KAWNEER 8225TL FIXED THERMAL WINDOWS

GENERAL NOTES

- 1. THIS WINDOW SYSTEM HAS BEEN TESTED TO ASTM E283, ASTM E330, ASTM E331, ASTM E1886, ASTM E1996, AND TAS 201/202/203, AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC), CURRENT EDITION, INCLUDING THE HIGH VELOCITY HURRICANE ZONE.
- 2. THE INSTALLED WINDOW SYSTEM SHALL BE FABRICATED, GLAZED, AND ANCHORED IN ACCORDANCE WITH THIS DRAWING AND APPLICABLE TEST REPORTS, OR AS INDICATED BY THE ENGINEER OF RECORD IN APPROVED SHOP DRAWINGS.
- 3. THIS DRAWING INDICATES VARIOUS APPROVED GLAZING METHODS AND FRAMING TYPES WHICH MAY BE USED SINGLY OR IN COMBINATION FOR EACH PROJECT. ANY NUMBER OF PANELS/WINDOWS MAY BE USED HORIZONTALLY PROVIDED THE MAXIMUM DLO SIZES AS INDICATED IN THIS DRAWING ARE NOT EXCEEDED.
- 4. THIS PRODUCT IS LARGE AND SMALL MISSILE IMPACT RESISTANT (SEE APPROVED GLAZING TYPES SHEET 10 OF THIS DRAWING FOR GLAZING TYPES THAT ARE APPROVED FOR LARGE AND FOR SMALL MISSILE PERFORMANCE), AND DOES NOT REQUIRE THE USE OF APPROVED SHUTTERS IN WINDBORNE DEBRIS AREAS.

 5. REQUIRED DESIGN PRESSURES SHALL BE DETERMINED FOR EACH PROJECT IN ACCORDANCE WITH
- APPLICABLE CODE REQUIREMENTS AND GOVERNING WIND SPEEDS FOR THE PROJECT LOCATION.
 6. THE ALLOWABLE DESIGN PRESSURES AND LOAD CAPACITIES SHOWN IN THIS DRAWING ARE ALLOWABLE STRESS DESIGN (ASD) BASIS AND ARE AS LIMITED BY ASTM E-1300 GLASS TABLES AND TESTED PRESSURES
- STRESS DESIGN (ASD) BASIS AND ARE AS LIMITED BY ASTM E-1300 GLASS TABLES AND TESTED PRESSURE ALTERNATE COMPARATIVE OR RATIONAL ANALYSIS CALCULATIONS COMPLIANT WITH FBC AS DEEMED APPROPRIATE ON A PROJECT BASIS BY THE ENGINEER OF RECORD ARE ACCEPTABLE.
- 7. DISSIMILAR MATERIALS THAT COME INTO CONTACT, INCLUDING BUT NOT LIMITED TO FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SUBSTRATES OR ALUMINUM, SHALL BE COATED OR OTHERWISE PROTECTED PER FBC REQUIREMENTS TO PREVENT CORROSION OR GALVANIC REACTIONS.
- 8. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER INFILTRATION RESISTANCE OF THE INSTALLED PRODUCT IS NOT WITHIN THE SCOPE OF THIS APPROVAL AND SHALL BE THE RESPONSIBILITY OF OTHERS.
 9. THE 4/3 ALLOWABLE STRESS INCREASE HAS NOT BEEN USED IN THE ANCHOR ANALYSIS FOR THIS SYSTEM. THE 1.6 Cd FACTOR WAS USED IN THE ANALYSIS OF WOOD SUBSTRATE.
- 10. STRUCTURAL INTEGRITY OF SUBSTRATE MATERIALS TO RECEIVE THE LOADS FROM THIS PRODUCT, AND INSTALLATION OF WOOD BUCKS OR OTHER ACCESSORIES TO THE SUBSTRATE, TO BE ENGINEERED BY OTHERS OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- 11. THIS PRODUCT SHALL BE INSTALLED USING ONE OF THE APPROVED FASTENING METHODS INDICATED IN THIS DRAWING, AS APPROPRIATE FOR THE SUBSTRATE TYPE, OR AS INDICATED BY THE ENGINEER OF RECORD IN APPROVED SHOP DRAWINGS. ANCHOR SIZE, EMBEDMENT, EDGE DISTANCE, AND LOCATIONS, SHALL BE IN ACCORDANCE WITH THESE DRAWINGS OR AS INDICATED IN APPROVED SHOP DRAWINGS. ENSURE 1-1/2" MIN. CENTER-TO-SPACING BETWEEN ANY TWO INSTALLATION FASTENERS.
- 12. MINIMUM ANCHOR EMBEDMENTS LISTED IN THIS DRAWING SHALL BE BEYOND WALL DRESSING OR STUCCO AND FULLY INTO SUBSTRATE. LOAD-BEARING SHIMS SHALL BE USED AT ALL ANCHOR LOCATIONS WHERE A GAP OF MORE THAN 1/16" EXISTS BETWEEN THE PRODUCT AND OPENING SUBSTRATE. MAXIMUM SHIM GAP IS AS INDICATED IN THESE DRAWINGS.
- 13. SUBTRATES SHALL MEET THE MINIMUM STRENGTH REQUIREMENTS AS SHOWN IN TABLE 1 IN SECTION 6. CONCRETE OR MASONRY SUBSTRATES SHALL NOT BE CRACKED. FOR INSTALLATION TO METAL SUBSTRATES, ANCHORS SHALL BE LONG ENOUGH TO BE FULLY THREADED THROUGH THE METAL THICKNESS WITH AN ADDITIONAL 3/16" MIN. OF THREADS BEYOND.
- 14. CONSTRUCTION NOTES: THE VERITICAL FRAME MEMBERS RUN THROUGH WHILE THE HORIZONTAL MEMBERS ARE COPED & BUTTED TO THE VERTICAL FRAME MEMBER. THE VERTICAL MEMBERS ARE FASTENED TO THE HORIZONTAL MEMBERS WITH ANCHORS INTO SCREW SPLINES. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH KAWNEER INSTALLATION INSTRUCTIONS.

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SHEET	DESCRIPTION
1	GENERAL NOTES
2	SAMPLE ELEVATIONS
3-4	SECTION DETAILS
5	APPROVED GLAZING TYPES, GLAZING DETAILS
6	DESIGN PRESSURE CHARTS
7	PERIMETER ANCHOR DETAILS
8	EXTRUSION PROFILES, MATERIAL PARTS LIST

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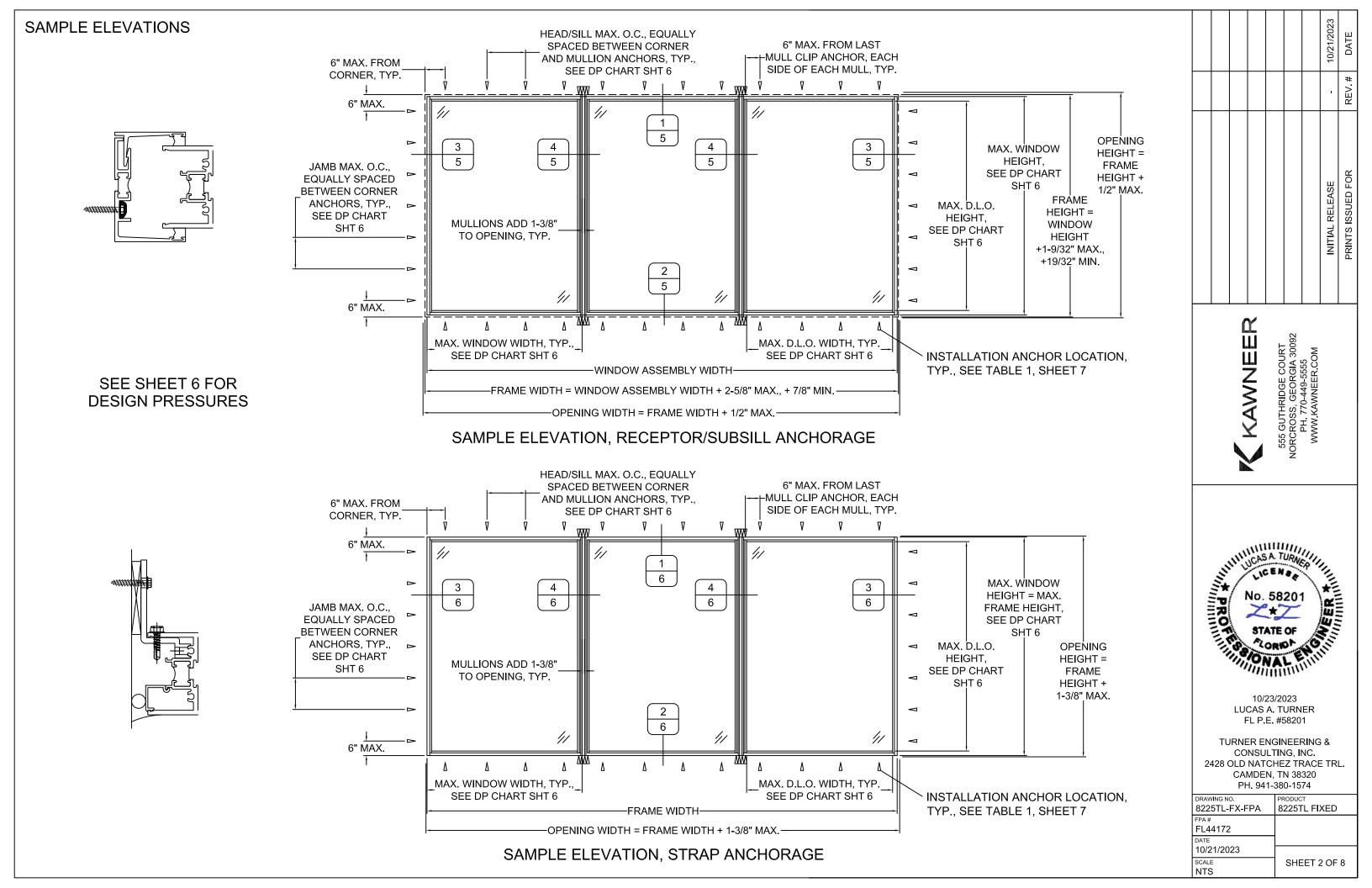


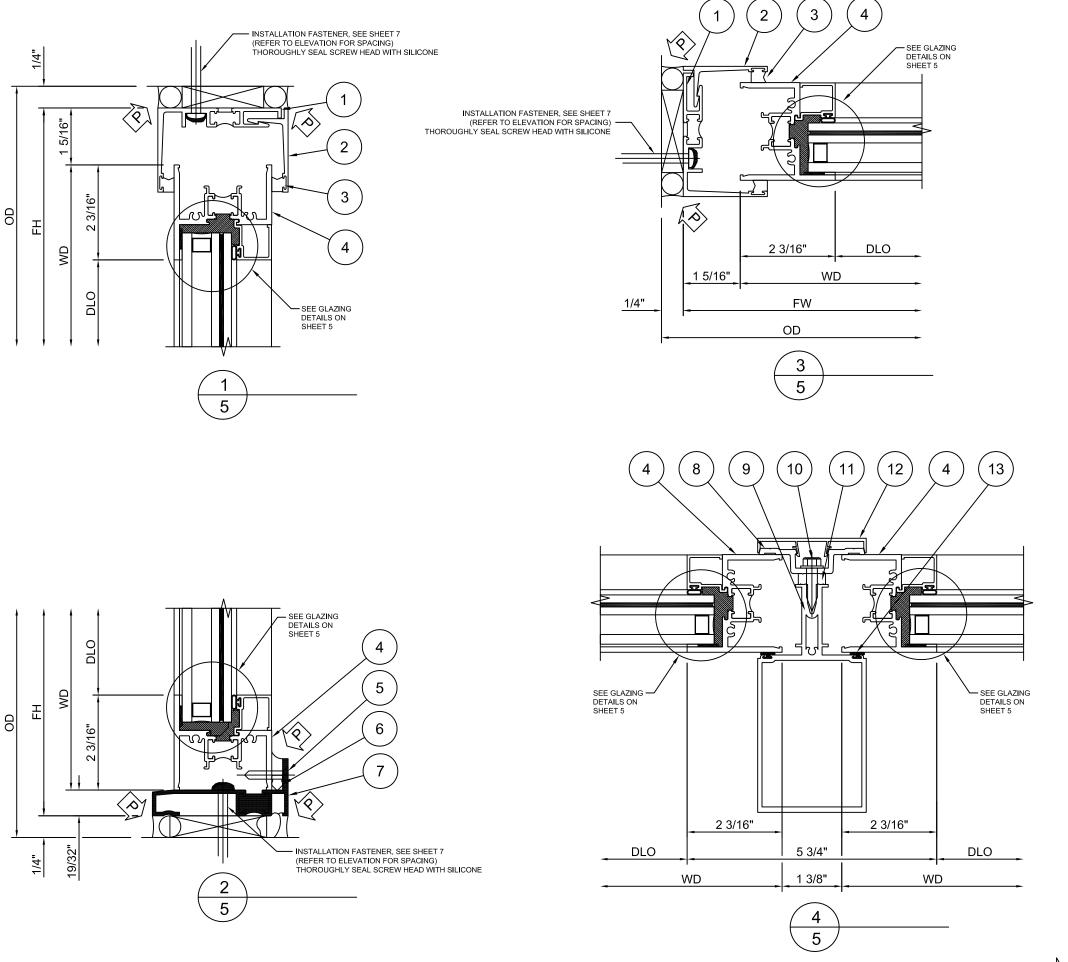
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TURNER ENGINEERING & CONSULTING, INC. 2428 OLD NATCHEZ TRACE TRL. CAMDEN, TN 38320 PH. 941-380-1574

DRAWING NO.	PRODUCT
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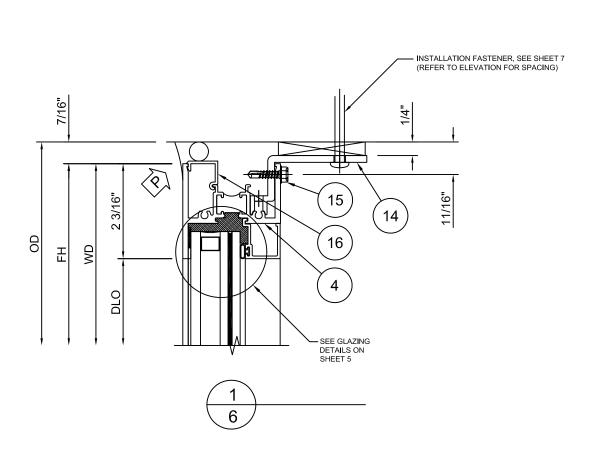
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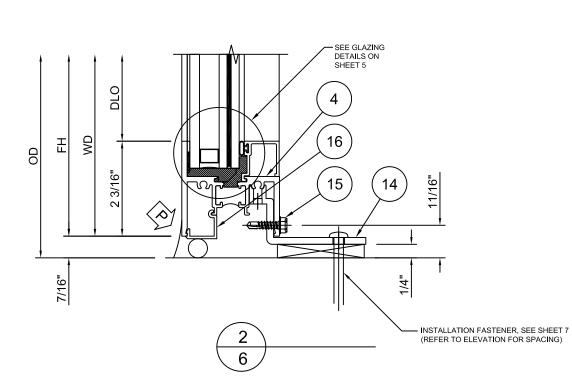
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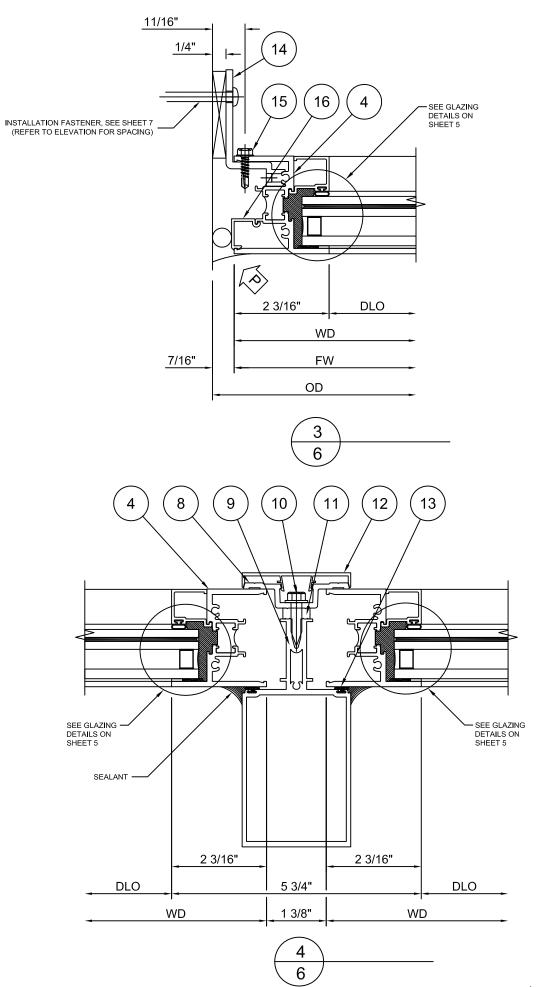
SHEET 3 OF 8

SCALE NTS

PERIMETER SEALS (BY OTHERS)









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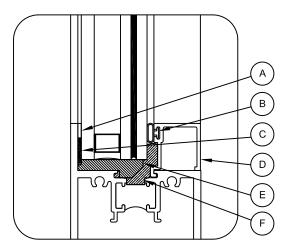
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PERIMETER SEALS (BY OTHERS)

APPROVED GLAZING TYPES							
MISSILE RATING	TYPE	NOMINAL THICKNESS	DESCRIPTION	MISSILE RATING	TYPE	NOMINAL	DESCRIPTION
LARGE AND SMALL MISSILE	1	1-1/8" (1.125")	1/4" FT OUTBOARD, 7/16" AIR SPACER, 3/16" HS INBOARD, 0.090 KURARAY SG, 3/16" HS INBOARD - WET GLAZE	SMALL	2	1-1/8" (1.125")	1/4" FT OUTBOARD, 7/16" AIR SPACER, 3/16" HS INBOARD, 0.060 KURARAY PVB, 3/16" HS INBOARD - DRY GLAZE
		•		MISSILE	3	1-1/8"	1/4" FT OUTBOARD, 7/16" AIR SPACER, 3/16" HS INBOARD,

ONLY

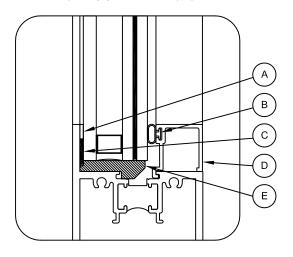
GLAZING DETAIL: LARGE AND SMALL MISSILE IMPACT GLASS TYPE 1



- A 127186 GLAZING TAPE
- B 127074 BULB WEATHERING (SHORE "A" 65±5 DUROMETER TAPE)
- C BACK BEDDING SILICONE, SEE TABLE BELOW *
- D 224166 GLASS BEAD
- E 127106 SETTING BLOCK (SILL ONLY)
- F STRUCTURAL SILICONE, SEE TABLE BELOW **

GLAZING DETAIL: SMALL MISSILE IMPACT GLASS TYPE 2 & 3

(1.125") 0.060 EASTMAN SAFLEX PVB, 3/16" HS INBOARD - DRY GLAZE

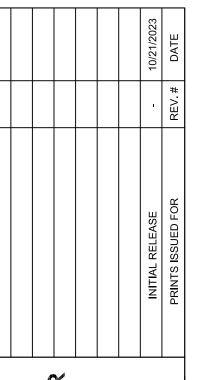


- A 127186 GLAZING TAPE
- B 127074 BULB WEATHERING
- (SHORE "A" 65±5 DUROMETER TAPE)
- C BACK BEDDING SILICONE, SEE TABLE BELOW *
- D 224166 GLASS BEAD
- E 127106 SETTING BLOCK (SILL ONLY)

GLAZING NOTES:

- 1) INFILL SIZE FORMULA DLO + 1 1/4" UNLESS OTHERWISE NOTED.
- 2) SETTING BLOCKS FBC 2411.3.3.1 COMPLIANT

APPROVED BACKBEDDING / STRUCTURAL SILICONE GLASS TYPE IMPACT RATING * BACK BEDDING SILICONE ** STRUCTURAL SILICONE DESIGNATION BB1 SCS2000 SILPRUF LMI OR SMI RGS7700 RAPIDSTRENGTH 1 BB2 LMI OR SMI DOWSIL 995 DOWSIL 995 BB3 LMI OR SMI TREMCO PROGLAZE SSG TREMCO PROGLAZE SSG BB4 SCS2000 SILPRUF SCS2000 SILPRUF LMI OR SMI 2 3 BB5 SMI **RGS7700 RAPIDSTRENGTH** NONE REQ'D 2 3 BB6 SMI DOWSIL 995 NONE REQ'D 2 3 BB7 SMI TREMCO PROGLAZE SSG NONE REQ'D 2 3 BB8 SMI SCS2000 SILPRUF NONE REQ'D







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8225TL FIXED WINDOW DP CHART (ALLOWABLE DESIGN PRESSURES), STRAP ANCHORAGE									
APPROVED GLASS TYPE(S) (SEE SHT 5)	APPROVED BACKBEDDING/			DIME	NSIONS	DESIGN PRESSURE	HEAD/SILL MAX. O.C. ANCHOR SPACING	JAMB MAX. O.C. ANCHOR SPACING	
	STRUCTURAL SILICONE TYPE(S) (SEE SHT 5)	IMPACT RATING	MAX. WINDOW WIDTH (in.)	MAX. D.L.O. WIDTH (in.)	MAX. WINDOW HEIGHT (in.)	MAX. D.L.O. HEIGHT (in.)	(+/- psf)	(in.)	(in.)
1	BB1, BB2, BB3, BB4	LARGE AND SMALL MISSILE	62	57-5/8	101	96-5/8	60	16-1/2	17-13/16
1	BB1	LARGE AND SMALL MISSILE	36	31-5/8	101	96-5/8	90	23-7/16	17-13/16
2 OR 3	BB5, BB6, BB7, BB8	SMALL MISSILE	62	57-5/8	101	96-5/8	60	16-1/2	17-13/16
2 OR 3	BB5	SMALL MISSILE	36	31-5/8	101	96-5/8	90	23-7/16	17-13/16

8225TL FIXED WINDOW DP CHART (ALLOWABLE DESIGN PRESSURES), RECEPTOR/SUBSILL ANCHORAGE									
APPROVED	APPROVED BACKBEDDING/			DIME	HEAD/SILL MAX. O.C. ANCHOR SPACING	JAMB MAX. O.C. ANCHOR SPACING			
GLASS TYPE(S) (SEE SHT 5)	STRUCTURAL SILICONE TYPE(S) (SEE SHT 5)	IMPACT RATING	MAX. WINDOW WIDTH (in.)	MAX. D.L.O. WIDTH (in.)	MAX. WINDOW HEIGHT (in.)	MAX. D.L.O. HEIGHT (in.)	(+/- psf)	(in.)	(in.)
1	BB1, BB2, BB3, BB4	LARGE AND SMALL MISSILE	62	57-5/8	101	96-5/8	60	16-15/16	18-3/16
1	BB1	LARGE AND SMALL MISSILE	36	31-5/8	101	96-5/8	90	24-3/4	18-3/16
2 OR 3	BB5, BB6, BB7, BB8	SMALL MISSILE	62	57-5/8	101	96-5/8	60	16-15/16	18-3/16
2 OR 3	BB5	SMALL MISSILE	36	31-5/8	101	96-5/8	90	24-3/4	18-3/16

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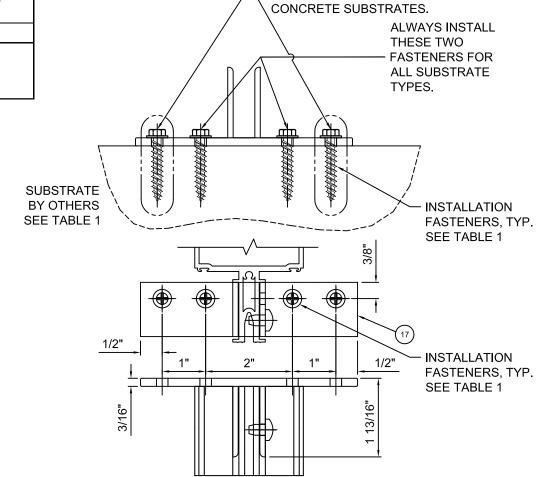


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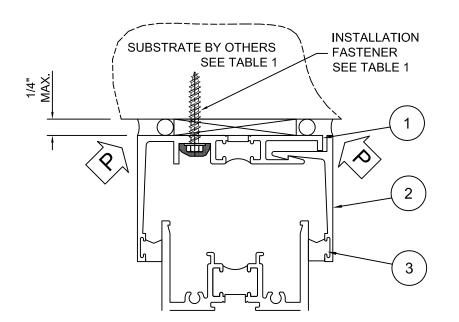
TABL	TABLE 1. QUALIFIED ANCHOR INFORMATION										
ID	SUBSTRATE	ANCHOR	MIN.	MIN. EDGE							
			EMBEDMENT	DISTANCE							
Α	SOLID UNCRACKED CONCRETE (2850 PSI MIN.)	1/4" DEWALT COATED CARBON STEEL ULTRACON+	1 3/4"	2 1/2"							
В	UNCRACKED CMU (ASTM C-90) (JAMBS ONLY)	1/4" DEWALT COATED CARBON STEEL ULTRACON+	1 1/4"	2 1/2"							
С	2x MIN. SOUTHERN PINE WOOD (G=0.55 MIN)	#12 GRADE 5 WOOD SCREW	2"	1"							
D	16 GAUGE (0.060") MIN. STEEL STUD (33 KSI YIELD MIN.) OR 1/8" MIN. ALUMINUM (6063-T5 MIN.) OR 1/8" MIN. A36 STEEL		FULL + 3 THREADS	1/2"							



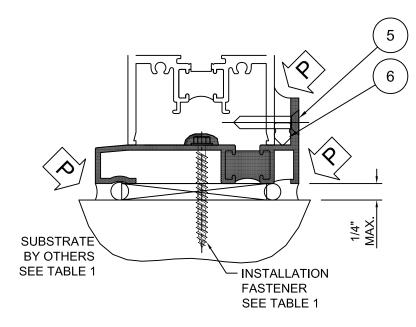
INSTALL OUTER TWO FASTENERS ONLY

FOR ANCHOR ID C INTO WOOD SUBSTRATE OR ANCHOR ID D INTO METAL SUBSTRATE. DO NOT INSTALL THESE ANCHORS FOR

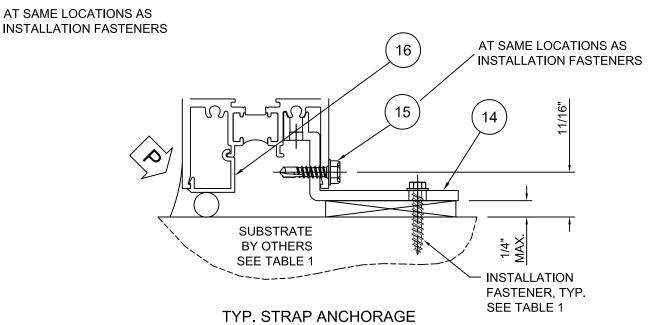
TYP. MULLION CLIP ANCHORAGE HEAD/SILL, EACH MULL



TYP. RECEPTOR ANCHORAGE HEAD/JAMB



TYP. SUBSILL ANCHORAGE



HEAD/SILL/JAMB

PERIMETER SEALS (BY OTHERS)

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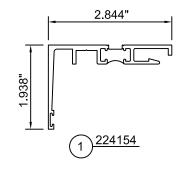
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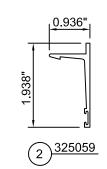
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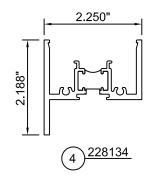
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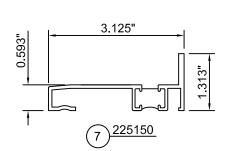
8225TL - FIXED THERMAL WINDOWS MATERIAL PARTS LIST

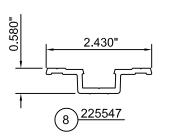
NO.	PART NO.	DESCRIPTION	DIMENSIONS	MATERIAL	
EXTRUSIONS & MISC. PARTS					
1	224154	TWO PIECE RECEPTOR	1.938 x 2.844 x 0.080	6063-T6 ALUMINUM	
2	325059	TWO PIECE RECEPTOR STOP	1.938 x 0.936 x 0.090	6063-T6 ALUMINUM	
3	027883	RECEPTOR WEATHERING	0.349 x 3.849 x 0.040	SANTOPRENE / POLYPROPYLENE	
4	228134	REVERSIBLE FRAME FOR 0.125" WALL	2.188 x 2.250 x 0.125	6063-T6 ALUMINUM	
5	028520	FASTENER	10 x 1 CRFCHTFS AB	300 SERIES STAINLESS STEEL	
6	127038	1/4" BACK UP WEDGE	0.250 x 0.340	BLACK SCR-900	
7	225150	FULL DEPTH SUB SILL	1.313 x 3.125 x 0.080	6063-T6 ALUMINUM	
8	225547	STRUCTURAL MULLION PRESS PLATE	2.430 x 0.581 x 0.125	6063-T6 ALUMINUM	
9	224072	STRUCTURAL MULLION 3-5/8" PROJECTION	2.500 x 5.265 x 0.100	6063-T6 ALUMINUM	
10	128406	FASTENER	1/4 x 1 HWHTFS AB	18-8 STAINLESS STEEL	
11	162310	THERMAL BREAK	0.626 x 5.850	BLACK EPDM, PEROXIDE	
12	224074	STRUCTURAL MULLION COVER	2.500 x 3.338 x 0.072	6063-T6 ALUMINUM	
13	027874	WEATHERING	0.187 x 0.200	VYRAM OR EQ. / POLYPROPYLENE OR EQ. / SANTOPRENE OR EQ.	
14	228460	STRAP ANCHOR	2.682 x 1.365 x 0.156	6063-T6 ALUMINUM	
15	128961	FASTENER	10-16 x 3/4 HWHSMD	400 SERIES STAINLESS STEEL	
16	225081	EXTERIOR SEALANT BACKUP	0.705 x 0.663 x 0.060	6063-T6 ALUMINUM	
17	225548	HEAVYWEIGHT MULL AHR CLIP	5 x 1.250 x 1.813	6063-T6 ALUMINUM	

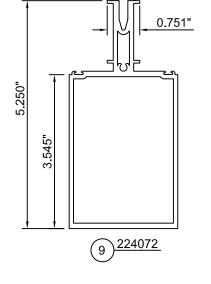


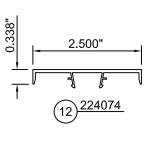


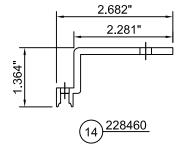


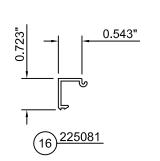


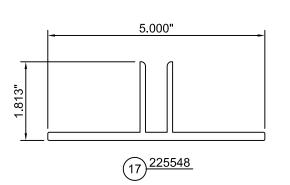












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