" Anchors	Installed with Group "B" Anchors	Installed with Group "C" Anchors	Installed with Group "D" Anchors	Installed with Group "E" Anchors
Centerline Width	Frame Height					
24"	48"	18"	18"	18"	18"	18"
36"		18"	18"	18"	18"	18"
48"		18"	18"	18"	18"	18"
60"		18"	18"	18"	18"	18"
72"		18"	18"	18"	18"	18"
84"		18"	18"	18"	18"	18"
96"		18"	18"	18"	18"	18"
108"		18"	18"	18"	18"	18"
120"		18"	18"	18"	18"	18"
132"		18"	18"	18"	18"	18"
144"		18"	18"	18"	18"	18"
24"	60"	18"	18"	18"	18"	18"
36"		16"	16"	18"	18"	18"
48"		16"	16"	18"	18"	18"
60"		16"	16"	18"	18"	18"
72"		16"	16"	18"	18"	18"
84"		16"	16"	18"	18"	18"
90"		16"	16"	18"	18"	18"
92"		16"	16"	18"	18"	18"
96"		16"	16"	18"	18"	18"
108"		16"	16"	18"	18"	18"
120"		16"	16"	18"	18"	18"
132"		16"	16"	18"	18"	18"
24"	72"	18"	18"	18"	18"	18"
36"		15"	15"	18"	18"	18"
48"		12"	12"	18"	18"	18"
60"		12"	12"	15"	18"	18"
72"		12"	12"	15"	18"	18"
84"		12"	12"	15"	18"	18"
96"		12"	12"	15"	18"	18"
108"		12"	12"	15"	18"	18"
24"	78"	18"	18"	18"	18"	18"
36"		16-1/2"	16-1/2"	18"	18"	18"
48"		13-3/16"	13-3/16"	16-1/2"	18"	18"
60"		11"	11"	16-1/2"	18"	18"
70"		11"	11"	13-3/16"	18"	18"
72"		11"	11"	13-3/16"	18"	18"
84"		11"	11"	13-3/16"	18"	18"
92"		11"	11"	13-3/16"	18"	18"
96"		11"	11"	13-3/16"	18"	18"
102"		11"	11"	13-3/16"	18"	18"
24"	84"	18"	18"	18"	18"	18"
36"		14-3/8"	14-3/8"	18"	18"	18"
48"		12"	12"	18"	18"	18"
54"		12"	12"	14-3/8"	18"	18"
60"		10-5/16"	10-5/16"	14-3/8"	18"	18"
70"		10-5/16"	10-5/16"	14-3/8"	18"	18"
72"		10-5/16"	10-5/16"	14-3/8"	18"	18"
84"		10-5/16"	10-5/16"	14-3/8"	18"	18"
96"		10-5/16"	10-5/16"	14-3/8"	18"	18"
24"	90"	18"	18"	18"	18"	18"
36"		15-5/8"	15-5/8"	18"	18"	18"
42"		13"	13"	18"	18"	18"
48"		13"	13"	15-5/8"	18"	18"
54"		11-1/8"	11-1/8"	15-5/8"	18"	18"
60"		11-1/8"	11-1/8"	15-5/8"	18"	18"
72"		9-3/4"	9-3/4"	13"	18"	18"
84"		9-3/4"	9-3/4"	13"	18"	18"
92"		9-3/4"	9-3/4"	13"	15-5/8"	18"

Jamb Anchor Spacing						Shim Thickness = 1/2"
Nominal Dim.		Installed with Group "A" Anchors	Installed with Group "B" Anchors	Installed with Group "C" Anchors	Installed with Group "D" Anchors	Installed with Group "E" Anchors
Centerline Width	Frame Height					
24"	97-3/4"	18"	18"	18"	18"	18"
36"		14-5/16"	14-5/16"	18"	18"	18"
42"		12-1/4"	12-1/4"	17-1/8"	18"	18"
48"		12-1/4"	12-1/4"	17-1/8"	18"	18"
54"		10-3/4"	10-3/4"	14-5/16"	18"	18"
70"		9-1/2"	9-1/2"	12-1/4"	17-1/8"	18"
72"		9-1/2"	9-1/2"	12-1/4"	17-1/8"	18"
84"		8-9/16"	8-9/16"	12-1/4"	17-1/8"	18"
24"	102"	18"	18"	18"	18"	18"
30"		18"	18"	18"	18"	18"
36"		15"	15"	18"	18"	18"
42"		12-7/8"	12-7/8"	18"	18"	18"
48"		11-1/4"	11-1/4"	15"	18"	18"
54"		11-1/4"	11-1/4"	15"	18"	18"
60"		10"	10"	12-7/8"	18"	18"
70"		9"	9"	12-7/8"	18"	18"
72"		9"	9"	12-7/8"	18"	18"
24"	108"	18"	18"	18"	18"	18"
30"		16"	16"	18"	18"	18"
36"		13-11/16"	13-11/16"	18"	18"	18"
42"		13-11/16"	13-11/16"	16"	18"	18"
48"		12"	12"	16"	18"	18"
60"		9-5/8"	9-5/8"	13-11/16"	18"	18"
72"		8-3/4"	8-3/4"	12"	16"	18"
24"	114"	18"	18"	18"	18"	18"
30"		17"	17"	18"	18"	18"
36"		14-9/16"	14-9/16"	18"	18"	18"
48"		11-5/16"	11-5/16"	14-9/16"	18"	18"
60"		9-1/4"	9-1/4"	12-3/4"	17"	18"
72"		8-1/2"	8-1/2"	11-5/16"	14-9/16"	18"
24"	120"	18"	18"	18"	18"	18"
30"		18"	18"	18"	18"	18"
36"		13-1/2"	13-1/2"	18"	18"	18"
46.25"		12"	12"	18"	18"	18"
48"		10-13/16"	10-13/16"	15-7/16"	18"	18"
60"		9-13/16"	9-13/16"	13-1/2"	18"	18"
24"	126"	18"	18"	18"	18"	18"
30"		16-5/16"	16-5/16"	18"	18"	18"
36"		14-1/4"	14-1/4"	18"	18"	18"
42"		12-11/16"	12-11/16"	16-5/16"	18"	18"
48"		11-3/8"	11-3/8"	14-1/4"	18"	18"
54"		10-3/8"	10-3/8"	14-1/4"	18"	18"
60"		9-1/2"	9-1/2"	12-11/16"	16-5/16"	18"
24"	132"	18"	18"	18"	18"	18"
30"		17-1/8"	17-1/8"	18"	18"	18"
36"		15"	15"	18"	18"	18"
42"		12"	12"	17-1/8"	18"	18"
48"		10-15/16"	10-15/16"	15"	18"	18"
54"		10"	10"	13-5/16"	17-1/8"	18"
60"		9-1/4"	9-1/4"	12"	17-1/8"	18"
24"	138"	18"	18"	18"	18"	18"
30"		15-3/4"	15-3/4"	18"	18"	18"
36"		14"	14"	18"	18"	18"
42"		12-5/8"	12-5/8"	15-3/4"	18"	18"
48"		11-7/16"	11-7/16"	14"	18"	18"
60"		9"	9"	12-5/8"	15-3/4"	18"
24"	144"	18"	18"	18"	18"	18"
30"		16-1/2"	16-1/2"	18"	18"	18"
36"		14-11/16"	14-11/16"	18"	18"	18"
42"		12"	12"	16-1/2"	18"	18"
48"		11"	11"	14-11/16"	18"	18"
58.25"		9-7/16"	9-7/16"	12"	16-1/2"	18"



Commercial
Architectural Products

CGI WINDOWS AND DOORS, INC.
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(305) 593-6590

PREPARED BY: A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275; (941) 480-1600

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NO CHANGES THIS SHEET.
- JR - 8/16/23

Rev. Description

Rev.

D

STOREFRONT WINDOW SYSTEM DETAILS - LM

TABLE 6

SS-3500

NTS

8 OF 16

MD-3500-2-LM

J ROSOWSKI

03/23/16

Series

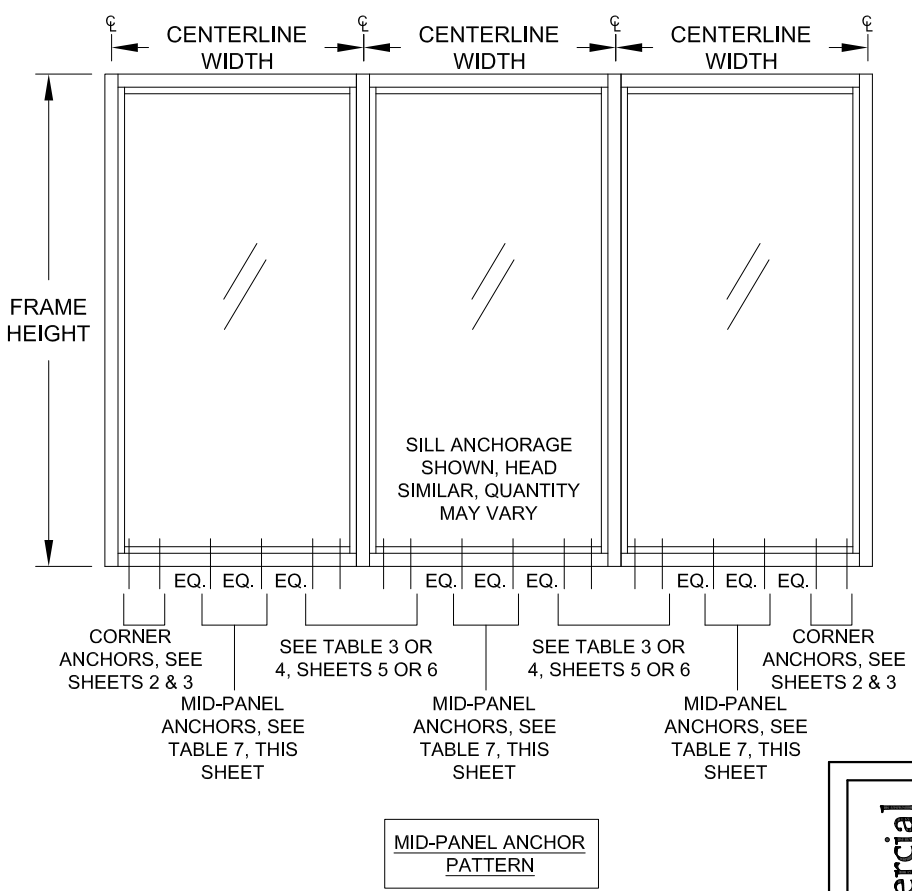
Desc.

Title

TABLE 7:

Mid-Panel Anchor Quantity				Shim Thickness = 1/4"		
Nominal Dim.		Installed with Group "A" Anchors	Installed with Group "B" Anchors	Installed with Group "C" Anchors	Installed with Group "D" Anchors	Installed with Group "E" Anchors
Centerline Width	Frame Height					
24"	48"	1	1	1	1	1
36"		1	1	1	1	1
48"		2	2	2	2	1
60"		3	2	2	2	2
72"		4	3	3	3	3
84"		5	4	4	4	4
96"		5	5	5	5	5
108"		6	6	6	6	6
120"		7	6	6	6	6
132"		8	7	7	7	7
144"		9	8	8	8	8
24"	60"	1	1	1	1	1
36"		1	1	1	1	1
48"		2	2	2	2	1
60"		3	2	2	2	2
72"		4	3	3	3	3
84"		5	4	4	4	4
90"		6	4	4	4	4
92"		6	5	5	5	5
96"		6	5	5	5	5
108"		7	6	6	6	6
120"		8	6	6	6	6
132"	9	7	7	7	7	
24"	72"	1	1	1	1	1
36"		1	1	1	1	1
48"		2	2	2	2	1
60"		3	2	2	2	2
72"		4	3	3	3	3
84"		5	4	4	4	4
96"		7	5	5	5	5
108"		8	6	6	6	6
24"	78"	1	1	1	1	1
36"		1	1	1	1	1
48"		2	2	2	2	1
60"		3	2	2	2	2
70"		4	3	3	3	3
72"		4	3	3	3	3
84"		5	4	4	4	4
92"		6	5	5	5	5
96"		7	5	5	5	5
102"		7	6	6	5	5
24"		84"	1	1	1	1
36"	1		1	1	1	1
48"	2		2	2	2	1
54"	3		2	2	2	2
60"	3		2	2	2	2
70"	4		3	3	3	3
72"	4		3	3	3	3
84"	5		4	4	4	4
96"	7		5	5	5	5
24"	90"	1	1	1	1	1
36"		1	1	1	1	1
42"		2	1	1	1	1
48"		2	2	2	2	1
54"		3	2	2	2	2
60"		3	2	2	2	2
72"		4	3	3	3	3
84"		5	4	4	4	4
92"		6	5	5	5	5

Mid-Panel Anchor Quantity				Shim Thickness = 1/4"		
Nominal Dim.		Installed with Group "A" Anchors	Installed with Group "B" Anchors	Installed with Group "C" Anchors	Installed with Group "D" Anchors	Installed with Group "E" Anchors
Centerline Width	Frame Height					
24"	97-3/4"	1	1	1	1	1
36"		1	1	1	1	1
42"		2	1	1	1	1
48"		2	2	2	2	1
54"		3	2	2	2	2
70"		4	3	3	3	3
72"		4	3	3	3	3
84"		5	4	4	4	4
24"	102"	1	1	1	1	1
30"		1	1	1	1	1
36"		1	1	1	1	1
42"		2	1	1	1	1
48"		2	2	2	2	1
54"		3	2	2	2	2
60"		3	2	2	2	2
70"		4	3	3	3	3
72"	4	3	3	3	3	
24"	108"	1	1	1	1	1
30"		1	1	1	1	1
36"		1	1	1	1	1
42"		2	1	1	1	1
48"		2	2	2	2	1
60"		3	2	2	2	2
72"		4	3	3	3	3
24"	114"	1	1	1	1	1
30"		1	1	1	1	1
36"		1	1	1	1	1
48"		2	2	2	2	1
60"		3	2	2	2	2
72"		4	3	3	3	3
24"		120"	1	1	1	1
30"	1		1	1	1	1
36"	1		1	1	1	1
46.25"	2		1	1	1	1
48"	2		2	2	2	1
60"	3		2	2	2	2
24"	126"	1	1	1	1	1
30"		1	1	1	1	1
36"		1	1	1	1	1
42"		2	1	1	1	1
48"		2	2	2	2	1
54"		3	2	2	2	2
60"		3	2	2	2	2
24"	132"	1	1	1	1	1
30"		1	1	1	1	1
36"		1	1	1	1	1
42"		2	1	1	1	1
48"		2	2	2	2	1
54"		3	2	2	2	2
60"		3	2	2	2	2
24"	138"	1	1	1	1	1
30"		1	1	1	1	1
36"		1	1	1	1	1
42"		2	1	1	1	1
48"		2	2	2	2	1
60"		3	2	2	2	2
24"		144"	1	1	1	1
30"	1		1	1	1	1
36"	1		1	1	1	1
42"	2		1	1	1	1
48"	2		2	2	2	1
58.25"	3		2	2	2	2



NOTES:

1. MID-PANEL ANCHORS TO BE EQUALLY SPACED, +/- 1/2".

[illegible]

TABLE 8:

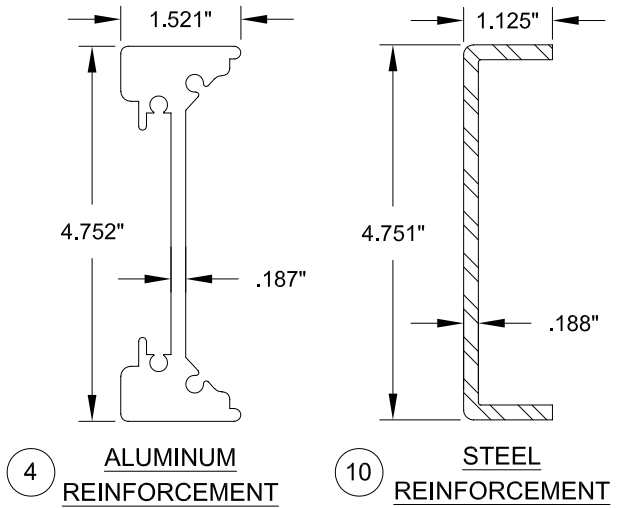
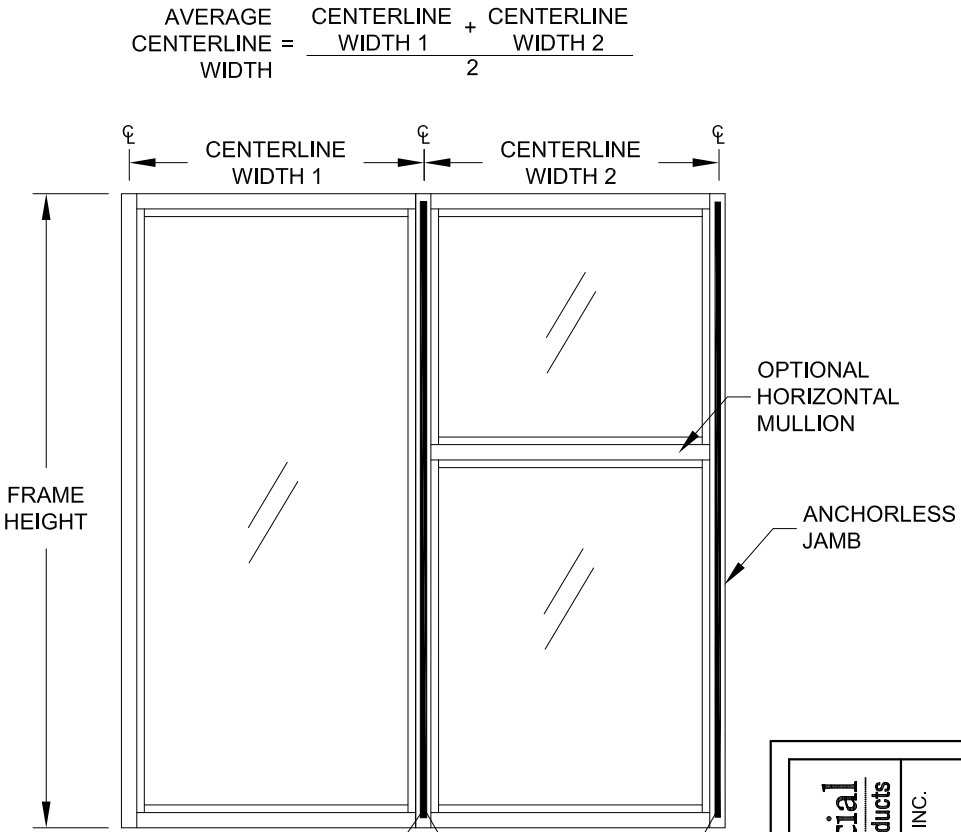
Mid-Panel Anchor Quantity							Shim Thickness = 1/2"					
Nominal Dim.		Installed with Group "A" Anchors	Installed with Group "B" Anchors	Installed with Group "C" Anchors	Installed with Group "D" Anchors	Installed with Group "E" Anchors						
Centerline Width	Frame Height											
24"	48"	1	1	1	1	1						
36"		2	2	2	1	1						
48"		3	3	2	2	1						
60"		4	4	3	3	2						
72"		6	6	4	3	3						
84"		7	7	5	4	4						
96"		8	8	6	5	5						
108"		9	9	7	6	6						
120"		11	11	8	6	6						
132"		12	12	9	7	7						
144"		13	13	10	8	8						
24"	60"	1	1	1	1	1						
36"		2	2	2	1	1						
48"		3	3	2	2	1						
60"		4	4	3	3	2						
72"		6	6	5	4	3						
84"		8	8	6	5	4						
90"		8	8	6	5	4						
92"		9	9	6	5	5						
96"		9	9	7	5	5						
108"		11	11	8	6	6						
120"		12	12	9	7	6						
132"		14	14	10	8	7						
24"	72"	1	1	1	1	1						
36"		2	2	2	1	1						
48"		3	3	2	2	1						
60"		4	4	3	3	2						
72"		6	6	5	4	3						
84"		8	8	6	5	4						
96"		10	10	7	6	5						
108"		12	12	9	7	6						
24"	78"	1	1	1	1	1						
36"		2	2	2	1	1						
48"		3	3	2	2	1						
60"		4	4	3	3	2						
70"		6	6	4	4	3						
72"		6	6	5	4	3						
84"		8	8	6	5	4						
92"		10	10	7	6	5						
96"		10	10	8	6	5						
102"		11	11	8	7	5						
24"	84"	1	1	1	1	1						
36"		2	2	2	1	1						
48"		3	3	2	2	1						
54"		4	4	3	2	2						
60"		4	4	3	3	2						
70"		6	6	4	4	3						
72"		6	6	5	4	3						
84"		8	8	6	5	4						
96"	90"	10	10	8	6	5						
24"		1	1	1	1	1						
36"		2	2	2	1	1						
42"		2	2	2	2	1						
48"		3	3	2	2	1						
54"		4	4	3	2	2						
60"		4	4	3	3	2						
72"		6	6	5	4	3						
84"		8	8	6	5	4						
92"		10	10	7	6	5						

Mid-Panel Anchor Quantity					Shim Thickness = 1/2"	
Nominal Dim.		Installed with Group "A" Anchors	Installed with Group "B" Anchors	Installed with Group "C" Anchors	Installed with Group "D" Anchors	Installed with Group "E" Anchors
Centerline Width	Frame Height					
24"	97-3/4"	1	1	1	1	1
36"		2	2	2	1	1
42"		2	2	2	2	1
48"		3	3	2	2	1
54"		4	4	3	2	2
70"		6	6	4	4	3
72"		6	6	5	4	3
84"		8	8	6	5	4
24"	102"	1	1	1	1	1
30"		1	1	1	1	1
36"		2	2	2	1	1
42"		2	2	2	2	1
48"		3	3	2	2	1
54"		4	4	3	2	2
60"		4	4	3	3	2
70"		6	6	4	4	3
72"	6	6	5	4	3	
24"	108"	1	1	1	1	1
30"		1	1	1	1	1
36"		2	2	2	1	1
42"		2	2	2	2	1
48"		3	3	2	2	1
60"		4	4	3	3	2
72"		6	6	5	4	3
24"		114"	1	1	1	1
30"	1		1	1	1	1
36"	2		2	2	1	1
48"	3		3	2	2	1
60"	4		4	3	3	2
72"	6		6	5	4	3
24"	120"	1	1	1	1	1
30"		1	1	1	1	1
36"		2	2	2	1	1
46.25"		2	2	2	2	1
48"		3	3	2	2	1
60"		4	4	3	3	2
24"	126"	1	1	1	1	1
30"		1	1	1	1	1
36"		2	2	2	1	1
42"		2	2	2	2	1
48"		3	3	2	2	1
54"		4	4	3	2	2
60"		4	4	3	3	2
24"		132"	1	1	1	1
30"	1		1	1	1	1
36"	2		2	2	1	1
42"	2		2	2	2	1
48"	3		3	2	2	1
54"	4		4	3	2	2
60"	4		4	3	3	2
24"	138"	1	1	1	1	1
30"		1	1	1	1	1
36"		2	2	2	1	1
42"		2	2	2	2	1
48"		3	3	2	2	1
60"		4	4	3	3	2
24"	144"	1	1	1	1	1
30"		1	1	1	1	1
36"		2	2	2	1	1
42"		2	2	2	2	1
48"		3	3	2	2	1
58.25"		4	4	3	3	2

TABLE 9:

Maximum Vertical Mullion Design Pressure, (psf)					Anchorless Jamb Design Pressure, (psf)	
Average Centerline Width	Frame Height	No Reinforcement	Alum. Reinforcement (part #4)	Steel Reinforcement (part #10)	No Reinforcement	Steel Reinforcement (part #10)
24"	48"	+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
36"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
48"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
60"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
72"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
84"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
96"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
108"			+90/-100	+90/-120	+60/-75	+90/-100
120"			+90/-100	+90/-120		+90/-100
132"				+90/-100		+60/-65
144"				+90/-100		+60/-65
24"	60"	+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
36"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
48"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
60"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
72"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
84"			+90/-100	+90/-120	+60/-75	+90/-100
90"			+90/-100	+90/-120	+60/-75	+90/-100
92"			+90/-100	+90/-120	+60/-75	+90/-100
96"			+90/-100	+90/-120		+90/-100
108"				+90/-100		+60/-65
120"				+90/-100		+60/-65
132"				+60/-65		+60/-65
24"	72"	+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
36"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
48"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
60"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
72"			+90/-100	+90/-120	+60/-75	+90/-100
84"				+90/-100		+60/-65
96"				+90/-100		+60/-65
108"				+60/-65		+60/-65
24"	78"	+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
36"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
48"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
60"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
70"			+90/-100	+90/-120	+60/-75	+90/-100
72"			+90/-100	+90/-120		+90/-100
84"				+90/-100		+60/-65
92"				+90/-100		+60/-65
96"				+60/-65		+60/-65
102"				+60/-65		+60/-65
24"	84"	+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
36"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
48"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
54"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
60"			+90/-100	+90/-120	+60/-75	+90/-100
70"				+90/-100		+60/-65
72"				+90/-100		+60/-65
84"				+90/-100		+60/-65
96"				+60/-65		+60/-65
24"	90"	+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
36"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
42"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
48"		+89.4/-89.4	+90/-100	+90/-120	+60/-75	+90/-100
54"			+90/-100	+90/-120	+60/-75	+90/-100
60"			+90/-100	+90/-120	+60/-75	+90/-100
72"				+90/-100		+60/-65
84"				+60/-65		+60/-65
92"				+60/-65		+60/-65

Maximum Vertical Mullion Design Pressure, (psf)					Anchorless Jamb Design Pressure, (psf)	
Average Centerline Width	Frame Height	No Reinforcement	Alum. Reinforcement (part #4)	Steel Reinforcement (part #10)	No Reinforcement	Steel Reinforcement (part #10)
24"	97-3/4"	+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
36"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
42"		+87.9/-87.9	+90/-100	+90/-120	+60/-75	+90/-100
48"		+80/-80	+90/-100	+90/-120	+60/-75	+90/-100
54"			+90/-100	+90/-120	+60/-75	+90/-100
70"				+90/-100		+60/-65
72"				+90/-100		+60/-65
84"				+60/-65		+60/-65
24"	102"	+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
30"		+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
36"		+88.3/-88.3	+90/-100	+90/-120	+60/-75	+90/-100
42"		+77.1/-77.1	+90/-100	+90/-120	+60/-75	+90/-100
48"			+90/-100	+90/-120	+60/-75	+90/-100
54"			+90/-100	+90/-120	+60/-75	+90/-100
60"				+90/-100		+60/-65
70"				+90/-100		+60/-65
72"				+60/-65		+60/-65
24"	108"	+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
30"		+87.5/-87.5	+90/-100	+90/-120	+60/-75	+90/-100
36"		+74/-74	+90/-100	+90/-120	+60/-75	+90/-100
42"		+64.5/-64.5	+90/-100	+90/-120	+60/-75	+90/-100
48"			+90/-100	+90/-120	+60/-75	+90/-100
60"				+90/-100		+60/-65
72"				+60/-65		+60/-65
24"	114"	+90/-90	+90/-100	+90/-120	+60/-75	+90/-100
30"		+74.2/-74.2	+90/-100	+90/-120	+60/-75	+90/-100
36"		+62.6/-62.6	+90/-100	+90/-120	+60/-75	+90/-100
48"			+90/-100	+90/-120	+60/-75	+90/-100
60"				+90/-100		+60/-65
72"				+60/-65		+60/-65
24"	120"	+78.5/-78.5	+90/-100	+90/-120	+60/-75	+90/-100
30"		+63.4/-63.4	+90/-100	+90/-120	+60/-75	+90/-100
36"		+53.5/-53.5	+90/-100	+90/-120	+60/-75	+90/-100
46.25"			+90/-100	+90/-120	+60/-75	+90/-100
48"			+90/-100	+90/-120		+90/-100
60"				+90/-100		+60/-65
24"	126"	+67.7/-67.7	+90/-100	+90/-120		+60/-65
30"		+54.6/-54.6	+90/-100	+90/-120		+60/-65
36"		+46/-46	+90/-100	+90/-120		+60/-65
42"		+87.1/-96.8		+90/-116.5		+60/-65
48"				+90/-100		+60/-65
54"				+84/-93.4		+60/-65
60"				+60/-65		+60/-65
24"	132"	+58.8/-58.8	+90/-100	+90/-120		+60/-65
30"		+47.4/-47.4	+90/-100	+90/-120		+60/-65
36"			+87.1/-96.7	+90/-116.4		+60/-65
42"			+75.4/-83.8	+90/-100.9		+60/-65
48"				+80.5/-89.4		+60/-65
54"				+72.6/-80.6		+60/-65
60"				+60/-65		+60/-65
24"	138"	+51.4/-51.4	+90/-100	+90/-120		+60/-65
30"		+41.4/-41.4	+90/-100	+90/-120		+60/-65
36"			+76/-84.4	+90/-101.6		+60/-65
42"				+79.2/-88		+60/-65
48"				+70.1/-77.9		+60/-65
60"				+60/-65		+60/-65
24"	144"	+45.2/-45.2	+90/-100	+90/-120		+60/-65
30"		+36.4/-36.4	+79.5/-88.3	+90/-106.3		+60/-65
36"			+66.7/-74.1	+80.3/-89.3		+60/-65
42"				+69.5/-77.2		+60/-65
48"				+61.5/-68.3		+60/-65
58.25"				+60/-65		+60/-65



- NOTES:
- IF COMBINED WITH ANOTHER ASSEMBLY WITH A SEPARATE APPROVAL, (STOREFRONT ENTRANCE DOOR, PTAC LOUVER OR WINDOW INSERT) THE LESSER DESIGN PRESSURE VALUE OF ANY ASSEMBLY OR THE STOREFRONT WINDOW SHALL BE THE DESIGN PRESSURE FOR THE ENTIRE SYSTEM.

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08/16/2023
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PROFESSIONAL ENGINEER

A. LYNN MILLER, P.E.
P.E.# 58705

NO CHANGES THIS SHEET. - JR - 8/16/23

Rev. Description

Rev. Title

STOREFRONT WINDOW SYSTEM DETAILS - LM

TABLE 9

SS-3500

J ROSOWSKI

MD-3500-2-LM

11 OF 16

NTS

03/23/16

Date

By

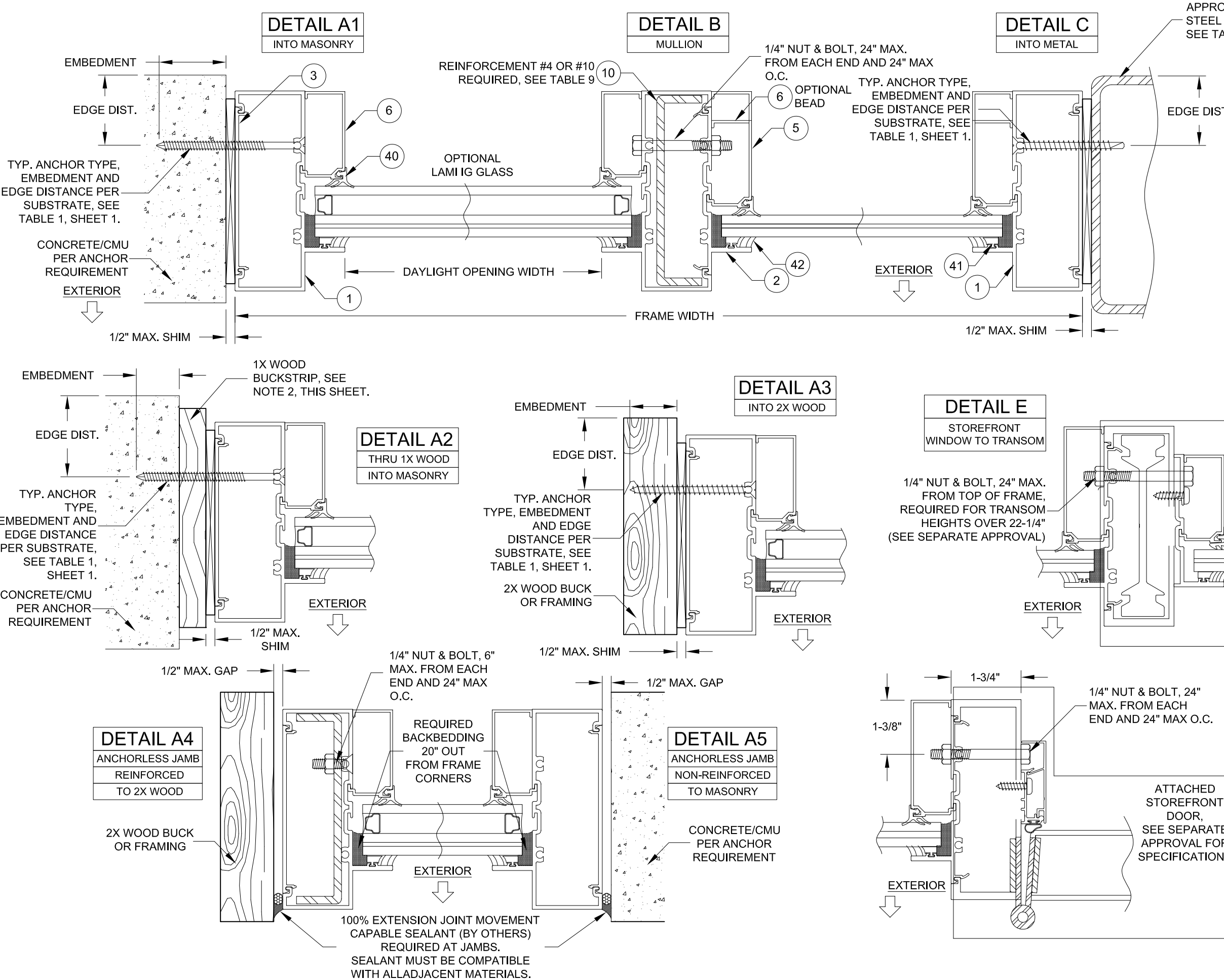
No.

Scale

Sheet

D

Rev.



INSTALLATION NOTES:

1) USE ONLY SUBSTRATE APPROPRIATE ANCHORS, FOLLOW EMBEDMENT, EDGE DISTANCE AND SUBSTRATE REQUIREMENTS PER TABLE 1, SHEET 1. ANY INSTALLATION OPTION SHOWN MAY BE USED ON ANY SIDE OF THE WINDOW. ALL ANCHOR HEAD TYPES ARE ALLOWED.

2) ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1X INSTALLATIONS. 1X WOOD BUCKS ARE OPTIONAL. UNIT MAY BE INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED TO PROPERLY TRANSFER LOADS TO THE STRUCTURE. WOOD BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD. MAXIMUM SHIM THICKNESS TO BE AS REQUIRED BY TABLES 3-8, SHEETS 5-10.

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P.E.# 58705

CHANGED TITLE BLOCK.

- JR - 8/16/23

Rev.

D

Rev. Description

Drawn By

J ROSOWSKI

Date

03/23/16

DWG No.

12 OF 16

Sheet

NTS

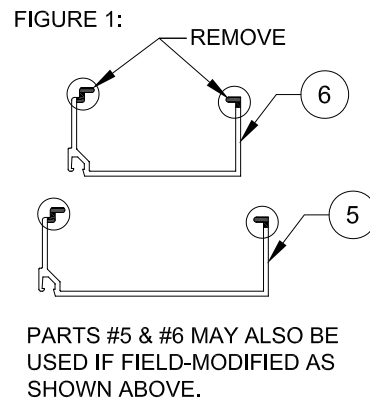
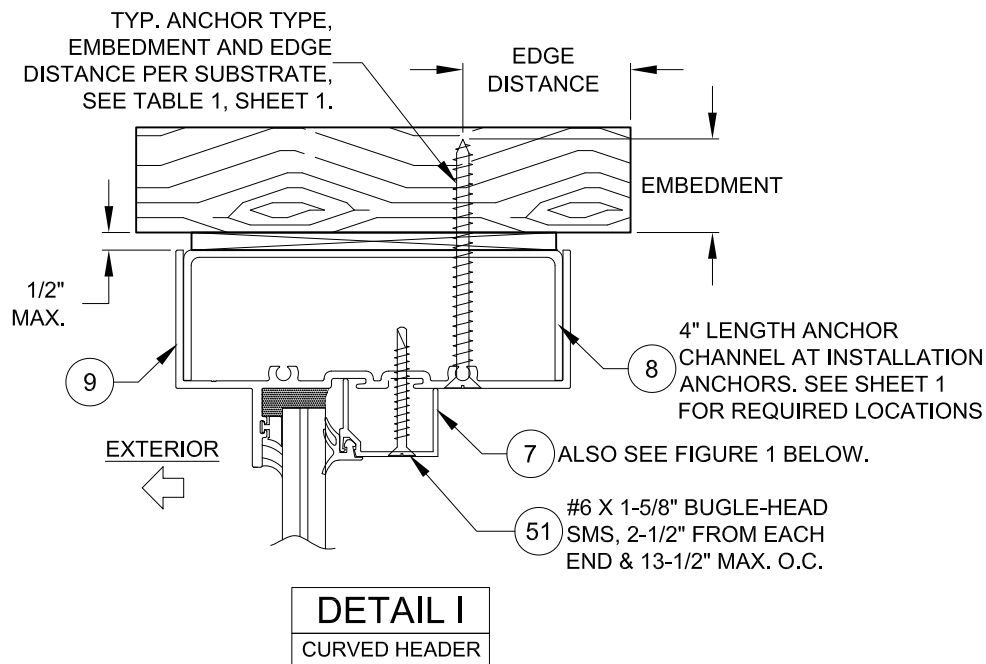
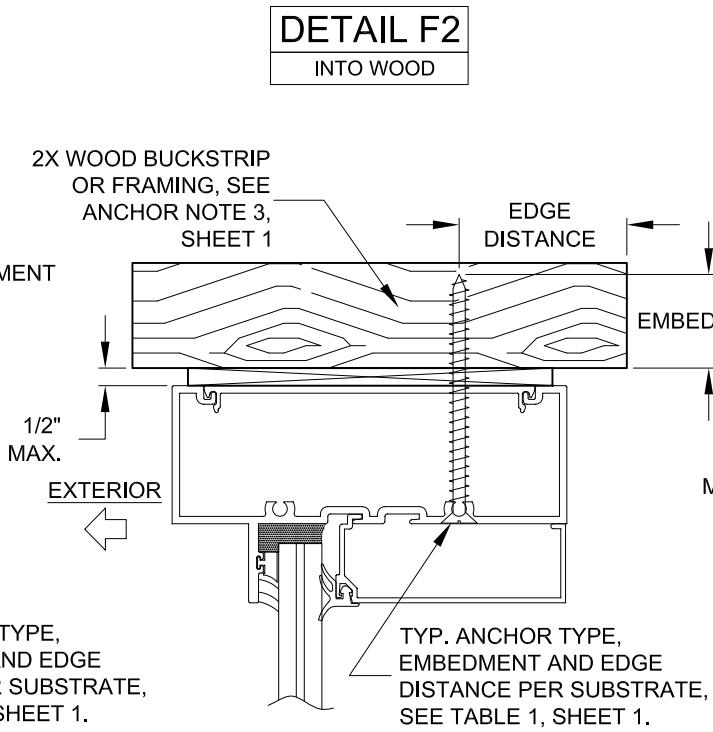
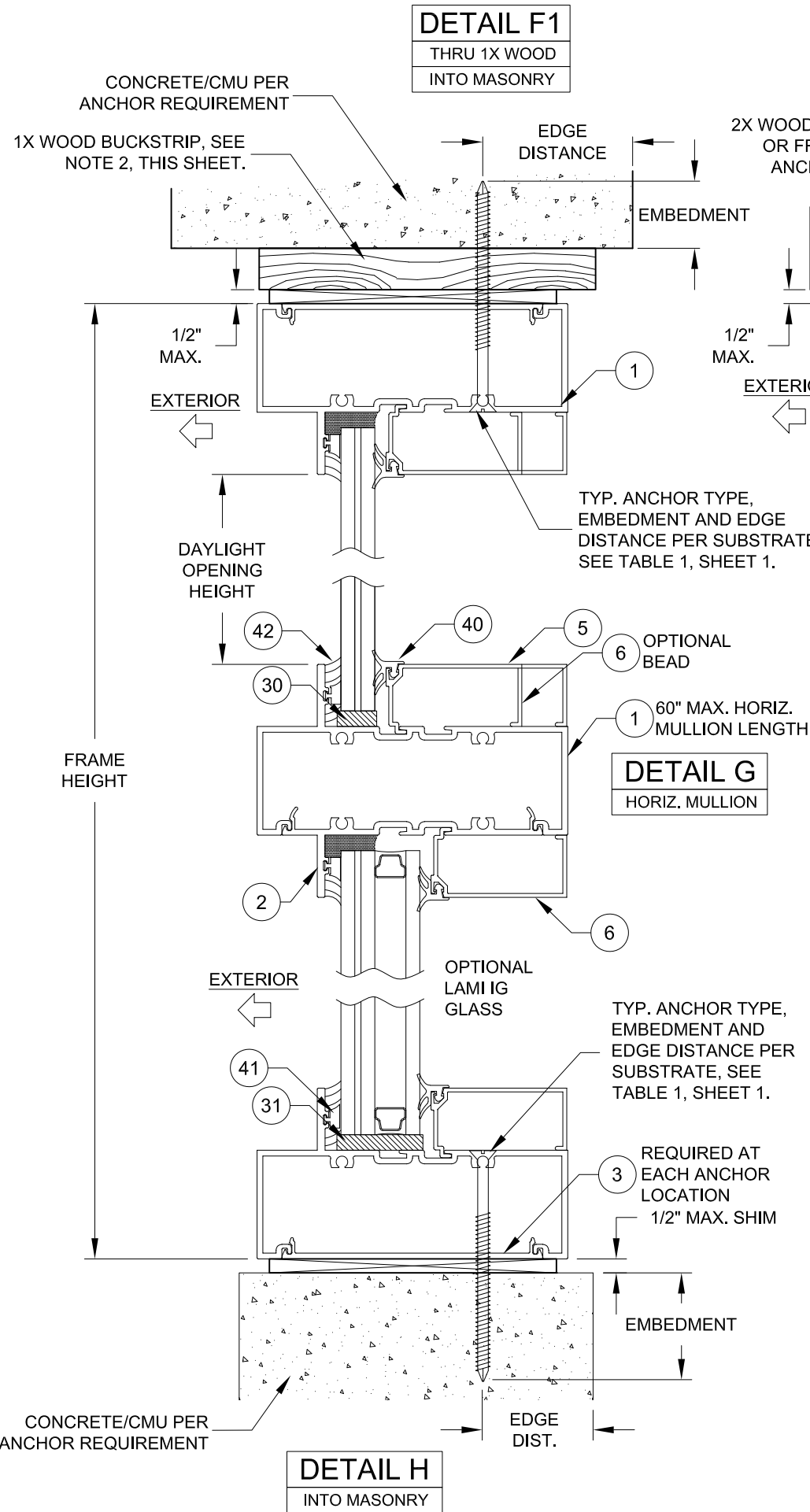
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SS-3500

Series

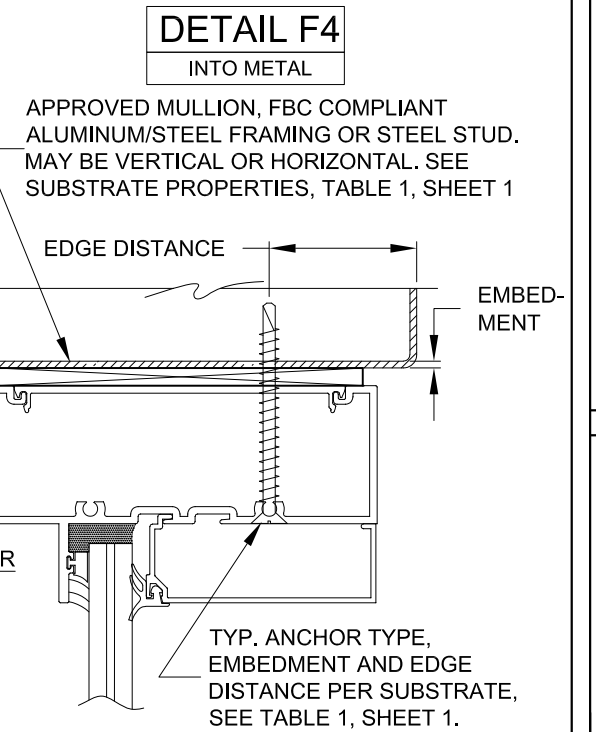
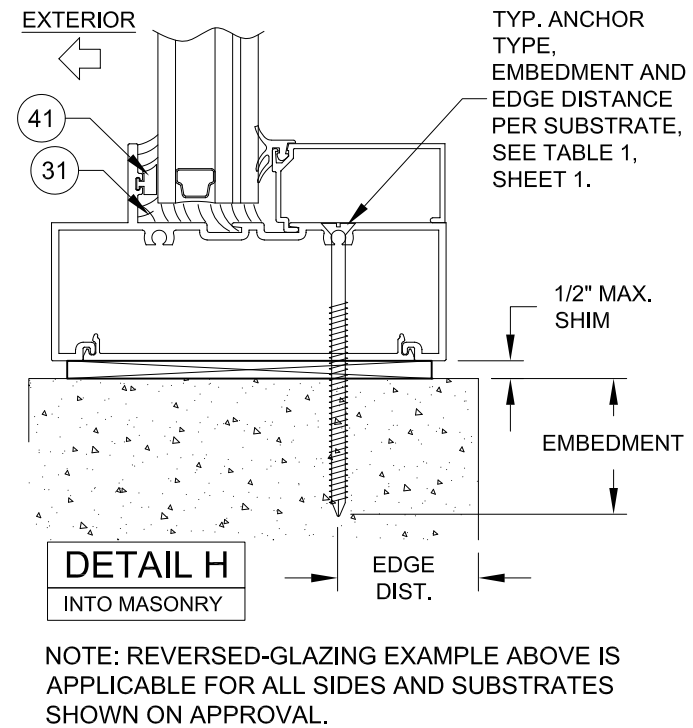
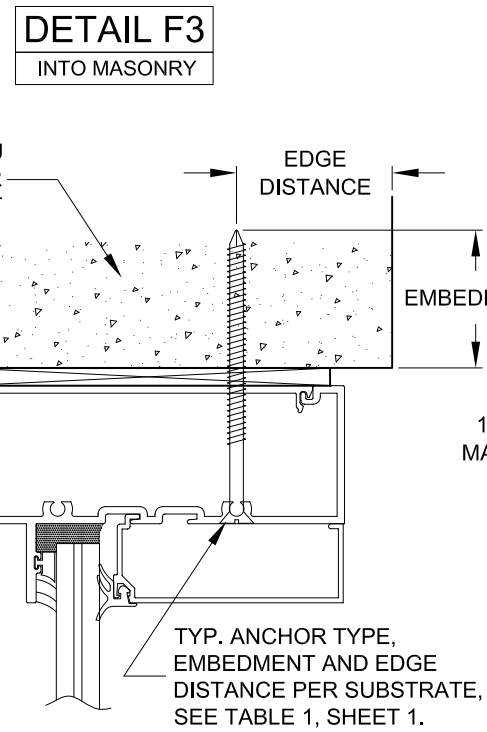
Horizontal X-Sections

STOREFRONT WINDOW SYSTEM DETAILS - LM



INSTALLATION NOTES:

- 1) USE ONLY SUBSTRATE APPROPRIATE ANCHORS, FOLLOW EMBEDMENT, EDGE DISTANCE AND SUBSTRATE REQUIREMENTS PER TABLE 1, SHEET 1. ANY INSTALLATION OPTION SHOWN MAY BE USED ON ANY SIDE OF THE WINDOW. ALL ANCHOR HEAD TYPES ARE ALLOWED.
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Commercial
Architectural Products

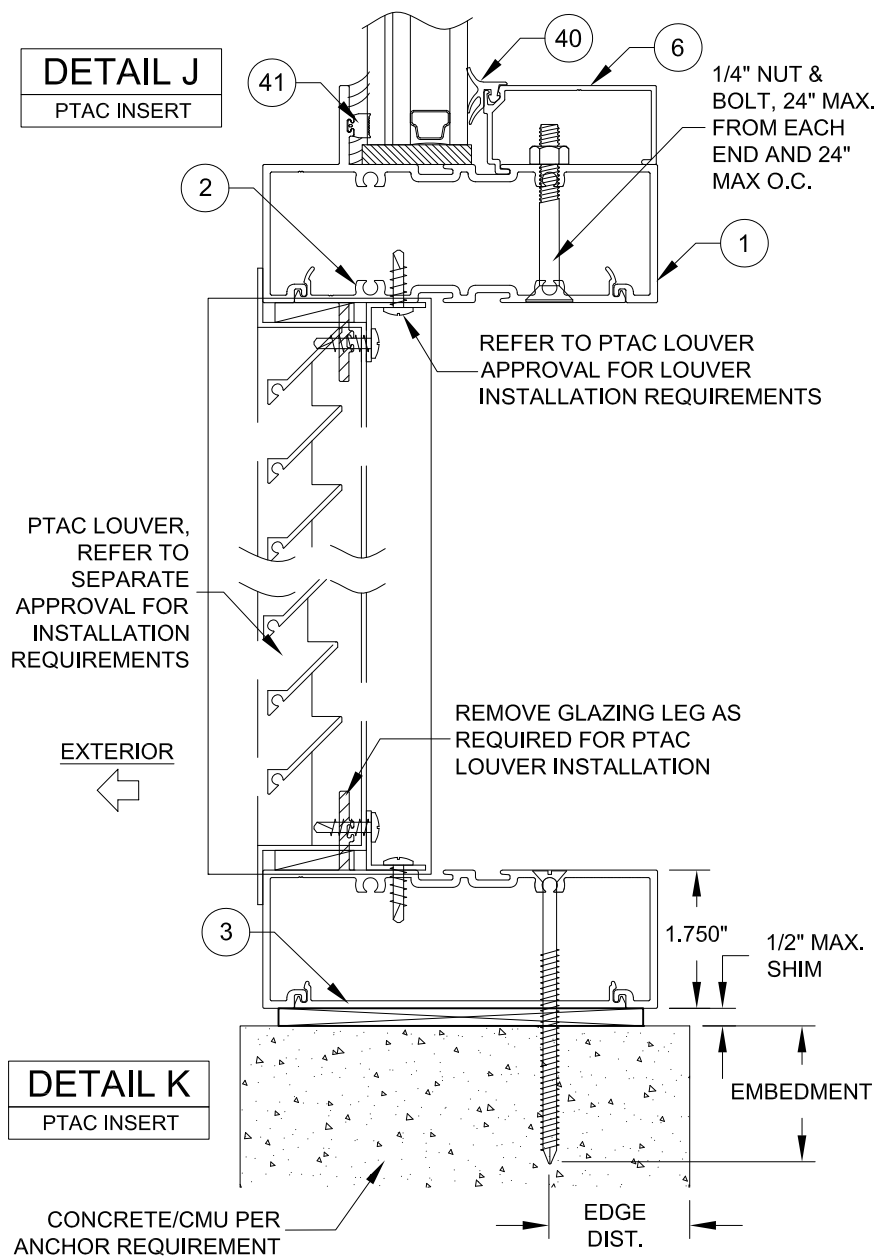
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PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705

Rev.	D
Rev. Description	CHANGED TITLE BLOCK. - JR - 8/16/23
Date	03/23/16
Drawn By	J ROSOWSKI
DWG No.	13 OF 16
Sheet	NTS
Scale	SS-3500
Series	VERTICAL X-SECTIONS
Title	STOREFRONT WINDOW SYSTEM DETAILS - LM

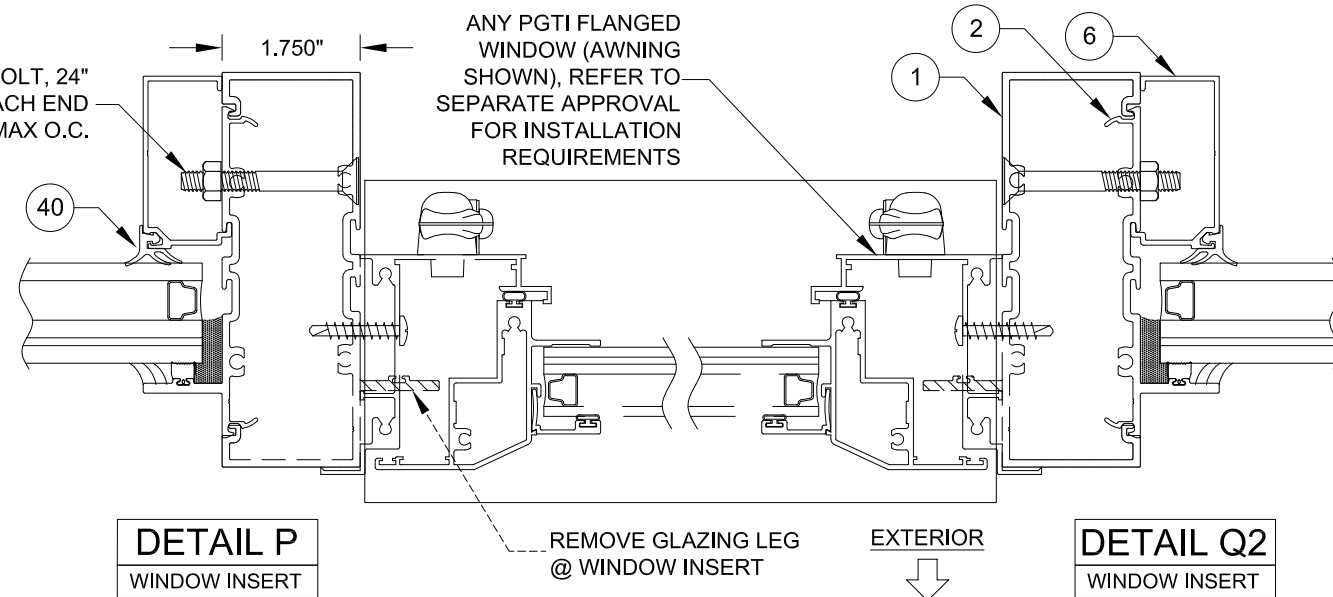
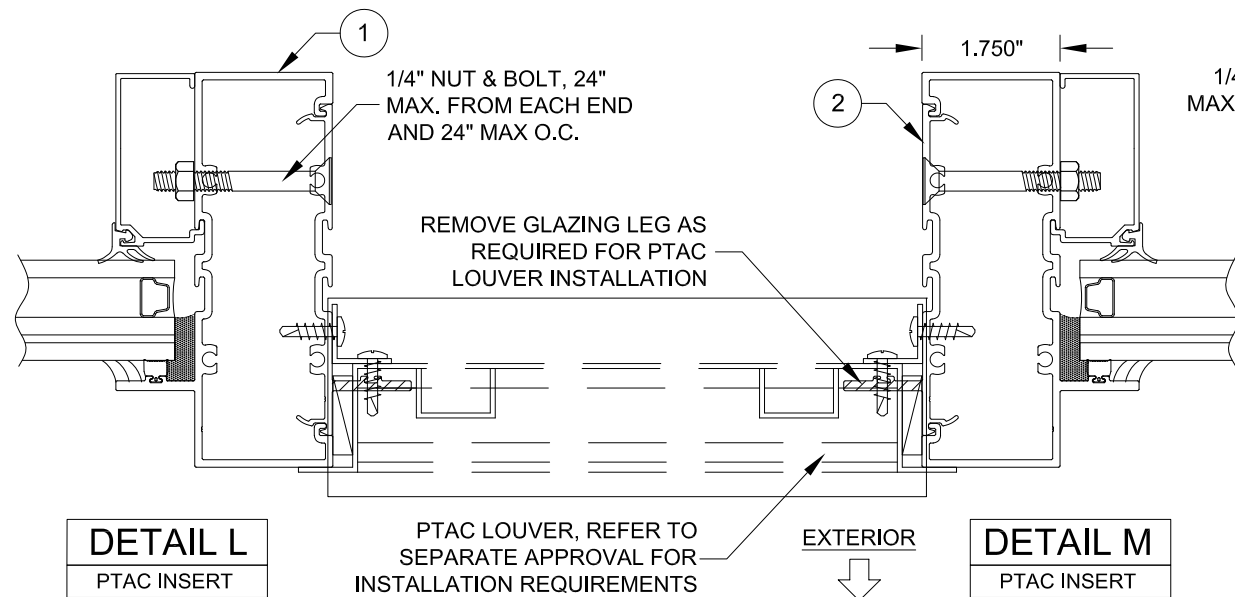
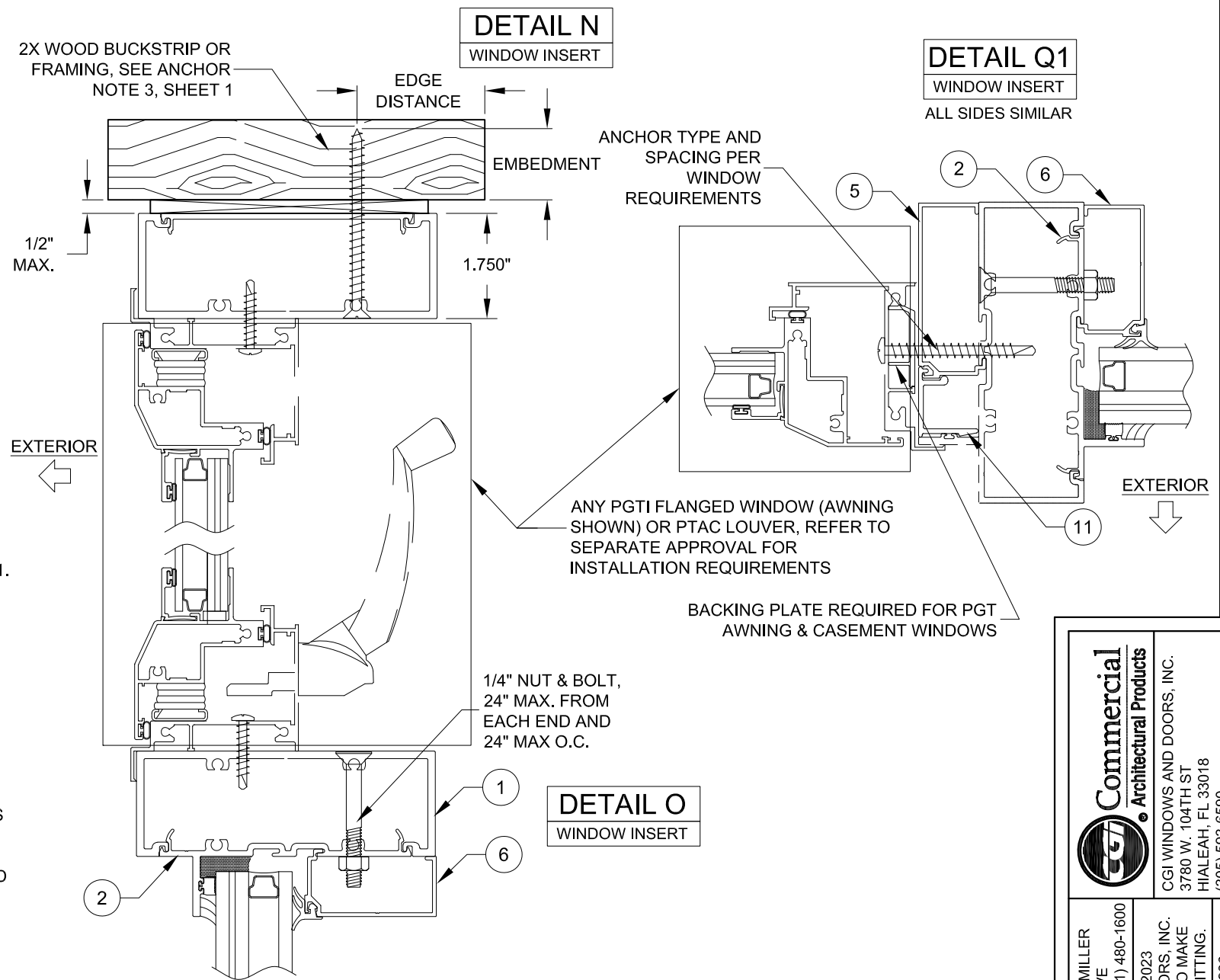


PTAC LOUVER & WINDOW INSERT NOTES:

1. REFER TO SEPARATE WINDOW APPROVAL FOR ALL WINDOW INSERT REQUIREMENTS AND INSTALLATION. AWNING WINDOW INSERT SHOWN BUT MAY BE ANY APPROVED PGTI WINDOW WITH A FLANGED FRAME. REFER TO PTAC LOUVER APPROVAL FOR ALL PTAC LOUVER REQUIREMENTS AND INSTALLATION.
2. IF COMBINED WITH ANOTHER ASSEMBLY WITH A SEPARATE APPROVAL, (PTAC LOUVER OR WINDOW INSERT) THE LESSER DESIGN PRESSURE VALUE OF ANY ASSEMBLY OR THE STOREFRONT WINDOW SHALL BE THE DESIGN PRESSURE FOR THE ENTIRE SYSTEM.

INSTALLATION NOTES:

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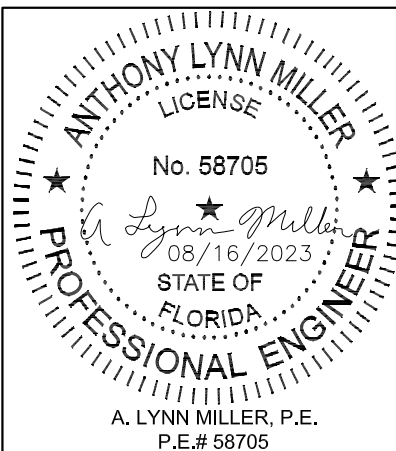


DETAIL Q1
WINDOW INSERT
ALL SIDES SIMILAR



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ADDED DETAIL Q1.
- JR - 8/16/23

STOREFRONT WINDOW SYSTEM DETAILS - LM

INSERT DETAILS

J ROSOWSKI

03/23/16

MD-3500-2-LM

DWG

No.

14 OF 16

Sheet

NTS

Scale

SS-3500

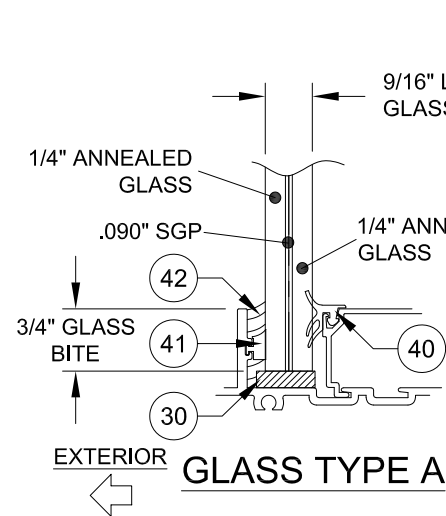
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Desc.

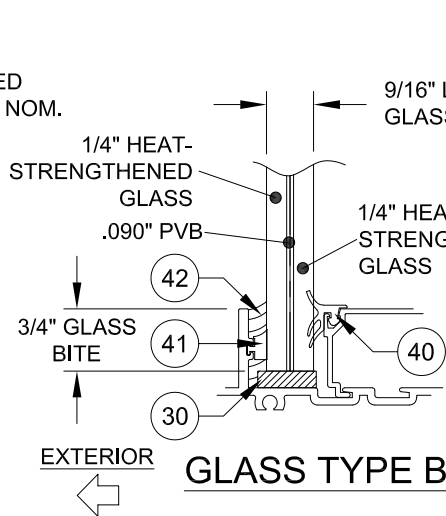
Title

Rev.

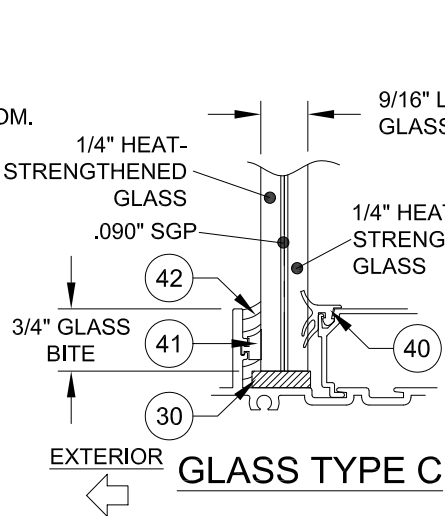
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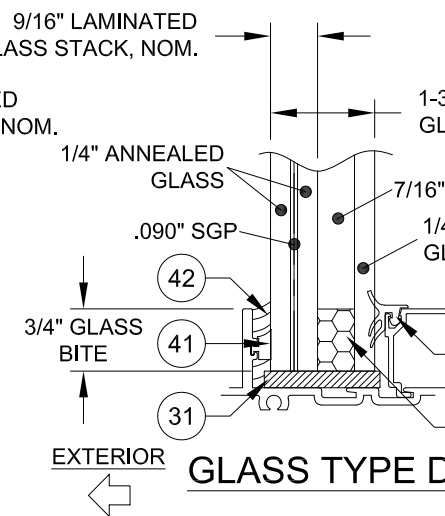
GLASS TYPE A



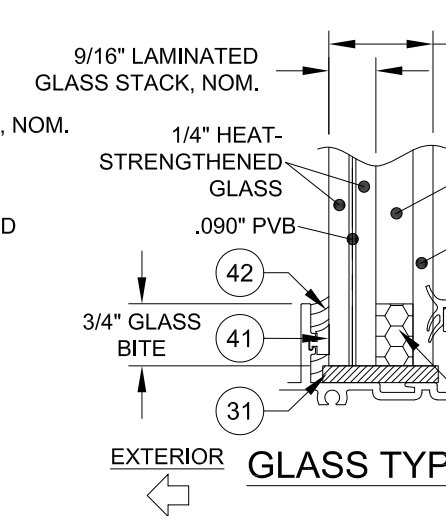
GLASS TYPE B



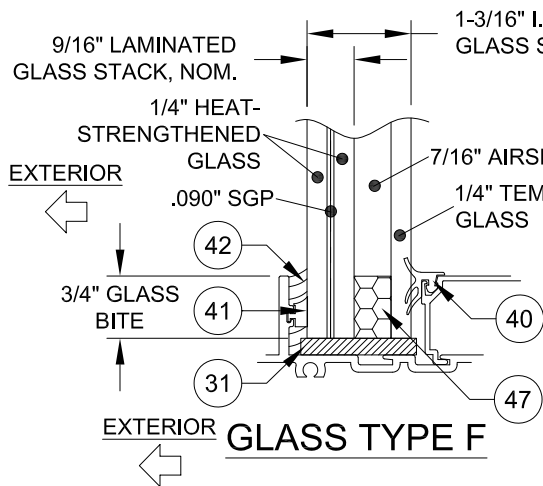
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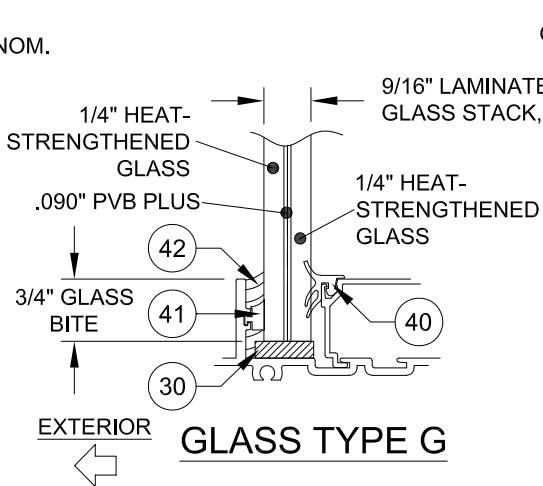
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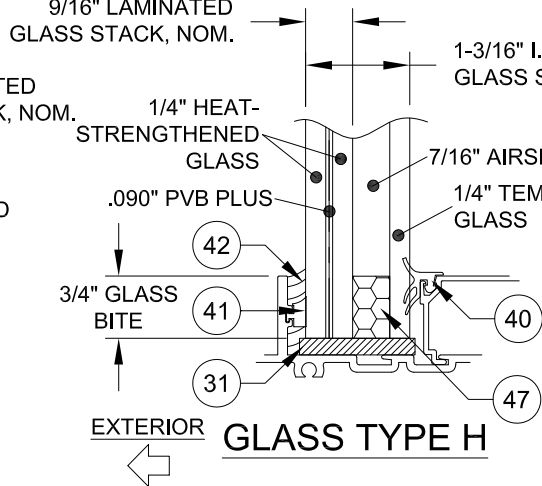
GLASS TYPE E



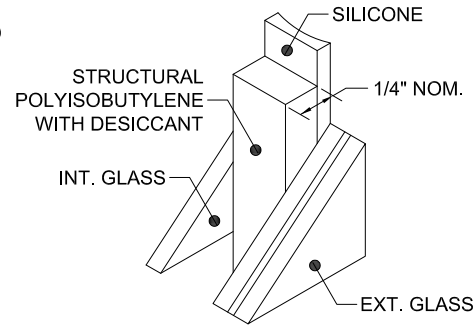
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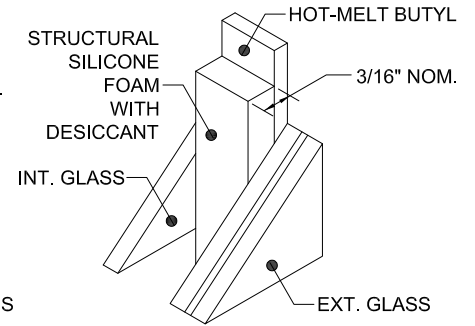
GLASS TYPE G



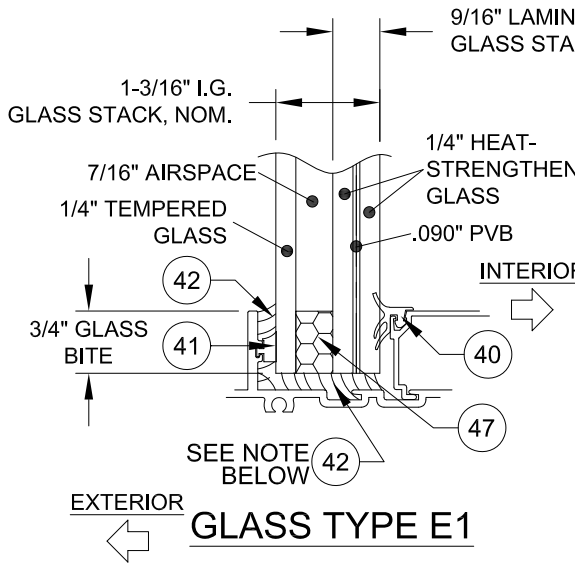
GLASS TYPE H



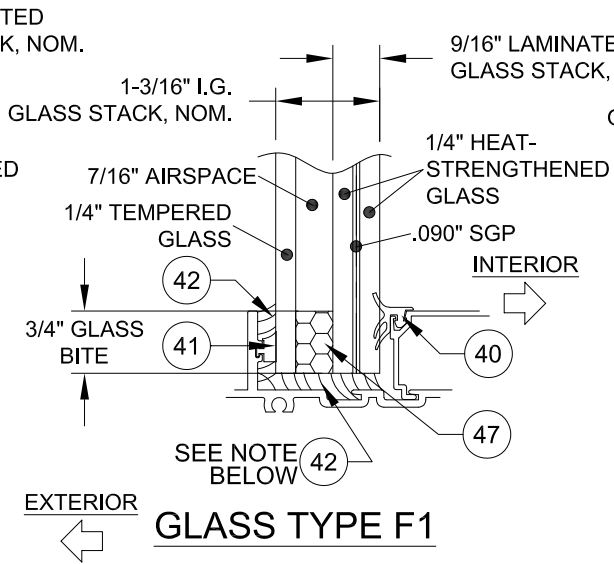
36 KODISPACE® 4SG TPS



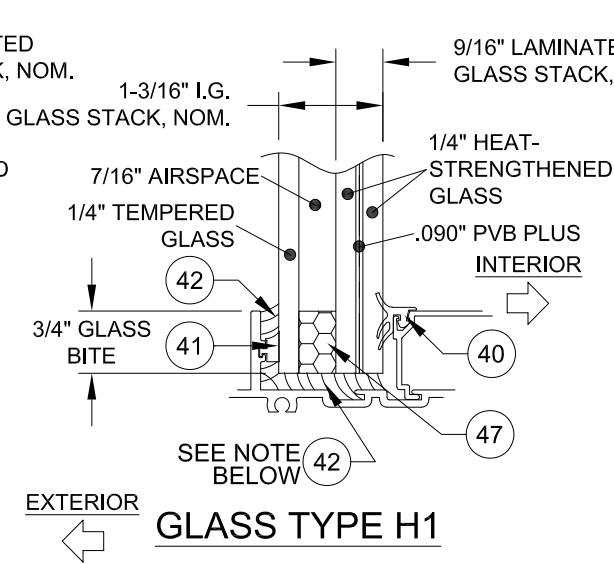
37 SUPER SPACER® NXT™



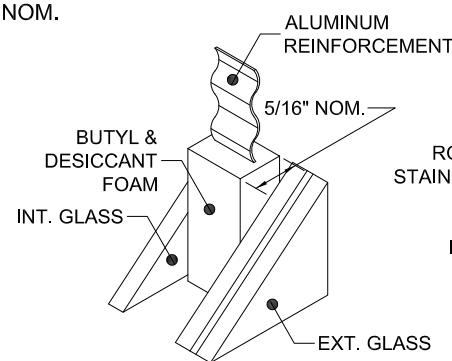
GLASS TYPE E1



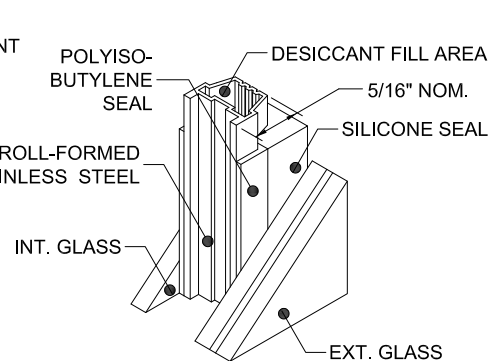
GLASS TYPE F1



GLASS TYPE H1



38 DURASEAL® SPACER



39 XL EDGE™ SPACER

NOTE: FOR REVERSED-GLAZING (E1, F1 & H1), ENTIRE PERIMETER OF GLASS EDGE TO HAVE BACKBEDDING. FOR CLARITY, SETTING BLOCKS ARE NOT SHOWN.

NOTES:
GLAZING FOR ALL GLASS TYPES MEETS ASTM E1300 FOR ALL APPROVED SIZES.

"PVB" = 0.090" TROSIFOL® PVB INTERLAYER BY KURARAY AMERICA, INC.
"SG" = 0.090" SENTRYGLAS® INTERLAYER BY KURARAY AMERICA, INC.

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P.E.# 58705

Rev.	D
Rev. Description	ADDED GLASS TYPES G, H & H1. - JR - 8/16/23
Drawn By	J ROSOWSKI
Date	03/23/16
DWG No.	MD-3500-2-LM
Sheet	15 OF 16
Scale	NTS
Series	SS-3500
STOREFRONT WINDOW SYSTEM DETAILS - LM	
GLAZING DETAILS	

ASSEMBLY DETAILS
ALL DETAILS SHOWN FROM THE EXTERIOR

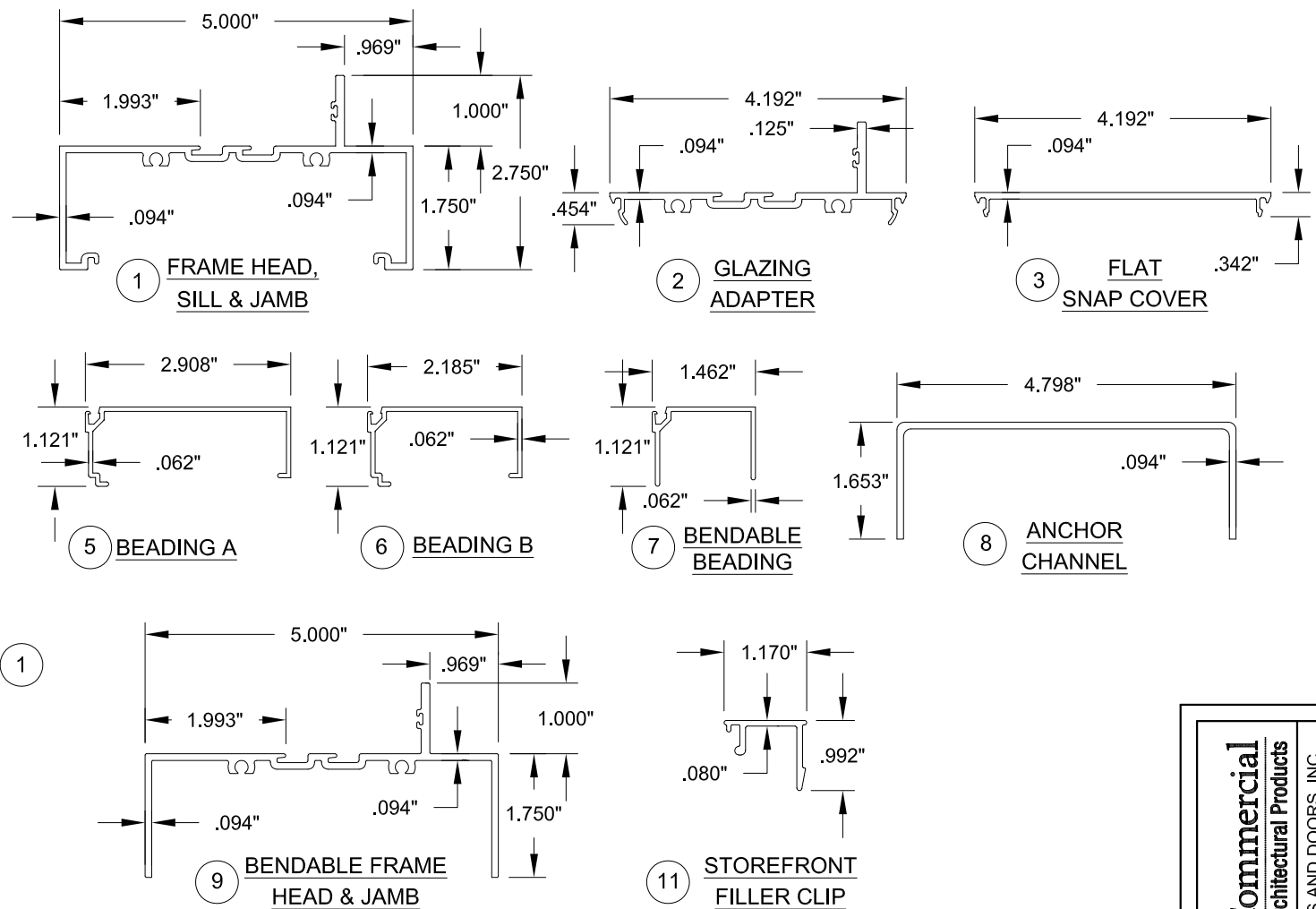
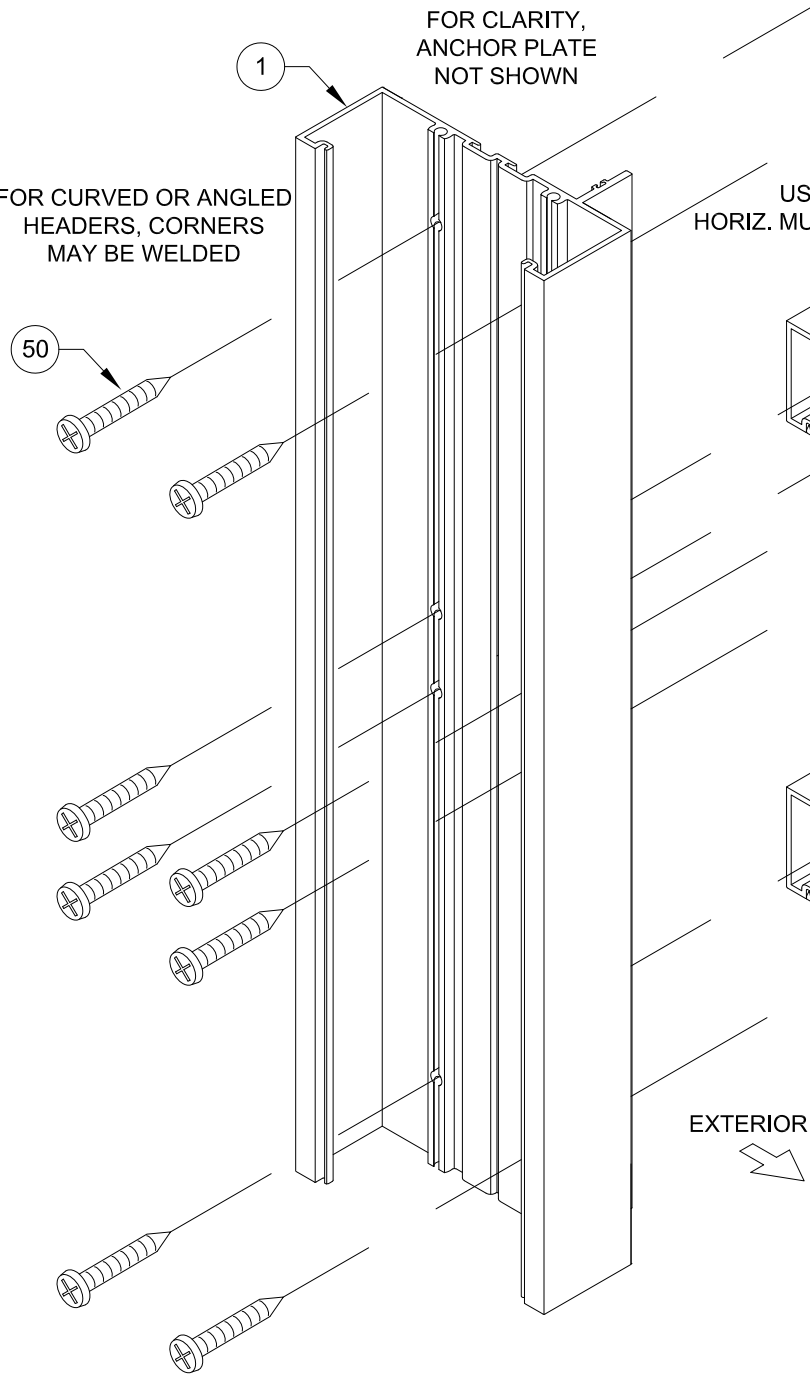


TABLE 10:

Item #	CGI Part #	Description	Material
1	CGIC-001	FRAME HEAD, JAMB & SILL	ALUM. (6063-T6)
2	CGIC-002	POCKET FILLER	ALUM. (6063-T6)
3	CGIC-003	FLAT SNAP COVER	ALUM. (6063-T6)
4	CGIC-008	ALUMINUM REINFORCEMENT	ALUM. (6063-T6)
5	CGIC-004	GLASS STOP "A"	ALUM. (6063-T6)
6	CGIC-005	GLASS STOP "B"	ALUM. (6063-T6)
7		BENDABLE BEADING	PVC
8	MISC-087	ANCHOR CHANNEL	ALUM. (6063-T6)
9	ARCH-079	FRAME HEAD & JAMB (BENDABLE)	ALUM. (6063-T6)
10	CGIC-009	STEEL REINFORCEMENT	C. STEEL (A-36)
11	619670	STOREFRONT FILLER CLIP	RIGID PVC
30	MISC-127	SETTING BLOCK 3/16" X 7/16"X 4", DURO=85 ±5	EPDM
31	MISC-128	IG SETTING BLOCK 3/16" X 1-3/32" X 4", DURO=85 ±5	EPDM
36		KOMMERLING KODISPAC 4SG TPS SPACER SYSTEM	SEE SHEET 15 FOR MATERIALS
37		QUANEX SUPER SPACER NXT WITH HOT MELT BUTYL	
38		QUANEX DURASEAL	
39		CARDINAL XL EDGE SPACER	
40	GSKT-190	GLAZING GASKET, GLASS STOP, DURO=65 ±5	EPDM
41	GSKT-007	GLAZING GASKET, GLAZING LEG, DURO=80 ±5	SANTOPRENE
42	SILC-131/132	SILICONE BACKBEADING: DOW791,983,995, GE7700	
50	SCRW-010	#12X1-1/2" HEX WASHER SCREW (ASSEMBLY)	STAINLESS STEEL

NOTES:
1. PARTS 12-29, 32-35, & 43-49 ARE NOT USED AND ARE NOT PART OF THIS APPROVAL.
2. SEE SHEET 11 FOR PARTS 4 & 10.

CGI Architectural Products

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Rev.	D
ADDED PART #11 - JR - 8/16/23	
Rev. Description	
By	J ROSOWSKI
Date	03/23/16
DWG No.	MD-3500-2-LM
Sheet	16 OF 16
Scale	NTS
Series	SS-3500
STOREFRONT WINDOW SYSTEM DETAILS - LM	
BOM & EXTRUSIONS	