



**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) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**Gamma U.S.A., Inc.
15407 West Dixie Highway
North Miami Beach, FL 33162**

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 60 Aluminum Window Wall System – S.M.I.

APPROVAL DOCUMENT: Drawing No. **T-60**, titled "Test # 60 Window Wall System 51" x 144" +110/-160 PSF Small Impact Elevation", sheets 1 through 8 of 8, dated 10/31/02 with revision "5" dated 02/07/05, prepared by Structural Design, Inc., signed and sealed by Farrokh Rasekhi, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Small Missile Impact

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 consists of this page 1 and evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Herminio F. Gonzalez, P.E., Director, BCCO**



mx
3/25/2005

**NOA No 04-1220.04
Expiration Date: April 14, 2010
Approval Date: April 14, 2005
Page 1**

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **T-60**, titled "Test # 60 Window Wall 51" x 144" +110/-160 Small Impact Elevation", sheets 1 through 8 of 8, dated 10/31/02 with revision "5" dated 02/07/05, prepared by Structural Design, Inc., signed and sealed by Farrokh Rasekhi, 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 202-94
 - 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 203-94along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-3717**, dated 02/04/03, signed and sealed by Edmundo Largaespada, P.E.

C. CALCULATIONS

1. Anchor Calculations, ASTM-E1300, and structural analysis, prepared Structural Design, Inc., dated 02/08/04, signed and sealed by Farrokh Rasekhi, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **00-1212.04** issued to E.I. DuPont DeNemours for "Dupont Butacite ® PVB", dated 02/15/01, expiring on 12/12/05.
2. Notice of Acceptance No. **01-0205.02** issued to Solutia Inc. for "Saflex/Keepsafe Maximum", dated 05/17/01, expiring on 05/21/06.

F. STATEMENTS

1. Statement letter of conformance and no financial interest, dated 12/14/04, signed by Farrokh Rasekhi, P.E.

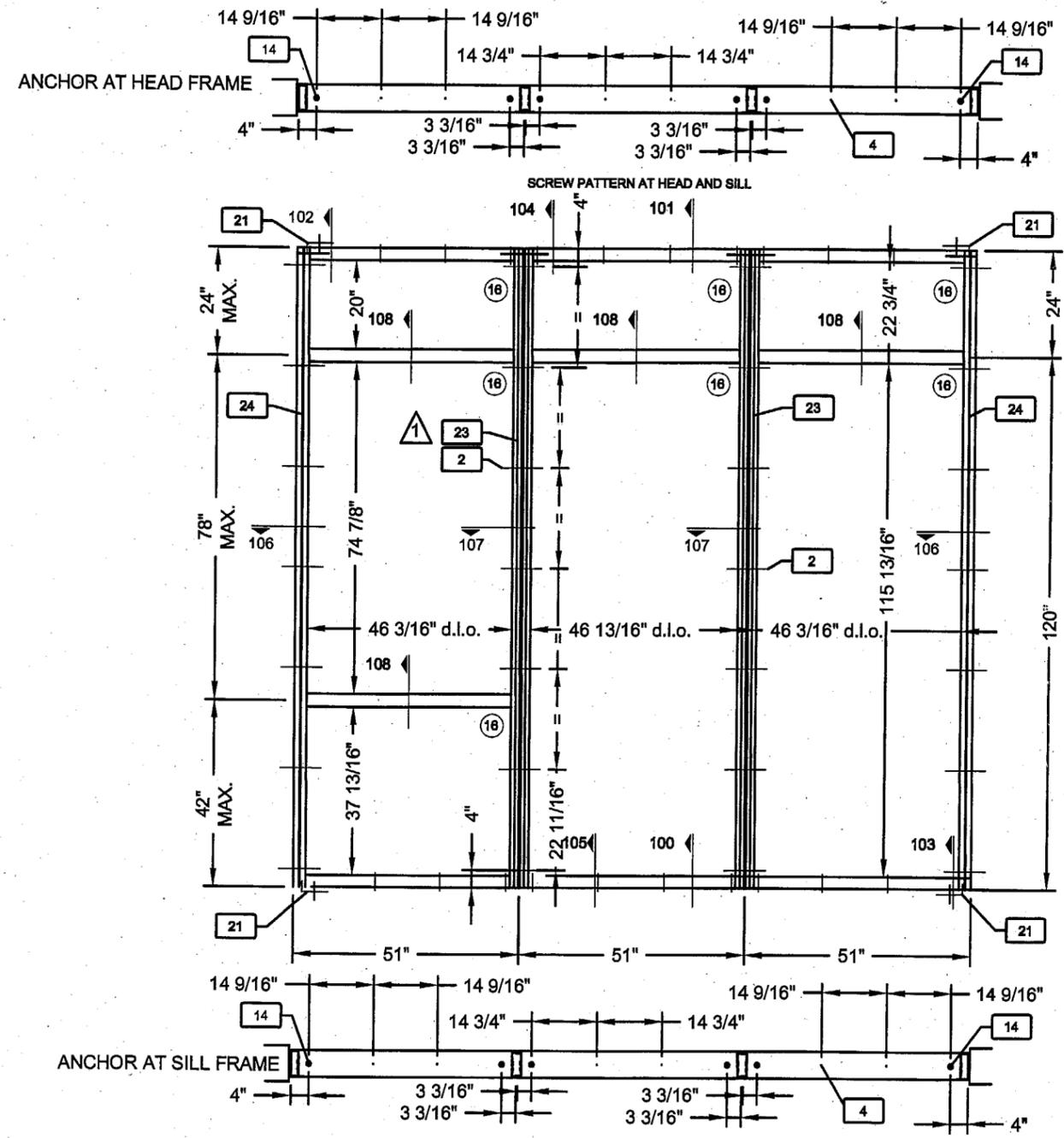
G. OTHER

1. Letter from the consultant stating that the product is in compliance with the Florida Building Code (Code).

for 

Herminio F. Gonzalez, P.E.
Director, Building Code Compliance Office
NOA No 04-1220.04
Expiration Date: April 14, 2010
Approval Date: April 14, 2005

Approved as complying with the
 Florida Building Code
 Date 04/14/05
 NOA# 04-1720-04
 Miami-Dade Product Control
 Division
 By M. Shank



Typical Elevation
 Exterior View

GENERAL NOTES

- (16) -GLASS TYPE: 9/16" LAMINATED GLASS
 1/4" TEMPERED GLASS
 0.060 SAFLEX/KEEPSAFE PVB BY SOLUTIA
 1/4" TEMPERED GLASS, LAMINATED BY PRELCO
 OR
 -GLASS TYPE: 9/16" LAMINATED GLASS
 1/4" TEMPERED GLASS
 0.060 BUTACITE P.V.B. BY DUPONT
 1/4" TEMPERED GLASS, LAMINATED BY PRELCO
- MAXIMUM GLASS DIMENSION 48 5/16" X 117 5/16"
- ALL ALUMINIUM IS 6063 T6

SHUTTER REQUIREMENTS:
 1- INSTALLATION OF THIS UNIT ABOVE
 30 FT ABOVE GRADE WILL NOT
 REQUIRE SHUTTERS
 2- MIAMI DADE COUNTY APPROVED
 SHUTTERS WILL BE REQUIRED FOR
 BELOW 30 FT ABOVE THE GRADE

- NOTES:
- 1- 3/8" MAX SHIM SPACE (PER CALC 'S)
 - 2- REFER TO BILL OF MATERIEL
 FOR COMPLETE DESCRIPTION
 - 3- CONCRETE APPLICATION
 3000 PSI MIN.

SMALL IMPACT TEST
 - DESIGN PRESSURE + 110 psf
 - DESIGN PRESSURE - 160 psf

- 2 HEX #14 STS SCREW 1" LONG
- 4 5/16" HH TAPCON SCREW
- 14 Ø1/2" KWIK BOLT II
- 27 5/16" FH TAPCON SCREW

REVISIONS:	BY:
R3 07/03/2003	M.G.
R4 05/04/2004	D.L.
R5 02/07/2005	A.B.

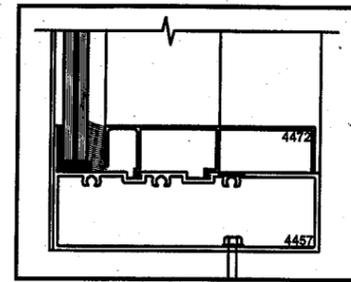
Farrokh Rasekhi
 2/7/05
Farrokh Rasekhi, P.E.
 Consulting Struct. Engineer
 Structural Design, Inc.
 FL. Registration #38001

MANUFACTURER:
Gamma
 Gamma Industrie Inc.
 15407 West Dixie Highway
 North Miami Beach, FL 33162
 Phone: (305) 957-7004 Fax: (305) 957-7008
 Web site: www.gamma-online.com
 Email: tech@gamma-online.com

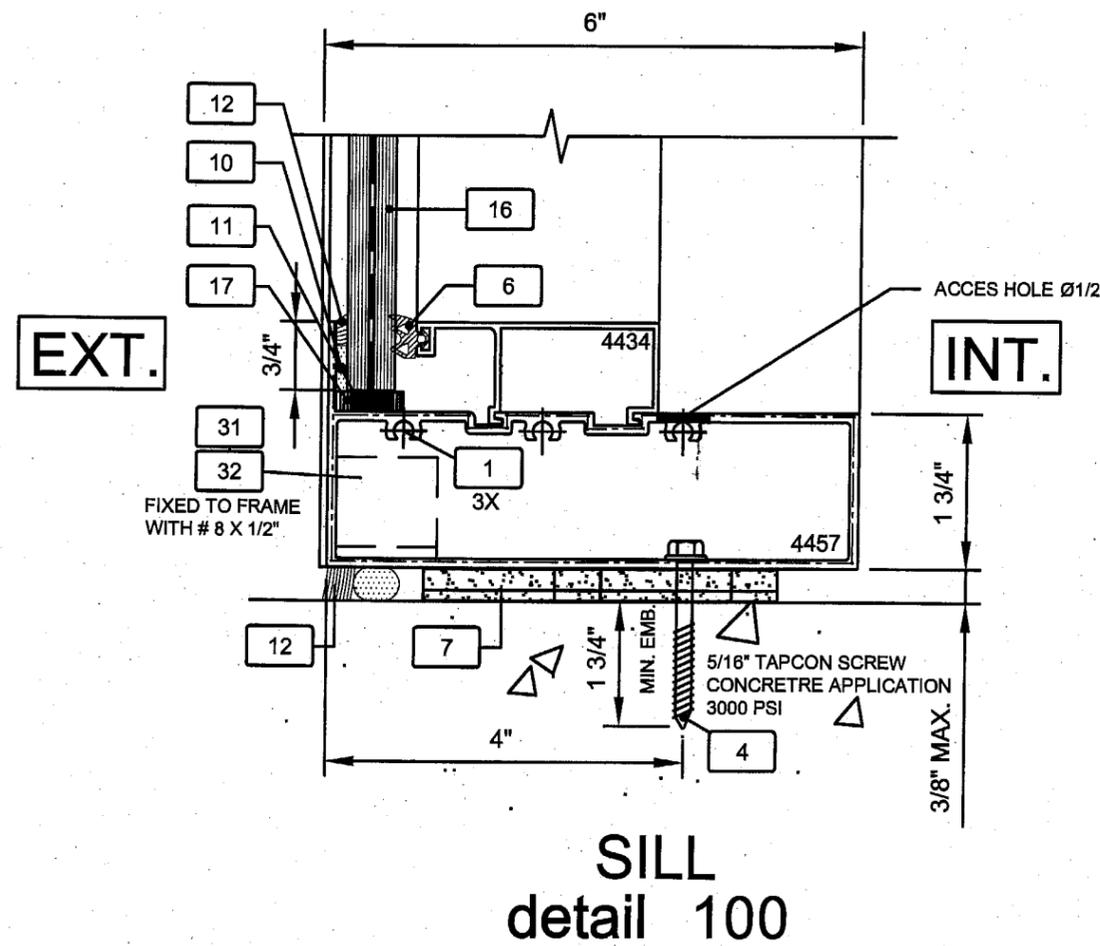
TITLE:
TEST # 60
WINDOW WALL
51" x 144"
+110/-160 PSF
SMALL IMPACT
ELEVATION

SCALE: N.T.S.	DRAWN BY: M. GRENIER	
DATE: 10/31/2002	DRAWING NO. T-60	SHEET NO. 1 OF 8

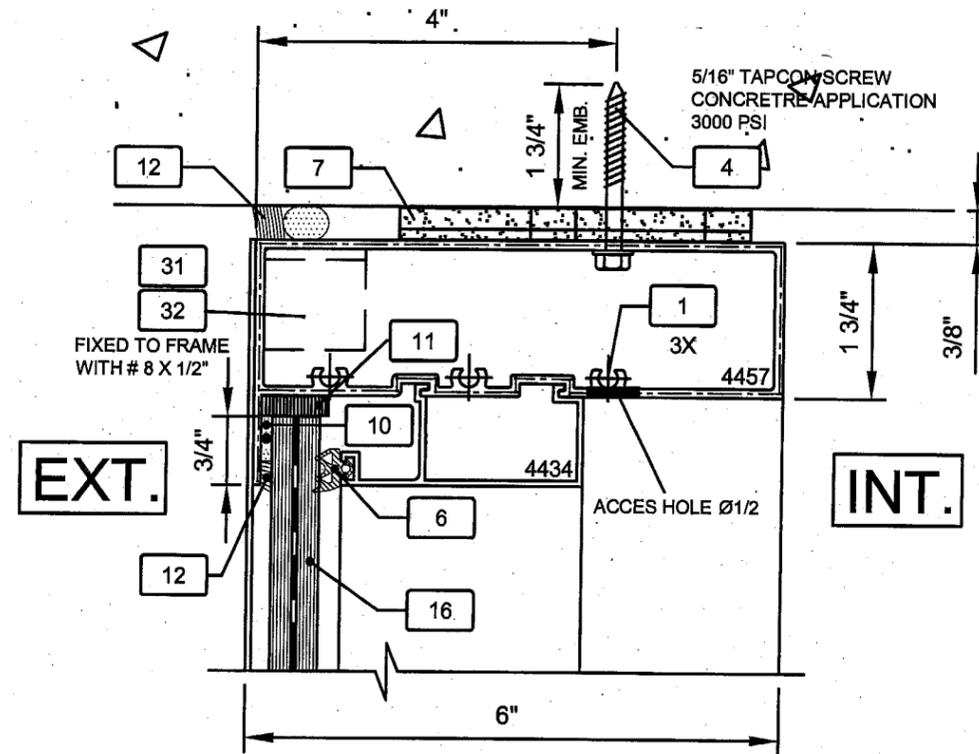
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ALTERNATE SNAP-ON



**SILL
detail 100**



**HEAD
detail 101**

FRAME CORNER AND HORIZONTAL MULLION SEAMS
SEALED WITH CLEAR COLORED GUTTER SEAL

Approved as complying with the
Florida Building Code
Date 04/14/05
NOA# 04-1220-04
Miami-Dade Product Control
Division
By M. Thakur

REVISIONS:	BY:
R3 07/03/2003	M.G.
R4 05/04/2004	D.L.
R5 02/07/2005	A.B.

Farrokh Rasekhi
2/7/05
Farrokh Rasekhi, P.E.
Consulting Struct. Engineer
Structural Design, Inc.
FL. Registration #38001

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Email: tech@gamma-online.com

TITLE:
TEST # 60
WINDOW WALL
51" x 144"
+110/-160 PSF
SMALL IMPACT
DETAILS 100 & 101

SCALE: 6" = 1'-0"	DRAWN BY: M. GRENIER	
DATE: 10/31/2002	DRAWING NO. T-60	SHEET NO. 2 OF 8

License BRN 1510049727

Approved as complying with the
 Florida Building Code
 Date: 04/14/05
 NOAB 04-1270.04
 Miami-Dade Product Control
 Division
 By: M. Hall

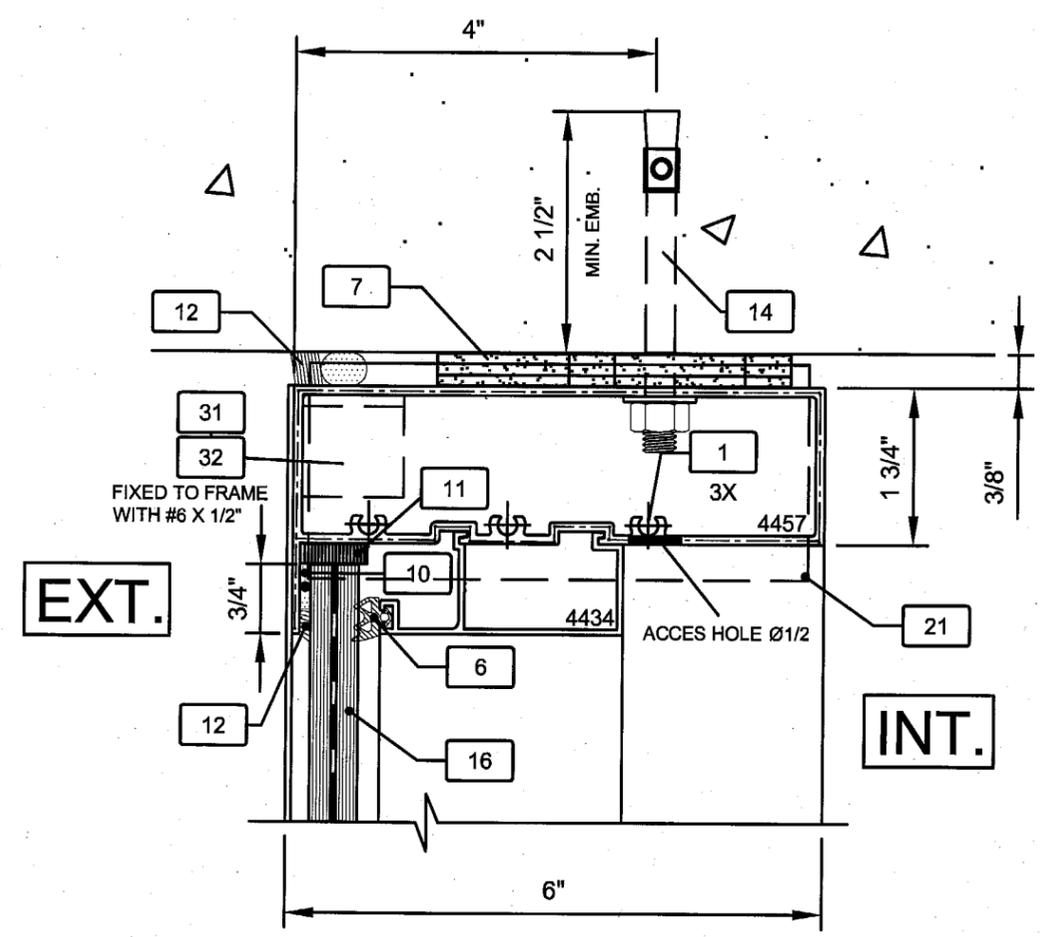
REVISIONS:	BY:
R3 07/03/2003	M.G.
R4 05/04/2004	D.L.
R5 02/07/2005	A.B.

Farrokh Rasekhi
 2/7/05
 Farrokh Rasekhi, P.E.
 Consulting Struct. Engineer
 Structural Design, Inc.
 FL Registration #38001

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 Web site: www.gamma-online.com
 Email: tech@gamma-online.com

TITLE:
 TEST # 60
 WINDOW WALL
 51" x 144"
 +110/-160 PSF
 SMALL IMPACT
 DETAILS 102 & 103

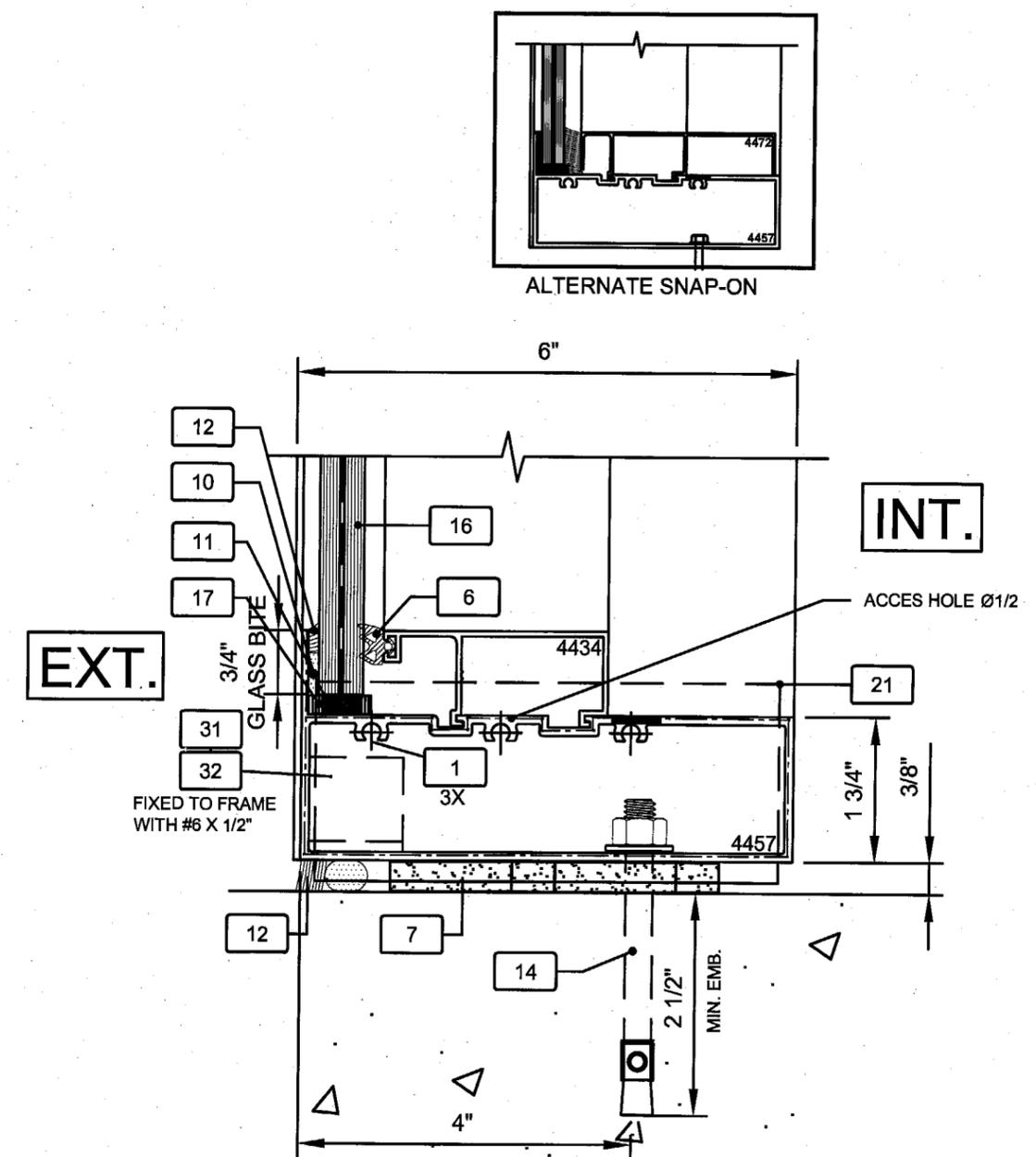
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DATE: 10/31/2002	DRAWING NO. T-60	SHEET NO. 3 OF 8



detail 102

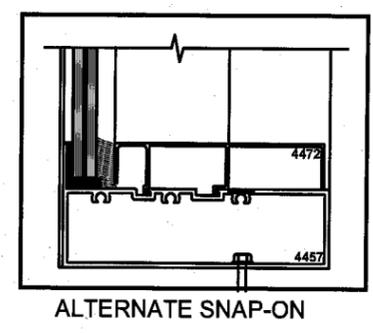
CORNER JAMB
 WITH Ø1/2" HILTI KWIK BOLT II

FRAME CORNER AND HORIZONTAL MULLION SEAMS
 SEALED WITH CLEAR COLORED GUTTER SEAL



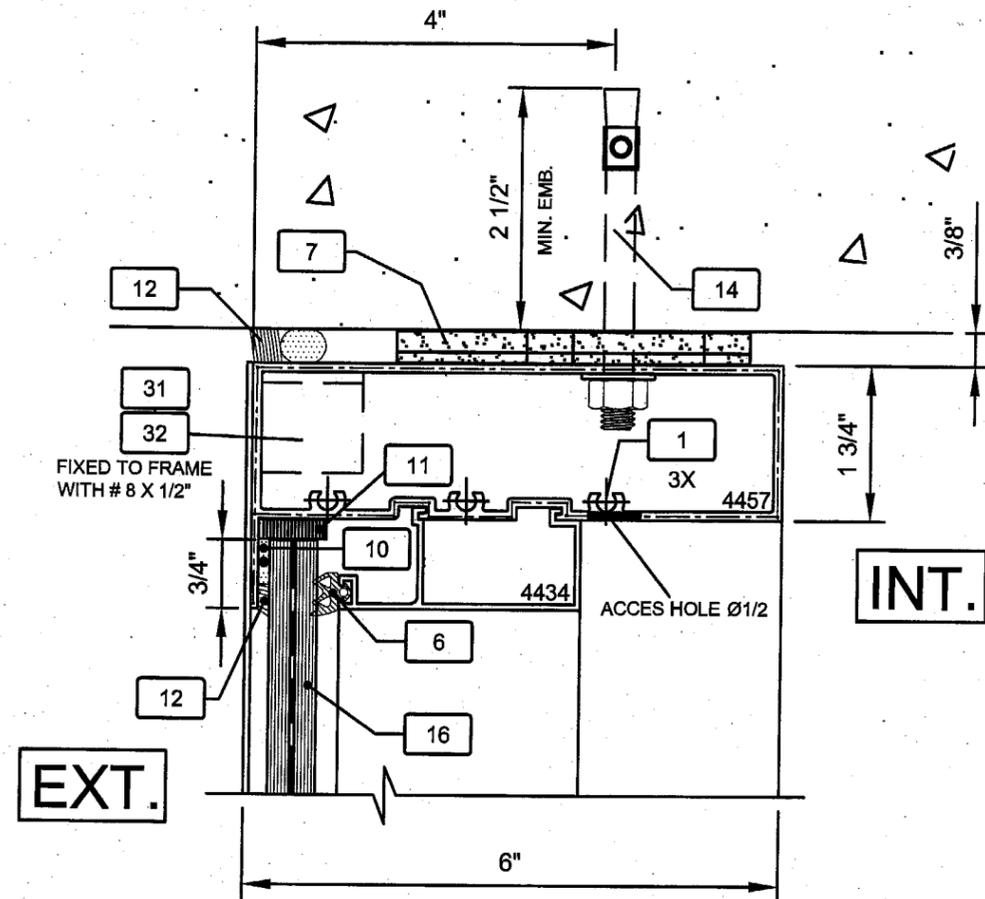
SILL detail 103

SILL AT CORNER JAMB
 WITH Ø1/2" HILTI KWIK BOLT II



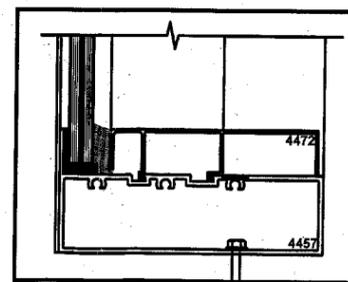
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Approved as complying with the
 Florida Building Code
 Date 04/14/05
 NOAS 04-1320.04
 Miami Dade Product Control
 Division
 By M. Khan

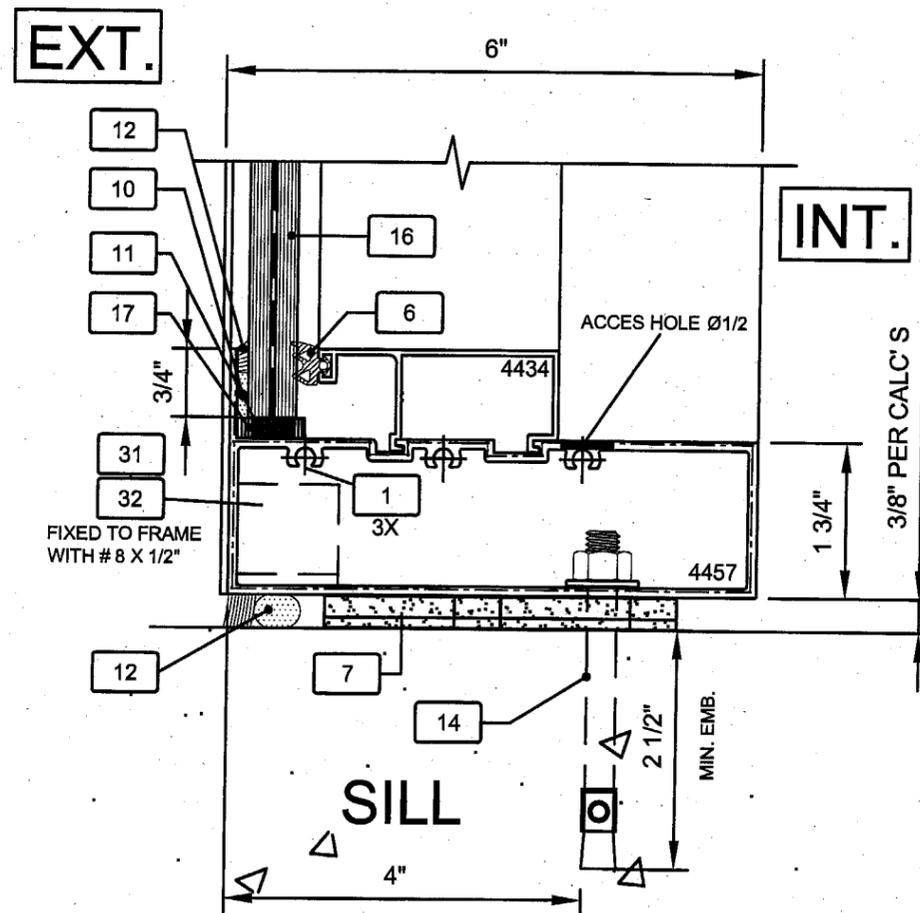


detail 104
 WITH Ø1/2" HILTI KWIK BOLT II

FRAME CORNER AND HORIZONTAL MULLION SEAMS
 SEALED WITH CLEAR COLORED GUTTER SEAL



ALTERNATE SNAP-ON



detail 105
 SILL WITH Ø1/2" HILTI KWIK BOLT II

REVISIONS:	BY:
R3 07/03/2003	M.G.
R4 05/04/2004	D.L.
R5 02/07/2005	A.B.

Farrokh Rasekhi
 2/7/05
Farrokh Rasekhi, P.E.
 Consulting Struct. Engineer
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 FL. Registration #38001

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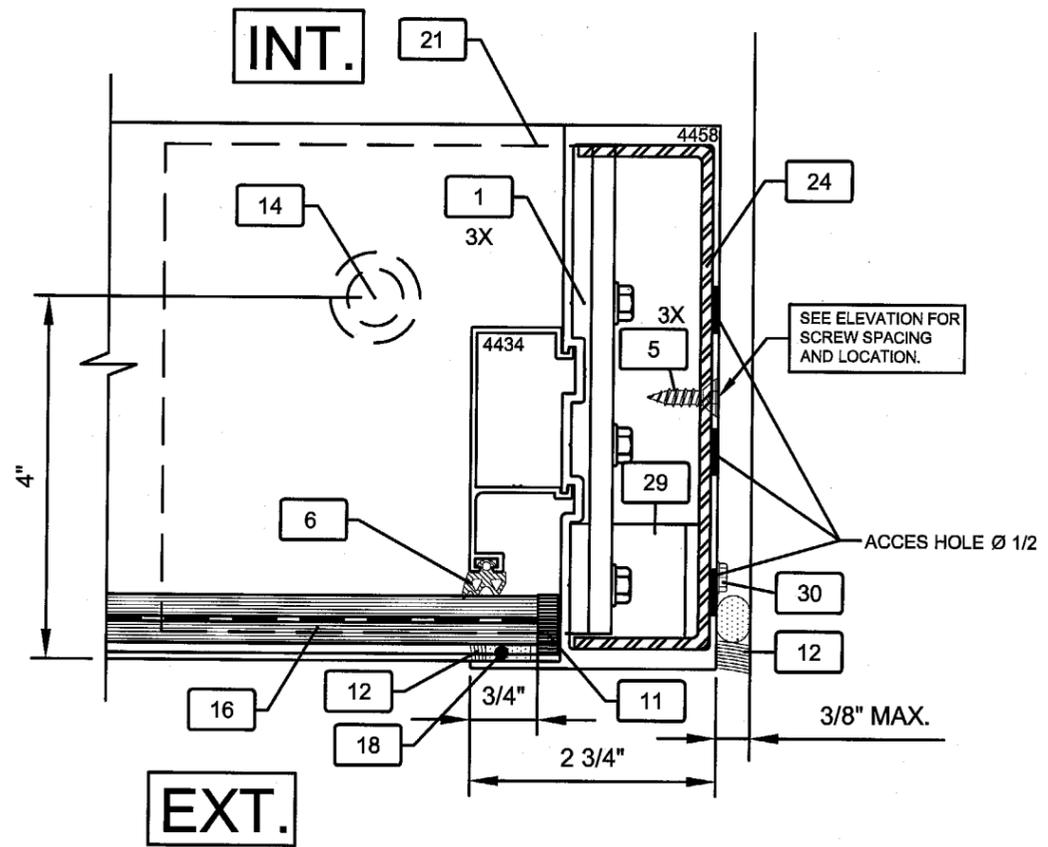
TITLE:
TEST # 60
WINDOW WALL
51" x 144"
+110/-160 PSF
SMALL IMPACT
DETAILS 104 & 105

SCALE:	DRAWN BY:	
6" = 1'-0"	M. GRENIER	
DATE:	DRAWING NO.	SHEET NO.
10/31/2002	T-60	4 OF 8

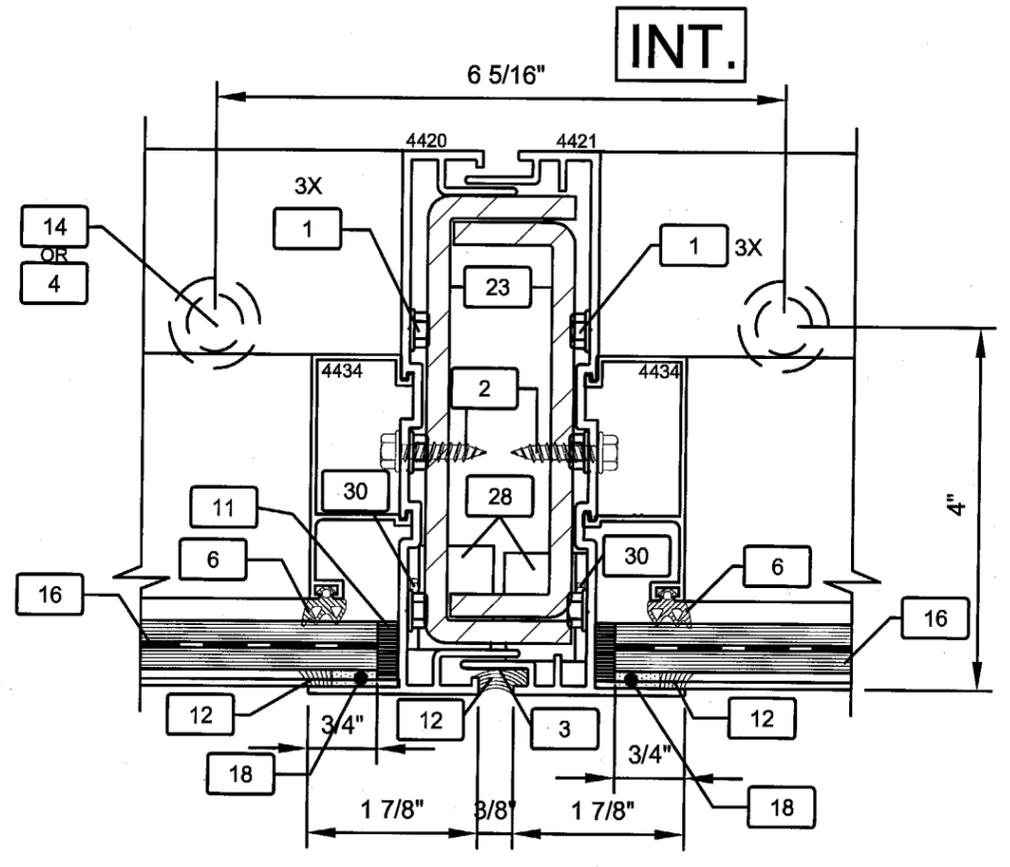
License BRN 1450-5077-22

Approved as complying with the
 Florida Building Code
 Date 04/14/05
 NOAH 04-1220.04
 Miami-Dade Product Control
 Division
 By M. Hall

REVISIONS:	BY:
R3 07/03/2003	M.G.
R4 05/04/2004	D.L.



detail 106
 JAMB CORNER



detail 107
 VERTICAL MULLION

Farrokh Rasekhi
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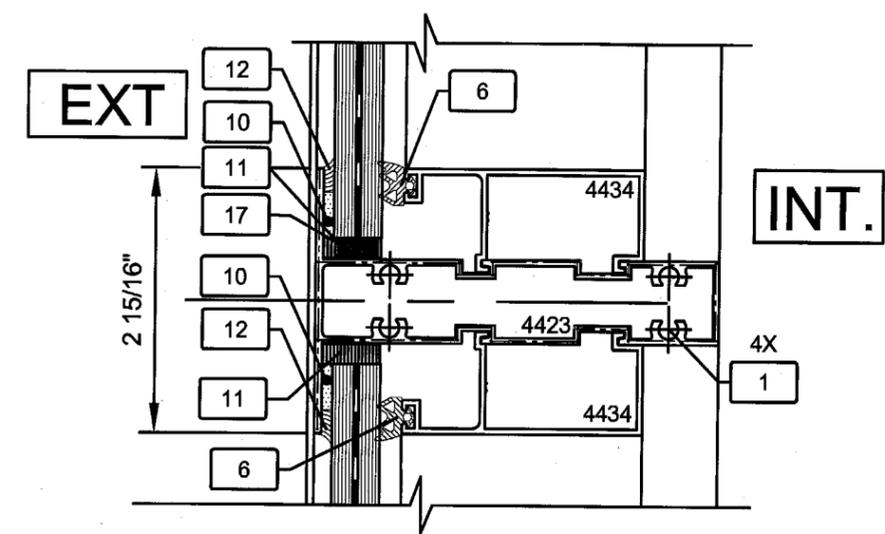
TITLE:
TEST # 60
WINDOW WALL
51" x 144"
+110/-160 PSF
SMALL IMPACT
DETAILS 106 & 107

SCALE: 6" = 1'-0"	DRAWN BY: M. GRENIER	
DATE: 10/31/2002	DRAWING NO. T-60	SHEET NO. 5 OF 8

Gamma RFD 1160007.02

Florida Building Code
 Date 04/14/05
 NOAH 04-1220.04
 Miami-Dade Product Control
 Division
 By M. Grenier

REVISIONS:	BY:
R3 07/03/2003	M.G.
R4 05/04/2004	D.L.
R5 02/07/2005	A.B.



detail 108
 horizontal mullion

FRAME CORNER AND HORIZONTAL MULLION SEAMS
 SEALED WITH CLEAR COLORED GUTTER SEAL

Farrokh Rasekhi
 2/7/05
 Farrokh Rasekhi, P.E.
 Consulting Struct. Engineer
 Structural Design, Inc.
 FL. Registration #38001

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 Web site: www.gamma-online.com
 Email: tech@gamma-online.com

TITLE:
 TEST # 60
 WINDOW WALL
 51" x 144"
 +110/-160 PSF
 SMALL IMPACT
 DETAILS 108 & 109

SCALE: 6" = 1'-0"	DRAWN BY: M. GRENIER	
DATE: 10/31/2002	DRAWING NO. T-60	SHEET NO. 6 OF 8

Gamma RIN 1160-007-07

Approved by
 Florida Building Code
 Date: 04/14/05
 NOAS 04-1220.04
 Miami-Dade Product Control
 Division
 By: M. H. H.

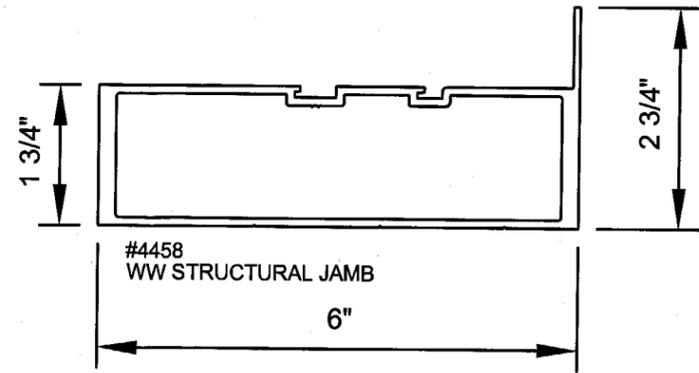
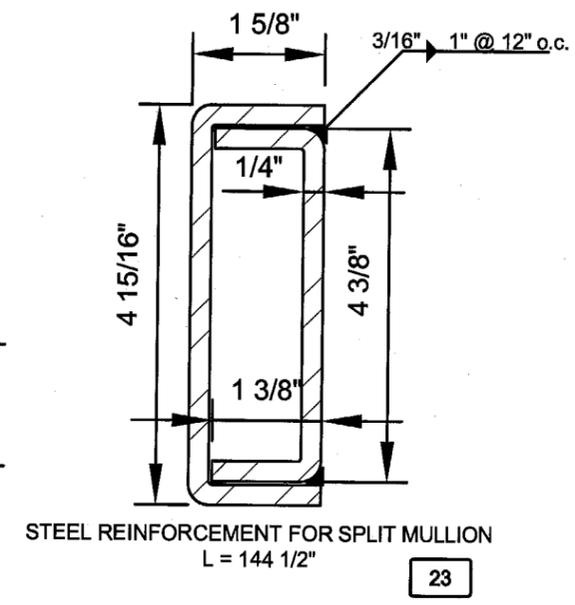
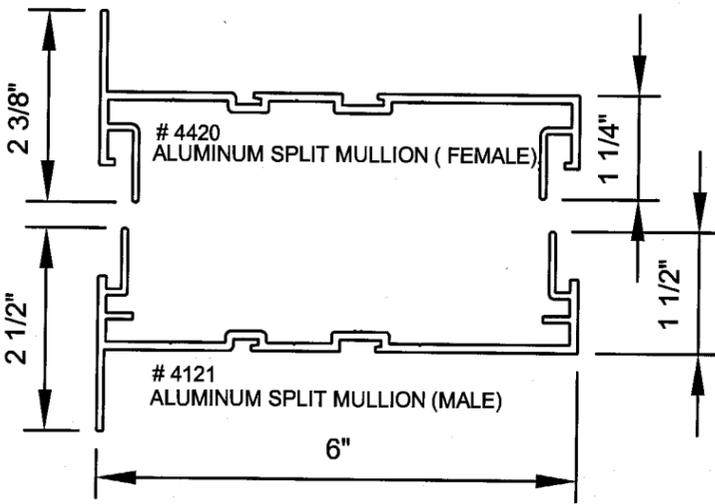
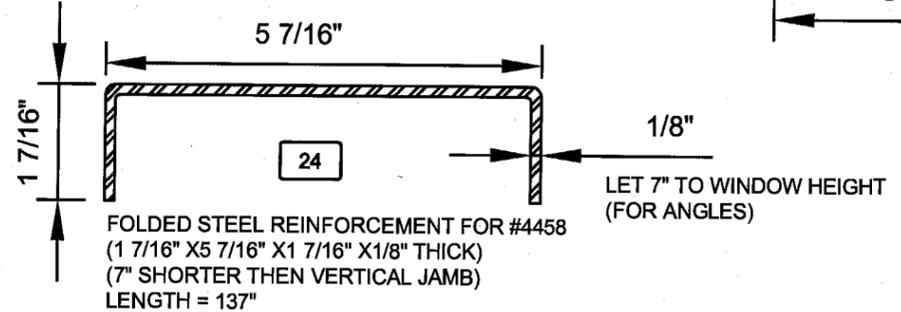
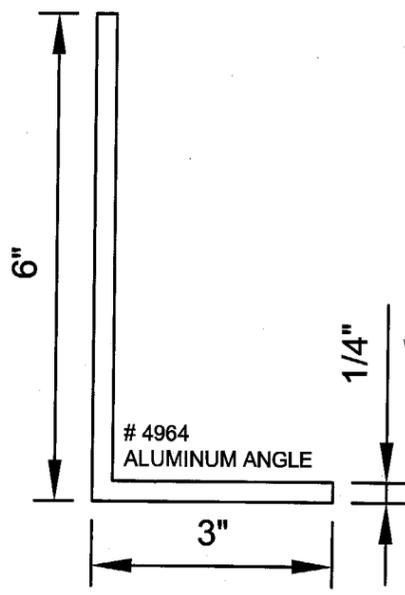
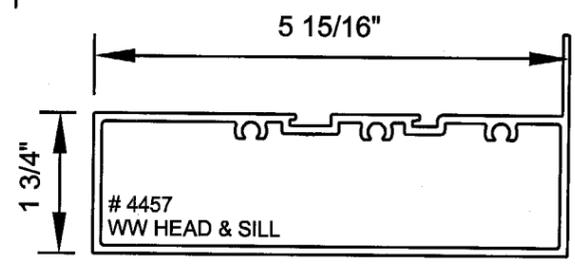
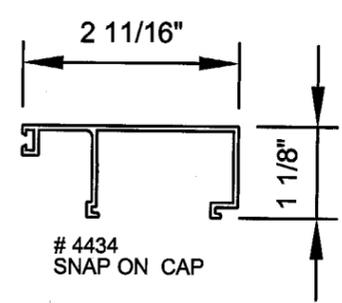
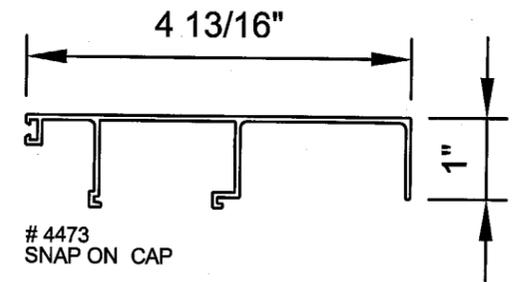
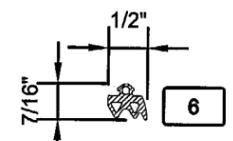
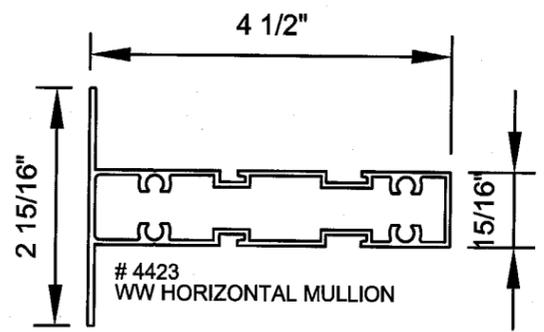
REVISIONS:	BY:
R3 07/03/2003	M.G.
R4 05/04/2004	D.L.
R5 02/07/2005	A.B.

Farrokh Rasekhi
 2/7/05
Farrokh Rasekhi, P.E.
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TITLE:
TEST # 60
WINDOW WALL
51" x 144"
+110/-160 PSF
SMALL IMPACT
EXTRUSION'S DRAWINGS

SCALE:	DRAWN BY:	
N.T.S.	M. GRENIER	
DATE:	DRAWING NO.	SHEET NO.
10/31/2002	T-60	7 OF 8



DESCRIPTION

1	#14 X 1-1/2" HH SST SCREW 3X AT TOP & BOTTOM & 4 FOR HORIZONTAL MULLION
2	#14 X 1" H.H. STS SCREW 1" LONG. (SEE ELEVATION) AT SPLIT MULLION
3	BOND BREAKER TAPE
4	5/16" ELCO TAPCON SCREW HEX 1-3/4" MIN EMBEDMENT
5	#14 X 1" FH SST SCREW AT JAMB ELEVATION
6	EPDM GASKET #3054
7	PVC "U" SHIM (3/8" MAX.)
10	POLYSHIM 1/8"
11	EPDM GASKET #3054
12	SILICONE SEALANT SPECTREM I or II
14	1/2" DIA. HILTI KWIK BOLT II (2 1/2" MINIMUM EMBEDMENT)
16	9/16" LAMINATED GLASS: 1/4" TEMPERED GLASS + .060 INTERLAYER (SOLUTIA OR DUPONT + 1/4" TEMPERED GLASS, LAMINATED BY PRELCO / SEE PAGE 1 of 8 FOR EXACT DESCRIPTION
17	1/4 X 1/2 X 3 NEOPRENE SITTING BLOCK AT L/4,2 AT SILL OF EACH GLASS INFILL
18	POLYSHIM 3/16"
21	ALUMINIUM ANGLE 3" X 6" X 1/4" THICK X 5 1/2" LONG #4964
23	FOLDED STEEL REINFORCEMENT (1 1/2" X 4 15/16" X 1 1/2" X 1/4") + FOLDED STEEL REINFORCEMENT (1 3/8" X 4 5/8" X 1 3/8" X 1/4" SEE DETAIL IN SHEET 7/8) WELDED TOGETHER
24	FOLDED STEEL REINFORCEMENT (SEE SHEET 7/8) (1 7/16" X 5 7/16" X 1 7/16" X 1/8")
28	ALUMINIUM BACKER ANGLE
29	ALUMINIUM BACKER ANGLE 1 1/16" X 3/4" X 1 1/16" X 1/16" THICK X 1"
30	# 8 X 1/2 HH SS SCREW (1 X FOR EACH BACKER ANGLE)
31	ALU. BACKER ANGLE 1 1/2" X 1 1/8" X 1 1/8" X 1/16"
32	ALU. BACKER ANGLE 15/16" X 3/4" X 3/4" X 1/16"

EXTRUSION LIST (ALL EXTRUSIONS ARE AL 6063-T6)	
#4420	ALUMINIUM SPLIT MULLION (FEMALE) (Die #945585)
#4421	ALUMINIUM SPLIT MULLION (MALE) (Die #945586)
#4423	W.W. HORIZONTAL MULLION (GAM 40)
#4434	SNAP ON CAP GAM 34 Or #4472 SNAP ON CAP
#4457	W.W. HEAD & SILL (GAM 74)
#4458	W.W. STRUCTURAL JAMB (GAM 73)

Approved as complying with the
Florida Building Code
Date 04/14/05
NOA# 04-1220-04
Miami Dade Product Control
Division
By [Signature]

REVISIONS:	BY:
R3 07/03/2003	M.G.
R4 05/04/2004	D.L.
R5 02/07/2005	A.B.

[Signature]
2/7/05

Farrokh Rasekhi, P.E.
Consulting Struct. Engineer
Structural Design, Inc.
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Gamma

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Email: tech@gamma-online.com

TITLE:

TEST # 60
WINDOW WALL
51" x 144"
+110/-160 PSF
SMALL IMPACT
BILL OF MATERIAL

SCALE:	DRAWN BY:	
N.T.S.	M. GRENIER	
DATE:	DRAWING NO.	SHEET NO.
10/31/2002	T-60	8 OF 8