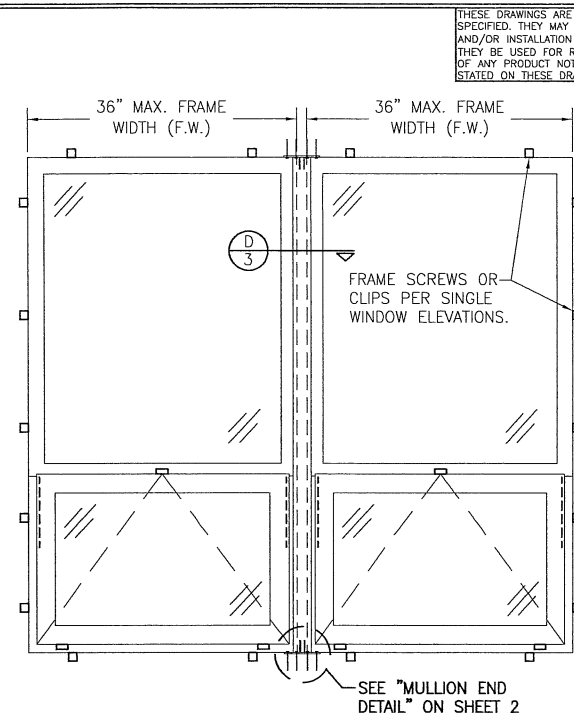
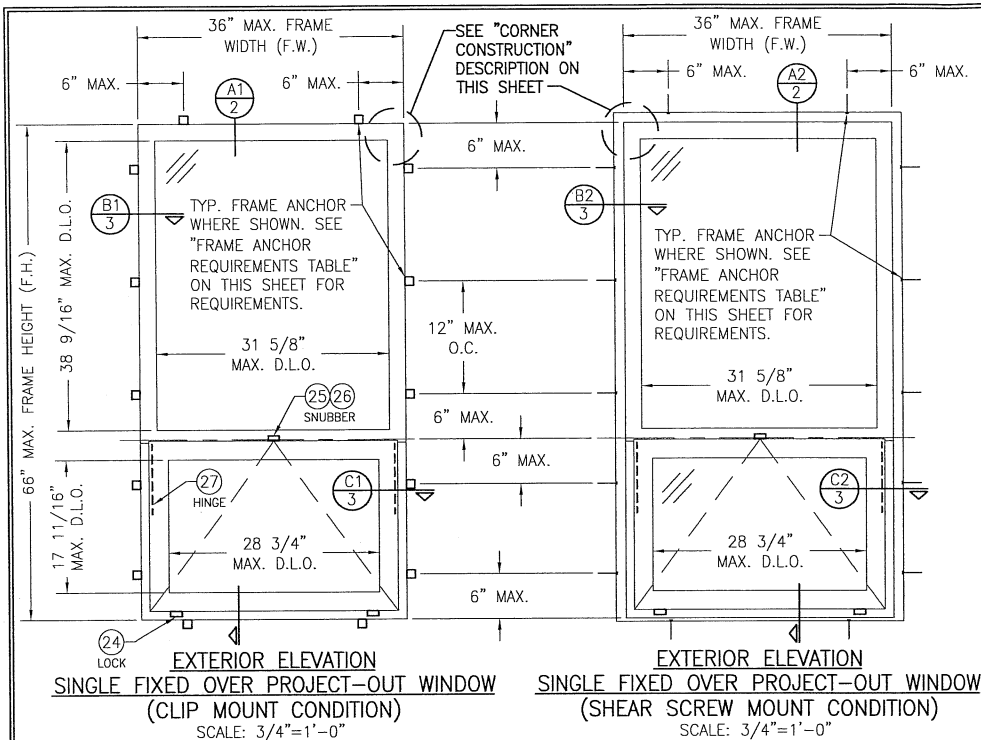




EXTERIOR ELEVATION
MULTIPLE FIXED OVER PROJECT-OUT WINDOWS
 (CLIP MOUNT CONDITION)

SCALE: 3/4"=1'-0"
 (FOR DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATIONS.)
 DOUBLE WINDOW SHOWN. ANY NUMBER OF WINDOWS MAY BE COMBINED
 HORIZONTALLY IN ANY OPENING.

CORNER CONSTRUCTION

JAMB CORNERS:
 COPED, SECURED WITH TWO (2) NO. 8 X 1 1/4"
 S.S. SCREWS PER CORNER AND SEALED WITH
 TREMCO-TREMSIL 600 SEALANT.

SASH CORNERS:
 COPED, SECURED WITH TWO (2) NO. 8 X 1 1/4"
 S.S. SCREWS PER CORNER AND SEALED WITH
 TREMCO-TREMSIL 600 SEALANT.

ALLOWABLE DESIGN PRESSURE
+100/-130 PSF
SMALL MISSILE IMPACT RATED

FRAME ANCHOR REQUIREMENTS TABLE

CLIP & FRAME SCREWS			
OPENING TYPE (SUBSTRATE)	FRAME TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	NO. 12 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
MIN. 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/2"	2"

(1) 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.

DRAWN BY: M.S.J.
 CHECKED BY: W.W.S.
 PLOT: 1=16
 DATE: 06/20/05

NO.	REVISION DESCRIPTION	DATE	BY	W.S.M.	W.S.M.
A1	UPDATE FOR CODE COMPLIANCE	04/15/08			
B1	UPDATE TO CURRENT STANDARDS	09/07/10			
C1	UPDATE CONSULTANTS ADDRESS	11/02/11			
D1	ADD GLAZING COMPONDS	02/26/13			
E1	UPDATE TO CURRENT STANDARDS	04/22/15			

MANUFACTURER
KAWNEER COMPANY, INC.
 555 GUTHRIE COURT
 NORCROSS, GA 30092
 770-449-5555

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)
 7480 150TH COURT NORTH
 PALM BEACH GARDENS, FL 33418
 PHONE: 561-744-3424

DRAWING TITLE
 7225/8225TL FIXED/PROJECT-OUT WINDOW (SMALL MISSILE IMPACT)

DATE
 NOV 2 2015

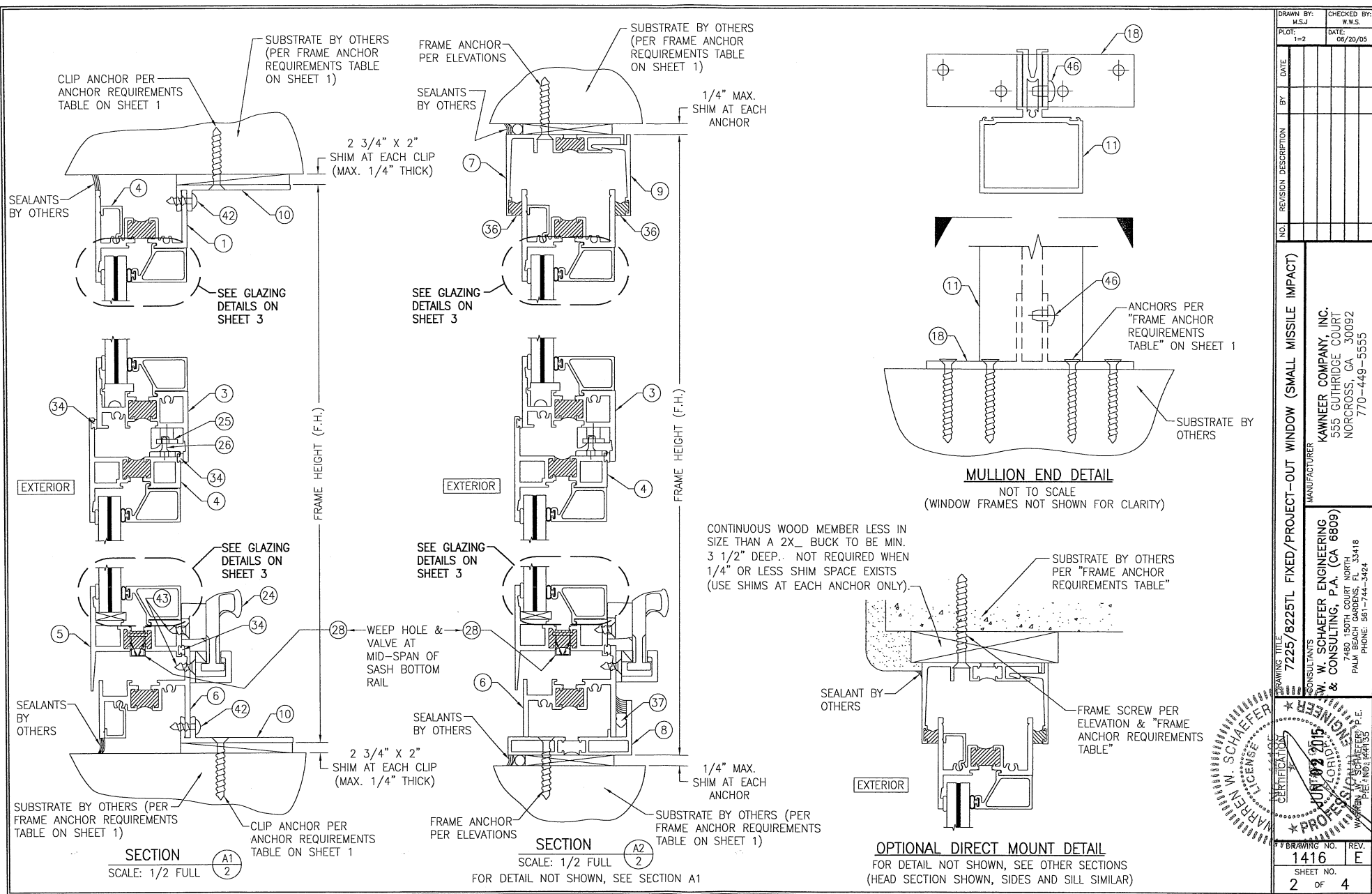
STATE OF FLORIDA
 PROFESSIONAL SEAL

DRAWING NO.
 1416

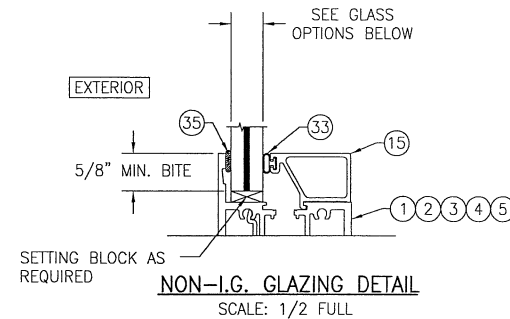
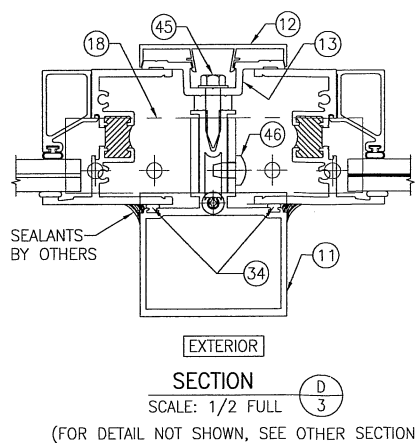
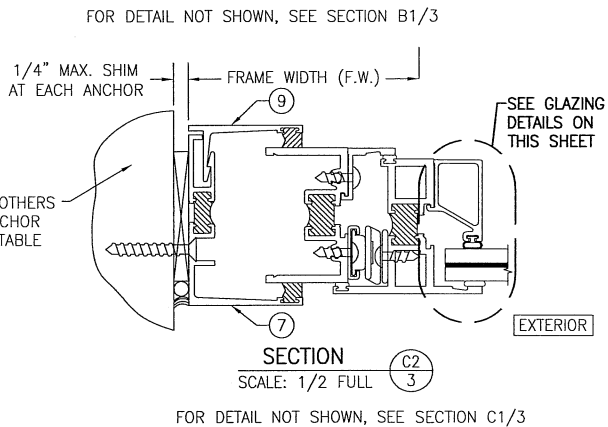
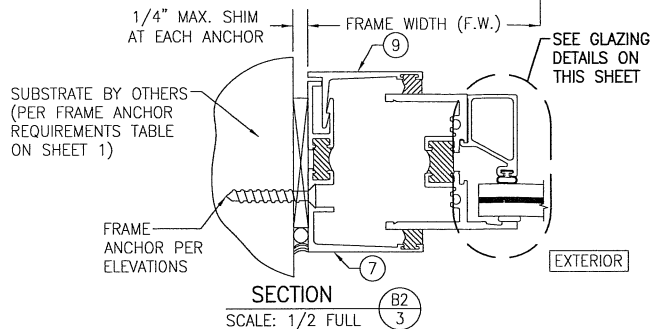
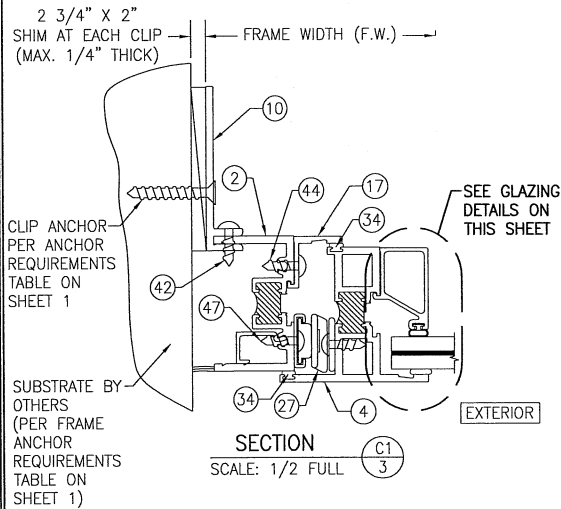
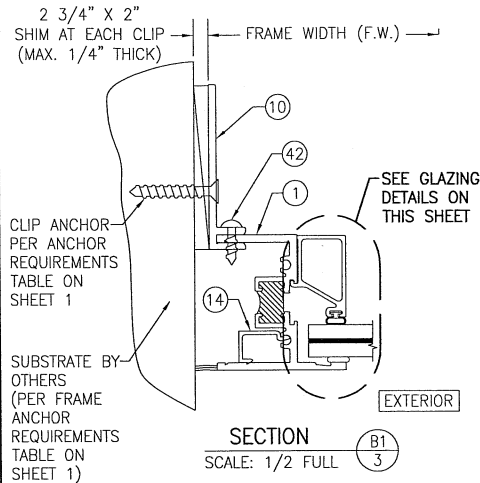
SHEET NO.
 1 OF 4

GENERAL NOTES:

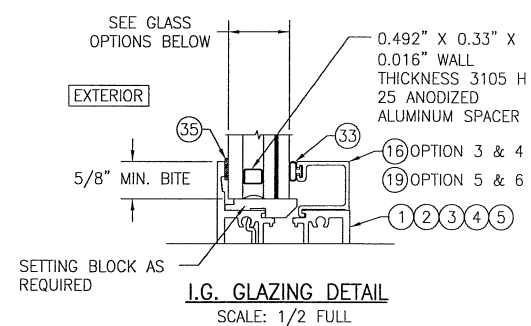
- THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
- OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
- ALL HARDWARE & FASTENERS SHALL BE IN 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.
- THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ) & IS SMALL MISSILE IMPACT RATED.
- THIS PRODUCT MAY NOT BE INSTALLED AT ELEVATIONS BELOW 30 FT. ABOVE GRADE OR AT ANY CODE DESIGNATED LARGE MISSILE IMPACT LOCATION WITHOUT AN APPROVED SHUTTER.
- 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 FLORIDA 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 MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE.
- TO THE BEST OF OUR KNOWLEDGE, THE PRODUCT SHOWN HEREIN IS QUALITY ASSURED BY A FLORIDA STATE APPROVED CERTIFICATION/QA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH THE FBC AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATIONS. 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 IT IS INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT OR IF IT IS INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH INSTALLATIONS OF THIS TYPE OF PRODUCT.



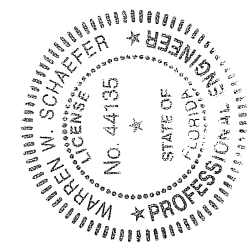
DRAWN BY: M.S.J.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 06/20/05
DATE:	
BY:	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE 7225/8225TL FIXED/PROJECT-OUT WINDOW (SMALL MISSILE IMPACT)	MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 130TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	ENGINEER W. W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1416	REV. E
SHEET NO. 2	OF 4



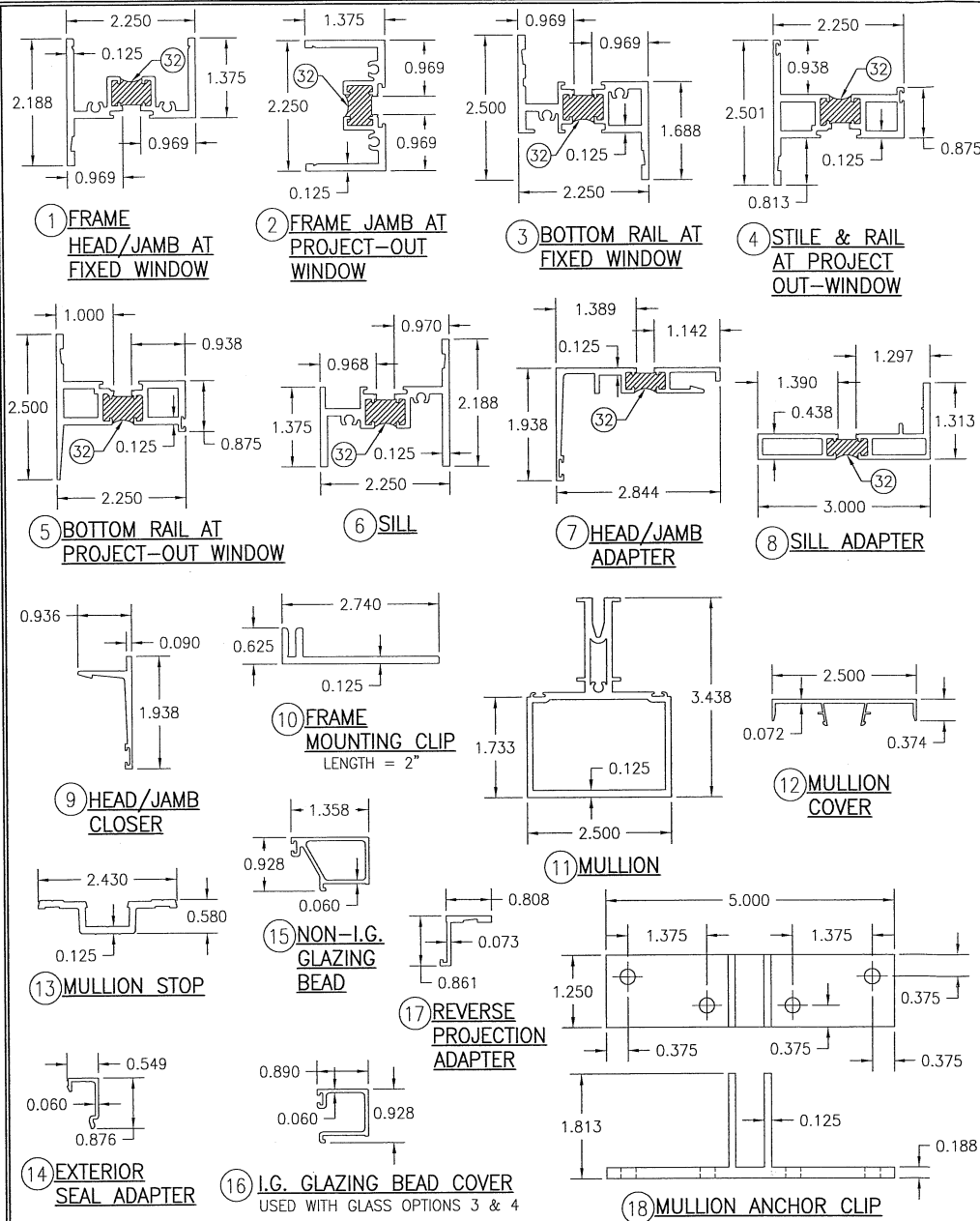
- GLASS OPTION 1: 9/16" THICK LAMINATED GLASS (1/4" H.S./0.060 EASTMAN CHEM. CO. SAFLEX/1/4" H.S.)
- GLASS OPTION 2: 9/16" THICK LAMINATED GLASS (1/4" H.S./0.060 DUPONT BUTACITE PVB/1/4" H.S.)



- GLASS OPTION 3: 1" THICK LAMINATED GLASS WITH 3/16" THICK TEMPERED OUTER PANE, 3/8" AIR SPACER AND 9/16" THICK LAMINATED INNER GLASS (3/16" H.S./0.060 EASTMAN CHEM. CO. SAFLEX/3/16" H.S.)
- GLASS OPTION 4: 1" THICK LAMINATED I.G. GLASS WITH 3/16" THICK TEMPERED OUTER PANE, 3/8" AIR SPACER AND 9/16" THICK LAMINATED INNER GLASS (3/16" H.S./0.060 DUPONT BUTACITE PVB/3/16" H.S.)

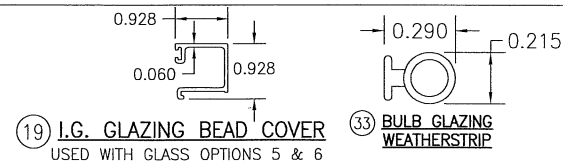


DRAWN BY: M.S.J.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 06/20/05	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: 7225/8225TL FIXED/PROJECT-OUT WINDOW (SMALL MISSILE IMPACT)			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		MANUFACTURER: KAWNEER COMPANY, INC.	
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555	
CERTIFICATION: JUN 02 2015		WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1416		REV. E	
SHEET NO. 3		OF 4	



ITEM #	PART #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS			
1	228-034/228-134	FRAME HEAD/JAMB AT FIXED WINDOW	6063-T6 ALUMINUM (SEE NOTE 1)
2	228-034/228-134	FRAME JAMB AT PROJECT-OUT WINDOW	6063-T6 ALUMINUM (SEE NOTE 1)
3	225-251/225-351	BOTTOM RAIL AT FIXED WINDOW	6063-T6 ALUMINUM (SEE NOTE 1)
4	225-225/225-325	STILE & RAIL AT PROJECT-OUT WINDOW	6063-T6 ALUMINUM (SEE NOTE 1)
5	225-220/225-320	BOTTOM RAIL AT PROJECT-OUT WINDOW	6063-T6 ALUMINUM (SEE NOTE 1)
6	225-013/225-113	SILL	6063-T6 ALUMINUM (SEE NOTE 1)
7	224-054/224-154	HEAD/JAMB ADAPTER	6063-T6 ALUMINUM (SEE NOTE 1)
8	224-055/224-155	SILL ADAPTER	6063-T6 ALUMINUM (SEE NOTE 1)
9	325-059	HEAD/JAMB CLOSER	6063-T6 ALUMINUM
10	225-165	FRAME MOUNTING CLIP	6063-T6 ALUMINUM
11	224-071	MULLION	6063-T6 ALUMINUM
12	224-074	MULLION COVER	6063-T6 ALUMINUM
13	224-073	MULLION STOP	6063-T6 ALUMINUM
14	228-281	EXTERIOR SEAL ADAPTER	6063-T6 ALUMINUM
15	224-082	NON-I.G. GLAZING BEAD	6063-T6 ALUMINUM
16	224-083	I.G. GLAZING BEAD	6063-T6 ALUMINUM
17	225-079	REVERSE PROJECTION ADAPTER	6063-T6 ALUMINUM
18	225-548	MULLION ANCHOR CLIP	6063-T6 ALUMINUM
19	224-063	I.G. GLAZING BEAD	6063-T6 ALUMINUM
HARDWARE			
24	225-405	PROJECT-OUT CAM LOCK	WHITE BRONZE US-25D (2 PER WINDOW)
25	229-156	FRAME SNUBBER (1 PER WINDOW)	WHITE ETPU; SECURED WITH 2 NO. 10 X 7/16" S.S. PH SCREWS
26	229-154	VENT SNUBBER (1 PER WINDOW)	304 SERIES SS; SECURED WITH 2 NO. 10 X 7/16" S.S. PH SCREWS
27	229-101	ADVANTAGE 4-BAR HINGE	300 SERIES SS
28	225-936	WEEP CHECK VALVE	VERNAY LABRATORIES VA-4394 1 AT MID-SPAN OF SASH
SEALS AND SEALANTS			
32	-	DEBRIDGING/THERMAL BREAK (OPTIONAL)	2-PART POLYURETHANE
33	127-074	BULB GASKET (DUROMETER = 65)	VISTAPLEX/POLYPROPYLENE
34	027-874	VENT WEATHERSTRIP	VISTAPLEX/POLYPROPYLENE
35	127-104	SILICONE	DOW CORNING INSTANT GLAZE, NOVAGARD SBC40-M170 OR MOMENTIVE RGS 7700
36	027-883	WEATHERSTRIP	SANTOPRENE
37	127-038	BACK-UP WEDGE	SCR-900
MISC. FASTENERS			
42	977-108	#10 X 3/4" SELF TAPPING PH SCREW	1 PER FRAME MOUNTING CLIP
43	128-415	#10 X 1/2" HHTF SCREW	2 PER CAM
45	128-406	1/4" X 1" HHTF SCREW	3" FROM ENDS & 9" O.C.
46	128-192	1/4" X 3/8" PHTF SCREW	1 PER MULLION ANCHOR CLIP
47	128-414	#10 X 7/16" PHTF SCREW	6 PER HINGE

(1) PARTS 1 THROUGH 8 MAY BE THERMALLY BROKEN AS SHOWN OR BE ONE WHOLE UNCUT EXTRUSION (EXTRUSIONS ARE CUT TO ALLOW FOR THERMAL BREAK PLACEMENT).



DRAWN BY: M.S.J.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 06/20/05	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE 7225/8225TL FIXED/PROJECT-OUT WINDOW (SMALL MISSILE IMPACT)			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		MANUFACTURER KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555	
SHEET NO. 4 OF 4			