

**GENERAL NOTES:**

- THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
- OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
- ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
- THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH 2018 IBC REFERENCED STANDARDS ASTM E330, E283, E331, F588, E1886 & E1996 FOR LARGE MISSILE IMPACT PRODUCTS. ALL TESTING OF THIS PRODUCT TO STANDARDS LESS CURRENT THAN THOSE SPECIFIED IN THE 2018 IBC HAS BEEN DETERMINED EQUIVALENT TO THE MORE CURRENT VERSIONS OF THOSE STANDARDS REFERENCED IN THE 2018 IBC.
- THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE (IBC).
- IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.
- ALL ANCHORS SECURING PRODUCT FRAMES TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
- DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, A DIRECTIONALITY FACTOR OF  $KD = 0.85$  MAY BE APPLIED PER THE ASCE-7 STANDARD.
- MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE SEPARATED OR COATED AS REQUIRED TO AVOID CORROSION OF EITHER MATERIAL.
- TO THE BEST OF OUR KNOWLEDGE, THE PRODUCT SHOWN HEREIN ARE QUALITY ASSURED BY AN APPROVED CERTIFICATION/QA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH APPLICABLE STANDARDS. THESE DRAWINGS SHOW ALL APPLICABLE ELEVATION, COMBINATION, INSTALLATION & COMPARATIVE ANALYSIS CONDITIONS AS DETERMINED THROUGH TESTING & ENGINEERING RATIONAL ANALYSIS. PRODUCT ASSEMBLY SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, THE MANUFACTURER'S QUALITY ASSURANCE SPECIFICATIONS & TESTING REPORTS.
- CERTIFICATION OF THIS PRODUCT SHALL BE CONSIDERED VOID IF THEY ARE INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT OR IF THEY ARE INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH INSTALLATIONS OF THIS TYPE OF PRODUCT.

EVALUATION OF THIS PRODUCT IS BASED ON APPLICABLE STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE BUILDING CODE VERSION CONSIDERED WITH THIS EVALUATION WAS THAT IN FORCE AT THE TIME OF THE EVALUATION. IN THE EVENT OF CODE VERSION CHANGES/UPDATES OR IN THE EVENT THAT NEW OR ADDITIONAL TESTING IS COMPLETED ON THIS PRODUCT, PRIOR TO STATING CODE COMPLIANCE, THE MANUFACTURER SHALL CONFIRM WITH THE EVALUATION ENGINEER OF RECORD THAT EVERYTHING SPECIFIED HERE-IN IS CURRENT WITH ALL CURRENT TESTING, CODES AND APPLICABLE STANDARDS.

**ALLOWABLE D.L.O. SIZE TABLE**

MAXIMUM D.L.O. HEIGHT (IN.)	MAXIMUM D.L.O. WIDTH (IN.)
115 1/4	43 3/4
108	46 1/2
102	49 1/4
96	52 1/2
92 3/4	54 1/4
90	56
84	60

**CORNER CONSTRUCTION:**

- FRAME CORNERS & VERTICAL INTERMEDIATE CORNERS:** HORIZONTAL MEMBERS ARE SQUARE CUT, BUTTED TO THE VERTICAL MEMBER, FASTENED WITH 3 TO 4 S.S. NO. 12 X 1" PHIFTS FASTENERS THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBER SCREW SPLINES & SEALED WITH SILICONE.
- PROJECT-OUT FRAME CORNERS:** MITERED, JOINED TOGETHER VIA A CORNER KEY (ITEM #24) & SEALED WITH SILICONE SEALANT.
- PROJECT-OUT SASH CORNERS:** MITERED, JOINED TOGETHER VIA A CORNER KEY (ITEM #25) & SEALED WITH SILICONE SEALANT.

**FRAME ANCHOR REQUIREMENTS TABLE**

OPENING TYPE (SUBSTRATE)	FRAME/FIN TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
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**FRAME & STRAP ANCHOR SCREWS**

(1) MIN. 2X_ WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 14 SMS OR WOOD SCREW	1 3/8"	1"
MIN. 16 GA. 50 KSI METAL STUD	1/4" SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	1/4" SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 0.100" THK 6063-T6 ALUM.	1/4" SELF TAP/DRILL SCREW	FULL	1/2"
(2) CONCRETE FILLED CMU	(3) 1/4" CONCRETE SCREW	1 3/4"	2 1/2"
3000 PSI CONCRETE	(3) 1/4" CONCRETE SCREW	1 3/4"	2 1/2"

- FRAME SCREW MOUNT REQUIRES MIN. 2X4; STRAP ANCHOR MOUNT REQUIRES MIN. 2X6.
- WHEN SUBSTRATE IS WOOD & FRAME SCREWS ARE REQUIRED AT SIDES OF OPENING, THE SHIM SPACE AT THE SIDES SHALL NOT BE GREATER THAN 1/4" UNLESS THE SCREWS ARE GRADE 5 (MAY BE UP TO 3/8" WITH GR. 5 SCREWS)
- CMU IS APPLICABLE AT SIDES ONLY & MUST BE CONCRETE FILLED WHEN SIDE JAMB ANCHORS ARE REQUIRED.
- CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.), ELCO CRETE-FLEX (S.S.), ITW RAMSET/RED HEAD TAPCONS (C.S. OR S.S.) OR HILTI KWIK-CON II (C.S OR S.S.).

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

**MULLION PRESSURE TABLE (VERTICAL INTERMEDIATE MULLION)**

MAXIMUM FRAME HEIGHT DIMENSION (IN.)	MAXIMUM LOAD WIDTH DIMENSION (IN.)	ALLOWABLE PRESSURE (PSF)	
		6 ANCHORS	4 ANCHORS
		121 1/4	62 3/4
	56 3/4	62.6	40.4
	50 3/4	70.0	45.2
	44 3/4	70.0	51.2
	38 3/4	70.0	59.2
	32 3/4	70.0	70.0
109 1/4	62 3/4	62.8	40.6
	56 3/4	69.5	44.8
	50 3/4	70.0	50.1
	44 3/4	70.0	56.9
	38 3/4	70.0	65.7
	35 3/4	70.0	70.0
97 1/4	62 3/4	70.0	45.6
	56 3/4	70.0	50.4
	50 3/4	70.0	56.3
	44 3/4	70.0	63.9
	40 3/4	70.0	70.0
90	62 3/4	70.0	49.2
	56 3/4	70.0	54.4
	50 3/4	70.0	60.9
	44 3/4	70.0	69.0
84	62 3/4	70.0	52.7
	56 3/4	70.0	58.3
	50 3/4	70.0	65.2
	46 3/4	70.0	70.0
78	62 3/4	70.0	56.8
	56 3/4	70.0	62.8
	50 3/4	70.0	70.0
72	62 3/4	70.0	61.5
	56 3/4	70.0	68.0
	54 3/4	70.0	70.0
66	62 3/4	70.0	67.1
	59 3/4	70.0	70.0
65	62 3/4	70.0	70.0

**MULLION PRESSURE TABLE (5" SIDE JAMB)**

MAXIMUM FRAME HEIGHT DIMENSION (IN.)	MAXIMUM LOAD WIDTH DIMENSION (IN.)	ALLOWABLE PRESSURE (PSF)	
		3 ANCHORS PER END	2 ANCHORS PER END
		121 1/4	35
	32	63.4	42.1
	29	70.0	46.5
	26	70.0	51.8
	23	70.0	58.6
	20	70.0	67.4
	17	70.0	70.0
109 1/4	35	64.4	42.7
	32	70.0	46.7
	29	70.0	51.6
	26	70.0	57.5
	23	70.0	65.0
	20	70.0	70.0
97 1/4	35	70.0	48.0
	32	70.0	52.5
	29	70.0	57.9
	26	70.0	64.6
	23	70.0	70.0
90	35	70.0	51.9
	32	70.0	56.7
	29	70.0	62.6
	26	70.0	69.8
	25	70.0	70.0
84	35	70.0	55.6
	32	70.0	60.8
	29	70.0	67.1
	27	70.0	70.0
78	35	70.0	59.8
	32	70.0	65.4
	29	70.0	70.0
72	35	70.0	64.8
	32	70.0	70.0
66	35	70.0	70.0

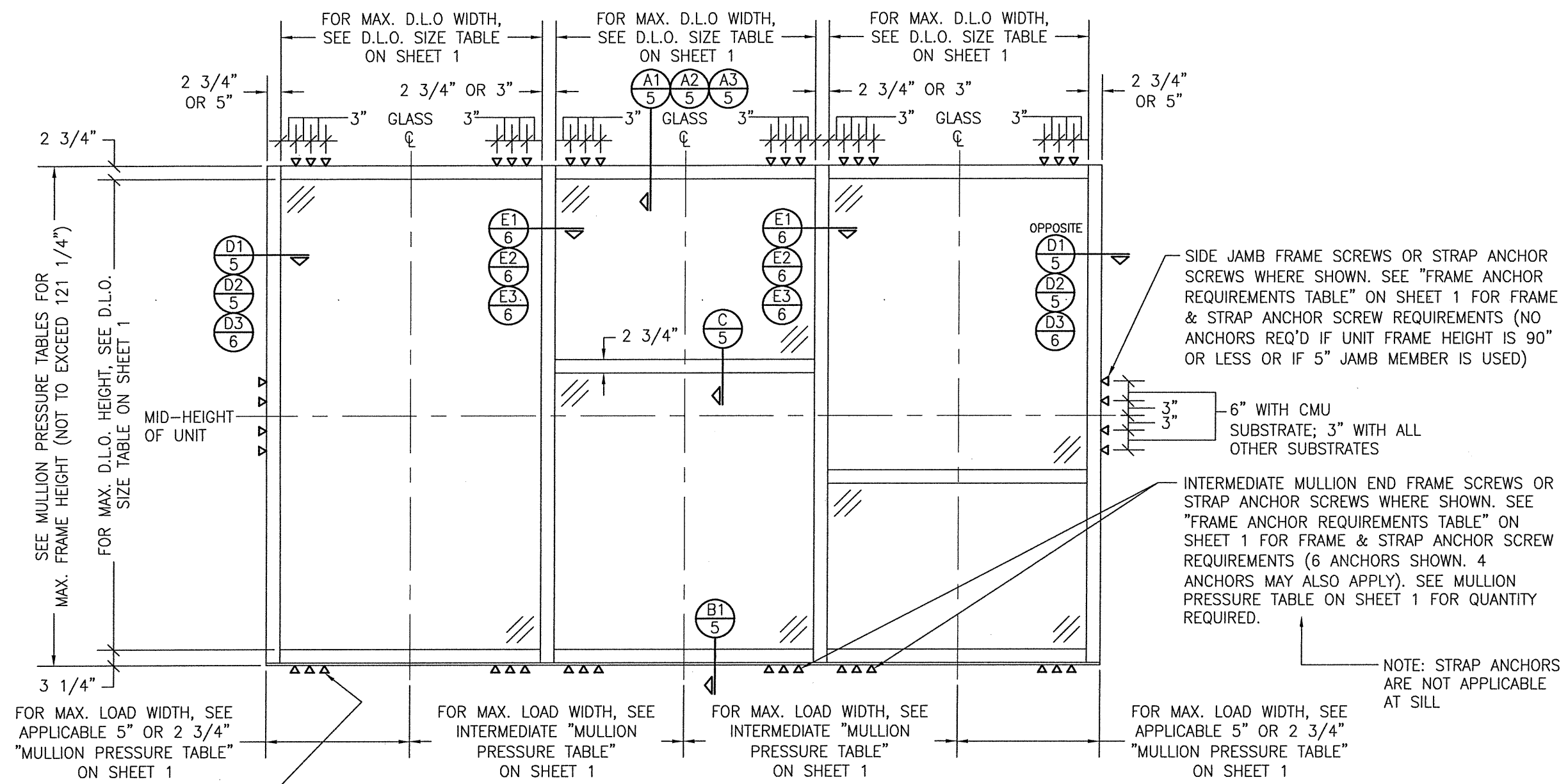
1. DIMENSIONS SHOWN ARE +/-1/4".

**MULLION PRESSURE TABLE (2 3/4" SIDE JAMB)**

MAXIMUM FRAME HEIGHT DIMENSION (IN.)	MAXIMUM LOAD WIDTH DIMENSION (IN.)	ALLOWABLE PRESSURE (PSF)	
		3 ANCHORS PER END	2 ANCHORS PER END
		90	32 3/4
	29 3/4	70.0	51.1
	26 3/4	70.0	56.9
	23 3/4	70.0	64.1
	20 3/4	70.0	70.0
84	32 3/4	70.0	49.8
	29 3/4	70.0	54.8
	26 3/4	70.0	60.9
	23 3/4	70.0	68.6
	22 3/4	70.0	70.0
78	32 3/4	70.0	53.6
	29 3/4	70.0	59.0
	26 3/4	70.0	65.6
	23 3/4	70.0	70.0
72	32 3/4	70.0	58.1
	29 3/4	70.0	63.9
	26 3/4	70.0	70.0
66	32 3/4	70.0	63.4
	29 3/4	70.0	69.7
	28 3/4	70.0	70.0
60	32 3/4	70.0	69.7
	31 3/4	70.0	70.0

- DIMENSIONS SHOWN ARE +/-1/4".
- FRAME HEIGHTS CONSIDERED ARE FOR SINGLE SPAN JAMBS ONLY. WHEN JAMB HAS MID-SPAN ANCHORS & IS SPLIT INTO 2 SPANS, THIS TABLE DOES NOT APPLY, ALLOWABLE PRESSURE ON THE 2-SPAN JAMB IS +/-70 PSF FOR ALL UNIT SIZE CONDITIONS & ONLY 2 ANCHORS ARE REQUIRED AT JAMB ENDS.

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=24	DATE: 02/10/21
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE <b>IR501T &amp; IR501UT ALUMINUM LARGE MISSILE IMPACT STORE FRONT SYSTEM (DRY GLAZED)</b>	
JOB INFORMATION: <b>KAWNEER COMPANY, INC.</b> 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (REG. NO. F-14980)</b> 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION	WARREN W. SCHAEFER, P.E. P.E. NO. 113497
DRAWING NO. <b>1760T</b>	REV.
SHEET NO. <b>1</b>	OF <b>10</b>



SIDE JAMB END FRAME SCREWS OR STRAP ANCHORS WHERE SHOWN. SEE "FRAME ANCHOR SCREW REQUIREMENTS TABLE" ON SHEET 1 FOR FRAME & STRAP ANCHOR REQUIREMENTS (3 ANCHORS SHOWN. 2 ANCHORS MAY ALSO APPLY). SEE MULLION PRESSURE TABLE ON SHEET 1 FOR QUANTITY REQUIRED.

NOTE: WHEN ANCHORS EXIST AT MID-SPAN OF SIDE JAMB, THE JAMB ENDS REQUIRE JUST 2 ANCHORS REGARDLESS OF UNIT SIZE

NOTE: STRAP ANCHORS ARE NOT APPLICABLE AT SILL

**EXTERIOR ELEVATION:  
MULTIPLE FIXED PANEL STORE FRONT ASSEMBLY**

SCALE: 1/2" = 1'-0"  
(HORIZONTAL STACKING & OVERALL UNIT WIDTH IS UNLIMITED PROVIDING DIMENSIONS SPECIFIED ARE NOT EXCEEDED. NUMBER OF VERTICAL STACKED GLASS PANELS IS UNLIMITED BUT MUST FIT INSIDE MAXIMUM UNIT HEIGHT SHOWN)  
NOTE: IT IS RECOMMENDED TO USE AN EXPANSION MULLION EVERY 20 FT. MAXIMUM ACROSS ALL OPENINGS OVER 20 FT. WIDE.

**ALLOWABLE DESIGN PRESSURE  
(STORE FRONT ASSEMBLY)**

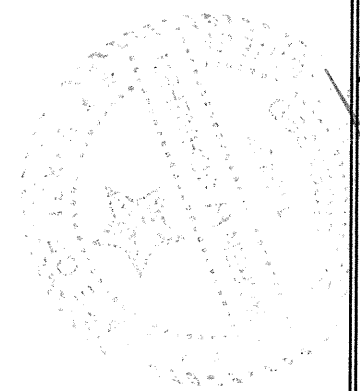
PRESSURE IS CONTROLLED BY VERTICAL FRAMING MEMBERS/MULLIONS & THEIR END ANCHOR QUANTITIES. SEE MULLION PRESSURE TABLES ON SHEET 1 FOR ALLOWABLE MULLION PRESSURE CONDITIONS.

SIDE JAMB FRAME SCREWS OR STRAP ANCHOR SCREWS WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR FRAME & STRAP ANCHOR SCREW REQUIREMENTS (NO ANCHORS REQ'D IF UNIT FRAME HEIGHT IS 90" OR LESS OR IF 5" JAMB MEMBER IS USED)

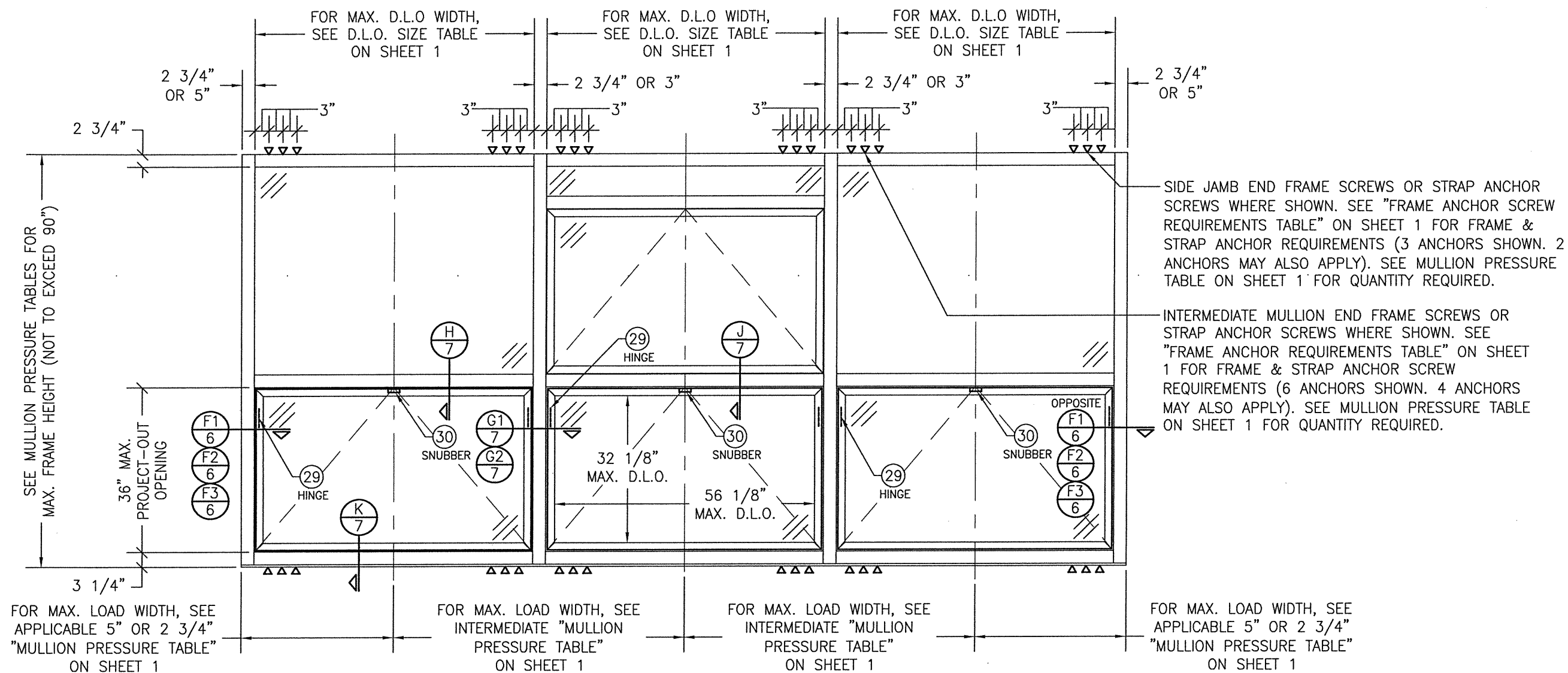
6" WITH CMU SUBSTRATE; 3" WITH ALL OTHER SUBSTRATES

INTERMEDIATE MULLION END FRAME SCREWS OR STRAP ANCHOR SCREWS WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR FRAME & STRAP ANCHOR SCREW REQUIREMENTS (6 ANCHORS SHOWN. 4 ANCHORS MAY ALSO APPLY). SEE MULLION PRESSURE TABLE ON SHEET 1 FOR QUANTITY REQUIRED.

NOTE: STRAP ANCHORS ARE NOT APPLICABLE AT SILL



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NO.	REVISION DESCRIPTION	BY	DATE
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JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION	FEB 10 2021		
WARREN W. SCHAEFER, P.E. P.E. NO. 113497			
DRAWING NO.	REV.		
1760T			
SHEET NO.			
2 OF 10			



SIDE JAMB END FRAME SCREWS OR STRAP ANCHOR SCREWS WHERE SHOWN. SEE "FRAME ANCHOR SCREW REQUIREMENTS TABLE" ON SHEET 1 FOR FRAME & STRAP ANCHOR REQUIREMENTS (3 ANCHORS SHOWN. 2 ANCHORS MAY ALSO APPLY). SEE MULLION PRESSURE TABLE ON SHEET 1 FOR QUANTITY REQUIRED.

INTERMEDIATE MULLION END FRAME SCREWS OR STRAP ANCHOR SCREWS WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR FRAME & STRAP ANCHOR SCREW REQUIREMENTS (6 ANCHORS SHOWN. 4 ANCHORS MAY ALSO APPLY). SEE MULLION PRESSURE TABLE ON SHEET 1 FOR QUANTITY REQUIRED.

**EXTERIOR ELEVATION:  
STORE FRONT ASSEMBLY WITH PROJECT-OUT WINDOWS**

SCALE: 1/2" = 1'-0"  
(FOR STORE FRONT DETAIL & INSTALLATION NOT SHOWN, SEE ELEVATION ON SHEET 2)

**ALLOWABLE DESIGN PRESSURE  
(STORE FRONT ASSEMBLY WITH PROJECT-OUT WINDOWS)**

PRESSURE IS CONTROLLED BY VERTICAL FRAMING MEMBERS/MULLIONS & THEIR END ANCHOR QUANTITIES. SEE MULLION PRESSURE TABLES ON SHEET 1 FOR ALLOWABLE MULLION PRESSURE CONDITIONS.

**STORE FRONT ASSEMBLY WITH PROJECT-OUT WINDOW NOTES:**

1. PROJECT-OUT WINDOWS MAY BE PLACED ANYWHERE WITHIN THE STORE FRONT FRAMING.
2. THERE IS NO LIMIT ON THE NUMBER OF PROJECT-OUT WINDOWS THAT MAY BE PLACED IN ANY ONE BAY OF THE STORE FRONT SYSTEM. NOTE: IT IS RECOMMENDED TO USE AN EXPANSION MULLION EVERY 20 FT. MAXIMUM ACROSS ALL OPENINGS OVER 20 FT. WIDE.
3. WHEN PROJECT-OUT WINDOWS EXIST, OVERALL FRAME HEIGHT SHALL BE LIMITED AS SHOWN. POTENTIAL INCREASED HEIGHTS SHALL BE REVIEWED & APPROVED BASED ON SEPARATE CERTIFICATION FOR ONE-TIME JOB APPROVAL IF NECESSARY.

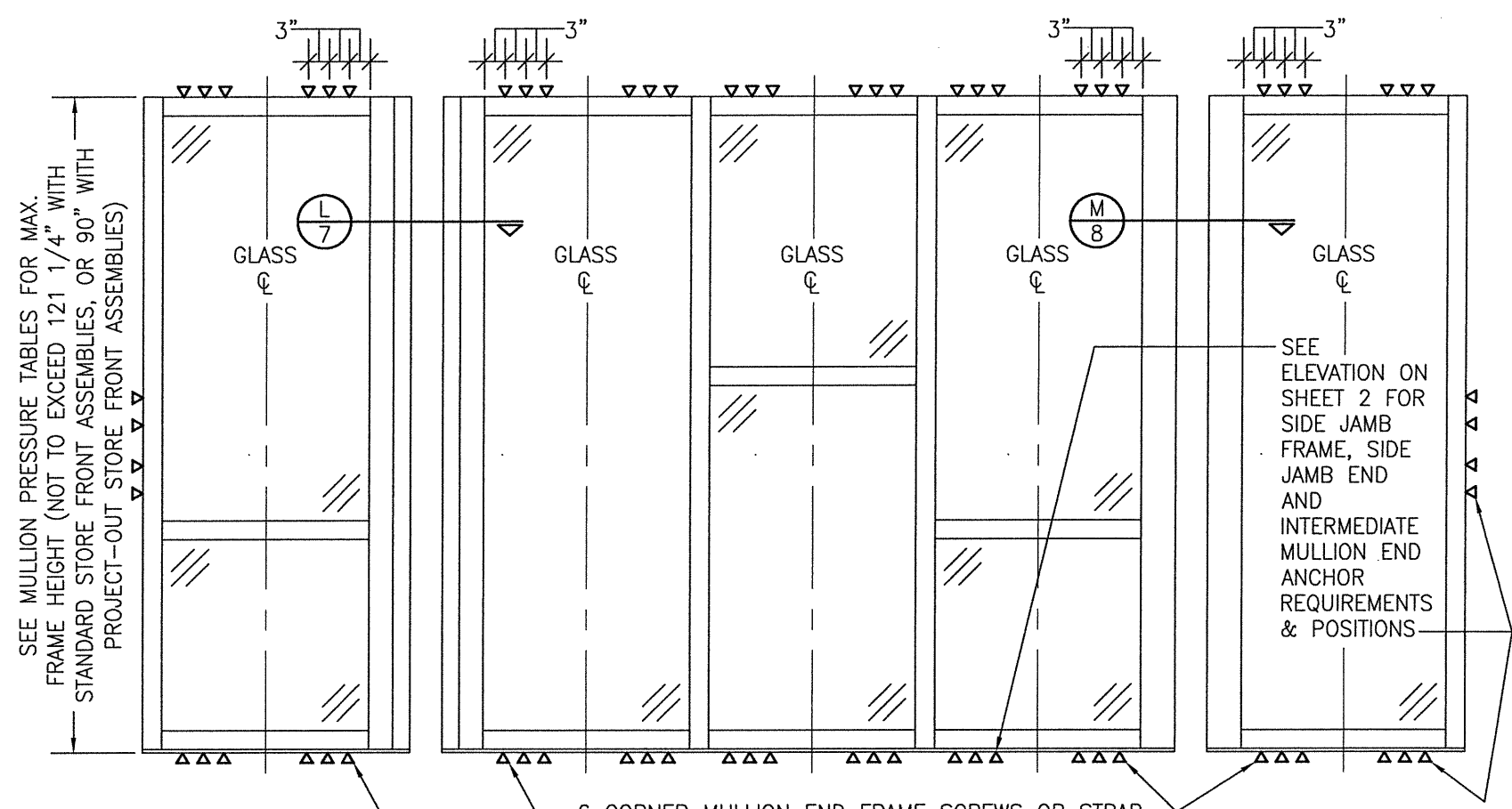
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PLOT: 1=24	DATE: 02/10/21
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE <b>IR501T &amp; IR501UT ALUMINUM LARGE MISSILE IMPACT STORE FRONT SYSTEM (DRY GLAZED)</b>	
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DRAWING NO. <b>1760T</b>	REV.
SHEET NO. <b>3 OF 10</b>	

CORNER MULLION PRESSURE TABLE (135 DEG. CORNER)		
MAXIMUM FRAME HEIGHT DIMENSION (IN.)	MAXIMUM LOAD WIDTH "A" OR "B" (IN.)	ALLOWABLE PRESSURE (PSF)
121 1/4	33.5	38.7
	30.5	42.5
	27.5	47.1
	24.5	52.9
	21.5	60.2
	18.5	70.0
109 1/4	33.5	47.6
	30.5	52.3
	27.5	58.0
	24.5	65.1
	21.5	70.0
97 1/4	33.5	60.1
	30.5	66.0
	27.5	70.0
90	33.5	70.0

(1) DIMENSIONS SHOWN ARE +/-1/4".  
(2) LOAD WIDTH DIMENSION TO BE CONSIDERED FOR USE WITH THIS LOAD TABLE SHALL BE THE GRATER VALUE OF "A" & "B".

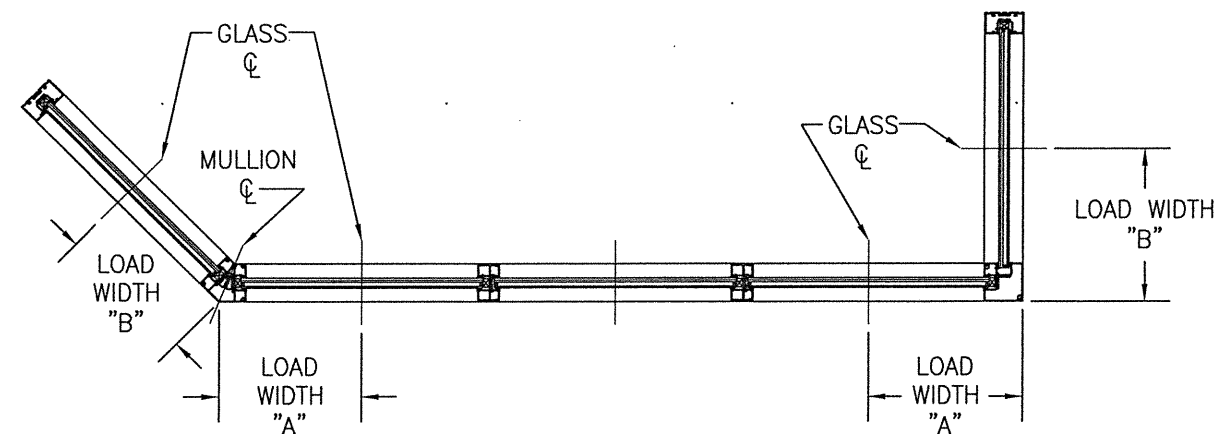
CORNER MULLION PRESSURE TABLE (90 DEG. CORNER)		
MAXIMUM FRAME HEIGHT DIMENSION (IN.)	MAXIMUM LOAD WIDTH "A" OR "B" (IN.)	ALLOWABLE PRESSURE (PSF)
121 1/4	35	40.0
	32	43.8
	29	48.3
	26	53.8
	23	60.9
	20	70.0
109 1/4	35	49.3
	32	53.9
	29	59.5
	26	66.3
	23	70.0
97 1/4	35	62.2
	32	68.0
	29	70.0
90	35	70.0

(1) DIMENSIONS SHOWN ARE +/-1/4".  
(2) LOAD WIDTH DIMENSION TO BE CONSIDERED FOR USE WITH THIS LOAD TABLE SHALL BE THE GRATER VALUE OF "A" & "B".

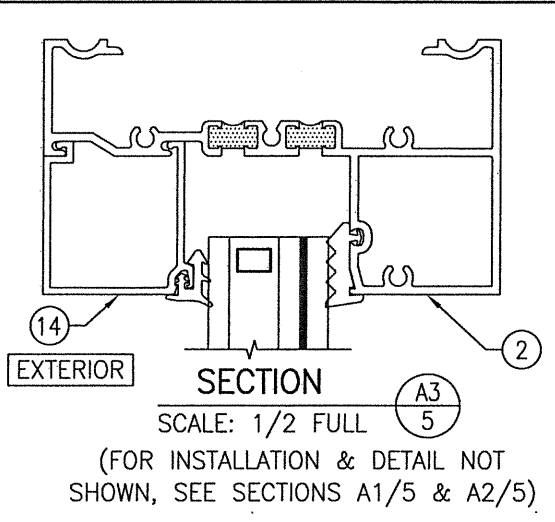
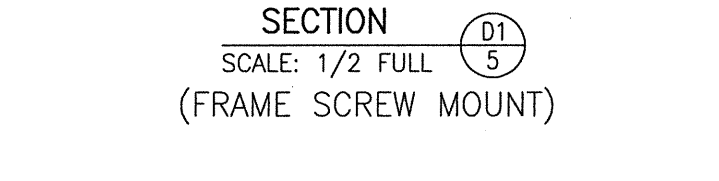
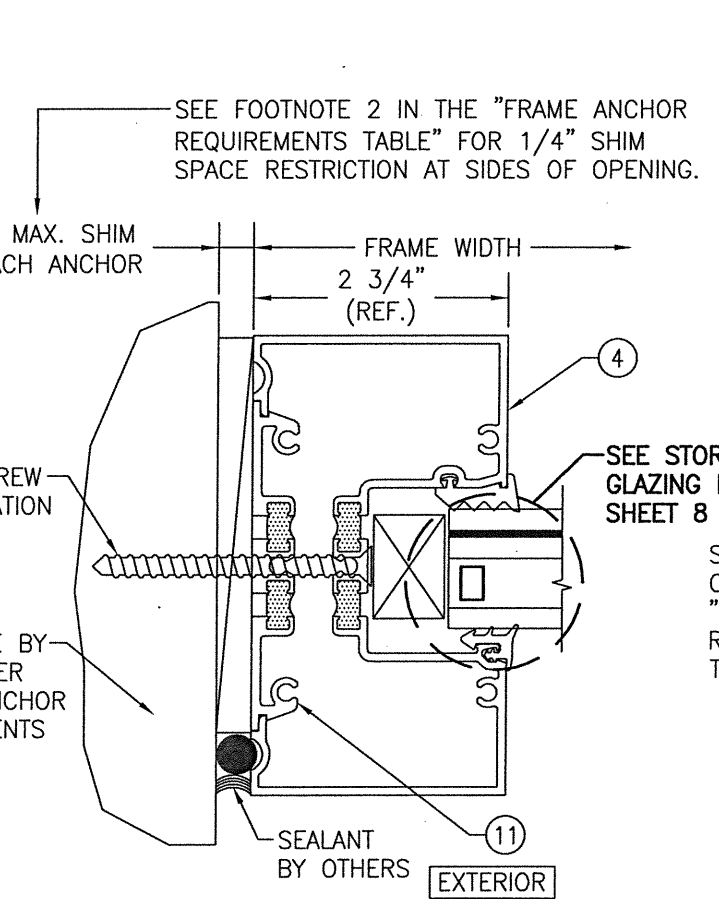
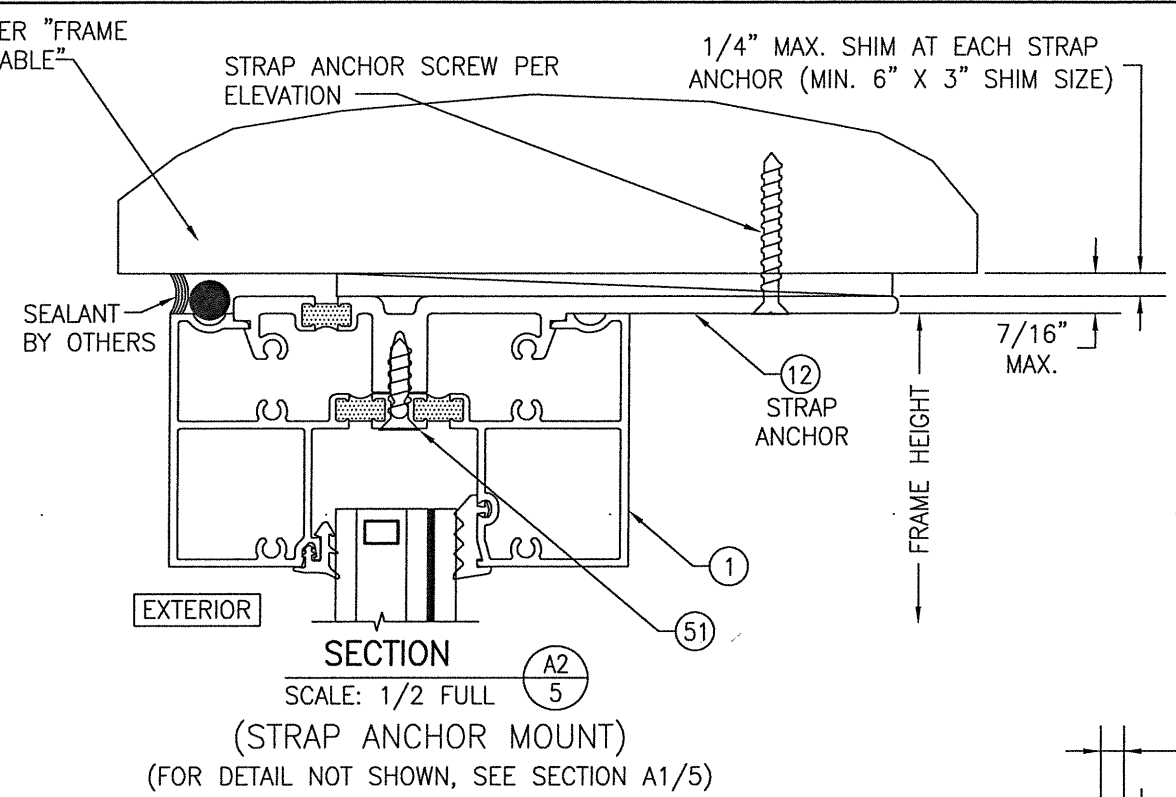
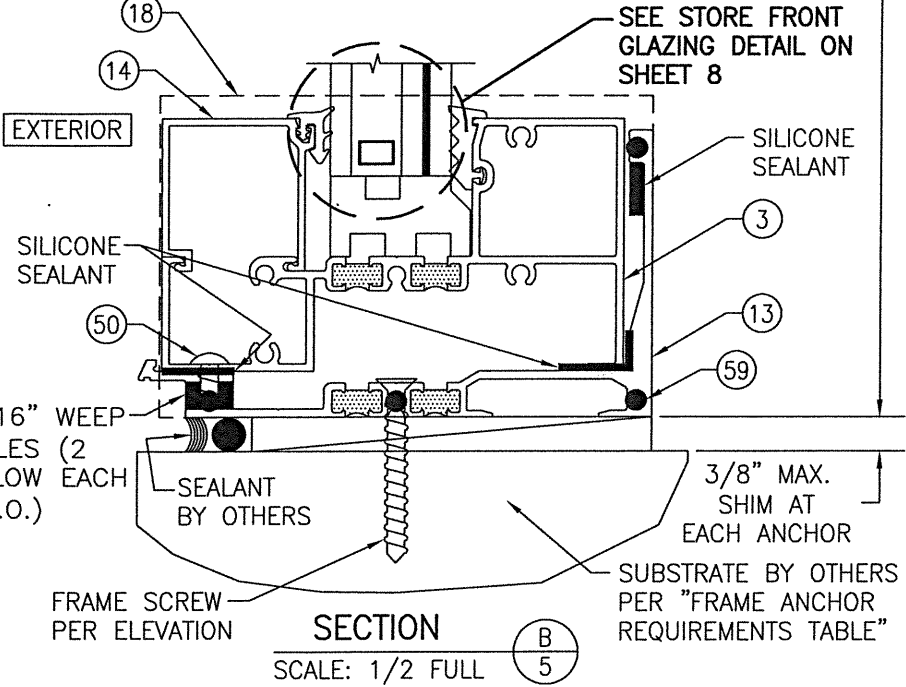
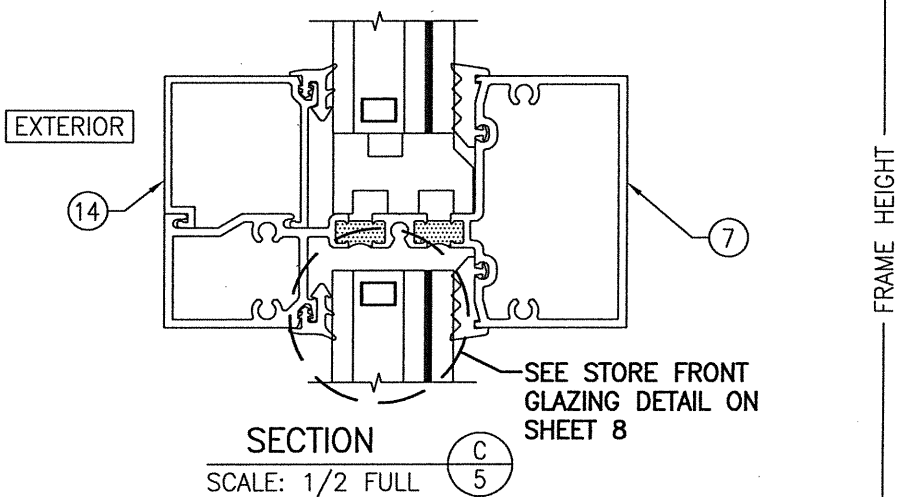
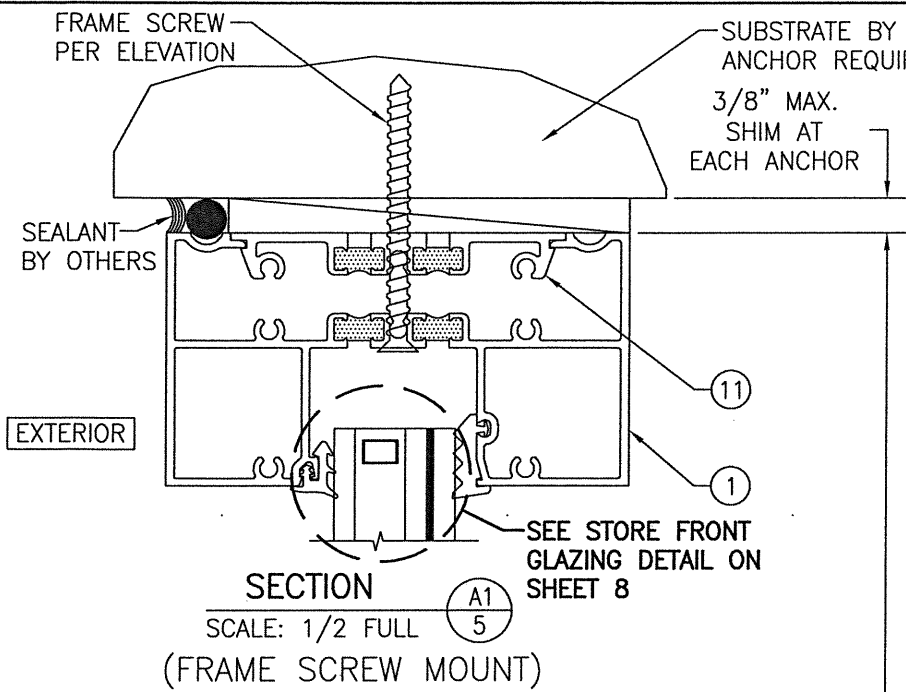


**EXTERIOR ELEVATION:**  
**MULTIPLE FIXED PANEL STORE FRONT ASSEMBLY WITH 90° AND/OR 135° CORNERS**

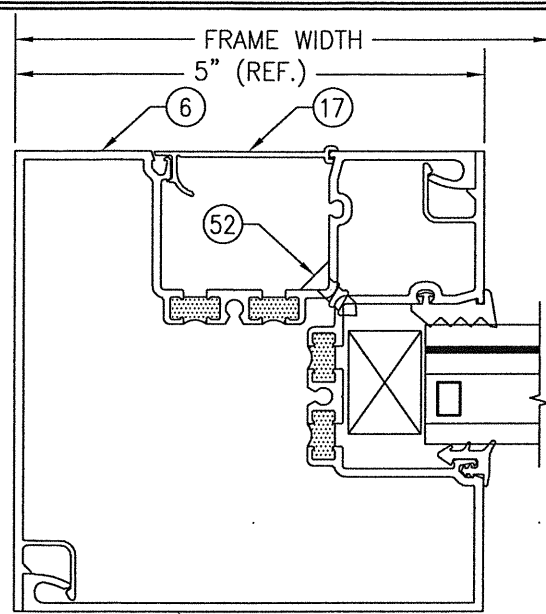
SCALE: 1/2" = 1'-0"  
(FOR ALL DETAIL INSTALLATION & MULLION LOAD TABLES NOT SHOWN, SEE LOAD TABLES & ELEVATIONS ON SHEETS 1, 2 & 3)  
(WHILE SHOWN WITH BOTH 90° AND 135° CORNERS, ONE OR BOTH MAY APPLY ON ANY JOB)  
(PROJECT-OUT WINDOWS ALSO APPLY TO THIS ELEVATION)



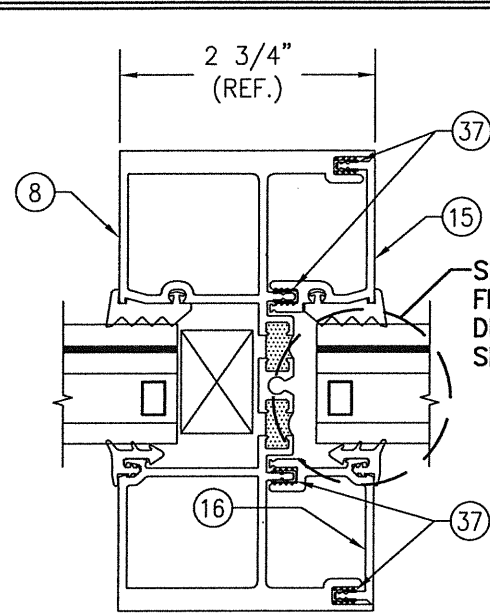
DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=24	DATE: 02/10/21
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CERTIFICATION:	FEB 10 2021 WARREN W. SCHAEFER, P.E. P.E. NO. 113497
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SHEET NO. 4	OF 10



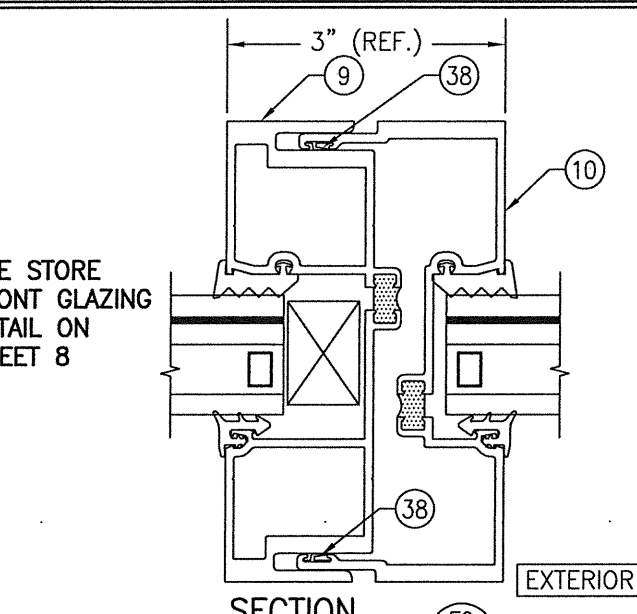
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PLOT: 1=2		DATE: 02/10/21	
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CERTIFICATION	FEB 10 2021		
WARREN W. SCHAEFER, P.E. P.E. NO. 113497			
DRAWING NO. 1760T	REV.	SHEET NO. 5 OF 10	



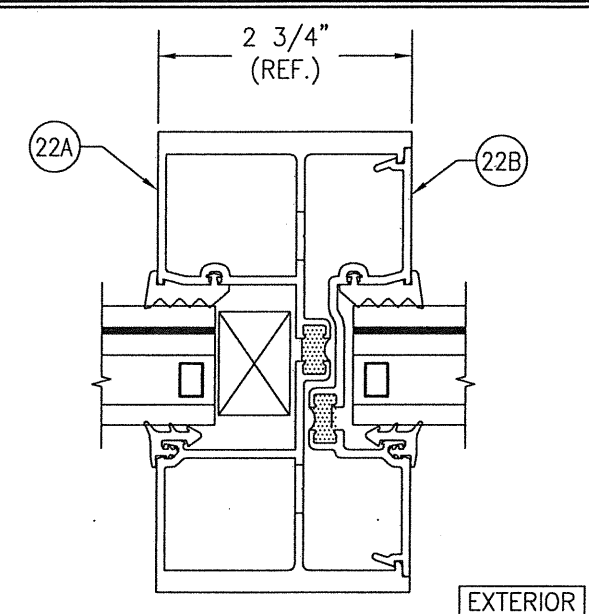
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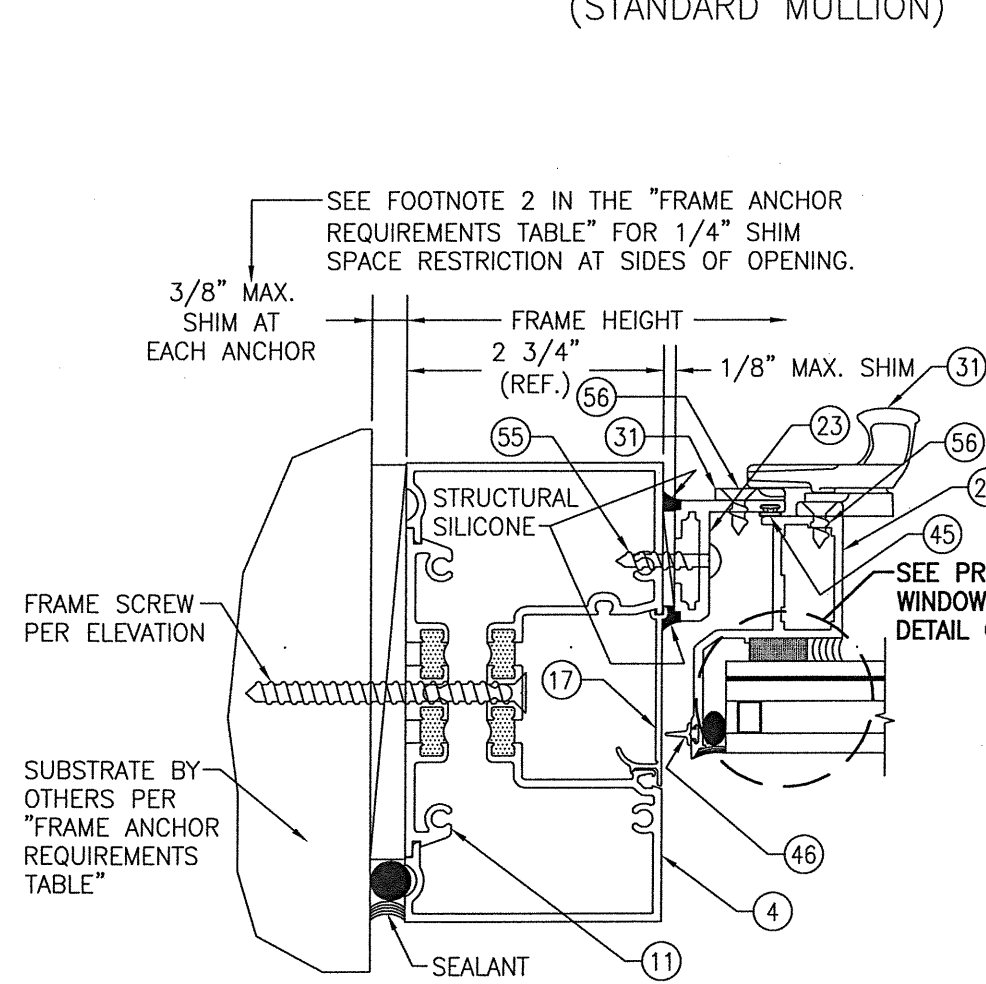
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(STANDARD MULLION)



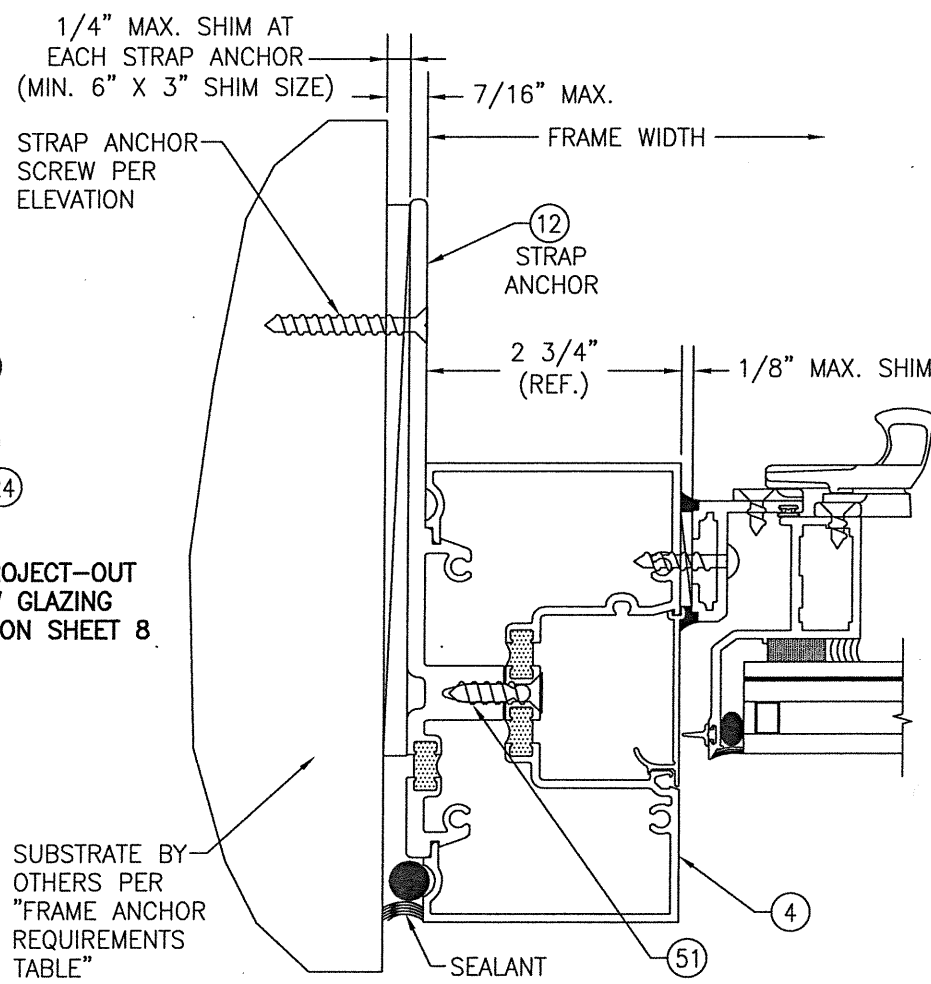
SECTION E2  
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(EXPANSION MULLION)  
(FOR DETAIL NOT SHOWN, SEE SECTION E1/6)



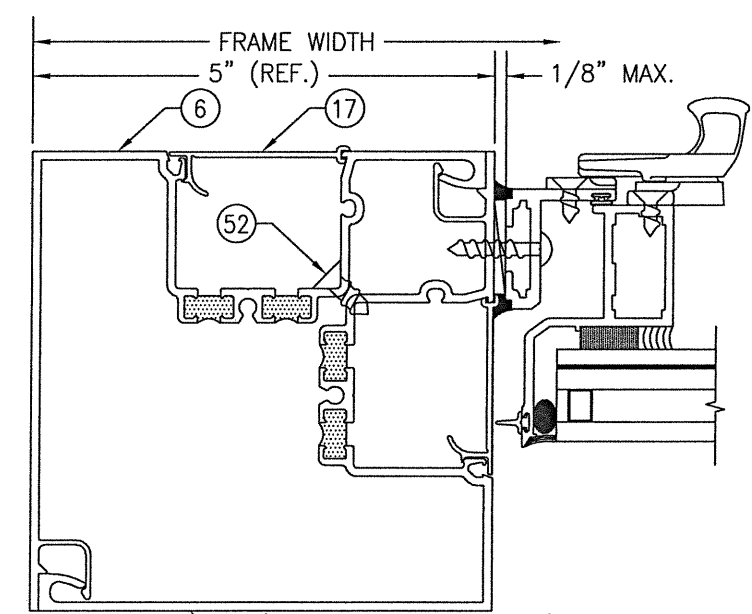
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(2 PIECE MULLION)  
(FOR DETAIL NOT SHOWN, SEE SECTION E1/6)



SECTION F1  
SCALE: 1/2 FULL  
(FRAME SCREW MOUNT)

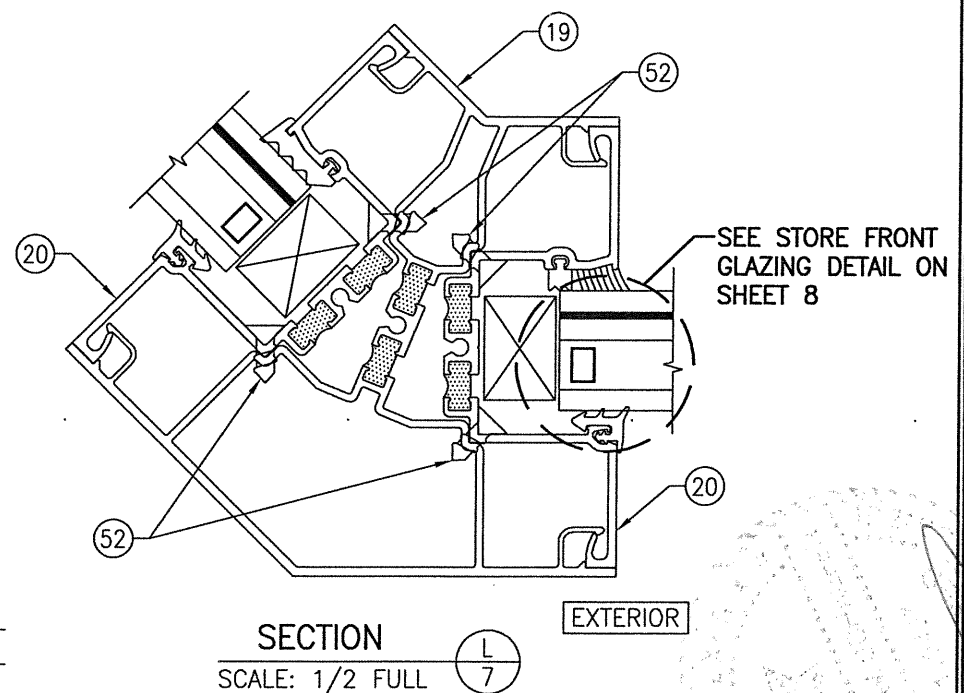
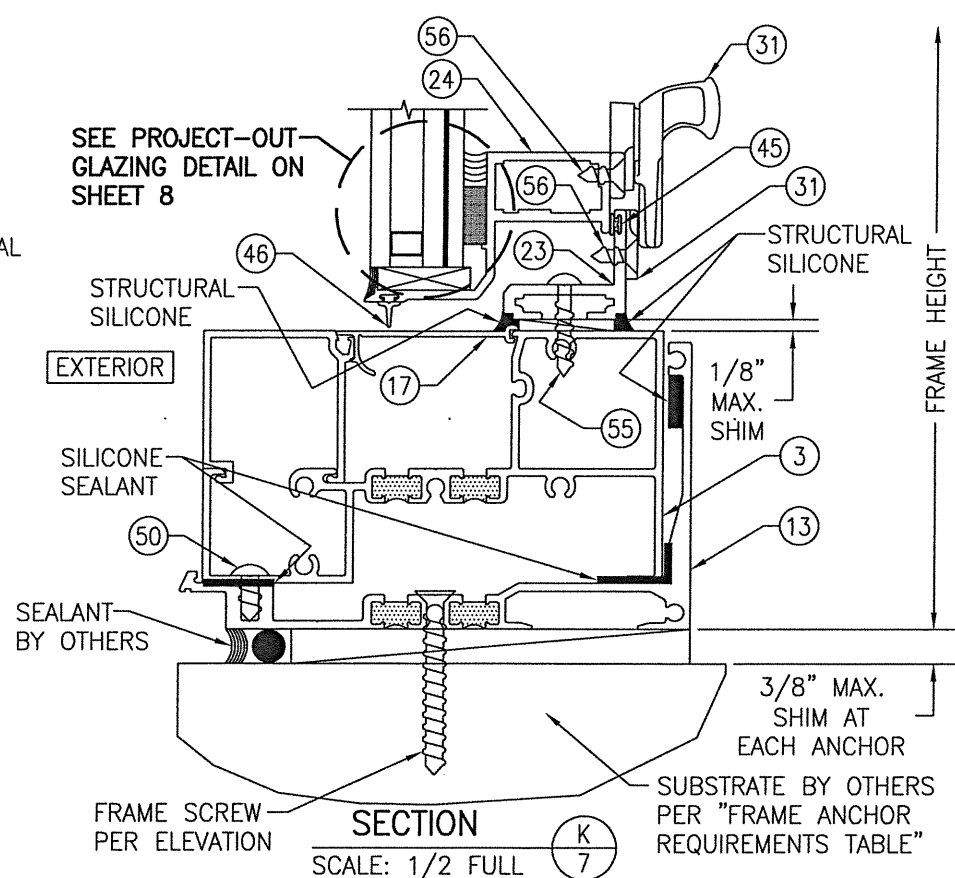
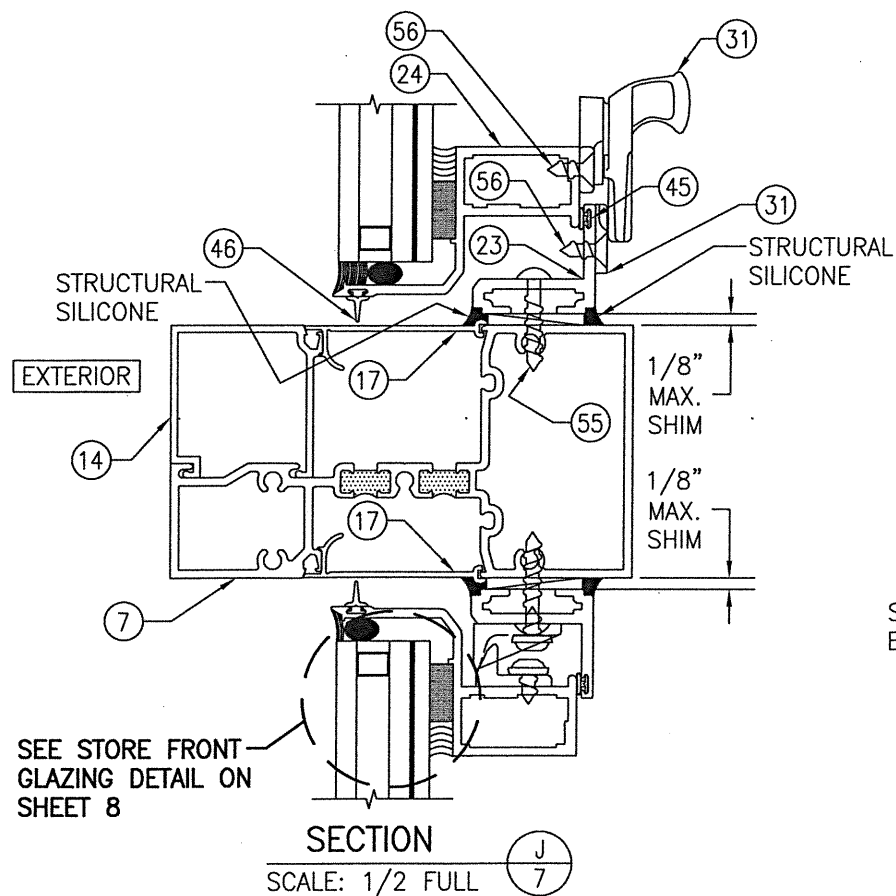
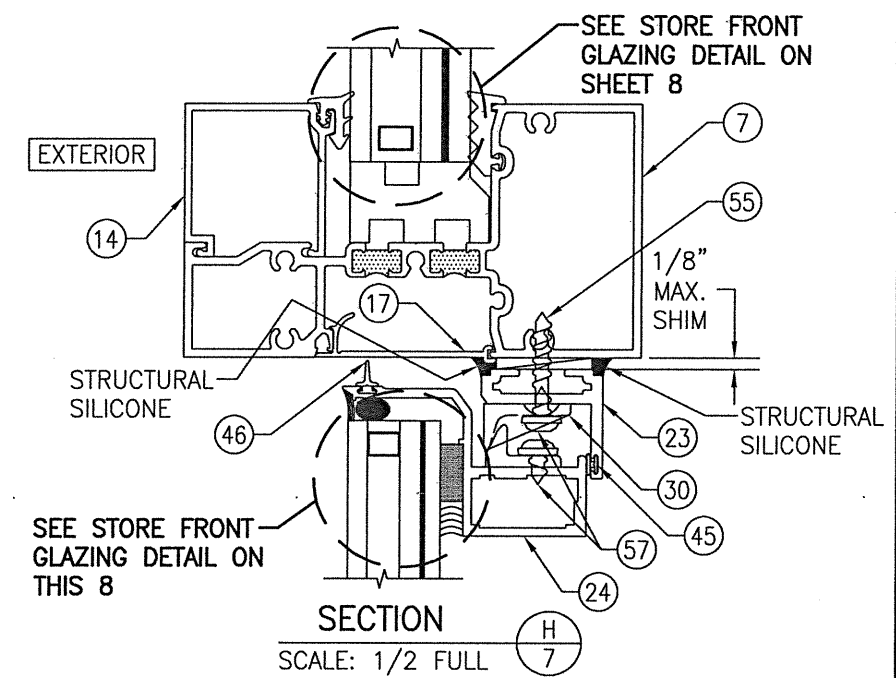
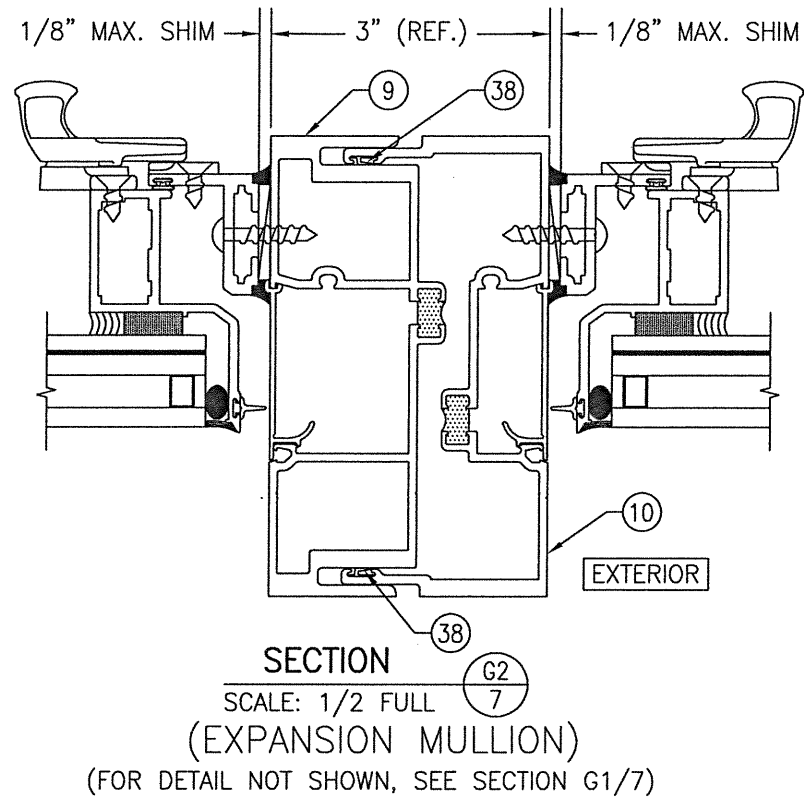
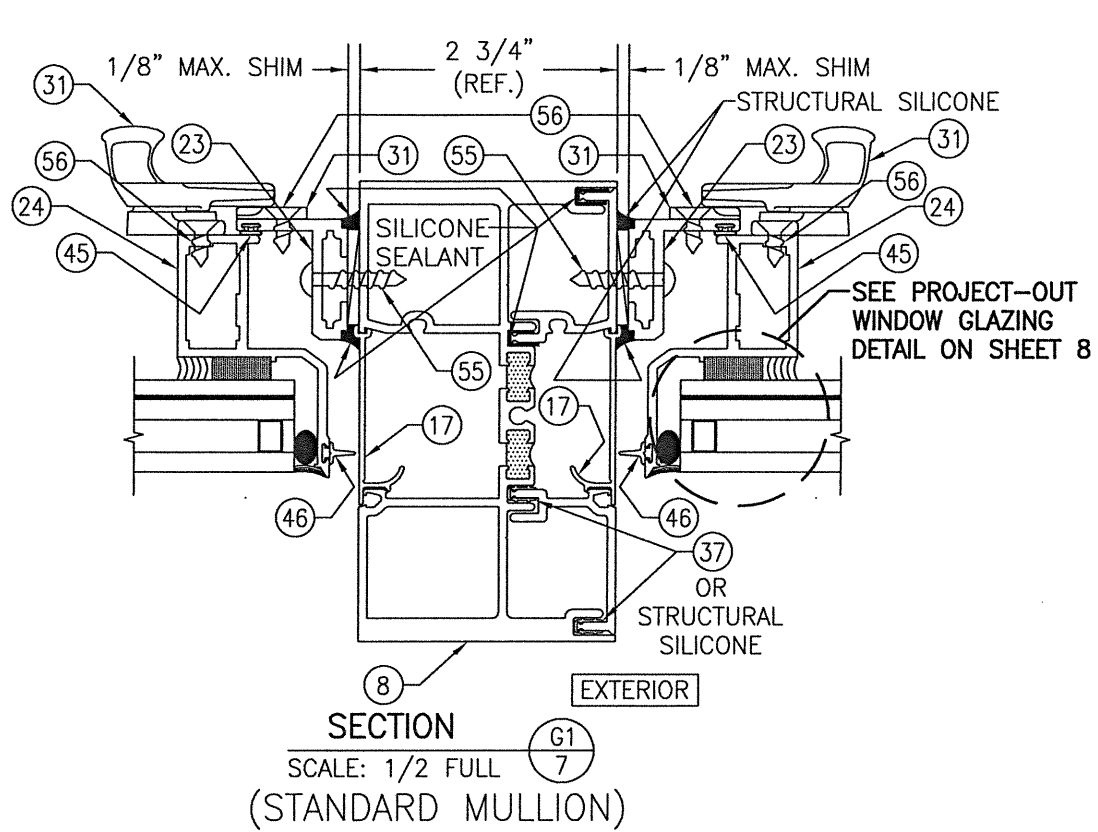


SECTION F2  
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(STRAP ANCHOR MOUNT)  
(FOR DETAIL NOT SHOWN, SEE SECTION F1/6)

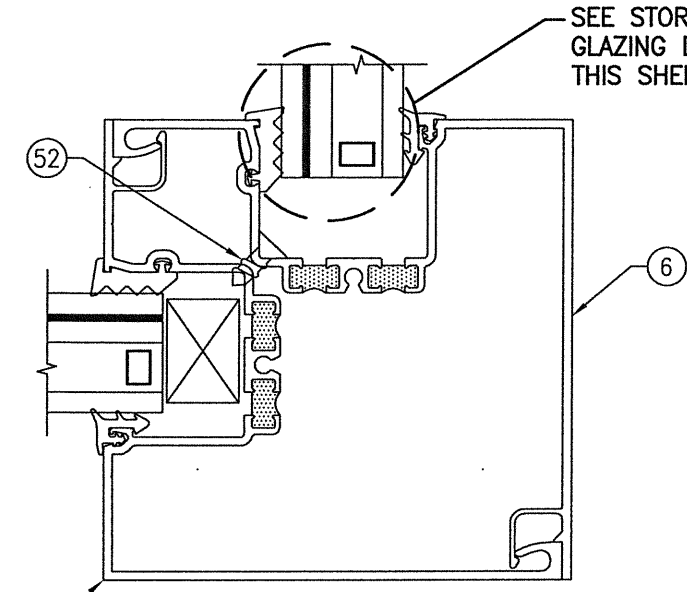


SECTION F3  
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(FOR DETAIL NOT SHOWN, SEE SECTION F1/6)

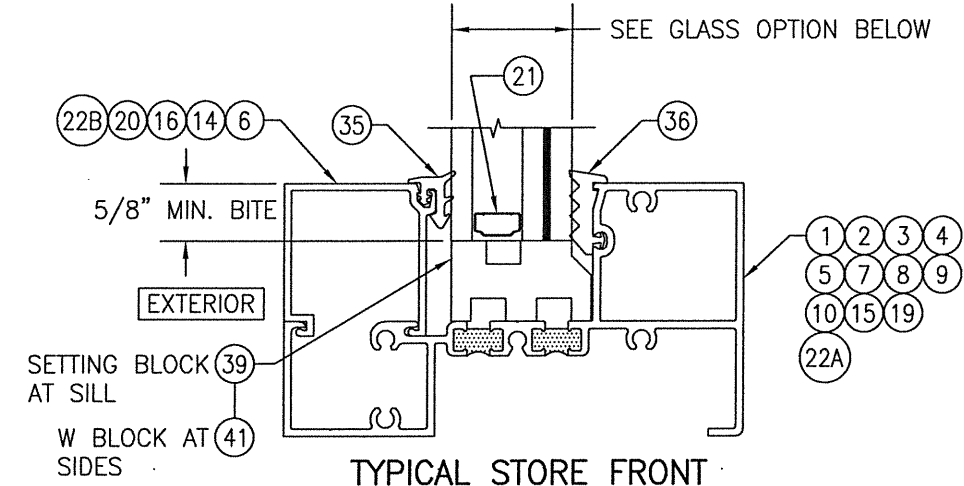
DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 02/10/21
NO.	REVISION DESCRIPTION
DATE	BY
DRAWING TITLE IR501T & IR501UT ALUMINUM LARGE MISSILE IMPACT STORE FRONT SYSTEM (DRY GLAZED)	
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION	FEB 10 2021
WARREN W. SCHAEFER, P.E. P.E. NO. 113497	
DRAWING NO. 1760T	REV.
SHEET NO. 6	OF 10



DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 02/10/21
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE IR501T & IR501UT ALUMINUM LARGE MISSILE IMPACT STORE FRONT SYSTEM (DRY GLAZED)	
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH, 33418 PALM BEACH GARDENS, FL PHONE: 561-744-3424	
CERTIFICATION FEB 10 2021	WARREN W. SCHAEFER, P.E. P.E. NO. 113497
DRAWING NO. 1760T	REV.
SHEET NO. 7	OF 10

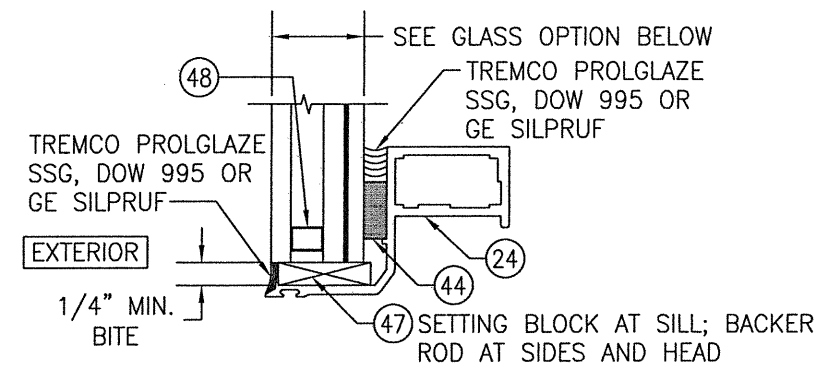


SECTION M  
SCALE: 1/2 FULL 8



TYPICAL STORE FRONT GLAZING DETAIL

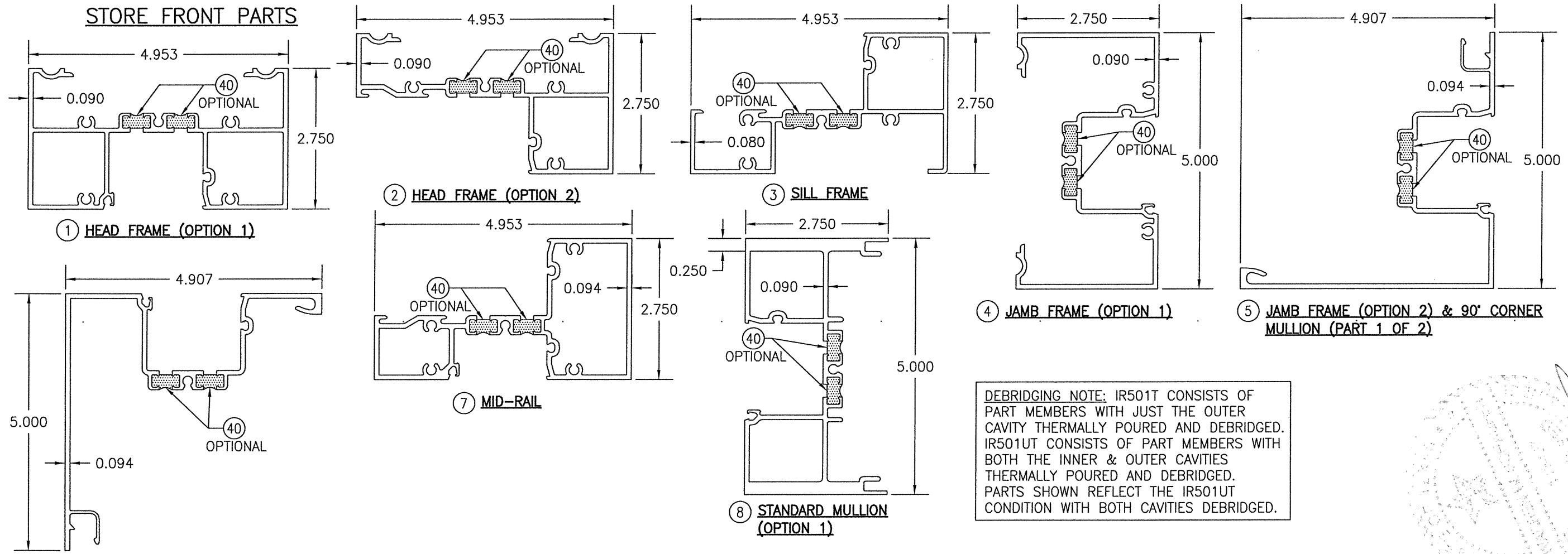
**GLASS OPTION:**  
**OPTION 1:** 1 5/16" THICK I.G. GLASS (1/4" HT. ST. OR TEMP. EXTERIOR; 1/2" SPACER/1/4" HT. ST./0.09 KURARAY SG/1/4" HT. ST. INTERIOR)  
**NOTE:** THE SINGLE PANE OF THE IG GLASS SHALL BE TEMPERED WHEN REQUIRED TO CONFORM WITH THE IBC FOR USE OF GLASS IN HAZARDOUS LOCATIONS OR WHEN INSTALLED OVER 30 FT. ABOVE GRADE.



TYPICAL PROJECT-OUT WINDOW GLAZING DETAIL

**GLASS OPTION:**  
**OPTION 1:** 1" THICK I.G. GLASS (3/16" TEMP. EXTERIOR; 3/8" SPACER/3/16" HT. ST./0.09 KURARAY BUTACITE PVB/3/16" HT. ST. INTERIOR)

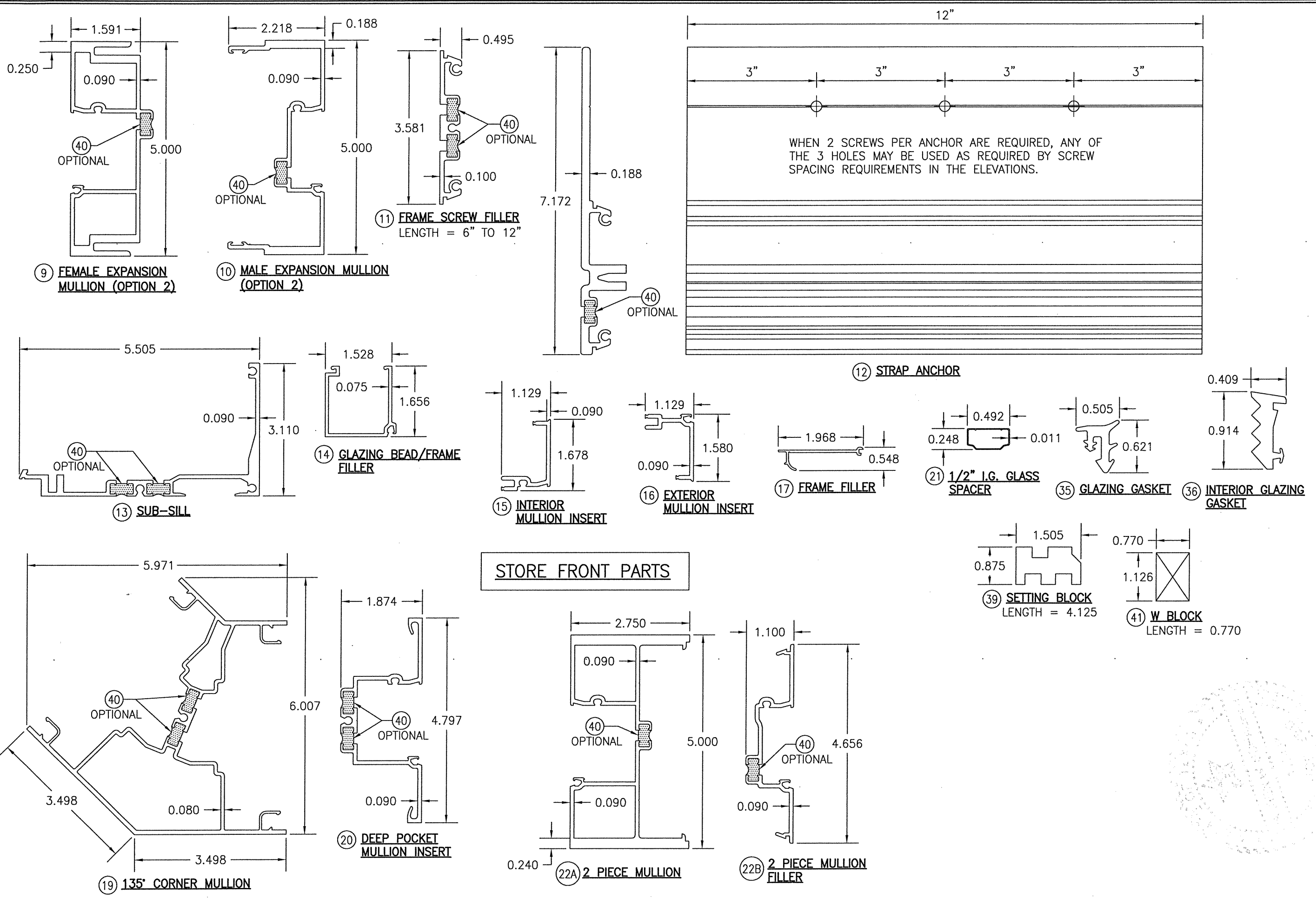
STORE FRONT PARTS



**DEBRIDGING NOTE:** IR501T CONSISTS OF PART MEMBERS WITH JUST THE OUTER CAVITY THERMALLY Poured AND DEBRIDGED. IR501UT CONSISTS OF PART MEMBERS WITH BOTH THE INNER & OUTER CAVITIES THERMALLY Poured AND DEBRIDGED. PARTS SHOWN REFLECT THE IR501UT CONDITION WITH BOTH CAVITIES DEBRIDGED.

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 02/10/21
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE IR501T & IR501UT ALUMINUM LARGE MISSILE IMPACT STORE FRONT SYSTEM (DRY GLAZED)	
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION	FEB 10 2021
WARREN W. SCHAEFER, P.E. P.E. NO. 113497	
DRAWING NO. 1760T	REV.
SHEET NO. 8	OF 10





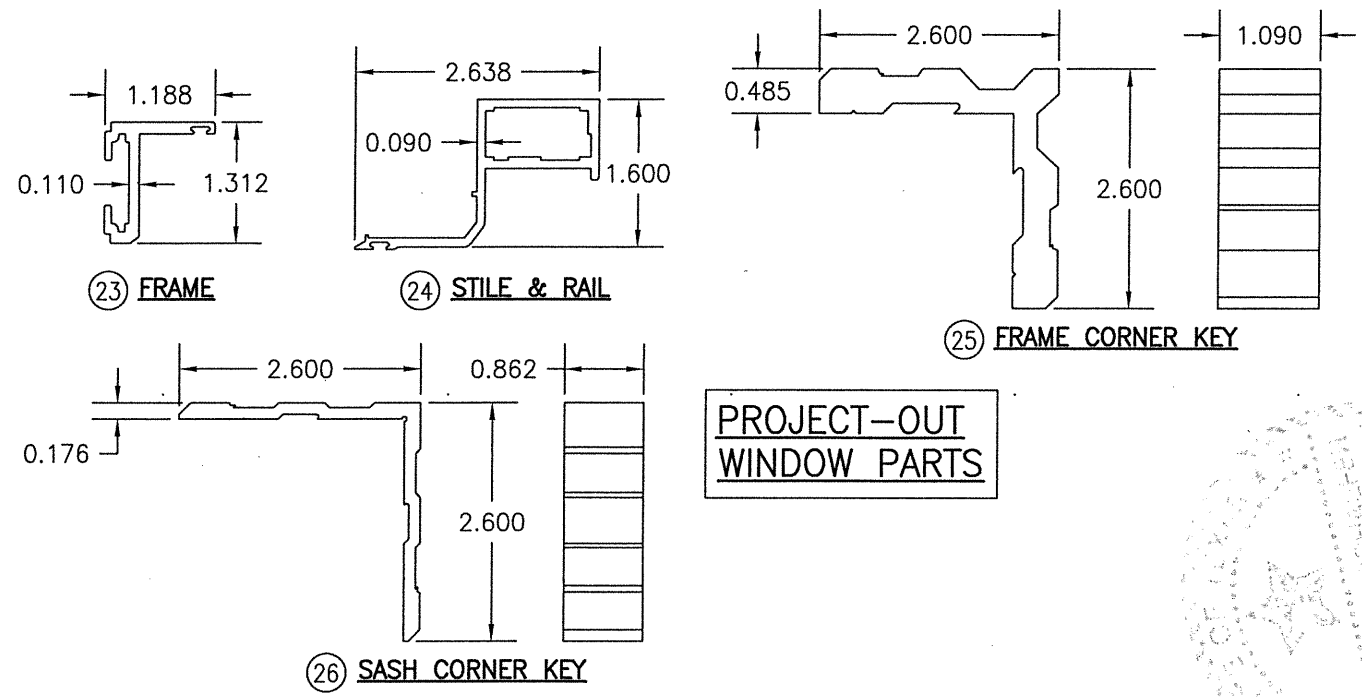
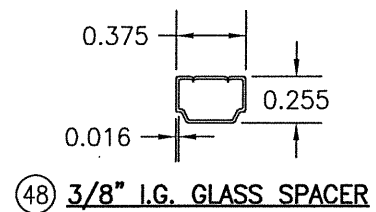
WHEN 2 SCREWS PER ANCHOR ARE REQUIRED, ANY OF THE 3 HOLES MAY BE USED AS REQUIRED BY SCREW SPACING REQUIREMENTS IN THE ELEVATIONS.

**STORE FRONT PARTS**

DRAWING TITLE		DRAWN BY:		CHECKED BY:	
IR501T & IR501UT ALUMINUM LARGE MISSILE IMPACT STORE FRONT SYSTEM (DRY GLAZED)		W.W.S.		W.W.S.	
CONSULTANTS		PLOT:		DATE:	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980)		1=2		02/10/21	
JOB INFORMATION:		DATE			
KAWNEER COMPANY, INC.		BY			
555 GUTHRIDGE COURT		REVISION DESCRIPTION			
NORCROSS, GA 30092		NO.			
770-449-5555		NO.			
DRAWING TITLE		CERTIFICATION			
IR501T & IR501UT ALUMINUM LARGE MISSILE IMPACT STORE FRONT SYSTEM (DRY GLAZED)		FEB 10 2021			
CONSULTANTS		WARREN W. SCHAEFER, P.E.			
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980)		P.E. NO. 113497			
7480 150TH COURT NORTH		DRAWING NO.			
PALM BEACH GARDENS, FL 33418		1760T			
PHONE: 561-744-3424		SHEET NO.			
		9 OF 10			

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
<b>STORE FRONT PARTS</b>		
1	HEAD FRAME (OPTION 1)	6063-T6 ALUMINUM
2	HEAD FRAME (OPTION 2)	6063-T6 ALUMINUM
3	SILL FRAME	6063-T6 ALUMINUM
4	JAMB FRAME (OPTION 1)	6063-T6 ALUMINUM
5	JAMB FRAME (OPTION 2) & 90° CORNER MULLION (PART 1 OF 2)	6063-T6 ALUMINUM
6	JAMB FRAME (OPTION 2) & 90° CORNER MULLION (PART 2 OF 2)	6063-T6 ALUMINUM
7	MID-RAIL	6063-T6 ALUMINUM
8	STANDARD MULLION (OPTION 1)	6063-T6 ALUMINUM
9	FEMALE EXPANSION MULLION (OPTION 2)	6063-T6 ALUMINUM
10	MALE EXPANSION MULLION (OPTION 2)	6063-T6 ALUMINUM
11	FRAME SCREW FILLER	6063-T6 ALUMINUM
12	STRAP ANCHOR	6063-T6 ALUMINUM
13	SUB-SILL	6063-T6 ALUMINUM
14	GLAZING BEAD/FRAME FILLER	6063-T6 ALUMINUM
15	INTERIOR MULLION INSERT	6063-T6 ALUMINUM
16	EXTERIOR MULLION INSERT	6063-T6 ALUMINUM
17	POCKET FILLER	ABS PLASTIC
18	SILL END DAM PLATE (5.281"X3.5"X0.062" THICK)	PLASTIC
19	135° CORNER MULLION	6063-T6 ALUMINUM
20	DEEP POCKET MULLION INSERT	6063-T6 ALUMINUM
21	1/2" I.G. GLASS SPACER	3005 OR 3105 ALUMINUM
22A	2 PIECE MULLION (KAWNEER #575-523)	6063-T6 ALUMINUM
22B	2 PIECE MULLION FILLER (KAWNEER #575-524)	6063-T6 ALUMINUM
<b>PROJECT-OUT GLASS VENT PARTS</b>		
23	FRAME	6063-T6 ALUMINUM
24	STILE & RAIL	6063-T6 ALUMINUM
25	FRAME CORNER KEY	6063-T6 ALUMINUM
26	SASH CORNER KEY	6063-T6 ALUMINUM
<b>PROJECT-OUT GLASS VENT HARDWARE</b>		
29	4" BAR HINGE	ADVANTAGE 316-AT
30	SNUBBER DRIVER & VENT DEFLECTION STOP	KENCO PLASTICS; NYLON WITH GLASS FILL
31	CAM LOCK & LOCK STRIKE	BRONZE CRAFT US-25-D; WHITE BRONZE
3 REQ'D AT BOTTOM RAIL; 1 REQ'D EACH STILE		

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
<b>STORE FRONT SEALS &amp; SEALANTS</b>		
35	GLAZING GASKET	TREMCO TR-14815E CLOSED CELLULAR EPDM (70 DUROMETER)
36	INTERIOR GLAZING GASKET (KAWNEER #127-121)	SEMPERIT DENSE EPDM (DUROMETER = SPONGE)
37	MATING GASKET	POLYPROPYLENE
38	FIXED GASKET	KRP POLYPROPYLENE & TPV
39	SETTING BLOCK	EPDM (DUROMETER = 85 +/-5)
40	OPTIONAL POURED IN DEBRIDGING/THERMAL BREAK	STRUCTURAL THERMAL BARRIER POLYMER (UNIVERSAL NO-TAPE 303-12T BY AZON)
41	W BLOCK	EPDM (DUROMETER = 85 +/-5)
<b>PROJECT-OUT GLASS VENT SEALS &amp; SEALANTS</b>		
44	GLAZING TAPE	POLYURETHANE FOAM
45	BULB GASKET	AMESBURY #32005 POLYPROPYLENE
46	KERF GASKET	ASTRO PLASTICS #C-9131 POLYPROPYLENE & SANDOPRENE
47	SETTING BLOCK	EPDM (DUROMETER = 85 +/-5)
48	3/8" I.G. SPACER	3005 OR 3105 ALUMINUM
<b>STORE FRONT FASTENERS</b>		
50	1/4-20 X 7/16" PHTC	QTY = 3 EACH SIDE OF EACH VERTICAL FRAMING MEMBER 2" FROM THE VERTICAL MEMBER & 2.5" O.C.
51	1/4-20 X 1" PHTC TYPE "D" OR "F"	QUANTITY TO MATCH THAT OF STRAP ANCHOR INSTALLATION SCREWS (SPACED 2.5" O.C.)
52	1/4-20 X 5/8" FHTC TYPE "D"	WITHIN 6" FROM MULL ENDS & 18" MAX. O.C.
<b>PROJECT-OUT GLASS VENT FASTENERS</b>		
55	NO. 10 X 1" PHTF "AB"	WITHIN 6" FROM EA. END & 18" MAX. O.C.
56	NO. 10 X 1/2" FHTF TYPE "B"	2 PER EACH CAM LOCK & KEEPER
57	NO. 10-16 X 5/16" CRIMPTITE TYPE "B"	2 PER EACH SNUBBER DRIVER & KEEPER
58	NO. 10-16 X 7/16" PHTF TYPE "B"	3 PER HINGE BAR
59	NO. 12 X 1" PHTF "AB"	4 PER END DAM



**PROJECT-OUT WINDOW PARTS**



DRAWN BY: W.W.S. CHECKED BY: W.W.S. PLOT: 1=2 DATE: 02/10/21	NO. _____ REVISION DESCRIPTION BY _____ DATE _____	DRAWING TITLE <b>IR501T &amp; IR501UT ALUMINUM LARGE MISSILE IMPACT STORE FRONT SYSTEM (DRY GLAZED)</b>	CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A. (REG. NO. F-14980)</b> 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424
CERTIFICATION <b>FEB 10 2021</b> WARREN W. SCHAEFER, P.E. P.E. NO. 113497		DRAWING NO. <b>1760T</b> SHEET NO. <b>10 OF 10</b>	