

SGD780A IMPACT RESISTANT SLIDING GLASS DOOR WITH ANCHORLESS JAMBS

FLORIDA PRODUCT APPROVAL #33106

DESIGN PRESSURE RATING	IMPACT RATING
SEE TABLES 2/3	RATED FOR LARGE & SMALL MISSILE IMPACT RESISTANCE

- THIS PRODUCT HAS BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE CURRENT FLORIDA BUILDING CODE, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- SHUTTERS ARE NOT REQUIRED WHEN USED IN WIND-BORNE DEBRIS REGIONS.
- MASONRY ANCHORS MAY BE USED INTO WOOD AS PER TABLE 1. ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1X INSTALLATIONS. 1X WOOD BUCKS ARE OPTIONAL IF UNIT IS 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.
- ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. USE ANCHORS OF SUFFICIENT LENGTH. INSTALLATION ANCHORS SHOULD BE SEALED. OVERALL SEALING/FLASHING STRATEGY FOR WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS AND IS BEYOND THE SCOPE OF THESE INSTRUCTIONS.
- 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 DOOR.
- THE ANCHORAGE METHODS SHOWN HAVE BEEN DESIGNED TO RESIST THE WIND LOADS 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. ANCHORS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE FOR CORROSION RESISTANCE.

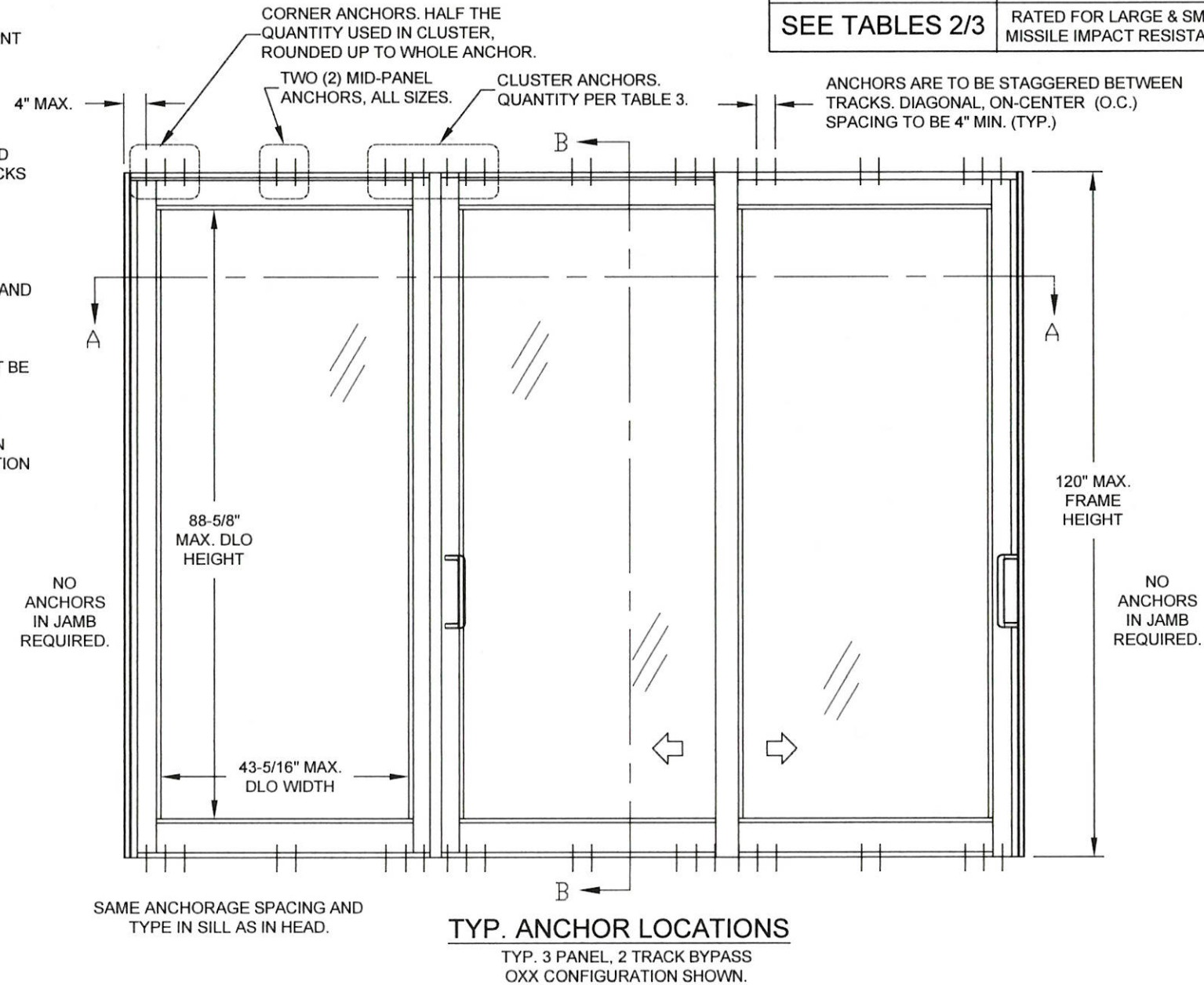


TABLE 1:

Anchor	Substrate	Minimum Edge Distance	Minimum Embedment
#12 SMS Screw (G5); Steel, 18-8 SS or 410 SS	Southern Pine (SG = .55)	9/16"	1-3/8"
	Aluminum, 6063-T5 min.	3/8"	1/16"
	Steel Stud, 18 Ga., Gr. 33 min.	3/8"	0.045"
	A36 Steel	3/8"	0.050"
1/4" DeWalt Ultracon+	Concrete (min. 3.00 ksi)	1-1/4"	1-3/8"
1/4" Elco Ultracon	Concrete (min. 2.85 ksi)	1"	1-3/8"
	Southern Pine (SG = .55)	1"	1-3/8"
1/4" DeWalt Ultracon+	Concrete (min. 3.00 ksi)	2-1/2"	1-3/8"
	Southern Pine (SG = .55)	1"	1-3/8"
1/4" Elco 410 SS CreteFlex	Concrete (min. 3.35 ksi)	1"	1-3/4"
	Southern Pine (SG = .55)	1"	1-3/8"
1/4" Elco SS Aggre-gator	Concrete (min. 2.22 ksi)	1-1/2"	1-3/8"
	Southern Pine (SG = .55)	1"	1-3/8"

- ANCHOR MUST EXTEND A MINIMUM OF 3 THREADS BEYOND ANY METAL SUBSTRATE.
- ANY ANCHOR HEAD TYPE IS APPLICABLE.

TABLE 2:

Water-Limited (+) Design Pressure		
Sill Riser	Total Sill Height	Max. (+) DP Allowed
60	1-5/8"	See Note B
61	2-3/4"	+50.0 psf
62	3-1/2"	+73.3 psf
63	4-1/2"	+90.0 psf
64	5-1/4"	+90.0 psf

A) IF WATER INFILTRATION RESISTANCE IS REQUIRED, THE LESSER VALUES OF EITHER TABLE 2 OR 3 DETERMINES THE WATER LIMITED (+) DP.

B) THE 1-5/8" SILL RISER, #60, MAY ONLY BE USED WHERE WATER INFILTRATION RESISTANCE IS NOT REQUIRED OR OVERHANG IS PER FIG 1. IF SO, +DP'S SHOWN IN TABLE 3 MAY BE USED.

FIG 1:

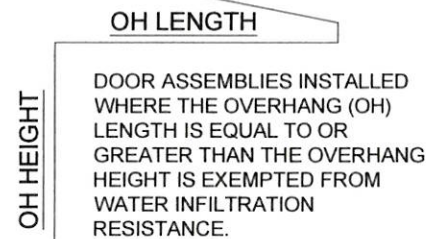


TABLE 3:

Design Pressure (psf) & Anchor Cluster Quantities at Head & Sill	Nominal Panel Width	DLO	Design Pressure	Frame Height							
				Panel Height							
				80"	84"	90"	96"	102"	108"	114"	120"
	36"	28-1/8"		77-3/4"	81-3/4"	87-3/4"	93-3/4"	99-3/4"	105-3/4"	111-3/4"	117-3/4"
	42"	34-1/8"	Design Pressure	+90/-90	+90/-90	+90/-90	+90/-90	+90/-90	+90/-90	+90/-90	+90/-90
Anchor Quantity			3	3	3	4	4	4	5	5	
	48"	40-1/8"	Design Pressure	+90/-90	+90/-90	+90/-90	+90/-90	+90/-90	+90/-90	+84/-90	+78.8/-89.3
Anchor Quantity			4	4	5	5	6	6	7	7	
	51-5/16"	43-7/16"	Design Pressure	+90/-90	+90/-90	+90/-90	+90/-90	+90/-90	+85.9/-90	+80.1/-90	+75/-85
Anchor Quantity			5	5	5	6	6	7	7	7	

1) UNLIMITED NUMBER OF PANELS IN ANY 2-TRACK OR 3-TRACK CONFIGURATION USING VERTICAL CONDITIONS SHOWN ON SHEET 2 ARE APPROVED AS LONG AS THE PANEL DLO WIDTH DOES NOT EXCEED THE TESTED DLO WIDTH OF 43-5/16" AND THE TESTED FRAME HEIGHT OF 120" IS NOT EXCEEDED.

2) FOR INSTALLATIONS IN THE HVHZ, MAXIMUM FRAME AREA OF 197.97 SQUARE FEET MAY NOT BE EXCEEDED.

3) SAMPLE CONFIGURATIONS INCLUDE: OX, XO, XX, XXXX, XOX, OXO, OXX, XXO, XXXX, OXXO, OXXXO, XXXXX, OXXXXO, XXXXXX OR SIMILAR.

Revision: REVISED JAMB EXTRUSIONS - JR - 12/03/20

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DATE: 08/08/20
DRAWN BY: JENS ROSOWSKI
DATE: 08/08/20

SERIES 780 ALUM. SGD, ANCHORLESS JAMB (LM)
ELEV., ANCHORS, DP & GEN. NOTES

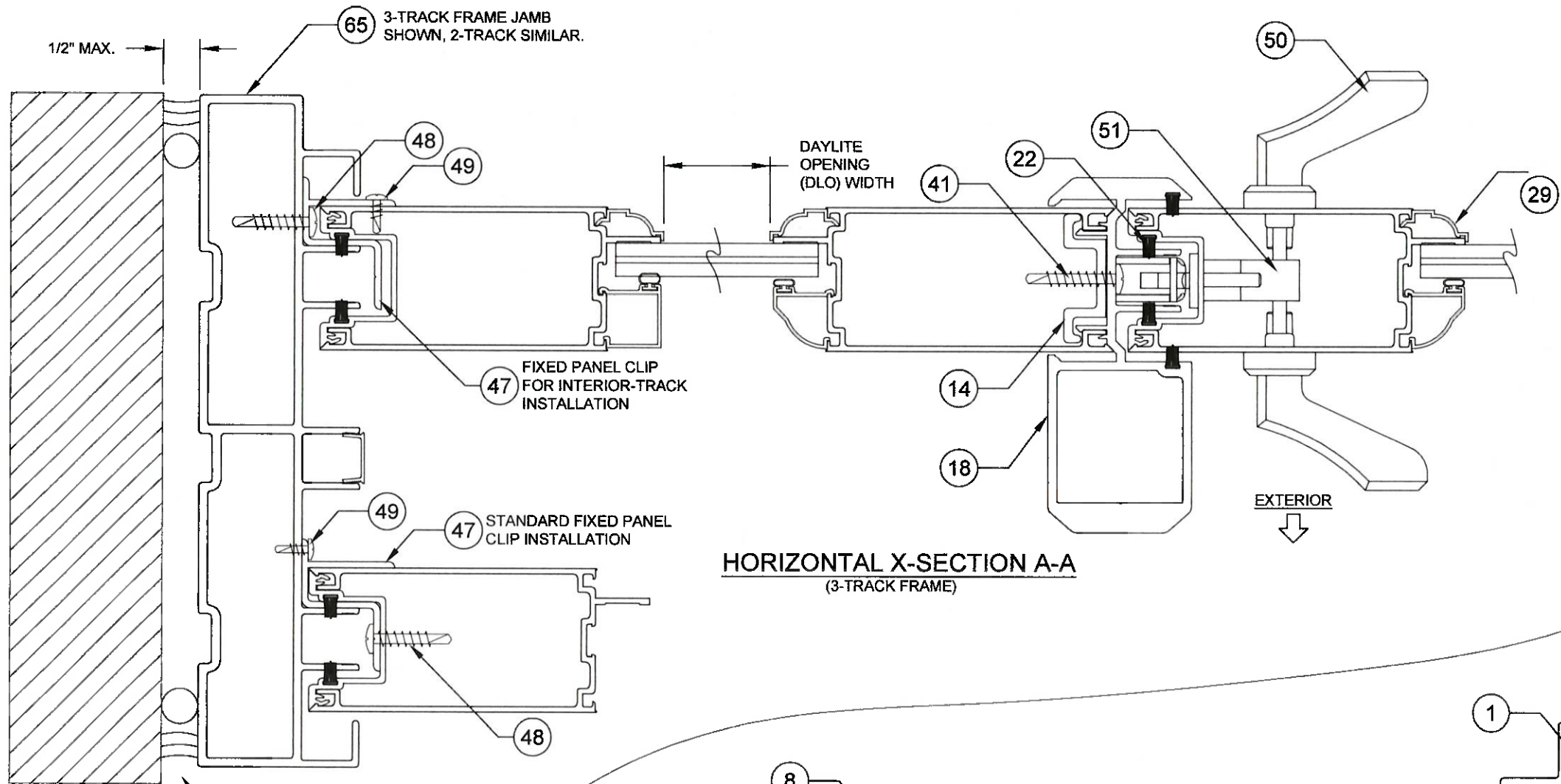
SGD780A

1 OF 5

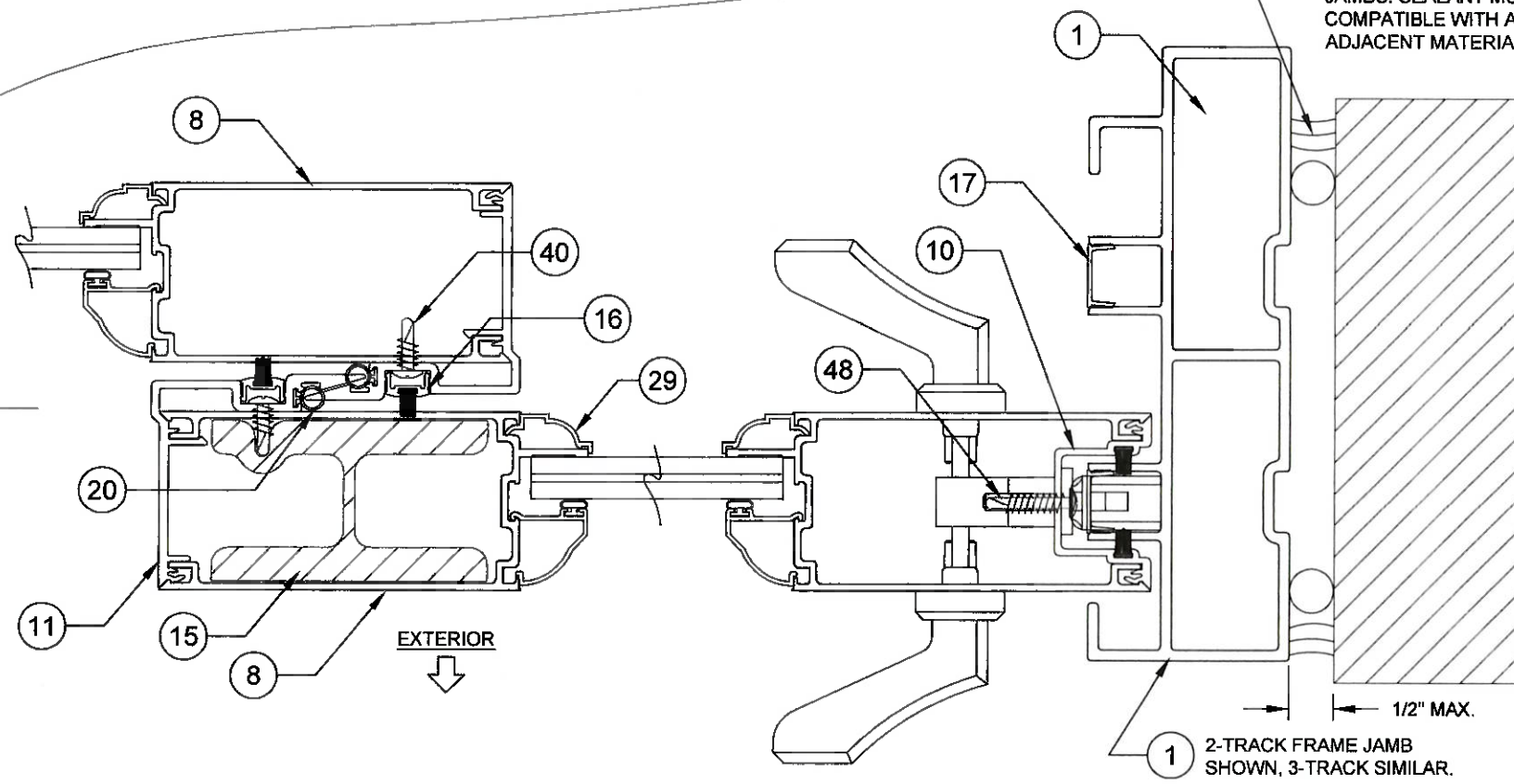
SGD780-LM-FPA1

ANTHONY LYNN MILLER
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12/3/20
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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



HORIZONTAL X-SECTION A-A
(3-TRACK FRAME)



HORIZONTAL X-SECTION A-A
(2-TRACK FRAME)

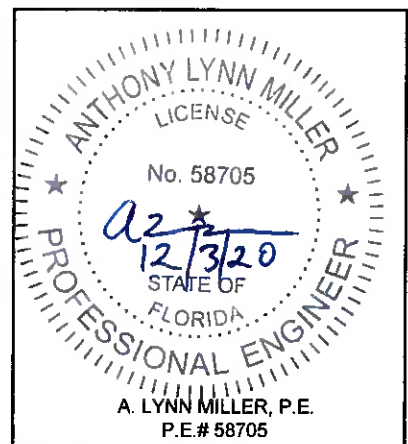
100% EXTENSION JOINT
MOVEMENT CAPABLE SEALANT
(BY OTHERS) REQUIRED AT
JAMBS. SEALANT MUST BE
COMPATIBLE WITH ALL
ADJACENT MATERIALS.

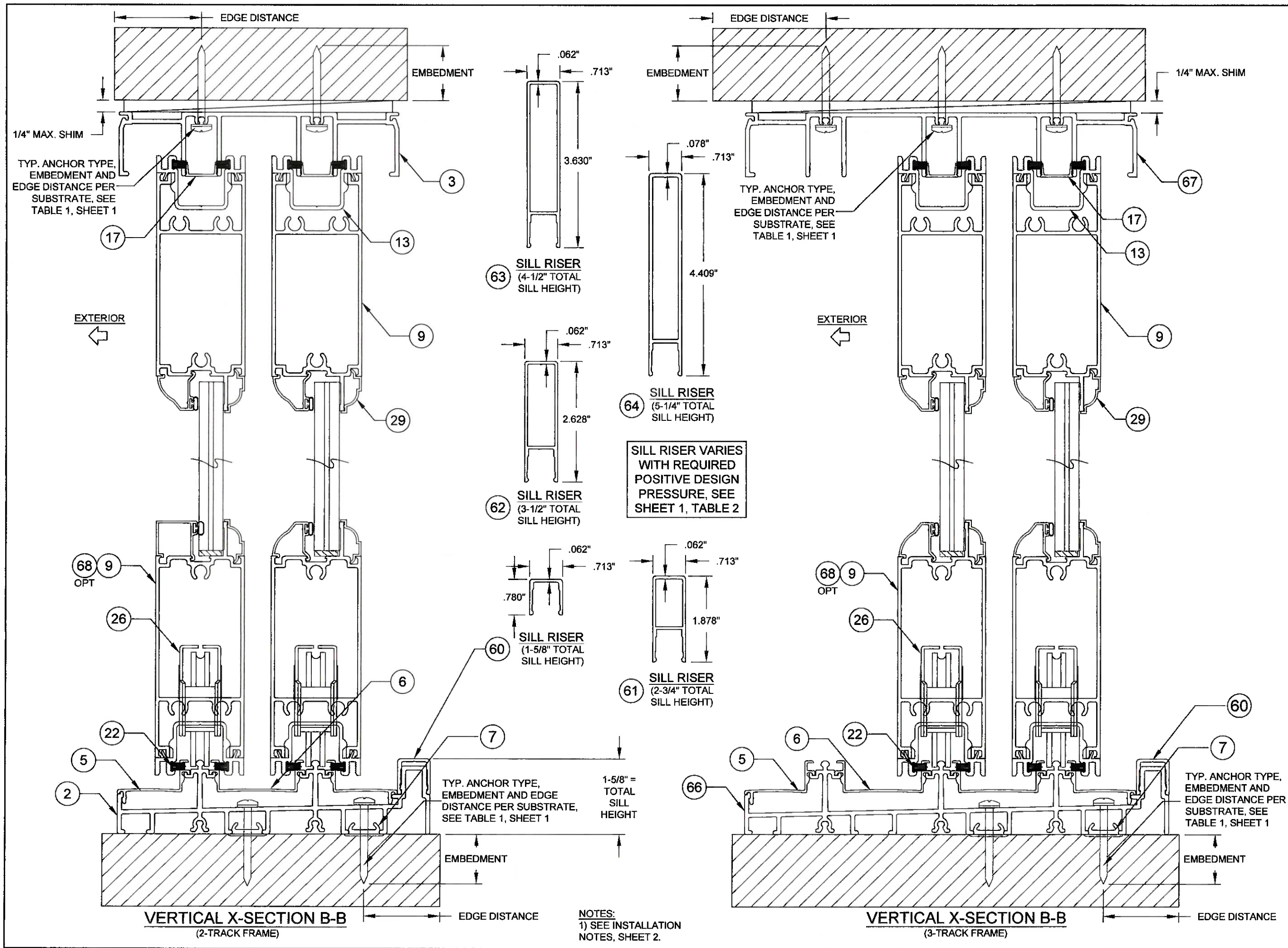
100% EXTENSION JOINT
MOVEMENT CAPABLE SEALANT
(BY OTHERS) REQUIRED AT
JAMBS. SEALANT MUST BE
COMPATIBLE WITH ALL
ADJACENT MATERIALS.

INSTALLATION NOTES:
1) USE ONLY SUBSTRATE APPROPRIATE ANCHORS LISTED IN TABLE 1. FOLLOW EMBEDMENT, EDGE DISTANCE AND SUBSTRATE REQUIREMENTS PER TABLE 1, SHEET 1. ANY INSTALLATION OPTION SHOWN MAY BE USED ON ANY FRAME MEMBER. ALL ANCHOR HEAD TYPES ARE ALLOWED.
2) MASONRY ANCHORS MAY BE USED INTO WOOD AS PER TABLE 1. ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1X INSTALLATIONS. 1X WOOD BUCKS ARE OPTIONAL IF UNIT IS 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.

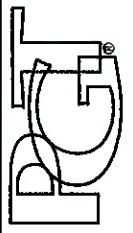
Revision: **REVISED JAMB EXTRUSIONS, REVISED FIXED PANEL CLIP - JR - 12/03/20**

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	SERIES 780 ALUM. SGD, ANCHORLESS JAMB (LM)	Desc. HORIZONTAL CROSS SECTION	No. 2 OF 5	Title SGD780-LM-FPA1
	1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	Series SGD780A	Sheet 2 OF 5	DWG 2 OF 5





Revision:

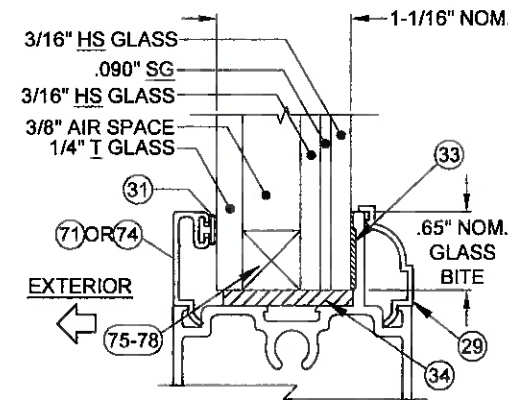
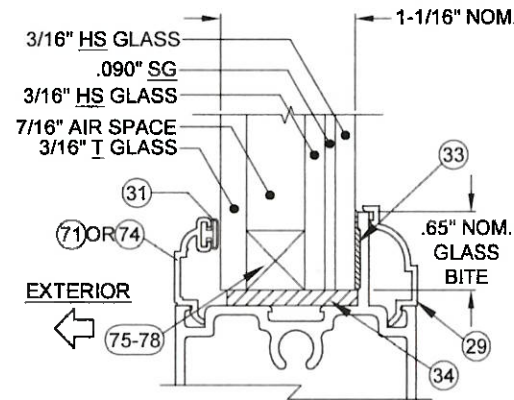
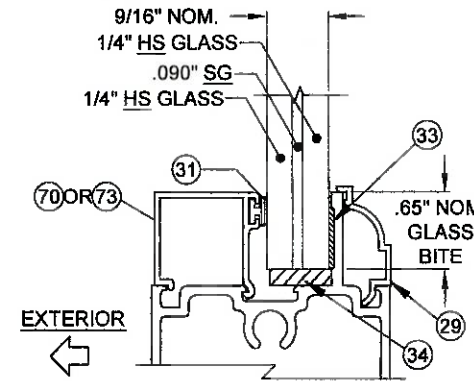
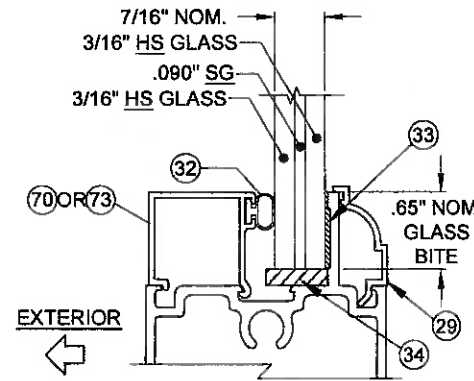
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 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	SERIES 780 ALUM. SGD, ANCHORLESS JAMB (LM)	JENS ROSOWSKI	B
			3 OF 5
SGD780A	VERTICAL CROSS SECTION	SGD780-LM-FPA1	

ANTHONY LYNN MILLER
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STATE OF
FLORIDA
PROFESSIONAL ENGINEER

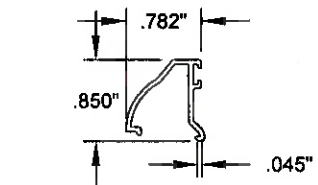
A. LYNN MILLER, P.E.
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TABLE 4:

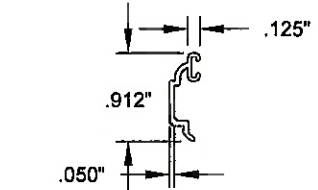
#	Part #	Description	Material
1	8209A	2-Track Anchorless Jamb	6063 T6 Al
2	8118	2-Track Sill	6063 T6 Al
3	8127A	2-Track Head	6063 T6 Al
4	8140	Sill Riser - 1-5/8"	6063 T6 Al
5	8117	Int-Ext. Sill Cover	6063 T6 Al
6	8115	Mid-Sill Cover	6063 T6 Al
7	8183	Sill Mounting Strip/Anchor Plate	6063 T6 Al
8	8012	Panel Stile	6063 T6 Al
9	8014C	Top/Bottom Rail	6063 T6 Al
10	8104	Stile Adaptor	6063 T6 Al
11	8102	Interlock Adaptor (Single)	6063 T6 Al
13	8103	Top Snap Rail Adaptor	6063 T6 Al
14	8105	Astragal Backup Plate	6063 T6 Al
15	8192	Interlock Reinforcement	6105 T5 Al
16	8200	Interlock Screw Cover with T-slot	6063 T6 Al
17	8136	Frame Screw Cover	6063 T6 Al
18	8107C	Astragal	6063 T6 Al
19	1695	1-1/2" X 1" X 3/4" Fin Seal Dust Plug	
20	6TP248	Vinyl Bulb Weatherstrip @ Interlock	Flex PVC
21	6TP247	Vinyl Bulb Weatherstrip @ P-hook	Flex PVC
22	1644	.187" X .270" Weatherstrip	
23	1270	1/2" X 1-1/8" Open Cell Foam Pad	
24	20162	1.24" X 4" X .625" Mullion	6005-T5
25	8197	Lagbolt Washer	SS
26	8153	Tandem Nylon Roller Assembly	Steel
27		#10" X 1-1/2" Ph. PH. SMS @ Roller	SS
28	8052	Roller Adj. Hole Plug	PVC
29	8022	Interior Bead	6063 T5 Al
31	6TP247	Glazing Vinyl	
32	1643	Foam-filled Glazing Bulb	
33		RGS 7700, Dow 791 or Dow 983	Silicone
34	1725	Setting Block, 1/2" X 4" X 1/16", 85 +/- 5 duro.	EPDM
38	710X34PPSDAX	#10 X 3/4" Ph. PH. SMS @ P-hook	SS
39		#8 X 5/8" Ph. PH. SMS @ Single Interlock	SS
40		#8 X 3/4" Ph. PH. SMS @ Double Interlock	SS
41	710X115PPX	#10 X 1-1/2" Ph. PH. SMS @ Astragal	SS
42	1155	#8 X 1" PH. Quad. SMS @ Main frame	SS
43	72087K	Jamb Bumper	
44	76X38PPAX	#6 X .375" Ph. PH. SMS	SS
45	4385	4 Hole Bumper Stop	
46	78X38PPTX	#8 X 3/8" Ph. PH. SMS	Steel
47	8193	Fixed Panel Clip - 12" long	
48		#10 X 3/4" Ph. PH. SMS	SS
49		#8 X 1/2" Ph. PH. SMS	SS
50	Varies	Handle Kit	Cast Zinc
51	8185X	Gemini Mortice Lock w/long Trim plate	SS
52	8184X	Gemini Mortice Lock w/pocket Trim plate	SS
53		#10-32 X 1" FH. MS	Steel
54		#10-32 U-Nut	Steel
55		5/16" x 2" LAG SCREW	SS
56	8187X	3/4" Mortice Keeper, 90° Corner	SS
57		#10 X 1-1/2" Ph. PH. SMS @ Keeper	SS
58	1032X1FPFX	10-32 X 1" Ph. FH. MS	SS



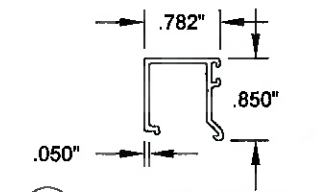
#	Part #	Description	Material
60	8140	Sill Riser - 1-5/8"	6063 T6 Al
61	8139	Sill Riser - 2-3/4"	6063 T6 Al
62	8138	Sill Riser - 3-1/2"	6063 T6 Al
63	8137	Sill Riser - 4-1/2"	6063 T6 Al
64	8182	Sill Riser - 5-1/4"	6063 T6 Al
65	8210A	3-Track Anchorless Jamb	6063 T6 Al
66	8116	3-Track Sill	6063 T6 Al
67	8124	3-Track Head	6063 T6 Al
68	8013C	9" Tall Bottom Rail	6063 T6 Al
70	8145	Lami. OG Bead	6063 T5 Al
71	8146	1-1/16" OG Bead	6063 T5 Al
73	8148	Lami. Square Bead	6063 T5 Al
74	8149	1-1/16" Square Bead	6063 T5 Al
75		Kommerling 4SG TPS Spacer System	
76		Quanex Super Spacer with Hot Melt Butyl	
77		Quanex Duraseal Spacer	
78		Cardinal XL Edge Spacer	



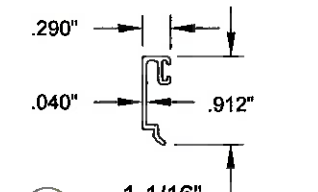
70 LAMI OGEE BEAD



71 1-1/16" OGEE BEAD



73 LAMI SQUARE BEAD

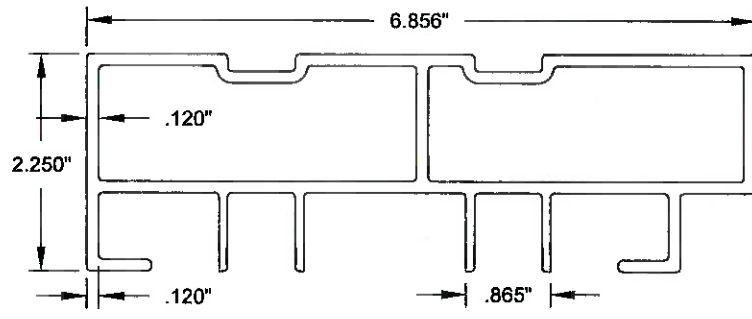


74 1-1/16" SQUARE BEAD

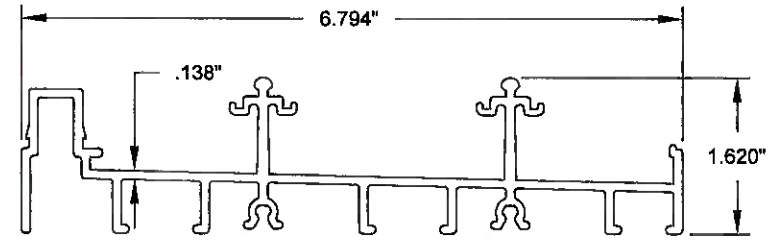
Revision:

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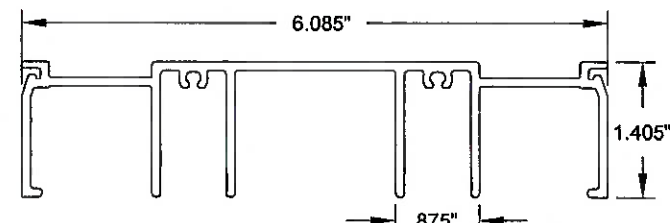
ANTHONY LYNN MILLER
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 P.E.# 58705



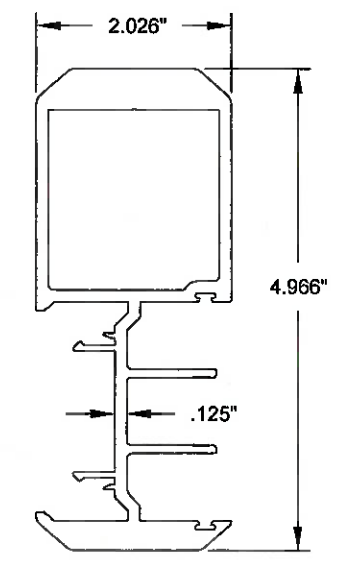
① 2-TRACK ANCHORLESS JAMB



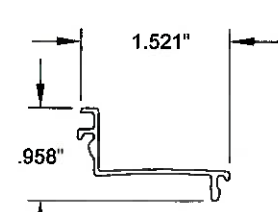
② 2-TRACK SILL



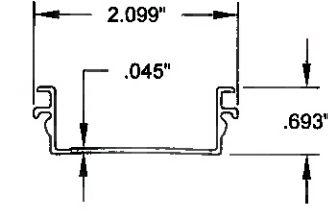
③ 2-TRACK SINGLE HEAD



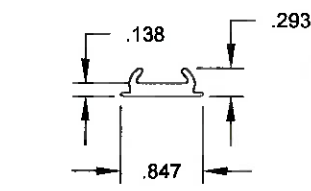
⑱ ASTRAGAL



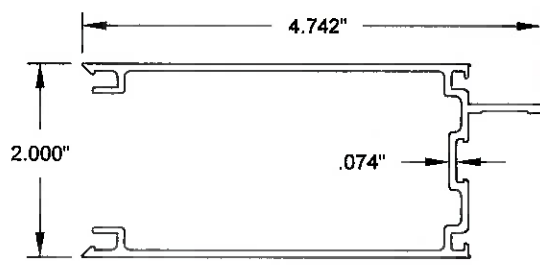
⑤ INT-EXT SILL COVER



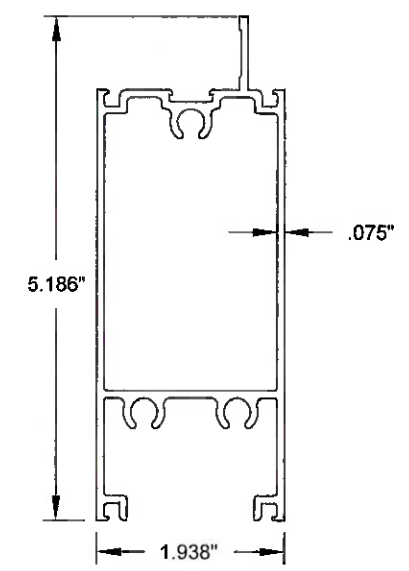
⑥ MID-SILL COVER



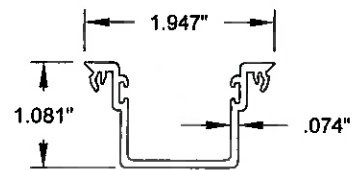
⑦ SILL MOUNTING STRIP



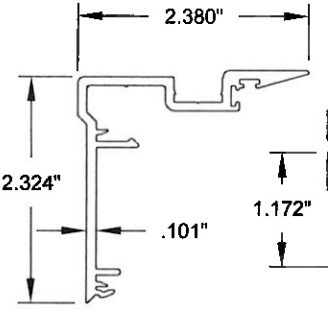
⑧ PANEL STILE



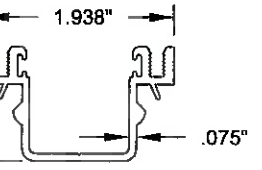
⑨ TOP/BOTTOM RAIL - 4 1/2"



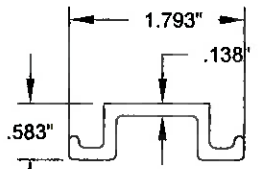
⑩ STILE ADAPTER



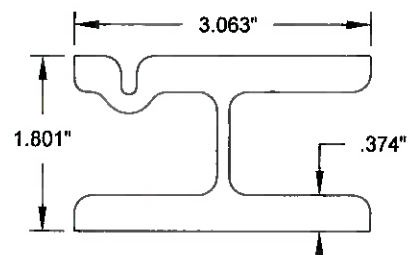
⑪ INTERLOCK ADAPTER



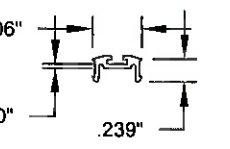
⑬ SNAP RAIL ADAPTER



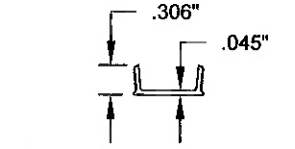
⑭ ASTRAGAL BACKER PLATE



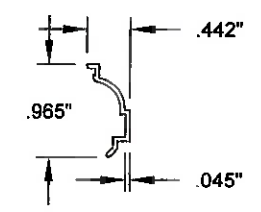
⑮ INTERLOCK REINFORCEMENT



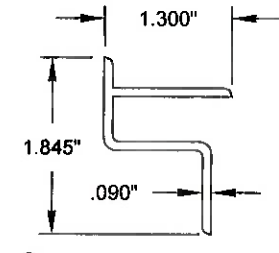
⑯ INTERLOCK TRIM COVER



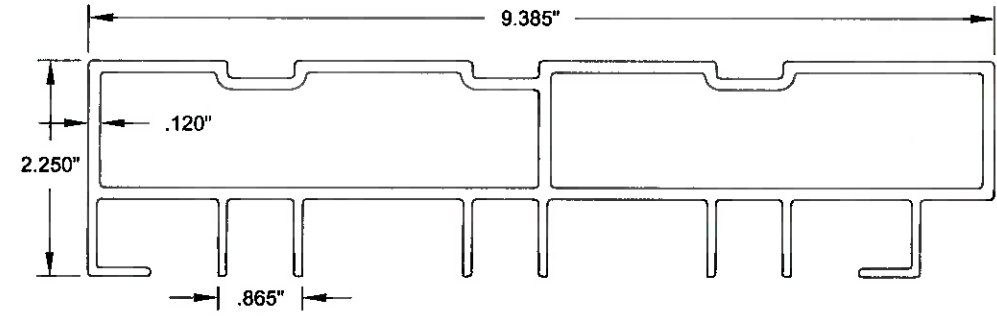
⑰ FRAME SCREW COVER



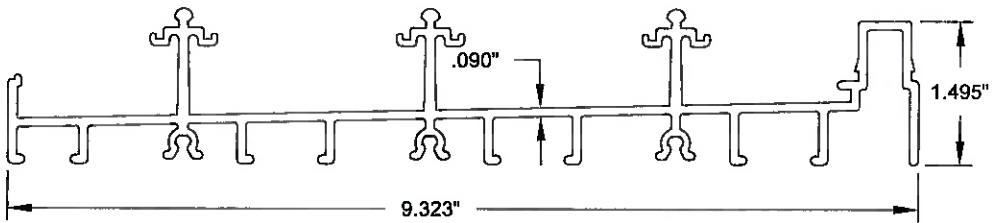
⑲ INTERIOR BEAD



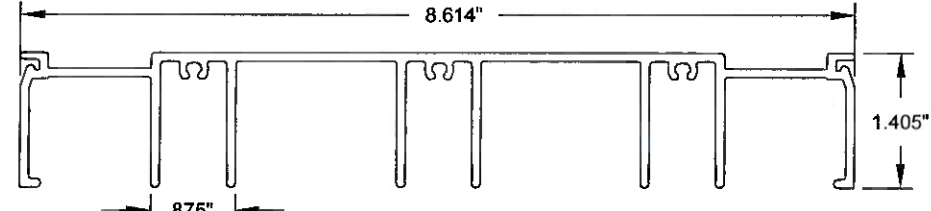
⑴⑷ "O" PANEL BRACKET



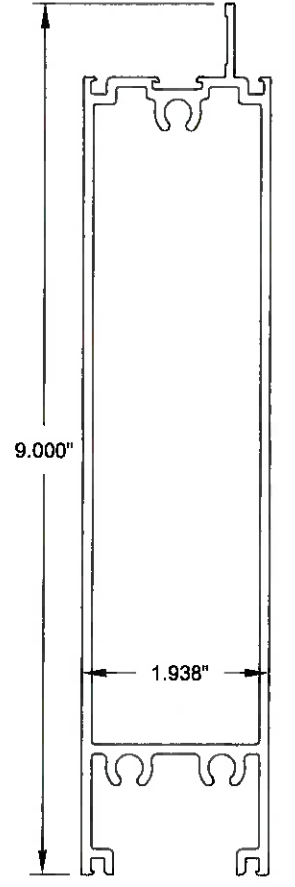
⑵⑶ 3-TRACK ANCHORLESS JAMB



⑵⑶ 3-TRACK SILL

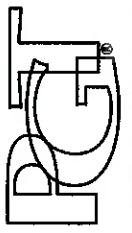


⑵⑷ 3-TRACK HEADER



⑵⑸ 9" TALL BOTTOM RAIL

Revision: REVISED JAMB EXTRUSIONS - JR - 12/03/20

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296	08/08/20	JENS ROSOWSKI Drawn By	B Rev.
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 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	SERIES 780 ALUM. SGD, ANCHORLESS JAMB (LM)		EXTRUSIONS Desc.	5 OF 5 Sheet
	SGD780A			

ANTHONY LYNN MILLER
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 No 58705
 02/12/20
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 A. LYNN MILLER, P.E.
 P.E.# 58705