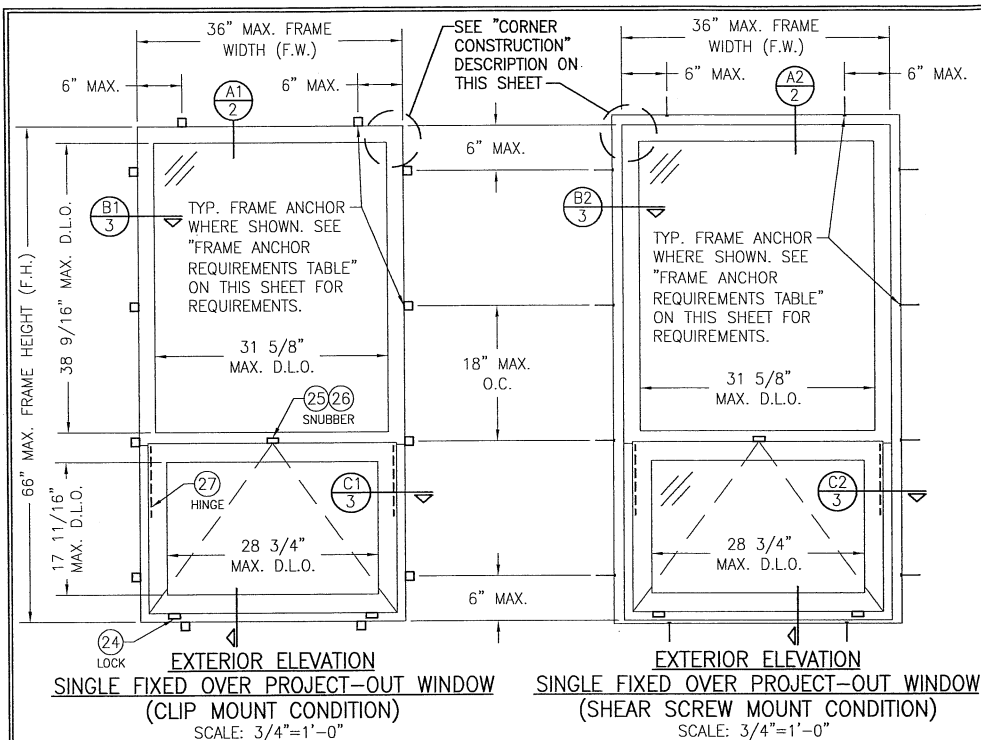




GENERAL NOTES:

1. THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. 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.
4. 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 LARGE MISSILE IMPACT RATED.
5. IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.
6. 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.
7. 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 $K_d = 0.85$ MAY BE APPLIED PER THE ASCE-7 STANDARD.
8. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE.
9. 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.
10. 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.

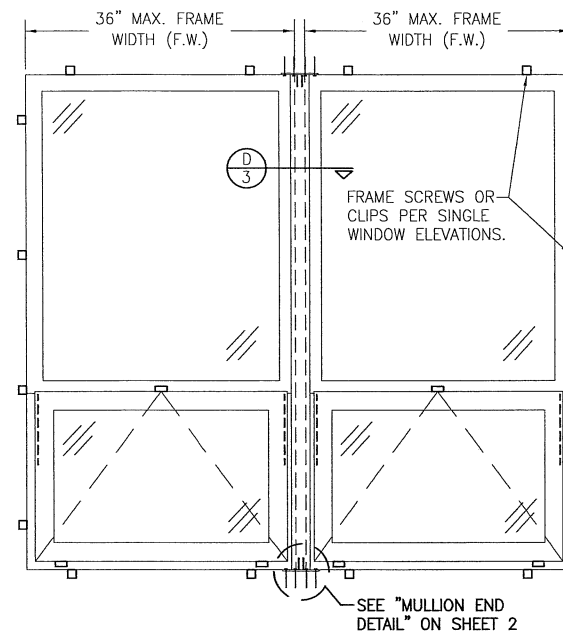
ALLOWABLE DESIGN PRESSURE
+/-90 PSF
LARGE MISSILE IMPACT RATED

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:		CHECKED BY:	
K.P.S.		W.W.S.	
PLOT:		DATE:	
1=16		04/06/05	
NO.	REVISION	DESCRIPTION	DATE
A1	UPDATE TO CURRENT STANDARDS		08/01/10
B1	UPDATE CONSULTANTS ADDRESS		11/02/11
C1	ADD GLAZING COMPONENTS		02/26/13
D1	UPDATE TO CURRENT STANDARDS		04/27/13
DRAWING TITLE: 7225/8225TL FIXED/PROJECT-OUT WINDOW (LARGE 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			
CERTIFICATION: APR 22 2015 W. W. SCHAEFER, P.E. NO. 44183			
DRAWING NO. 1415		REV. D	
SHEET NO. 1		OF 4	



(FOR DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATIONS.)
DOUBLE WINDOW SHOWN. ANY NUMBER OF WINDOWS MAY BE COMBINED HORIZONTALLY IN ANY OPENING.

CORNER CONSTRUCTION

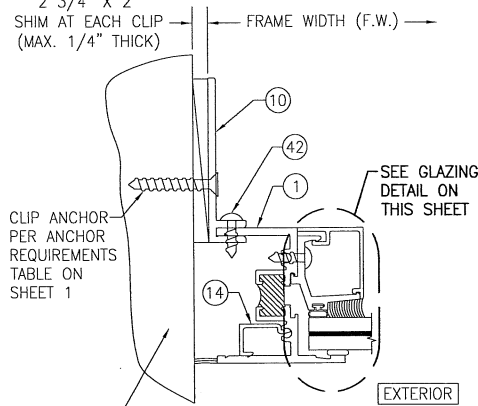
JAMB CORNERS:

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

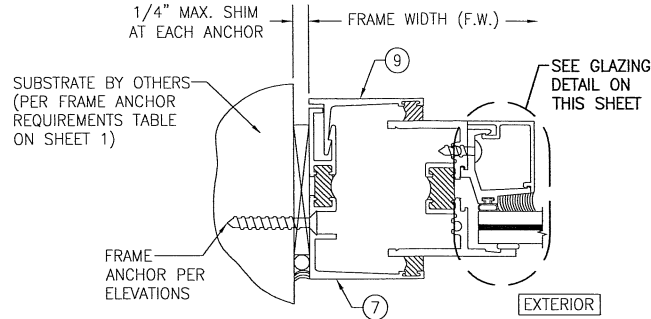
SASH CORNERS:

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

2 3/4" X 2"
SHIM AT EACH CLIP
(MAX. 1/4" THICK)

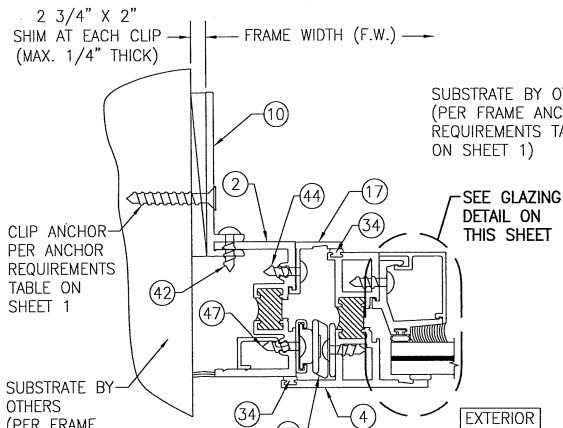


SECTION B1
SCALE: 1/2 FULL

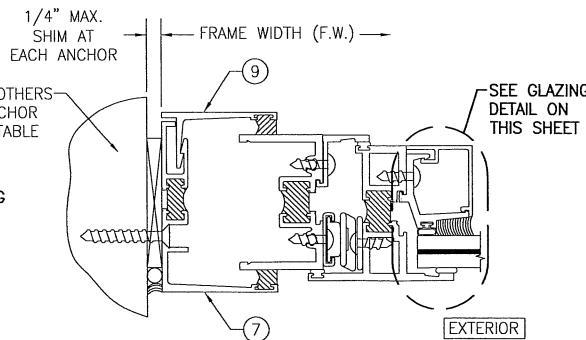


SECTION B2
SCALE: 1/2 FULL
FOR DETAIL NOT SHOWN, SEE SECTION B1/3

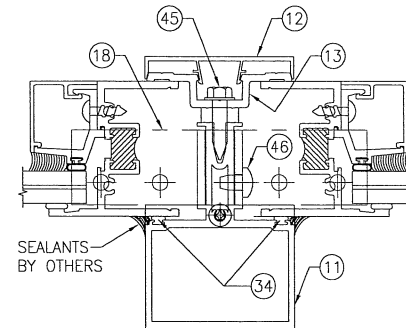
2 3/4" X 2"
SHIM AT EACH CLIP
(MAX. 1/4" THICK)



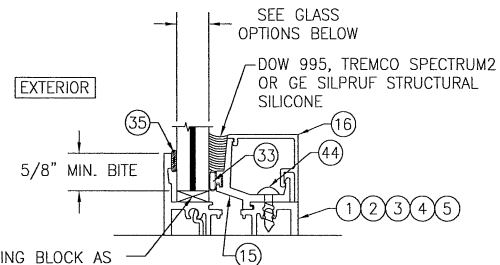
SECTION C1
SCALE: 1/2 FULL



SECTION C2
SCALE: 1/2 FULL
FOR DETAIL NOT SHOWN, SEE SECTION C1/3



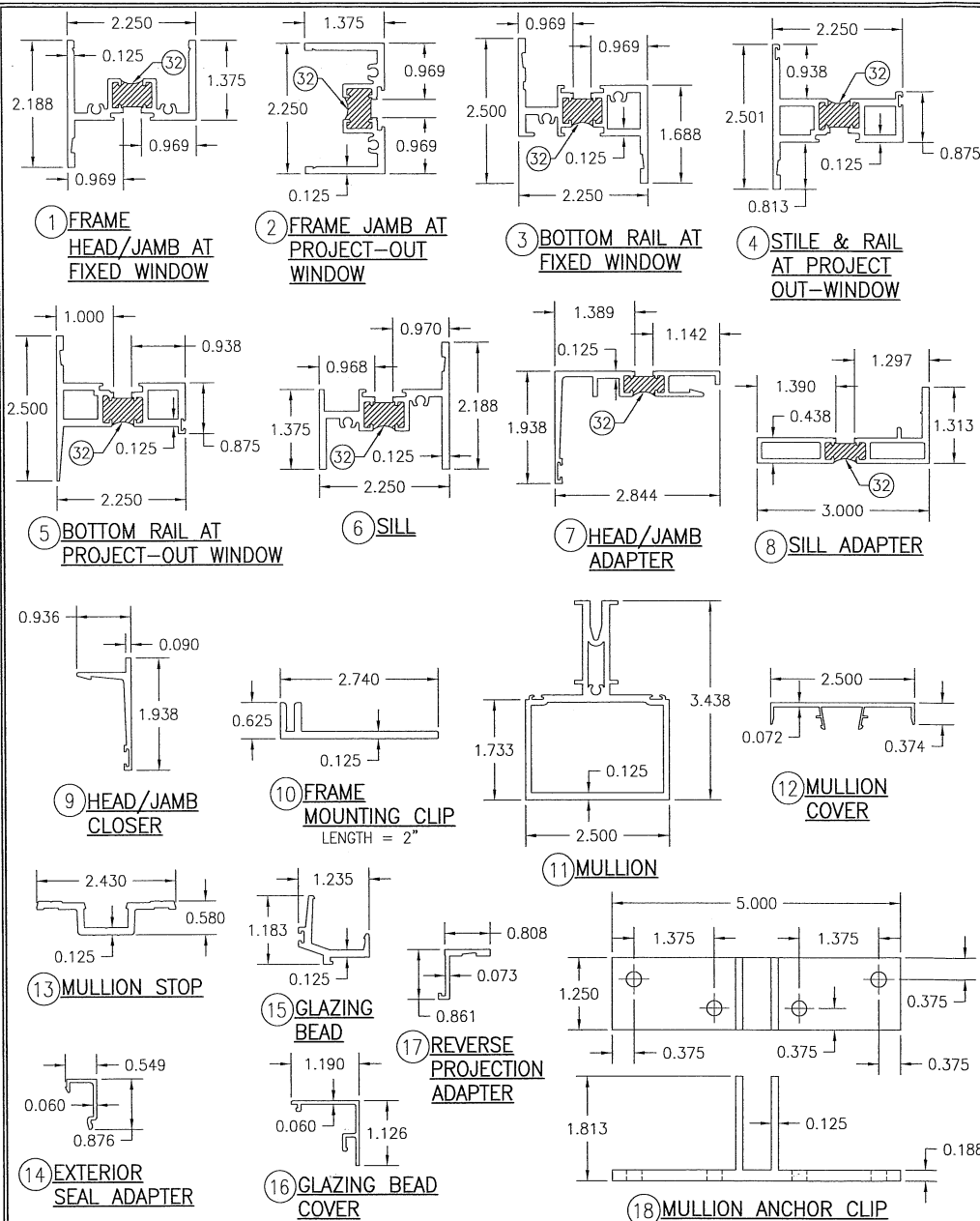
SECTION D
SCALE: 1/2 FULL
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



GLAZING DETAIL
SCALE: 1/2 FULL

- GLASS OPTION 1: 9/16" THICK LAMINATED GLASS (1/4" H.S./0.100 EASTMAN CHEM. CO. SAFLEX HP/1/4" H.S.)
- GLASS OPTION 2: 9/16" THICK LAMINATED GLASS (1/4" H.S./0.070 EASTMAN CHEM. CO. SAFLEX CP/1/4" H.S.)
- GLASS OPTION 3: 9/16" THICK LAMINATED GLASS (1/4" H.S./0.090 DUPONT SG/1/4" H.S.)
- GLASS OPTION 4: 9/16" THICK SOLUTIA SAFLEX LAMINATED GLASS (1/4" H.S./0.090 EASTMAN CHEM. CO. SAFLEX/1/4" H.S.)
- GLASS OPTION 5: 9/16" THICK LAMINATED GLASS (1/4" H.S./0.090 DUPONT BUTACITE PVB/1/4" H.S.)

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/06/05
NO.	REVISION
DATE	BY
DESCRIPTION	
DRAWING TITLE 7225/8225TL FIXED/PROJECT-OUT WINDOW (LARGE 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 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION APR 28 2015 W. W. SCHAEFER, P.E. NO. 141135	
DRAWING NO. 1415	REV. D
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	224-080	GLAZING BEAD	6063-T6 ALUMINUM
16	224-081	GLAZING BEAD COVER	6063-T6 ALUMINUM
17	225-079	REVERSE PROJECTION ADAPTER	6063-T6 ALUMINUM
18	225-548	MULLION ANCHOR CLIP	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 LABORATORIES 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" FHIF SCREW	2 PER CAM
44	128-414	#10 X 7/16" PHIF SCREW	2" FROM ENDS
45	128-406	1/4" X 1" HHIF SCREW	3" FROM ENDS & 9" O.C.
46	128-192	1/4" X 3/8" PHIF SCREW	1 PER MULLION ANCHOR CLIP
47	128-414	#10 X 7/16" PHIF 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: K.P.S.		CHECKED BY:	
PLOT: 1=2		DATE: 04/06/05	
DATE	BY	NO.	REVISION DESCRIPTION
DRAWING TITLE: 7225/8225TL FIXED/PROJECT-OUT WINDOW (LARGE 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 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION:		APR 9 2005	
DRAWING NO.:		1415	
SHEET NO.:		D	
		4 OF 4	