



**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)

www.buldingcodeonline.com

**Gamma U.S.A. Inc.
2115 SW 2nd Street
Pompano Beach, FL 33069**

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 97 Inswing Aluminum Casement Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **T-97**, titled “Test # 97 Casement Window 104-1/4” x 84” +110/-130 PSF – Large Impact”, sheets 1 through 5 of 5, dated 02/18/08 with revision R5 dated 06/16/08, prepared by manufacturer, 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: Large and Small Missile Impact Resistant

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 **Manuel Perez, P.E.**



**NOA No. 08-0303.07
Expiration Date: July 24, 2013
Approval Date: July 24, 2008
Page 1**

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **T-97**, Sheets 1 through 5 of 5, titled "Test # 97 Casement Window 104-1/4" x 84" +110/-130 PSF – Large Impact", dated 02/18/08 with revision R5 dated 06/16/08, prepared by manufacturer, 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 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94along with marked-up drawings and installation diagram of two inswing series 97 aluminum casement windows mullied together, prepared by Fenestration Testing Laboratory Inc., Test Report No. **FTL-5454**, dated 01/25/08, signed and sealed by Carlos S. Rionda, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2004, prepared by Structural Design, Inc, dated 02/19/08, signed and sealed by Farrokh Rasekhi, P.E.
Complies with ASTM E1300-02

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

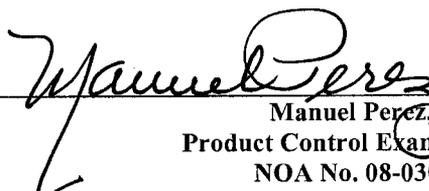
1. Notice of Acceptance No. **07-1116.04** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont SentryGlas ® Plus**" dated 01/03/08, expiring on 01/14/12..

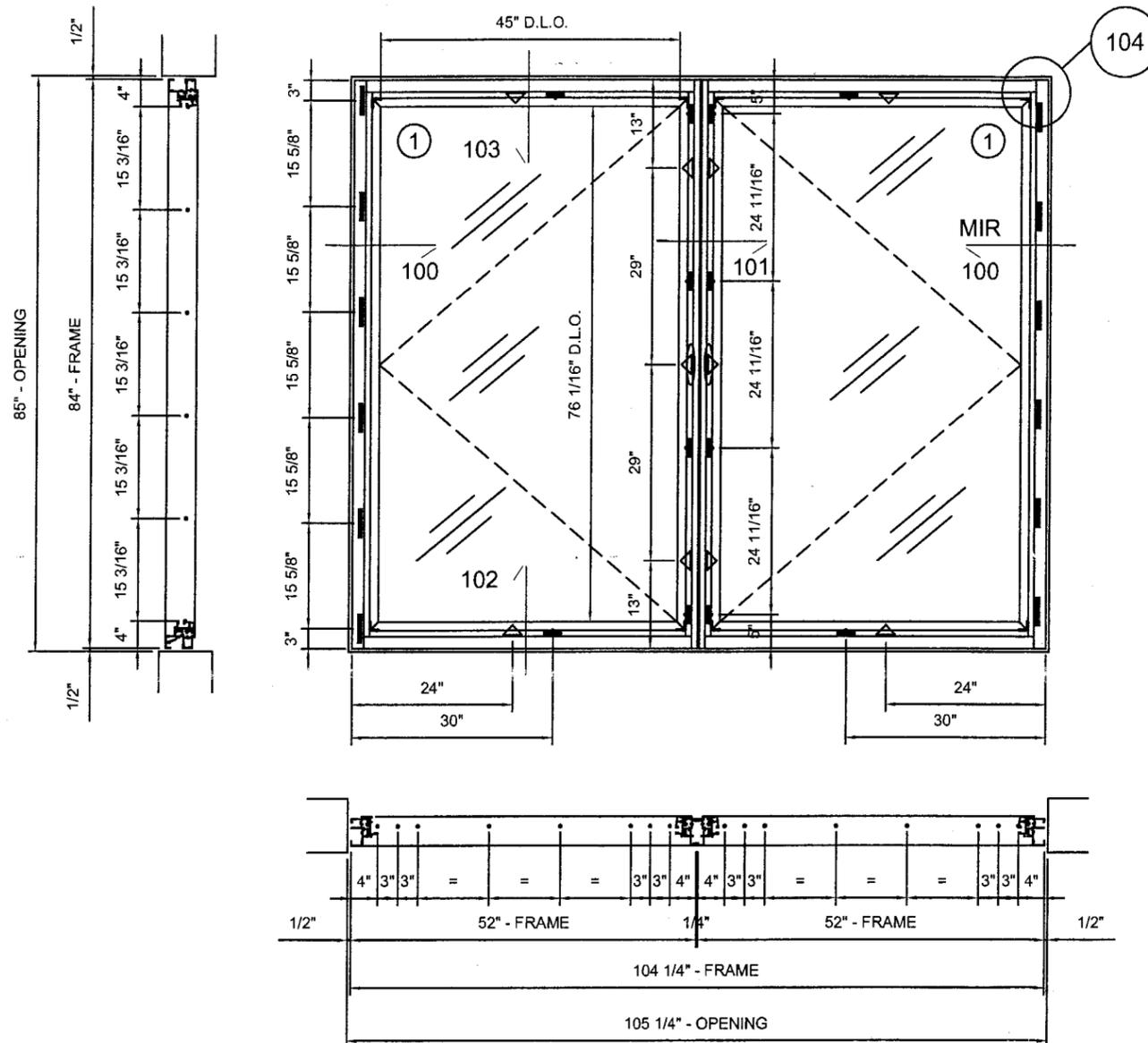
F. STATEMENTS

1. Statement letter of conformance, dated February 18, 2008, signed and sealed by Farrokh Rasekhi, P.E.
2. Statement letter of no financial interest, dated June 5, 2007, signed and sealed by Farrokh Rasekhi, P.E.
3. Laboratory compliance letter for Test Report no. **FTL- 5454**, issued by Fenestration Testing Laboratory, Inc., dated 02/05/08, signed and sealed by Carlos S. Rionda, P.E.

G. OTHER

1. None.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 08-0303.07
Expiration Date: July 24, 2013
Approval Date: July 24, 2008



GENERAL NOTES

- ① -GLASS TYPE: 9/16" LAMINATED GLASS
1/4" CLEAR HEAT STRENGTHENED GLASS
0.100" SENTRY GLASS PLUS
1/4" CLEAR HEAT STRENGTHENED GLASS
- MAXIMUM GLASS DIMENSION 46 1/2" x 77 9/16"
- ALL ALUMINUM IS 6063 T6
- GLAZING PENETRATION: 3/4"
- 1/2" MAX. SHIM SPACE
- CONCRETE APPLICATION (3000 PSI MIN.)
- FRAME CORNERS SEAMS SEALED WITH CLEAR SEALANT SPECTREM 2 OR SILPRUF SCS 2000
- REFER TO BILL OF MATERIEL FOR COMPLETE DESCRIPTION

SHUTTER REQUIREMENTS:
1- INSTALLATION OF THIS UNIT ABOVE GRADE WILL NOT REQUIRE SHUTTERS

SEALANT USED FOR TESTING :

- MOCK-UP # 1 : TREMCO PROGLAZE II (A-1)
- MOCK-UP # 2 : TREMCO PROGLAZE II (A-2)
- MOCK-UP # 3 : ULTRAGLAZE SSG 4700 (G.E.) (A-3)

SEALANT TYPE 1 :

- TREMCO PROGLAZE II (A-1 AND A-2)
- ULTRAGLAZE SSG 4700 (G.E.) (A-3)

SEALANT TYPE 2 :

- TREMCO SPECTREM 2 or SILPRUF SCS 2000 (G.E.)

- Ø5/16" FH TAPCON SCREW (TRIMFIT)

HARWARE ITEMS

- △ STRUCTURAL KEEPER, 5 PER WINDOW
- WIND KEEPER, 6 PER WINDOW
- HANDLE, 2 PER WINDOW
- ALUMINIUM HINGE, 6 PER WINDOW

Approved as complying with the Florida Building Code
Date July 24, 2008
NOA# 081-0303.07
Miami Date Product Control
Division
By Manuel Perez

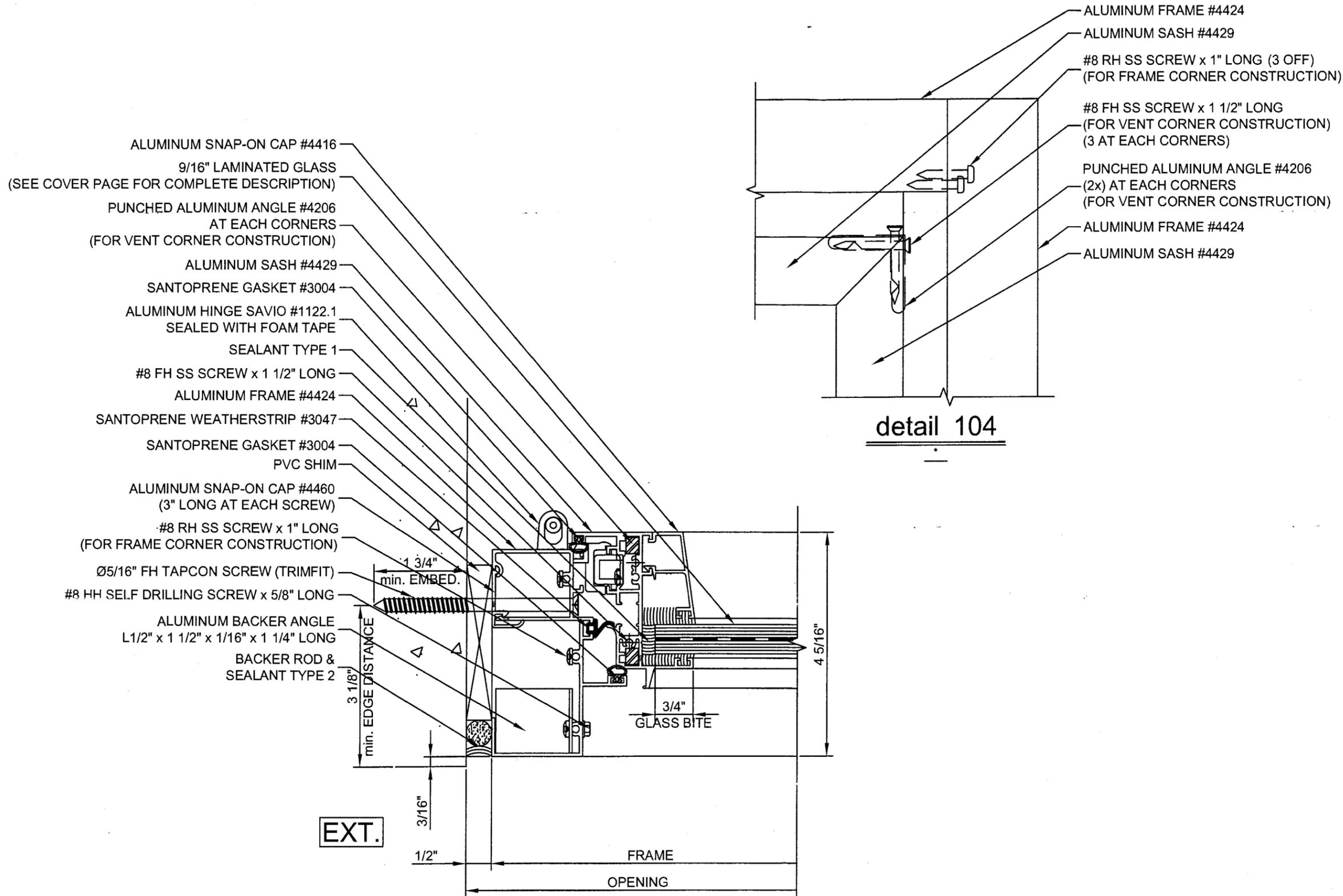
REVISIONS:	BY:
R1 09-19-2007	J.C.
R2 02-18-2008	J.C.
R3 04-21-2008	A.R.
R4 05-29-2008	M.P.
R5 06-16-2008	J.F.L.

STRUCTURAL DESIGN INC.
CONSULTING STRUCTURAL ENGINEERS
995 N. KENDALL DR. SUITE NO. 209
MIAMI, FLORIDA 33176 / CERTIFICATE # 8808
Farrokh Rasekh
6/19/08
TEL: (305) 595-8965 FARROKH RASEKHI, P.E.
FAX: (305) 595-8966 FL. REG. #38001

MANUFACTURER:
Gamma
U.S.A.
2115 S.W. 2nd Street
Pompano Beach, FL 33069
Phone: (954) 977-2711 Fax: (954) 977-2715
Web site: www.gammaindustries.ca
E-mail: info@gamma-online.com

TITLE:
**TEST # 97
CASEMENT WINDOW
104 1/4" x 84"
+110/-130 PSF
LARGE IMPACT
ELEVATION**

SCALE: 1/2" = 1'-0"	DRAWN BY: M. POTVIN	
DATE: 05/29/2007	DRAWING NO. T-97	SHEET NO. 1 of 5



- ALUMINUM SNAP-ON CAP #4416
- 9/16" LAMINATED GLASS
(SEE COVER PAGE FOR COMPLETE DESCRIPTION)
- PUNCHED ALUMINUM ANGLE #4206
AT EACH CORNERS
(FOR VENT CORNER CONSTRUCTION)
- ALUMINUM SASH #4429
- SANTOPRENE GASKET #3004
- ALUMINUM HINGE SAVIO #1122.1
SEALED WITH FOAM TAPE
- SEALANT TYPE 1
- #8 FH SS SCREW x 1 1/2" LONG
- ALUMINUM FRAME #4424
- SANTOPRENE WEATHERSTRIP #3047
- SANTOPRENE GASKET #3004
- PVC SHIM
- ALUMINUM SNAP-ON CAP #4460
(3" LONG AT EACH SCREW)
- #8 RH SS SCREW x 1" LONG
(FOR FRAME CORNER CONSTRUCTION)
- Ø5/16" FH TAPCON SCREW (TRIMFIT)
- #8 HH SELF DRILLING SCREW x 5/8" LONG
- ALUMINUM BACKER ANGLE
L1/2" x 1 1/2" x 1/16" x 1 1/4" LONG
- BACKER ROD &
SEALANT TYPE 2

- ALUMINUM FRAME #4424
- ALUMINUM SASH #4429
- #8 RH SS SCREW x 1" LONG (3 OFF)
(FOR FRAME CORNER CONSTRUCTION)
- #8 FH SS SCREW x 1 1/2" LONG
(FOR VENT CORNER CONSTRUCTION)
(3 AT EACH CORNERS)
- PUNCHED ALUMINUM ANGLE #4206
(2x) AT EACH CORNERS
(FOR VENT CORNER CONSTRUCTION)
- ALUMINUM FRAME #4424
- ALUMINUM SASH #4429

Approved as complying with the
Florida Building Code
Date July 24, 2008
NOA# 08-0303-07
Miami Dade Product Control
District
By: Manuel Perez

REVISIONS:	BY:
R1 09-19-2007	J.C.
R2 02-18-2008	J.C.
R3 04-21-2008	A.R.
R4 05-29-2008	M.P.
R5 06-16-2008	J.F.L.

STRUCTURAL DESIGN INC.
CONSULTING STRUCTURAL ENGINEERS
9985 N. KENDALL DR. SUITE NO. 200
MIAMI, FLORIDA 33176 PERMIT # 8803

Jamal Rasekhi
4/19/08

TEL: (305) 595-8965 FARROKH RASEKHI, P.E.
FAX: (305) 595-8966 FL REG. #38001

MANUFACTURER:

Gamma
U.S.A.
2115 S.W. 2nd Street
Pompano Beach, FL 33069

Phone: (954) 977-2711 Fax: (954) 977-2715
Web site: www.gammaindustries.ca
E-mail: info@gamma-online.com

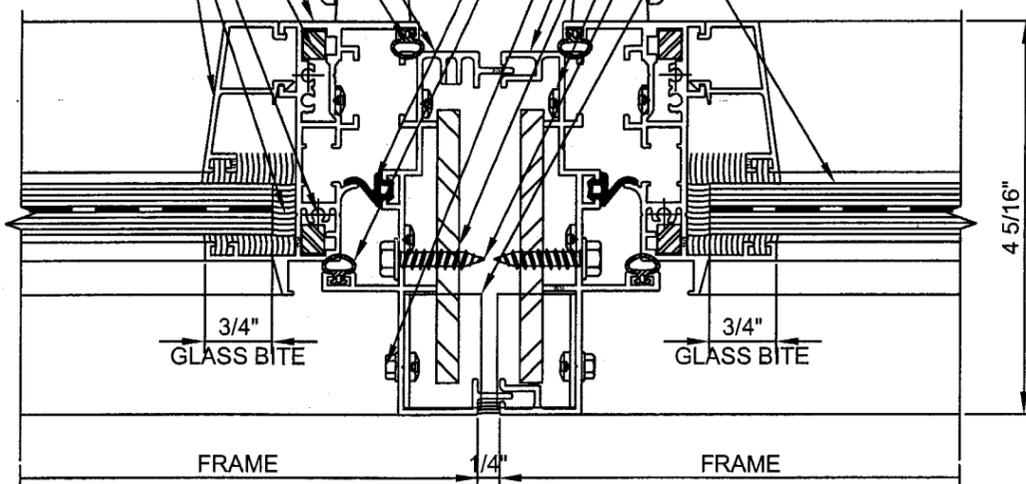
TITLE:

TEST # 97
CASEMENT WINDOW
104 1/4" x 84"
+110/-130 PSF
LARGE IMPACT
DETAIL 100 & 104

SCALE: 1/2" = 1'-0"	DRAWN BY: M. POTVIN	
DATE: 05/29/2007	DRAWING NO. T-97	SHEET NO. 2 OF 5

KEEPER 1 SAVIO #1243.721 + 1243.710 WIND WEEPER
 KEEPER 2 SAVIO #340647 + 340.649 STRUCTURAL KEEPER
 KEEPER 3 SAVIO #1243.721 + 1481
 HANDLE SAVIO #870
 ALUMINUM SPLIT MULLION #4428
 SANTOPRENE GASKET #3004
 ALUMINUM SASH #4429
 PUNCHED ALUMINUM ANGLE #4206
 AT EACH CORNERS
 (FOR VENT CORNER CONSTRUCTION)
 #8 FH SS SCREW x 1 1/2" LONG
 SEALANT TYPE 1
 ALUMINUM SNAP-ON CAP #4416

SANTOPRENE WEATHERSTRIP #3047
 SANTOPRENE GASKET #3004
 #8 HH SELF DRILLING SCREW x 5/8" LONG
 ALUMINUM SPLIT MULLION #4426
 (2x) GALVANIZED STEEL REINFORCEMENT
 3" X 1/4" THICK X 84" LONG
 #8 RH SS SCREW x 1" LONG
 (FOR FRAME CORNER CONSTRUCTION)
 #14 HH SS SCREW x 1" LONG (3 OFF)
 ONE AT MIDSPAN & 4" FROM EACH END
 ALUMINUM BACKER ANGLE
 L1/2" x 7/8" x 1/16" x 1 1/4" LONG
 9/16" LAMINATED GLASS
 (SEE COVER PAGE FOR COMPLETE DESCRIPTION)



EXT.

detail 101

Approved as complying with the
 Florida Building Code
 Date July 24, 2008
 NOA# 081-0303-07
 Miami Dade Product Control
 Division
 By *Manuel Perez*

REVISIONS:	BY:
R1 09-19-2007	J.C.
R2 02-18-2008	J.C.
R3 04-21-2008	A.R.
R4 05-29-2008	M.P.
R5 06-16-2008	J.F.L.

STRUCTURAL DESIGN INC.
 CONSULTING STRUCTURAL ENGINEERS
 959 N. KENDALL DR. SUITE NO. 209
 MIAMI, FLORIDA 33176 CERTIFICATE # 8808
Farrokh Rasekhi
 6/19/08
 TEL: (305) 595-8965 FARROKH RASEKHI, P.E.
 FAX: (305) 595-8966 FL. REG. #38001

MANUFACTURER:
Gamma
 U.S.A.
 2115 S.W. 2nd Street
 Pompano Beach, FL 33069
 Phone: (954) 977-2711 Fax: (954) 977-2715
 Web site: www.gammaindustries.ca
 E-mail: info@gamma-online.com

TITLE:
 TEST # 97
 CASEMENT WINDOW
 104 1/4" x 84"
 +110/-130 PSF
 LARGE IMPACT
 DETAIL 101

SCALE: 1/2" = 1'-0"	DRAWN BY: M. POTVIN	
DATE: 05/29/2007	DRAWING NO. T-97	SHEET NO. 3 OF 5

Approved as complying with the
 Florida Building Code
 Date: July 24, 2008
 NOA#: 081-0303-07
 Miami Dade Product Control
 Division
 By: *Mauro Perez*

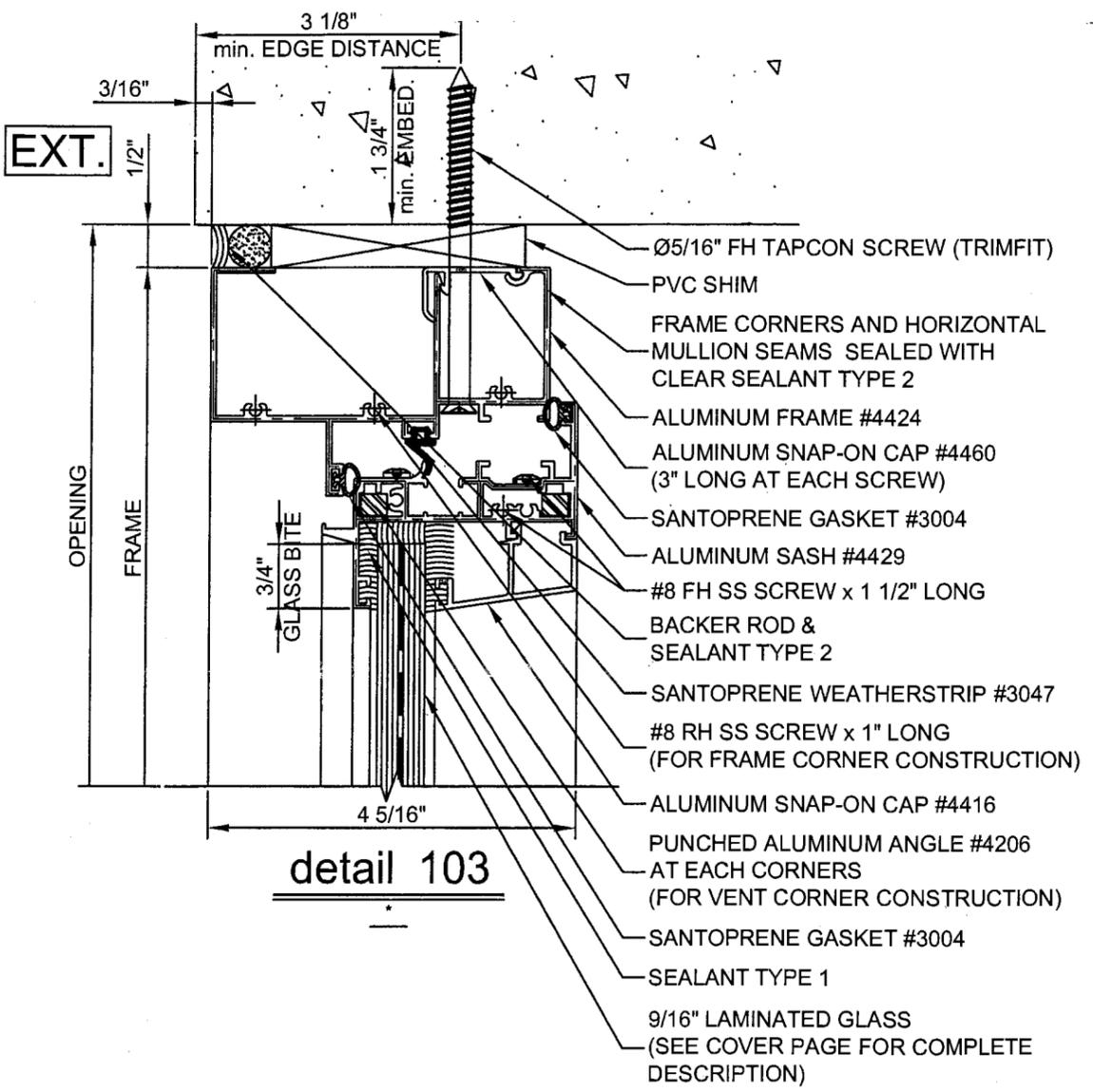
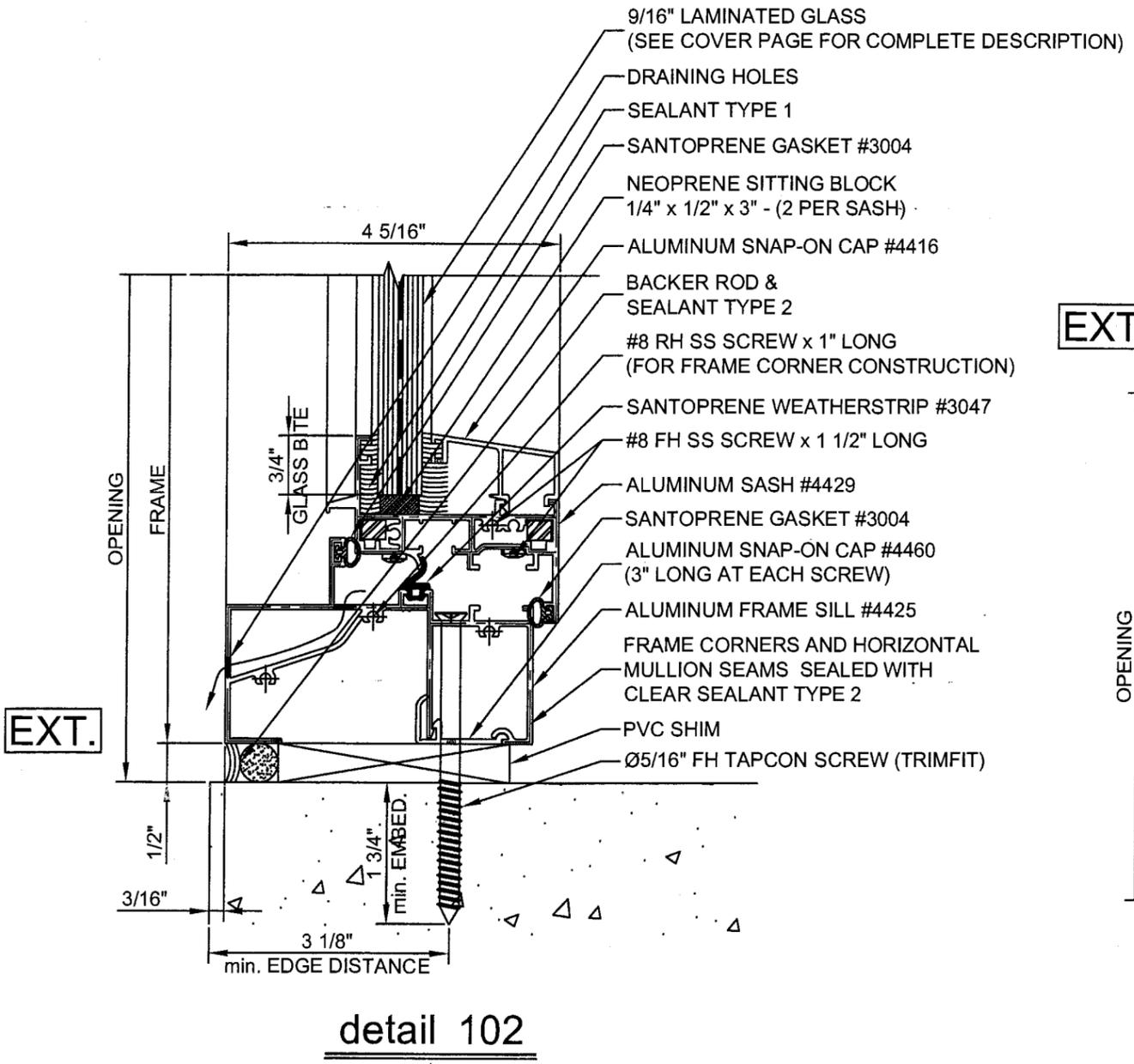
REVISIONS:	BY:
R1 09-19-2007	J.C.
R2 02-18-2008	J.C.
R3 04-21-2008	A.R.
R4 05-29-2008	M.P.
R5 06-16-2008	J.F.L.

STRUCTURAL DESIGN INC.
 CONSULTING STRUCTURAL ENGINEERS
 959 N. KENDALL DR. SUITE NO. 208
 MIAMI, FLORIDA 33176 CERTIFICATE # 8803
Jomah Rasekhi
 6/19/08
 TEL: (305) 595-8965 FARROKH RASEKHI, P.E.
 FAX: (305) 595-8966 FL. REG. #38001

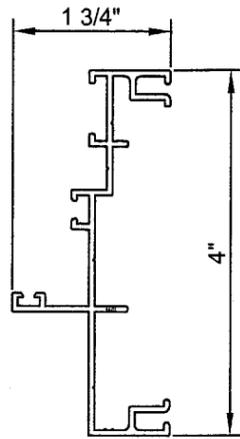
MANUFACTURER:
Gamma
 U.S.A.
 2115 S.W. 2nd Street
 Pompano Beach, FL 33069
 Phone: (954) 977-2711 Fax: (954) 977-2715
 Web site: www.gammaindustries.ca
 E-mail: info@gamma-online.com

TITLE:
**TEST # 97
 CASEMENT WINDOW
 104 1/4" x 84"
 +110/-130 PSF
 LARGE IMPACT
 DETAIL 102 & 103**

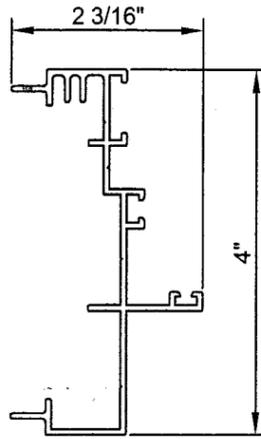
SCALE: 1/2" = 1'-0"	DRAWN BY: M. POTVIN
DATE: 05/29/2007	DRAWING NO. SHEET NO. T-97 4 OF 5



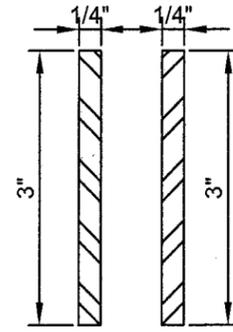
- 9/16" LAMINATED GLASS
(SEE COVER PAGE FOR COMPLETE DESCRIPTION)
- DRAINING HOLES
- SEALANT TYPE 1
- SANTOPRENE GASKET #3004
- NEOPRENE SITTING BLOCK
1/4" x 1/2" x 3" - (2 PER SASH)
- ALUMINUM SNAP-ON CAP #4416
- BACKER ROD &
SEALANT TYPE 2
- #8 RH SS SCREW x 1" LONG
(FOR FRAME CORNER CONSTRUCTION)
- SANTOPRENE WEATHERSTRIP #3047
- #8 FH SS SCREW x 1 1/2" LONG
- ALUMINUM SASH #4429
- SANTOPRENE GASKET #3004
- ALUMINUM SNAP-ON CAP #4460
(3" LONG AT EACH SCREW)
- ALUMINUM FRAME SILL #4425
- FRAME CORNERS AND HORIZONTAL
MULLION SEAMS SEALED WITH
CLEAR SEALANT TYPE 2
- PVC SHIM
- Ø5/16" FH TAPCON SCREW (TRIMFIT)
- Ø5/16" FH TAPCON SCREW (TRIMFIT)
- PVC SHIM
- FRAME CORNERS AND HORIZONTAL
MULLION SEAMS SEALED WITH
CLEAR SEALANT TYPE 2
- ALUMINUM SNAP-ON CAP #4460
(3" LONG AT EACH SCREW)
- SANTOPRENE GASKET #3004
- ALUMINUM SASH #4429
- #8 FH SS SCREW x 1 1/2" LONG
- BACKER ROD &
SEALANT TYPE 2
- SANTOPRENE WEATHERSTRIP #3047
- #8 RH SS SCREW x 1" LONG
(FOR FRAME CORNER CONSTRUCTION)
- ALUMINUM SNAP-ON CAP #4416
- PUNCHED ALUMINUM ANGLE #4206
AT EACH CORNERS
(FOR VENT CORNER CONSTRUCTION)
- SANTOPRENE GASKET #3004
- SEALANT TYPE 1
- 9/16" LAMINATED GLASS
(SEE COVER PAGE FOR COMPLETE
DESCRIPTION)



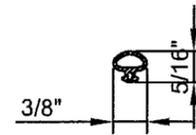
#4428
ALUMINUM SPLIT MULLION



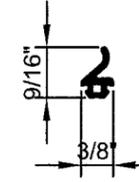
#4426
ALUMINUM SPLIT MULLION



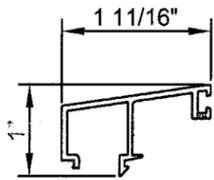
STEEL REINFORCEMENT
Fy = 44 KSI



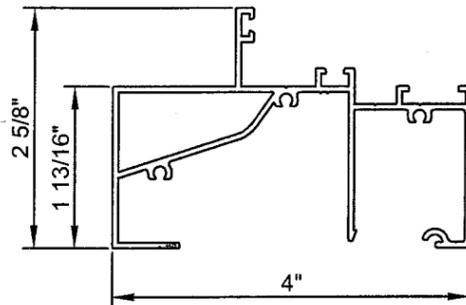
#3004
SANTOPRENE GASKET



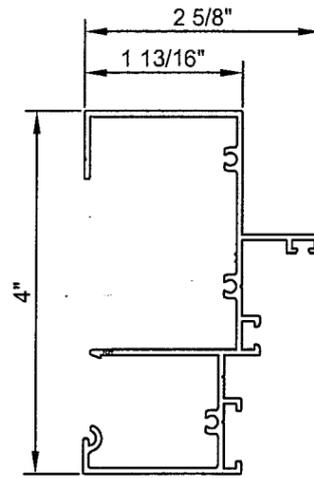
#3047
SANTOPRENE GASKET



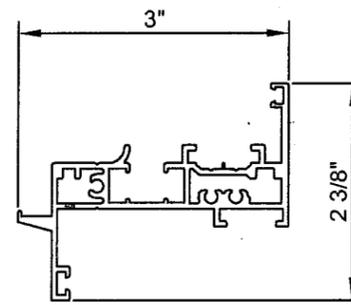
#4416 ALUMINUM
SNAP-ON CAP



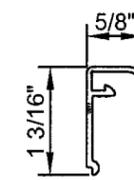
#4425 ALUMINUM FRAME SILL



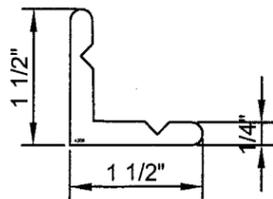
#4424 ALUMINUM FRAME



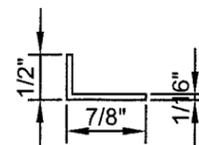
#4429 ALUMINUM SASH



#4460 ALUMINUM
SCREWING CAP



#4206 PUNCHED ALUMINUM ANGLE
AT EACH CORNERS
(FOR VENT CORNER CONSTRUCTION)



ALUMINUM BACKER ANGLE
L1/2\" x 7/8\" x 1/16\" x 1 1/4\" LONG

FOR MORE SPECIFIC
DIMENSIONS PLEASE
REFER TO THE
SPECIFICATION SHEET
FOR EACH EXTRUSIONS

Approved as complying with the
Florida Building Code
Date July 24, 2008
NOA# 081-0303-07
Special Code Product Control
By Manuel Perez

REVISIONS:	BY:
R1 09-19-2007	J.C.
R2 02-18-2008	J.C.
R3 04-21-2008	A.R.
R4 05-29-2008	M.P.
R5 06-16-2008	J.F.L.

S STRUCTURAL DESIGN **I**NC.
CONSULTING STRUCTURAL ENGINEERS
9515 N. KENDALL DR. SUITE NO. 209
MIAMI, FLORIDA 33178 CERTIFICATE # 8800
Farrokh Rasekhi
6/19/08
TEL: (305) 595-8965 FARROKH RASEKHI, P.E.
FAX: (305) 595-8966 FL. REG. #38001

MANUFACTURER:
Gamma
U.S.A.
2115 S.W. 2nd Street
Pompano Beach, FL 33069
Phone: (954) 977-2711 Fax: (954) 977-2715
Web site: www.gammaindustries.ca
E-mail: info@gamma-online.com

TITLE:
TEST # 97
CASEMENT WINDOW
104 1/4" x 84"
+110/-130 PSF
LARGE IMPACT
GAMMA'S EXTRUSIONS

SCALE: 1/2" = 1'-0"	DRAWN BY: M. POTVIN	
DATE: 05/29/2007	DRAWING NO. T-97	SHEET NO. 5 OF 5