



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

www.buldingcodeonline.com

NOTICE OF ACCEPTANCE (NOA)

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 85 "Steel Reinforced" Aluminum Window Wall System – L.M.I.

APPROVAL DOCUMENT: Drawing No. **T#85**, titled "Test # 85 W.Wall / Spandrel 52 3/8" x 123" +100/-150 PSF – Large Impact", sheets 1 through 9 of 9, dated 08/23/07 with revision R2 dated 08/23/07, 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. 07-0208.05
Expiration Date: March 20, 2013.
Approval Date: March 20, 2008
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **T-85**, Sheets 1 through 9 of 9, titled "Test # 85 W.Wall / Spandrel 52-3/8" x 123" +100/-150 PSF – Large Impact", dated 08/23/07 with revision R2 dated 08/23/07, 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) Large 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 a Series 85 aluminum window wall system, prepared by Fenestration Testing Laboratory Inc., Test Report No. **FTL-5014**, dated 08/8-18/06, signed and sealed by Edmundo Largaespada, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2004, prepared by Structural Design, Inc, dated 01/24/07, signed and sealed by Farrokh Rasekhi, P.E.
Complies with ASTM E1300-98/02

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

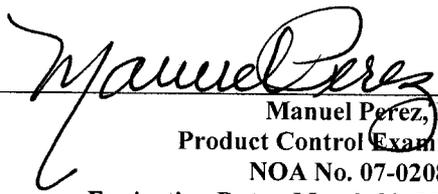
1. Notice of Acceptance No. **01-1204.01** issued to E.I. DuPont DeNemours for their "**Sentry Glass (R) Plus**" dated 01/17/02, expiring on 01/14/07.

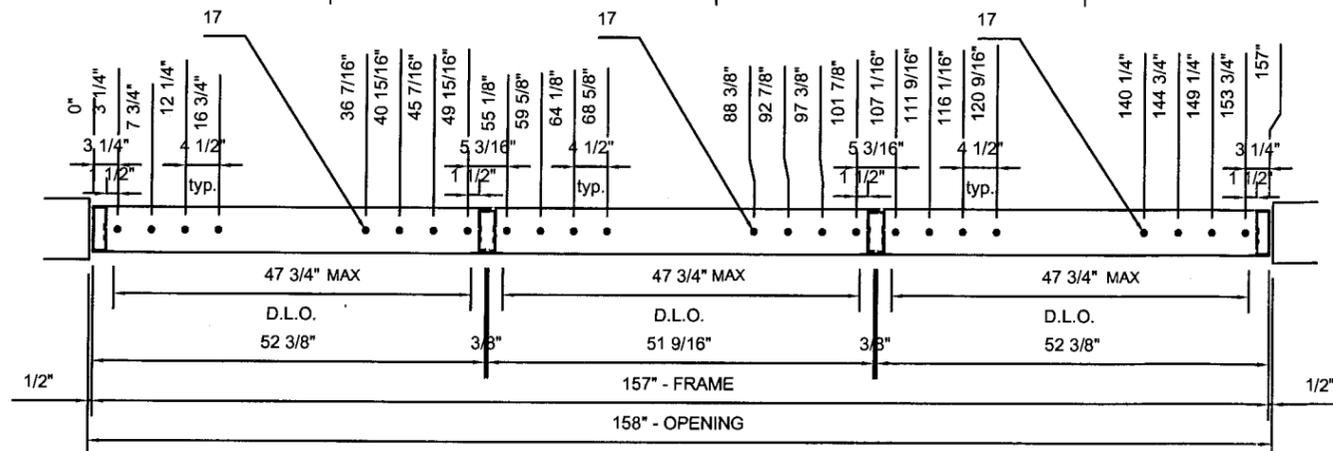
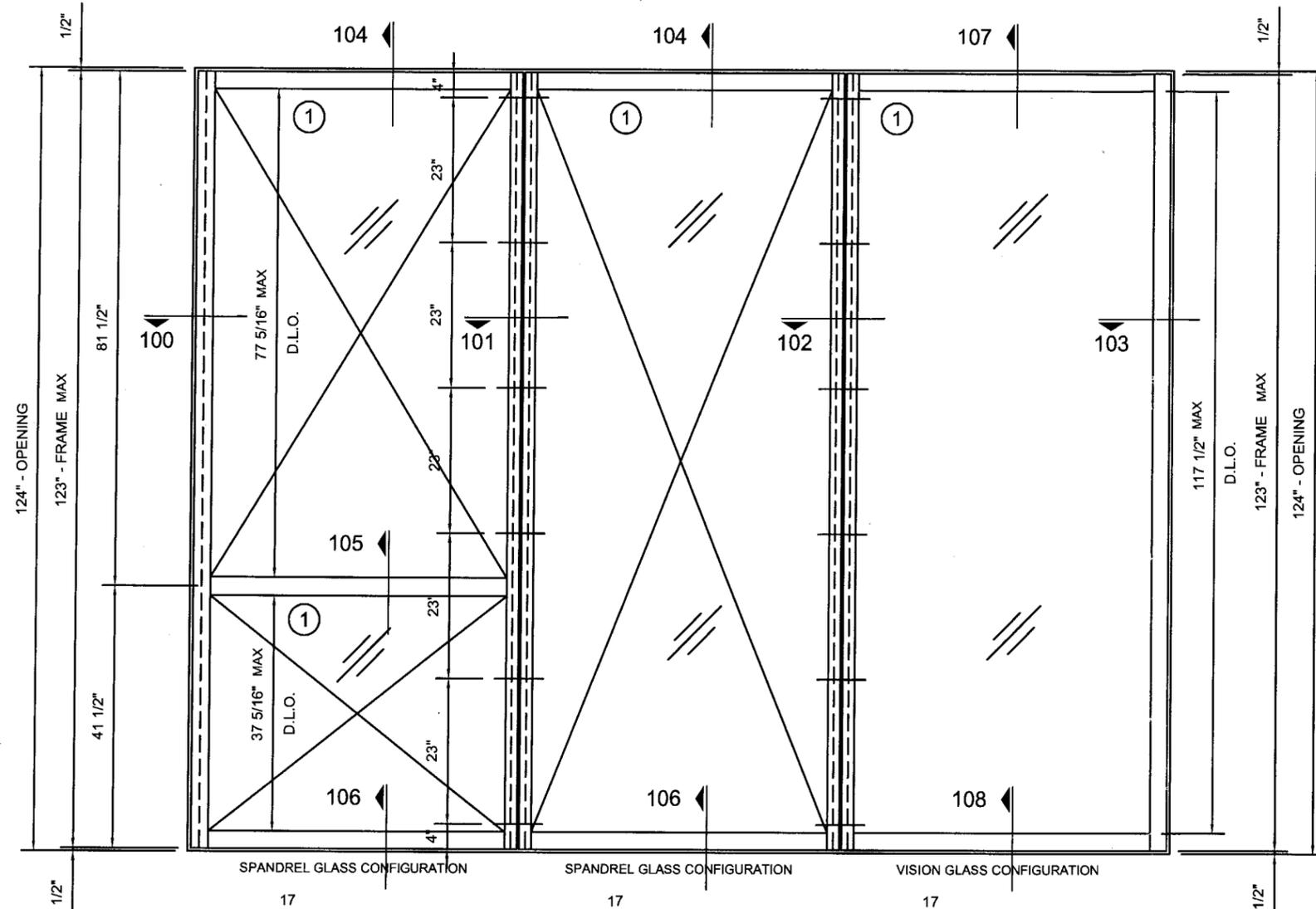
F. STATEMENTS

1. Statement letter of conformance, dated January 24, 2007, signed and sealed by Farrokh Rasekhi, P.E.
2. Statement letter of no financial interest, dated January 24, 2007, signed and sealed by Farrokh Rasekhi, P.E.
3. Laboratory compliance letter for Test Report no. **FTL- 5014**, issued by Fenestration Testing Laboratory, Inc., dated October 30, 2006, signed and sealed by Edmundo Largaespada, P.E.

G. OTHER

1. None.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 07-0208.05
Expiration Date: March 20, 2013
Approval Date: March 20, 2008



GENERAL NOTES

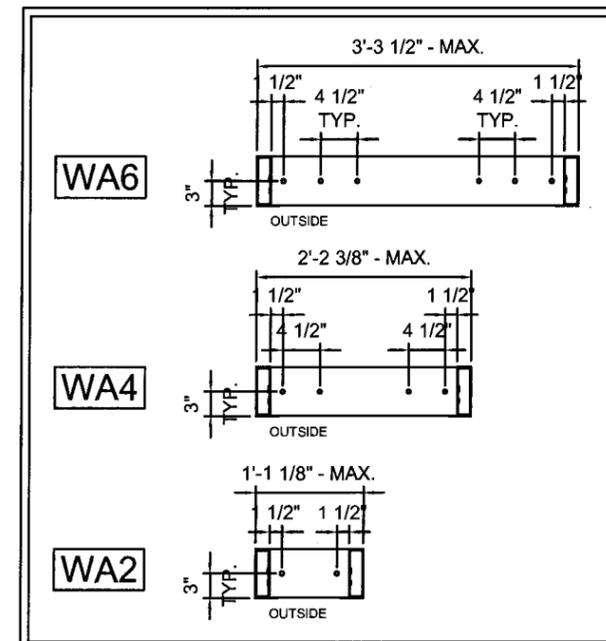
- ① - GLASS TYPE: 9/16" LAMINATED GLASS 1/4" CLEAR HEAT STRENGTHENED GLASS 0.100" SENTRY GLASS PLUS 1/4" CLEAR HEAT STRENGTHENED GLASS
- MAXIMUM GLASS DIMENSION 49 1/4" x 119"
- ALL ALUMINUM IS 6063 T6
- GLAZING PENETRATION: 3/4"
- 1/2" MAX. SHIM SPACE
- CONCRETE APPLICATION
- FRAME CORNERS & MEETING RAIL SEAMS SEALED WITH CLEAR SEALANT SPECTREM 2 OR SILPRUF SCS 2000
- REFER TO BILL OF MATERIEL FOR COMPLETE DESCRIPTION
- THIS PRODUCT CAN BE USED WITH MULTIPLE PANELS

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

SEALANT USED FOR TESTING :

- MOCK-UP # 1 : G.E. - ULTRAGLAZE SSG 4700
- MOCK-UP # 2 : G.E. - ULTRAGLAZE SSG 4000
- MOCK-UP # 3 : TREMCO PROGLAZE II

HEAD & SILL CONNECTION SCHEDULE FOR REDUCED WIDTH.



DESIGN PRESSURE RATING
+ 100 PSF, - 150 PSF

REVISIONS:	BY:
R1 09/12/2006	D.L.
R2 01/08/2007	M.P.
R2 08/23/2007	J.C.

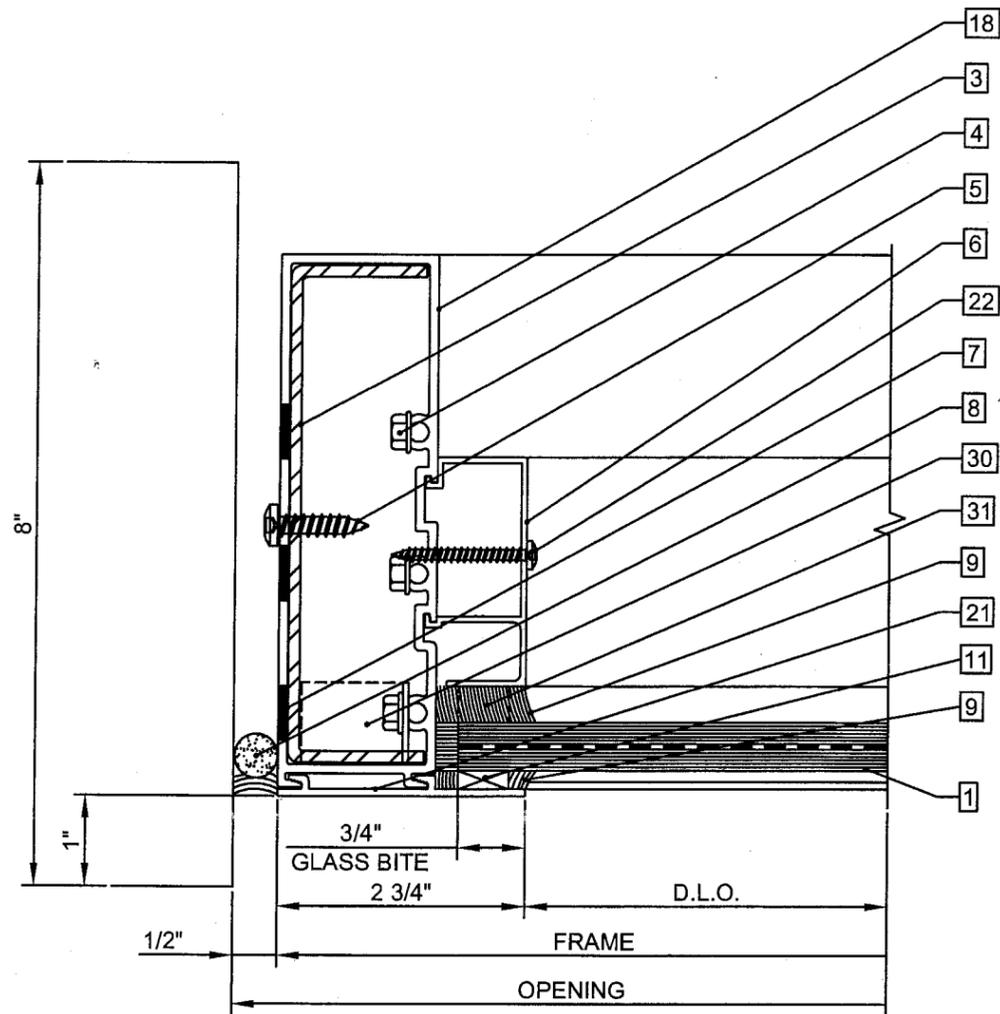
Approved as complying with the Florida Building Code
Date MARCH 20, 2008
NOAF 07-0208.05
Miami Dade Product Control Division
By Manuel Perez

STRUCTURAL DESIGN INC.
CONSULTING STRUCTURAL ENGINEERS
9505 N. KENDALL DR. SUITE NO. 209
MIAMI, FLORIDA 33176 CERTIFICATE # 8803
Farrokh Rasekhi
9/14/07
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
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Phone: (954) 977-2711 Fax: (954) 977-2715
Web site: www.gammaindustries.ca
E-mail: info@gamma-online.com

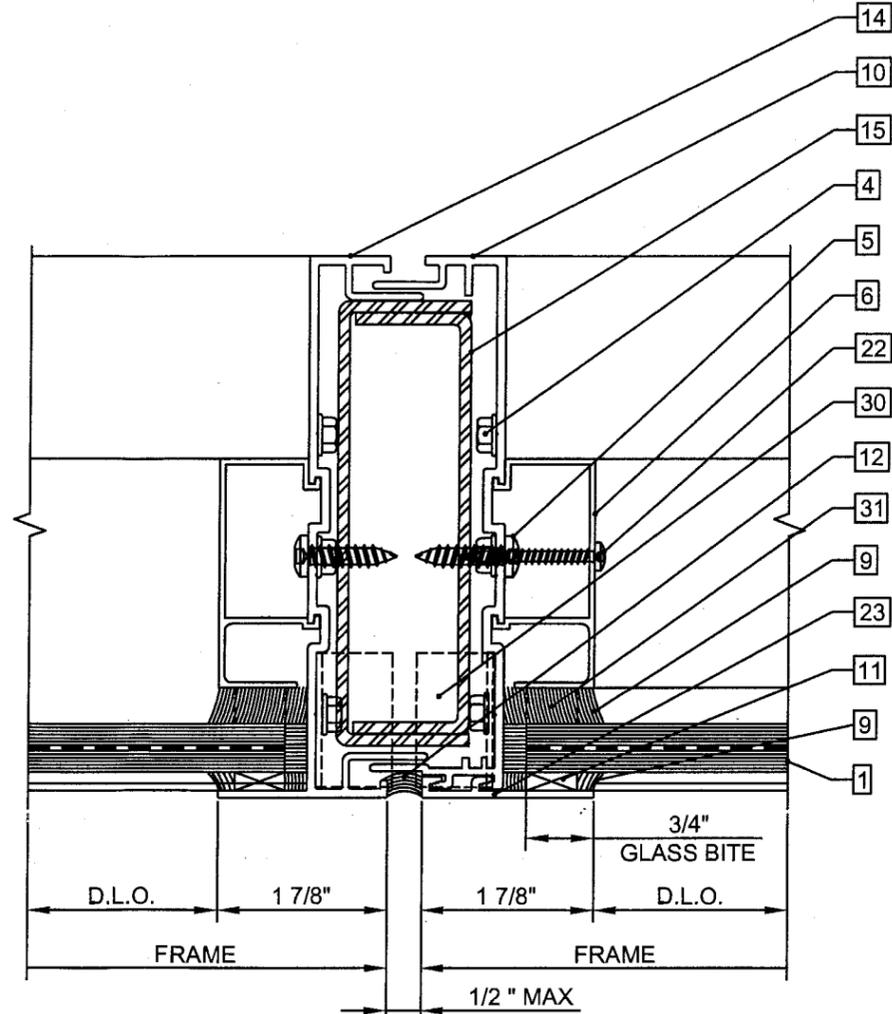
TITLE:
TEST# 85
W.WALL / SPANDREL
52 3/8" X 123"
+ 100 / - 150 PSF
LARGE IMPACT
ELEVATION

SCALE: 1/2"=1'	DRAWN BY: J.C.R.	
DATE: 08/23/2007	DRAWING NO. J.C.	SHEET NO. 1 OF 9



OUTSIDE
detail 100

T-85



OUTSIDE
detail 101

T-85

REVISIONS:	BY:
R1 09/12/2006	D.L.
R2 01/08/2007	M.P.
R2 08/23/2007	J.C.

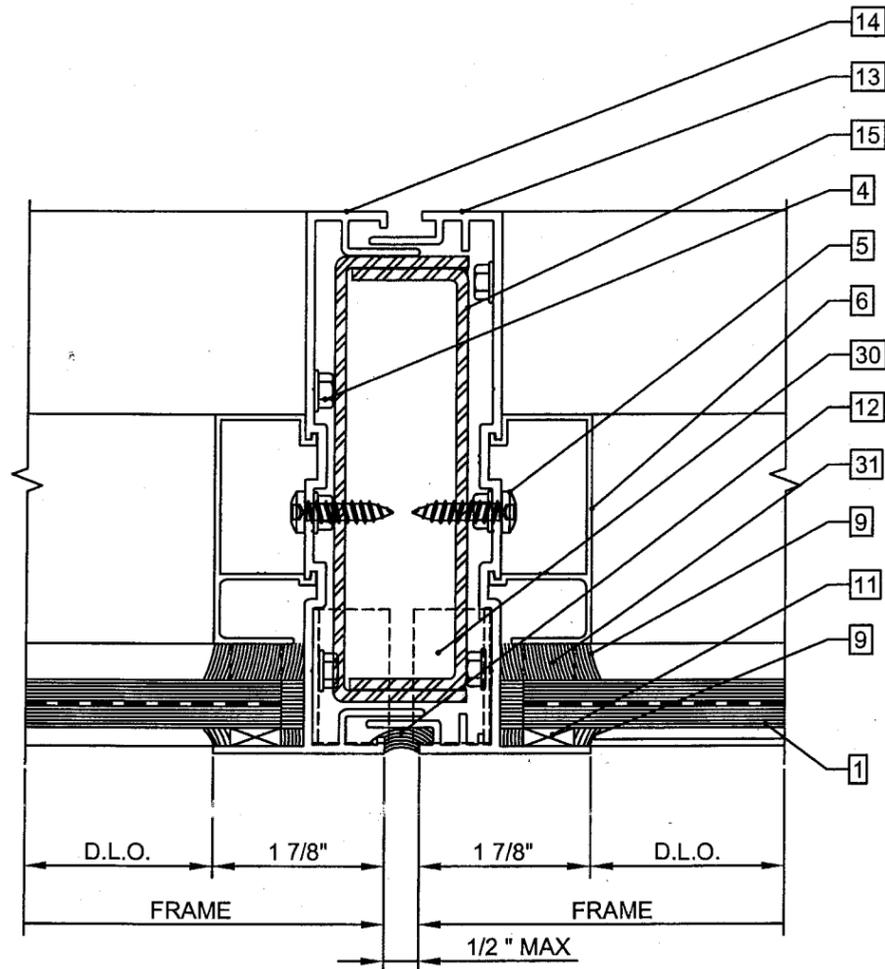
Approved as complying with the
Florida Building Code
Date MARCH 20, 2008
NOA# 07-0208.05
Miami Dade Product Control
Division
By Maurice Perez

STRUCTURAL DESIGN I
CONSULTING STRUCTURAL ENGINEERS
959 N. KENDALL DR. SUITE NO. 209
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J. Farrokh Rasekhi
9/19/07
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Phone: (954) 977-2711 Fax: (954) 977-2715
Web site: www.gammaindustries.ca
E-mail: info@gamma-online.com

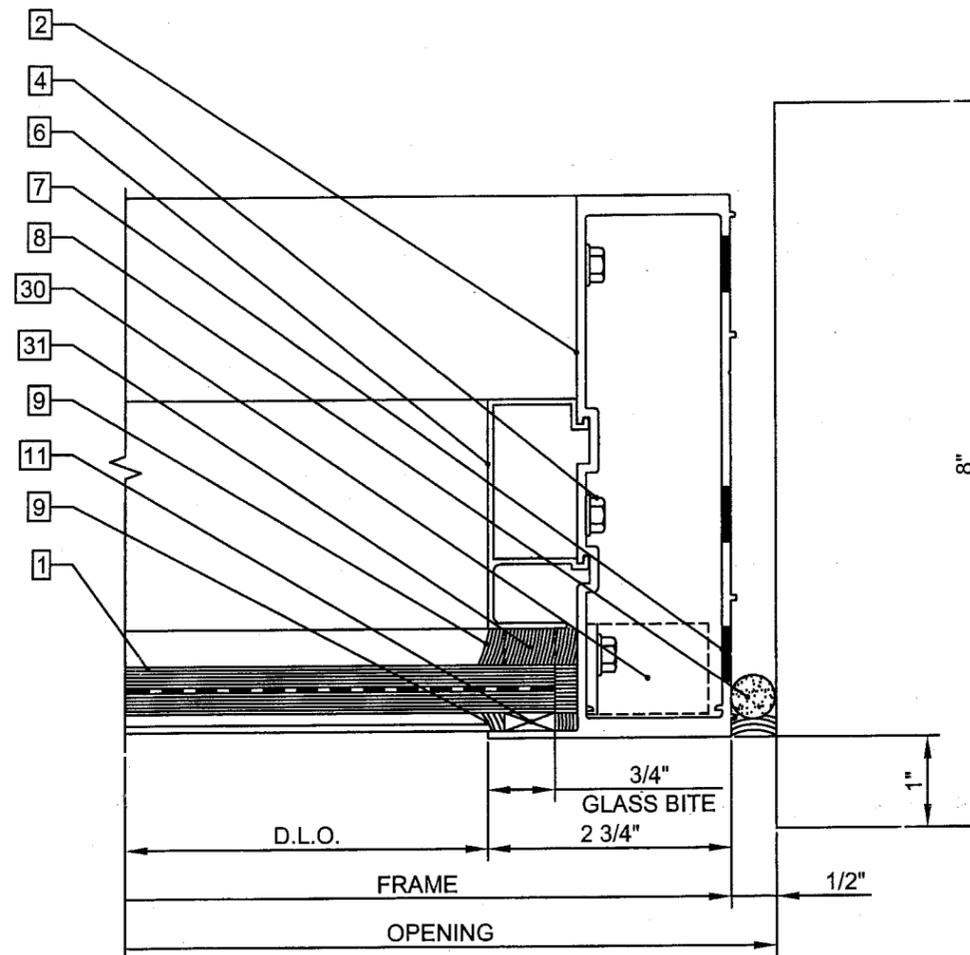
TITLE:
TEST # 85
W.WALL / SPANDREL
52 3/8" x 123"
+100/-150 PSF
LARGE IMPACT
DETAILS 100 & 101

SCALE: 1:2	DRAWN BY: J.C.R.	
DATE: 08/23/2007	DRAWING NO. T-85	SHEET NO. 2 OF 9



OUTSIDE
detail 102

T-85



OUTSIDE
detail 103

T-85

REVISIONS:	BY:
R1 09/12/2006	D.L.
R2 01/08/2007	M.P.
R2 08/23/2007	J.C.

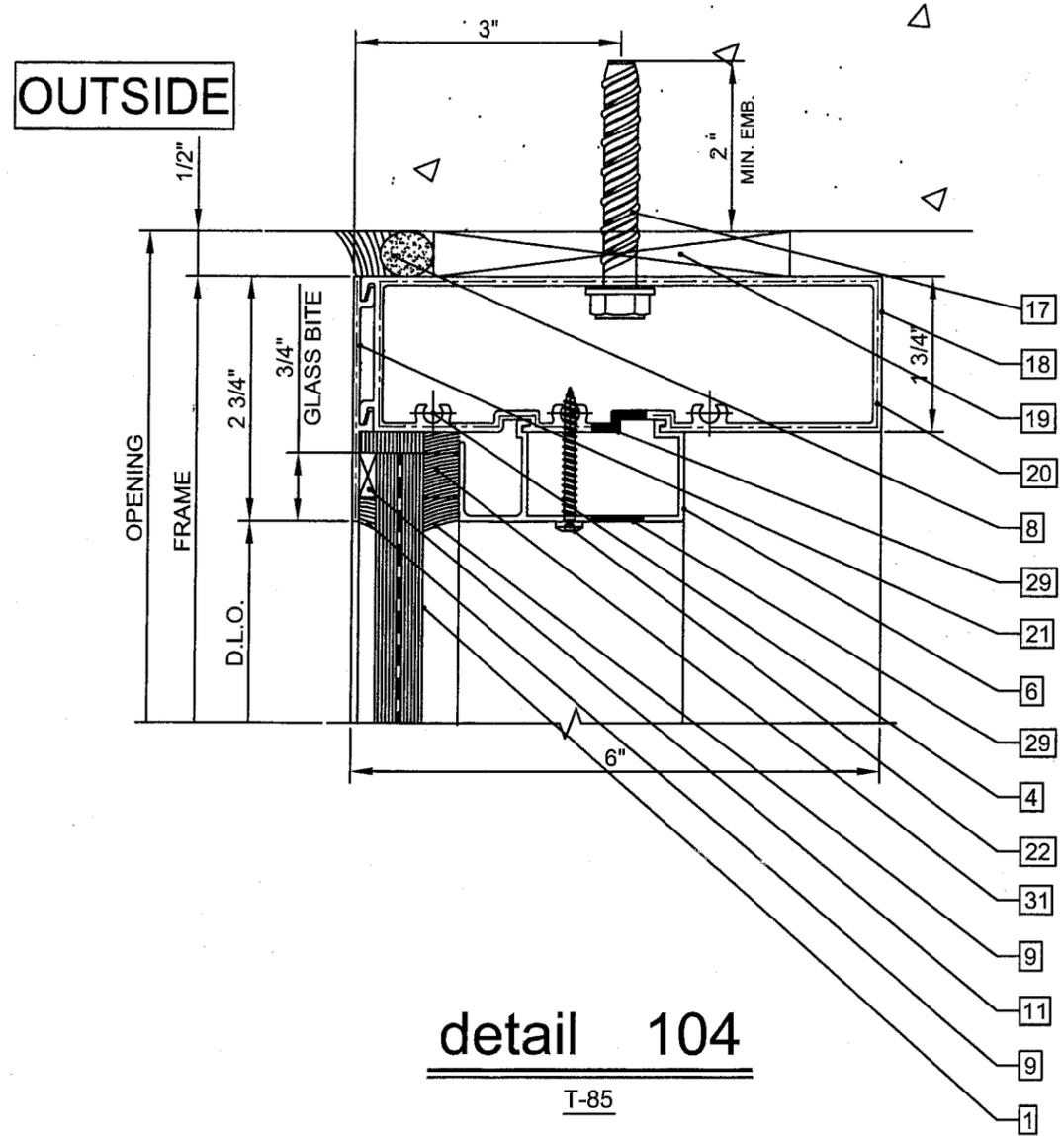
Approved as complying with the
Florida Building Code
Date **MARCH 20, 2008**
NOA# **07-0208-05**
Miami Dade Product Control
Division
By *Mauro Diaz*

STRUCTURAL DESIGN I
CONSULTING STRUCTURAL ENGINEERS
9585 N. KENDALL DR. SUITE NO. 209
MIAMI, FLORIDA 33176 CERTIFICATE # 8808
Farrokh Rasekhi
9/19/07
TEL: (305) 595-8965 FARROKH RASEKHI, P.E.
FAX: (305) 595-8966 FL. REG. #38001

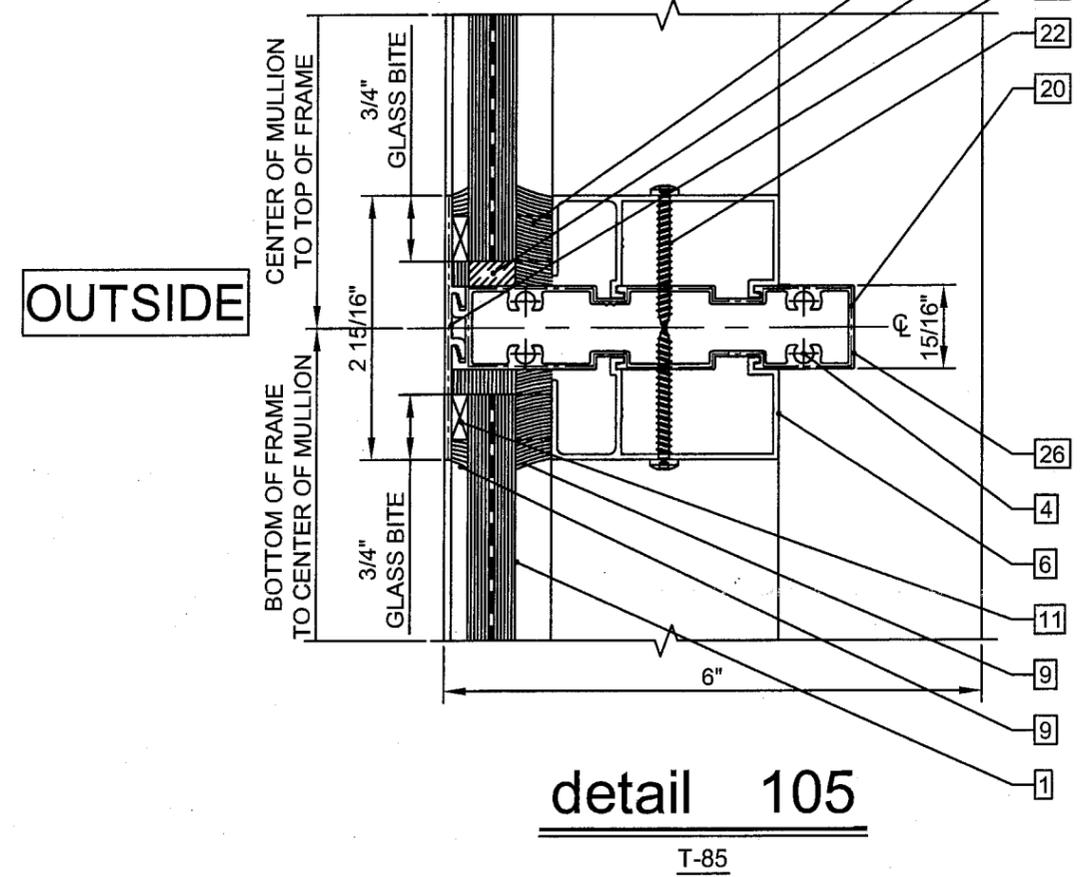
MANUFACTURER:
Gamma
U.S.A.
2115 S.W. 2nd Street
Pompano Beach, FL 33069
Phone: (954) 977-2711 Fax: (954) 977-2715
Web site: www.gammaindustries.ca
E-mail: info@gamma-online.com

TITLE:
TEST # 85
W.WALL / SPANDREL
52 3/8" x 123"
+100/-150 PSF
LARGE IMPACT
DETAILS 102 & 103

SCALE: 6" = 1'-0"	DRAWN BY: D. LABBÉ	
DATE: 04/14/2006	DRAWING NO. T-85	SHEET NO. 3 OF 9



detail 104
T-85



detail 105
T-85

REVISIONS:	BY:
R1 09/12/2006	D.L.
R2 01/08/2007	M.P.
R2 08/23/2007	J.C.

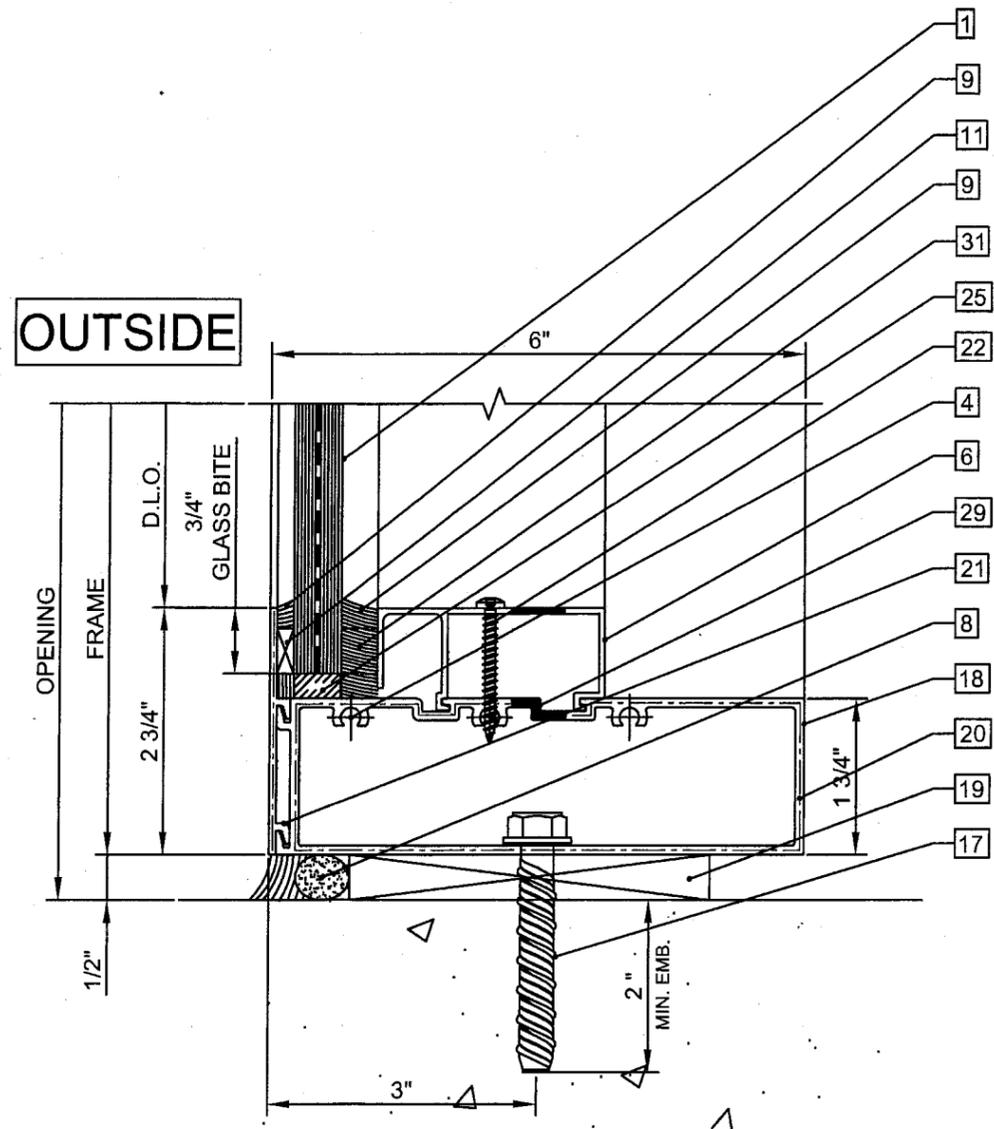
Approved as complying with the Florida Building Code
 Date **MARCH 20, 2008**
 NOAH **07-0208.05**
 Miami Date Product Control
 Division
 By *[Signature]*

STRUCTURAL DESIGN I
 CONSULTING STRUCTURAL ENGINEERS
 9595 N. KENDALL DR. SUITE NO. 209
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[Signature]
9/14/07
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 Phone: (954) 977-2711 Fax: (954) 977-2715
 Web site: www.gammaindustries.ca
 E-mail: info@gamma-online.com

TITLE:
TEST # 85
W.WALL / SPANDREL
52 3/8" x 123"
+100/-150 PSF
LARGE IMPACT
DETAILS 104 & 105

SCALE: 1:2	DRAWN BY: J.C.R.	
DATE: 08/23/2007	DRAWING NO. T-85	SHEET NO. 4 OF 9



detail 106
T-85

REVISIONS:	BY:
R1 09/12/2006	D.L.
R2 01/08/2007	M.P.
R2 08/23/2007	J.C.

Approved as complying with the Florida Building Code
 Date: MARCH 20, 2008
 NOA# 07-0205-05
 Miami Date Product Control Division
 By: *J. Perez*

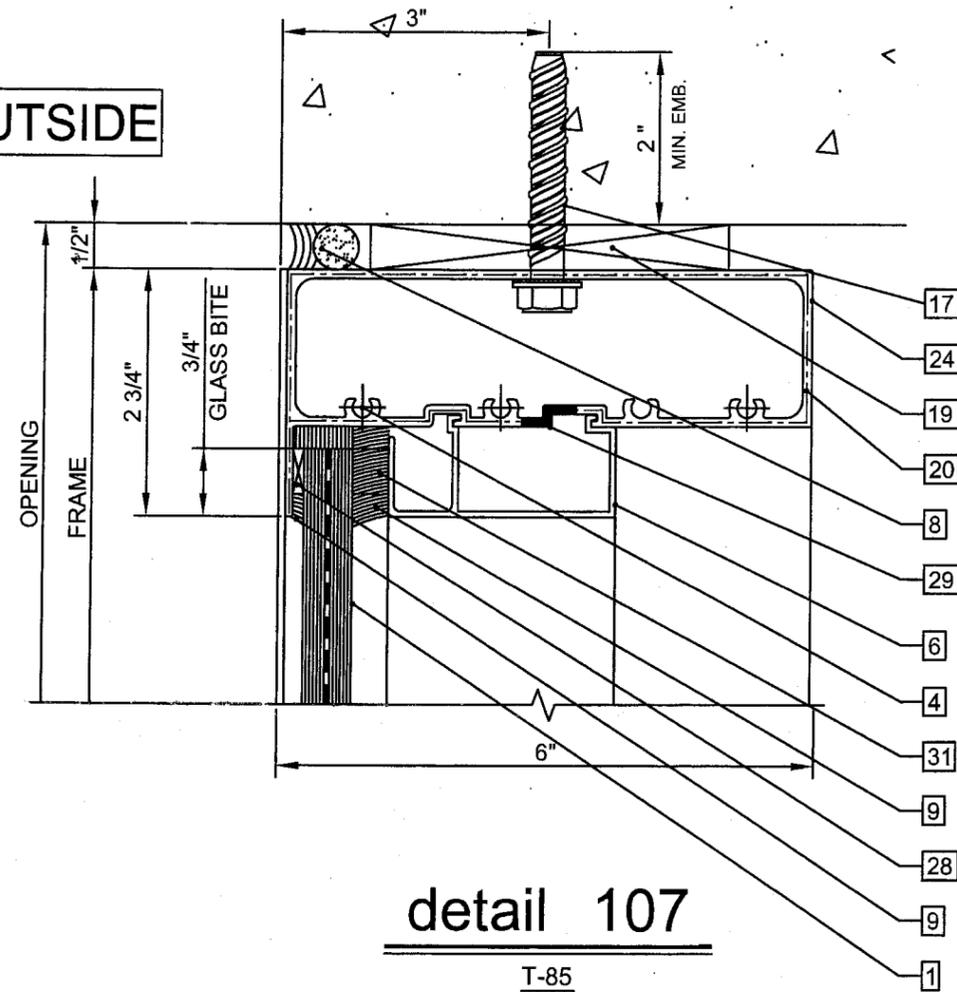
STRUCTURAL DESIGN I
 CONSULTING STRUCTURAL ENGINEERS
 9595 N. KENDALL DR. SUITE NO. 209
 MIAMI, FLORIDA 33176 CERTIFICATE #: 8603
J. Rasekhi
 9/14/07
 TEL: (305) 595-8965 FARROKH RASEKHI, P.E.
 FAX: (305) 595-8966 FL. REG. #38001

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 E-mail: info@gamma-online.com

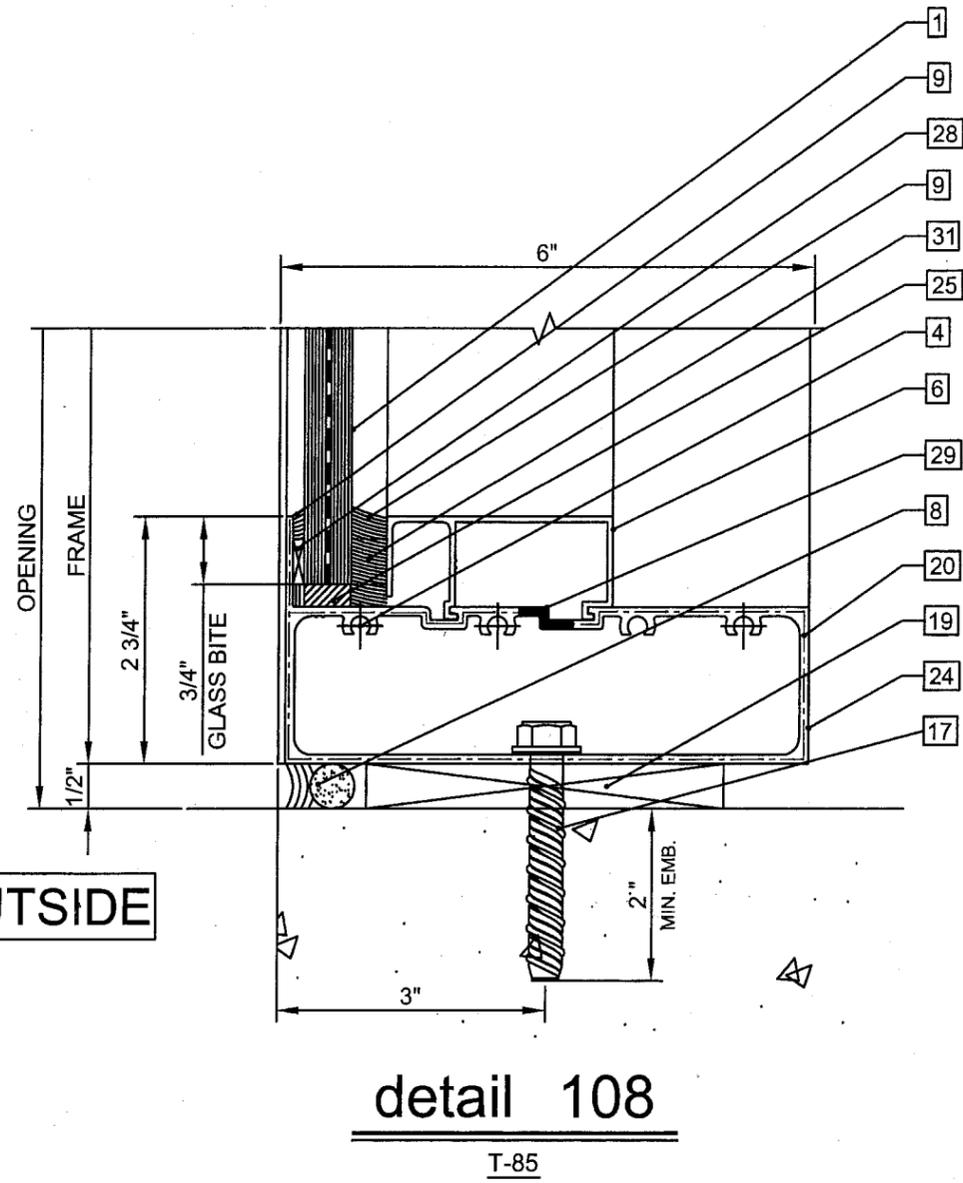
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TEST # 85
W.WALL / SPANDREL
52 3/8" x 123"
+100/-150 PSF
LARGE IMPACT
DETAIL 106

SCALE: 1:2	DRAWN BY: J.C.R.	
DATE: 08/23/2007	DRAWING NO. T-85	SHEET NO. 5 OF 9

OUTSIDE



OUTSIDE



REVISIONS:	BY:
R1 09/12/2006	D.L.
R2 01/08/2007	M.P.
R2 08/23/2007	J.C.

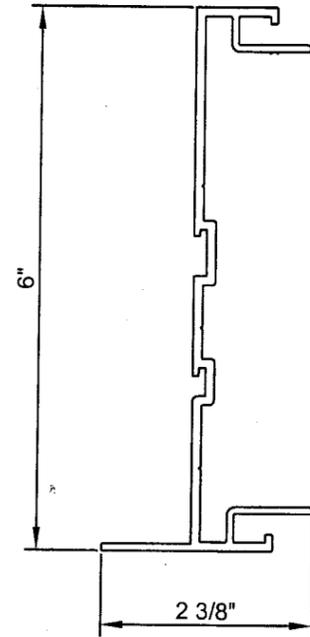
Approved as complying with the
Florida Building Code
Date MARCH 20, 2008
NOA# 07-0208.05
Miami Dade Product Control
Division
By Mamad Jerez

STRUCTURAL DESIGN I
CONSULTING STRUCTURAL ENGINEERS
9595 N. KENDALL DR. SUITE NO. 209
MIAMI, FLORIDA 33176 CERTIFICATE # 8800
F. Rasekhi
9/14/07
TEL: (305) 595-8965 FARROKH RASEKHI, P.E.
FAX: (305) 595-8966 FL. REG. #38001

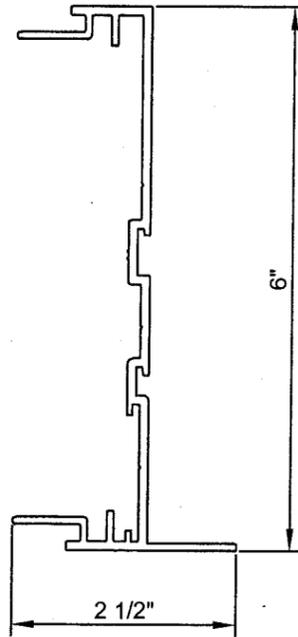
MANUFACTURER:
Gamma
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2115 S.W. 2nd Street
Pompano Beach, FL 33069
Phone: (954) 977-2711 Fax: (954) 977-2715
Web site: www.gammaindustries.ca
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TITLE:
TEST # 85
W.WALL / SPANDREL
52 3/8" x 123"
+100/-150 PSF
LARGE IMPACT
DETAILS 107 & 108

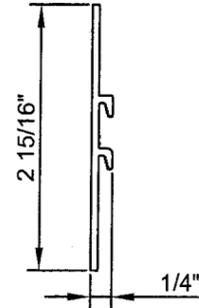
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DATE: 08/23/2007	DRAWING NO. T-85	SHEET NO. 6 OF 9



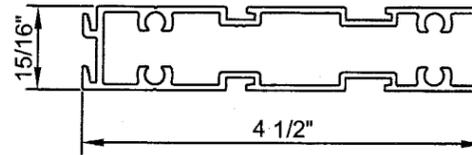
4420 ALUMINUM SPLIT MULLION (FEMALE)



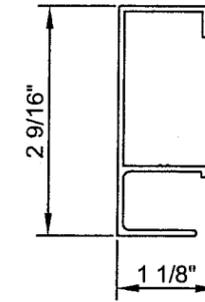
4421 ALUMINUM SPLIT MULLION (MALE)



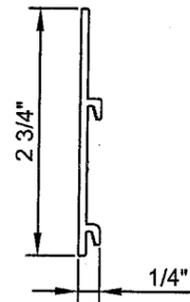
4441 ALUMINUM COVER



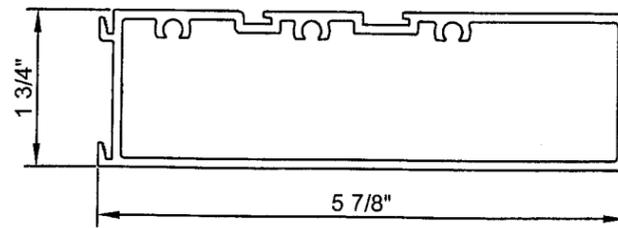
4442 ALUMINUM HORIZONTAL MULLION FOR SPANDREL GLASS



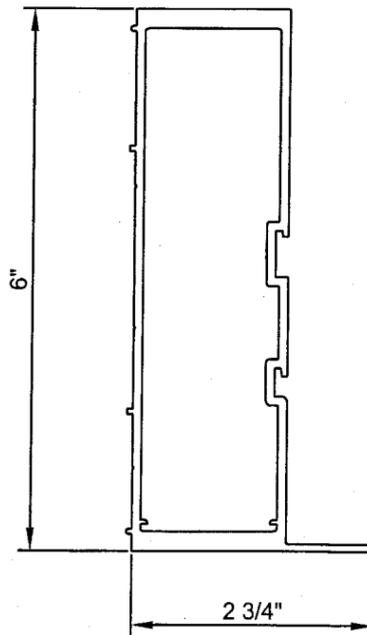
4438 ALUMINUM SNAP-ON CAP



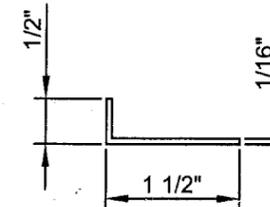
4469 ALUMINUM COVER



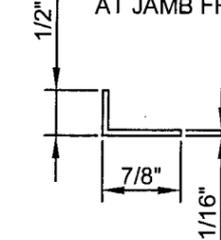
4470 ALUMINUM FRAME FOR SPANDREL HEAD AND SILL



4458 ALUMINUM STRUCTURAL JAMB



ALUMINUM BACKER ANGLE (L1/2" x 1 1/2" x 1/16" x 1/4" LONG) AT JAMB FRAME



ALUMINUM BACKER ANGLE (L1/2" x 7/8" x 1/16" x 1 3/8" LONG) AT SPLIT FRAME

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

REVISIONS:	BY:
R1 09/12/2006	D.L.
R2 01/08/2007	M.P.
R2 08/23/2007	J.C.

Approved as complying with the Florida Building Code
 Date MARCH 20, 2008
 NOA# 07-0200-D5
 Miami Date Product Control Division
 By [Signature]

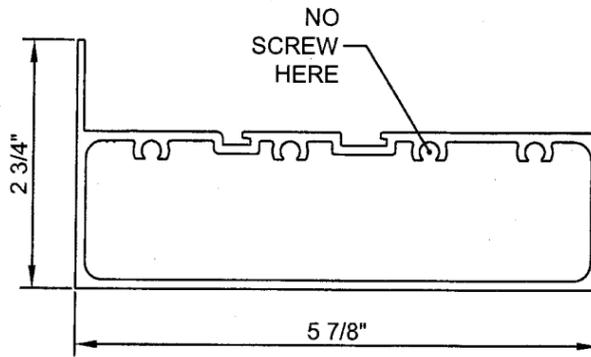
STRUCTURAL DESIGN I
 CONSULTING STRUCTURAL ENGINEERS
 9595 N. KENDALL DR. SUITE NO. 209
 MIAMI, FLORIDA 33176 CERTIFICATE # 8808

[Signature]
 9/14/07
 TEL: (305) 595-8965 FARROKH RASEKHI, P.E.
 FAX: (305) 595-8966 FL. REG. #38001

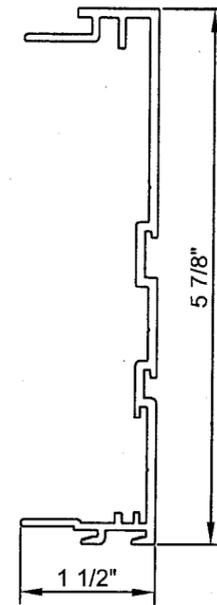
MANUFACTURER:
Gamma
 U.S.A.
 2115 S.W. 2nd Street
 Pompano Beach, FL 33069
 Phone: (954) 977-2711 Fax: (954) 977-2715
 Web site: www.gammaindustries.ca
 E-mail: info@gamma-online.com

TITLE:
TEST # 85
W.WALL / SPANDREL
52 3/8" x 123"
+100/-150 PSF
LARGE IMPACT
GAMMA'S EXTRUSIONS

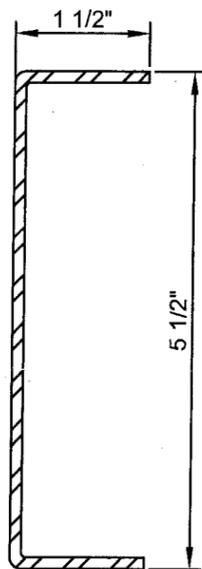
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DATE: 08/23/2007	DRAWING NO. T-85	SHEET NO. 7 OF 9



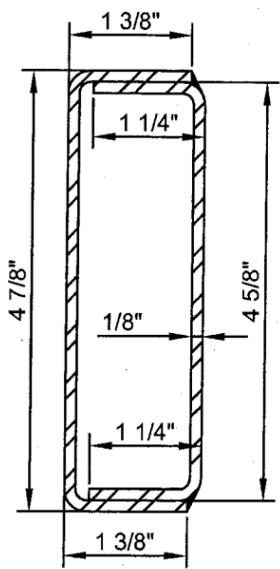
4457 ALUMINUM FRAME
HEAD AND SILL



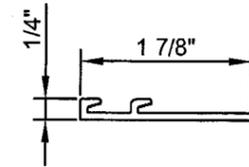
4477 ALUMINUM SPLIT MULLION FOR
SPANDREL CONDITIONS



GALVANIZED STEEL
REINFORCEMENT (JAMB)



GALVANIZED STEEL
REINFORCEMENT (SPLIT)



4478 ALUMINUM COVER FOR SPLIT MULLION

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

REVISIONS:	BY:
R1 09/12/2006	D.L.
R2 01/08/2007	M.P.
R2 08/23/2007	J.C.

Approved as complying with the
Florida Building Code
Date **MARCH 20, 2008**
NOAH **07-0208.05**
Miami Dade Product Control
Division
By *Manuel Ferriz*

STRUCTURAL DESIGN I
CONSULTING STRUCTURAL ENGINEERS
9595 N. KENDALL DR. SUITE NO. 209
MIAMI, FLORIDA 33176 CERTIFICATE #: 8803
Farrokh Rasekhi
9/19/07
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 # 85
W.WALL / SPANDREL
52 3/8" x 123"
+100/-150 PSF
LARGE IMPACT
GAMMA'S EXTRUSIONS**

SCALE: 1:2	DRAWN BY: J.C.R.	
DATE: 08/23/2007	DRAWING NO. T-85	SHEET NO. 8 OF 9

ITEM	PART #	DESCRIPTION
1	-	9/16" LAMINATED GLASS - SEE COVER FOR COMPLETE DESCRIPTION
2	4458	ALUMINUM FRAME
3	-	FOLDED STEEL REINFORCEMENT - 1C 1 1/2"x5 1/2"x 1 1/2"x1/8"
4	-	#14 HH SS SCREW x 1 1/2" LONG
5	-	#14 RH SS SCREW x 1" LONG
6	4438	ALUMINUM SNAP-ON CAP
7	-	ACCESS HOLE Ø5/8"
8	-	BACKER ROD & SEALANT SPECTREM 2 OR SILPRUF SCS 2000
9	-	STRUCTURAL SILICONE ULTRAGLAZE SSG 4700 by G.E. OR TREMCO PROGLAZE II
10	4477	ALUMINUM SPLIT MULLION FOR SPANDREL
11	-	NEOPRENE - 1/4" THICK (2" LONG)
12	-	SEALANT SPECTREM 2 OR SILPRUF SCS 2000
13	4421	ALUMINUM SPLIT MULLION
14	4420	ALUMINUM SPLIT MULLION
15	-	FOLDED STEEL REINFORCEMENT - C 1 3/8"x4 7/8"x1 3/8"x1/8" THICK & C 1 1/4"x4 5/8"x1 1/4"x1/8" THICK - WELDED TOGETHER
17	-	Ø3/8" WEDGE BOLT - 2" min. EMBEDMENT
18	4470	ALUMINUM FRAME FOR SPANDREL
19	-	PVC SHIM
20	-	FRAME CORNERS AND HORIZONTAL MULLION SEAMS SEALED WITH CLEAR SPECTREM 2 OR SILPRUF SCS 2000
21	4469	ALUMINUM COVER FOR SPANDREL GLASS
22	-	#8 RH SS SCREW x 1 1/2" LONG - QTY: 2 PER HORIZONTAL / 3 PER VERTICAL
23	4478	ALUMINUM COVER FOR SPLIT MULLION
24	4457	ALUMINUM FRAME (SILL & HEAD)
25	-	NEOPRENE SITTING BLOCK 3/4"x1/4"x3" LONG
26	4442	ALUMINUM HORIZONTAL MULLION FOR SPANDREL GLASS
27	4441	ALUMINUM COVER
28	-	NEOPRENE - 3/16" THICK (2" LONG)
29	-	ACCESS HOLE Ø1"
30	-	ALUMINUM BACKER ANGLE - SEE SHEET 7/9 FOR EXACT DIMENSIONS
31	-	NEOPRENE - 3/8" THICK (2" LONG)

REVISIONS:	BY:
R1 09/12/2006	D.L.
R2 01/08/2007	M.P.
R2 08/23/2007	J.C.

Approved as complying with the
Florida Building Code
Date MARCH 20, 2008
NOA# 07-0205.05
Miami Dade Product Control
Division
By Manuel Perez

STRUCTURAL DESIGN I
CONSULTING STRUCTURAL ENGINEERS
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9/19/07
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TITLE:
**TEST # 85
W.WALL / SPANDREL
52 3/8" x 123"
+100/-150 PSF
LARGE IMPACT
BILL OF MATERIAL**

SCALE: N.T.S.	DRAWN BY: J.C.R.	
DATE: 08/23/2007	DRAWING NO. T-85	SHEET NO. 9 OF 9