



**MIAMI-DADE COUNTY**  
**BUILDING CODE COMPLIANCE OFFICE (BCCO)**  
**PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA**  
**METRO-DADE FLAGLER BUILDING**  
**140 WEST FLAGLER STREET, SUITE 1603**  
**MIAMI, FLORIDA 33130-1563**  
**(305) 375-2901 FAX (305) 372-6339**

**NOTICE OF ACCEPTANCE (NOA)**

[www.maimidade.gov/buildingcode](http://www.maimidade.gov/buildingcode)

**Kawneer Company, Inc.**  
**555 Guthridge Court**  
**Norcross, GA 30092**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

**DESCRIPTION: Series "IR631" Aluminum Storefront System - S.M.I.**

**APPROVAL DOCUMENT:** Drawing No. **1458**, titled "IR 631- Small Missile Impact Store Front System", sheets 1 through 4 of 4 prepared by W.W Schaefer Engineering & Consulting, P.A., dated 11/02/05 with revision "A1" dated 04/16/08, signed and sealed by Warren W. Schaefer, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

**MISSILE IMPACT RATING: Small Missile Impact Resistant**

**LIMITATIONS: Miami-Dade County Product Control Approved Shutters Or Protection Devices Shall Be Required Below 30 Ft. Above Grade.**

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises NOA # **05-1227.04** and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**



**NOA No. 08-0425.05**  
**Expiration Date: July 27, 2011**  
**Approval Date: January 28, 2009**  
**Page 1**

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.
2. Drawing No **1458**, titled "IR 631- Small Missile Impact Store Front System", sheets 1 through 4 of 4 prepared by W.W Schaefer Engineering & Consulting, P.A., dated 11/02/05 with revision "A1", dated 04/16/08, signed and sealed by Warren W. Schaefer, P.E.

**B. TESTS**

1. Test reports on:
  - 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 20294
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Small Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

Along with marked-up drawings and installation diagram of an IR-631 aluminum wall system door, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0049-0313-05**, dated 03/01/05 - 05/06/05, signed and sealed by Vinu J. Abraham, P.E.

*(Submitted under previous NOA # 05-1227.04)*

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with FBC-2004, prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 06/12/05, signed and sealed by Warren W. Schaefer

**Complies with ASTM E1300-98/02**

*(Submitted under previous NOA # 05-1227.04)*

**D. QUALITY ASSURANCE**

1. Miami Dade Building Code Compliance Office (BCCO).

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. **06-0216.06** issued to Solutia Inc. for their "**Saflex III G Clear or colored interlayer**" dated 05/04/06, and expiring on 05/21/11.

**F. STATEMENTS**

1. Statement letter of compliance, dated April 14, 2008, signed and sealed by Warren W. Schaefer, P.E.
2. Statement letter of conformance and no financial interest, dated 11/14/05, signed and sealed by Warren W. Schaefer, P.E.

*(Submitted under previous NOA # 05-1227.04)*

  
Manuel Perez, P.E.  
Product Control Examiner

NOA No. 08-0425.05

Expiration Date: July 27, 2011

Approval Date: January 28, 2009

**Kawneer Company, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**F. STATEMENTS (CONTINUED)**

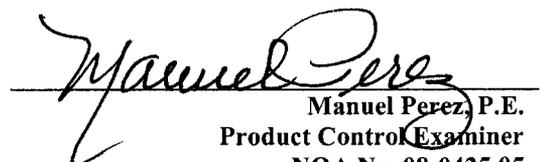
3. Laboratory compliance letter for Test Report no. **HTL-0049-0313-05**, issued by Hurricane Test Laboratory, Inc., dated May 06, 2005, signed and sealed by Vinu J. Abraham, P.E.  
*(Submitted under previous NOA # 05-1227.04)*

**G. OTHERS**

1. Notice of Acceptance No. **05-1227.04**, issued to Kawneer Company, Inc. for their Series "**IR631 Aluminum Store Front System – S.M.I.**", approved on 07/27/06 and expiring on 07/27/11.

**H. LIMITATIONS:**

1. **Miami-Dade County Product Control Approved Shutters Or Protection Devices Shall Be Required Below 30 Ft. Above Grade.**

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 08-0425.05  
Expiration Date: July 27, 2011  
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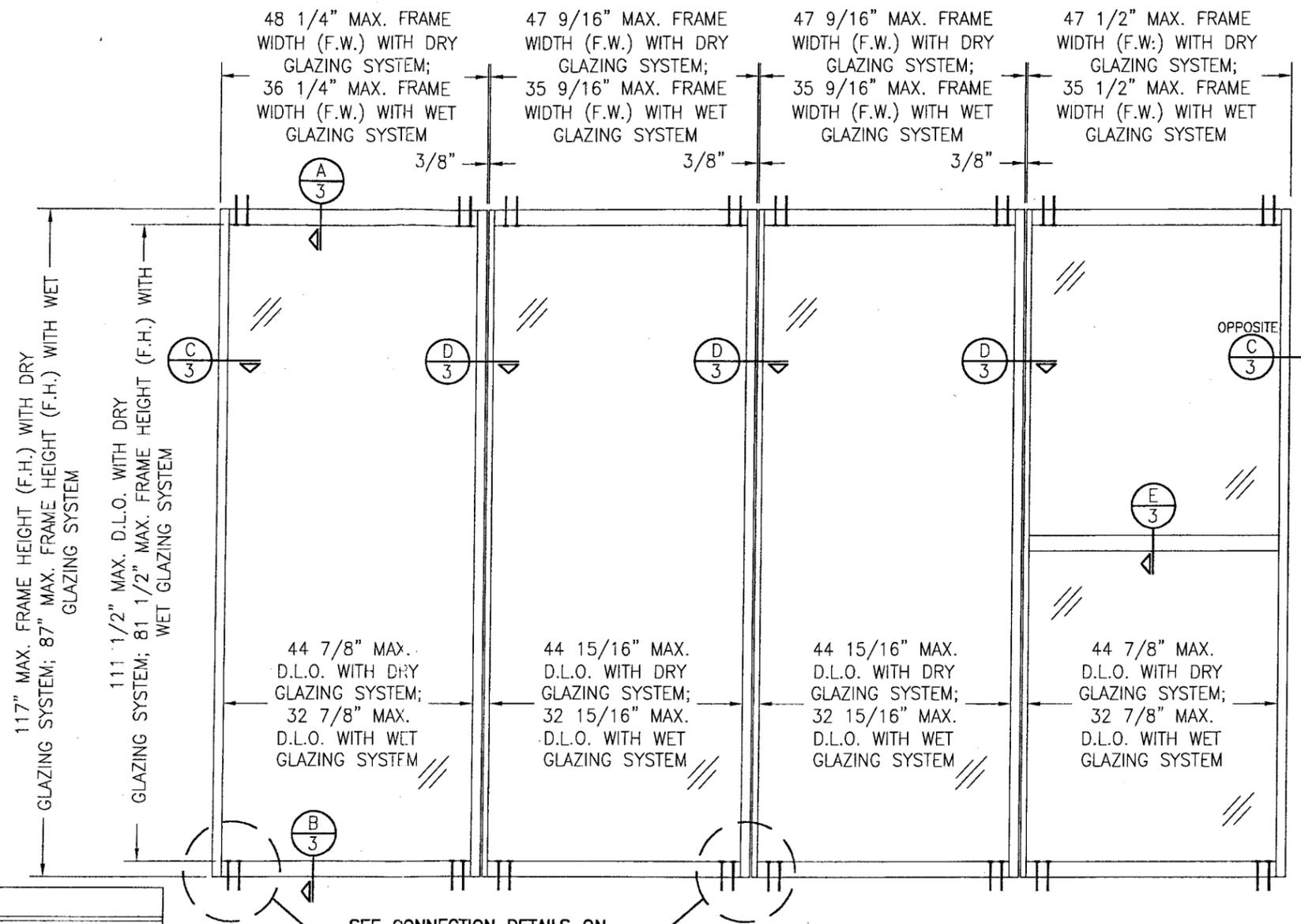
**GENERAL NOTES:**

1. THESE WINDOW SYSTEMS HAVE 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. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR SMALL MISSILE IMPACT WINDOWS.
5. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
6. WHEN GLAZED FOR SMALL MISSILE IMPACT, THESE WINDOWS MAY NOT BE INSTALLED AT ELEVATIONS BELOW 30 FT. ABOVE GRADE WITHOUT AN APPROVED SHUTTER.
7. ALL ANCHORS SECURING WINDOW FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
8. 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 WHEN USED IN CONJUNCTION WITH LOAD COMBINATIONS SPECIFIED IN SECTION 2.0 OF THE ASCE 7 STANDARD.
9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR  $C_d = 1.6$  WAS USED FOR WOOD SCREW ANALYSIS ONLY.
10. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20.

**CORNER & FRAME END CONSTRUCTION:**

**FRAME CORNER:** THE VERTICAL FRAME MEMBER RAN THROUGH WHILE THE HORIZONTAL FRAME MEMBER END WAS SQUARE CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBER USING THREE (3) #12 X 2 1/4" SCREWS & SEALED WITH DOW 795 SILICONE SEALANT.

**HORIZONTAL (MID-RAIL) END:** THE VERTICAL FRAME MEMBER RAN THROUGH WHILE THE HORIZONTAL FRAME MEMBER END WAS SQUARE CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBER USING TWO (2) #12 X 2 1/4" SCREWS & SEALED WITH DOW 795 SILICONE SEALANT.



**EXTERIOR ELEVATION**  
**MULTIPLE FIXED PANEL STORE FRONT ASSEMBLY**  
 SCALE: 1/2"=1'-0"

**FRAME ANCHOR REQUIREMENTS TABLE**

FRAME & SILL ANCHORS				
ANCHOR TYPE	OPENING TYPE (SUBSTRATE)	JAMB TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
A	2X_ WOOD FRAME OR BUCK (G=MIN. 0.55)	(1) 1/4" CONCRETE SCREW	1 3/8"	3/4"
B	MIN. 16 GA. 50 KSI METAL STUD	(2) 1/4" SELF DRILL/TAP SCREW	FULL	1/2"
C	MIN. 1/4" THICK A36 STEEL	(2) 3/8" H.H. MACHINE SCREW	FULL	3/4"
D	MIN. 3000 P.S.I. CONCRETE	(3) 3/8" WEDGE ANCHOR	2 1/2"	3"
E	MIN. 1/8" THICK A36 STEEL	(2) 1/4" SELF DRILL/TAP SCREW	FULL	1/2"
F	MIN. 3000 P.S.I. CONCRETE	(4) 1/4" WEDGE ANCHOR	2"	3"

- (1) CONCRETE SCREWS SHALL BE ELCO OR ITW RAMSET/RED HEAD TAPCONS, POWERS RAWL TAPPER OR HILTI KWIK-CON II (HARDENED STEEL OR S.S.).
- (2) SELF DRILLING/TAPPING SCREWS & MACHINE SCREWS SHALL BE MIN. GRADE 5 CORROSION RESISTANT STEEL
- (3) 3/8" WEDGE ANCHORS SHALL BE POWERS RAWL POWERBOLT OR HILTI KWIK-BOLT II (STEEL OR S.S.)
- (4) 1/4" WEDGE ANCHORS SHALL BE POWERS RAWL POWERBOLT, HILTI KWIK-BOLT II OR ITW RAMSET/RED HEAD DYNABOLT (STEEL OR S.S.).

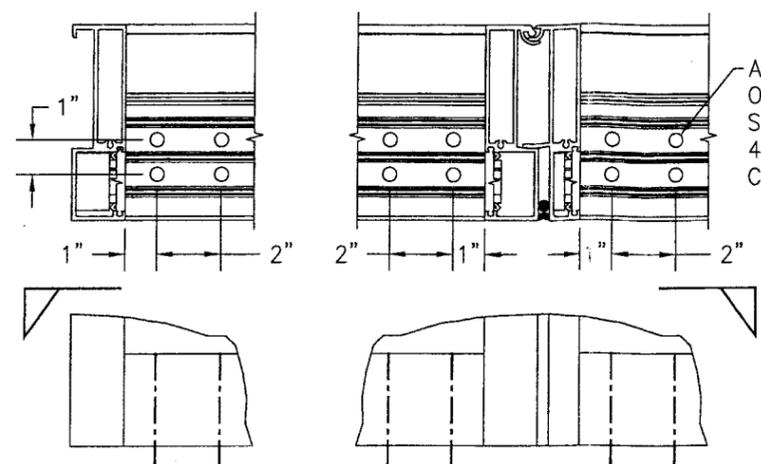
(1) ALLOWABLE DESIGN PRESSURE	
GLAZING SYSTEM	ALLOWABLE PRESSURE
DRY GLAZING	±95 P.S.F.
WET GLAZING	±135 P.S.F.

(1) SEE LOAD TABLES ON SHEET 2 FOR PRESSURE LIMITATIONS WITH RESPECT TO ANCHOR TYPE. LESSER OF PRESSURE IN ANCHOR LOAD TABLE AND THIS TABLE SHALL CONTROL.

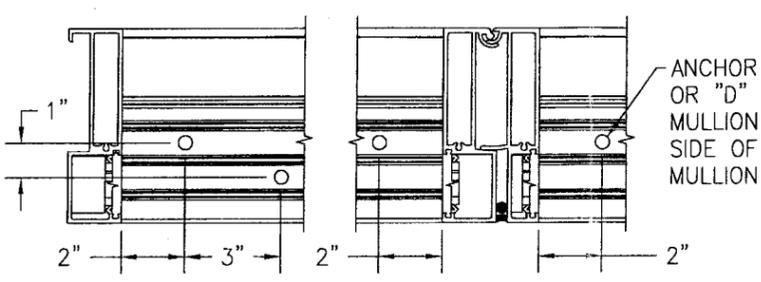
**PRODUCT REVISED**  
 as complying with the Florida Building Code  
 Acceptance No **08-0425.05**  
 Expiration Date **07/27/2011**  
 By *Manuel Perez*  
 Miami Dade Product Control Division

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-24	DATE: 11/02/05
DATE: 04/16/08	
BY: W.R.M.	
REVISION DESCRIPTION	
NO. 1	UPDATE FOR CODE COMPLIANCE
DRAWING TITLE <b>IR 631-SMALL MISSILE IMPACT STORE FRONT SYSTEM</b>	
MANUFACTURER <b>KAWNEER COMPANY, INC.</b> 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A.</b> 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
CERTIFICATION <b>APR 16 2008</b> WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. <b>1458</b>	REV. <b>A</b>
SHEET NO. <b>1 OF 4</b>	

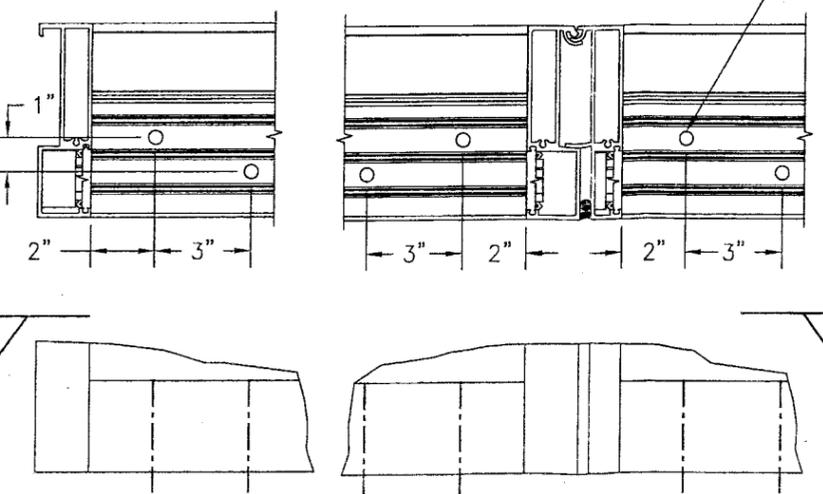
DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 11/02/05
NO.	DATE
BY	
REVISION DESCRIPTION	



MULLION END CONNECTION DETAIL  
(ANCHOR TYPES "A" & "B")

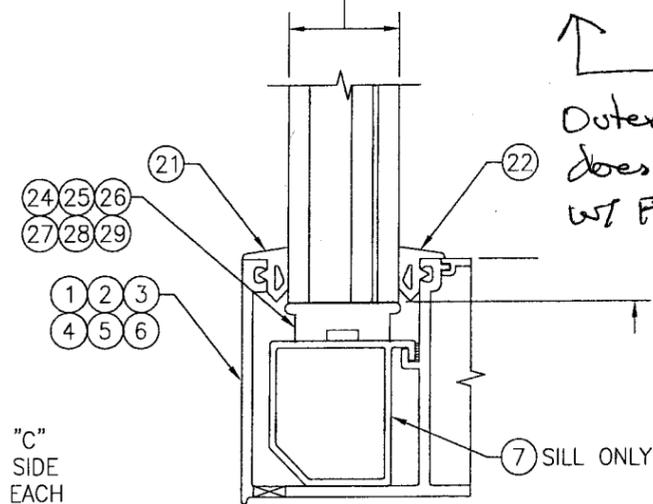


MULLION END CONNECTION DETAIL  
(ANCHOR TYPES "C" & "D")



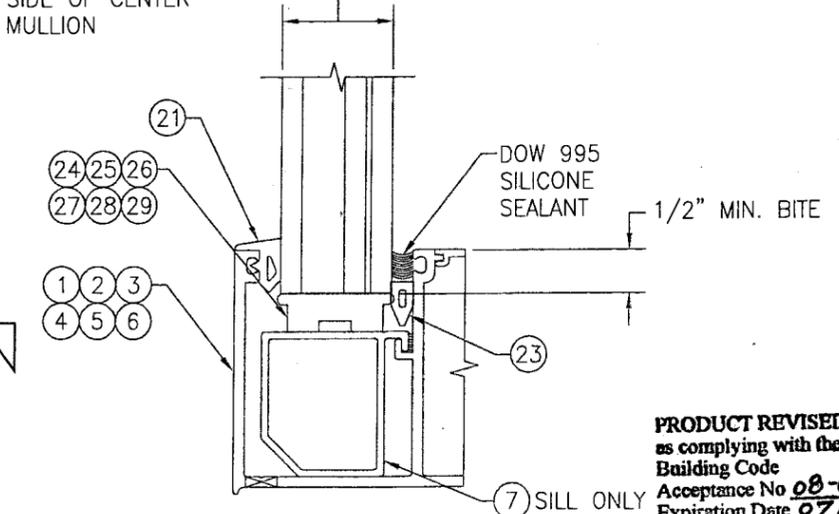
MULLION END CONNECTION DETAIL  
(ANCHOR TYPES "E" & "F")

1 5/16" THICK LAMINATED I.G. SOLUTIA SAFLEX GLASS WITH 1/4" THICK HEAT STRENGTHENED OUTER PANE, 1/2" AIR SPACER, AND 9/16" THICK LAMINATED INNER GLASS (1/4" H.S./0.06 SAFLEX IIIIG PVB/1/4" H.S.)



TYP. GLAZING DETAIL 1  
(DRY GLAZING SYSTEM)  
SCALE: 1/2 FULL

1 5/16" THICK LAMINATED I.G. SOLUTIA SAFLEX GLASS WITH 1/4" THICK TEMPERED OUTER PANE, 1/2" AIR SPACER, AND 9/16" THICK LAMINATED INNER GLASS (1/4" H.S./0.06 SAFLEX IIIIG PVB/1/4" H.S.)



TYP. GLAZING DETAIL 2  
(WET GLAZING SYSTEM)  
SCALE: 1/2 FULL

ANCHOR LOAD TABLE				
(1) MAXIMUM FRAME HEIGHT (IN.)	(1) MAXIMUM FRAME WIDTH (IN.)	(2) ALLOWABLE PRESSURE (P.S.F.)		
		ANCHOR TYPE A & B	ANCHOR TYPE C & D	ANCHOR TYPE E & F
117	48	95.0	95.0	75.3
	42	95.0	95.0	86.0
	36	95.0	95.0	95.0
108	48	95.0	95.0	81.6
	42	95.0	95.0	93.2
	36	95.0	95.0	95.0
96	48	95.0	95.0	91.8
	42	95.0	95.0	95.0
90	48	95.0	95.0	95.0
87	36	135.0	135.0	135.0

(1) MAXIMUM FRAME HEIGHT & WIDTH DIMENSIONS SHOWN ARE ±1/2"

(2) NOTE: PRESSURES ARE LIMITED TO 95 PSF WHEN FRAME HEIGHT IS GREATER THAN 87" OR FRAME WIDTH IS GREATER THAN 36". PRESSURES ARE LIMITED TO 135 PSF WHEN FRAME HEIGHT IS 87" OR LESS AND FRAME WIDTH IS 36" OR LESS.

DRAWING TITLE  
IR 631 - SMALL MISSILE IMPACT STORE FRONT SYSTEM

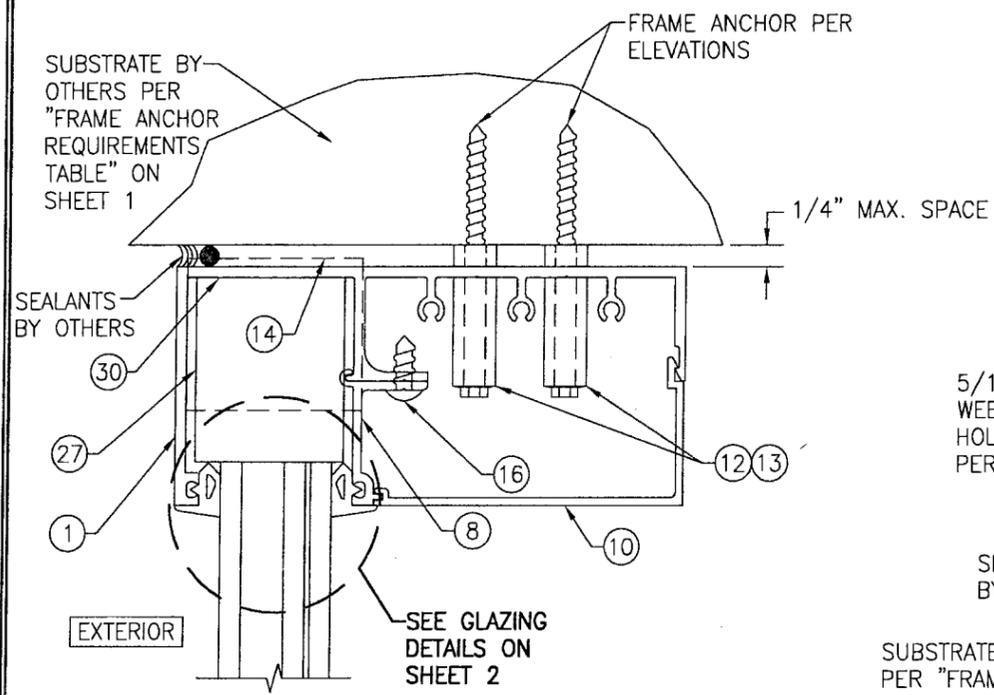
MANUFACTURER  
KAWNEER COMPANY, INC.  
555 GUTHRIDGE COURT  
NORCROSS, GA 30092  
770-449-5555

CONSULTANTS  
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.  
8895 N. MILITARY TRAIL, SUITE C-204  
PALM BEACH GARDENS, FL 33410  
PHONE: 561-775-4902 FAX: 561-775-4903

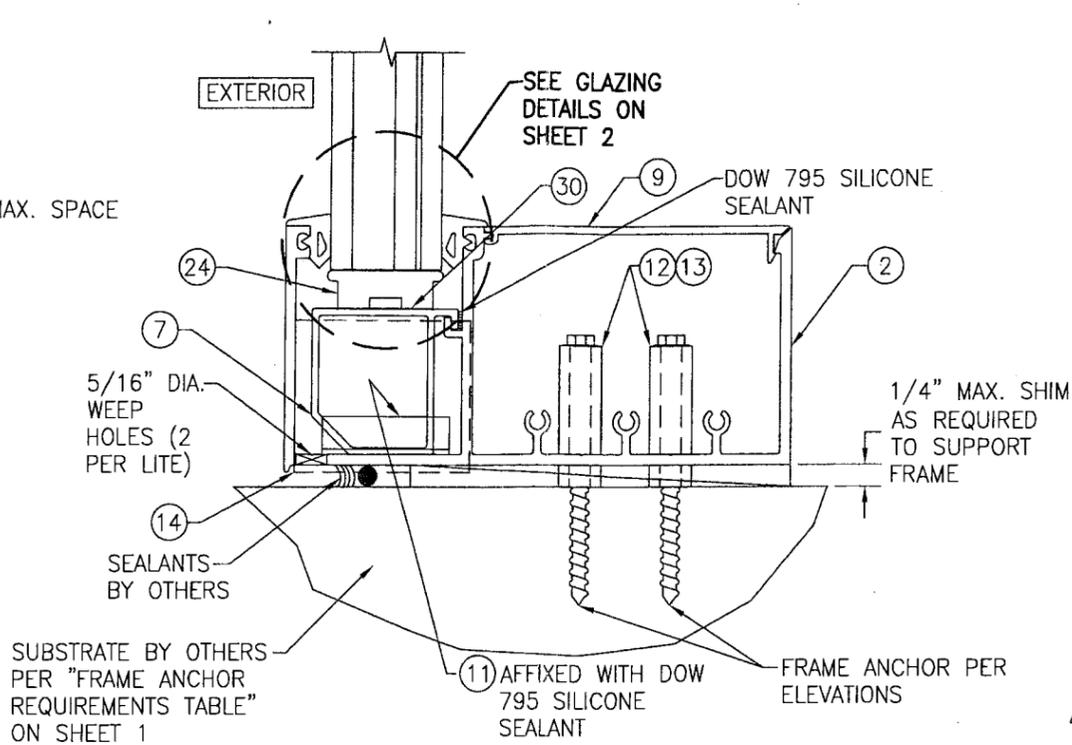
CERTIFICATION  
APR 16 2008  
WARREN W. SCHAEFER, P.E.  
P.E. NO. 44135

DRAWING NO. 1458  
REV. A  
SHEET NO. 2 OF 4

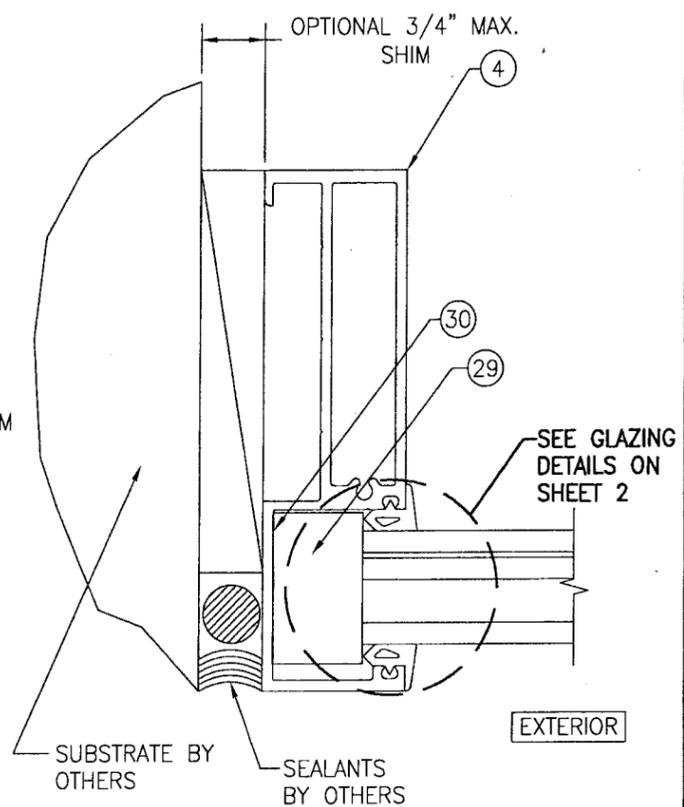
PRODUCT REVISED  
as complying with the Florida Building Code  
Acceptance No 08-0425.05  
Expiration Date 07/27/2011  
By *Warren W. Schaefer*  
Miami Dade Product Control  
Division



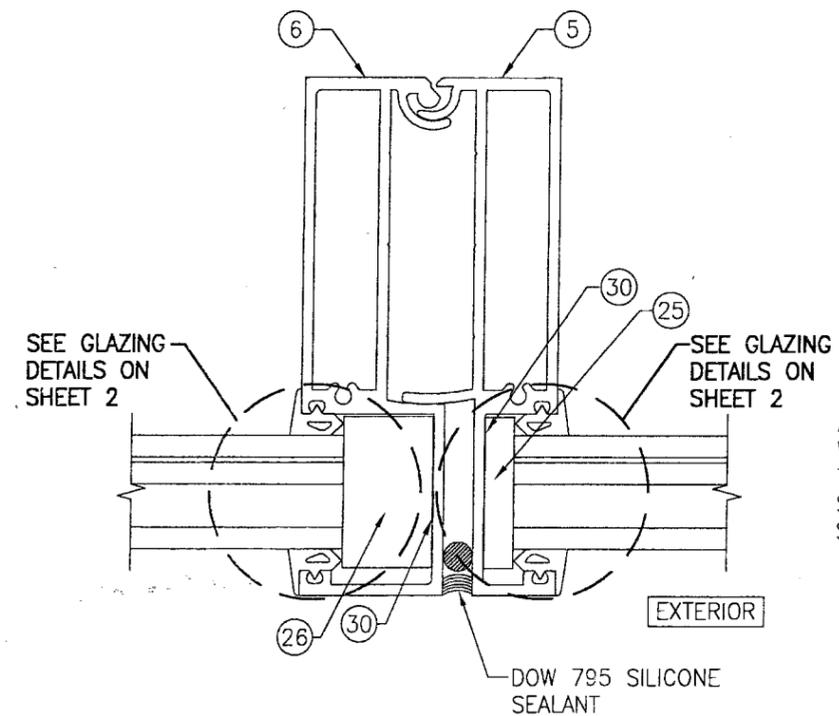
SECTION A  
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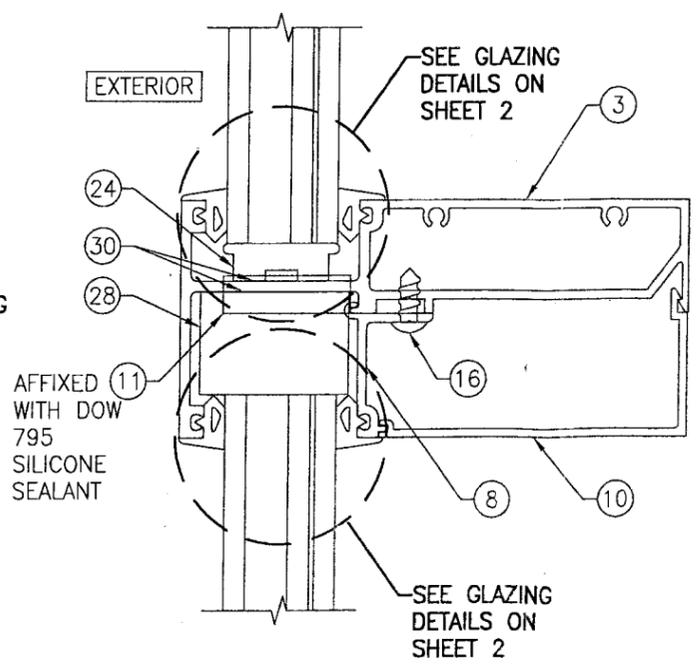
SECTION B  
SCALE: 1/2 FULL



SECTION C  
SCALE: 1/2 FULL



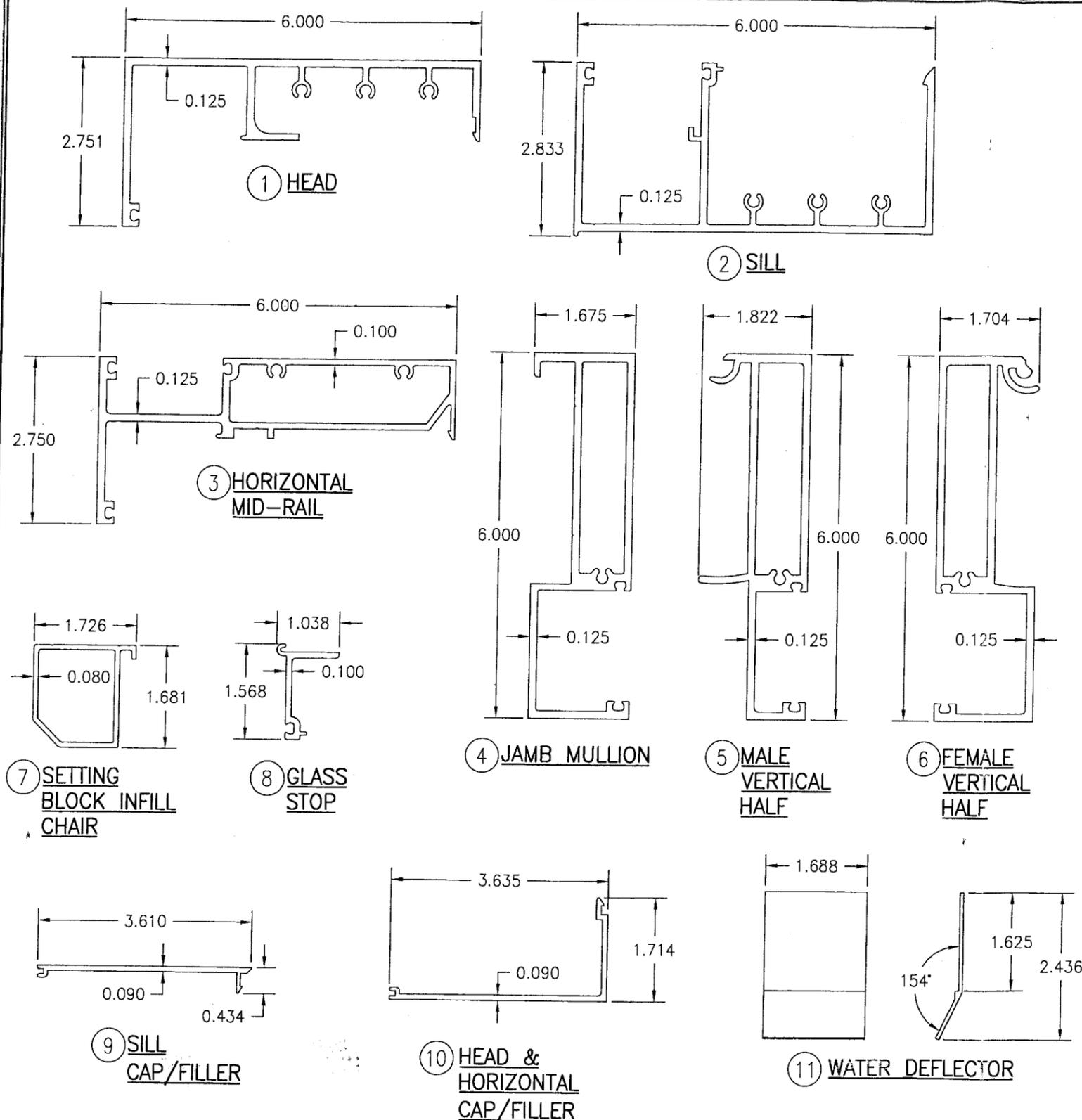
SECTION D  
SCALE: 1/2 FULL



SECTION E  
SCALE: 1/2 FULL

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1-2		DATE: 11/02/05	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: IR 631 - SMALL MISSILE IMPACT STORE FRONT SYSTEM			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		MANUFACTURER: KAWNEER COMPANY, INC.	
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903		555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
CERTIFICATION: APR 16 2008 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1458		REV. A	
SHEET NO. 3 OF 4			

PRODUCT REVISED  
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Miami/Dade Product Control  
Division



ITEM #	PART #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS			
1	831-492	HEAD RAIL	6063-T6 ALUMINUM
2	831-496	SILL RAIL	6063-T6 ALUMINUM
3	831-495	HORIZONTAL MID-RAIL	6063-T6 ALUMINUM
4	831-499	JAMB MULLION	6063-T6 ALUMINUM
5	831-510	MALE VERTICAL HALF	6063-T6 ALUMINUM
6	831-511	FEMALE VERTICAL HALF	6063-T6 ALUMINUM
7	831-498	SETTING BLOCK INFILL CHAIR	6063-T6 ALUMINUM
8	831-493	GLASS STOP	6063-T6 ALUMINUM
9	831-497	SILL CAP/FILLER	6063-T6 ALUMINUM
10	831-494	HEAD & HORIZONTAL CAP/FILLER	6063-T6 ALUMINUM
11	831-656	WATER DEFLECTOR	6063-T6 ALUMINUM
12	-	1/4" X 1 1/4" SCH. 80 PIPE SLEEVE	ASTM A53F LOW-CARBON STEEL
13	-	3/8" X 1 1/4" SCH. 80 PIPE SLEEVE	ASTM A53F LOW-CARBON STEEL
14	575-038	END CAP	6063-T6 ALUMINUM
MISC. FASTENERS			
16	128-100	1/4" X 5/8" SELF TAPPING SCREW	3" FROM EACH END & ONE (1) AT MID-SPAN
SEALS AND SEALANTS			
21	027-850	FIXED GASKET	TREMCO; SHORE "A" 60 DUROMETER EPDM
22	027-851	WEDGE GASKET (DRY GLAZING ONLY)	TREMCO; SHORE "A" 60 DUROMETER EPDM
23	027-575	WEDGE GASKET (WET GLAZING ONLY)	TREMCO; SHORE "A" 60 DUROMETER EPDM
24	831-552	SETTING BLOCK	KRP; SHORE "A" 85 DUROMETER EPDM
25	831-542	SIDE BLOCK; SHALLOW POCKET	KRP; SHORE "A" 85 DUROMETER EPDM
26	831-709	SIDE BLOCK; DEEP POCKET	KRP; SHORE "A" 85 DUROMETER EPDM
27	831-659	"W" BLOCK; HEAD	KRP; SHORE "A" 85 DUROMETER EPDM
28	123-391	"W" BLOCK; HORIZONTAL	KRP; SHORE "A" 85 DUROMETER EPDM
29	831-657	"W" BLOCK; JAMB	KRP; SHORE "A" 85 DUROMETER EPDM
30	027-895	DOUBLE SIDED TAPE	3M; ACRYLIC FOAM

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
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NO.	
DRAWING TITLE <b>IR 631 - SMALL MISSILE IMPACT STORE FRONT SYSTEM</b>	
MANUFACTURER <b>KAWNEER COMPANY, INC.</b> 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A.</b> 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
DRAWING NO. 1458 REV. A SHEET NO. 4 OF 4	

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Acceptance No 08-0425.05  
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By *Manuel Diaz*  
Miami Dade Product Control  
Division

CERTIFICATION  
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