

NOTE:
GLASS CAPACITIES ARE
BASED ON ASTM E1300-16 (3 SEC. GUSTS)

THESE DOORS ARE RATED FOR LARGE & SMALL MISSILE IMPACT.
SHUTTERS ARE NOT REQUIRED.

SERIES 850-16
ALUMINUM/GLASS SECTIONAL GARAGE DOOR

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

WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

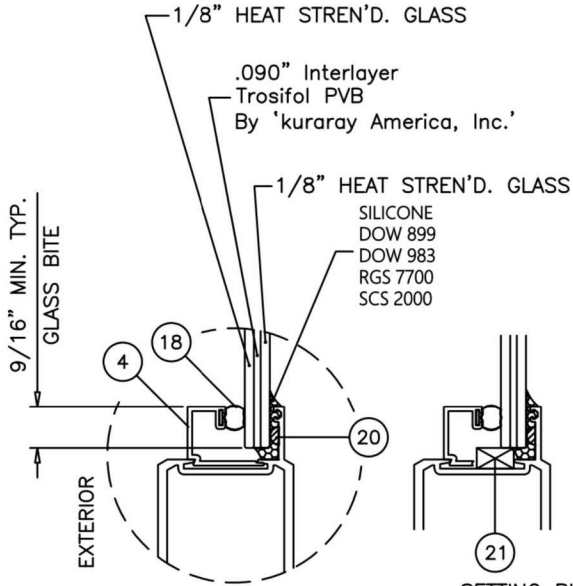
A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

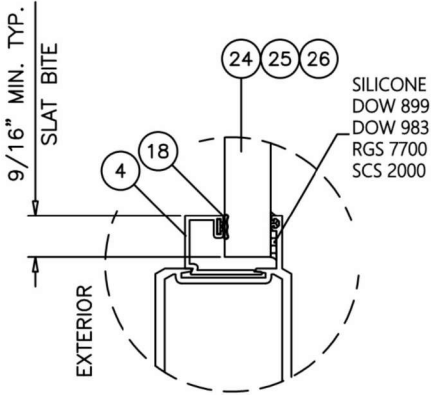
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.



5/16" LAM. GLASS



ALUMINUM SLAT INSERTS

GLAZING OPTIONS

FL#40247.2



JAVAD AHMAD PE, inc
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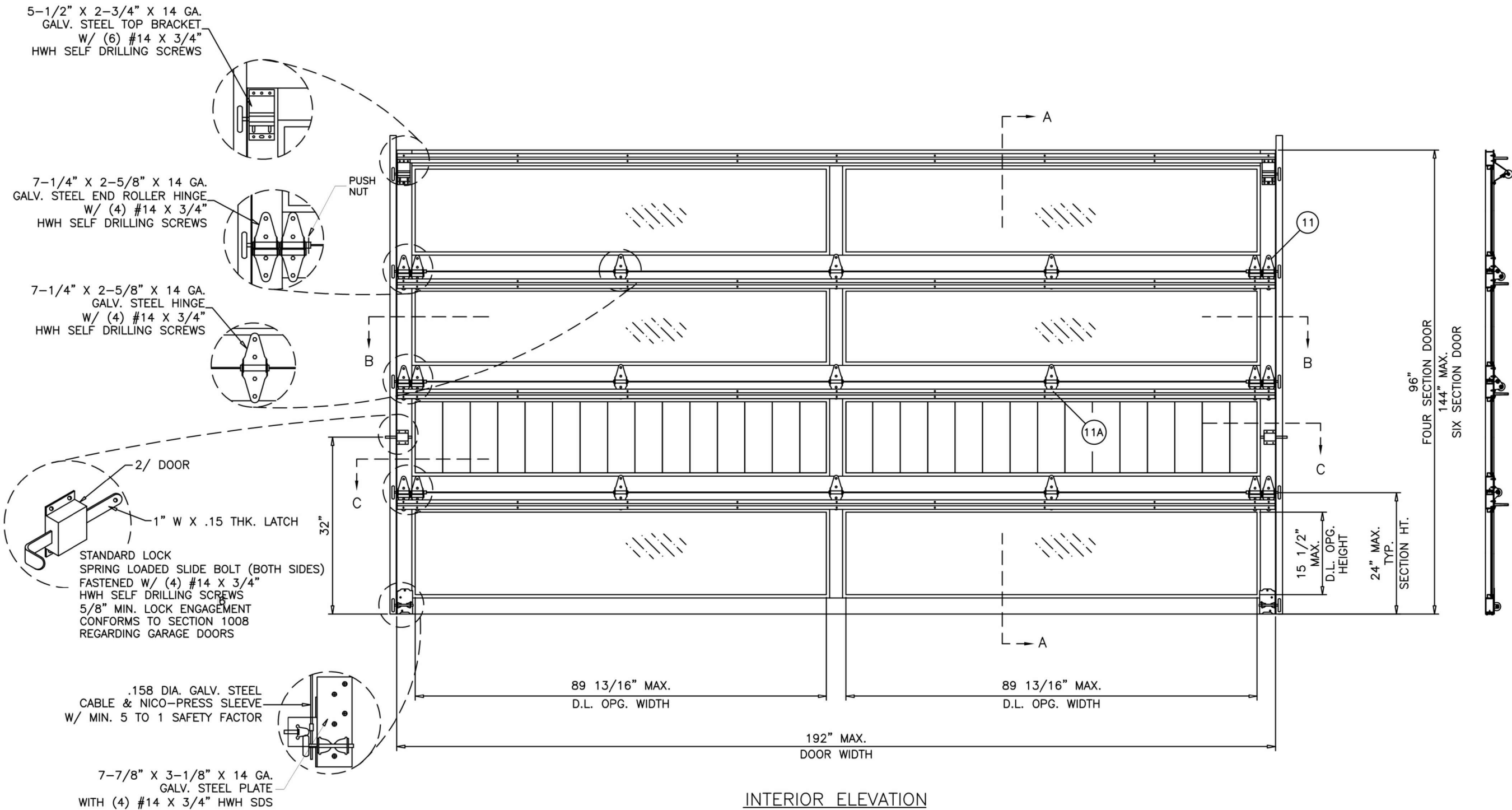
drawing no.	JA-1844-24	MA
date:	12/31/2024	drawn by: BS
check by:		
REVISION		
No.	DATE	DESCRIPTION

SERIES 850: ALUMINUM / GLASS SECTIONAL GARAGE DOOR(16' MAX)
(L.M.I.)
LARGE MISSILE IMPACT RATED

ECO window systems
ECO WINDOW SYSTEMS, LLC.
8502 N.W. 80th ST. MEDLEY, FL 33166
TEL. (305) 885-5299 FAX. (305) 885-5902



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MAXIMUM DESIGN LOAD RATING = + 40.0 PSF
(FOR SIZES SHOWN OR SMALLER) - 45.0 PSF

NOMINAL DOOR HEIGHT	NO. OF SECTIONS
8'-0"	4 SECTIONS
10'-0"	5 SECTIONS
12'-0"	6 SECTIONS

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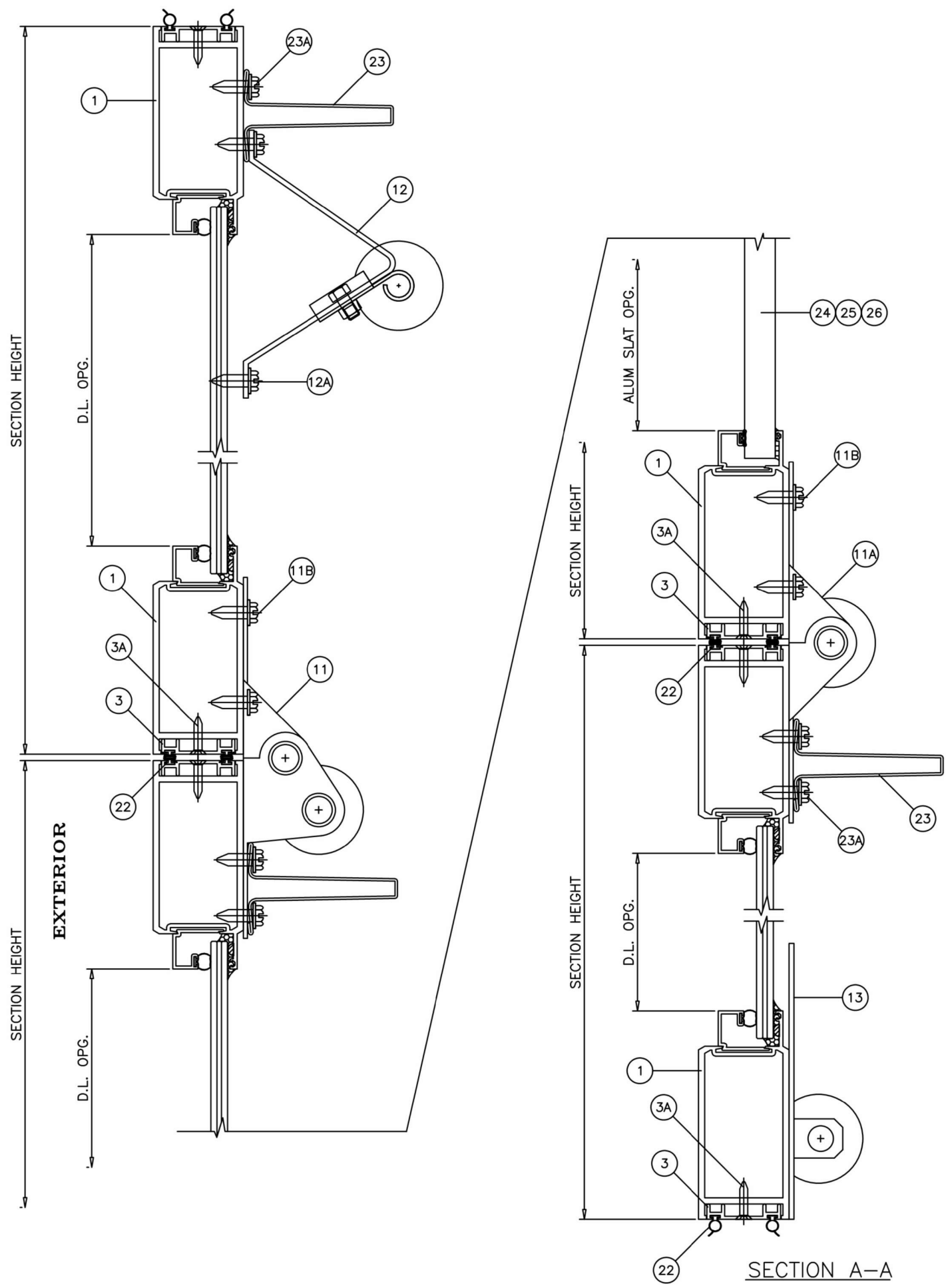
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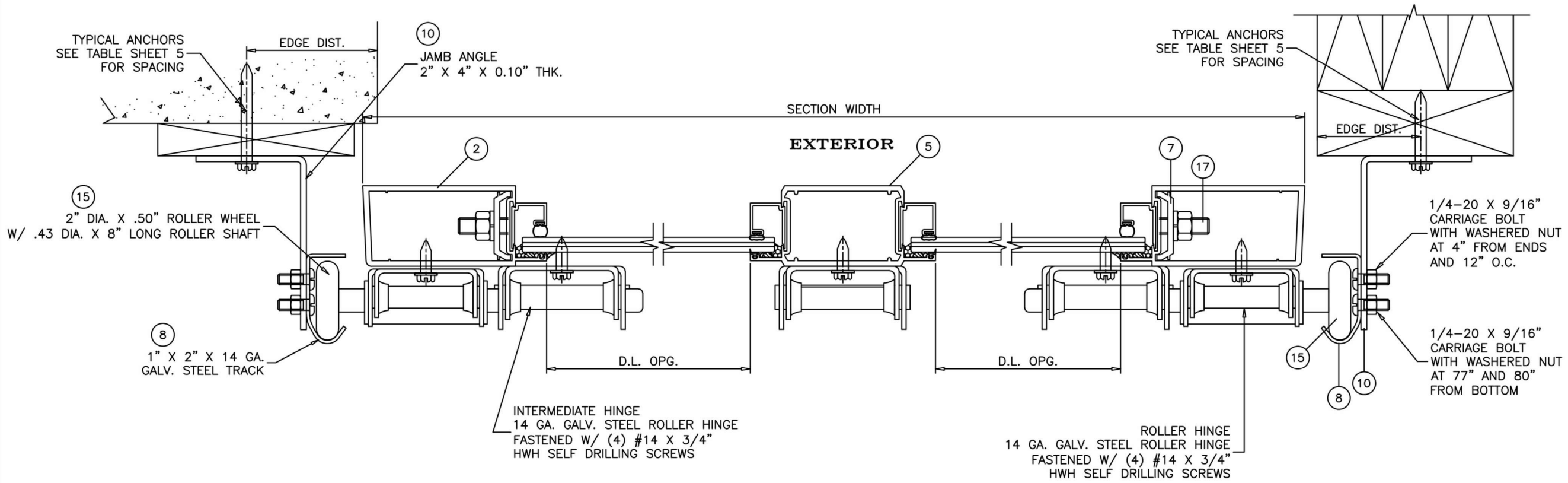
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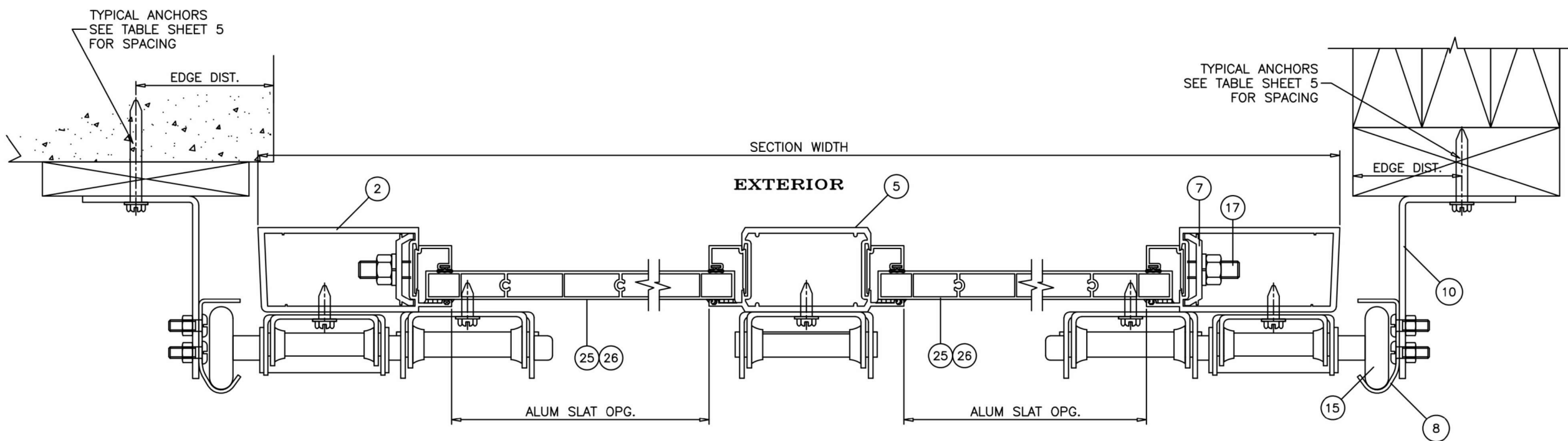
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SECTION B-B
5/16" LAM GLASS OPTION



SECTION C-C
ALUM SLAT INSERT OPTION



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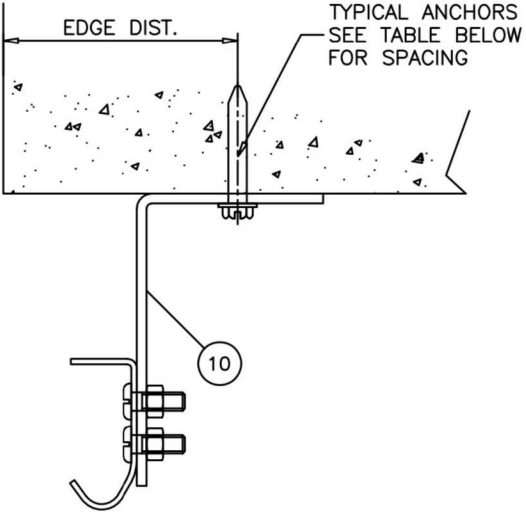
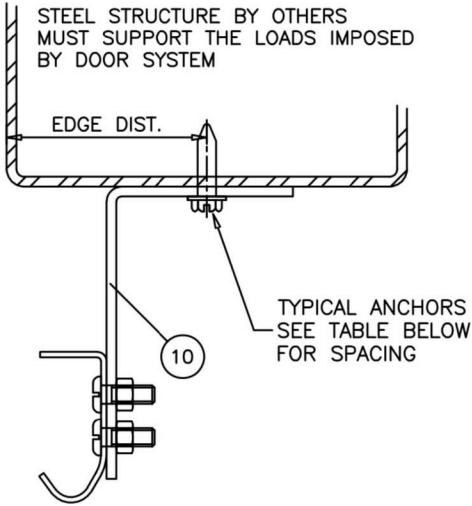
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TYPICAL ANCHORS:

Anchor Type	Substrate	Min. Edge Distance	Min. Embedment or Metal Thickness	Spacing
5/16" DeWalt UltraCon+	Thru 1BY or 2BY Buck into Concrete (min. 3 ksi)	3-1/8"	2"	4" from bottom and 8-3/4" Max O.C.
	Concrete (min. 3 ksi)	3-1/8"	2"	4" from bottom and 8-3/4" Max O.C.
3/8" Hilti Kwik Bolt 3 Expansion Anchor	Filled Block (ASTM C90, min. 2 ksi)	4"	2-1/2"	4" from bottom and 7-1/4" Max O.C.
5/16" DeWalt Dril-Flex Screws	Steel 1/8" Thk. Min. (min. 36 ksi)	3/4"	(3) Threads min. beyond metal thickness	4" from bottom and 8-3/4" Max O.C.
5/16" Lag Screws	Southern Pine (SG = 0.55)	1-1/2"	2-1/4"	4" from bottom and 12" Max O.C.

1. STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED
2. ALL ANCHOR HEAD TYPES ARE ACCEPTABLE



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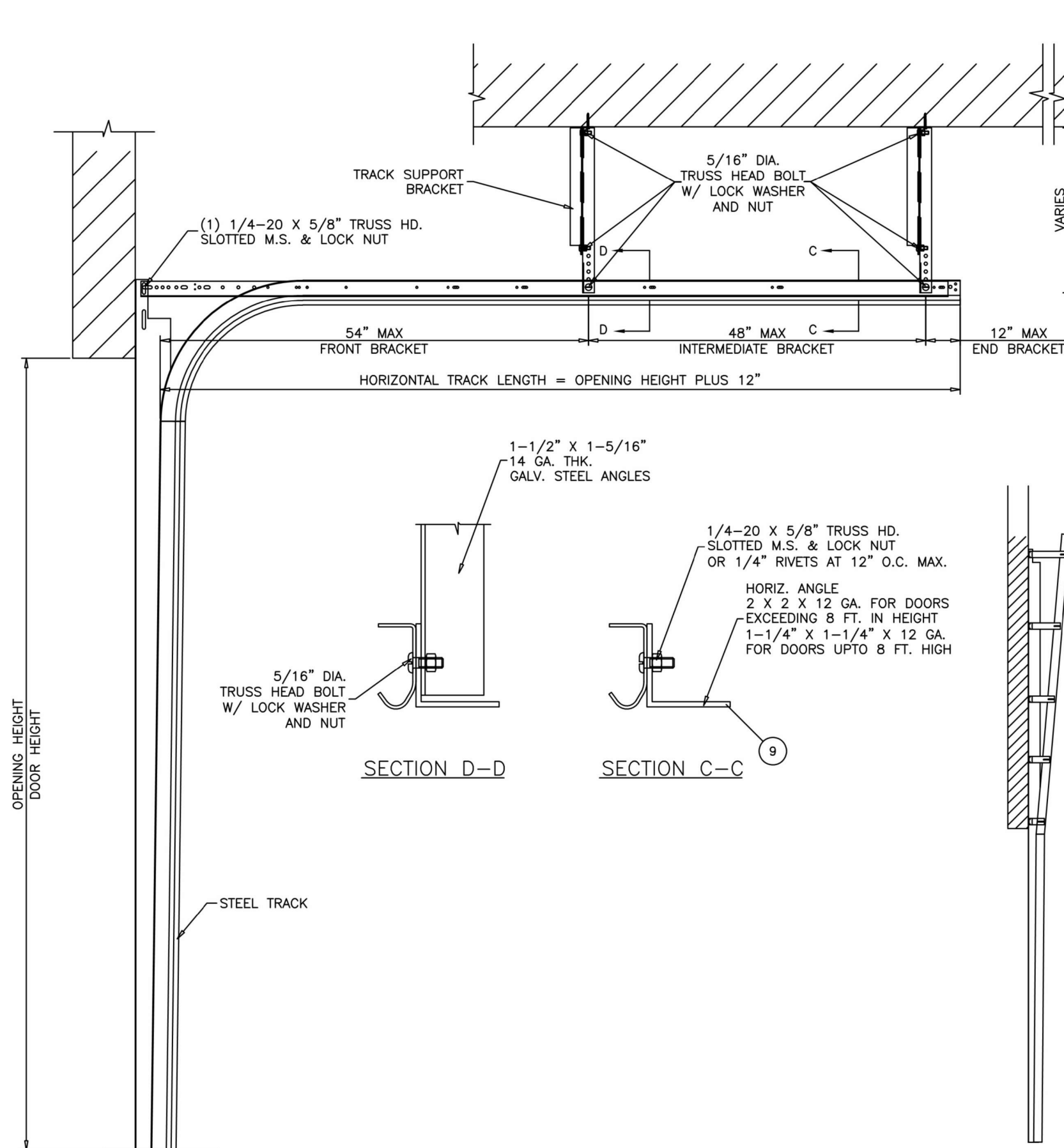
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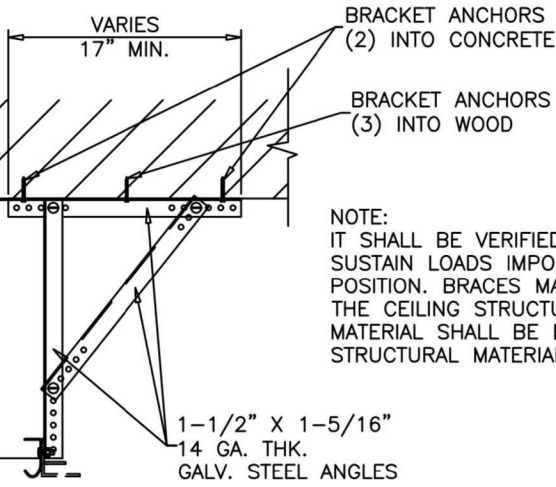
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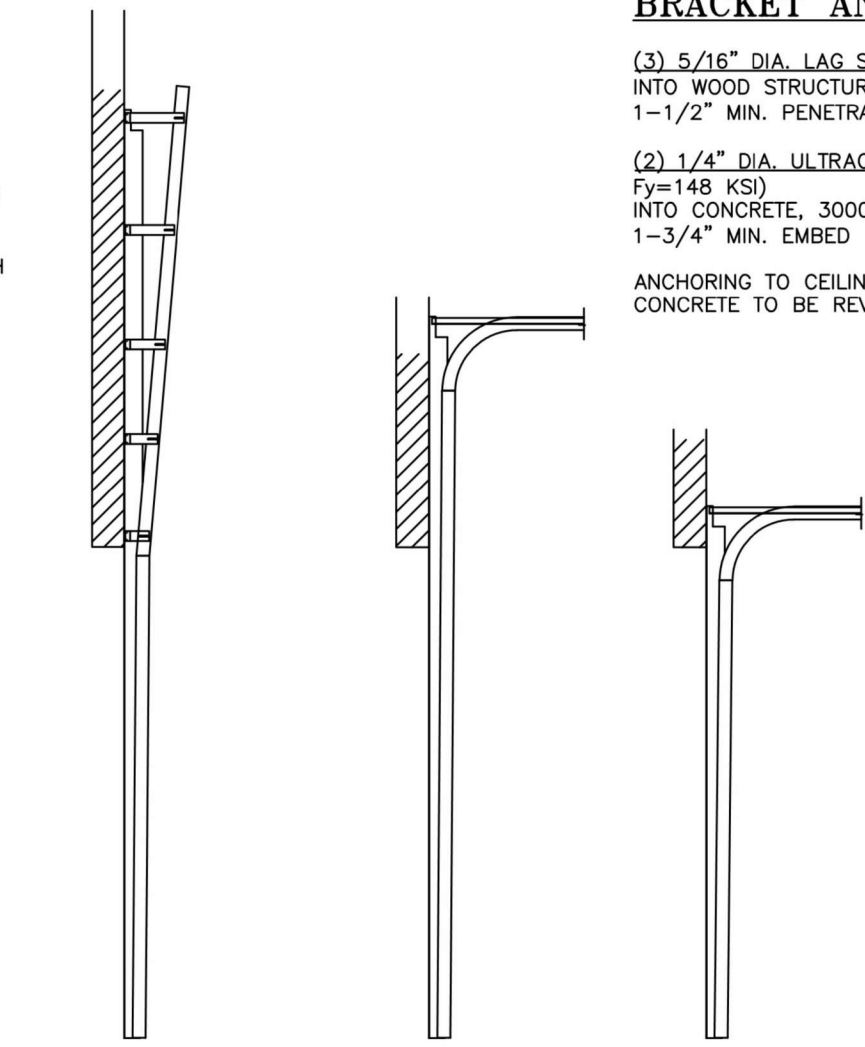
TRACK DETAIL



SUPPORT BRACKETS AT EACH TRACK
BRACKETS RUN PERPENDICULAR TO TRACKS
FRONT AND END BRACKETS TO BE SPACED AS SHOWN ABOVE.
ADDITIONAL INTERMEDIATE BRACKETS TO BE INSTALLED FOR SPACING MORE THAN 48" IN BETWEEN FRONT AND END BRACKETS.
(MINIMUM OF 2 BRACKETS PER TRACK)

BRACKET ANCHORS:

- (3) 5/16" DIA. LAG SCREWS INTO WOOD STRUCTURES, (S.G.=0.50) 1-1/2" MIN. PENETRATION
 - (2) 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI) INTO CONCRETE, 3000 PSI MIN. 1-3/4" MIN. EMBED
- ANCHORING TO CEILING OTHER THAN WOOD OR CONCRETE TO BE REVIEWED SEPARATELY.



VERTICAL LIFT HIGH LIFT STANDARD LIFT

AVAILABLE TRACK OPTIONS

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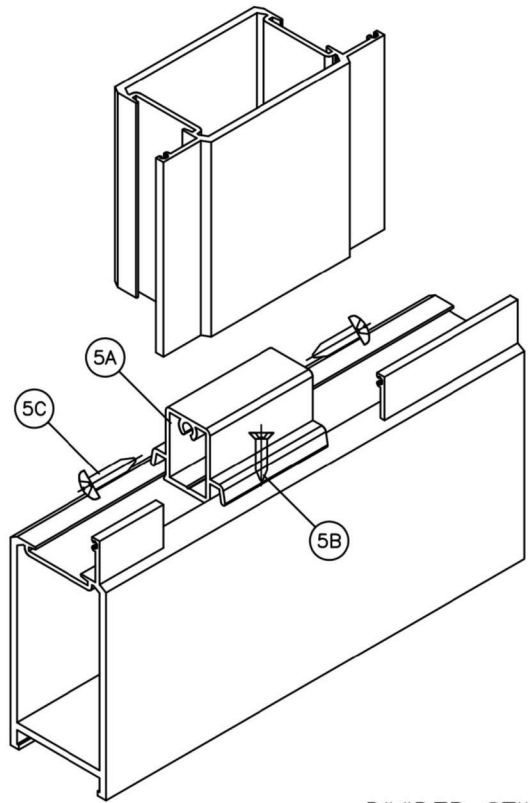
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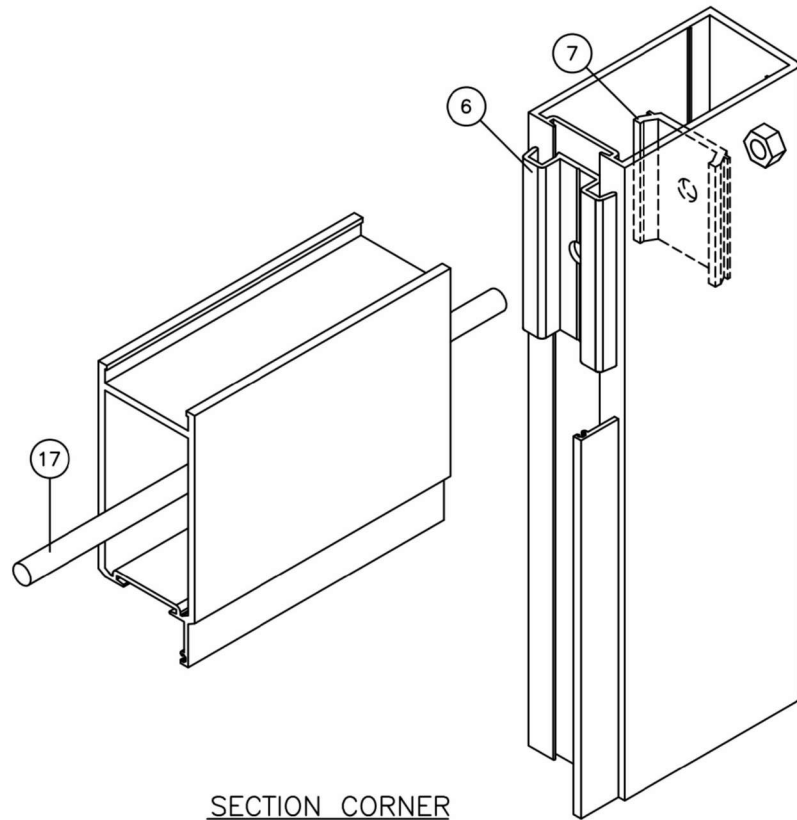
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DIVIDER STILE CORNER



SECTION CORNER
TOP & BOTTOM RAIL

ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	E805	2	TOP AND BOTTOM RAIL	6063-T6	-
2	E806	2	SIDE RAIL	6063-T6	-
3	E608	AS REQD.	W'STRIP ADAPTER	6063-T6	-
3A	#10 X 3/4"	AS REQD.	ADAPTER FASTENERS AT 6" FROM ENDS & 12" O.C.	GALV. STEEL	FH SELF DRILLING SCREWS
4	E614	AS REQD.	GLAZING BEAD	6063-T6	-
5	E821	AS REQD.	DIVIDER STILE	6063-T6	-
5A	E822	AS REQD.	DIVIDER SHEAR BLOCK	6063-T6	-
5B	#10 X 3/4"	AS REQD.	SHEAR BLOCK FASTENERS	GALV. STEEL	FH SELF DRILLING SCREWS
5C	#12 X 1-1/2"	AS REQD.	DIVIDER ASSEMBLY SCREWS	GALV. STEEL	TC MS
6	E612	4/ SECTION	ALIGNMENT BRACKET	6063-T6	-
7	E613	4/ SECTION	CLAMP	6063-T6	-
8	-	2	DOOR TRACK	GALV. STEEL	-
9	-	2	HORIZONTAL ANGLE	GALV. STEEL	Fy MIN. = 50 KSI
10	-	AS REQD.	JAMB ANGLE	GALV. STEEL	Fy MIN. = 42 KSI
11	-	AS REQD.	ROLLER HINGES	GALV. STEEL	-
11A	-	AS REQD.	ROLLER/CENTER HINGES	GALV. STEEL	-
11B	#14 X 3/4"	AS REQD.	HINGE FASTENERS	GALV. STEEL	HWH SELF DRILLING SCREWS
12	-	2	TOP FIXTURE	GALV. STEEL	-
12A	#14 X 3/4"	6/ BRACKET	BRACKET FASTENERS	GALV. STEEL	HWH SELF DRILLING SCREWS
13	-	2	BOTTOM FIXTURE	GALV. STEEL	-
14	-	2	STANDARD LOCK	-	-
15	-	AS REQD.	2" ROLLER WITH 8" STEM	STEEL	-
16	H107	2	5/32" SPRING LIFT CABLE	GALV. STEEL	-
17	-	-	3/8" DIA. THREADED ROD & NUT	STEEL	-
18	-	AS REQD.	GLAZING VINYL	EPDM	DUROMETER 70±5 SHORE A
20	-	-	GLASS SPACER	SILICONE	FRANK LOWE RUBBER CO.
21	-	2/ LITE	SETTING BLOCK, 1/4" X 1/2" X 4" LONG	EPDM	AT 6" FROM EACH END, DUROMETER 65±5
22	E20618-KN-3020	-	BULB W'STRIPPING	SANTOPRENE	EPDM
23	-	1	REINFORCING TRUSS, FULL LENGTH	GALV. STEEL	Fy MIN. = 50 KSI
23A	#14 X 3/4"	AS REQD.	TRUSS FASTENERS, AT 1-1/2" FROM ENDS & 24" O.C.	GALV. STEEL	HWH SELF DRILLING SCREWS
24	EK-5	AS REQD.	INTERMEDIATE SLAT	6063-T5	-
25	EK-2	AS REQD.	END SLAT, TYPE 1	6063-T5	-
26	EK-3	AS REQD.	END SLAT, TYPE 2	6063-T5	-



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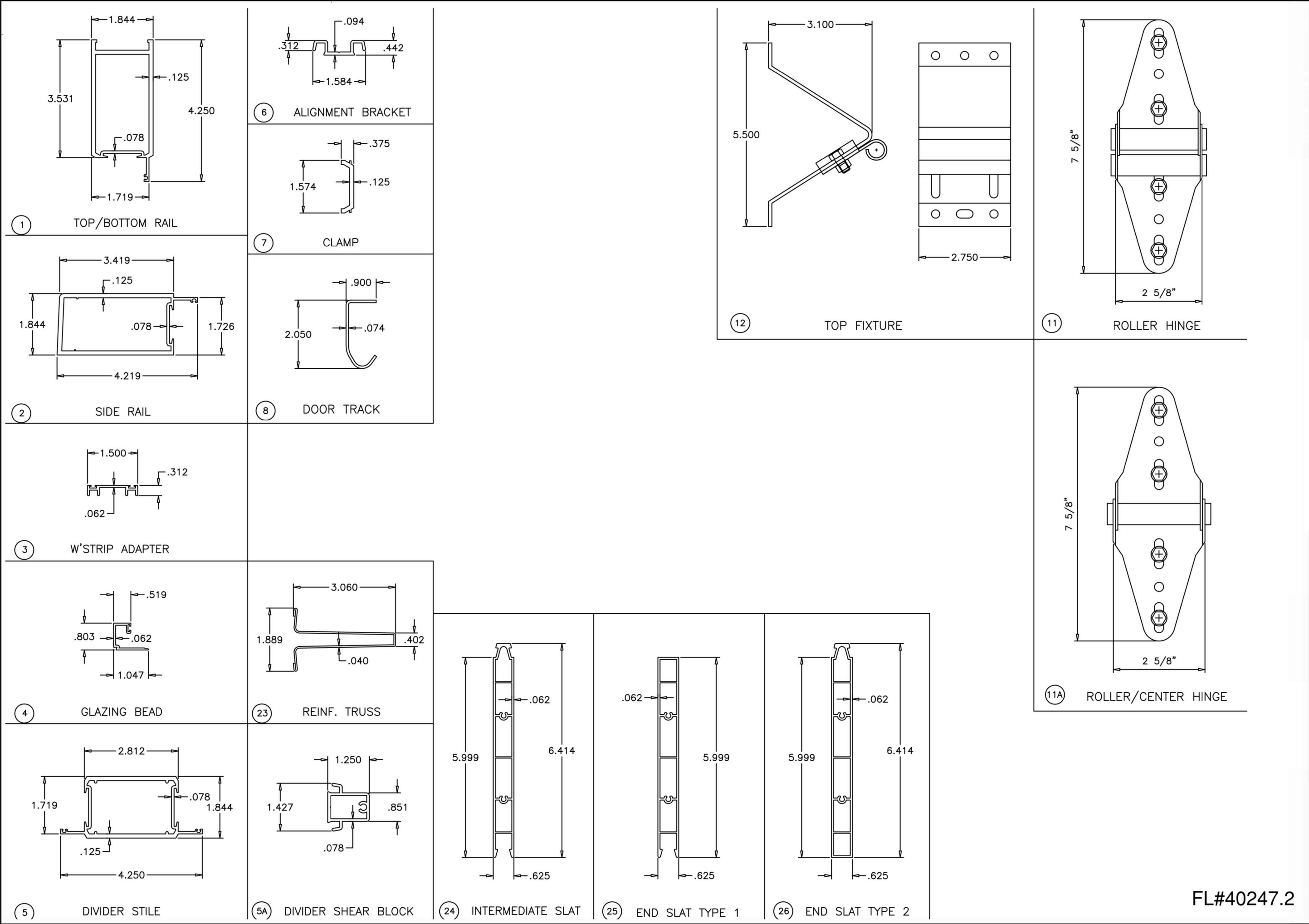


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