



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/pera/

Trainer Glass Company
1101 W. 13th Street West
Riviera Beach, FL 33404

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA-Product Control Section 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 Section (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. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 "T850 ICW 130 PSF" Aluminum Curtain Wall System - L.M.I.

APPROVAL DOCUMENT: Drawing No. 4326440, titled "Series T850 ICW System Single & Multiple Span 130 PSF Large Missile Impact", sheets 1 through 41 of 41, dated 03/03/2011 with revision "2" dated 10/04/2011, prepared by Design Engineering & Consulting, Inc., signed and sealed by Jeffery H. Marsh, 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 Section.

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, model/series 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 pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**



J. Gascon
10/14/11

NOA No. 11-0401.04
Expiration Date: October 20, 2016
Approval Date: October 20, 2011
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **4326440**, titled "Series T850 ICW System Single & Multiple Span 130 PSF Large Missile Impact", sheets 1 through 41 of 41, dated 03/03/2011 with revision "2" dated 10/04/2011, prepared by Design Engineering & Consulting, Inc., signed and sealed by Jeffery H. Marsh, 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) Dynamic Water Infiltration Test, per FBC and per AAMA 501.1-05
 - 5) Interstory Displacement Test, per FBC and per AAMA 501.4-00
 - 6) Large Missile Impact Test per FBC, TAS 201-94, Level D and E per ASTM E 1996-08
 - 7) Thermal Cycling Test, per FBC and per AAMA 501.5-07
 - 8) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of curtain wall system, prepared by Hurricane Test Laboratory, LLC, Test Reports No.'s **HTL 0062-0307-10**, **HTL 0062-0906-10** and **HTL 0062-0909-10**, dated 05/18, 09/28 and 08/20/2010, all signed and sealed by Vinu J. Abraham, P. E.

C. CALCULATIONS

1. Anchor calculations and structural analysis, complying with FBC-2007, prepared by Design Engineering & Consulting, Inc., dated 11/18/2010, signed, sealed and dated 10/04/2011 by Jeffery H. Marsh, P. E.
Complies with ASTM E1300-04

D. QUALITY ASSURANCE

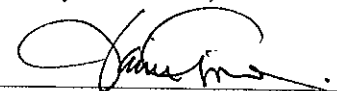
1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **11-0624.02** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont Sentry Glass® Interlayer**" dated 05/26/2010, expiring on 01/14/12.

F. STATEMENTS

1. Statement letter of compliance with the FBC-2007 and FBC-2010, dated 10/04/2011, signed and sealed by Jeffery H. Marsh, P. E.
2. Statement letter of no financial interest, conformance and compliance with the FBC-2007, dated 11/18/2010, signed and sealed by Jeffery H. Marsh, P. E.



Jaime D. Gascón, P. E.
Product Control Section Supervisor
NOA No. 11-0401.04
Expiration Date: October 20, 2016
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F. STATEMENTS (CONTINUED)

3. Laboratory compliance letters for Test Reports No.'s **HTL 0062-0307-10**, **HTL 0062-0906-10** and **HTL 0062-0909-10**, issued by Hurricane Test Laboratory, LLC, dated 05/18, 09/28 and 08/20/2010, all signed and sealed by Vinu J. Abraham, P. E.

G. OTHERS

1. None.



Jaime D. Gascon, P. E.
Product Control Section Supervisor
NOA No. 11-0401.04
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TRAINOR GLASS - T850 ICW SYSTEM SINGLE & MULTIPLE SPAN 130 PSF LARGE MISSILE IMPACT

GLAZING GASKETS AND TAPES

PART NO.	PROFILE	DESCRIPTION	MANUFACTURER NO.	MATERIAL	DURO-METER	COLOR	FURNISHED BY
G-1		PRESET WIPER GASKET	TX-18034E	EPDM	70±5	BLACK	TRAINOR/TREMCO
G-2		PRESET AIR SEAL BULB GASKET	TX-17992E	EPDM	70±5	BLACK	TRAINOR/TREMCO
G-3		PRESET RAINSCREEN GASKET	TX-15075E	EPDM	70±5	BLACK	TRAINOR/TREMCO
G-4		WEDGE GASKET	TR-6329E	EPDM	70±5	BLACK	TRAINOR/TREMCO
G-5		PRESET GASKET	TR-5796W	SCR-900	70±5	BLACK	TRAINOR/TREMCO
G-6		PRESET GLASS EDGE BULB GASKET	TX-17989E	EPDM	70±5	BLACK	TRAINOR/TREMCO
G-7		PRESET AIR SEAL WIPER GASKET	TX-17979E	EPDM	70±5	BLACK	TRAINOR/TREMCO
G-8		ACCORDIAN RAINSCREEN GASKET	TX-17980P/S	PEROX. EPDM SILICONE	60±5	BLACK	TRAINOR/TREMCO
		0.062" X 6" EXTRUDED SILICONE SHEET	TR4949S	SILICONE	N/A	TRANS-LUCENT	TRAINOR/TREMCO
FB-1		EXTRUDED CLOSED CELL FOAM BAFFLE 6" LONG	TR16132E	EPDM	N/A	BLACK	TRAINOR/TREMCO
FB-2		EXTRUDED CLOSED CELL FOAM BAFFLE 6" LONG	TR16133E	EPDM	N/A	BLACK	TRAINOR/TREMCO

SETTING BLOCKS

PART NO.	PROFILE	DESCRIPTION	MANUFACTURER NO.	MATERIAL	DUROMETER
SB-1		5/16" X 1 1/4" X 4"	TR-1731S	SILICONE	85±5
SB-2		5/16" X 1/2" X 4"	TR-1058S	SILICONE	85±5
SB-3		1/4" X 1 3/8" X 4"	TR-1064S	SILICONE	85±5
SB-4		3/8" X 1 1/4" X 4"	TR-5043S	SILICONE	85±5
SB-5		3/8" X 11/16" X 4"	TX-18035S	SILICONE	85±5
SB-6		1/4" X 1/2" X 4"	TR-1294S	SILICONE	85±5

GLASS TYPES

TAG	DESCRIPTION	TAG	DESCRIPTION
GL1	1 5/16" THK. INSULATED GLASS LARGE MISSILE I.G. LAMI CONSISTING OF: -1/4" CLEAR, TEMPERED -1/2" AIRSPACE -1/4" CLEAR, HEAT STRENGTHENED -0.090 SENTRYGLAS - MDCA -1/4" CLEAR, HEAT STRENGTHENED	GL4	5/8" THK. LAMINATED GLASS LAMINATED LEVEL "E" LARGE MISSILE CONSISTING OF: -1/4" CLEAR, HEAT STRENGTHENED -0.180 SENTRYGLAS - MDCA -1/4" CLEAR, HEAT STRENGTHENED
GL2	9/16" THK. LAMINATED GLASS LARGE MISSILE LAMI CONSISTING OF: -1/4" CLEAR, HEAT STRENGTHENED -0.090 SENTRYGLAS - MDCA -1/4" CLEAR, HEAT STRENGTHENED		
GL3	1 5/16" COMPOSITE METAL PANEL LARGE MISSILE, CONSISTING OF: 4MM COMPOSITE ALUMINUM CLEAR ANODIZED 1" RIGID INSULATION .060 ALUM. SHEET CLEAR ANODIZED		

INDEX

1/41	COVER SHEET
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9/41	DETAILS - INTERMEDIATE MULLION
10/41	DETAILS - INSIDE CORNER MULLION
11/41	DETAILS - OUTSIDE CORNER MULLION
12/41	DETAILS - HEAD
13/41	DETAILS - INTERMEDIATE HORIZONTAL
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15/41	DETAILS - CURTAINWALL SILL
16/41	DETAILS - EXPANSION (STACK) HORIZONTAL
17/41	ANCHOR DETAILS - JAMB
18/41	ANCHOR DETAILS - INT MULLION
19/41	ANCHOR DETAILS - INSIDE CORNER MULLION
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26/41	ANCHOR DETAILS - HEAD/SILL STRAP ANCHORS
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39/41	STEEL & BRAKE SHAPES
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GENERAL NOTES

DESIGN PARAMETERS

△ 2007 AND 2010 FLORIDA BUILDING CODE WITH HVHZ REQUIREMENTS
 TAS-201 - LARGE AND SMALL MISSILE IMPACT
 TAS-202 - AIR LEAKAGE, WATER PENETRATION AND STRUCTURAL PERFORMANCE
 TAS-203 - CYCLIC WIND PRESSURE LOADING

ASTM STANDARDS

E283 STATIC AIR LEAKAGE
 E331 STATIC WATER PENETRATION
 E501.1 DYNAMIC WATER PENETRATION
 E330 UNIFORM STRUCTURAL DESIGN
 E1886 LEVEL "D" IMPACT BY MISSILE & CYCLIC PRESSURES
 E1996 LEVEL "E" IMPACT BY WINDBORNE DEBRIS
 AAMA - TIR - A9 - 91

SYSTEM DIMENSIONS

3 1/2" x 7 3/4" WITH 1 5/16" GLAZING
 3 1/2" x 7" WITH 9/16" OR 5/8" GLAZING

FINISH

ON A PER JOB BASIS (EXPOSED AREAS)
 CLEAR ANODIZED (NON EXPOSED AREAS)
 MILL (NON-EXPOSED AREAS SUCH AS SETTING CHAIRS, ANCHOR CLIPS, ETC)
 ALUMINUM IN CONTACT WITH DISSIMILAR MATERIALS SHALL BE PROTECTED AS SPECIFIED IN SECTION 2003.8.4 OF THE FLORIDA BUILDING CODE (FBC)

ALUMINUM ALLOYS

6063-T5, 6063-T6 AND 6005-T5 (SEE ALSO EXTRUSIONS ON SHEETS 36-43)

STEEL

ALL REINFORCING STEEL SHALL BE PER ASTM-A36 (PRIME PAINTED)

GLASS

SEE "GLASS TYPES" SECTION ON THIS COVER SHEET
 SEE GLAZING CHART ON SHEET 5

GASKETS

SEE "GLAZING GASKETS AND TAPES" SECTION ON THIS COVER SHEET

SEALANTS

SEE "SEALANT TYPES" SECTION ON THIS COVER SHEET
 SEE "PERIMETER SEALANT OPTIONS" ON SHEETS 8, 12, 14 & 15

ANCHORAGE

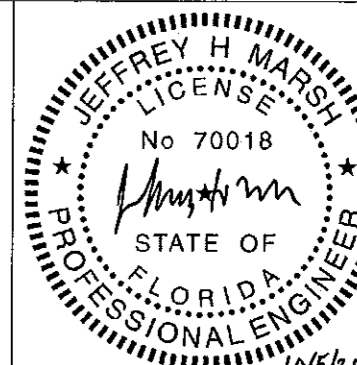
FASTENERS AND ANCHOR BOLTS TO BE CORROSION RESISTANT AS DETAILED HEREIN AND CONFORM TO THE FLORIDA BUILDING CODE (FBC)

SEALANT TYPES

TAG	DESCRIPTION
S-1	DOW-CORNING 983 (2 PART SILICONE) COLOR: (BLACK) SHOP APPLIED STRUCTURAL SILICONE SEALANT
S-2	DOW-CORNING 795 (1 PART SILICONE) COLOR: (BLACK) SHOP APPLIED WEATHER SEAL AND PERIMETER SEALANT
S-3	DOW-CORNING 795 (1 PART SILICONE) COLOR: (TO MATCH FRAME) SHOP APPLIED JOINERY SILICONE SEALANT
S-4	DOW-CORNING 795 (1 PART SILICONE) COLOR: (TO BE DETERMINED) FIELD JOINERY AND PERIMETER SILICONE SEALANT
S-5	DOW-CORNING 995 (1 PART SILICONE) COLOR: (BLACK) FIELD REGLAZE STRUCTURAL SILICONE SEALANT

FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the
 Florida Building Code
 Date 10/10/2011
 NOA# 11-0401.04
 Miami Dade Product Control
 By *[Signature]*



Date	Scale
3-3-11	NONE
Drawing No	4326440
Drawing Title	130 PSF LARGE MISSILE IMPACT COVER SHEET
Sheet No	1 / 41

TRAINOR
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NO.	DATE	BY	REVISIONS
1	10/10/11	JH	ISSUE FOR PERMIT
2	10/10/11	JH	ISSUE FOR PERMIT
3	10/10/11	JH	ISSUE FOR PERMIT
4	10/10/11	JH	ISSUE FOR PERMIT
5	10/10/11	JH	ISSUE FOR PERMIT

LISTS OF MATERIALS

FASTENERS		
NO.	PROFILE	DESCRIPTION
F-1		#12-14 x 1 1/2" HWH SMS
F-4		#12-24 x 5/8" PH SMS (S.S. OR CAP SEAL)
F-5		12-24 x 3/4" HWH SMS
F-6		12-24 x 3/4" 300 SERIES FH UNDER CUT S.S. SCREW
F-7		12-24 x 1 1/2" PH SMS (S.S. OR CAP SEAL)
F-10		3/8" x 2" HEX HEAD THRU-BOLT w/ WASHER & LOCK NUT
F-11		5/8-11 x 2 1/2" CONTI DUO-TAPTITE, Gr. 5 Δ WITH 1/2" MIN THICKNESS STEEL
F-12		3/8-16 X 4" LONG FULLY THREADED H.H.M.B. GR.5 WITH (2) HH NUT ZINC PLATED
F-13		5/8" x 2 3/4" LONG HHMB (GR5) w/ (2) FLAT WASHERS AND LOCK NUT
F-14		3/8" x 1 3/4" FH BOLT w/ FLAT WASHER AND LOCK NUT
F-20		#8-32 x 5/8" P.H. S.M.S.
F-22		1/4" HH BUILDTEX TAPCON CONCRETE ANCHOR w/ 1" MIN EMBED
F-24		1/4"-20 x 3/4" 300 SERIES (S.S.) FH SMS
F-25		1/4" x 1" HEX HEAD THRU BOLT w/ WASHER AND LOCK NUT
F-26		5/8" DIA HILTI HIT-HY 150 MAX ADHESIVE ANCHOR w/ 5 5/8" MIN EMBEDMENT
F-29		M16 (5/8") (GR8.8) 2 3/4" LONG HALFEN TEE-BOLTS
F-30		5/8" DIA. (5" LONG) HILTI KWIK BOLT III WITH 4" MIN EMBEDMENT
F-31		5/8" DIA (5" LONG) POWERS FASTENERS WEDGE BOLT Δ WITH 2-1/2" MIN EMBEDMENT
F-32		#12-14 x 1 1/2" HWH DRIL-FLEX FASTENER
F-33		#6-32 x 1/2" 300 SERIES (S.S.) FH SMS
F-34		M16 (5/8") (GR8.8) 3 1/2" LONG HALFEN TEE-BOLTS
F-37		1/2" -13 x 2 1/2" CONTI DUO-TAPTITE, Gr. 5 Δ WITH 1/2" MIN STEEL THICKNESS
F-38		5/8" x 3 1/2" LONG HHMB (GR5) w/ (2) FLAT WASHERS AND LOCK NUT
F-39		#12 x 3/4" PH SMS
F-40		3/8" x 1 1/2" FH MACHINE SCREW
F-41		3/8"-16 x 2" FH SMS w/ LOC-TITE
F-42		1/2" DIA. 5" LONG HILTI KWIK BOLT III WITH 4" MIN. EMBEDMENT
F-43		5/8"-11 x 2 3/4" FH BOLT w/ FLAT WASHER AND LOCK NUT
F-44		1/2"-13 x 1 1/2" 300 SERIES (S.S.) FH BOLT
F-45		1/2"-13 x 1 1/2" 300 SERIES (S.S.) FH MACHINE BOLT w/ LOC-TITE
F-46		1/2" x 6" 300 SERIES (S.S.) HEX HEAD BOLT w/ (S.S.) FLAT WASHERS & (S.S.) NYLON LOCK NUT

FASTENERS (CONT)		
NO.	PROFILE	DESCRIPTION
F-47		3/8" x 3 3/4" 300 SERIES (S.S.) BOLT w/ (S.S.) FLAT WASHER AND (S.S.) NYLON LOCK NUT
F-48		1/4" x 2" 300 SERIES (S.S.) FH MACHINE SCREW
F-49		1/2"-13 x 2" 300 SERIES (S.S.) FH MACHINE BOLT w/ LOC-TITE
F-50		1/2"-13 x 2 1/2" 300 SERIES (S.S.) FH MACHINE BOLT w/ LOC-TITE
F-51		#12-14 x 1" UNDERCUT FH DRIL-FLEX FASTENER
F-52		#12 x 5/8" HWH SMS
F-53		3/4" DIA HILTI KWIK BOLT III w/ 5" MIN EMBEDMENT
F-54		3/4" x 2 3/4" (GR5) HHMB w/ (2) FLAT WASHERS & LOCK NUT
F-55		M20 (3/4") x 3" (GR8.8) HALFEN TEE-BOLTS
F-56		5/8" x 1 1/2" (GR5) HHMB w/ HALFEN CHANNEL NUT (LP5511)
F-57		5/8" x 3" (GR5) HHMB w/ (2) FLAT WASHERS & HALFEN CHANNEL NUT (LP5511)
F-58		1/2" x 3" (GR5) HHMB w/ (2) FLAT WASHERS & LOCK NUT
F-59		M12 (1/2") x 4" (GR8.8) HALFEN TEE BOLTS
F-60		M12 (1/2") x 3" (GR8.8) HALFEN TEE BOLTS
F-61		1/2"-13 x 1 1/2" FH MACHINE SCREW w/ FLAT WASHER & LOCK NUT
F-62		M16 (5/8") (GR8.8) 4" LONG HALFEN TEE-BOLTS Δ

FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the Florida Building Code
 Date 10/20/2011
 NOA# 11-0401-04
 Miami-Dade Product Control
 By [Signature]

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TRAINOR

ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGN ENGINEERING & CONSULTING

[Signature]

Date: 3-3-11

Drawing No: 4326440

Drawing Title: LARGE MISSILE IMPACT LISTS OF MATERIALS

Sheet No: 2 / 41

Scale: NONE

1: DESIGN PARAMETERS

DETERMINE THE WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BUILDING HEIGHT, AND WIND ZONE USING APPLICABLE ASCE 7 STANDARDS OR PROJECT WIND TUNNEL ANALYSIS

2: GLAZING TYPES AND SIZES

SEE CHART ON SHEET 5 FOR ALLOWABLE DESIGN LOAD CAPACITY FOR DESIRED GLAZING TYPES AND SIZE

3: MULLION LENGTHS

SEE CHARTS ON SHEET 6 FOR ALLOWABLE DESIGN LOAD CAPACITY OF MULLION HEIGHTS AND MODULE WIDTHS. THE CAPACITY SHOULD EQUAL OR EXCEED THE DESIGN LOAD GIVEN FOR THE SPECIFIC PROJECT.

4: ANCHOR OPTIONS

SEE DETAILS ON 17-26 TO SELECT ANCHOR AND SUBSTRATE OPTIONS WITH CAPACITY EQUAL TO OR GREATER THAN THE DESIGN LOAD GIVEN.

5: ENTIRE ASSEMBLY

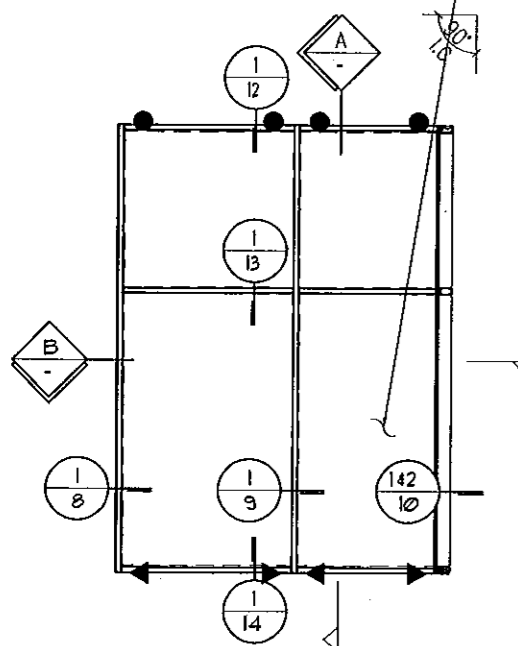
MULTIPLE UNITS CAN BE INSTALLED SIDE BY SIDE FOR AN UNLIMITED OVERALL ROUGH OPENING

- ▶ DEAD LOAD ANCHOR
- WIND LOAD ANCHOR
- = COMBINED MODULES
- = INSIDE CORNER MODULE
- = OUTSIDE CORNER MODULE
- = JAMB MODULE
- = TYPICAL MODULE
- = TYPICAL MODULE

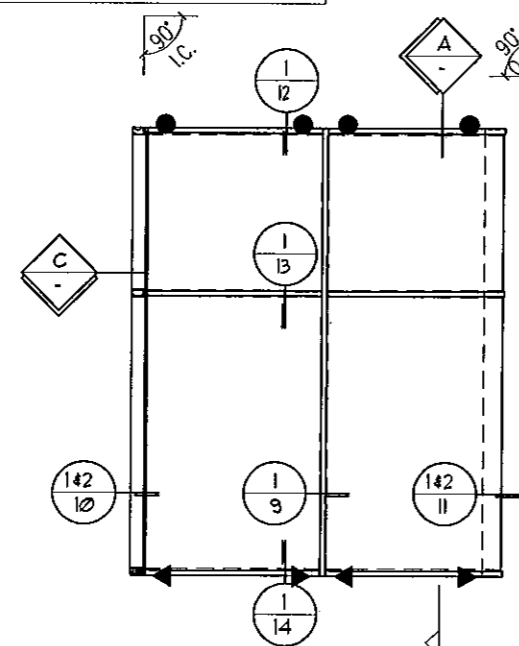
REFER TO GLAZING CHARTS ON SHEET 5 FOR ALLOWABLE GLAZING TYPES AND MAXIMUM SIZES
NOTICE: OVERALL SQUARE FOOTAGE MUST NOT EXCEED MAXIMUM AREA OF TESTED GLAZING.

NOTICE: 4 SIDED CAPTURED WITH 2 1/2" EXTERIOR COVERS ARE SHOWN IN ELEVATION.
REFER TO SHEETS 8-16 FOR 3 1/2" EXTERIOR COVERS OPTIONS.

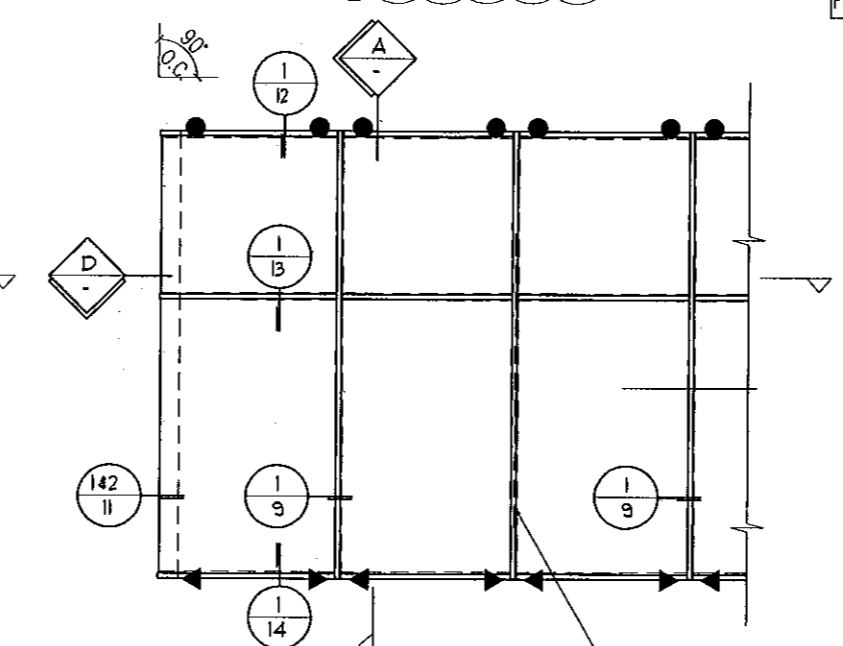
REFER TO ANCHOR CHARTS ON SHEETS 17-26 FOR ALLOWABLE FRAMING, SUBSTRATES AND PRESSURES



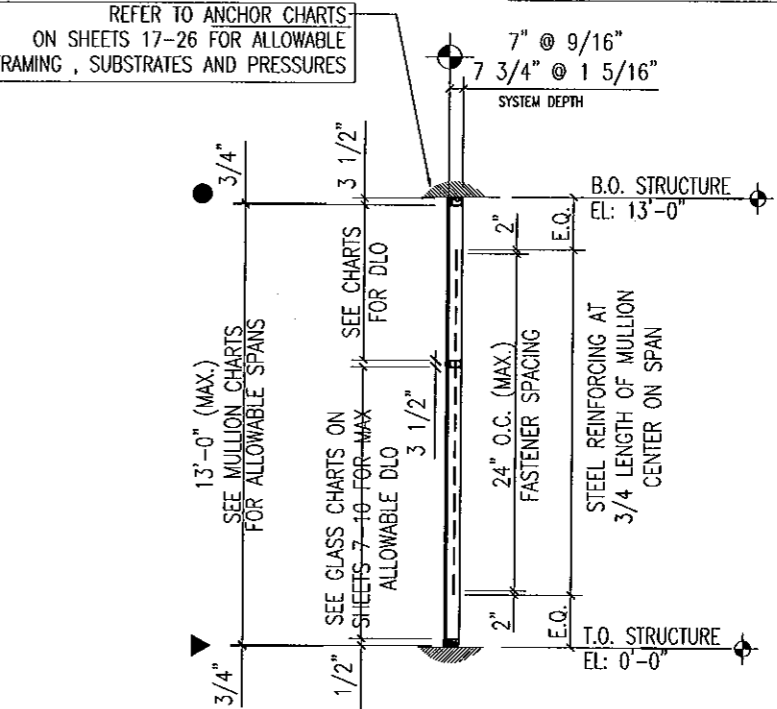
1 SINGLE SPAN ELEVATION
+ / - 130 PSF LARGE MISSILE IMPACT



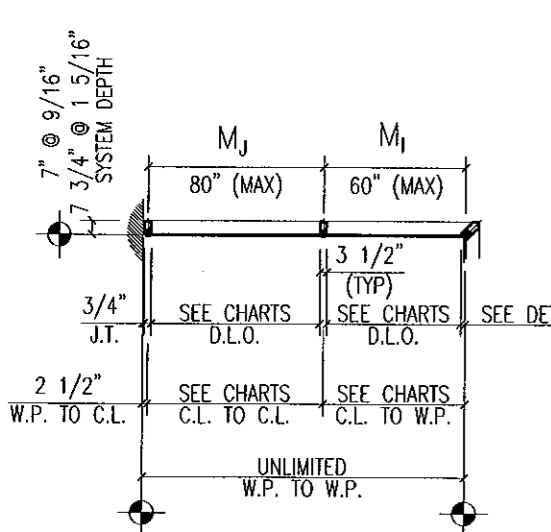
2 SINGLE SPAN ELEVATION
+ / - 130 PSF LARGE MISSILE IMPACT



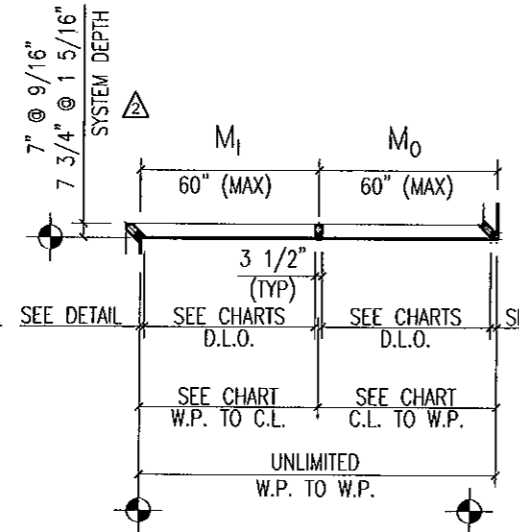
3 SINGLE SPAN ELEVATION
+ / - 130 PSF LARGE MISSILE IMPACT



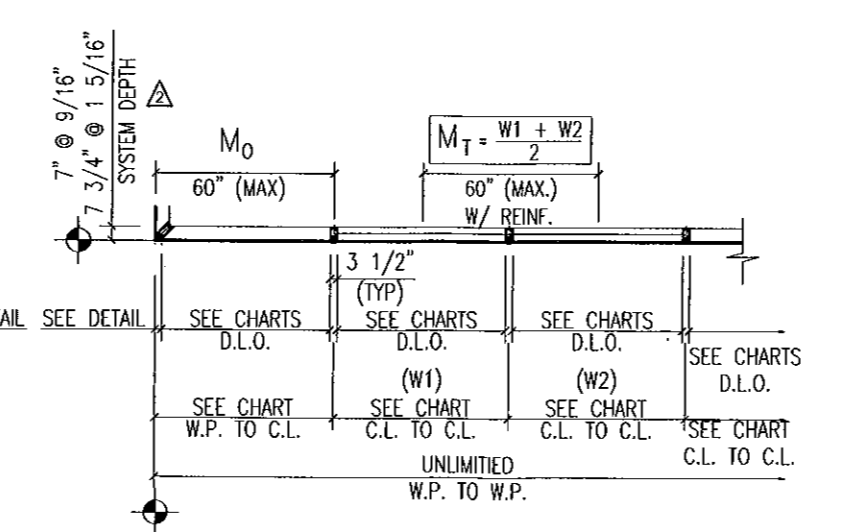
A WALL SECTION
+ / - 130 PSF LARGE MISSILE IMPACT



B KEY PLAN
+ / - 130 PSF LARGE MISSILE IMPACT



C KEY PLAN
+ / - 130 PSF LARGE MISSILE IMPACT



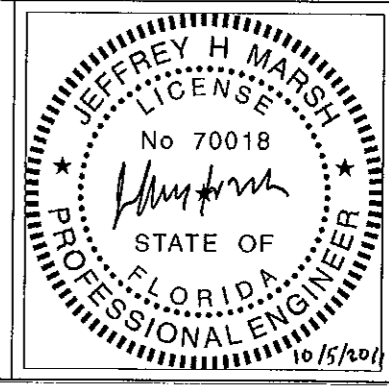
D KEY PLAN
+ / - 130 PSF LARGE MISSILE IMPACT

GLASS COMPANY
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
www.trainorglass.com

NO.	DATE	BY	REVISIONS
1	9/29/11	DEC	ISSUED ELEVATION, ANCHOR AND MULLION LOCATIONS TO ELEVATIONS
2	9/29/11	DEC	ISSUED GLAZING CHARTS AND DETAIL
3			
4			
5			

DESIGN ENGINEERING & CONSULTING
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088

FOR MIAMI-DADE CO. B.C.C.O.
Approved as complying with the Florida Building Code
Date 10/20/2011
NOA# 11-0401-0A
Miami Dade Product Control
By [Signature]



Date	Scale
3-3-11	1/4" = 1'-0"
Drawing No	4326440
Drawing Title	130 PSF LARGE MISSILE IMPACT ELEVATIONS
Sheet No	3 / 41

MAX. DESIGN PRESSURES (PSF) FOR VARIOUS GLASS TYPES

SQUARE FEET	GLASS WIDTH (DLO)	GLASS HEIGHT (DLO)	GLASS & INFILL TYPES			
			GL1 1 5/16" THK.	GL2 9/16" THK.	GL3 1 5/16" THK.	GL4 5/8" THK.
22.12	48	60	+130, -130	+130, -130	+130, -130	+130, -130
23.86	52					
24.73	54					
25.82	56.5					
27.34	60					
29.96	66					
32.57	72	72	+130, -130	+130, -130	+130, -130	+130, -130
34.32	76					
26.34	48					
28.42	52					
29.46	54					
30.76	56.5					
32.57	60	84	+130, -130	+130, -130	+130, -130	+130, -130
35.69	66					
38.80	72					
40.88	76					
30.57	48					
32.98	52					
34.19	54	86	+130, -130	+130, -130	+130, -130	+130, -130
35.69	56.5					
37.80	60					
41.42	66					
45.03	72					
47.44	76					
31.28	48	96	+130, -130	+130, -130	+130, -130	+130, -130
33.74	52					
34.98	54					
36.52	56.5					
38.67	60					
42.37	66					
46.07	72	108	+130, -130	+130, -130	+130, -130	+130, -130
48.54	76					
34.80	48					
37.55	52					
38.92	54					
40.63	56.5					
43.03	60	108	+130, -130	+130, -130	+130, -130	+130, -130
47.15	66					
39.03	48					
42.11	52					
43.65	54					
45.57	56.5					

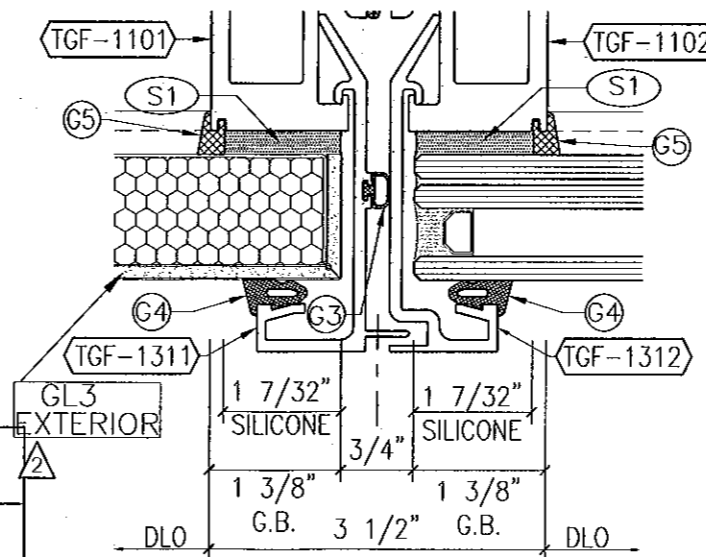
1 3/8" SILICONE BOND WIDTH CHART

WINDLOAD 130 PSF	(SMALLEST LEG OF LARGEST LITE OF GLASS) - INCHES											
	24	30	36	42	48	52	54	56.5	60	66	72	76
	OK	OK	OK	OK	OK	OK	OK	OK	X	X	X	X

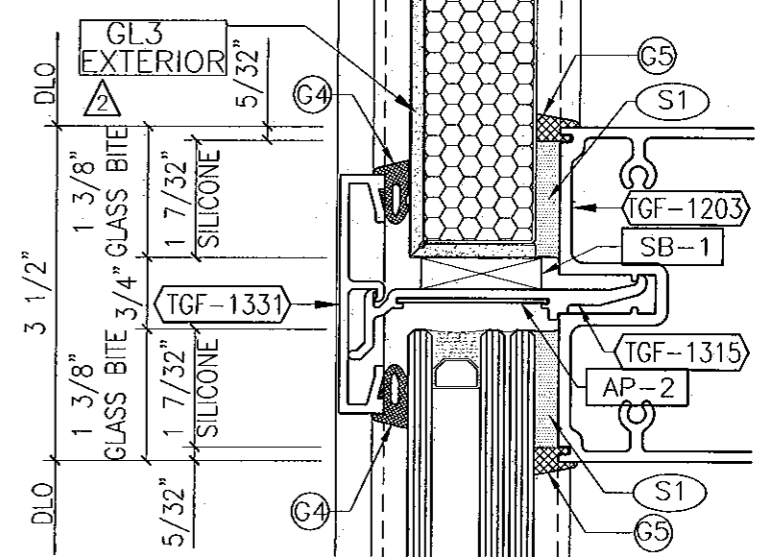
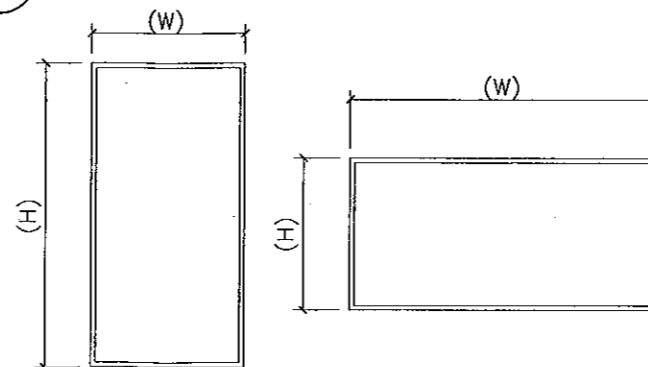
A: 1 3/8" SILICONE BOND WIDTH IS ACCEPTABLE FOR I.S. AND O.S. CORNERS ONLY
 B: REFER TO NOTE (1)

NOTES:

- ALL GLAZING TYPES AND SIZES ARE ACCEPTABLE AT 130 PSF FOR:
 - SIDED CAPTURED, SSG AT CORNERS ONLY
 - REFER TO SHEET 8 FOR JAMB CONDITIONS AND GLAZING OPTIONS
 - REFER TO SHEET 9 FOR TYPICAL MULLION CONDITIONS AND GLAZING OPTIONS
 - REFER TO SHEET 10 FOR INSIDE 90deg. CORNER CONDITIONS
 - REFER TO SHEET 11 FOR OUTSIDE 90deg. CORNER CONDITIONS
 - REFER TO SHEET 12 FOR HEAD HORIZONTAL CONDITIONS AND GLAZING OPTIONS
 - REFER TO SHEET 13 FOR INTERMEDIATE HORIZONTAL CONDITIONS AND GLAZING OPTIONS
 - REFER TO SHEETS 14 & 15 FOR SILL HORIZONTAL CONDITIONS AND GLAZING OPTIONS
 - REFER TO SHEET 16 FOR EXPANSION (STACK) HORIZONTAL CONDITIONS AND GLAZING OPTIONS
- ALL GLAZING SIZES MUST MEET ASTM E1300-04 WITH A SQUARE FOOTAGE LESS THAN OR EQUAL TO THE MAXIMUM TESTED SQUARE FOOT SIZE. REFER TO GLAZING OPTIONS CHART
- 1 3/8" MINIMUM GLASS BITE AT ALL GLAZING AND FRAMING OPTIONS UP TO 1-3/4" MAX. GLASS BITE AT CAPTURED STACK AND SILL HORIZONTALS. Δ
- 1/4" X 1 3/8" MINIMUM SILICONE BOND AT ALL GLAZING AND FRAMING OPTIONS
- GLAZING FORMULA = D.L.O. + 2 3/4" HORIZONTALLY AND VERTICALLY. REFER TO D.L.O. ON SHOP DRAWINGS FOR DIMENSION (H) AND (W)



1 VERTICAL BOND WIDTH AND GLASS BITE

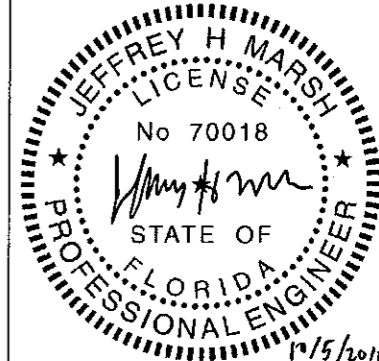


1 HORIZONTAL BOND WIDTH AND GLASS BITE

GLAZING OPTIONS	MAXIMUM TESTED GLASS AND PANELS
GL1 	59.25" X 99.125" = 40.79 SQ. FT. +130/-130
GL2 	59.25" X 98.875" = 40.68 SQ. FT. +130/-130
GL3 	59.25" X 74.875" = 30.81 SQ. FT. +130/-130
GL4 	59.25" X 98.875" = 40.68 SQ. FT. +130/-130

FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the Florida Building Code
 Date 10/20/11
 NOA# 11-0401.04
 Miami Dade Product Control
 By [Signature]



GLASS COMPANY
 1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
 PH. (561) 863-7078 FAX (561) 863-7088
 www.trainorglass.com

TRAINOR

ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

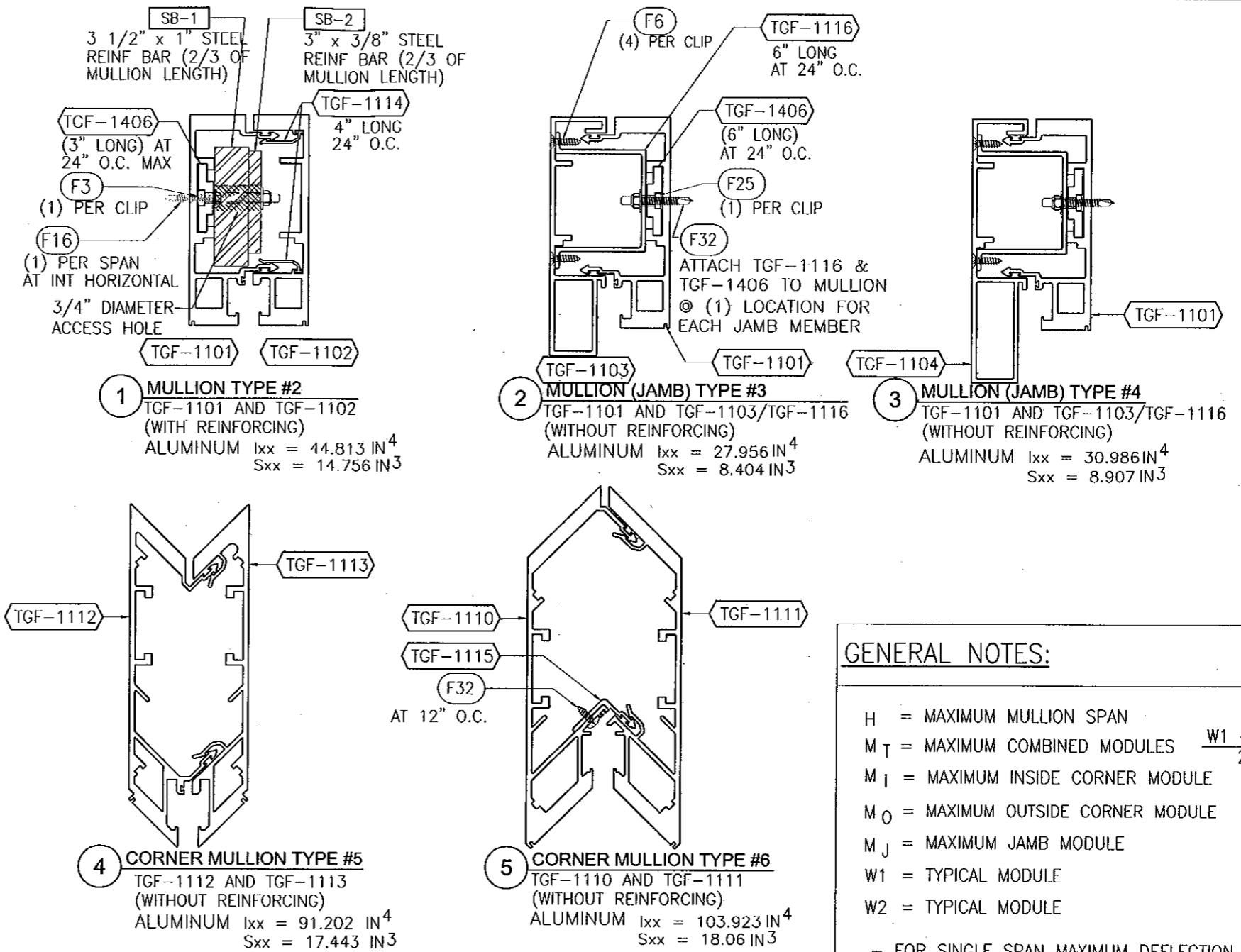
REVISIONS

NO.	DATE	BY	DESC.
1	10/20/11	JHM	ISSUED UNDER LICENSE AND SEAL OF JHM
2	10/20/11	JHM	ISSUED UNDER LICENSE AND SEAL OF JHM

DESIGN ENGINEERING & CONSULTING
 JHM
 200 N. CALDWAY BLVD., SUITE 100
 BOCA RATON, FLORIDA 33433
 PH. 561-994-8800
 FAX 561-994-8804

Date 3-3-11 Scale HALF
 Drawing No 4326440
 Drawing Title 130 PSF LARGE MISSILE IMPACT GLASS CHART
 Sheet No 5/41

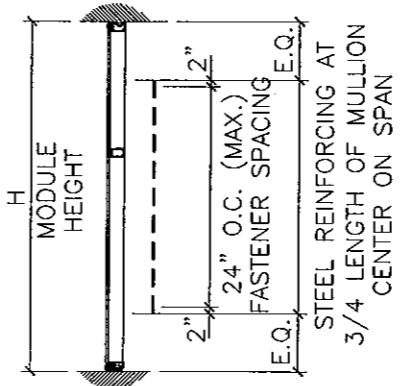
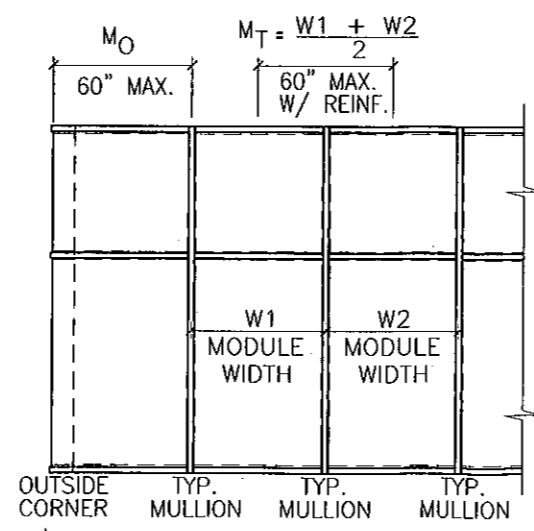
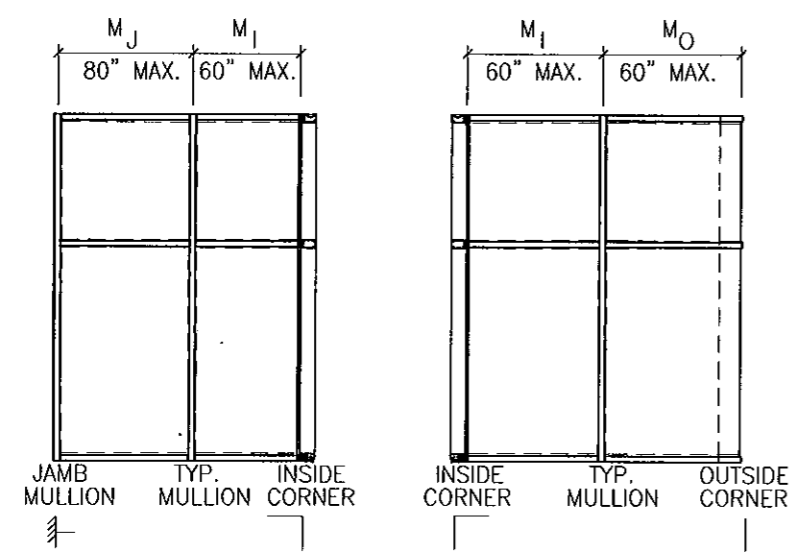
Mullion Span Chart with End Reactions (lbf)						
WL (+/-) = 130 psf						
Module (in.)	Mull Height	Mull	Jamb	Jamb	Corner	Corner
M _T , M _O , M _I , M _J	H (in.)	Type 1	Type 2	Type 3	Type 4	Type 5
54	96	2340	1170	1170	1655	1655
57		2470	1235	1235	1747	1747
60		2600	1300	1300	1838	1838
54	102	2486	1243	1243	1758	1758
57		2624	1312	1312	1856	1856
60		2763	1381	1381	1953	1953
54	114	2779	1389	1389	1965	1965
57		2933	1467	1467	2074	2074
60		3088	1544	1544	2183	2183
54	120	2925	1463	1463	2068	2068
57		3088	1544	1544	2183	2183
60		3250	1625	1625	2298	2298
54	132	3218	1609	1609	2275	2275
57		3396	1698	1698	2401	2401
60		3575	1788	1788	2528	2528
54	144	3510	1755	1755	2482	2482
57		3705	1853	1853	2620	2620
60		3900	1950	1950	2758	2758
54	156	3803	1901	1901	2689	2689
57		4014	2007	2007	2838	2838
60		4225	2113	2113	2987	2987



GENERAL NOTES:

H = MAXIMUM MULLION SPAN
 $M_T = \text{MAXIMUM COMBINED MODULES } \frac{W1 + W2}{2}$
 $M_I = \text{MAXIMUM INSIDE CORNER MODULE}$
 $M_O = \text{MAXIMUM OUTSIDE CORNER MODULE}$
 $M_J = \text{MAXIMUM JAMB MODULE}$
W1 = TYPICAL MODULE
W2 = TYPICAL MODULE

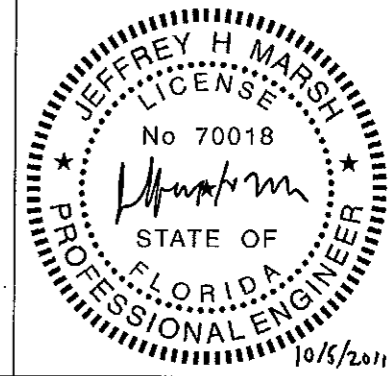
- FOR SINGLE SPAN MAXIMUM DEFLECTION = $L/180$ OR 1" (WHICHEVER IS LESS)
- SPANS ARE LIMITED BY MAXIMUM TESTED END REACTIONS



FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the Florida Building Code
Date 10/20/11
NOA# 11-0401-04
Miami Dade Product Control

By *[Signature]*



GLASS COMPANY
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
www.trainorglass.com

TRAINOR

ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

NO.	DATE	BY
1		
2		
3		
4		
5		

DESIGN ENGINEERING & CONSULTING
[Signature]
2005 N. CRENSHAW BLVD., SUITE 100
P.O. BOX 10000, CHICAGO, ILLINOIS 60628-1000
TEL: 773-344-0000

Date	Scale
3-3-11	HALF

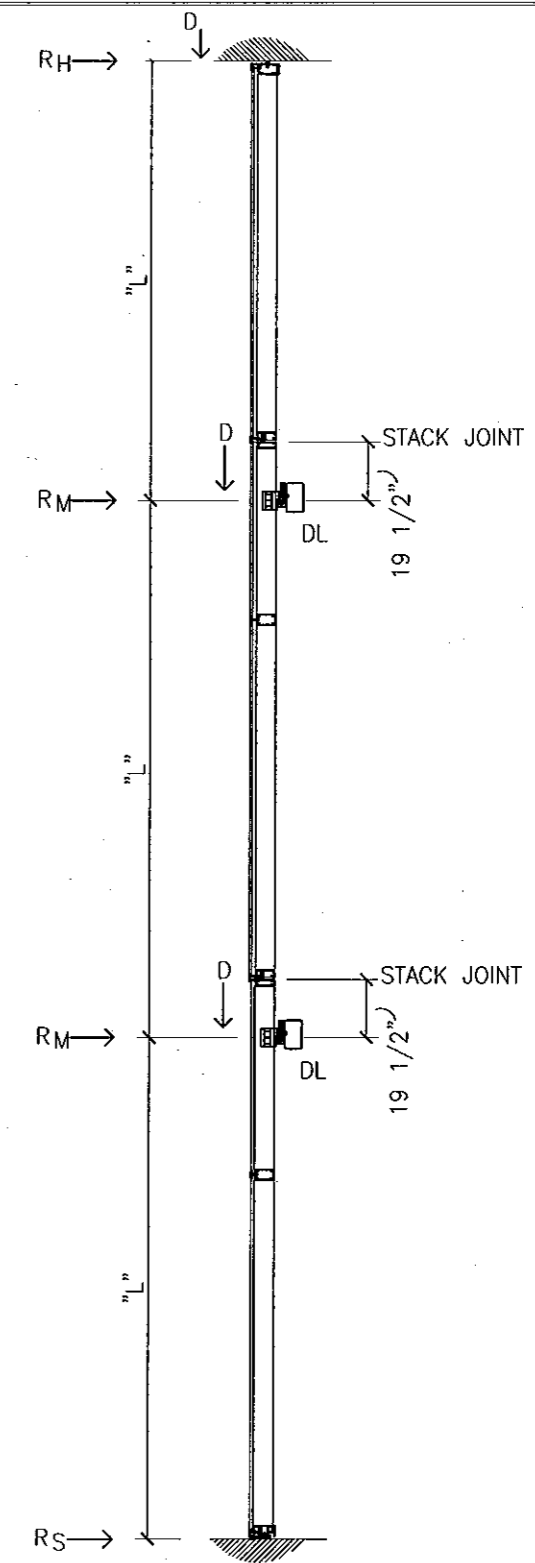
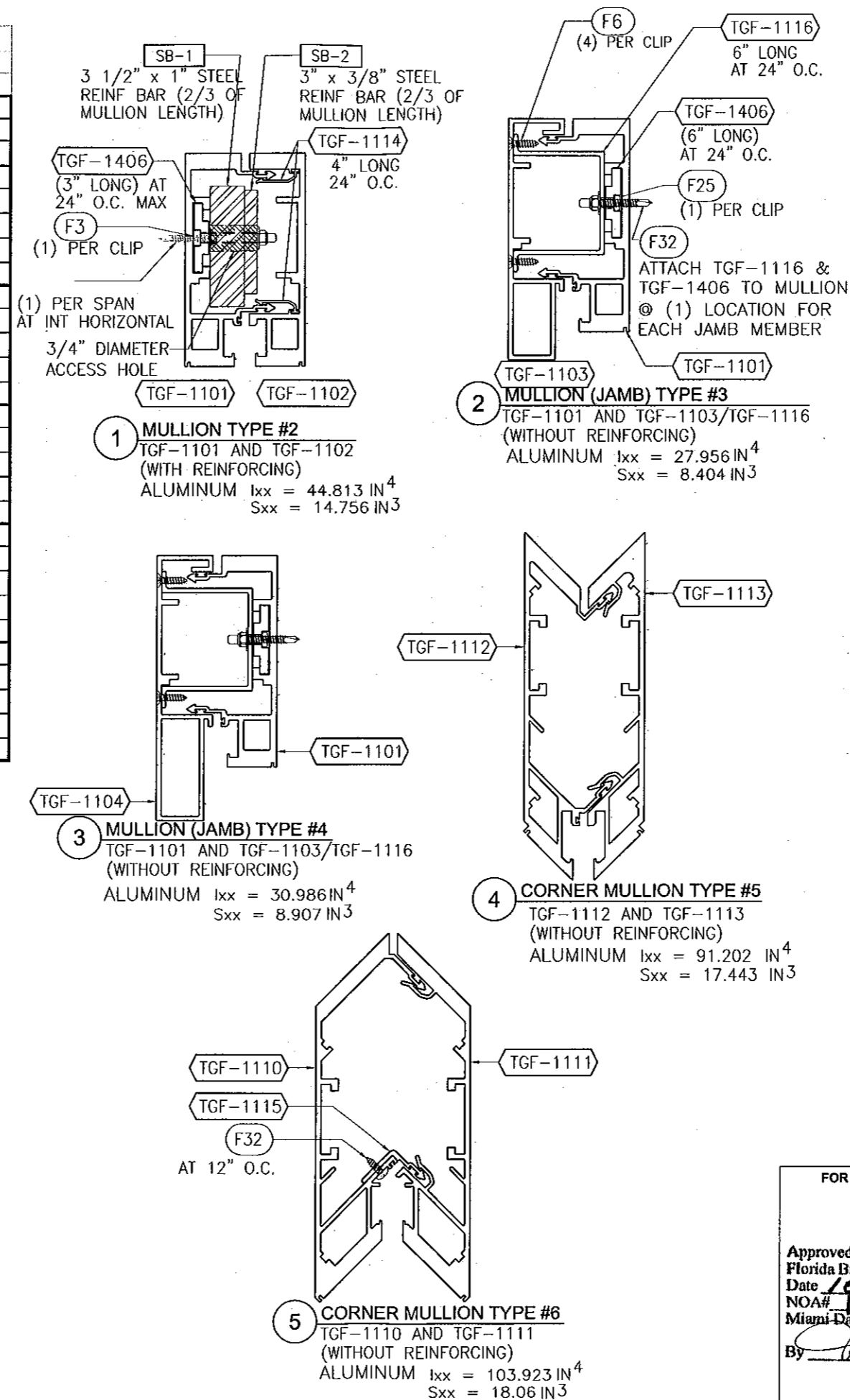
Drawing No 4326440
Drawing Title 130 PSF LARGE MISSILE IMPACT MULLION CHART
Sheet No 6 / 41

Multi-Span w/ Stack Horizontal Application and Support Reactions (lbf)

	WL (+/-) = 130 psf					
	Mull	Jamb	Jamb	Corner	Corner	
	Type 1	Type 2	Type 3	Type 4	Type 5	
M _T	L/R	L/R	L/R	L/R	L/R	
3'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	
R _S	2408	1204	1204	1703	1703	
R _M	6244	3122	3122	4415	4415	
R _H	2578	1289	1289	1823	1823	
D	570	208	285	570	570	
3'-6"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	
R _S	2809	1405	1405	1986	1986	
R _M	7285	3642	3642	5151	5151	
R _H	3007	1504	1504	2126	2126	
D	665	242	333	665	665	
4'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	
R _S	3210	1605	1605	2270	2270	
R _M	8326	4163	4163	5887	5887	
R _H	3437	1718	1718	2430	2430	
D	760	277	380	760	760	
4'-6"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	
R _S	3612	1806	1806	2554	2554	
R _M	9366	4683	4683	6623	6623	
R _H	3866	1933	1933	2734	2734	
D	855	312	428	855	855	
5'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	14'-0" / 15'-0"	
R _S	4013	2007	2007	2838	2838	
R _M	10407	5204	5204	7359	7359	
R _H	4296	2148	2148	3038	3038	
D	950	346	475	950	950	

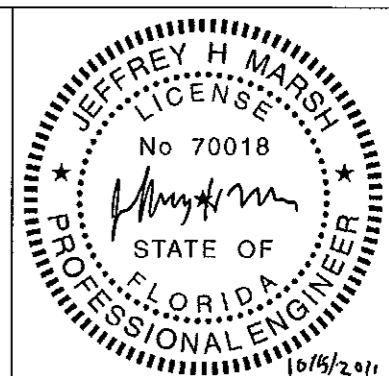
GENERAL NOTES:

- L = DISTANCE BETWEEN ANCHOR POINTS
- R_H = MAXIMUM REACTION AT HEAD ANCHOR
- R_M = MAXIMUM REACTION AT MIDSPAN ANCHOR
- R_S = MAXIMUM REACTION AT SILL ANCHOR
- D = MAXIMUM DEAD LOAD REACTION
- DL = DEAD LOAD ANCHOR POINT
- WL = WIND LOAD ANCHOR POINT
- FOR MULTIPLE SPAN MAXIMUM DEFLECTION = L/180 OR 1" (WHICHEVER IS LESS)
- SPANS ARE LIMITED BY MAXIMUM TESTED END REACTIONS



FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the Florida Building Code
Date 10/26/2011
NOA# 11-0401-0A
Miami Dade Product Control
By [Signature]



Date	Scale
3-3-11	QUARTER
Drawing No	4326440
Drawing Title	130 PSF LARGE MISSILE IMPACT MULLION CHART
Sheet No	7 / 41

GLASS COMPANY
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PH. (561) 863-7078 FAX (561) 863-7088
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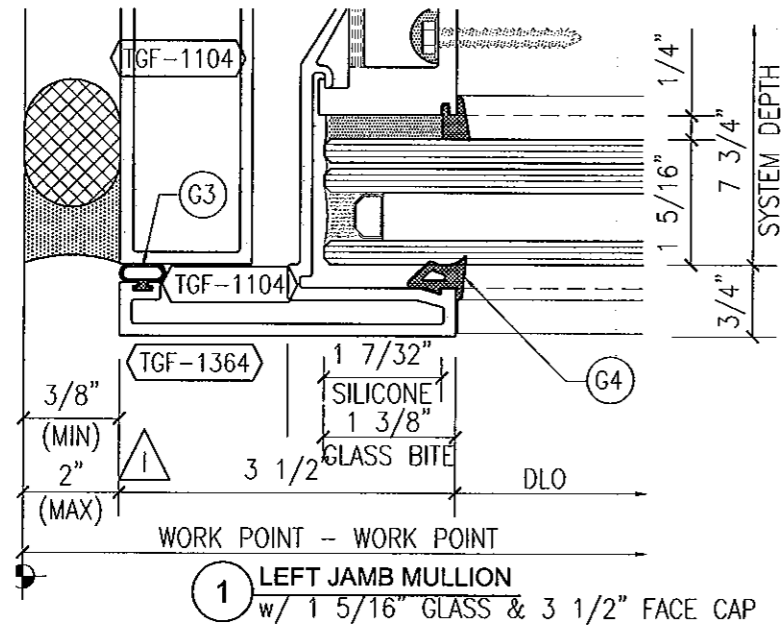
ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

PERIMETER SEALANT OPTIONS

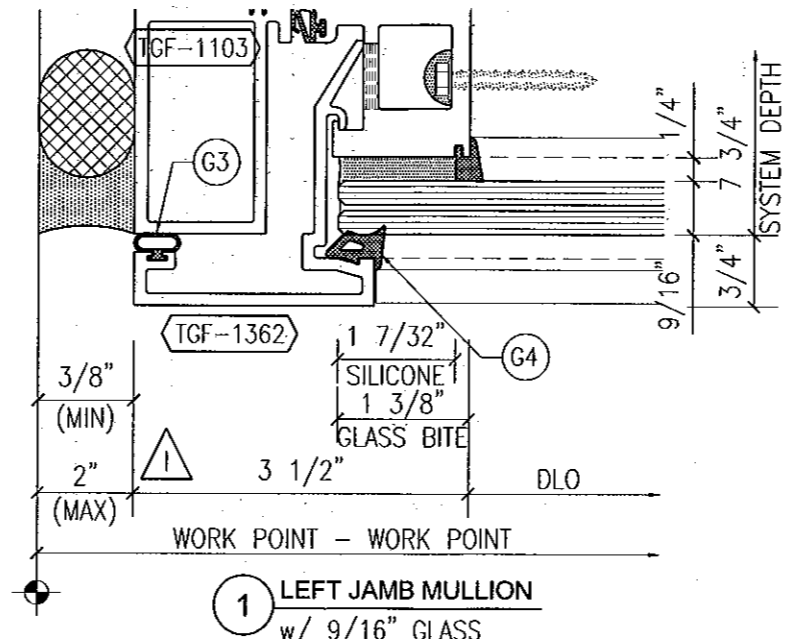
DOW CORNING 790 SILICONE
 DOW CORNING 791 SILICONE
 DOW CORNING 795 SILICONE
 TREMCO SPECTRUM 2
 ALTERNATE PERIMETER SEALANT TYPES AND JOINT SIZES SHALL BE DESIGNED AND APPROVED BY DESIGN PROFESSIONAL OF RECORD AND/OR THE SEALANT MANUFACTURER.

NOTE:
 SEE SHEET 17 FOR ANCHORAGE CONDITIONS

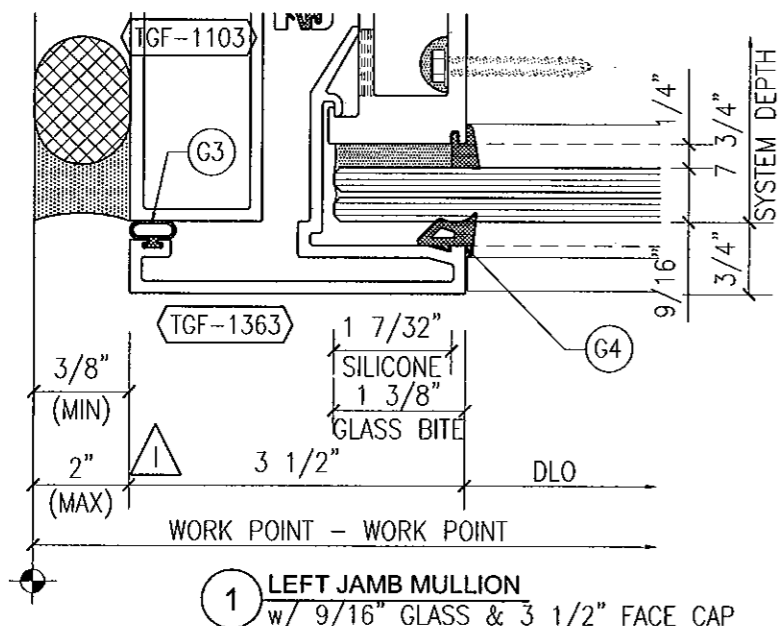
ATTACH TGF-1116 & TGF-1406 TO MULLION @ (1) LOCATION FOR EACH JAMB MEMBER AT INTERMEDIATE HORIZONTAL



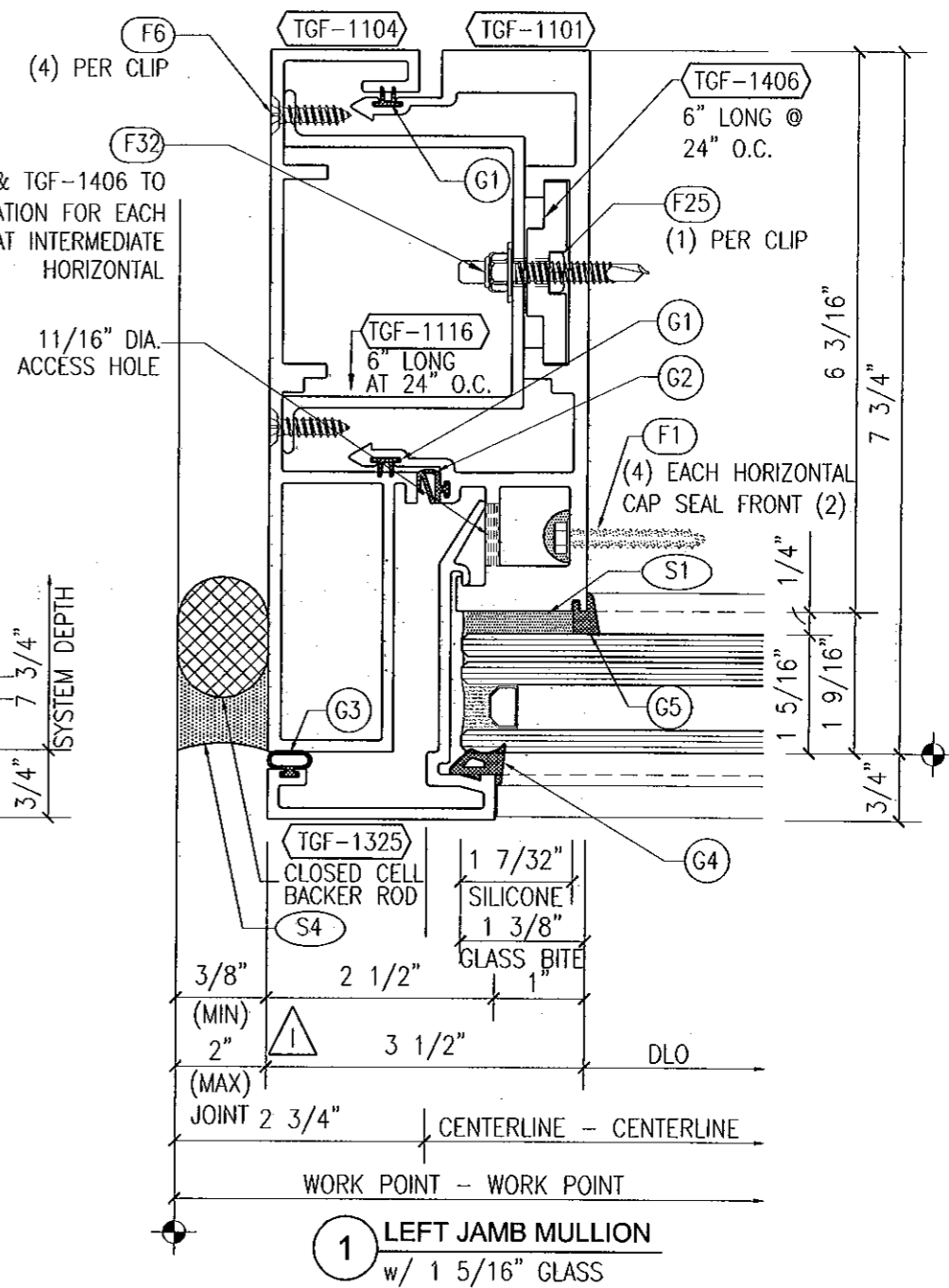
1 LEFT JAMB MULLION
 w/ 1 5/16" GLASS & 3 1/2" FACE CAP



1 LEFT JAMB MULLION
 w/ 9/16" GLASS



1 LEFT JAMB MULLION
 w/ 9/16" GLASS & 3 1/2" FACE CAP



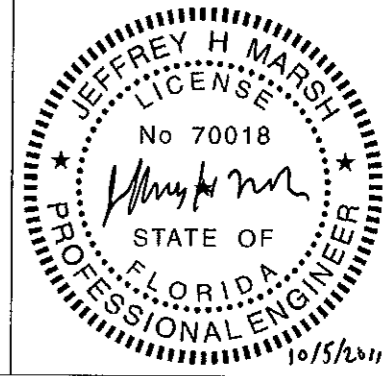
1 LEFT JAMB MULLION
 w/ 1 5/16" GLASS

GLASS COMPANY
 1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
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 www.trainorglass.com

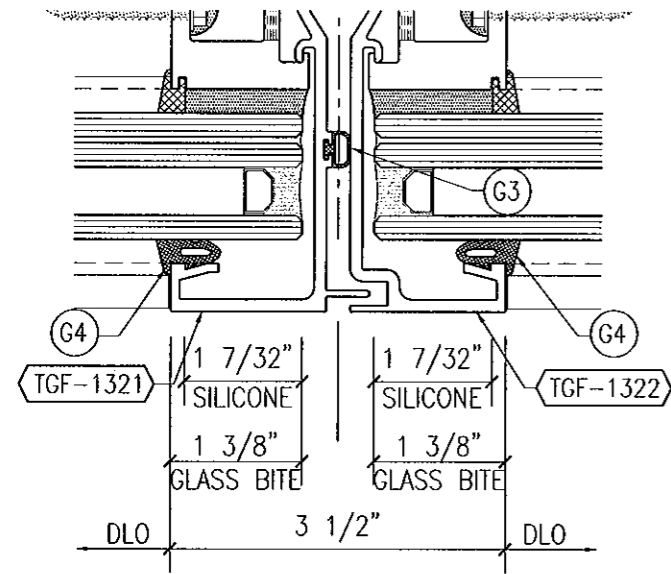


NO.	DATE	BY	REVISIONS
1	10/15/2011	JHM	ISSUED FOR CONSTRUCTION
2			
3			
4			
5			

FOR MIAMI-DADE CO. B.C.C.O.
 Approved as complying with the Florida Building Code
 Date 10/20/2011
 NOA# 11-0401.04
 Miami Dade Product Control
 By *[Signature]*

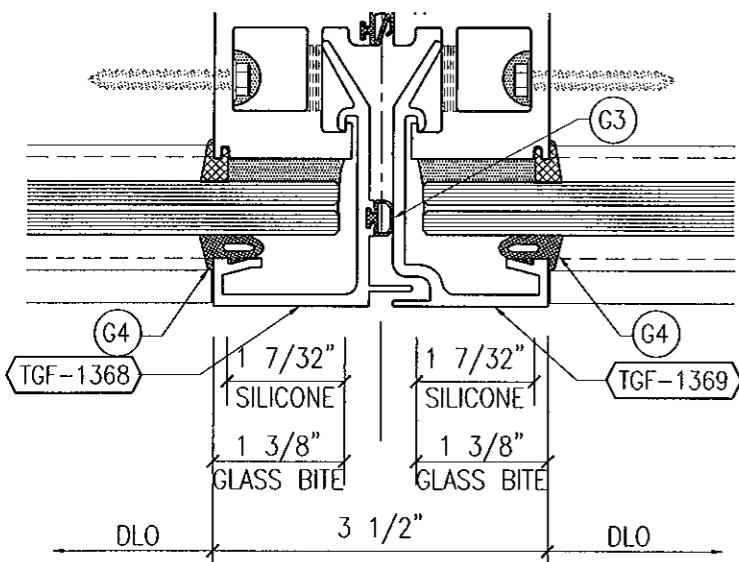


Date	Scale
3-3-11	HALF
Drawing No	
4326440	
Drawing Title	
130 PSF LARGE MISSILE IMPACT DETAILS	
Sheet No	
8 / 41	



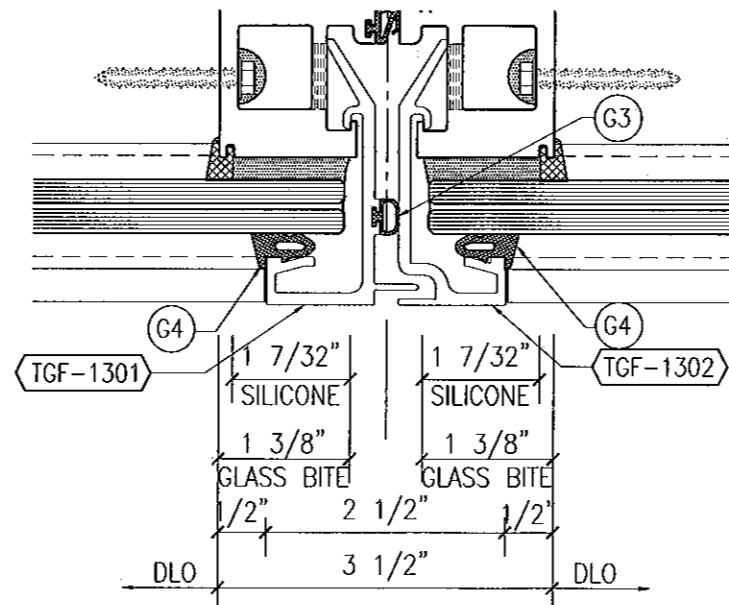
CENTERLINE - CENTERLINE | CENTERLINE - CENTERLINE

1 INTERMEDIATE MULLION
w/ 1 5/16" THICK GLASS & 3 1/2" FACE CAP



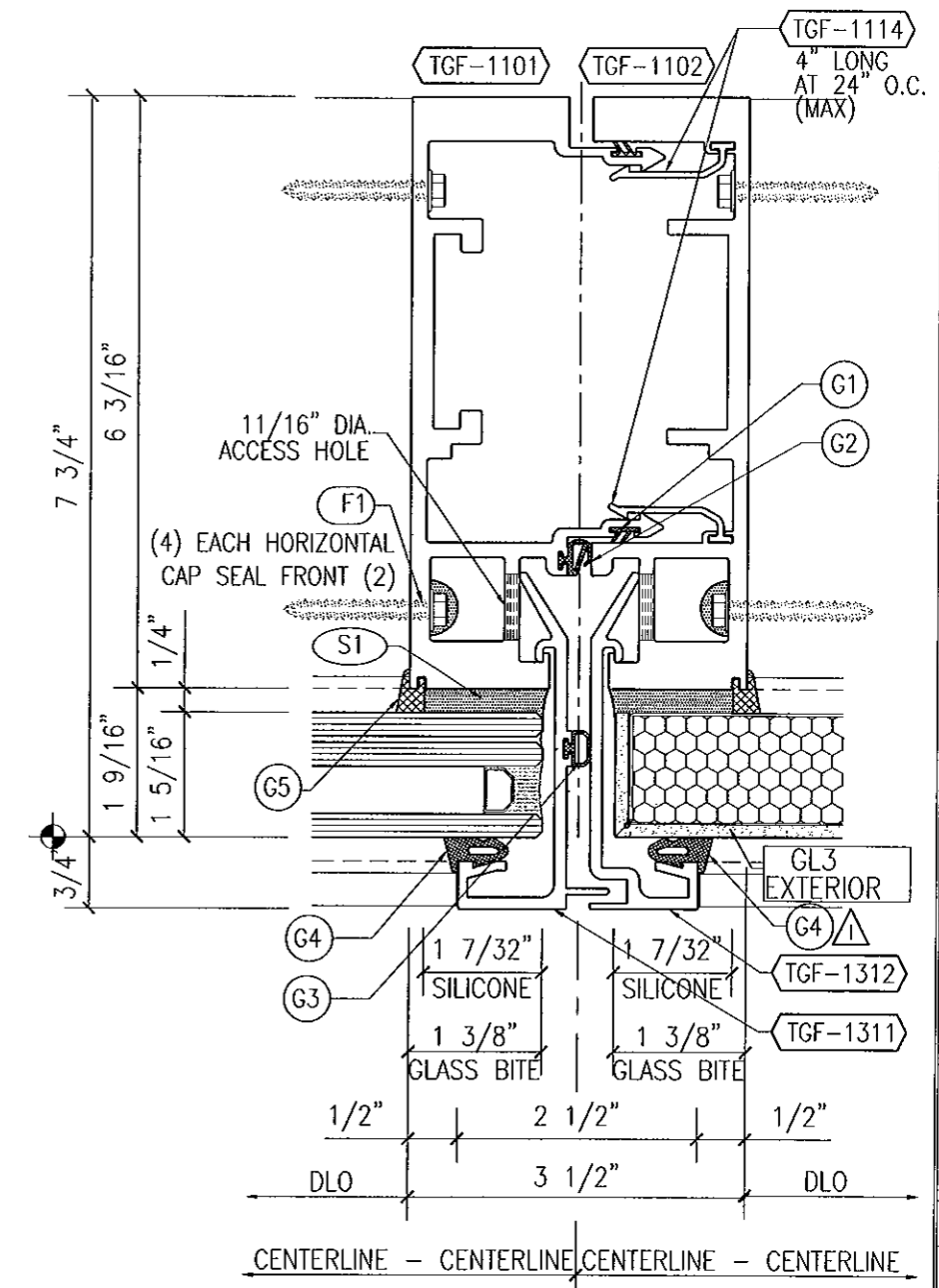
CENTERLINE - CENTERLINE | CENTERLINE - CENTERLINE

1 INTERMEDIATE MULLION
w/ 9/16" THICK GLASS & 3 1/2" FACE CAP



CENTERLINE - CENTERLINE | CENTERLINE - CENTERLINE

1 INTERMEDIATE MULLION
w/ 9/16" THICK GLASS & 2 1/2" FACE CAP

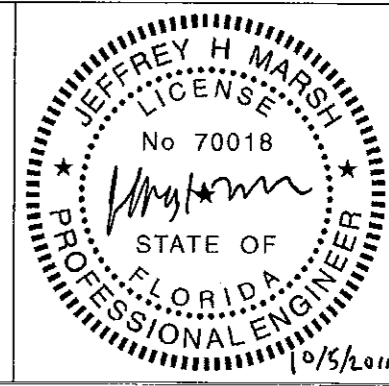


CENTERLINE - CENTERLINE | CENTERLINE - CENTERLINE

1 INTERMEDIATE MULLION
w/ 1 5/16" THICK GLASS OR COMPOSITE PANELS

NOTE:
SEE SHEET 18 FOR
ANCHORAGE CONDITIONS

FOR MIAMI-DADE CO. B.C.C.O.
Approved as complying with the
Florida Building Code
Date 10/20/2011
NOA# 11-0401-04
Miami Dade Product Control
By [Signature]

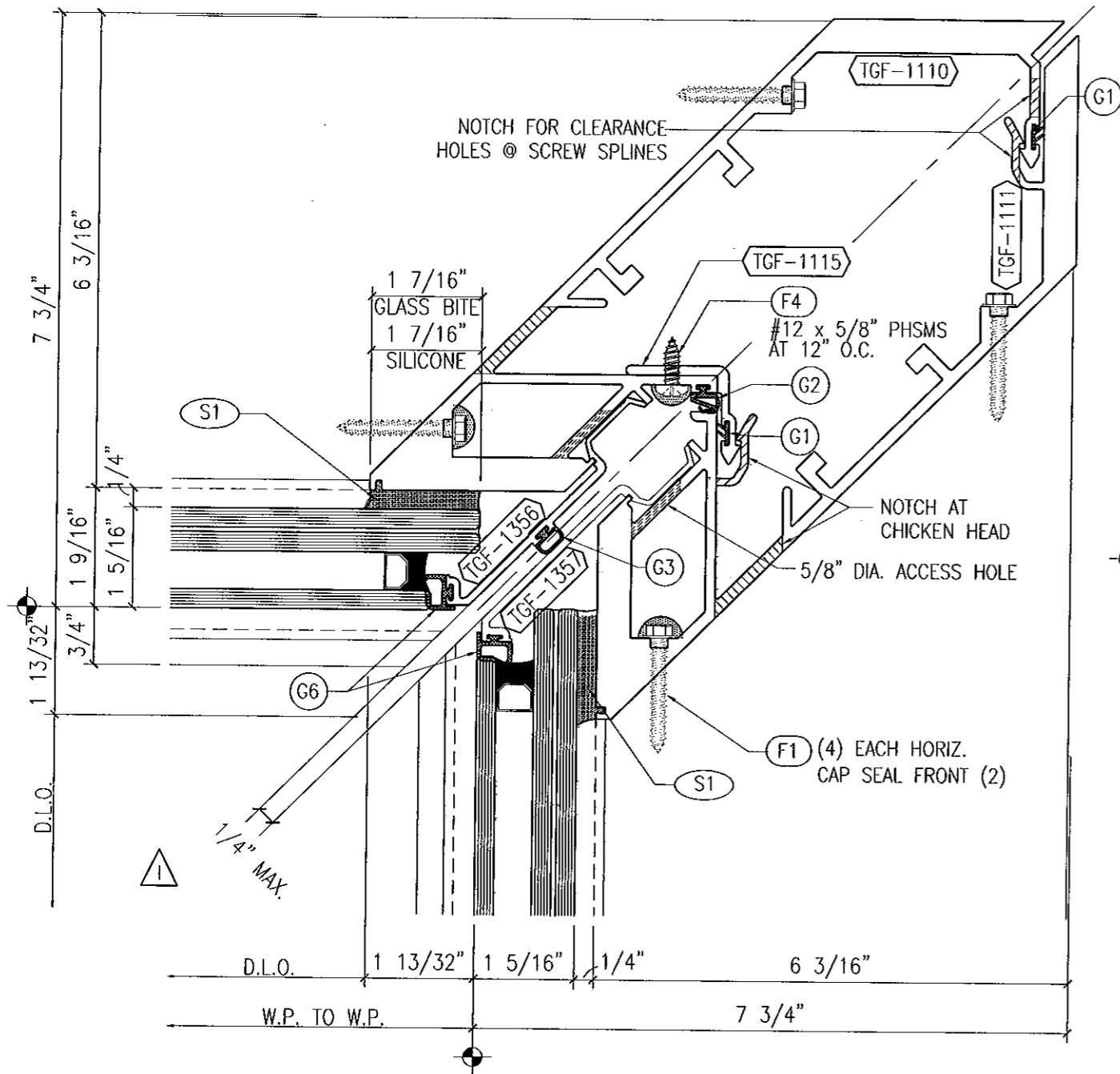


Date	Scale
3-3-11	HALF
Drawing No	
4326440	
Drawing Title	
130 PSF LARGE MISSILE IMPACT DETAILS	
Sheet No	
9 / 41	

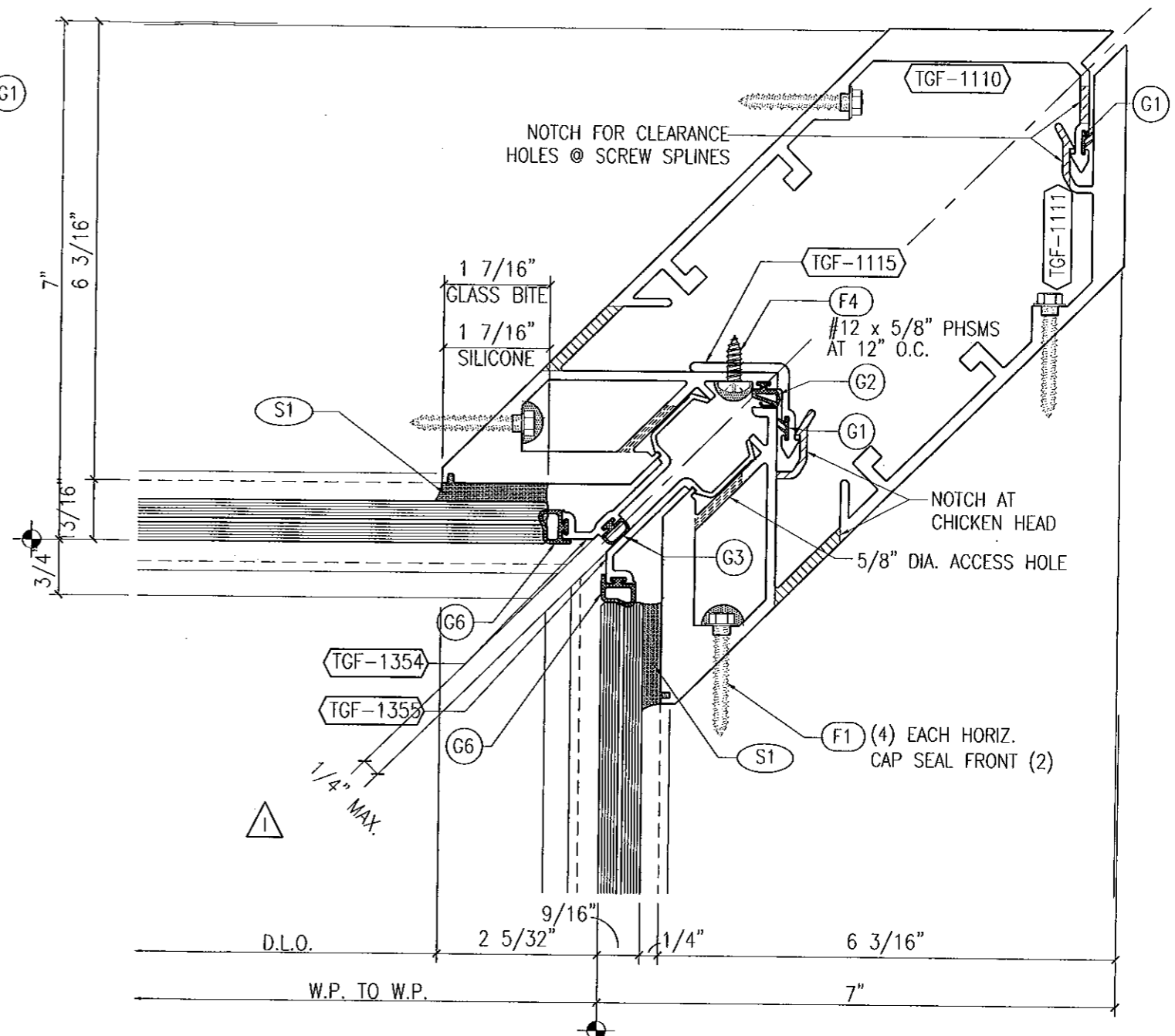
G L A S S C O M P A N Y
 1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
 PH. (561) 863-7078 FAX (561) 863-7088
 www.trainorglass.com
TRAINOR
 ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

NO.	DATE	BY	REVISIONS
1	10/20/11
2
3
4
5

DESIGN
ENGINEERING
& CONSULTING
[Signature]
1101 13TH STREET WEST
RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088



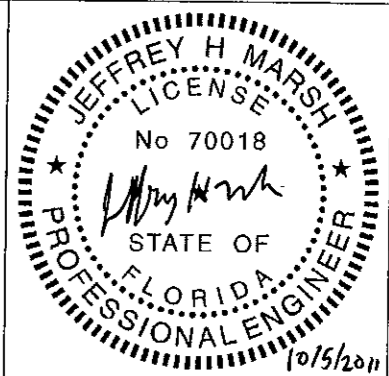
1 90° I.S. CORNER MULLION
w/ 1 5/16" THICK GLASS



2 90° I.S. CORNER MULLION
w/ 9/16" THICK GLASS

NOTE:
SEE SHEET 19 FOR
ANCHORAGE CONDITIONS

FOR MIAMI-DADE CO. B.C.C.O.
Approved as complying with the
Florida Building Code
Date 10/20/2011
NOAH 11-0421-04
Miami-Dade Product Control
By *[Signature]*

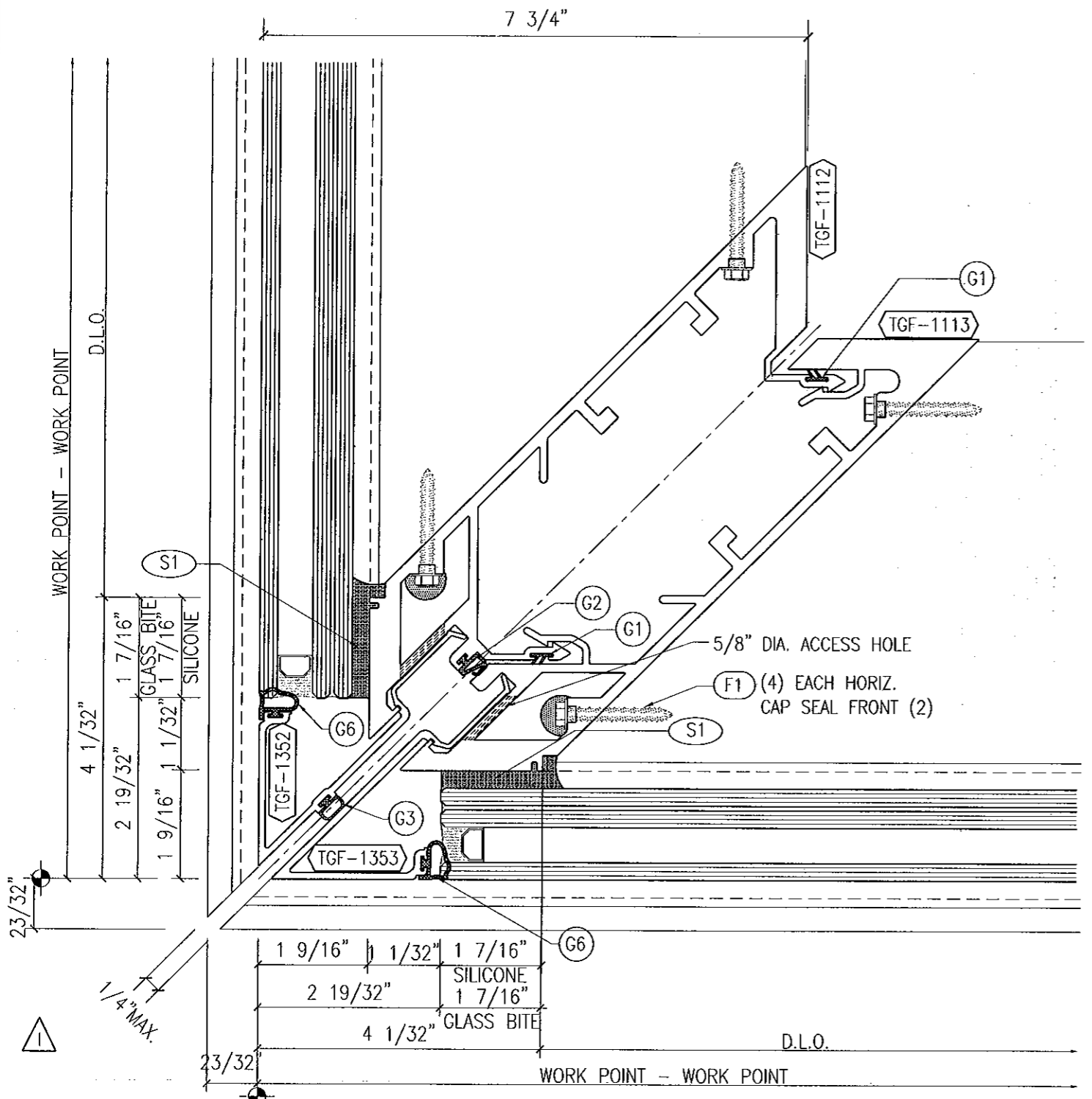


Date	Scale
3-3-11	HALF
Drawing No	4326440
Drawing Title	130 PSF LARGE MISSILE IMPACT DETAILS
Sheet No	10 / 41

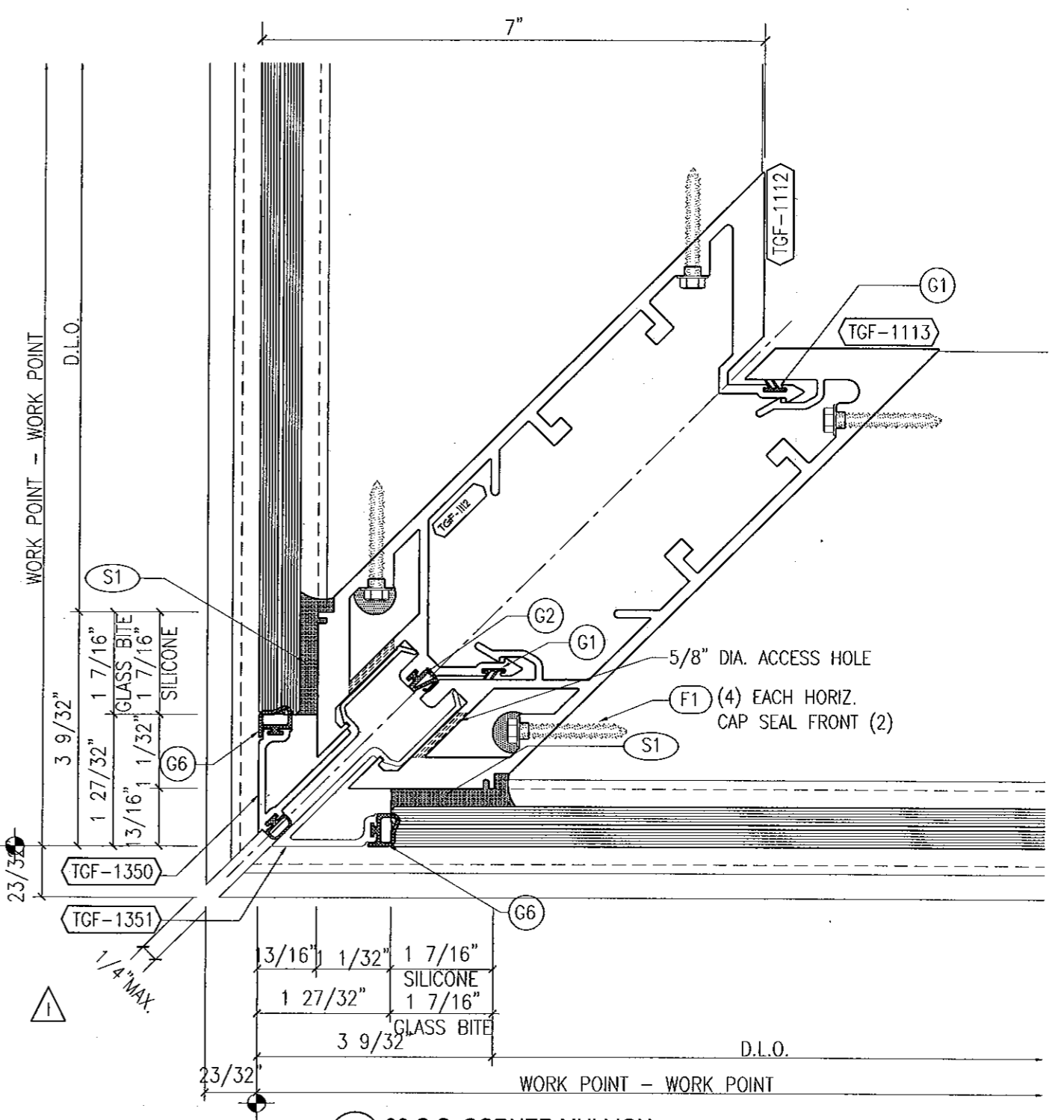
GLASS COMPANY
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
www.trainorglass.com
TRAINOR
ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

NO.	DATE	BY	REVISIONS
1			ADD 1/4" MAX. CORNER AT 1/4"
2			
3			
4			
5			

DESIGN
ENGINEERING
& CONSULTING
[Signature]
2006 S. GUNNAR BLVD. SUITE 100
REDFORD, CALIF. 94588
TEL. 925-844-2299
FAX 925-844-2298



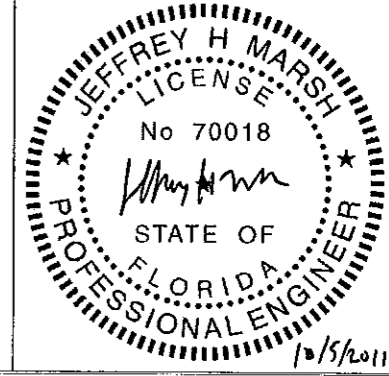
1 90 O.S. CORNER MULLION
w/ 1 5/16" THICK GLASS



2 90 O.S. CORNER MULLION
w/ 9/16" THICK GLASS

NOTE:
SEE SHEET 20 & 21 FOR
ANCHORAGE CONDITIONS

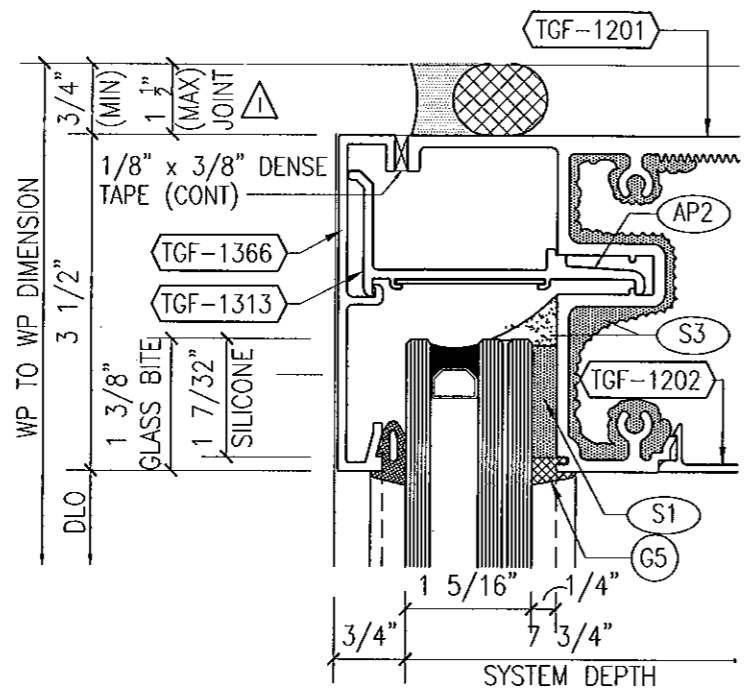
Approved as complying with the
Florida Building Code
Date 10/20/2011
NOA# 11-0401.04
Miami Dade Product Control
By [Signature]



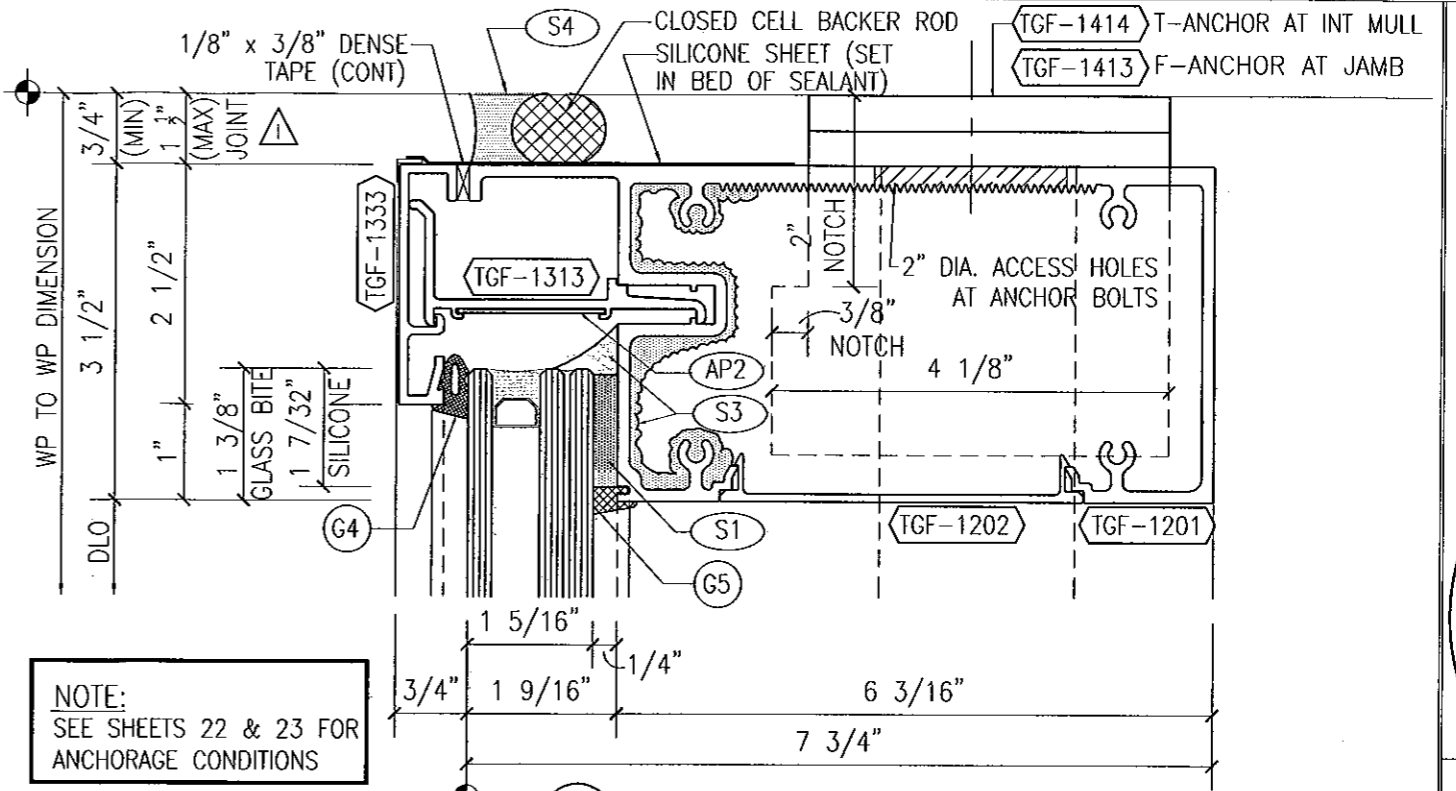
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3-3-11	HALF
Drawing No	
4326440	
Drawing Title	
130 PSF LARGE MISSILE IMPACT DETAILS	
Sheet No	
11 / 41	

DESIGN
ENGINEERING
& CONSULTING
[Signature]

NO.	DATE	BY	REVISIONS
1			ADD 1/4" MAX. CORNER IF IM
2			
3			
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5			

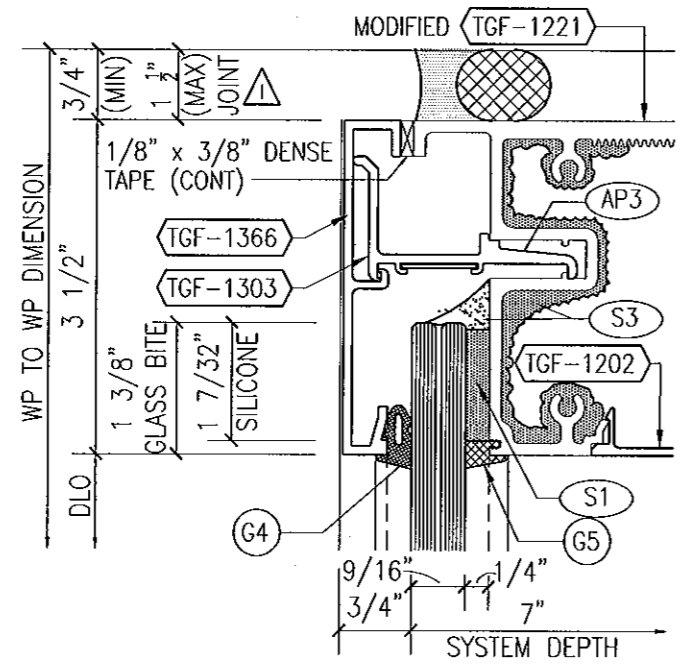


1 HEAD HORIZONTAL
w/ 1 5/16" THICK GLASS & 3 1/2" FACE CAP

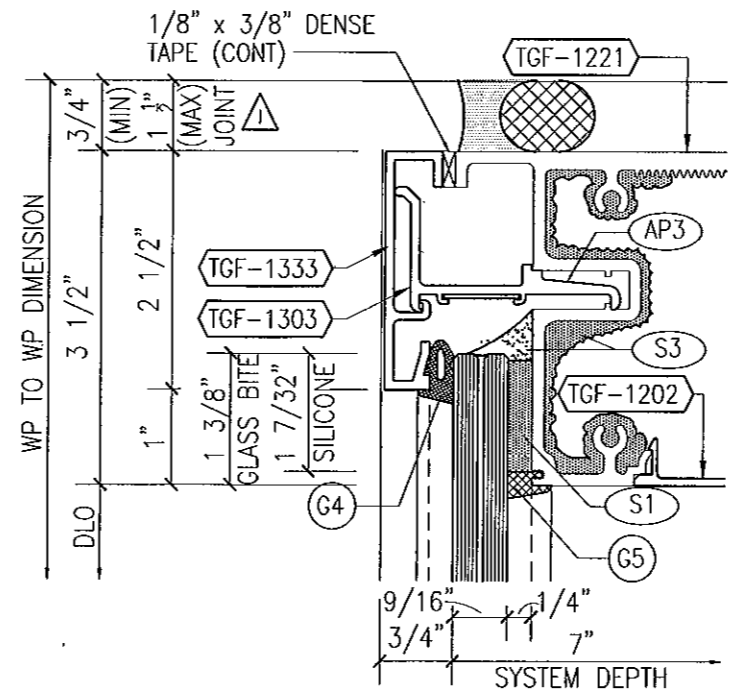


NOTE:
SEE SHEETS 22 & 23 FOR
ANCHORAGE CONDITIONS

1 HEAD HORIZONTAL
w/ 1 5/16" THICK GLASS



1 HEAD HORIZONTAL
w/ 9/16" THICK GLASS & 3 1/2" FACE CAP



1 HEAD HORIZONTAL
w/ 9/16" THICK GLASS

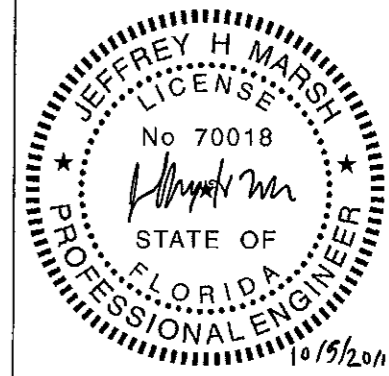
PERIMETER SEALANT OPTIONS

- DOW CORNING 790 SILICONE
- DOW CORNING 791 SILICONE
- DOW CORNING 795 SILICONE
- TREMCO SPECTRUM 2

ALTERNATE PERIMETER SEALANT TYPES AND JOINT SIZES SHALL BE DESIGNED AND APPROVED BY DESIGN PROFESSIONAL OF RECORD AND/OR THE SEALANT MANUFACTURER.

FOR MIAMI-DADE CO. B.C.C.O.

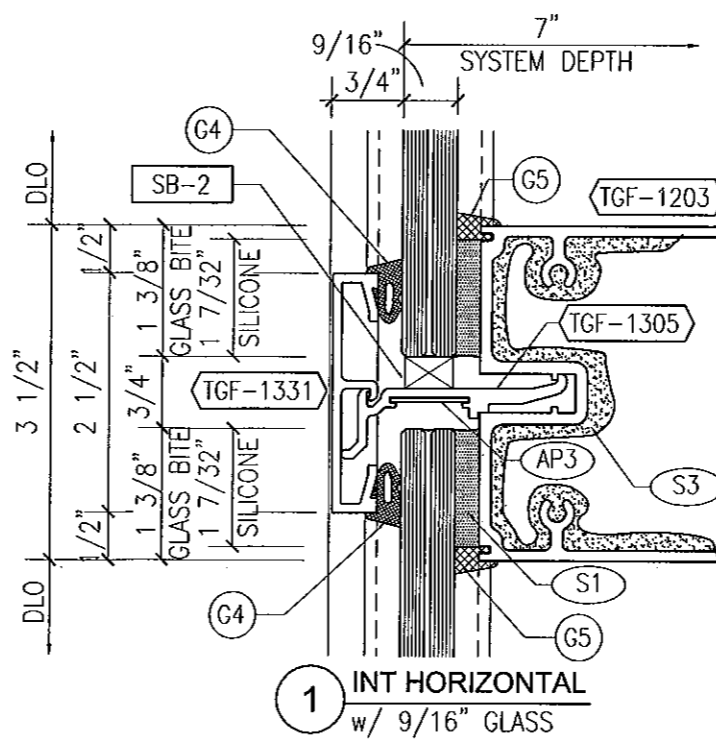
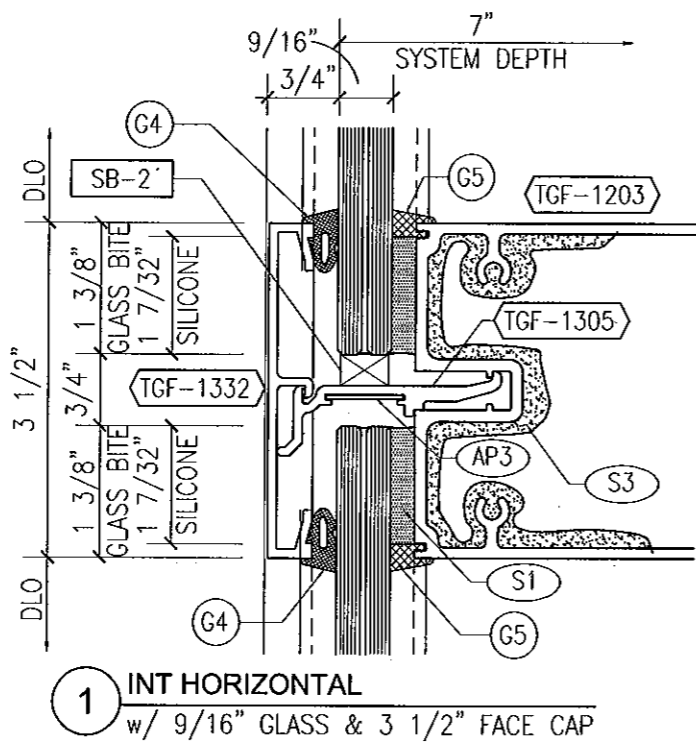
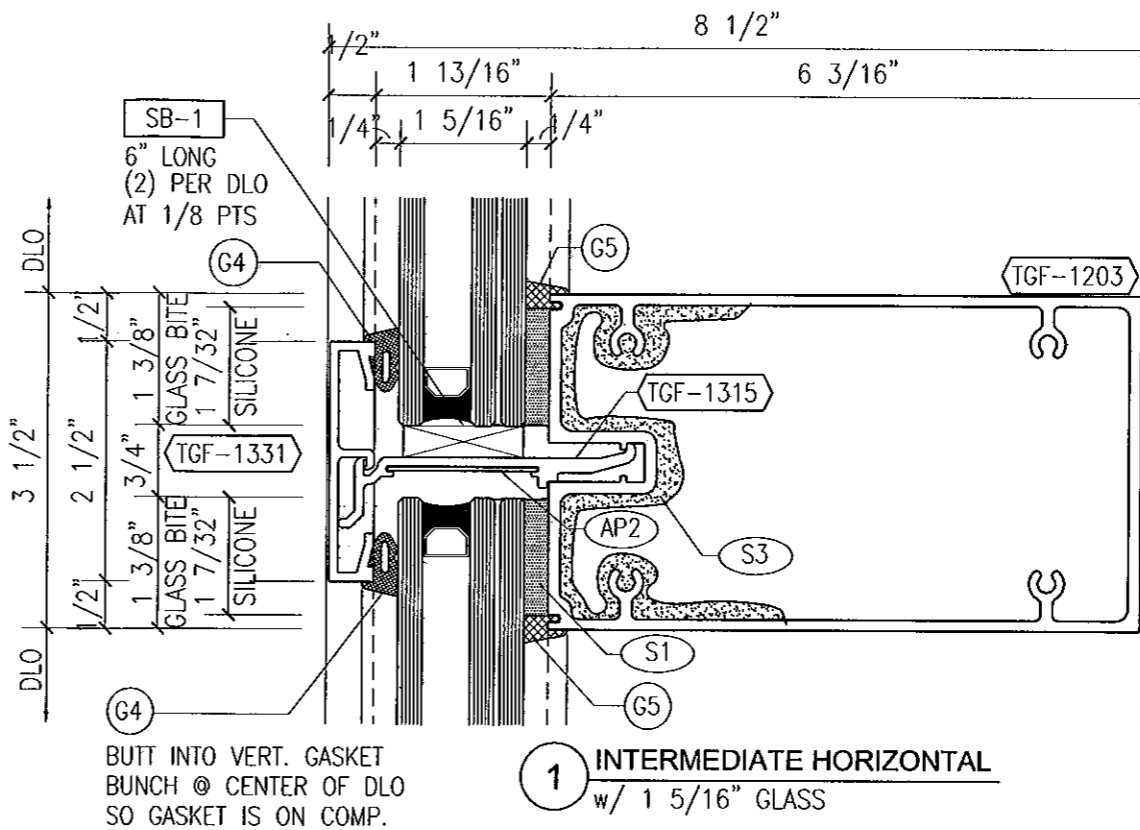
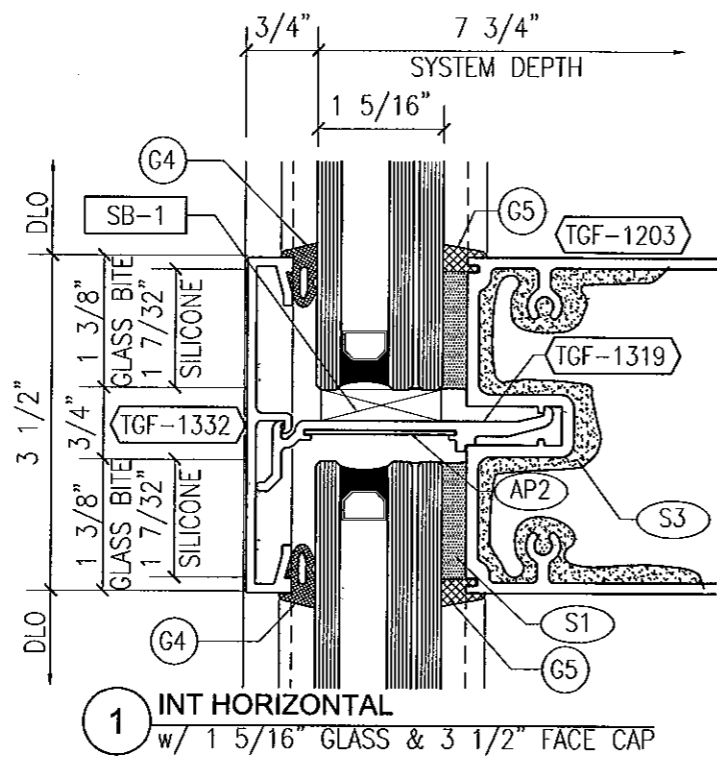
Approved as complying with the
Florida Building Code
Date 10/26/2011
NOA# 11-0401.04
Miami Dade Product Control
By [Signature]



Date	Scale
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Drawing No	
4326440	
Drawing Title	
130 PSF LARGE MISSILE IMPACT DETAILS	
Sheet No	
12 / 41	

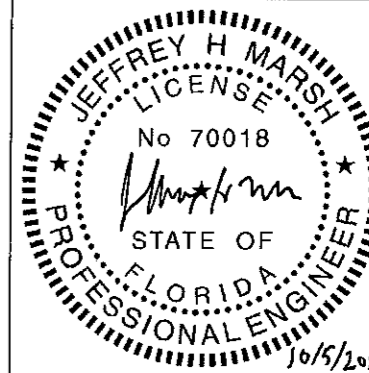
NO.	DATE	BY	REVISIONS
1	10/26/11	DES	ISSUED FOR CONSTRUCTION
2			
3			
4			

DESIGN ENGINEERING & CONSULTING
[Signature]
2002 N. CENTRAL EXPRESSWAY, SUITE 100
MIAMI, FLORIDA 33156
TEL: 305-555-1111
FAX: 305-555-1112

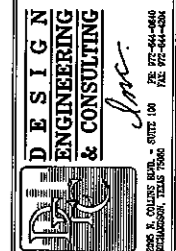


FOR MIAMI-DADE CO. B.C.C.O.

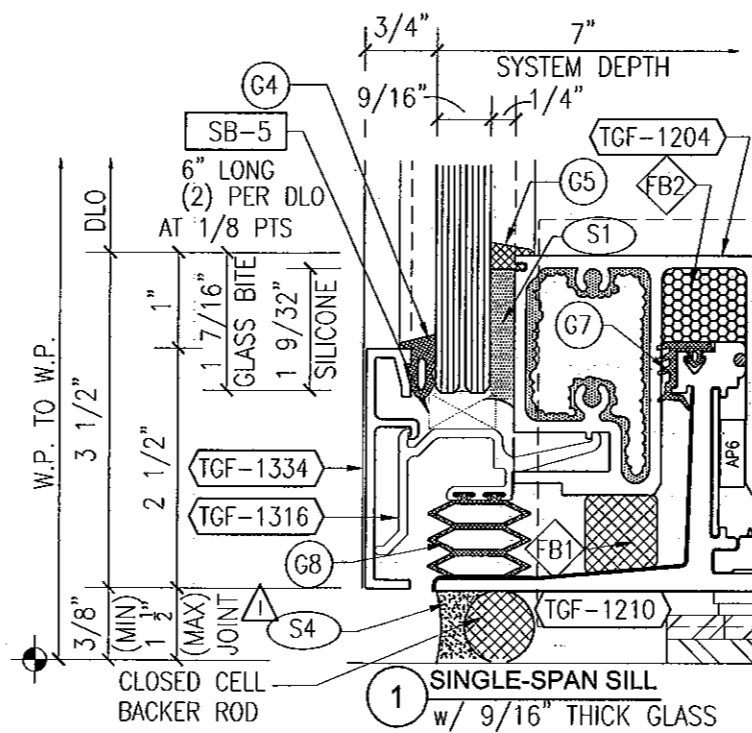
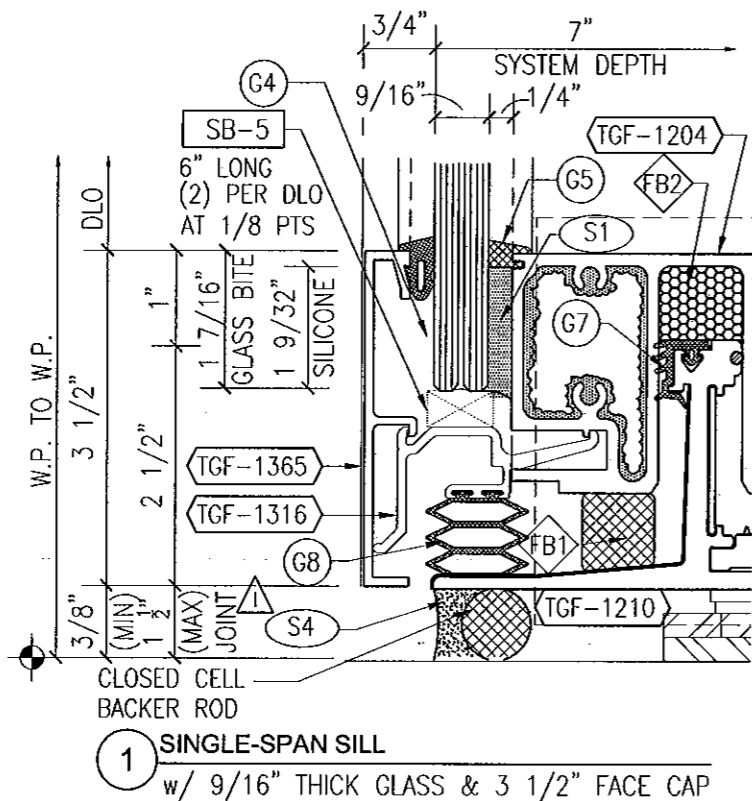
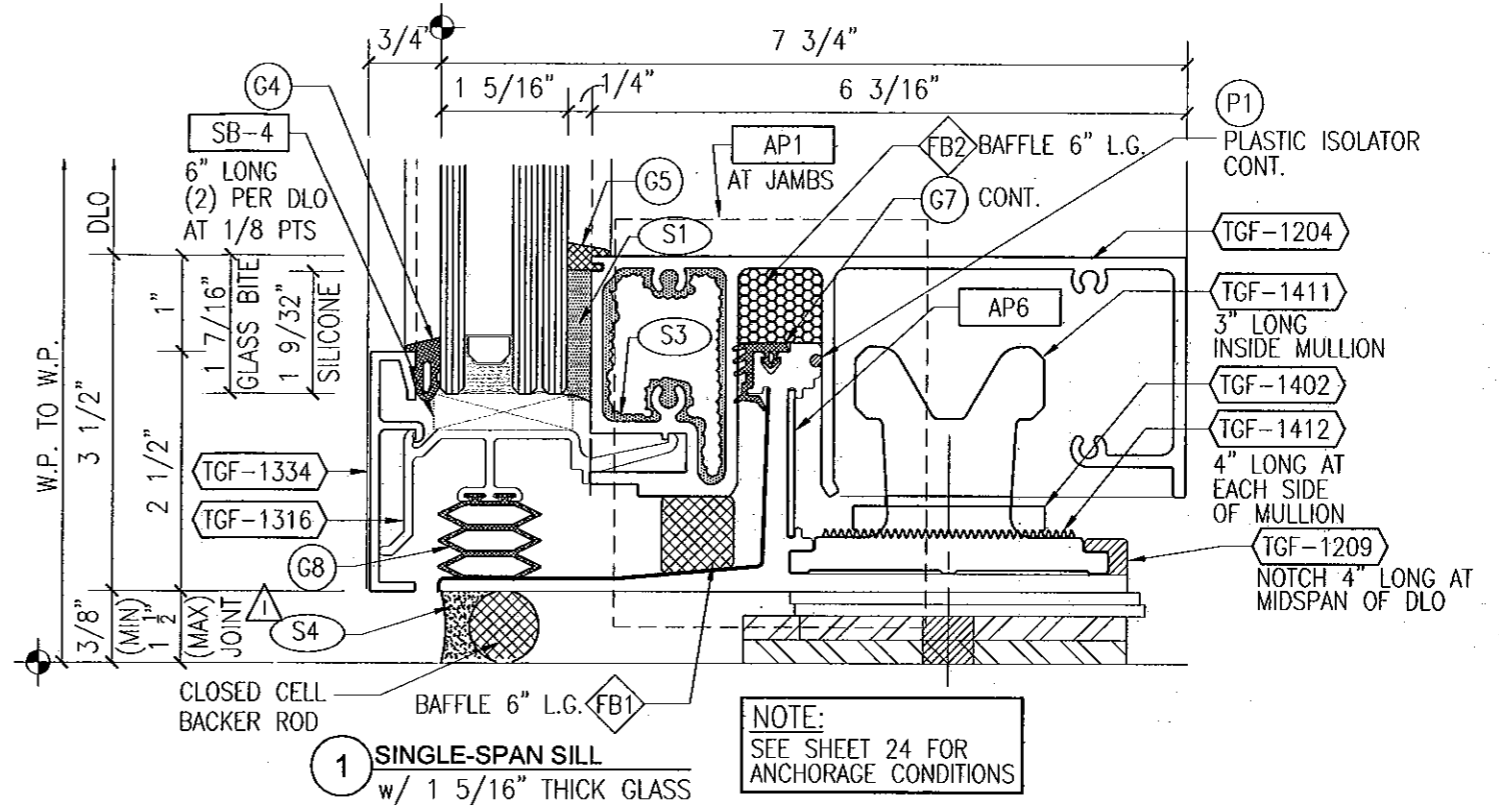
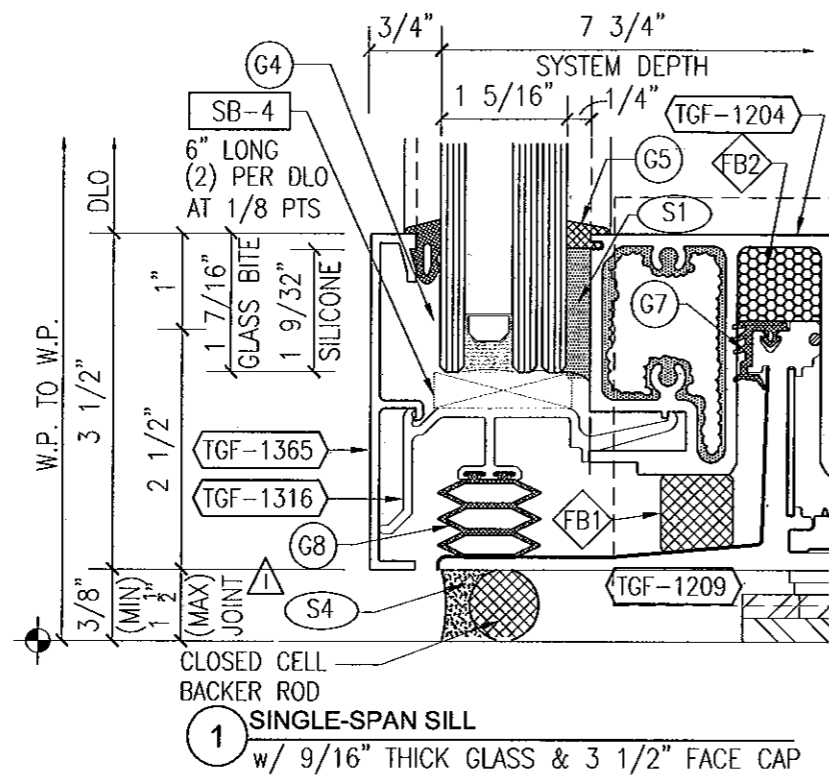
Approved as complying with the
Florida Building Code
Date 10/20/2011
NOA# 11-02-01-A
Miami-Dade Product Control
By [Signature]



Date	Scale
3-3-11	HALF
Drawing No	
4326440	
Drawing Title	
130 PSF LARGE MISSILE IMPACT DETAILS	
Sheet No	
13 / 41	



NO.	DATE	BY	REVISIONS
1			
2			
3			
4			



PERIMETER SEALANT OPTIONS

- DOW CORNING 790 SILICONE
- DOW CORNING 791 SILICONE
- DOW CORNING 795 SILICONE
- TREMCO SPECTRUM 2

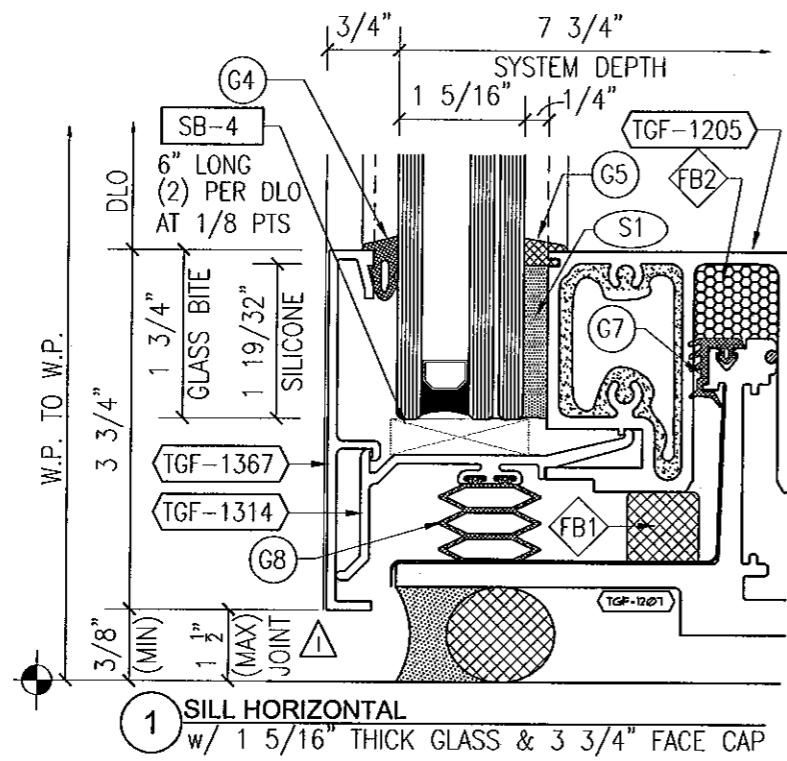
ALTERNATE PERIMETER SEALANT TYPES AND JOINT SIZES SHALL BE DESIGNED AND APPROVED BY DESIGN PROFESSIONAL OF RECORD AND/OR THE SEALANT MANUFACTURER.

FOR MIAMI-DADE CO. B.C.C.O.

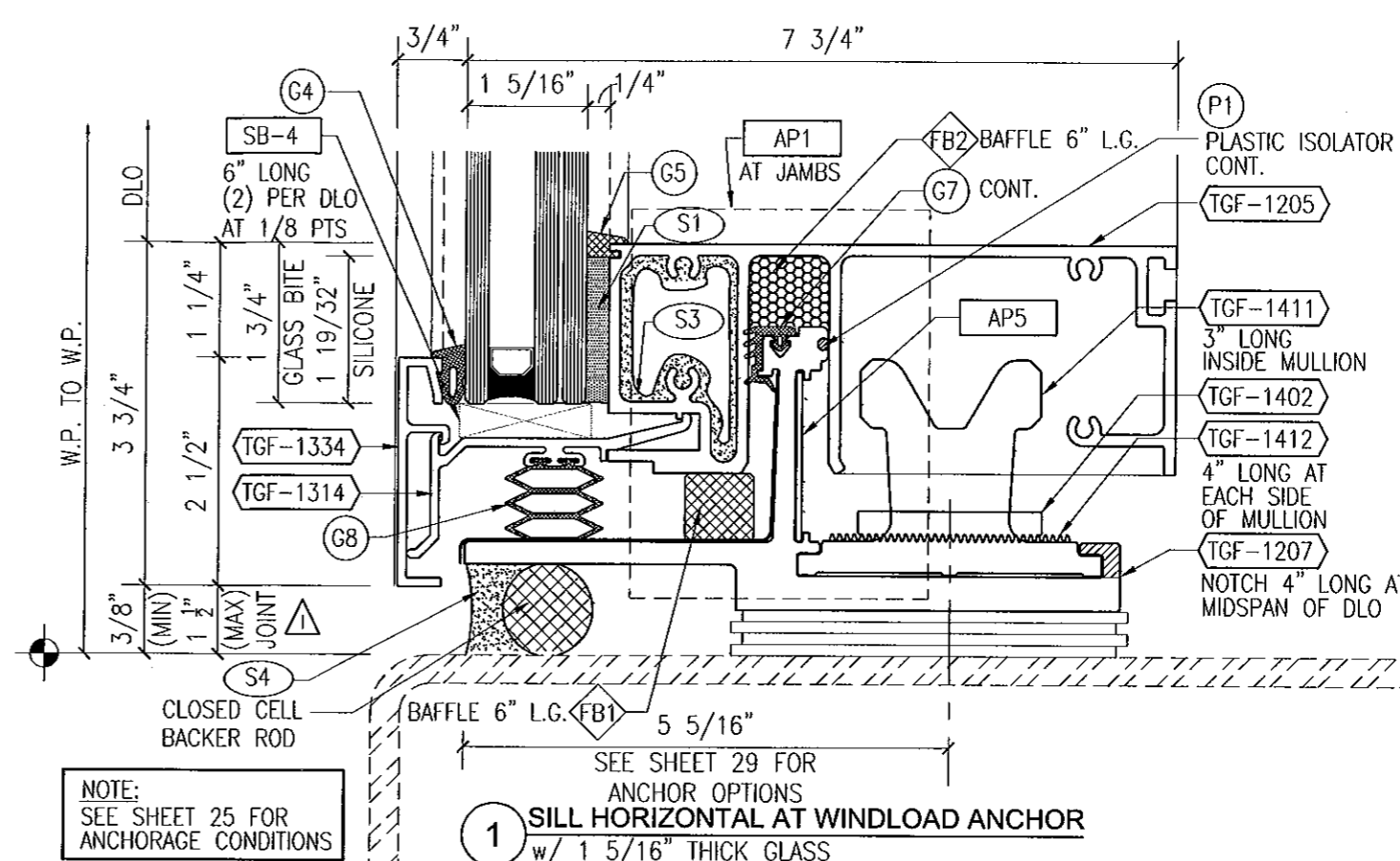
Approved as complying with the Florida Building Code
 Date 10/20/2011
 NOA# 11-0401-04
 Miami Dade Product Control
 By [Signature]



Date	Scale
3-3-11	HALF
Drawing No	4326440
Drawing Title	130 PSF LARGE MISSILE IMPACT DETAILS
Sheet No	14 / 41

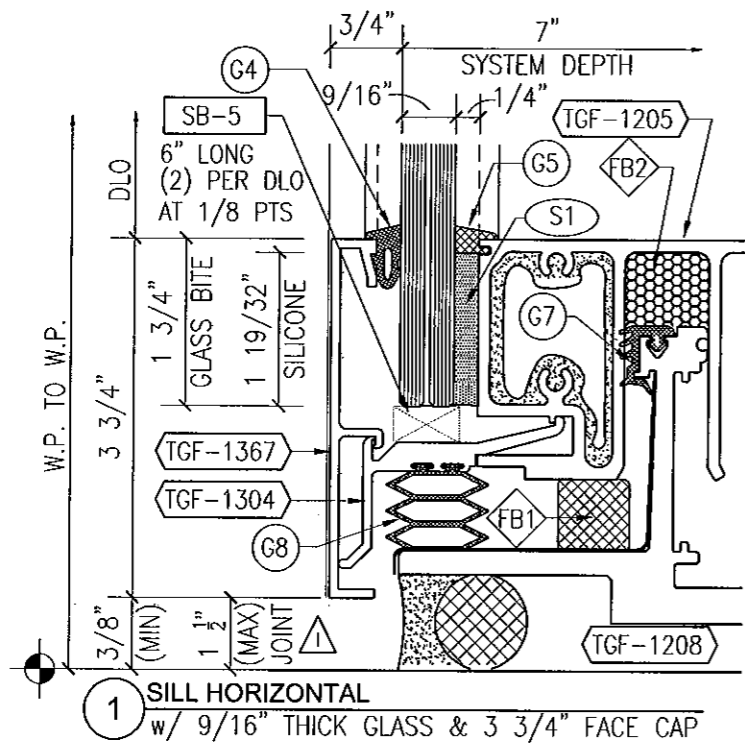


1 SILL HORIZONTAL
w/ 1 5/16" THICK GLASS & 3 3/4" FACE CAP

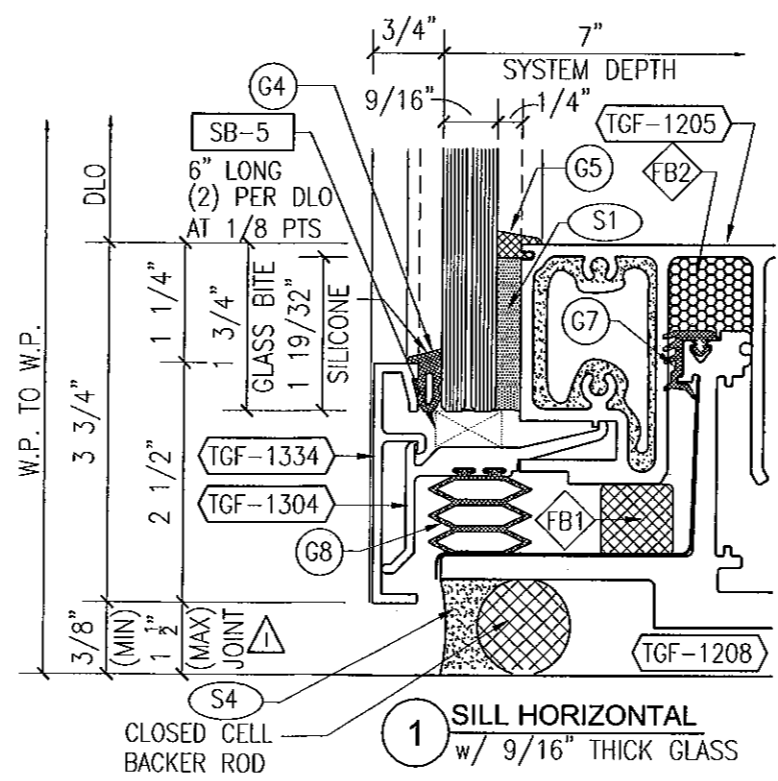


NOTE:
SEE SHEET 25 FOR
ANCHORAGE CONDITIONS

1 SILL HORIZONTAL AT WINDLOAD ANCHOR
w/ 1 5/16" THICK GLASS



1 SILL HORIZONTAL
w/ 9/16" THICK GLASS & 3 3/4" FACE CAP



1 SILL HORIZONTAL
w/ 9/16" THICK GLASS

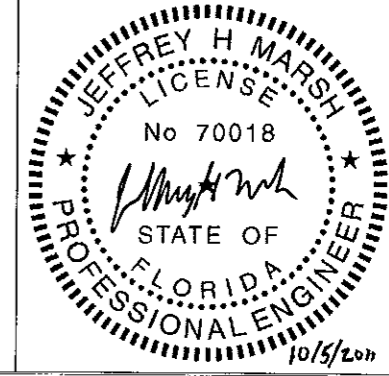
PERIMETER SEALANT OPTIONS

- DOW CORNING 790 SILICONE
- DOW CORNING 791 SILICONE
- DOW CORNING 795 SILICONE
- TREMCO SPECTRUM 2

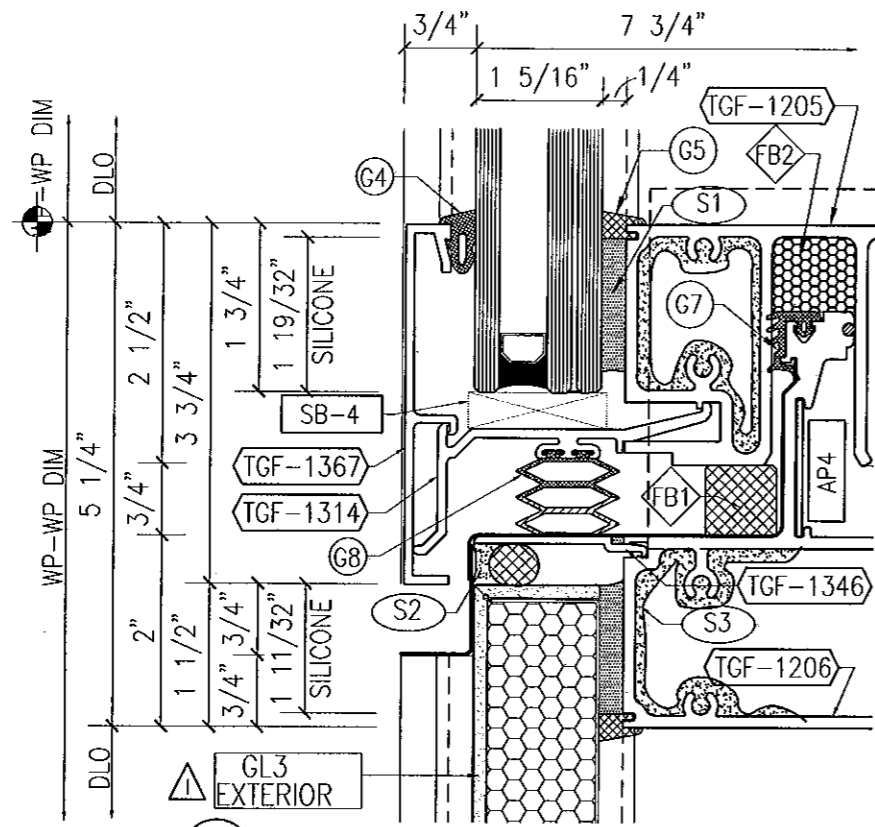
ALTERNATE PERIMETER SEALANT TYPES AND JOINT SIZES SHALL BE DESIGNED AND APPROVED BY DESIGN PROFESSIONAL OF RECORD AND/OR THE SEALANT MANUFACTURER.

FOR MIAMI-DADE CO. B.C.C.O.

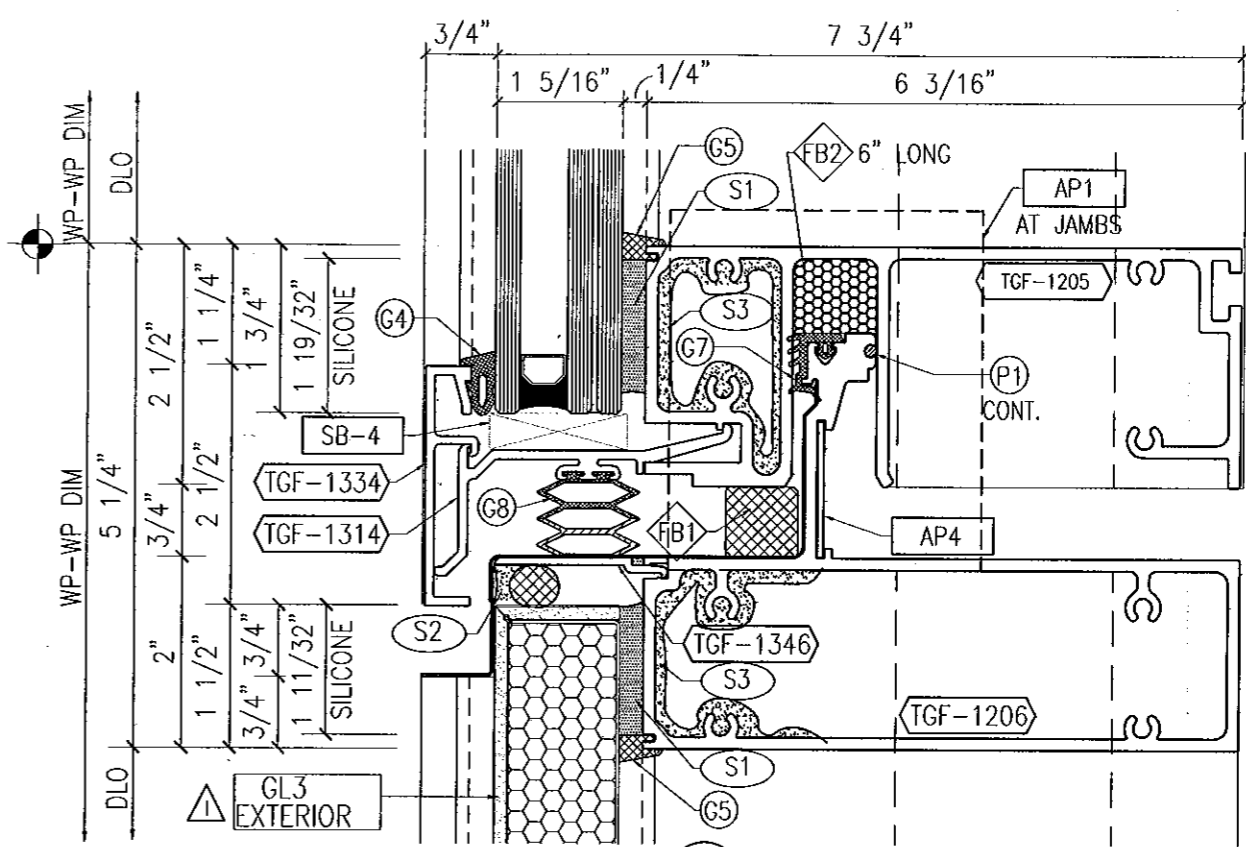
Approved as complying with the
Florida Building Code
Date 10/10/2011
NOA# 11-02-01.04
Miami Dade Product Control
By [Signature]



Date	Scale
3-3-11	HALF
Drawing No	
4326440	
Drawing Title	
130 PSF LARGE MISSILE IMPACT DETAILS	
Sheet No	
15 / 41	

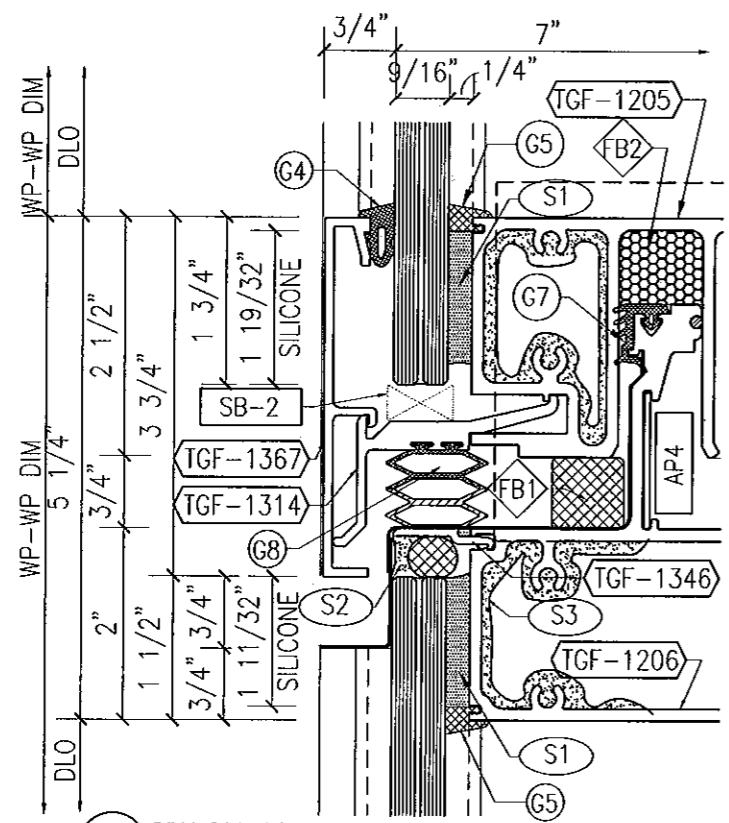


1 STACK HORIZONTAL
w/ 1 5/16" GLAZING & 3 3/4" FACE CAP

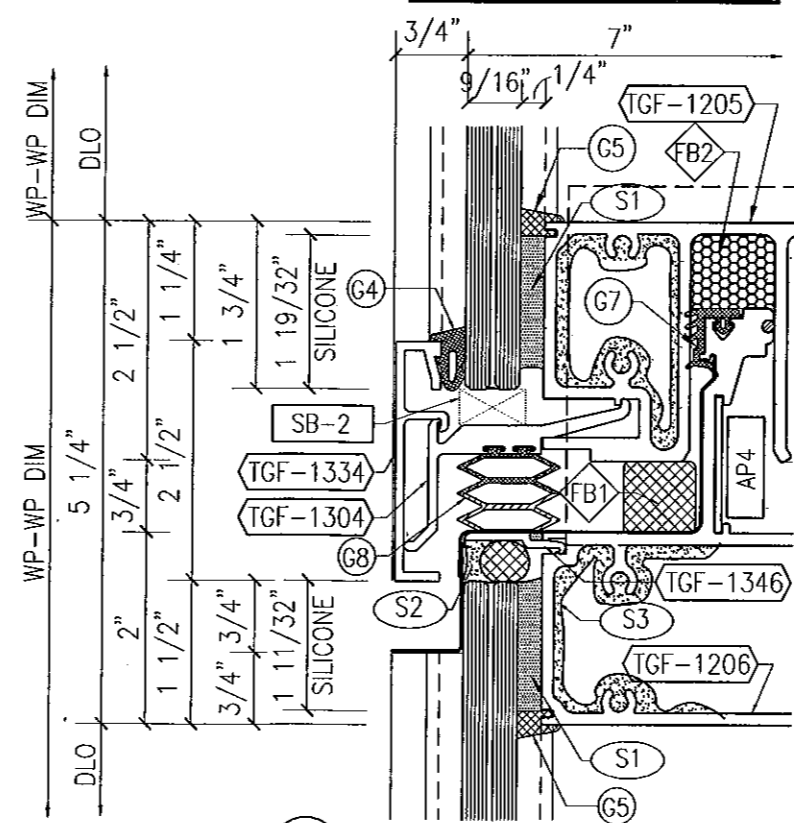


1 STACK HORIZONTAL
w/ 1 5/16" GLAZING

NOTE:
SEE SHEETS 17 THRU 21
FOR MIDSPAN ANCHORAGE
CONDITIONS (BENEATH STACK)

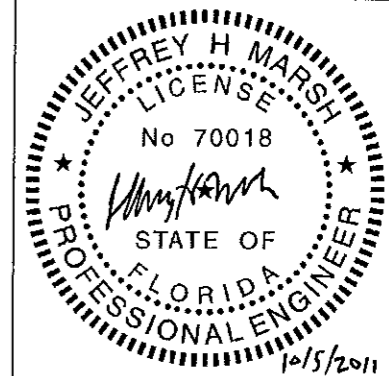


1 STACK HORIZONTAL
w/ 9/16" GLAZING & 3 3/4" FACE CAP



1 STACK HORIZONTAL
w/ 9/16" GLAZING

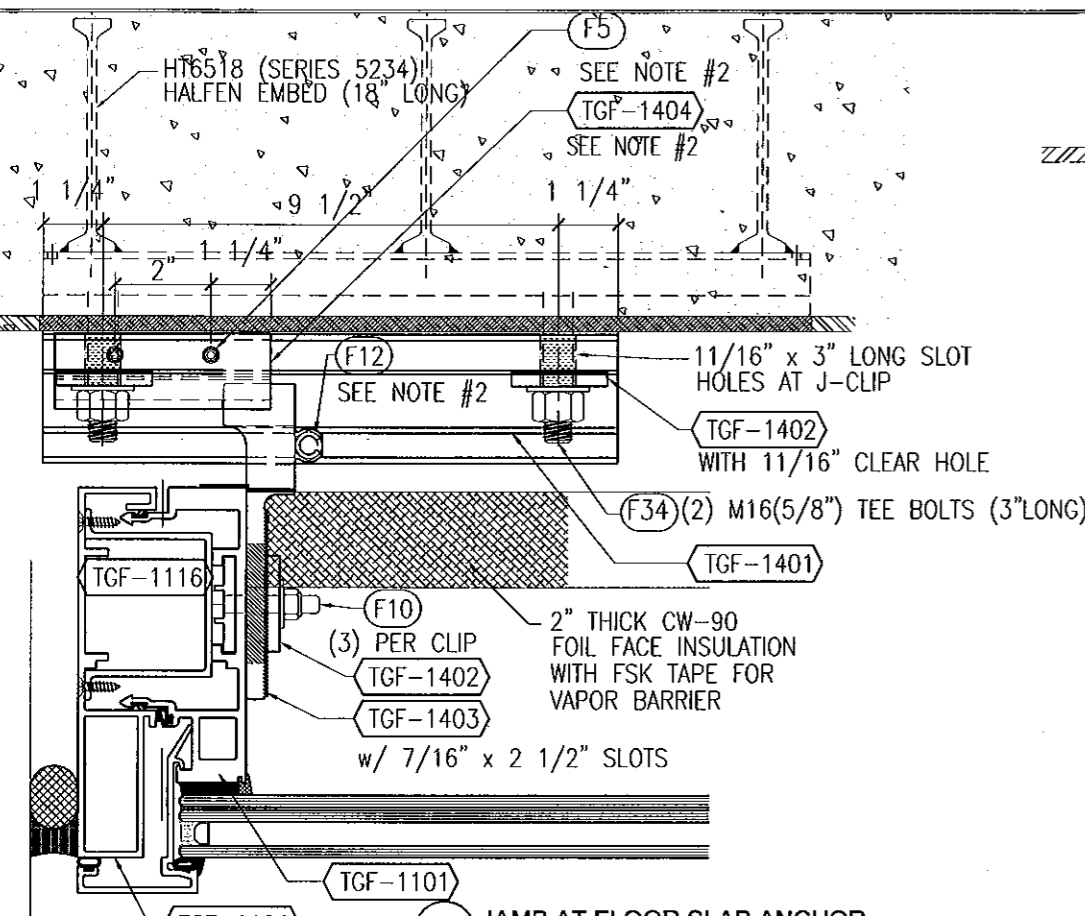
FOR MIAMI-DADE CO. B.C.C.O.
Approved as complying with the
Florida Building Code
Date 10/20/2011
NOA# 11-0201.04
Miami Dade Product Control
By [Signature]



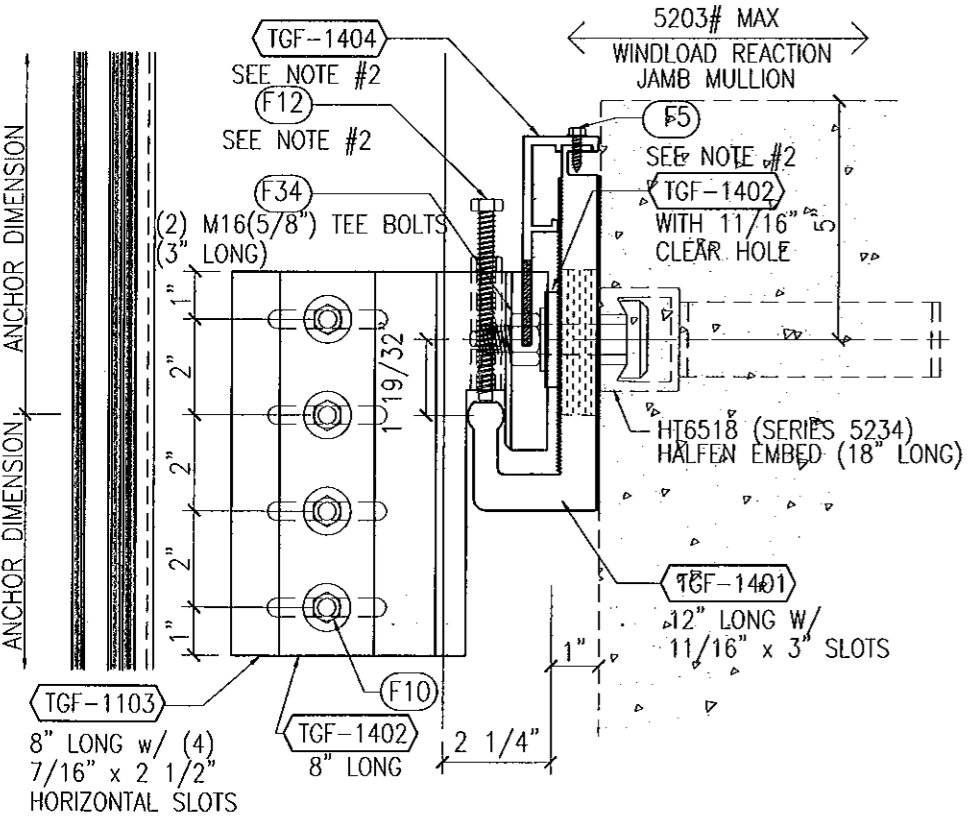
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Drawing Title	
130 PSF LARGE MISSILE IMPACT DETAILS	
Sheet No	
16 / 41	

DESIGN
ENGINEERING
& CONSULTING
[Signature]
200 S. OCEAN BLVD., SUITE 100
MIAMI BEACH, FLORIDA 33139
TEL: 305-444-8844
FAX: 305-444-8844

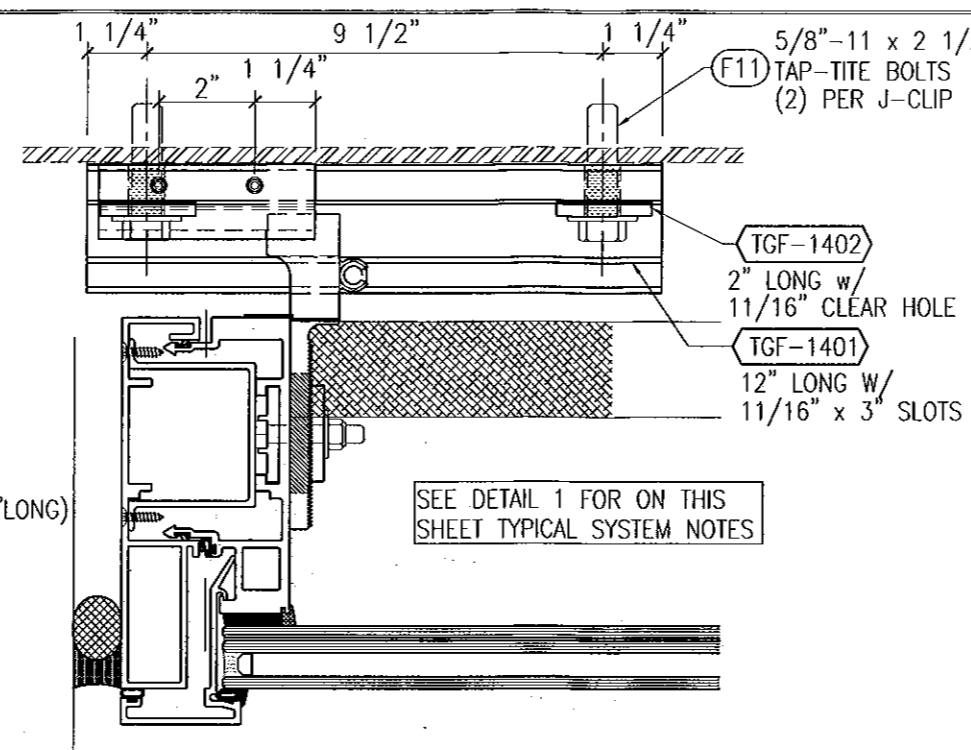
NO.	DATE	BY	REVISIONS
1	10/20/11	ME	ADD NEW FOR AS CORRECT
2			
3			
4			
5			



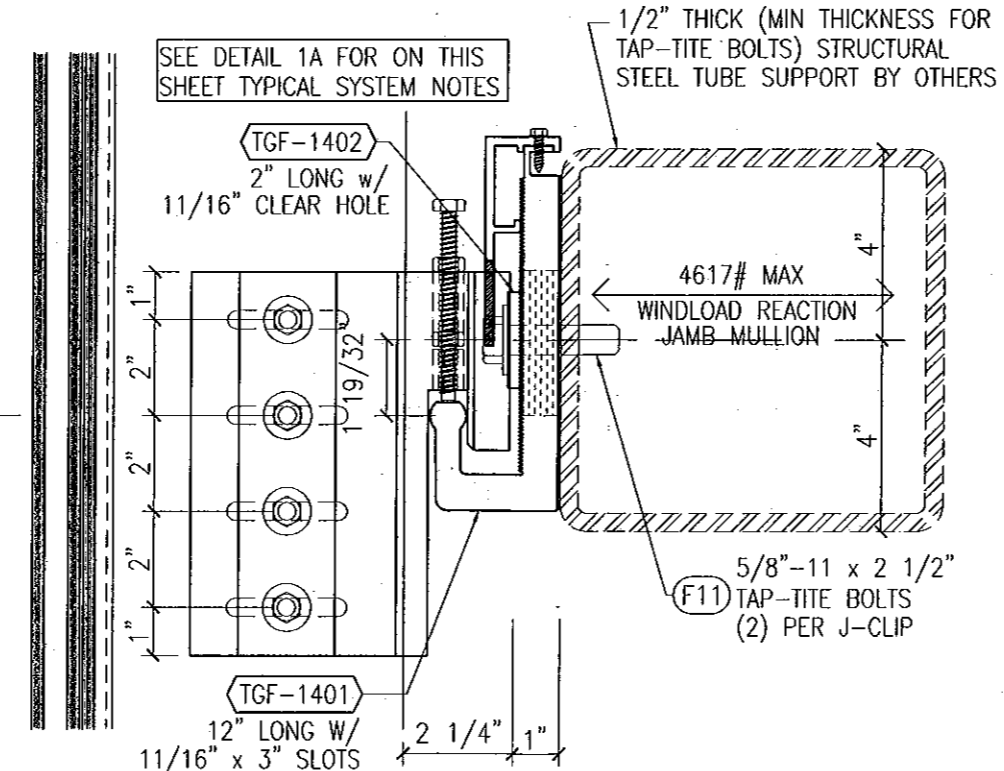
1 JAMB AT FLOOR SLAB ANCHOR
SEE SHEET 10 FOR GLAZING OPTIONS
ANCHORED w/ HALFEN EMBED



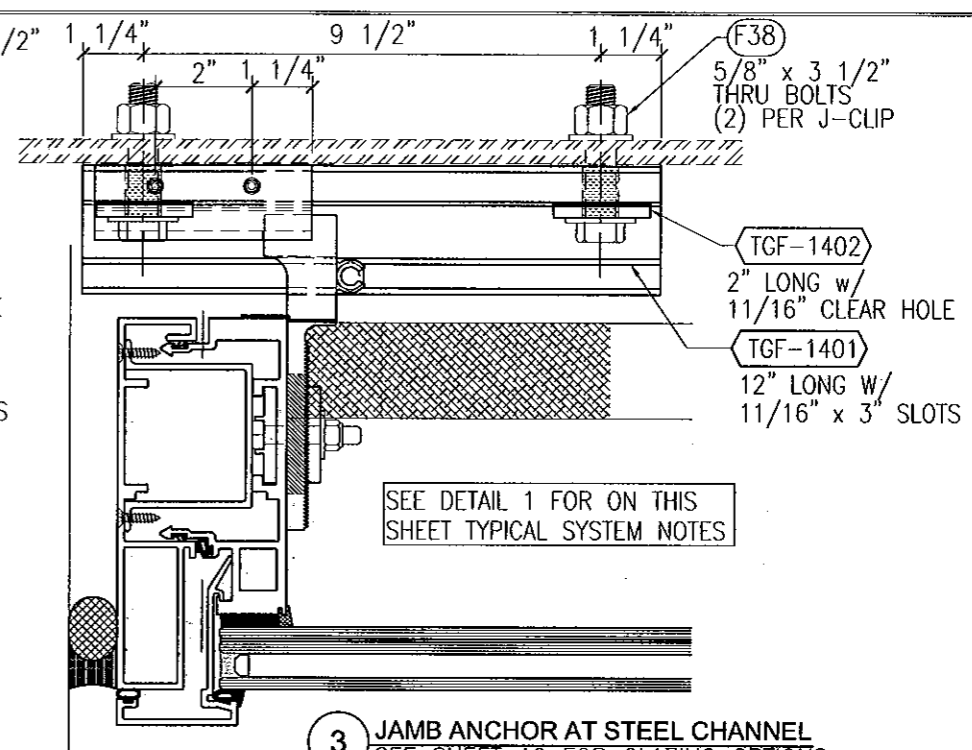
1A DL ANCHOR AT FLOOR SLAB (SIDE VIEW)
SEE SHEET 10 FOR GLAZING OPTIONS
ANCHORED w/ HALFEN EMBED



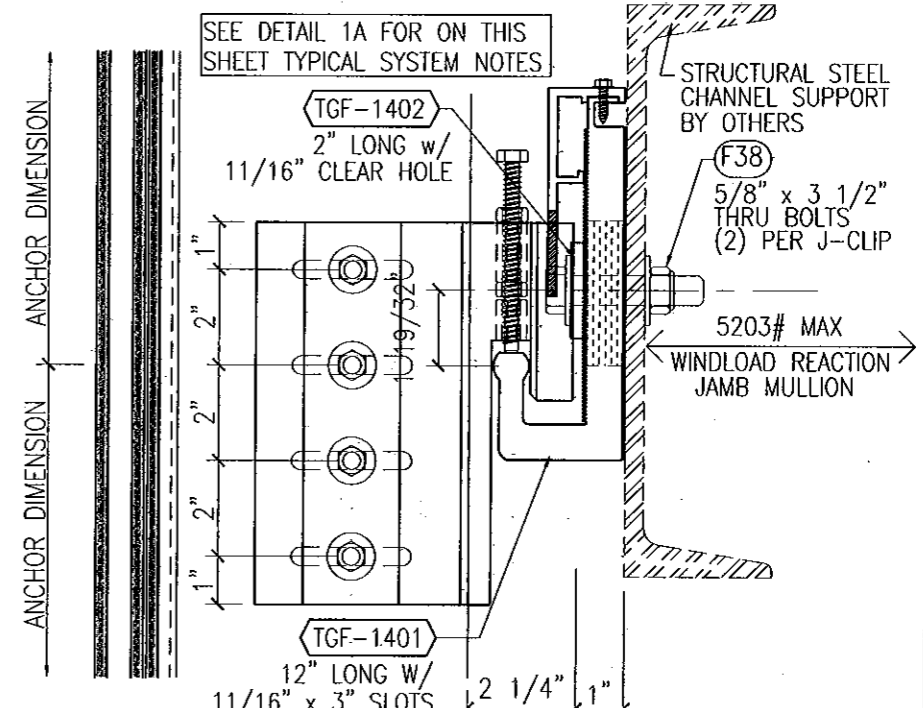
2 JAMB ANCHOR AT TUBE STEEL
SEE SHEET 10 FOR GLAZING OPTIONS
ANCHORED w/ 5/8" TAP-TITE BOLTS



2A DL ANCHOR AT TUBE STEEL SUPPORT (SIDE VIEW)
SEE SHEET 10 FOR GLAZING OPTIONS
ANCHORED w/ 5/8" TAP-TITE BOLTS



3 JAMB ANCHOR AT STEEL CHANNEL
SEE SHEET 10 FOR GLAZING OPTIONS
ANCHORED w/ 5/8" THRU BOLTS

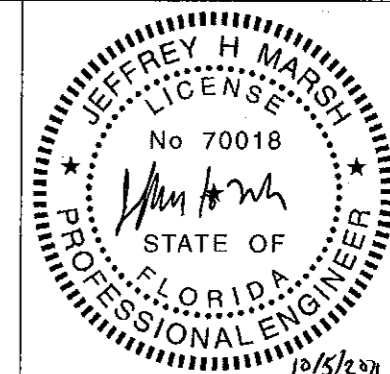


3A DL ANCHOR AT STEEL SUPPORT CHANNEL (SIDE VIEW)
SEE SHEET 10 FOR GLAZING OPTIONS
ANCHORED w/ 5/8" THRU BOLTS

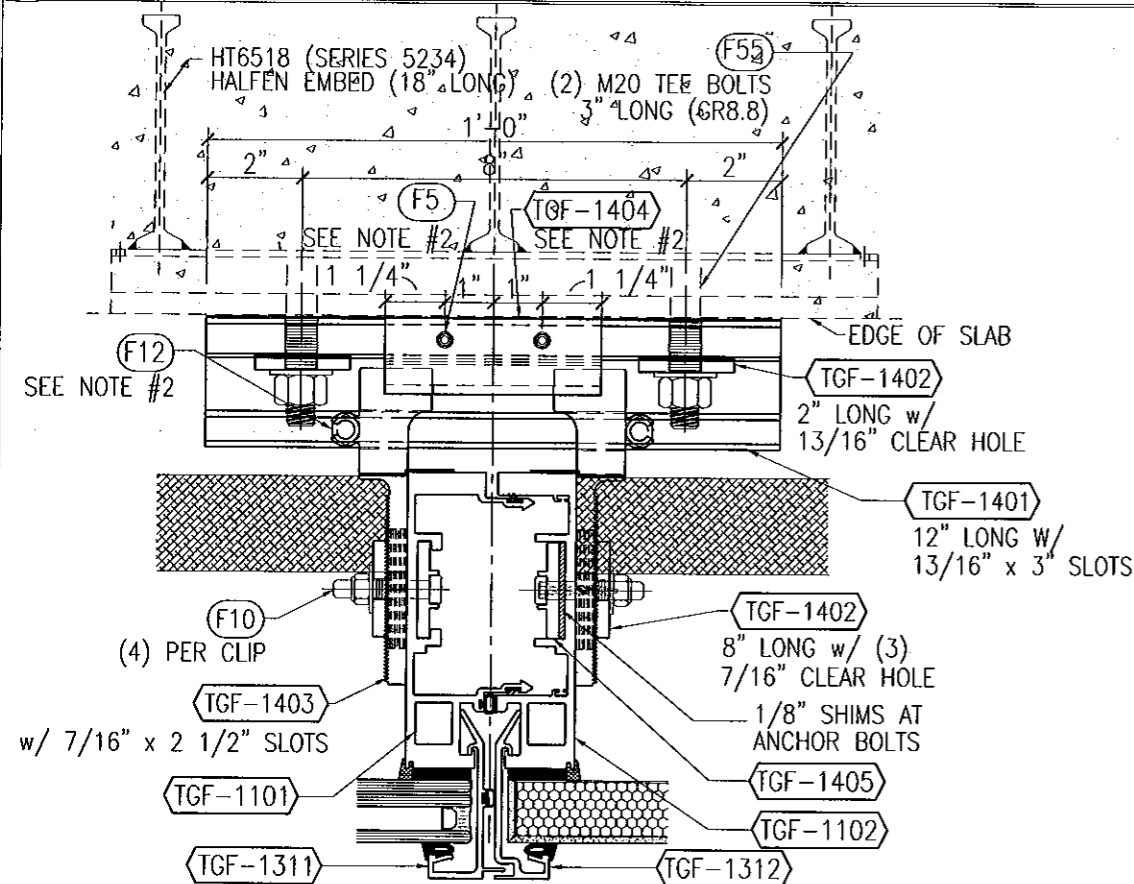
- NOTES:**
- SEE DETAILS ON SHEET 10 FOR BALANCE OF JAMB MULLION INFORMATION AND VARIOUS GLAZING OPTIONS
 - INDICATES FASTENERS AND PARTS ARE NOT REQUIRED FOR WINDLOAD ANCHOR CONDITIONS

FOR MIAMI-DADE CO. B.C.C.O.

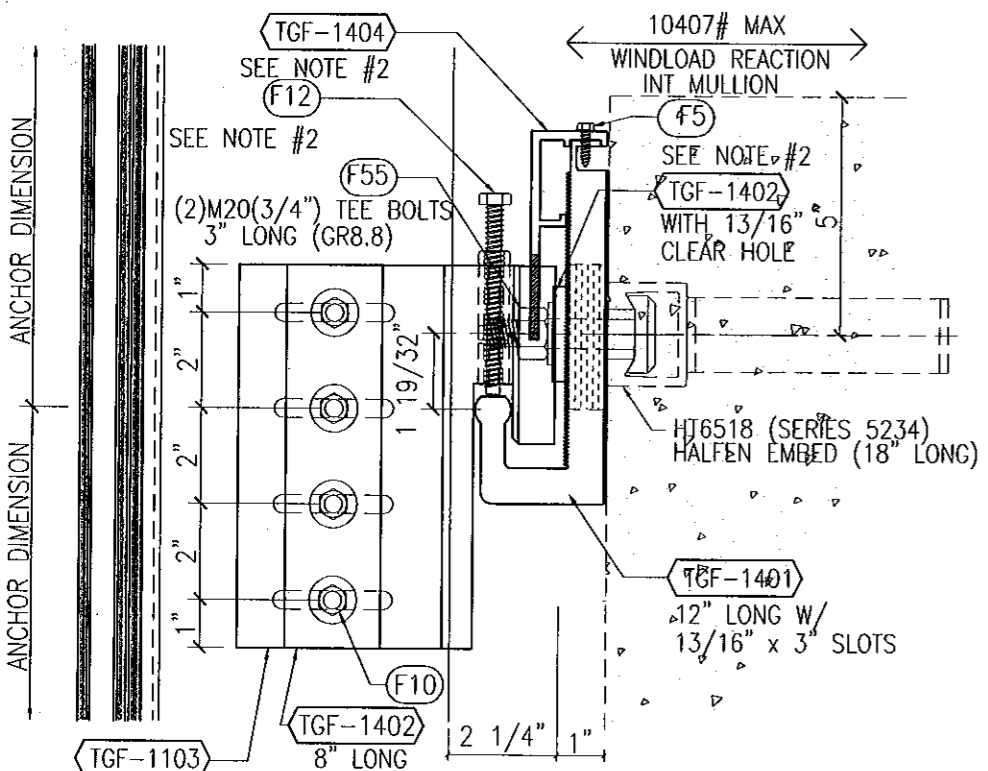
Approved as complying with the Florida Building Code
Date 10/12/2011
NOA# 11-02-01-04
Miami Dade Product Control
By *[Signature]*



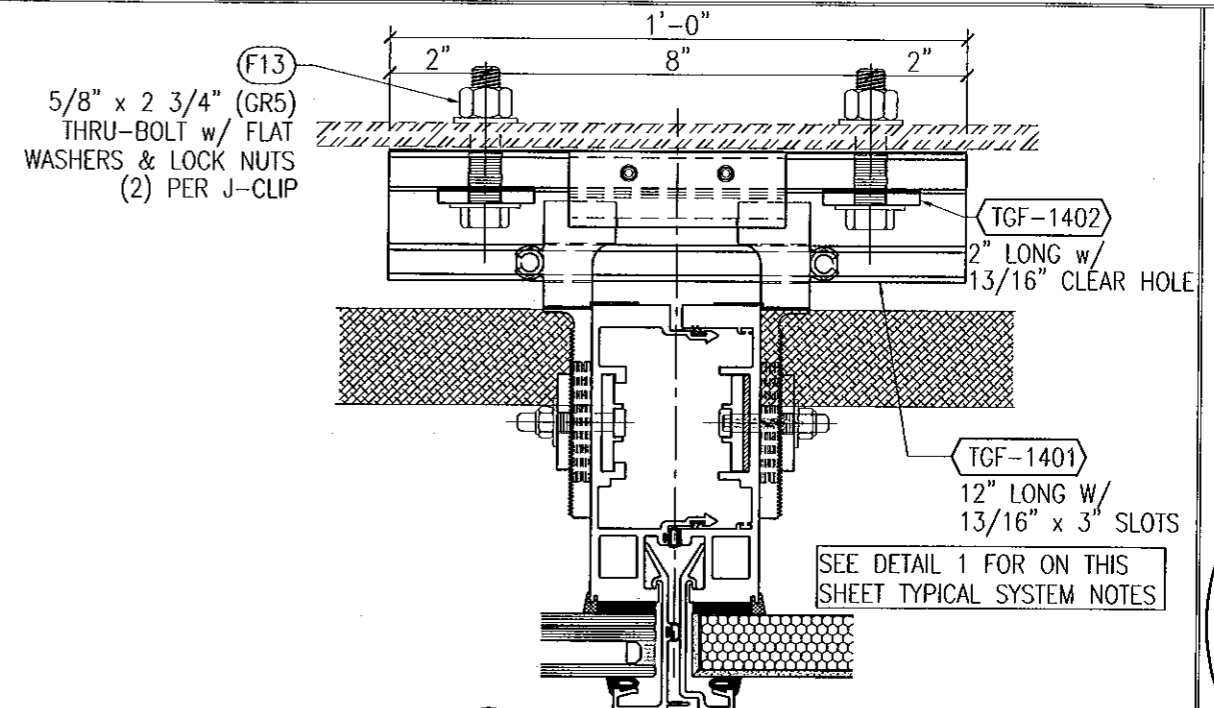
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Drawing No	
4326440	
Drawing Title	
1305P LARGE MISSILE IMPACT ANCHOR DETAILS	
Sheet No	
17	141



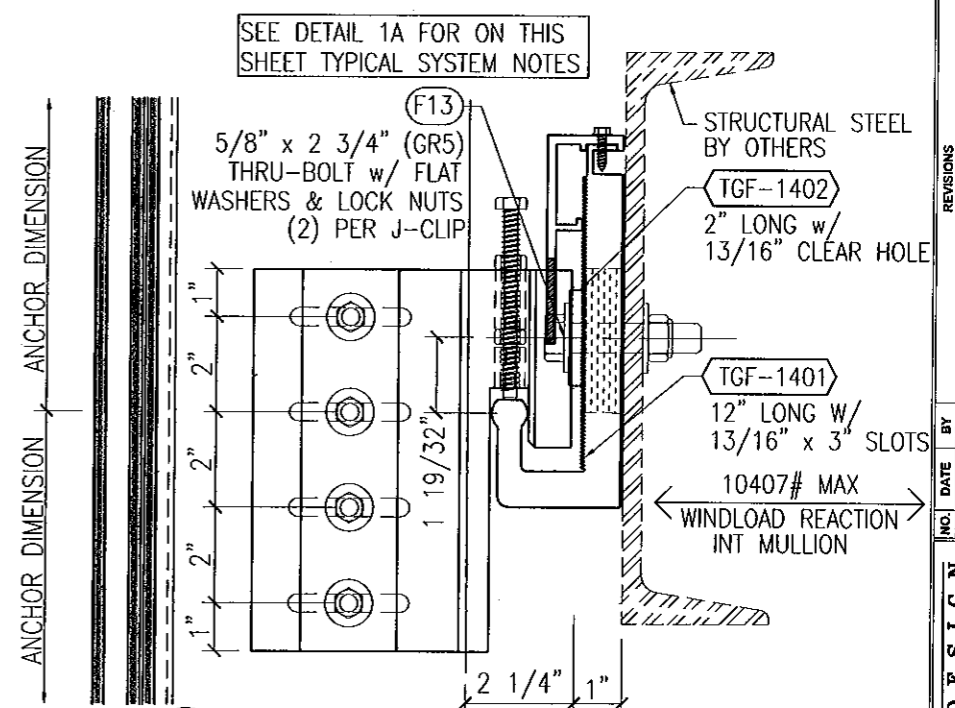
1 INT MULL AT FLOOR SLAB ANCHOR
SEE SHEET 11 FOR GLAZING OPTIONS
ANCHORED w/ HALFEN EMBED



1A DL ANCHOR AT FLOOR SLAB (SIDE VIEW)
SEE SHEET 11 FOR GLAZING OPTIONS
ANCHORED w/ HALFEN EMBED



3 INT MULL AT STEEL CHANNEL
SEE SHEET 11 FOR GLAZING OPTIONS
ANCHORED w/ 5/8\"/>

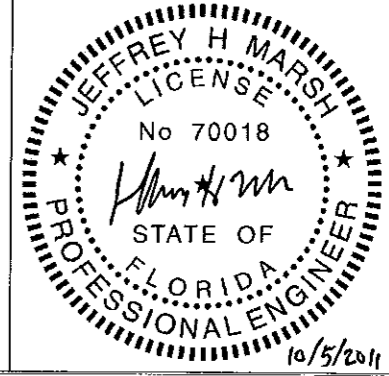


3A DL ANCHOR AT STEEL CHANNEL SUPPORT (SIDE VIEW)
SEE SHEET 11 FOR GLAZING OPTIONS
ANCHORED w/ 5/8\"/>

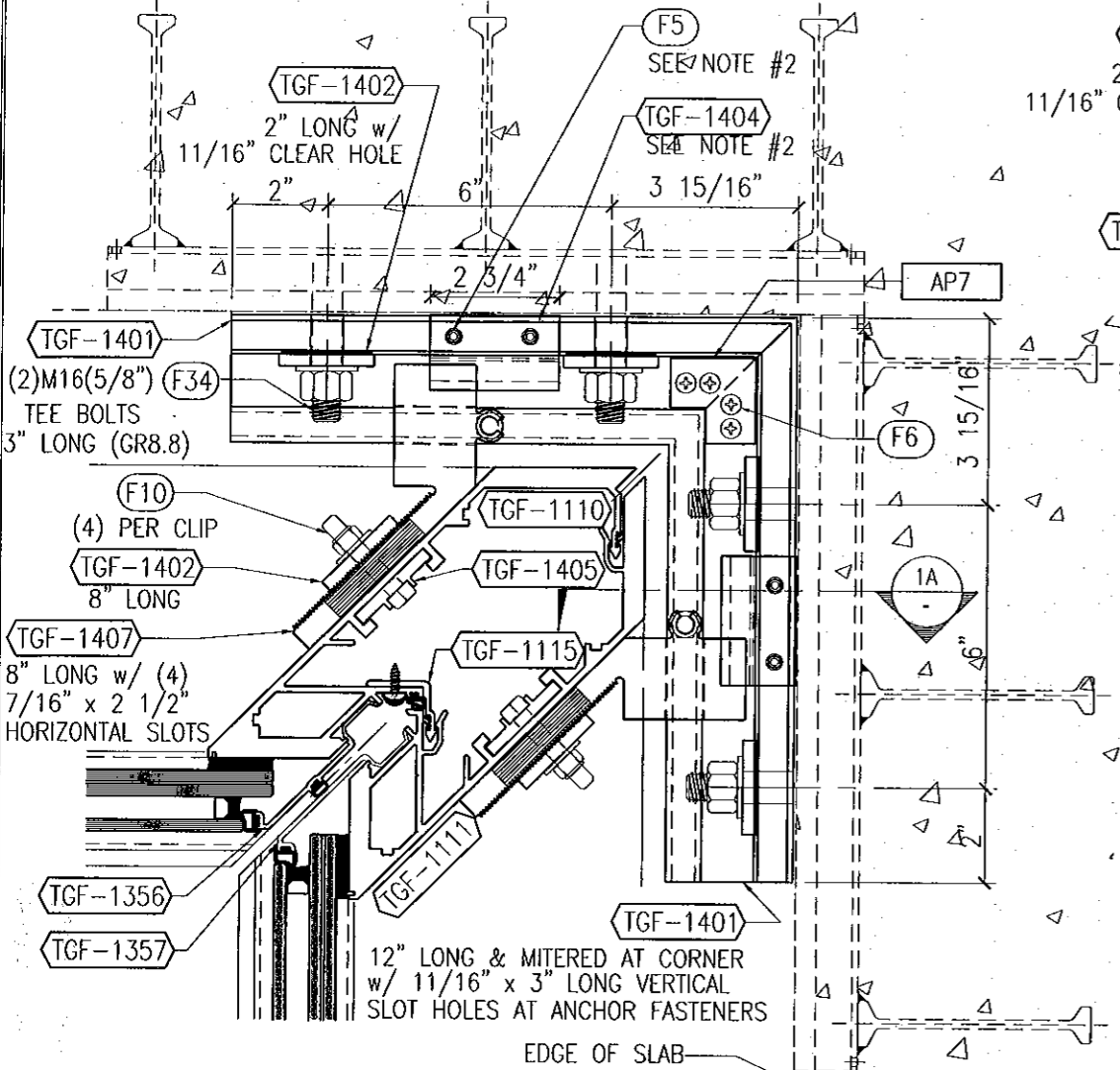
- NOTES:**
- SEE DETAILS ON SHEET 11 FOR BALANCE OF INTERMEDIATE MULLION INFORMATION AND VARIOUS GLAZING OPTIONS
 - INDICATES FASTENERS AND PARTS ARE NOT REQUIRED FOR WINDLOAD ANCHOR CONDITIONS

FOR MIAMI-DADE CO. B.C.C.O.

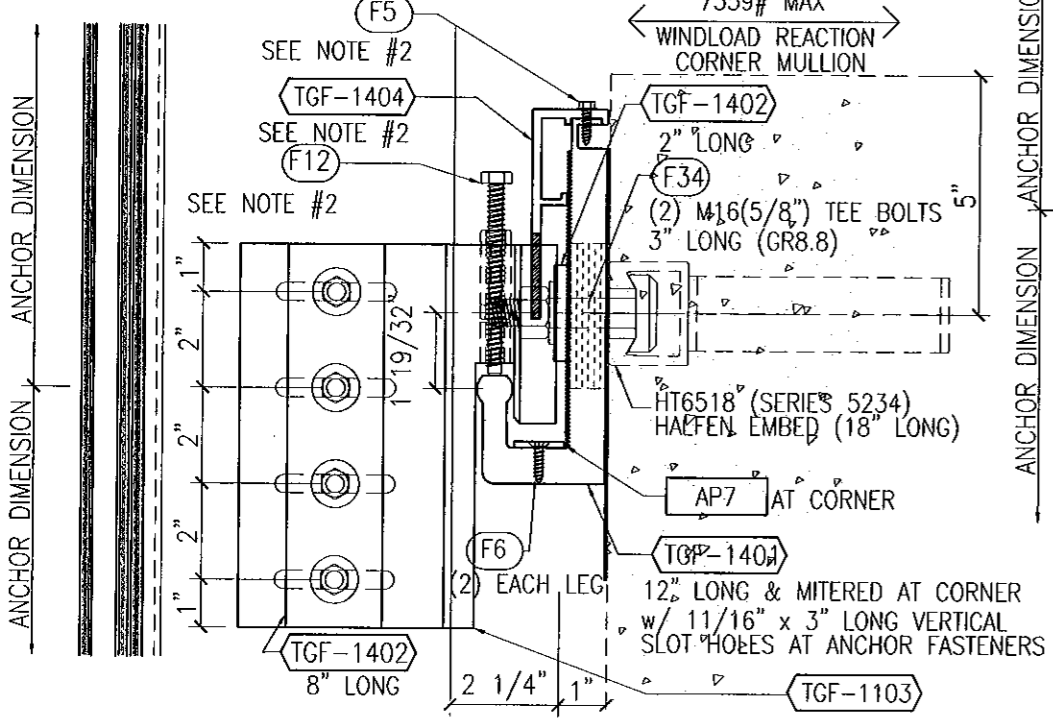
Approved as complying with the
Florida Building Code
Date 10/20/2011
NOA# 11-0201-04
Miami Dade Product Control
By [Signature]



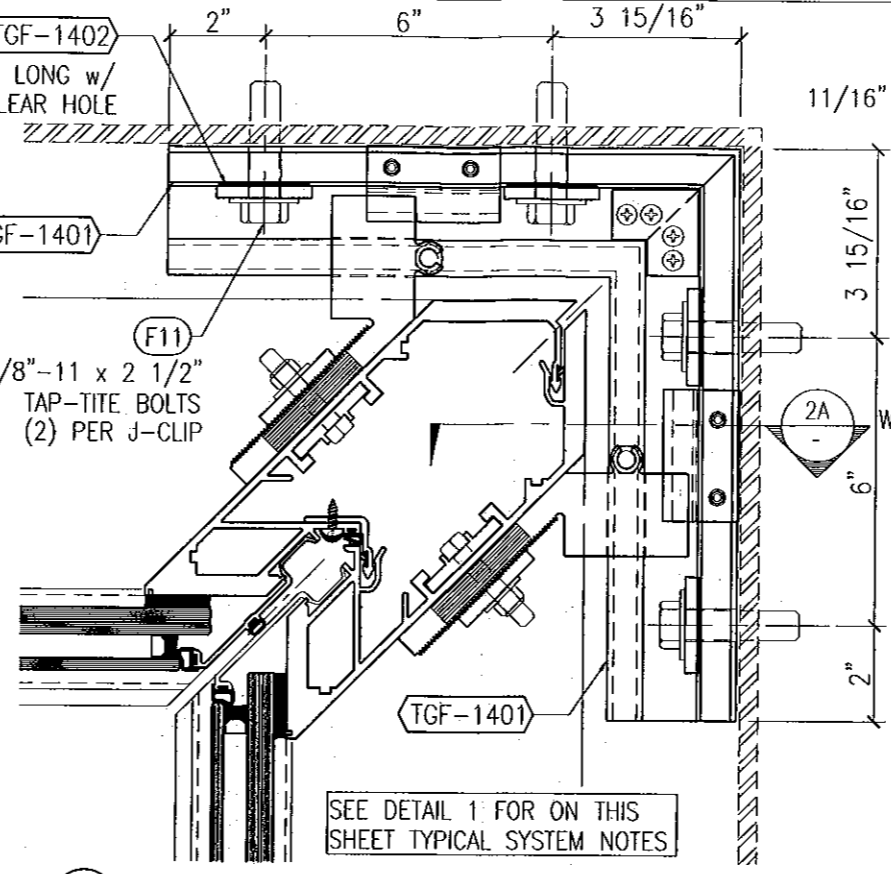
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Drawing Title	
130PSF LARGE MISSILE IMPACT ANCHOR DETAILS	
Sheet No	
18 / 41	



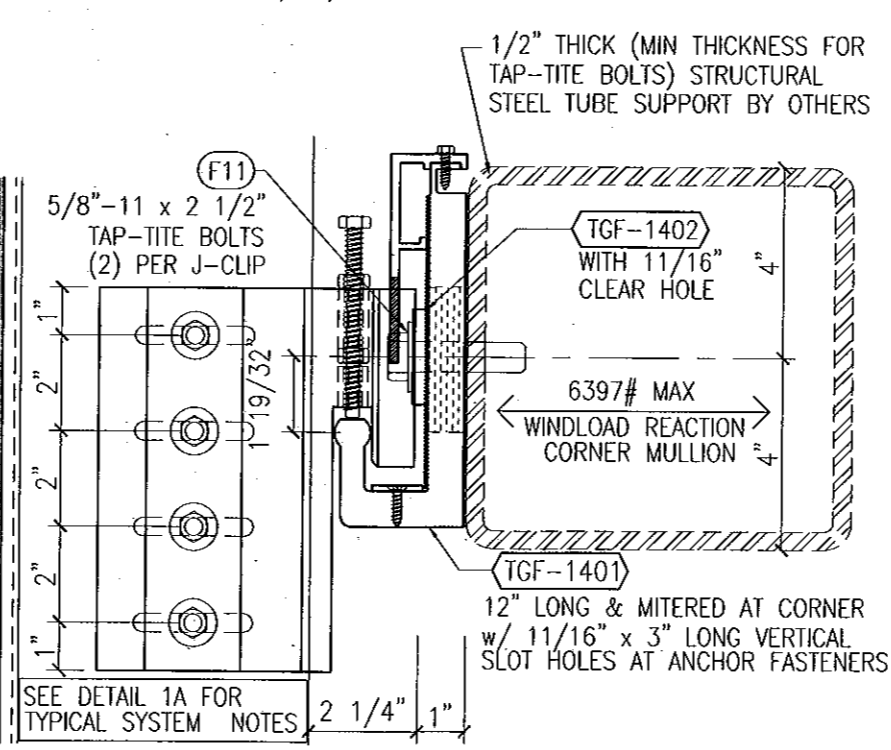
1 90° I.S. CORNER MULLION AT FLOOR SLAB ANCHOR
SEE SHEET 12 FOR GLAZING OPTIONS
ANCHORED w/ HALFEN CORNER EMBED



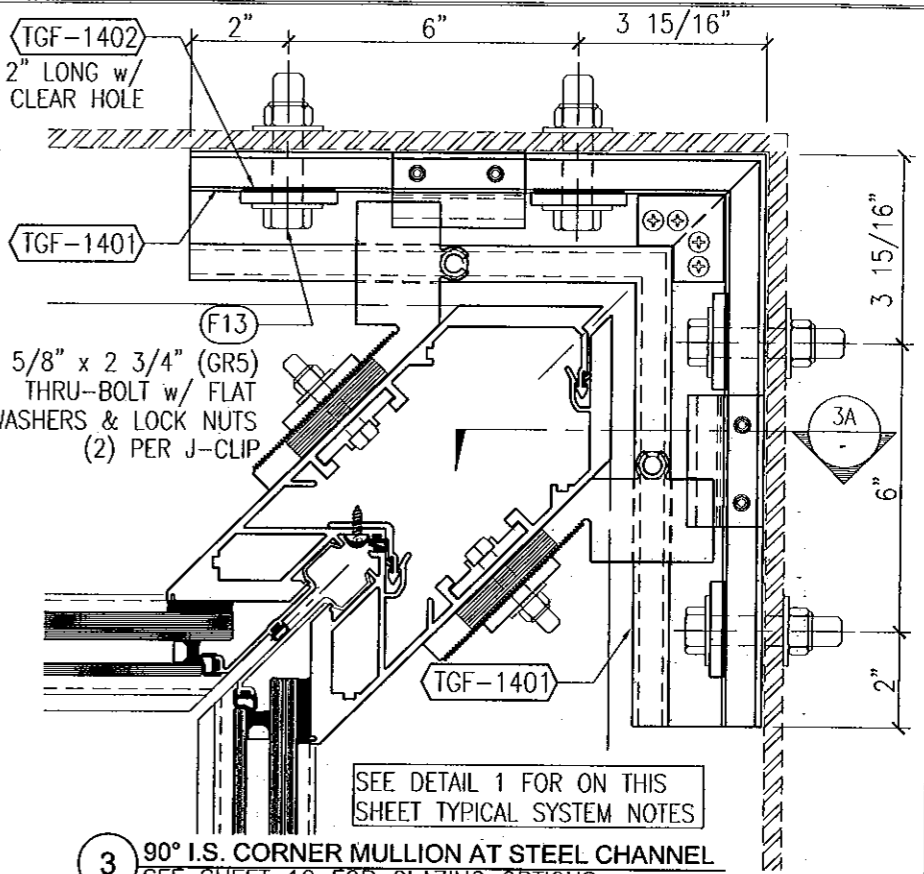
1A DL ANCHOR AT FLOOR SLAB (SIDE VIEW)
SEE SHEET 12 FOR GLAZING OPTIONS
ANCHORED w/ HALFEN CORNER EMBED



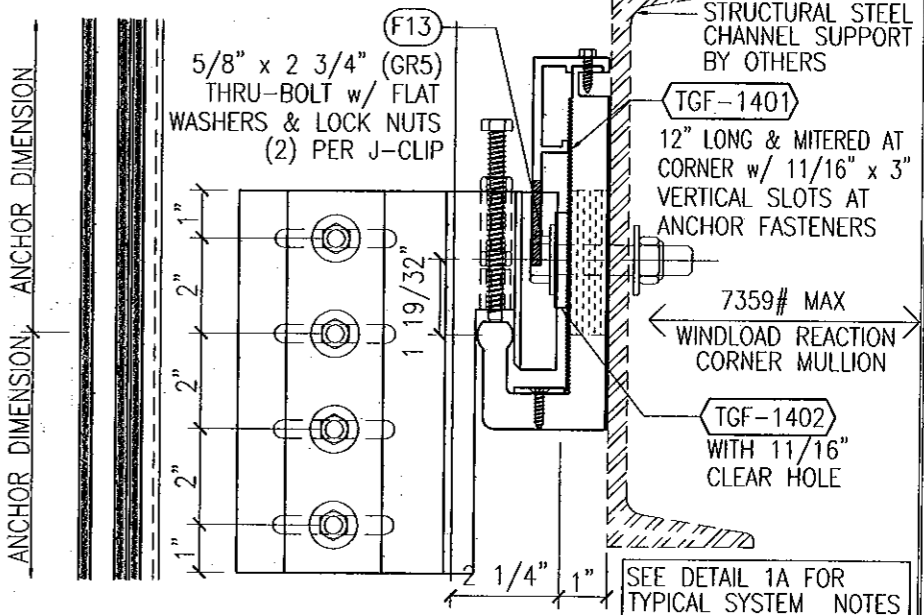
2 90° I.S. CORNER MULLION AT TUBE STEEL
SEE SHEET 12 FOR GLAZING OPTIONS
ANCHORED w/ 5/8\"/>



2A DL ANCHOR AT TUBE STEEL SUPPORT (SIDE VIEW)
SEE SHEET 12 FOR GLAZING OPTIONS
ANCHORED w/ 5/8\"/>



3 90° I.S. CORNER MULLION AT STEEL CHANNEL
SEE SHEET 12 FOR GLAZING OPTIONS
ANCHORED w/ 5/8\"/>

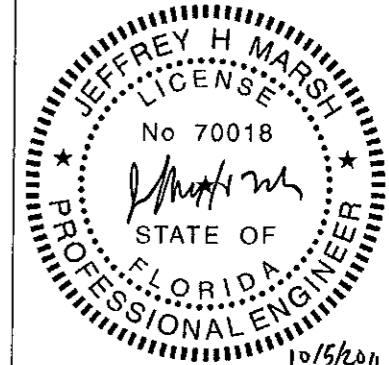


3A DL ANCHOR AT STEEL CHANNEL SUPPORT (SIDE VIEW)
SEE SHEET 12 FOR GLAZING OPTIONS
ANCHORED w/ 5/8\"/>

NOTES:

- SEE DETAILS ON SHEET 12 FOR BALANCE OF INSIDE CORNER MULLION INFORMATION AND VARIOUS GLAZING OPTIONS
- INDICATES FASTENERS AND PARTS ARE NOT REQUIRED FOR WINDLOAD ANCHOR CONDITIONS

Approved as complying with the Florida Building Code
Date 10/20/2011
NOA# 11-05201.04
Miami Dade Product Control
By *[Signature]*



GLASS COMPANY
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
www.trainorglass.com

TRAINOR

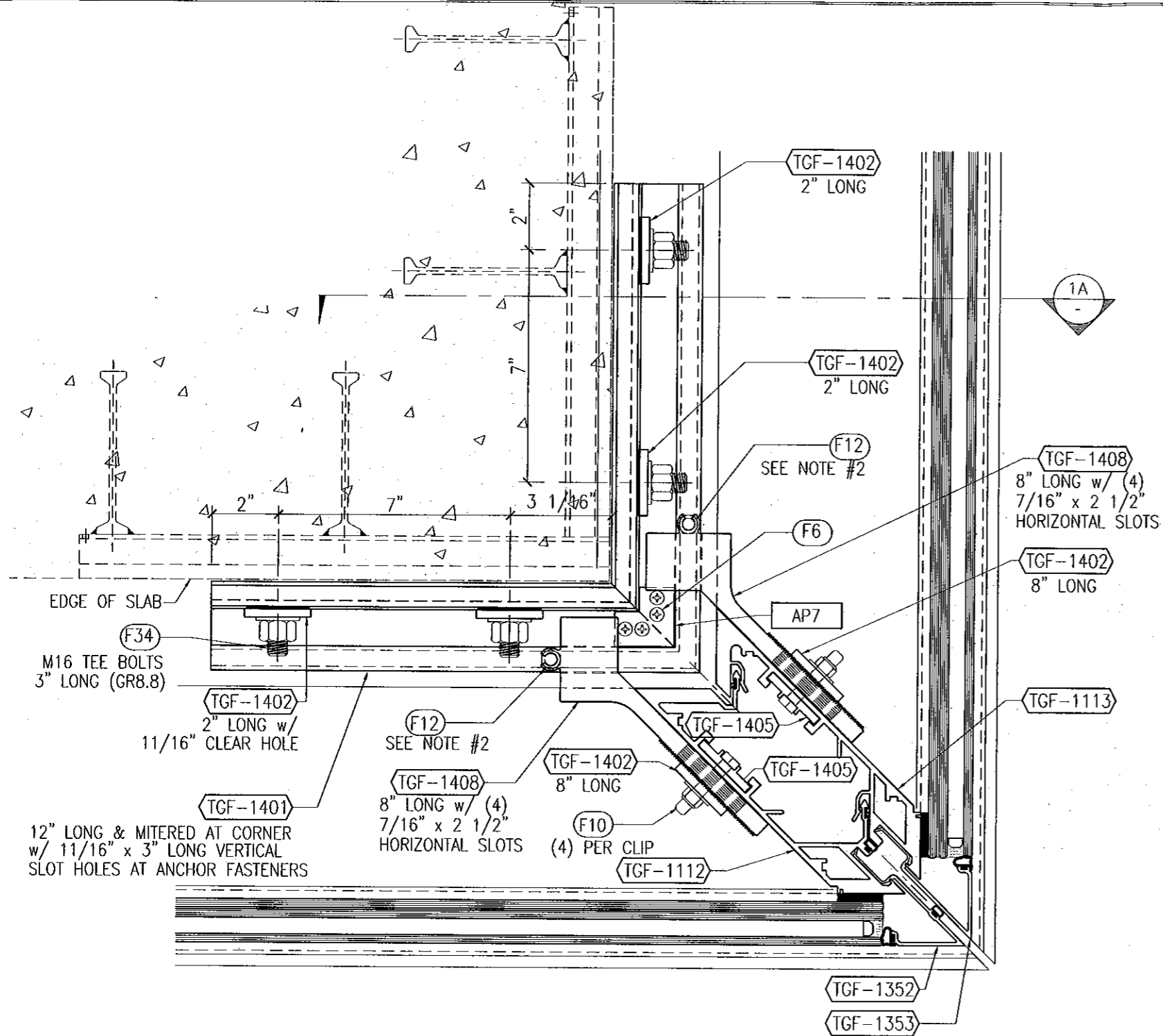
ILLINOIS FLORIDA GEORGIA NEW JERSEY NEW YORK TEXAS ARIZONA VIRGINIA MARYLAND

NO.	DATE	BY	REVISIONS

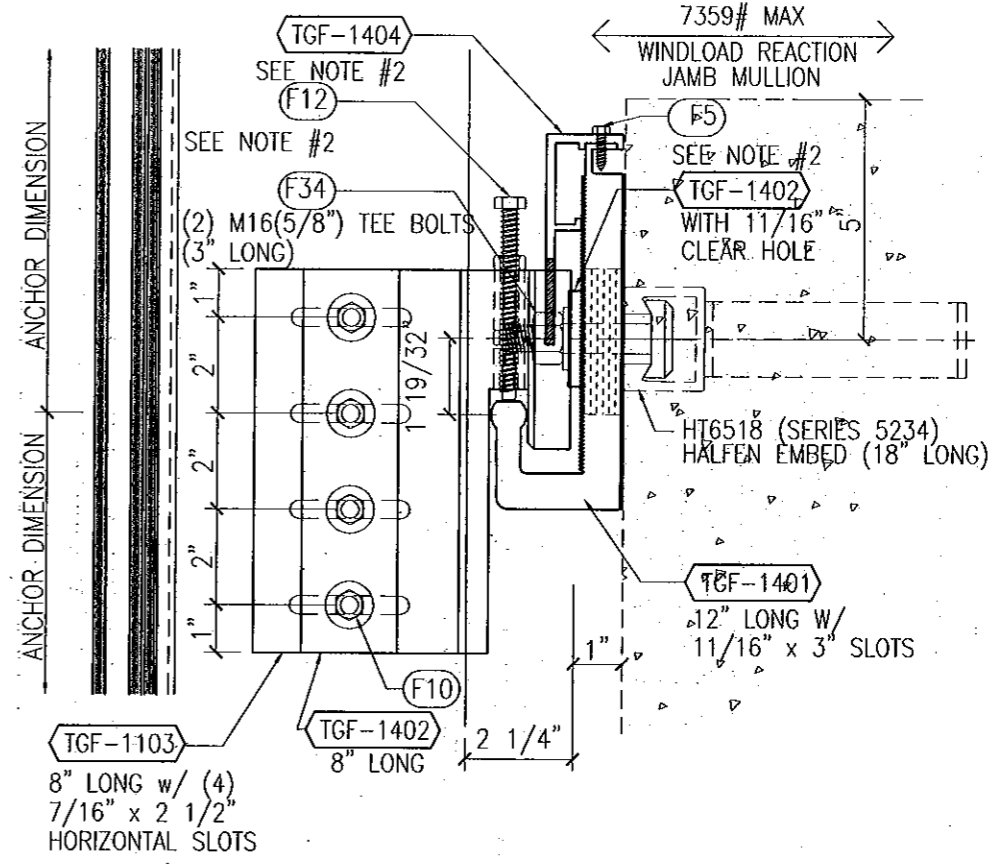
DESIGN ENGINEERING & CONSULTING

1305PF LARGE MISSILE IMPACT ANCHOR DETAILS

Sheet No 19 / 41



1 90° O.S. CORNER MULL AT FLOOR SLAB ANCHOR
SEE SHEET 13 FOR GLAZING OPTIONS
ANCHORED w/ HALFEN CUSTOM CORNER EMBED



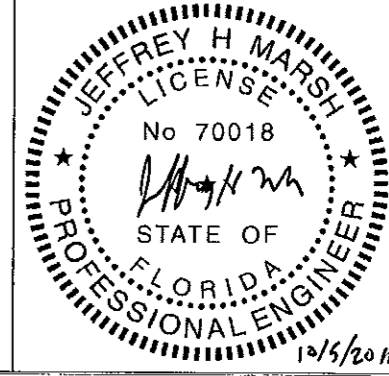
1A DL ANCHOR AT FLOOR SLAB (SIDE VIEW)
SEE SHEET 13 FOR GLAZING OPTIONS
ANCHORED w/ HALFEN CUSTOM CORNER EMBED

NOTES:

- SEE DETAILS ON SHEET 13 FOR BALANCE OF OUTSIDE CORNER MULLION INFORMATION AND VARIOUS GLAZING OPTIONS
- INDICATES FASTENERS AND PARTS ARE NOT REQUIRED FOR WINDLOAD ANCHOR CONDITIONS

FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the
Florida Building Code
Date 10/20/2011
NOA# 11-020-04
Miami Dade Product Control
By *[Signature]*



Date	Scale
3-3-11	1/4" = 1'-0"
Drawing No	
4326440	
Drawing Title	
130PSF LARGE MISSILE IMPACT ANCHOR DETAILS	
Sheet No	
20 / 41	

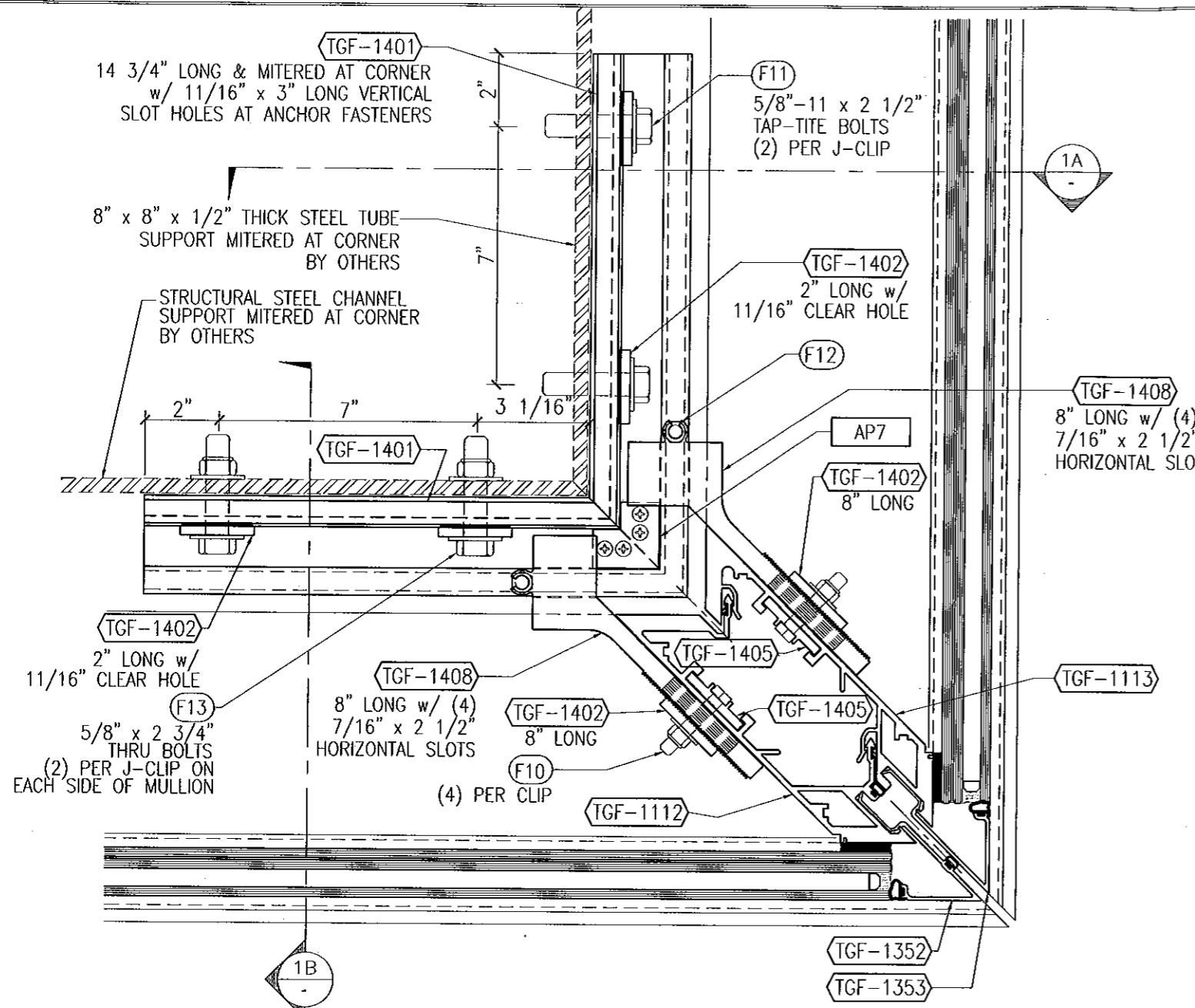
NO.	DATE	BY
1		
2		
3		
4		
5		

DESIGN ENGINEERING & CONSULTING
[Signature]
 2005 N. COLLINS BLVD., SUITE 100
 BOCA RATON, FLORIDA 33433
 TEL: 561-994-9400
 FAX: 561-994-9401

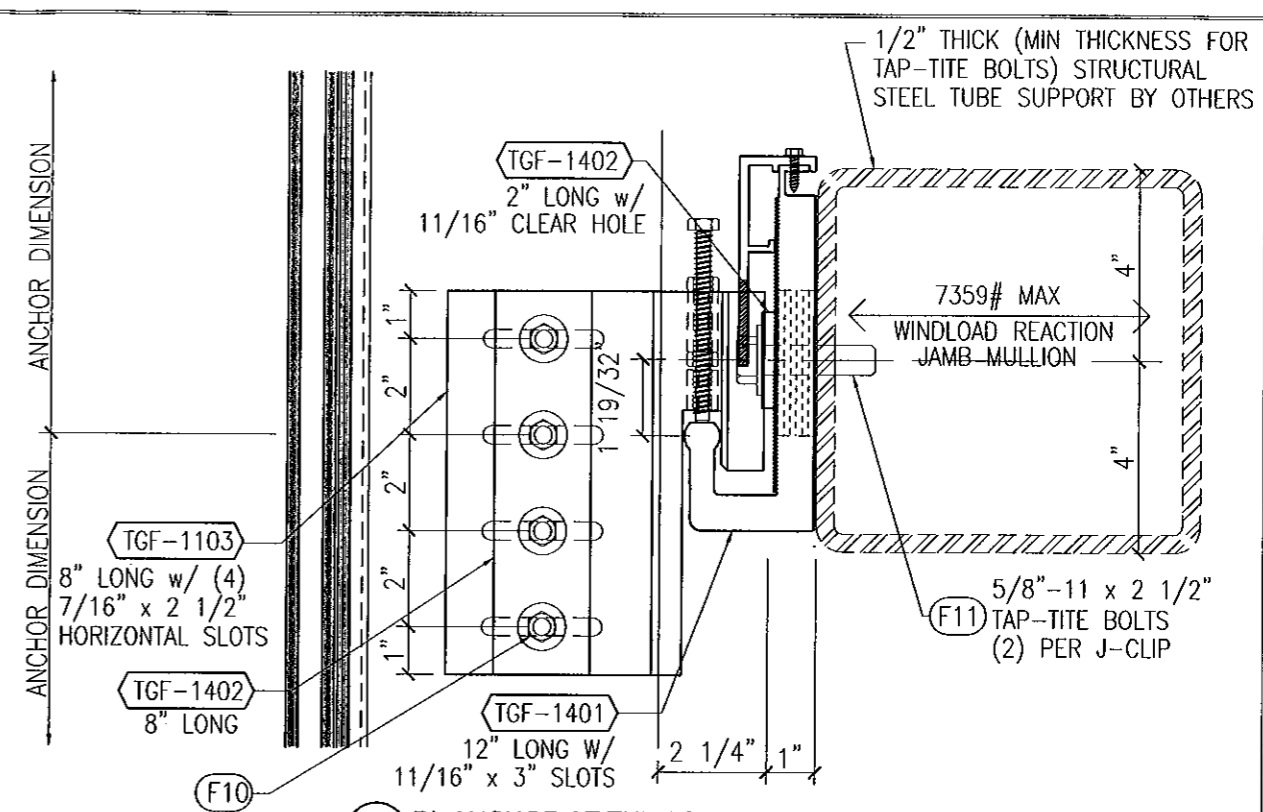
GLASS COMPANY
 1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
 PH. (561) 863-7078 FAX (561) 863-7088
 www.trainorglass.com

TRAINOR

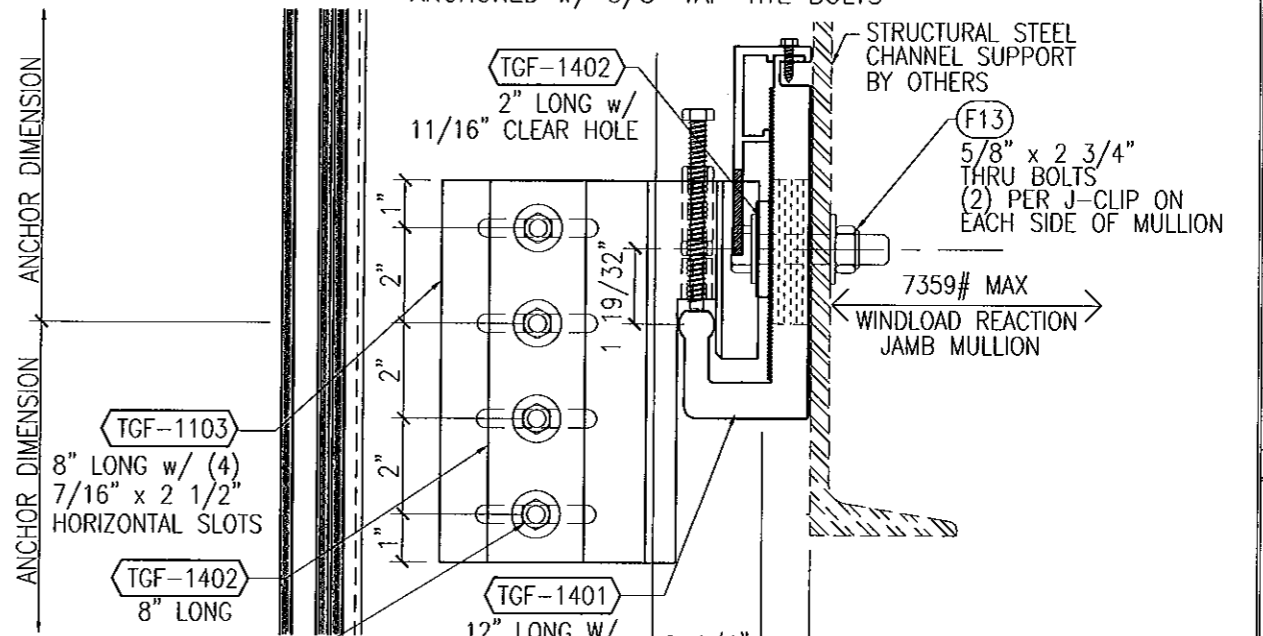
ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND



1 90° O.S. CORNER MULL AT TUBE STEEL SUPPORT
SEE SHEET 13 FOR GLAZING OPTIONS
ANCHORED w/ 5/8" TAP-TITE OR 5/8" THRU BOLTS



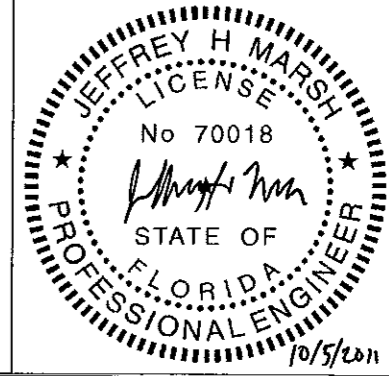
1A DL ANCHOR AT TUBE STEEL SUPPORT (SIDE VIEW)
SEE SHEET 10 FOR GLAZING OPTIONS
ANCHORED w/ 5/8" TAP-TITE BOLTS



1B DL ANCHOR AT STEEL SUPPORT CHANNEL (SIDE VIEW)
SEE SHEET 10 FOR GLAZING OPTIONS
ANCHORED w/ 5/8" THRU BOLTS

- NOTES:
- SEE DETAILS ON SHEET 13 FOR BALANCE OF OUTSIDE CORNER MULLION INFORMATION AND VARIOUS GLAZING OPTIONS
 - INDICATES FASTENERS AND PARTS ARE NOT REQUIRED FOR WINDLOAD ANCHOR CONDITIONS

FOR MIAMI-DADE CO. B.C.C.O.
Approved as complying with the
Florida Building Code
Date 10/20/2011
NOA# 11-04-01.04
Miami Dade Product Control
By *[Signature]*



Date	Scale
3-3-11	HALF
Drawing No	
4326440	
Drawing Title	
130PSF LARGE MISSILE IMPACT ANCHOR DETAILS	
Sheet No	
21 / 41	

GLASS COMPANY
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
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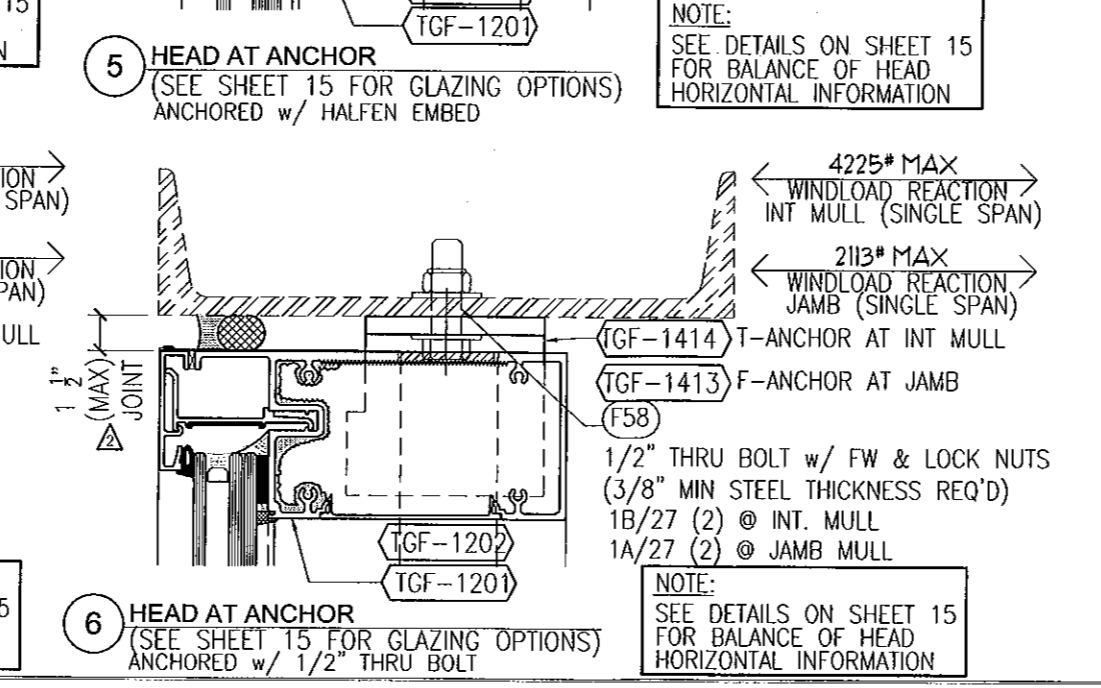
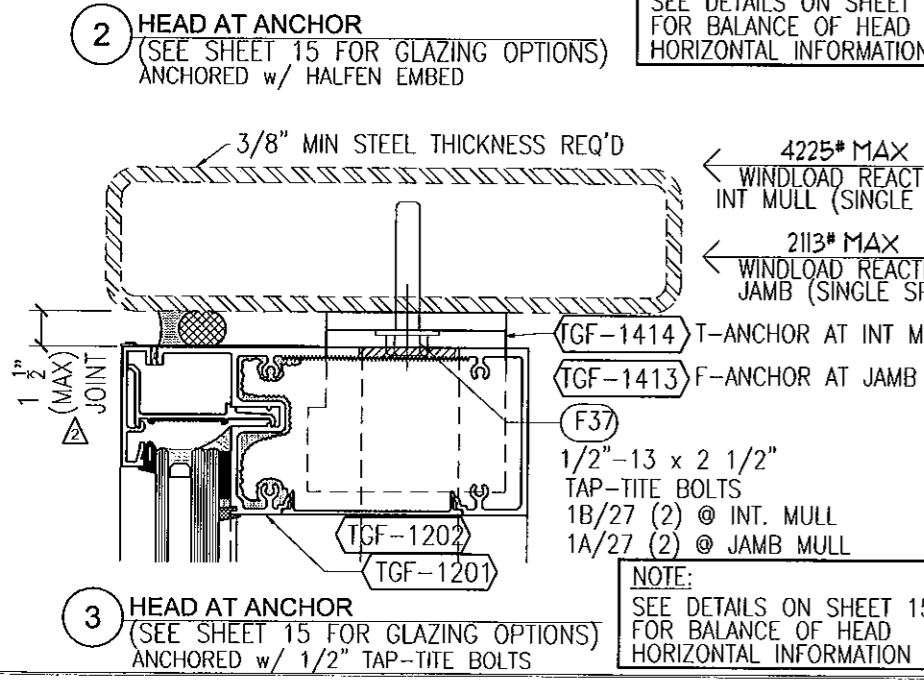
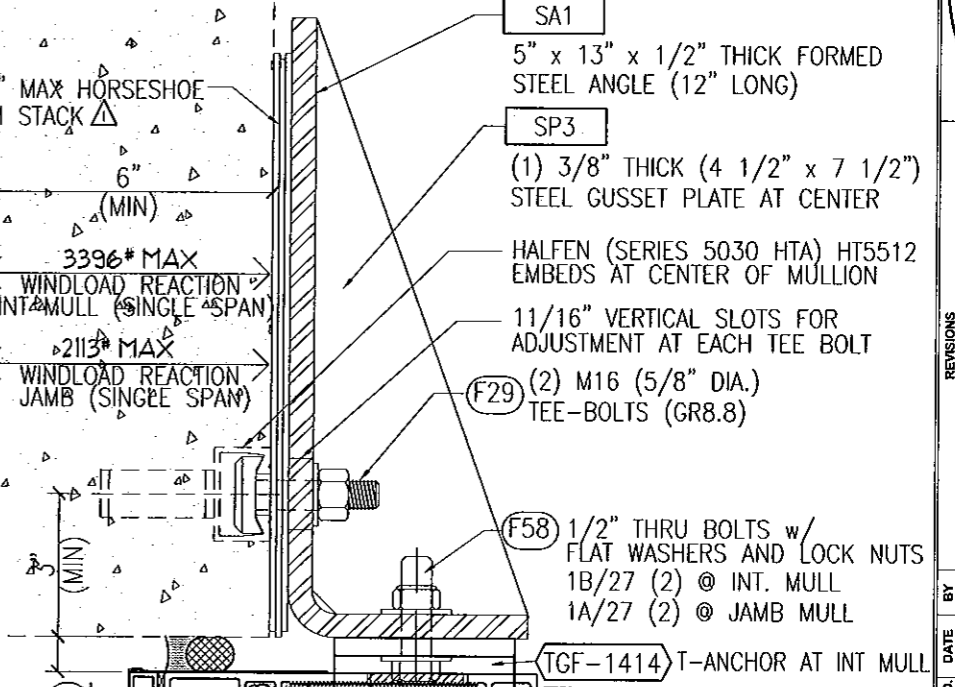
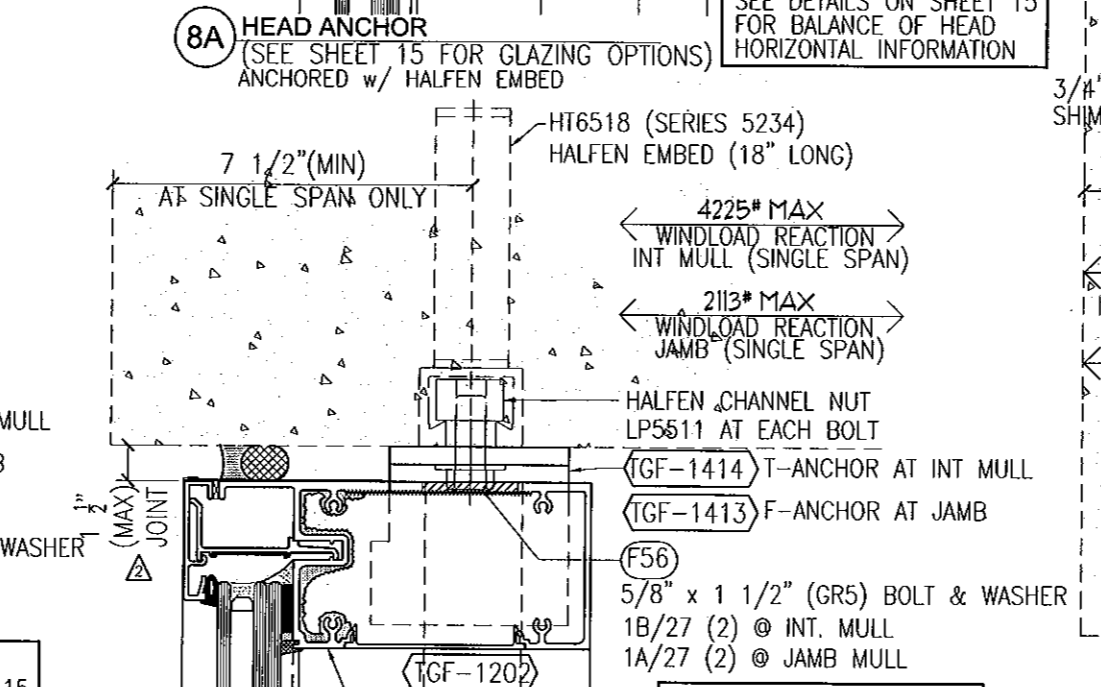
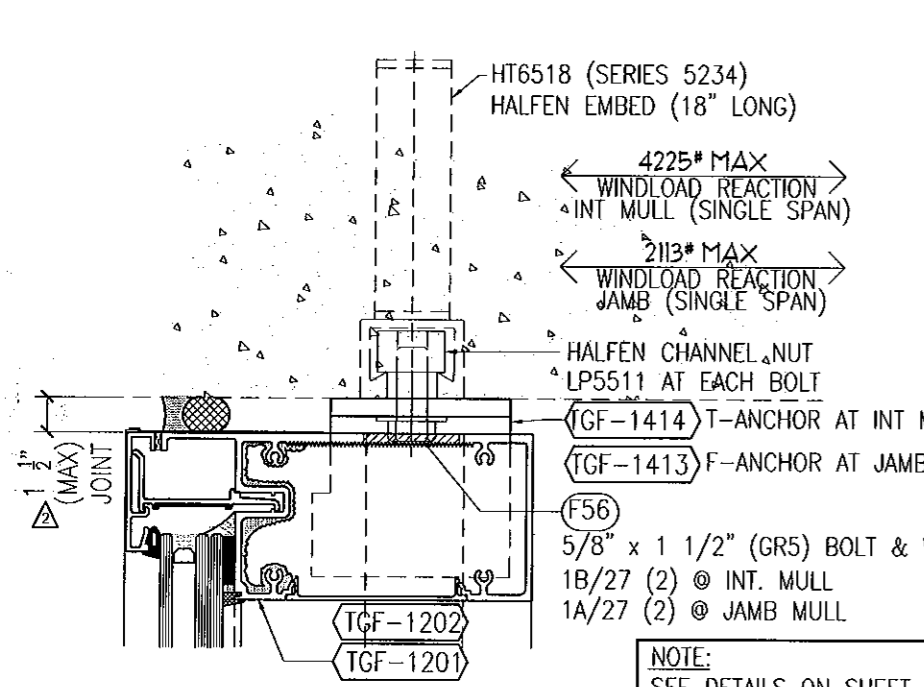
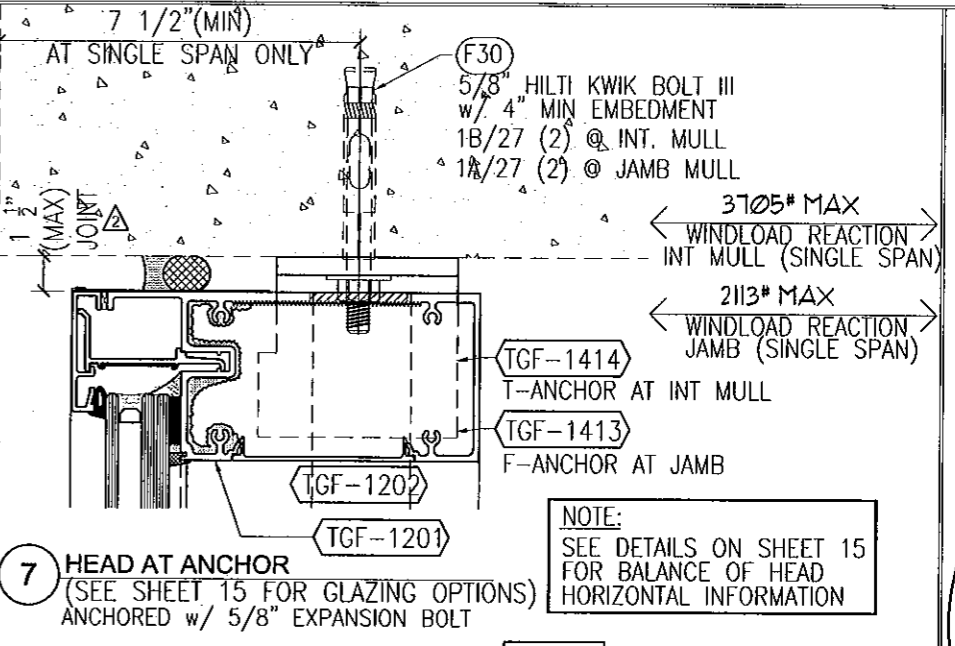
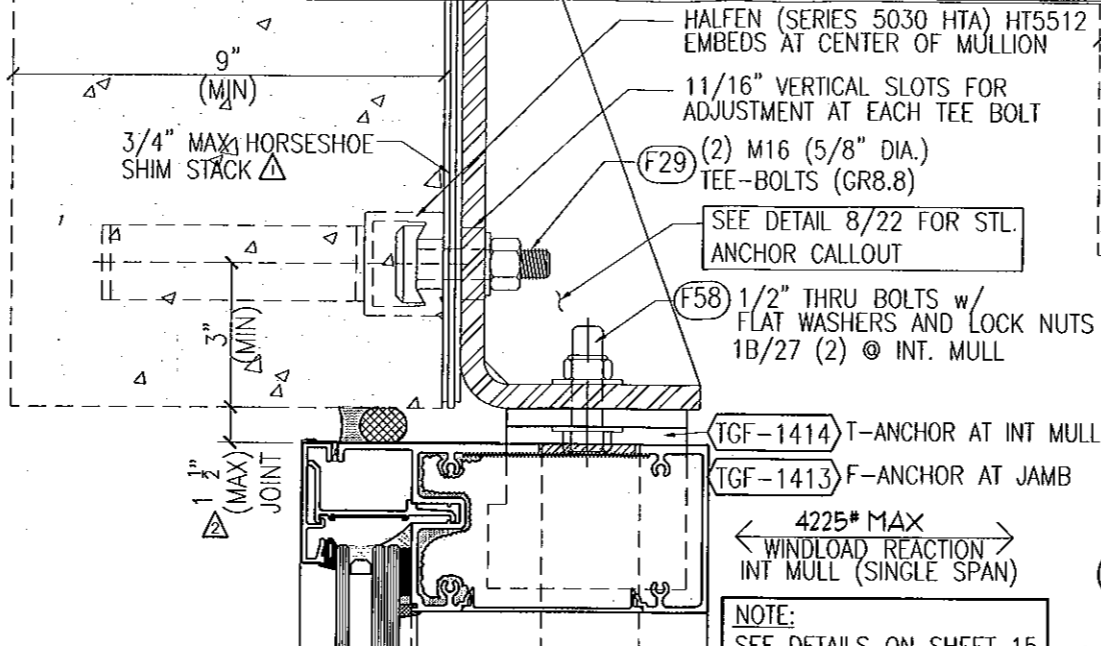
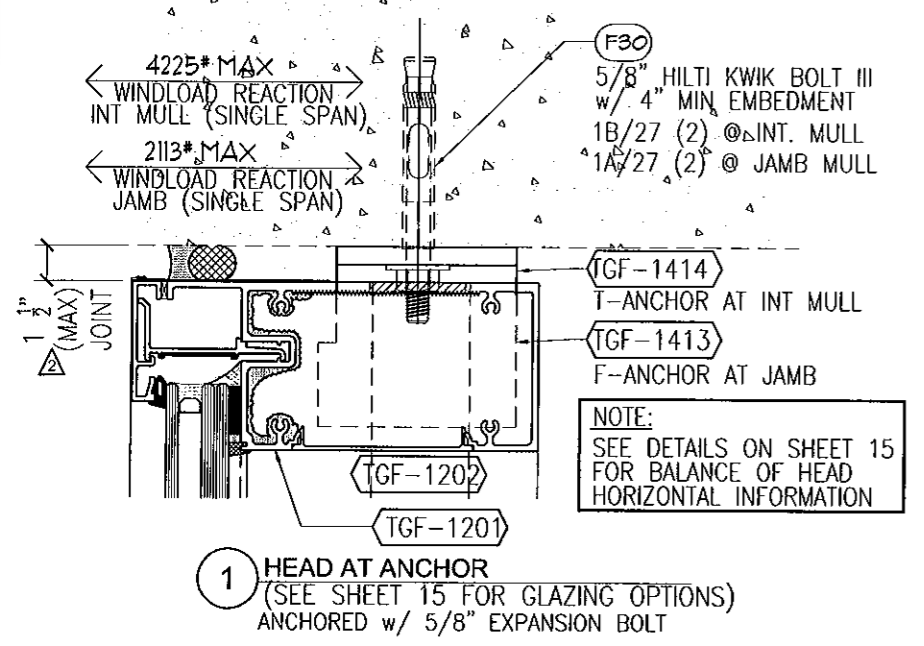
TRAINOR

ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

REVISIONS

NO.	DATE	BY
1		
2		
3		
4		
5		

DESIGN ENGINEERING & CONSULTING
JAC
2000 N. COLLINS BLVD., SUITE 110
FORT LAUDERDALE, FLORIDA 33309
TEL: 978-944-9966
FAX: 978-944-9968



8 HEAD ANCHOR
(SEE SHEET 15 FOR GLAZING OPTIONS)
ANCHORED w/ HALFEN EMBED

FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the Florida Building Code
Date 10/20/2011
NOA# 11-0401.04
Miami Dade Product Control
By [Signature]

JEFFREY H MARSH
LICENSE
No 70018
STATE OF FLORIDA
PROFESSIONAL ENGINEER
10/5/2011

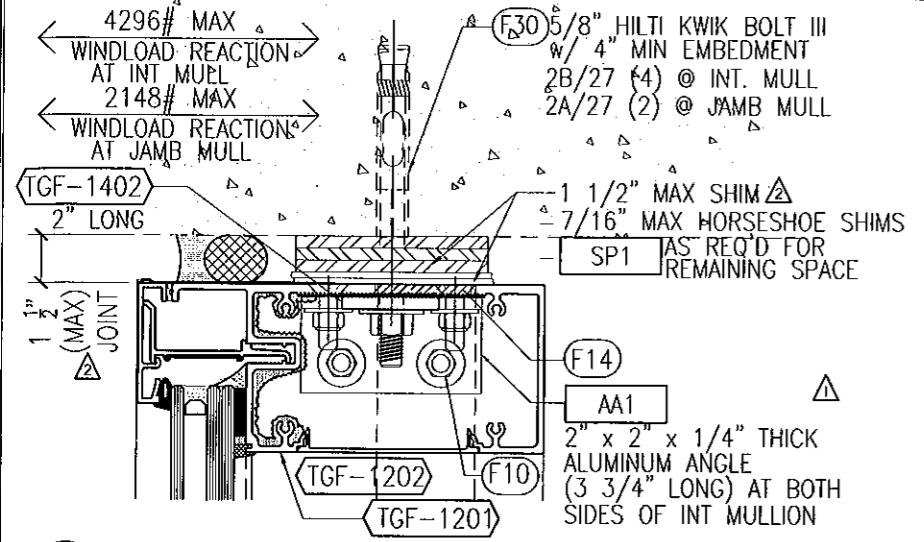
NO.	DATE	BY	REVISIONS
1	10/20/11	JHM	ISSUED FOR BIDDING
2	11/04/11	JHM	ISSUED FOR CONSTRUCTION

Date 3-3-11 Scale HALF
Drawing No 4326440
Drawing Title 1309SF LARGE MISSILE IMPACT ANCHOR DETAILS
Sheet No 22 / 41

TRAINOR

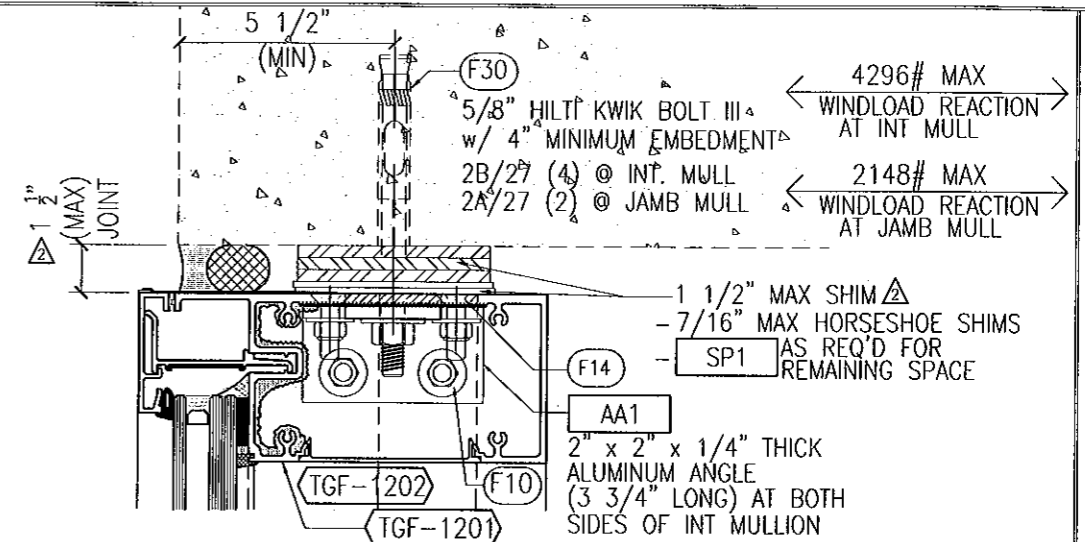
GLASS COMPANY
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
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ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND



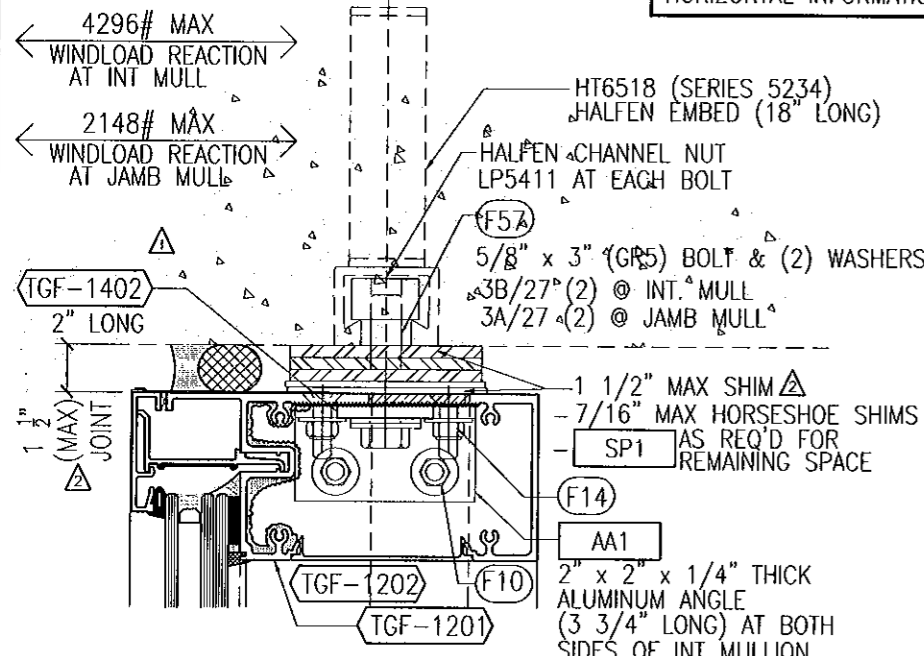
1 HEAD AT DL ANCHOR (MULTISPAN ONLY)
 (SEE SHEET 15 FOR GLAZING OPTIONS)
 ANCHORED w/ 5/8" EXPANSION BOLT

NOTE:
 SEE DETAILS ON SHEET 15
 FOR BALANCE OF HEAD
 HORIZONTAL INFORMATION

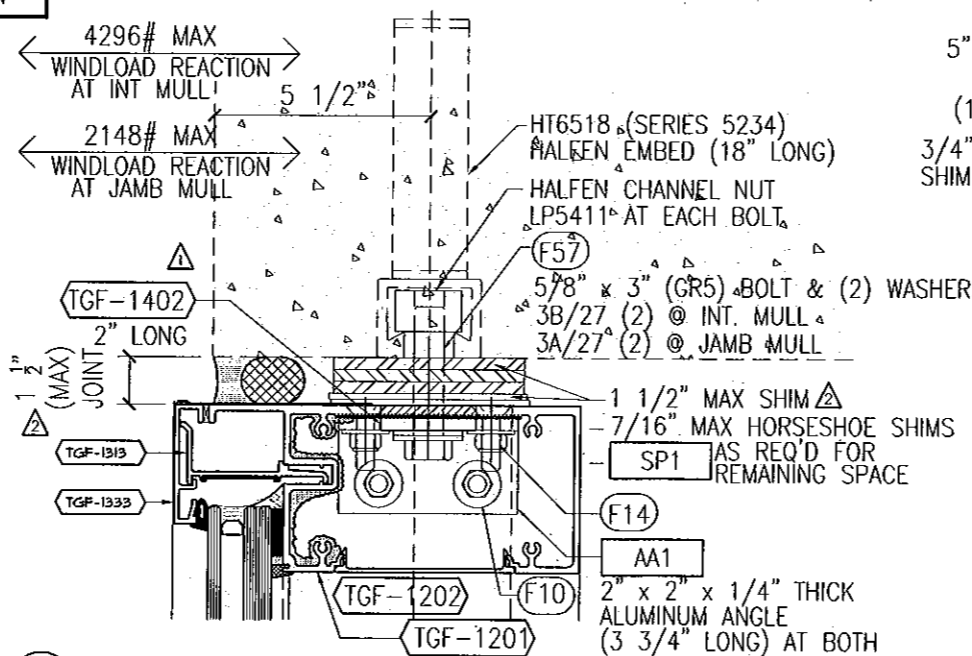


6 HEAD AT DL ANCHOR (MULTISPAN ONLY)
 (SEE SHEET 15 FOR GLAZING OPTIONS)
 ANCHORED w/ 5/8" EXPANSION BOLT

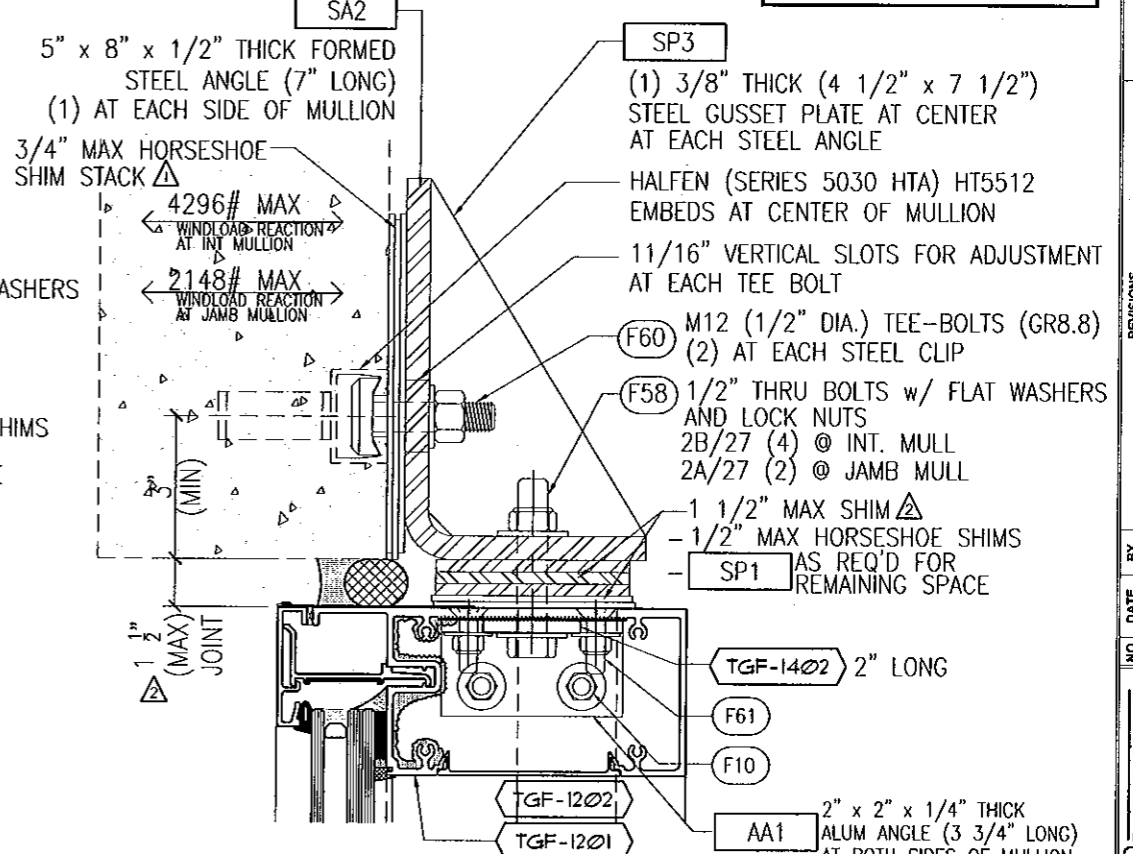
NOTE:
 SEE DETAILS ON SHEET 15
 FOR BALANCE OF HEAD
 HORIZONTAL INFORMATION



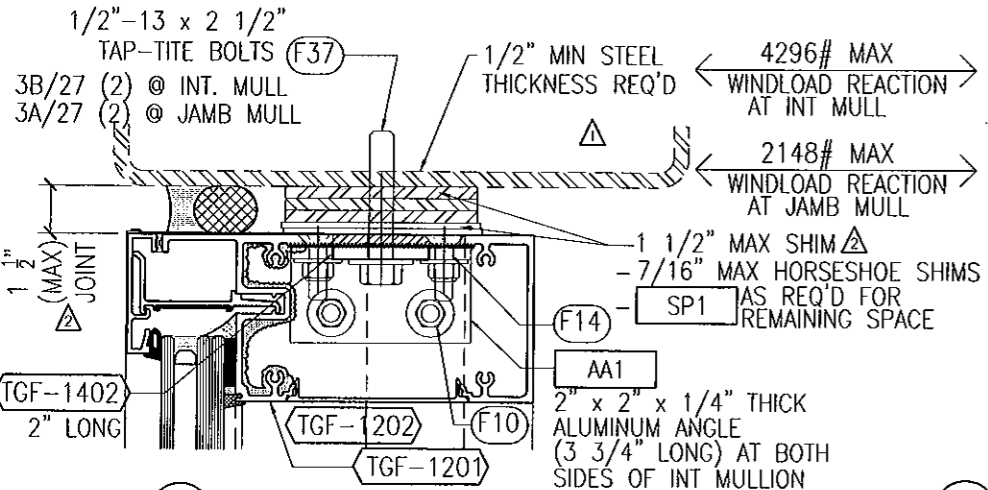
2 HEAD AT DL ANCHOR (MULTISPAN ONLY)
 (SEE SHEET 15 FOR GLAZING OPTIONS)
 ANCHORED w/ HALFEN EMBED



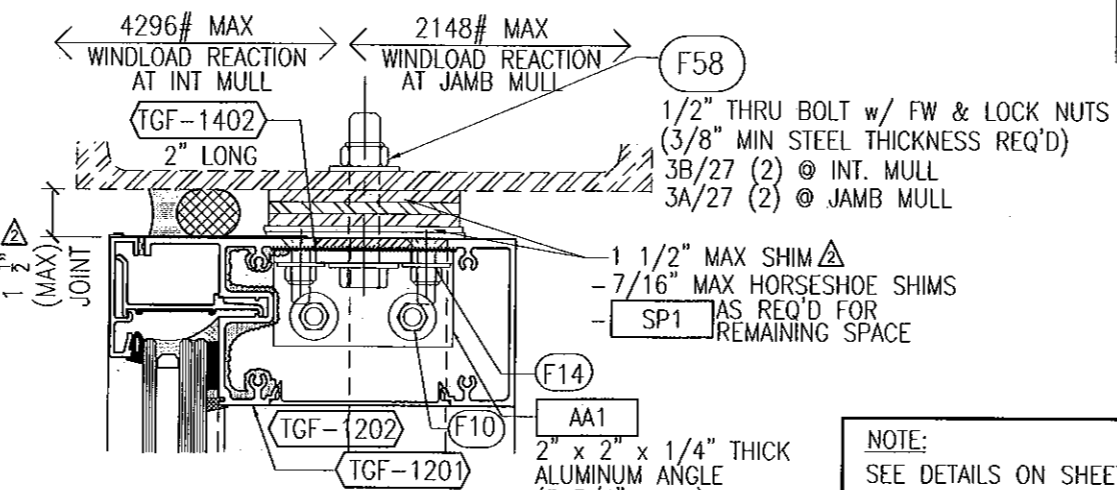
4 HEAD AT DL ANCHOR (MULTISPAN ONLY)
 (SEE SHEET 15 FOR GLAZING OPTIONS)
 ANCHORED w/ HALFEN EMBED



7 HEAD DL ANCHOR (MULTISPAN ONLY)
 (SEE SHEET 15 FOR GLAZING OPTIONS)
 ANCHORED w/ HALFEN EMBED



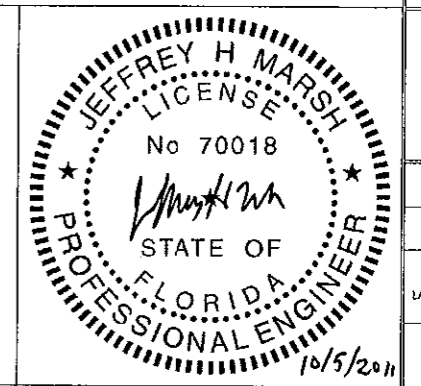
3 HEAD AT DL ANCHOR (MULTISPAN ONLY)
 (SEE SHEET 15 FOR GLAZING OPTIONS)
 ANCHORED w/ 1/2" TAP-TITE BOLTS



5 HEAD AT DL ANCHOR (MULTISPAN ONLY)
 (SEE SHEET 15 FOR GLAZING OPTIONS)
 ANCHORED w/ 1/2" THRU BOLTS

NOTE:
 SEE DETAILS ON SHEET 15
 FOR BALANCE OF HEAD
 HORIZONTAL INFORMATION

FOR MIAMI-DADE CO. B.C.C.O.
 Approved as complying with the
 Florida Building Code
 Date 10/20/2011
 NOA# 11-04201-04
 Miami Dade Product Control
 By [Signature]

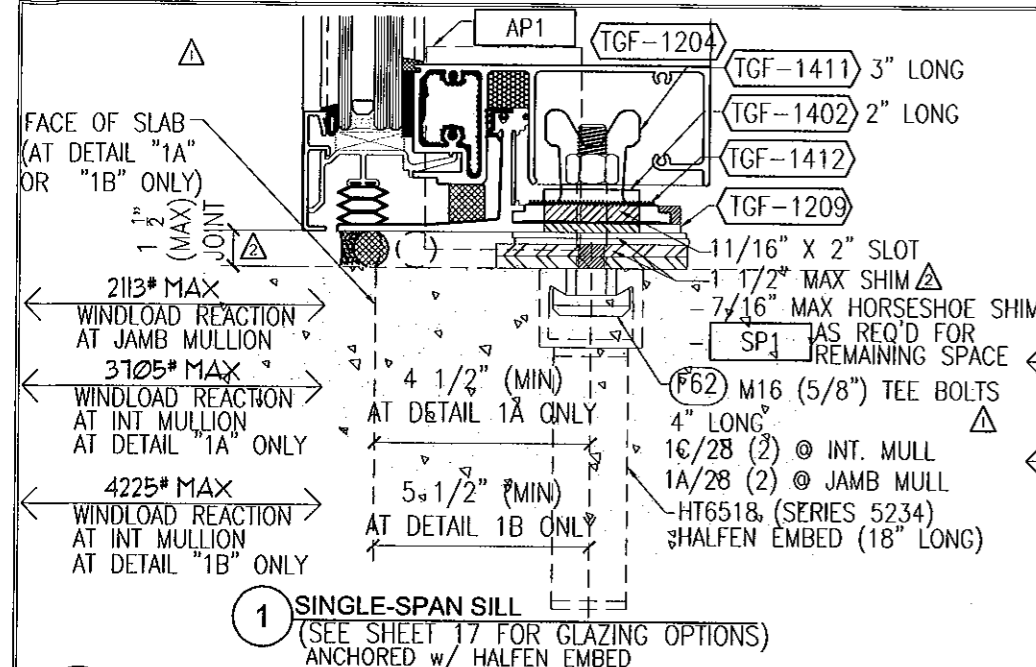


Date	Scale
3-3-11	HALF
Drawing No	4326440
Drawing Title	1305PF LARGE MISSILE IMPACT ANCHOR DETAILS
Sheet No	23 / 41

NO.	DATE	BY	REVISIONS
1	10/20/11	JHM	ISSUED FOR BIDDING
2	10/20/11	JHM	REVISED FOR JAMB AND SHIM NOTES

DESIGN ENGINEERING & CONSULTING
 [Signature]
 200 S. COLLINS BLVD., SUITE 100
 DUBLIN, TEXAS 75848
 PH. 972-444-0960
 FAX 972-444-0204

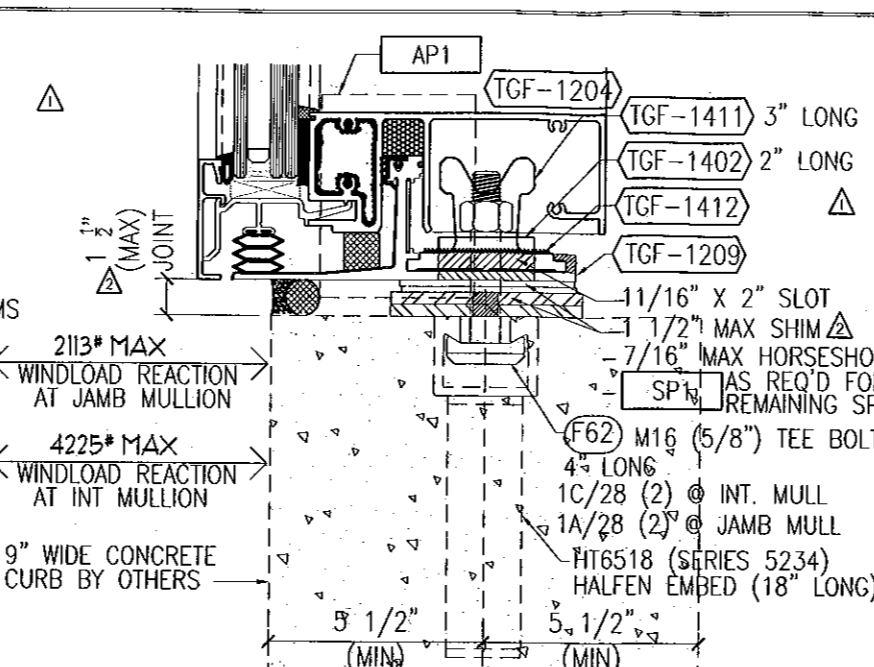
TRAINOR
 ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND
 G L A S S C O M P A N Y
 1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
 PH. (561) 863-7078 FAX (561) 863-7088
 www.trainorglass.com



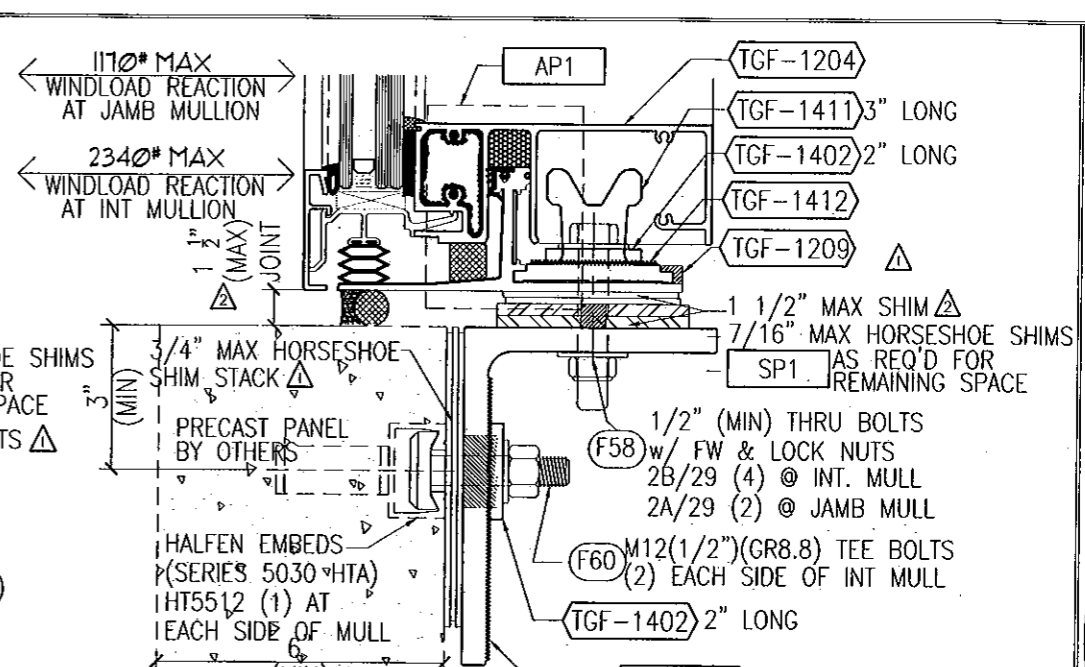
1 SINGLE-SPAN SILL
(SEE SHEET 17 FOR GLAZING OPTIONS)
ANCHORED w/ HALFEN EMBED

1A SINGLE-SPAN SILL W/ SLAB EDGE
ANCHORED w/ HALFEN EMBED

1B SINGLE-SPAN SILL W/ SLAB EDGE
ANCHORED w/ HALFEN EMBED

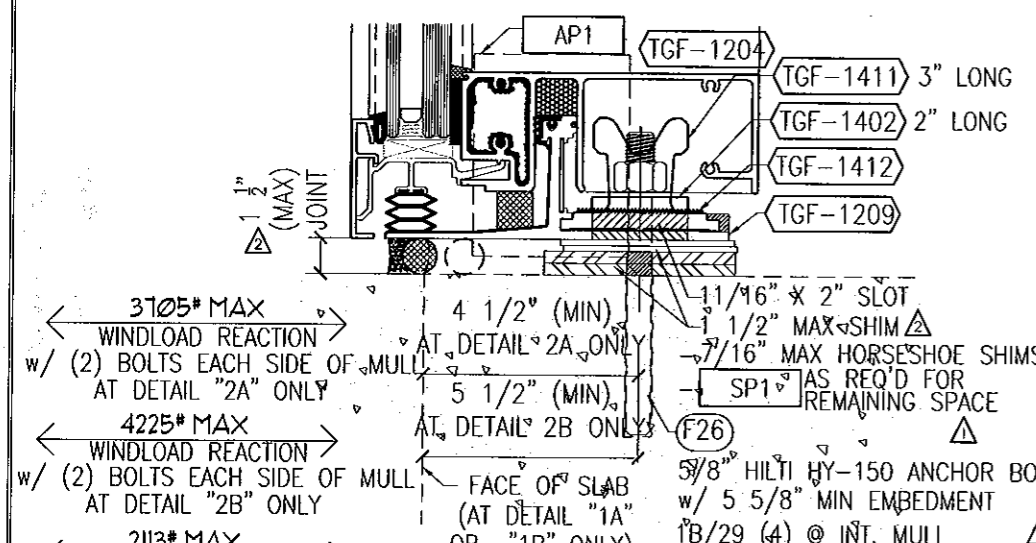


4 SINGLE-SPAN SILL
(SEE SHEET 17 FOR GLAZING OPTIONS)
ANCHORED w/ HALFEN EMBED



6 SINGLE-SPAN SILL
(SEE SHEET 17 FOR GLAZING OPTIONS)
ANCHORED w/ HALFEN EMBED

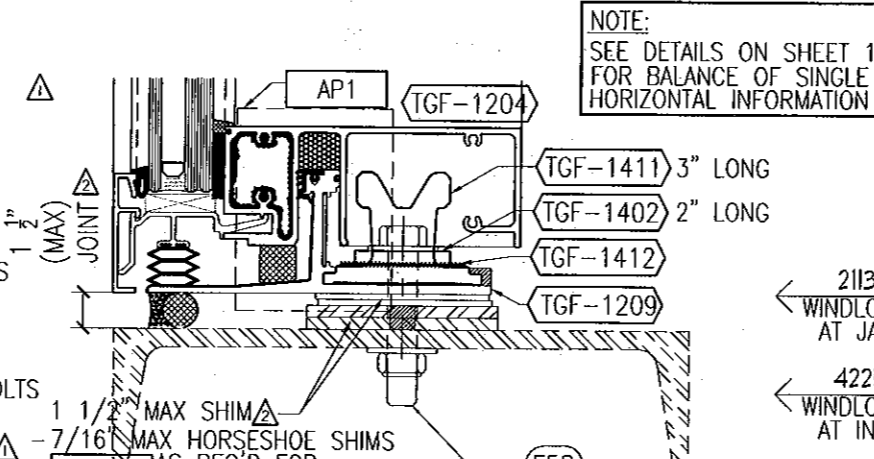
8" LONG AND (1) AT EACH SIDE OF INT MULLION AND (1) AT JAMB MULLION W/ 9/16" VERTICAL SLOTS



2 SINGLE-SPAN SILL
(SEE SHEET 17 FOR GLAZING OPTIONS)
ANCHORED w/ 5/8" EPOXY ANCHOR BOLT

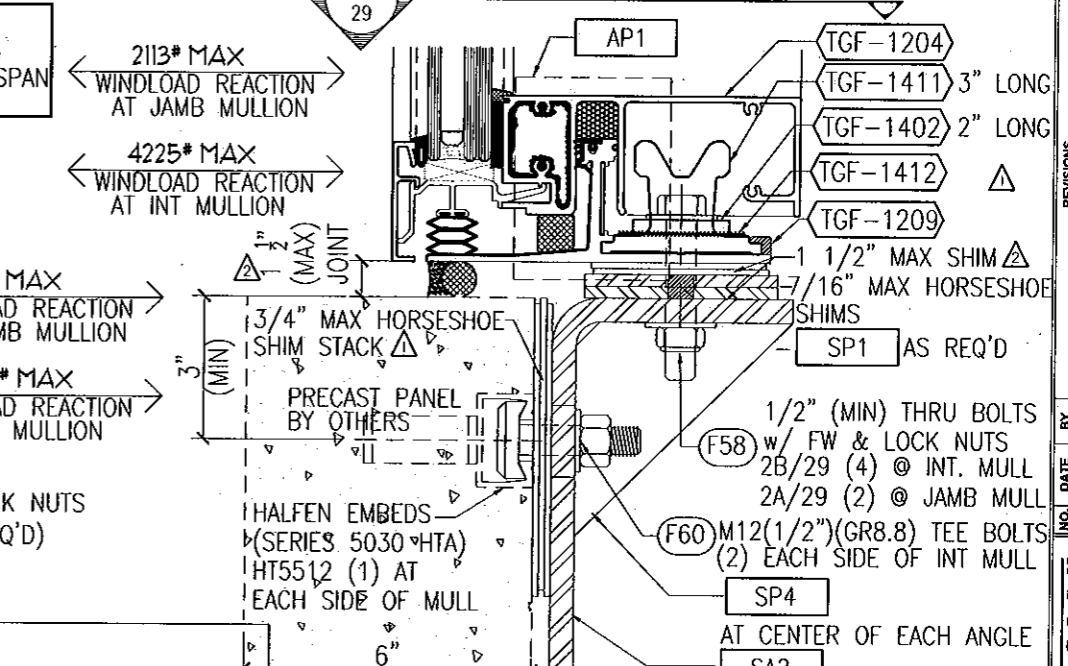
2A SINGLE-SPAN SILL
ANCHORED w/ 5/8" EPOXY BOLT

2B SINGLE-SPAN SILL
ANCHORED w/ 5/8" EPOXY BOLT



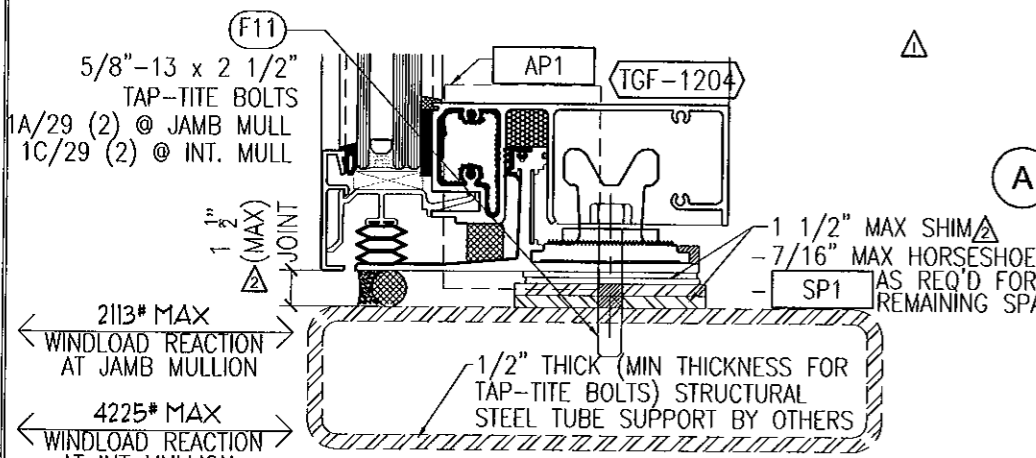
5 SINGLE-SPAN SILL
SEE SHEET 17 FOR GLAZING OPTIONS
ANCHORED w/ 5/8" THRU BOLT

NOTE:
SEE DETAILS ON SHEET 15
FOR BALANCE OF SINGLE SPAN
HORIZONTAL INFORMATION



7 SINGLE-SPAN SILL
AT PRECAST PANEL (SEE SHEET 17 FOR GLAZING OPTIONS)
ANCHORED w/ HALFEN EMBED

8" LONG AND (1) AT EACH SIDE OF INT MULLION AND (1) AT JAMB MULLION W/ 9/16" VERTICAL SLOTS



3 SINGLE-SPAN SILL
(SEE SHEET 17 FOR GLAZING OPTIONS)
ANCHORED w/ 1/2" TAP-TITE BOLT

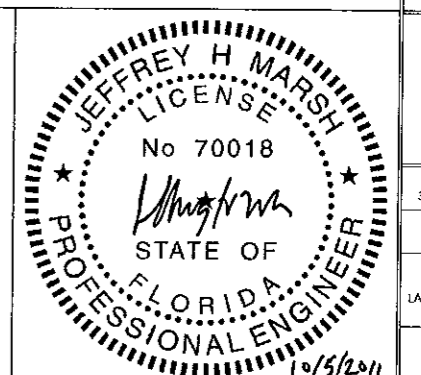
A MULLION NOTCH AT DL SILLS
NOTCH AT CHICKEN HEAD OF SILL STARTER

NOTE:
NOTCH BOTTOM OF MULLION
AT CHICKEN HEAD 1 19/32"
DEEP AT ALL DEADLOAD
SILL LOCATIONS

- NOTES:**
- SEE DETAILS ON SHEET 15 FOR BALANCE OF SINGLE SPAN SILL INFORMATION AND VARIOUS GLAZING OPTIONS
 - INDICATES FASTENERS AND PARTS ARE NOT REQUIRED FOR WINDLOAD ANCHOR CONDITIONS
 - MAX WINDLOAD REACTION = 3412# IF (2) 5/8" EPOXY ANCHOR BOLTS w/ 5 5/8" MIN EMBEDMENT ARE USED ON EACH SIDE OF MULLION - (2) AT JAMB

- SA2 = 5" x 8" x 1/2" THICK FORMED STEEL ANGLE (7" LONG)
- SP1 = 4" x 4" x 1/4" THICK STEEL PLATES
- SP4 = 4 1/2" x 4 1/2" x 3/8" THICK STEEL GUSSET PLATE

FOR MIAMI-DADE CO. B.C.C.O.
Approved as complying with the Florida Building Code
Date 10/20/11
NOA# 11-020-04
Miami Dade Product Control
By [Signature]



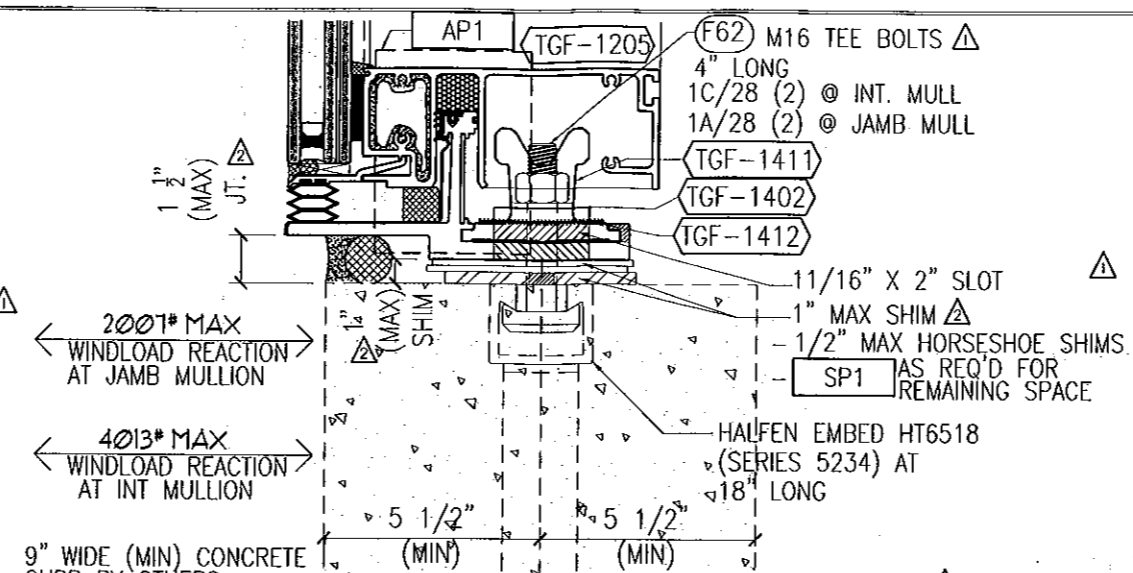
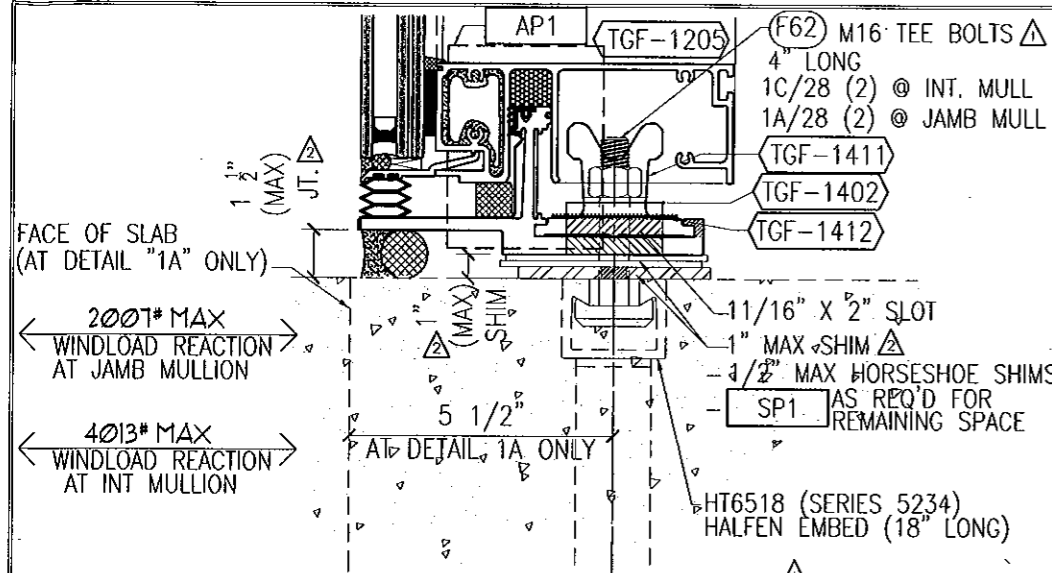
GLASS COMPANY
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
www.trainorglass.com

TRAINOR

ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

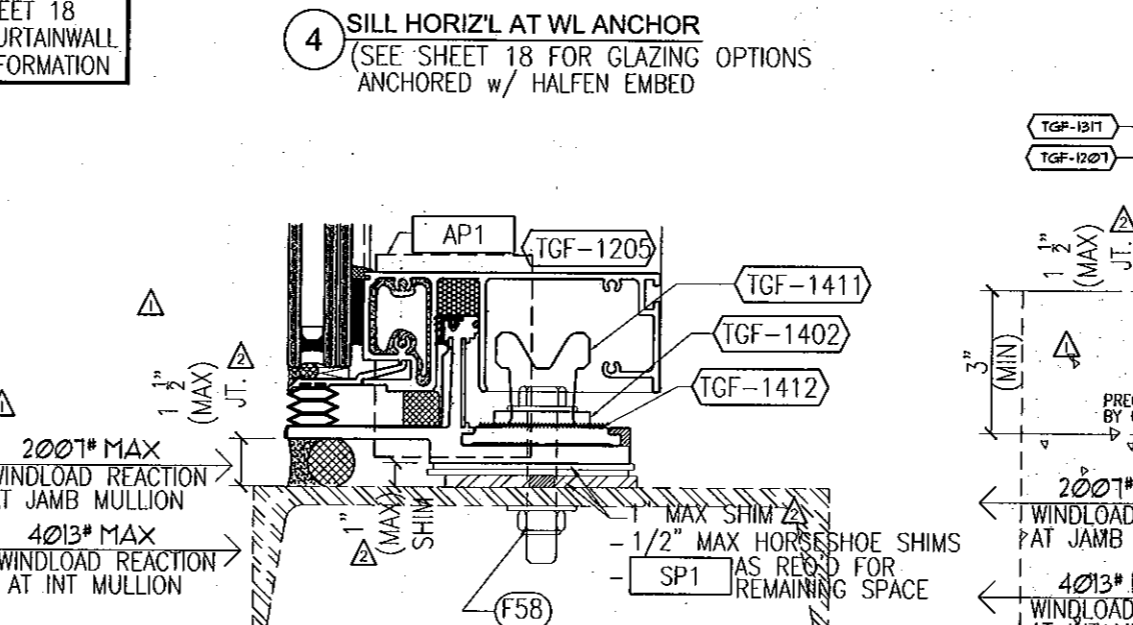
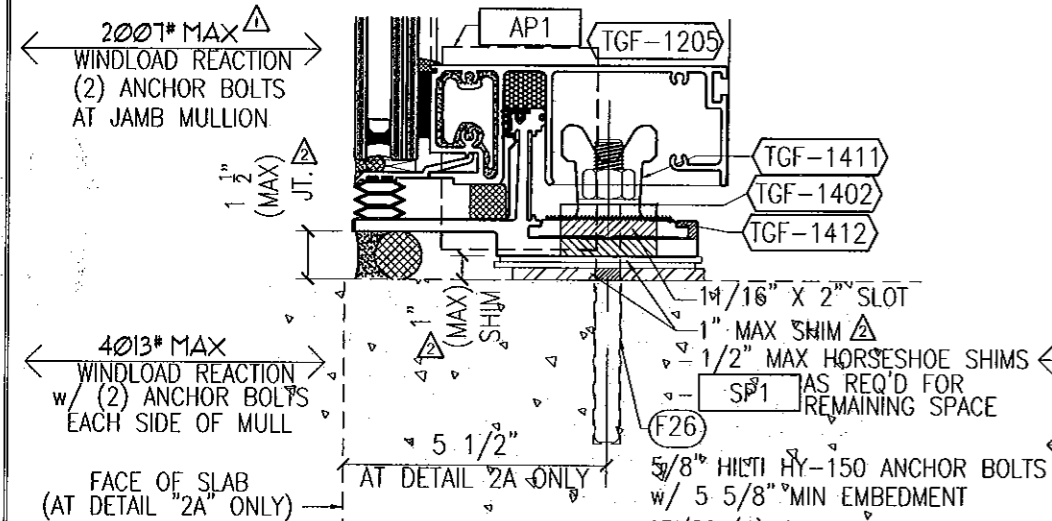
NO.	DATE	BY	REVISIONS
1	10/20/11	JHM	ADD 1 1/2" x 2" SLOT TO ANCHOR BOLTS UNDER 1" MAX SLUR
2	10/20/11	JHM	REMOVED 1/2" SLUR AND 1" MAX SLUR

DESIGN ENGINEERING & CONSULTING
1305 P.F. LARGE MISSILE IMPACT ANCHOR DETAILS
Sheet No. 24 / 41



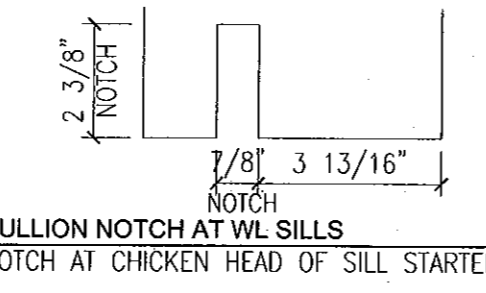
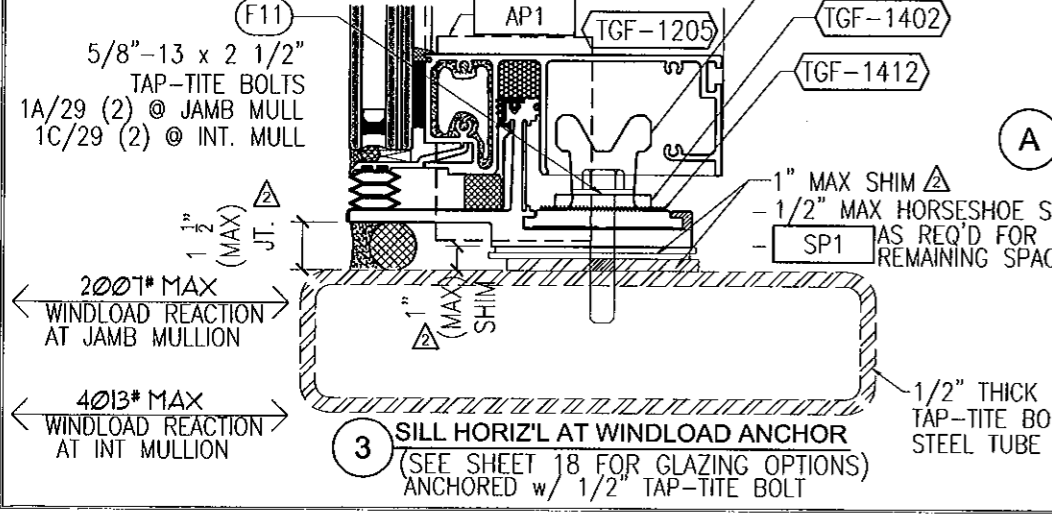
- 1 SILL HORIZ'L AT WL ANCHOR (SEE SHEET 18 FOR GLAZING OPTIONS ANCHORED w/ HALFEN EMBED)
- 1A SILL HORIZ'L AT WL ANCHOR W/ SLAB EDGE (SEE SHEET 18 FOR GLAZING OPTIONS ANCHORED w/ HALFEN EMBED)

NOTE: SEE DETAILS ON SHEET 18 FOR BALANCE OF CURTAINWALL SILL HORIZONTAL INFORMATION



- 2 SILL HORIZ'L AT WINDLOAD ANCHOR (SEE SHEET 18 FOR GLAZING OPTIONS) ANCHORED w/ 5/8" EPOXY ANCHOR BOLT
- 2A SILL HORIZ'L AT WINDLOAD ANCHOR W/SLAB EDGE (SEE SHEET 18 FOR GLAZING OPTIONS) ANCHORED w/ 5/8" EPOXY ANCHOR BOLT

- 5 SILL HORIZ'L AT WINDLOAD ANCHOR (SEE SHEET 18 FOR GLAZING OPTIONS) ANCHORED w/ 5/8" THRU BOLT

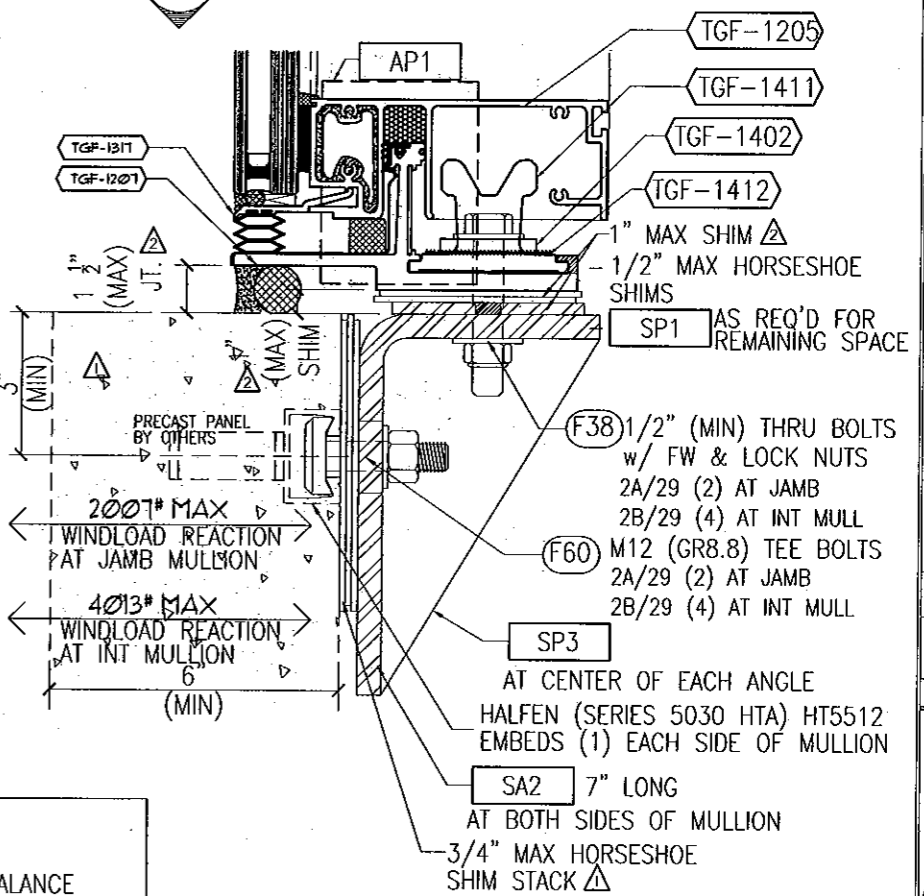


NOTE: NOTCH BOTTOM OF MULLION AT CHICKEN HEAD 2 3/8" DEEP AT ALL WINDLOAD SILL LOCATIONS

- A MULLION NOTCH AT WL SILLS NOTCH AT CHICKEN HEAD OF SILL STARTER

- NOTES:
- SEE DETAILS ON SHEET 18 FOR BALANCE OF CURTAINWALL SILL INFORMATION AND VARIOUS GLAZING OPTIONS
 - INDICATES FASTENERS AND PARTS ARE NOT REQUIRED FOR WINDLOAD ANCHOR CONDITIONS
 - MAX WINDLOAD REACTION = 3412# IF (2) 5/8" EPOXY ANCHOR BOLTS w/ 5 5/8" MIN EMBEDMENT ARE USED ON EACH SIDE OF MULLION - (2) AT JAMB
- SA2 = 5" x 8" x 1/2" THICK FORMED STEEL ANGLE (7" LONG)
 - SP1 = 4" x 4" x 1/4" THICK STEEL PLATES
 - SP4 = 4 1/2" x 4 1/2" x 3/8" THICK STEEL GUSSET PLATE

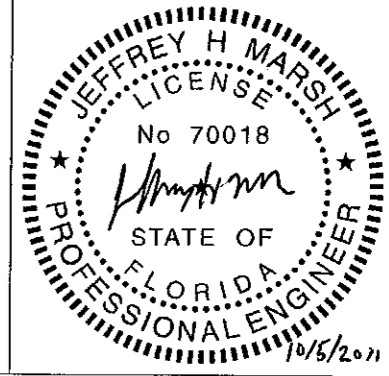
NOTE: SEE DETAILS ON SHEET 18 FOR BALANCE OF CURTAINWALL SILL HORIZONTAL INFORMATION



- 6 SILL HORIZ'L AT WL ANCHOR AT PRECAST PANEL (SEE SHEET 18 FOR GLAZING OPTIONS) ANCHORED w/ HALFEN EMBED

FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the Florida Building Code
 Date 10/20/2011
 NO. 11-0201-02
 Miami Dade Product Control
 By [Signature]



Date	Scale
3-3-11	HALF
Drawing No	4326440
Drawing Title	130PSF LARGE MISSILE IMPACT ANCHOR DETAILS
Sheet No	25 / 41

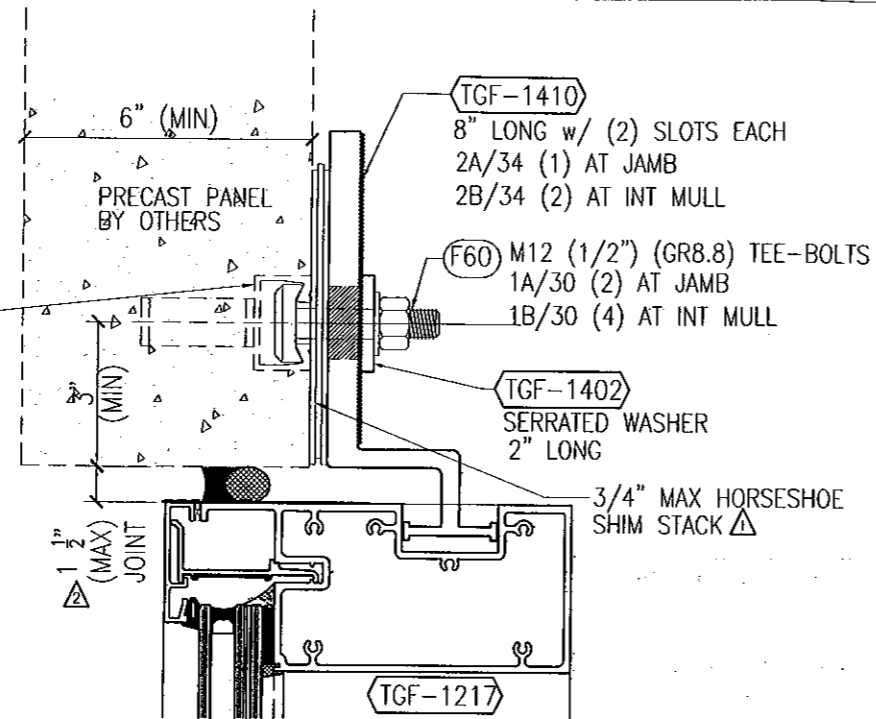
GLASS COMPANY
 1101 13TH STREET WEST RIVERIA BEACH, FLORIDA 33404
 PH. (561) 863-7078 FAX (561) 863-7088
 www.trainorglass.com

TRAINOR
 ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

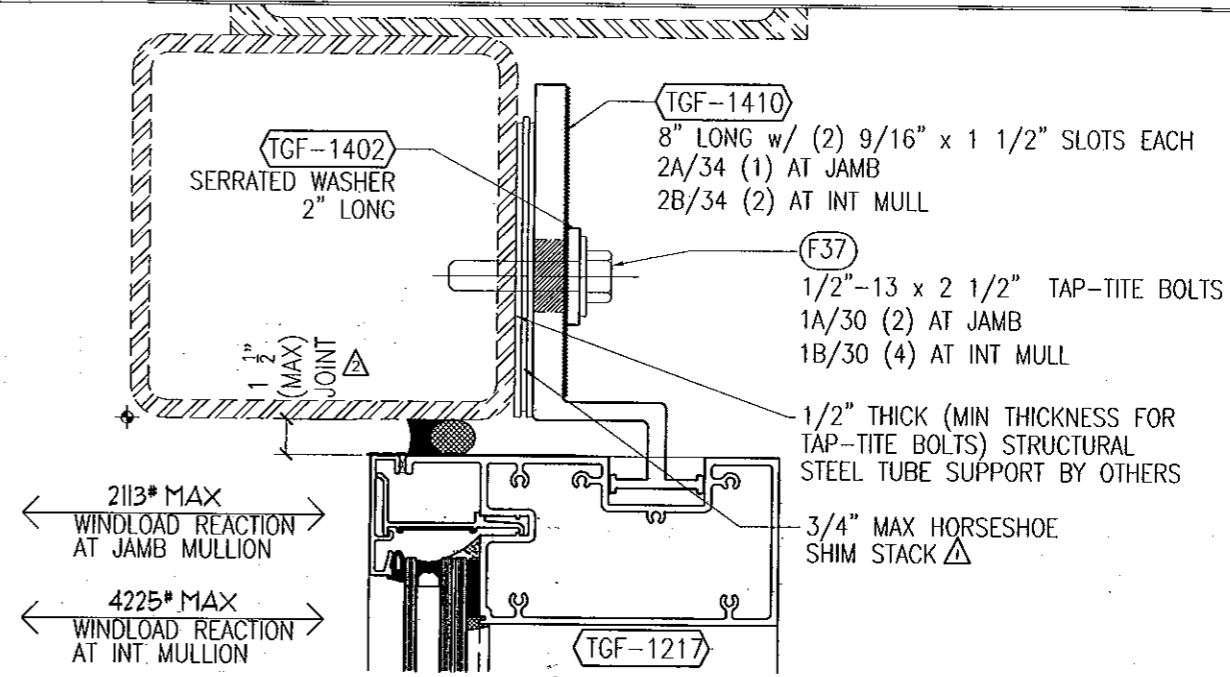
HALFEN (SERIES 5030 HTA) HT5512 EMBEDS (1) EACH SIDE OF MULLION AND (1) EACH JAMB AT DETAIL "1"

2113# MAX
WINDLOAD REACTION
AT JAMB MULLION

4225# MAX
WINDLOAD REACTION
AT INT MULLION



1 HEAD w/ STRAP ANCHOR
AT PRECAST PANEL
ANCHORED w/ HALFEN EMBED



3 HEAD w/ STRAP ANCHOR
AT STRUCTURAL STEEL SUPPORT
ANCHORED w/ 1/2" TAP-TITE BOLTS

HALFEN (SERIES 5030 HTA) HT5512 EMBEDS (1) EACH SIDE OF MULLION AT DETAIL "2" ONLY

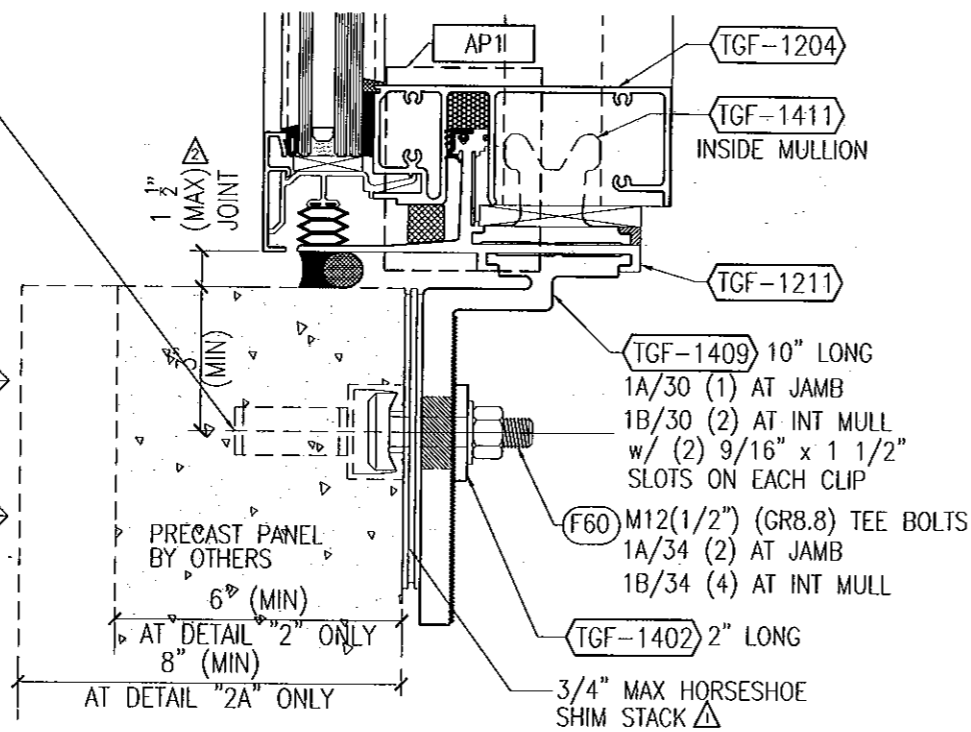
HALFEN (SERIES 5234 HTA) HT6512 EMBEDS (1) EACH SIDE OF MULLION AT DETAIL "2A" ONLY

2113# MAX
WINDLOAD REACTION
AT JAMB MULLION
AT DETAIL "2A"

1836# MAX
WINDLOAD REACTION
AT JAMB MULLION
AT DETAIL "2"

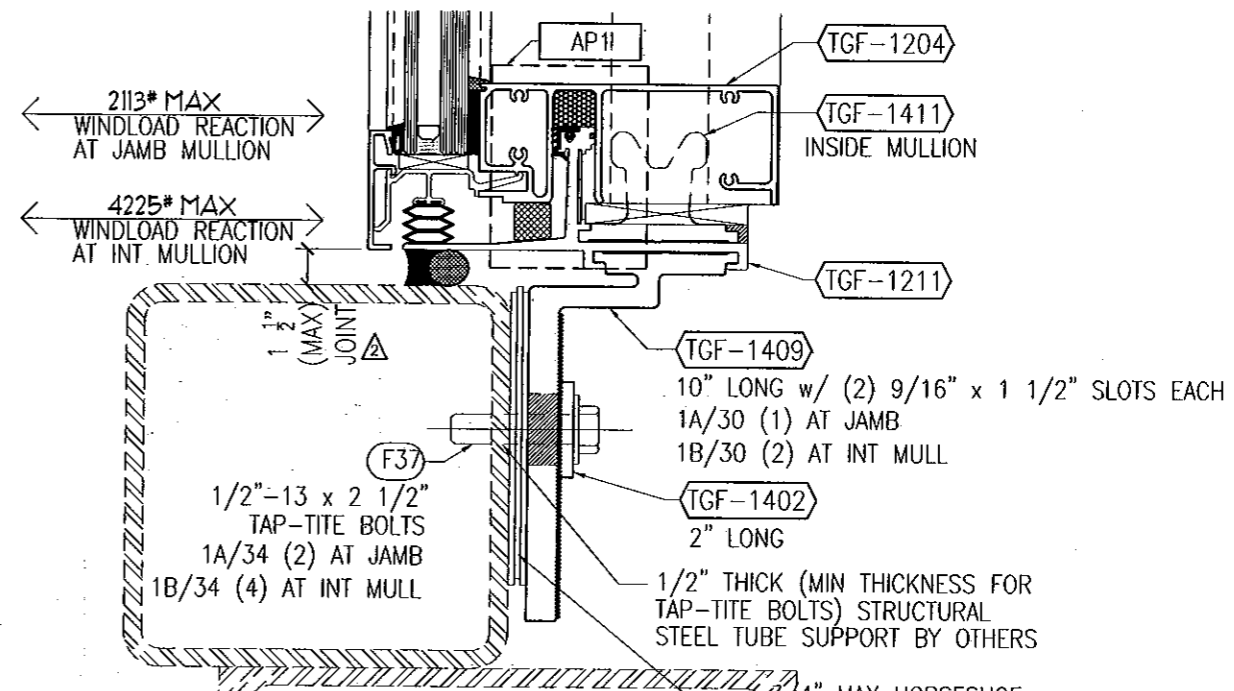
4225# MAX
WINDLOAD REACTION
AT INT MULLION
AT DETAIL "2A"

3705# MAX
WINDLOAD REACTION
AT INT MULLION
AT DETAIL "2"



2 SILL w/ STRAP ANCHOR
AT PRECAST PANEL
ANCHORED w/ HALFEN EMBED

2A SILL w/ STRAP ANCHOR AT 8" PRECAST
AT PRECAST PANEL
ANCHORED w/ HALFEN EMBED

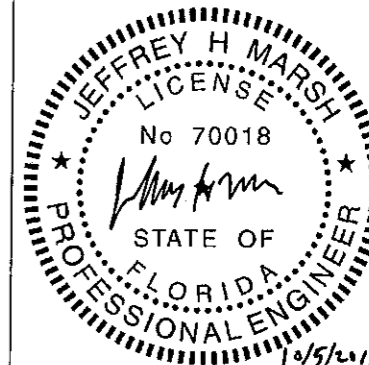


4 SILL w/ STRAP ANCHOR
AT STRUCTURAL STEEL SUPPORT
ANCHORED w/ 1/2" TAP-TITE BOLT

AP1 = 1/8" x 3 1/4" ALUMINUM END DAM PLATE (2" LONG) AT JAMBS

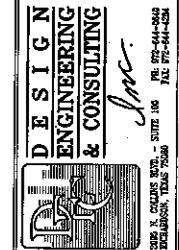
FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the
Florida Building Code
Date 10/20/11
NOA# 11-0401.04
Miami-Dade Product Control
By [Signature]



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	10/20/11	JHM	ISSUED FOR BIDDING
2	10/20/11	JHM	ISSUED FOR BIDDING
3	10/20/11	JHM	ISSUED FOR BIDDING
4	10/20/11	JHM	ISSUED FOR BIDDING

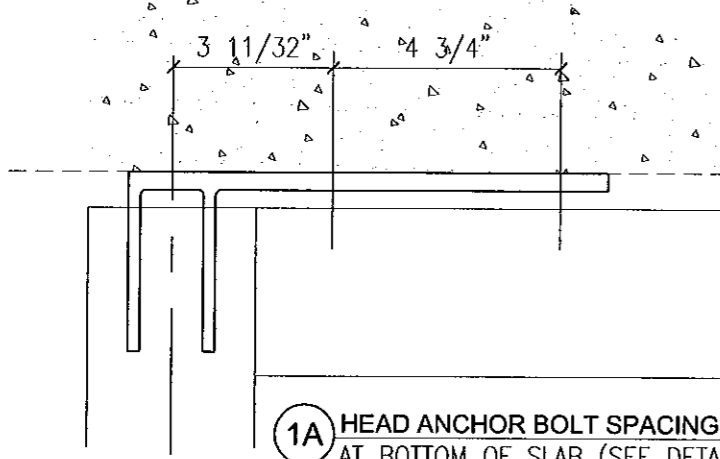


Date	Scale
3-3-11	HALF
Drawing No	4326440
Drawing Title	130PSP LARGE MISSILE IMPACT ANCHOR DETAILS
Sheet No	26 / 41

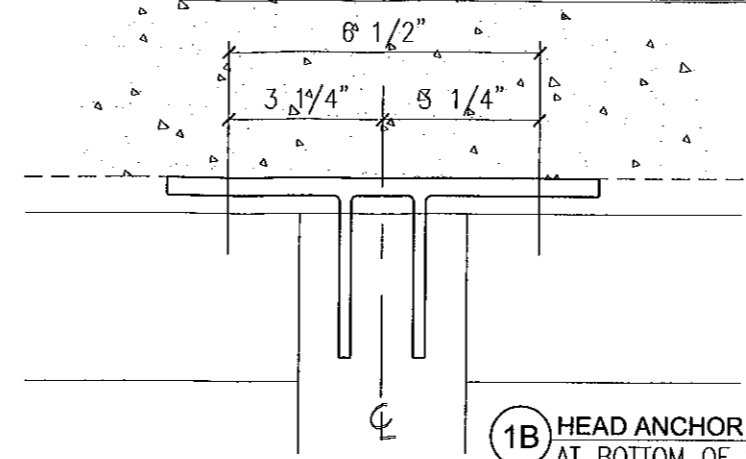
GLASS COMPANY
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
www.trainorglass.com

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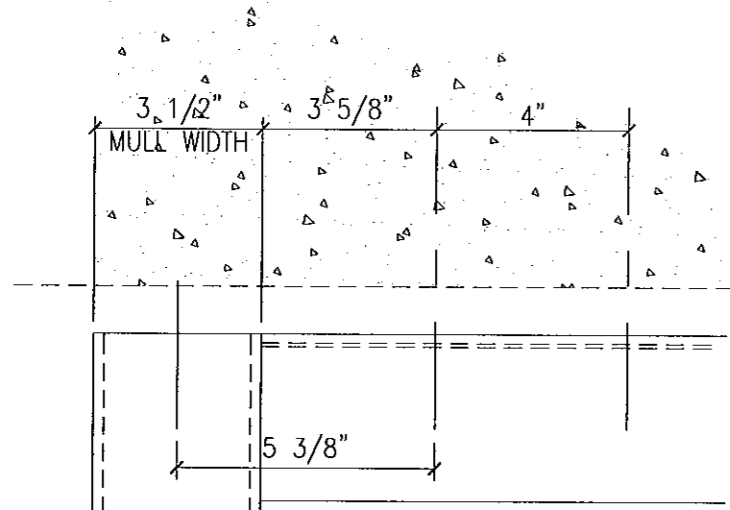
ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND



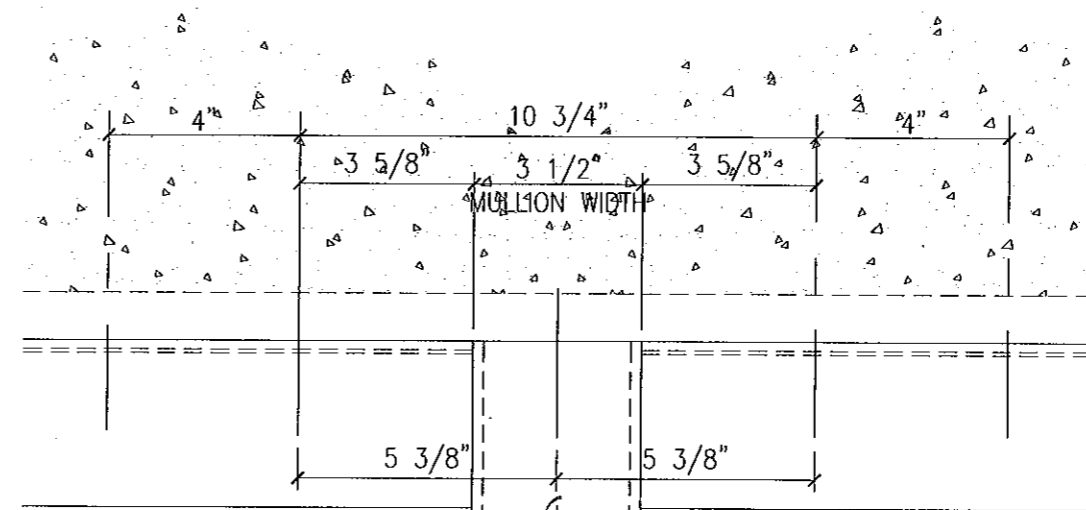
1A HEAD ANCHOR BOLT SPACING AT JAMB (FRONT VIEW)
AT BOTTOM OF SLAB (SEE DETAILS 1 & 7/26)



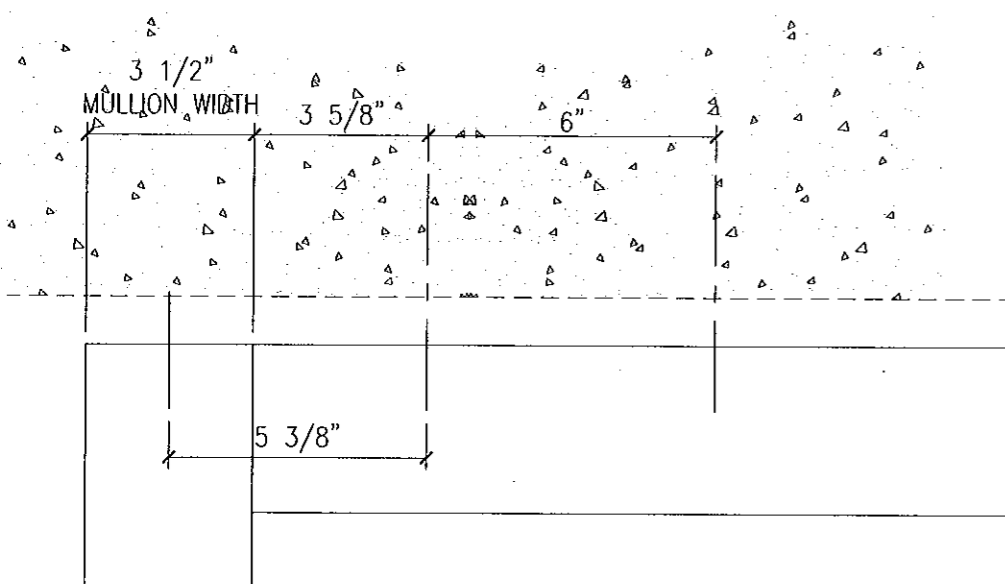
1B HEAD ANCHOR BOLT SPACING AT INT MULLION (FRONT VIEW)
AT BOTTOM OF SLAB (SEE DETAILS 1 & 7/26)



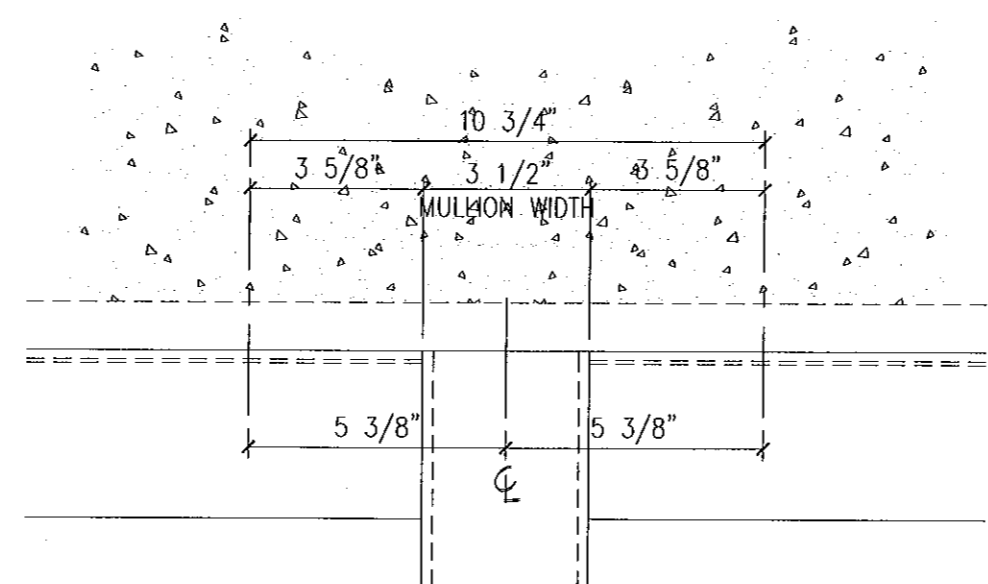
2A HEAD ANCHOR SPACING AT JAMB (FRONT VIEW)
AT BOTTOM OF SLAB (SEE DETAILS 1 & 7/27)



2B HEAD ANCHOR SPACING AT INT MULLION (FRONT VIEW)
AT BOTTOM OF SLAB (SEE DETAILS 1 & 7/27)

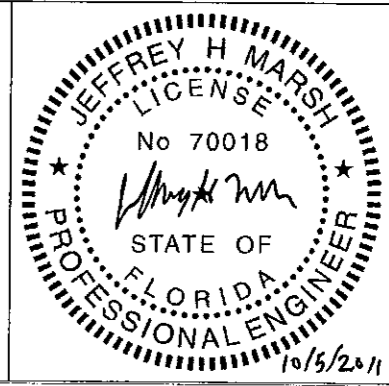


3A HEAD ANCHOR SPACING AT JAMB (FRONT VIEW)
AT BOTTOM OF SLAB (SEE DETAILS 2 & 5/27)



3B HEAD ANCHOR SPACING AT INT MULLION (FRONT VIEW)
AT BOTTOM OF SLAB (SEE DETAILS 2 & 5/27)

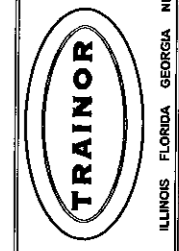
FOR MIAMI-DADE CO. B.C.C.O.
Approved as complying with the
Florida Building Code
Date 10/12/11
NOA# 11-0401.04
Miami Dade Product Control
By [Signature]



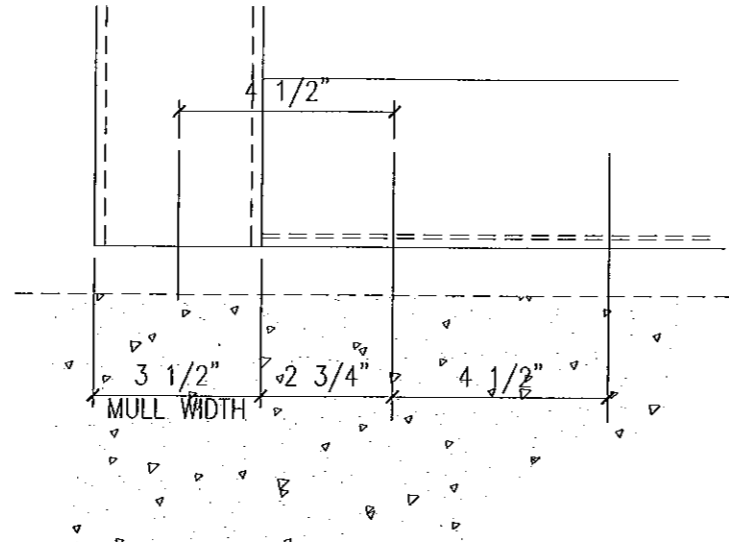
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130PSF LARGE MISSILE IMPACT ANCHOR LAYOUTS	
Sheet No	
27 / 41	

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ENGINEERING
& CONSULTING
[Signature]
STATE 110
EXPIRES 12/31/2011

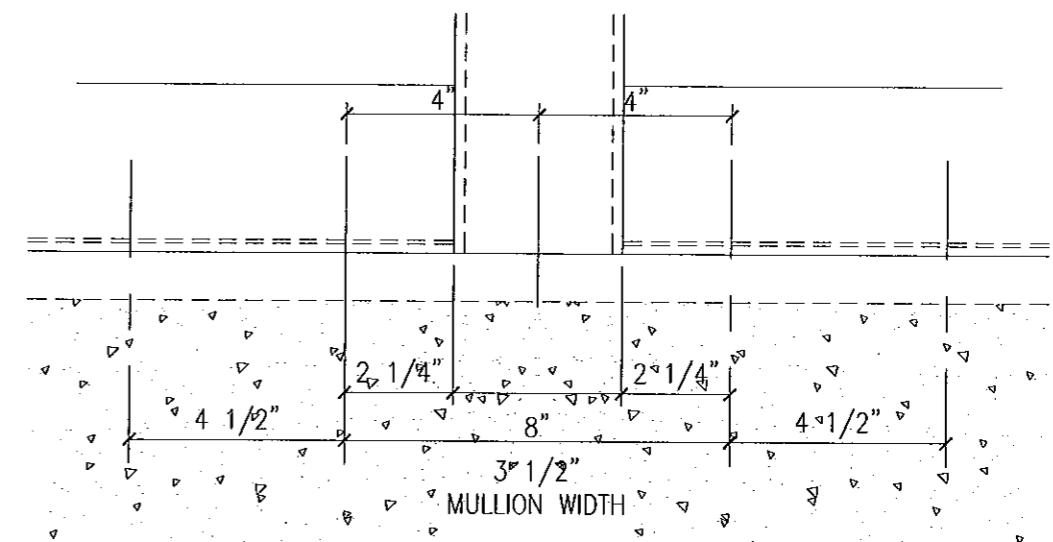
NO.	DATE	BY	REVISIONS
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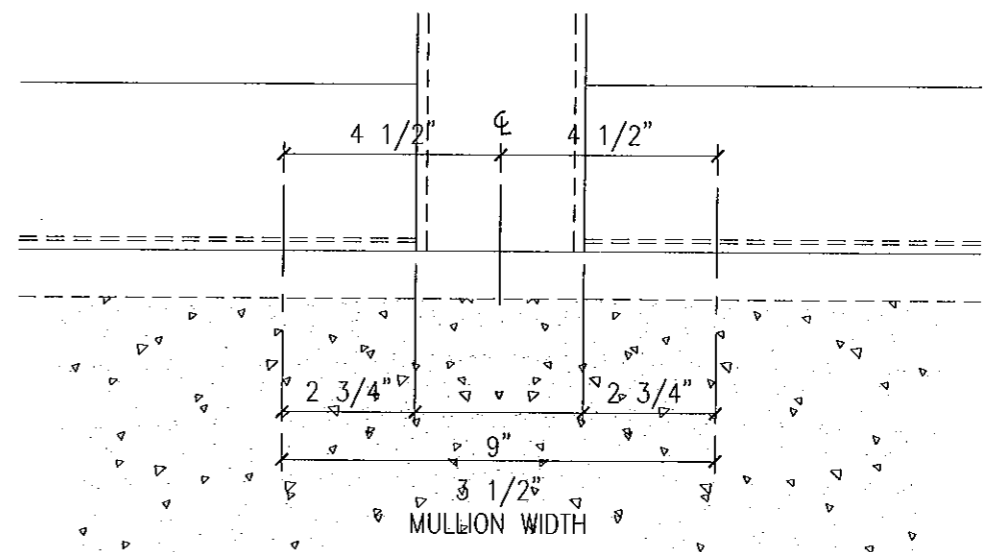
G L A S S C O M P A N Y
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
www.trainorglass.com
ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND



1A SILL ANCHOR SPACING AT JAMB (FRONT VIEW)
AT TOP OF SLAB (SEE DETAILS 2/28)



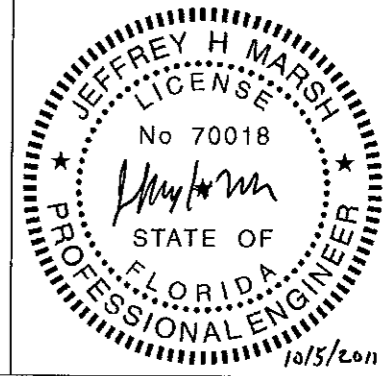
1B SILL ANCHOR SPACING AT INT MULLION (FRONT VIEW)
AT TOP OF SLAB (SEE DETAILS 2/28)



1C SILL ANCHOR SPACING AT INT MULLION (FRONT VIEW)
AT TOP OF SLAB (SEE DETAILS 1, 3, 4 & 5/28)

FOR MIAMI-DADE CO. B.C.C.O.

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Florida Building Code
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Date	Scale
3-3-11	HALF
Drawing No	
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Drawing Title	
1 30PSF LARGE MISSILE IMPACT ANCHOR LAYOUTS	
Sheet No	
28 / 41	

TRAINOR

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1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
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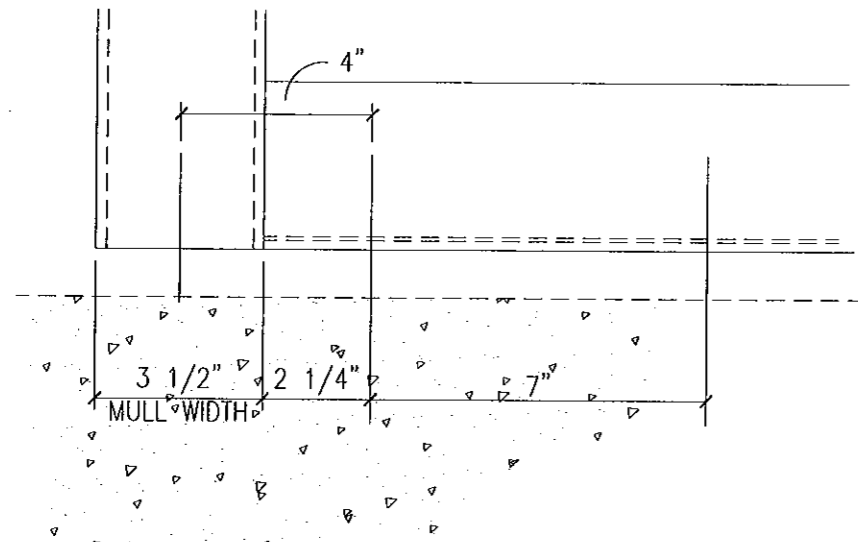
ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

NO.	DATE	BY	REVISIONS

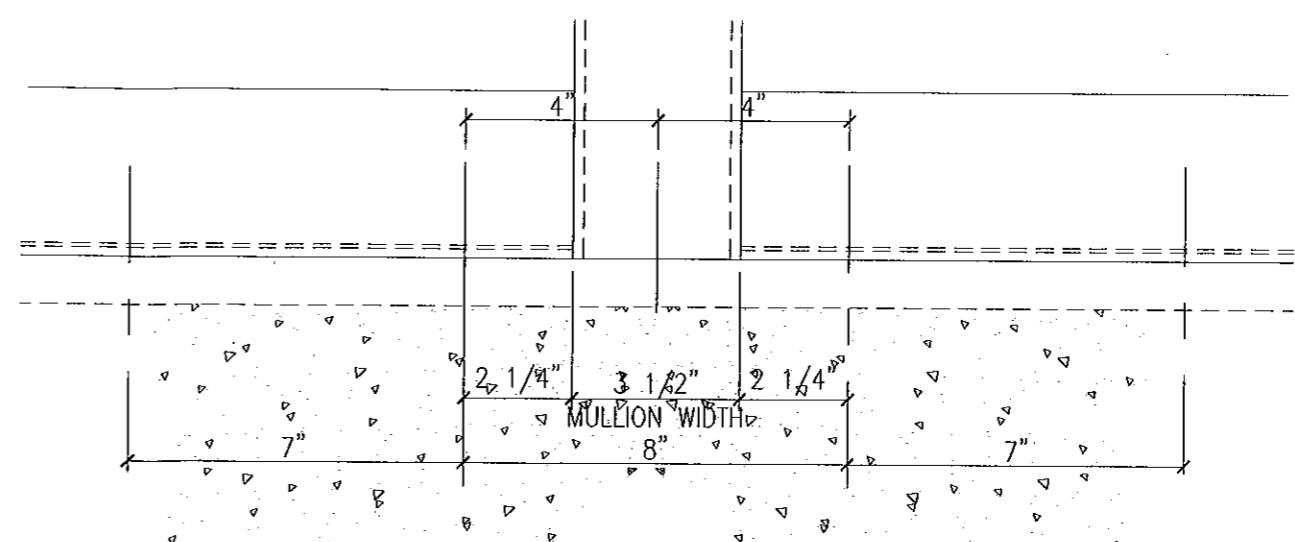
DESIGN
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& CONSULTING

[Signature]

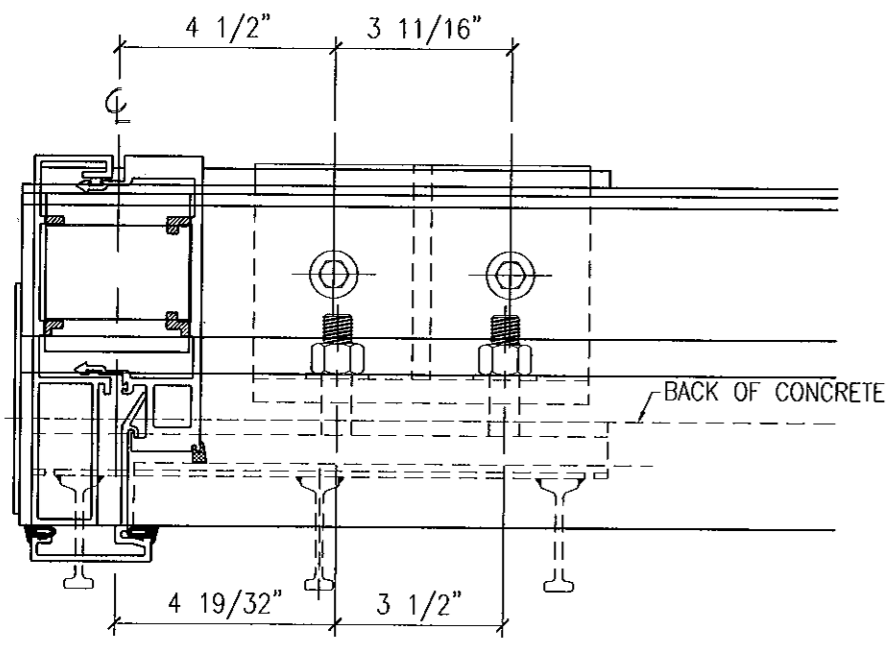
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PROFESSIONAL ENGINEER



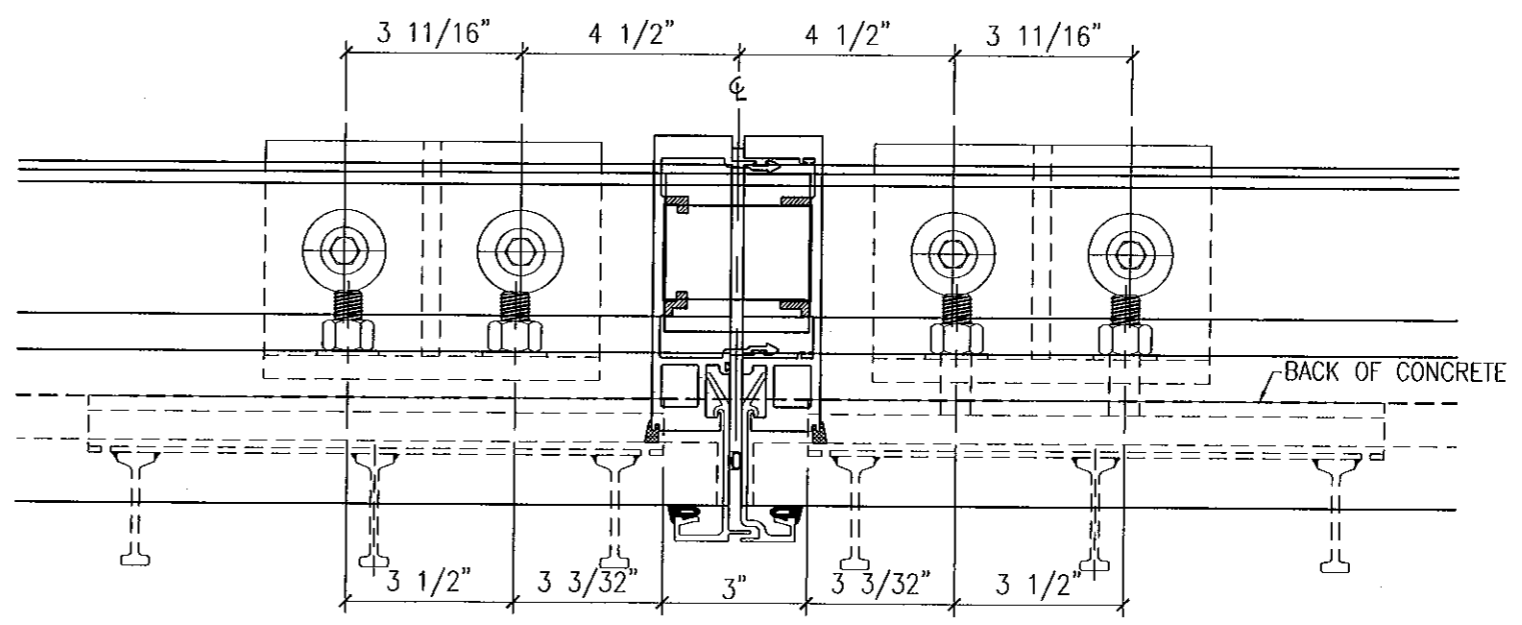
1A SILL ANCHOR SPACING AT JAMB (FRONT VIEW)
AT TOP OF SLAB (SEE DETAILS 2/25)



1B SILL ANCHOR SPACING AT INT MULLION (FRONT VIEW)
AT TOP OF SLAB (SEE DETAILS 2/25)



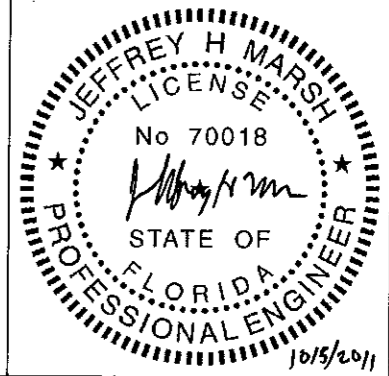
2A SILL ANCHOR SPACING AT JAMB (PLAN VIEW)
AT PRECAST PANEL & ANCHOR CLIPS (SEE DETAILS 6 & 7/24 AND 6 & 7/25)



2B SILL ANCHOR AT INT MULL (PLAN VIEW)
AT PRECAST PANEL & ANCHOR CLIPS (SEE DETAILS 6 & 7/24 AND 6 & 7/25)

FOR MIAMI-DADE CO. B.C.C.O.

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Date	Scale
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Drawing No	
4326440	
Drawing Title	
130PSF LARGE MISSILE IMPACT ANCHOR LAYOUTS	
Sheet No	
29 / 41	

TRAINOR

ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

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1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
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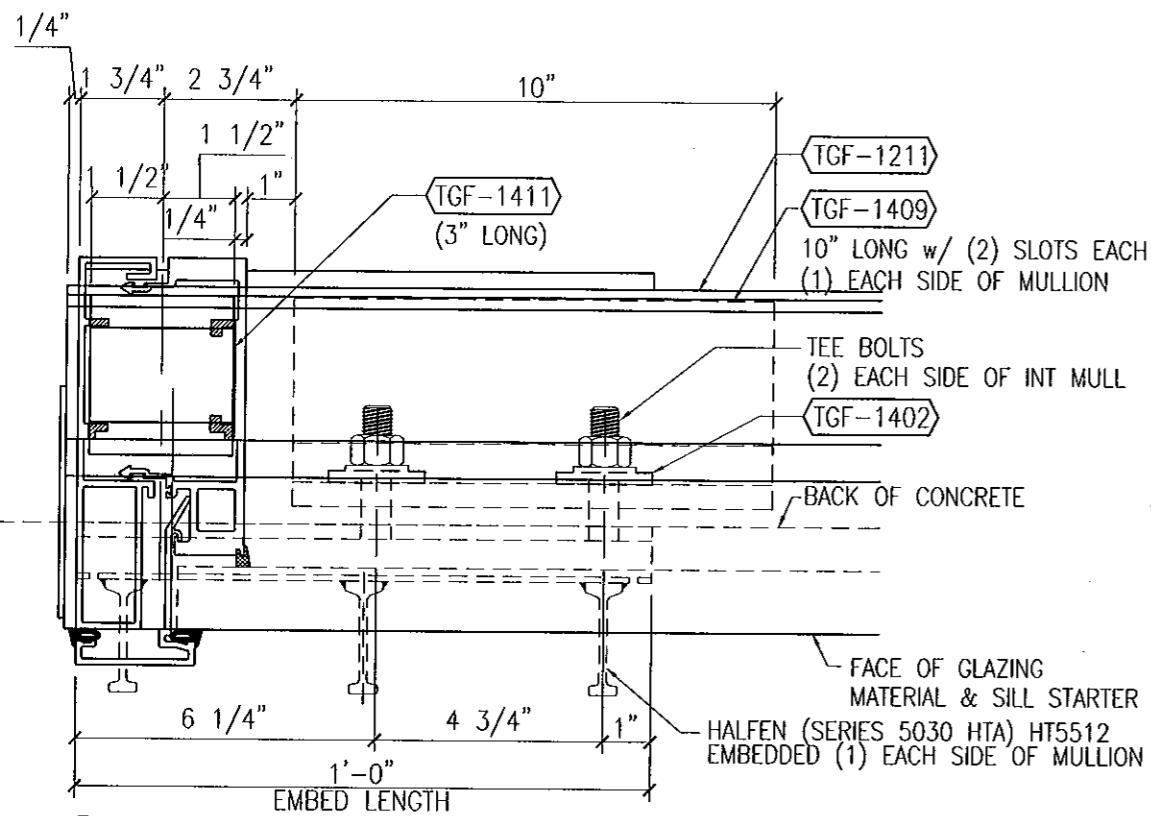
REVISIONS

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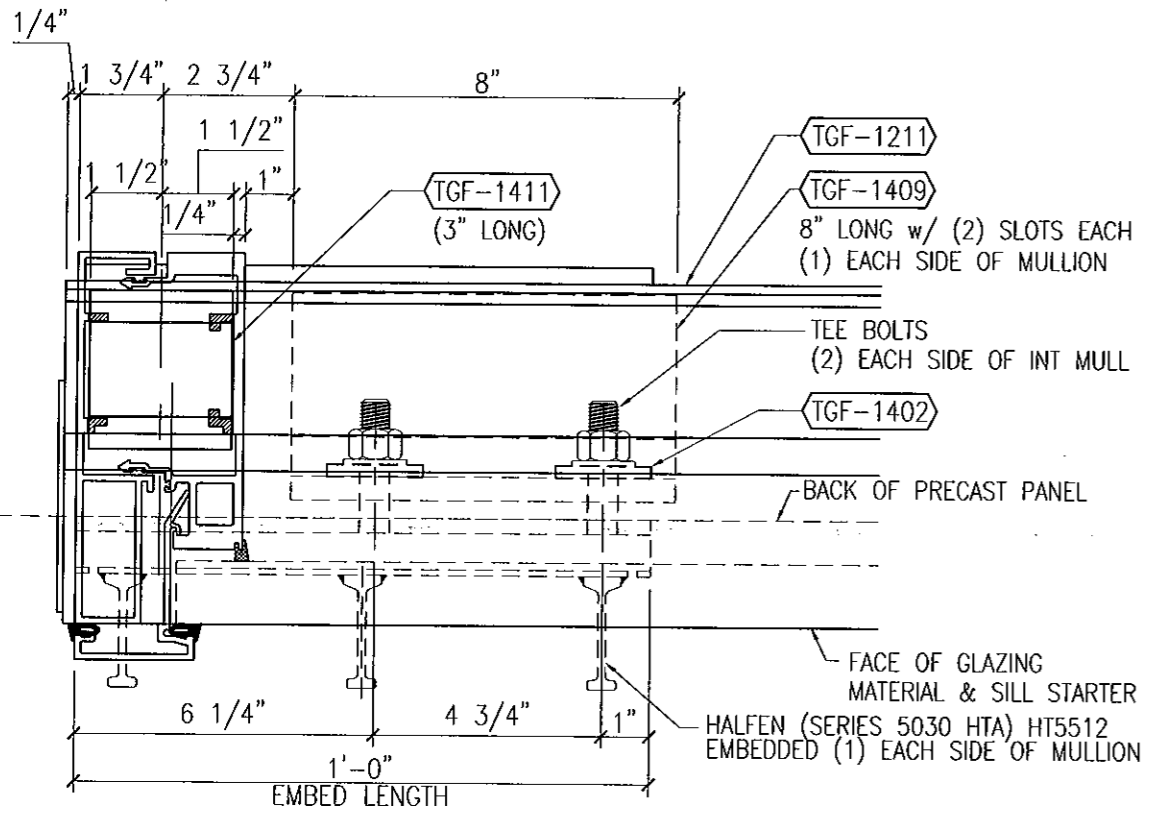
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ENGINEERING
& CONSULTING

[Signature]

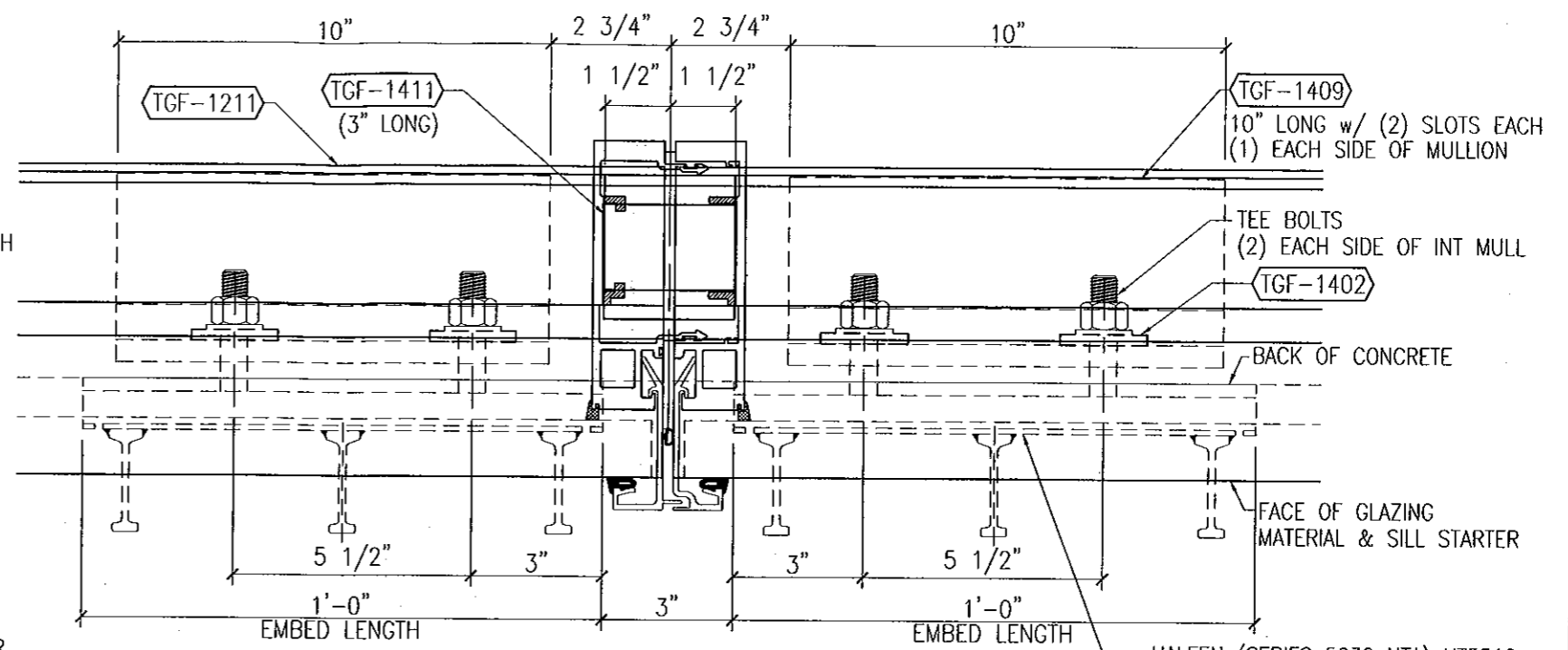
1015 13TH STREET, SUITE 100
RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088



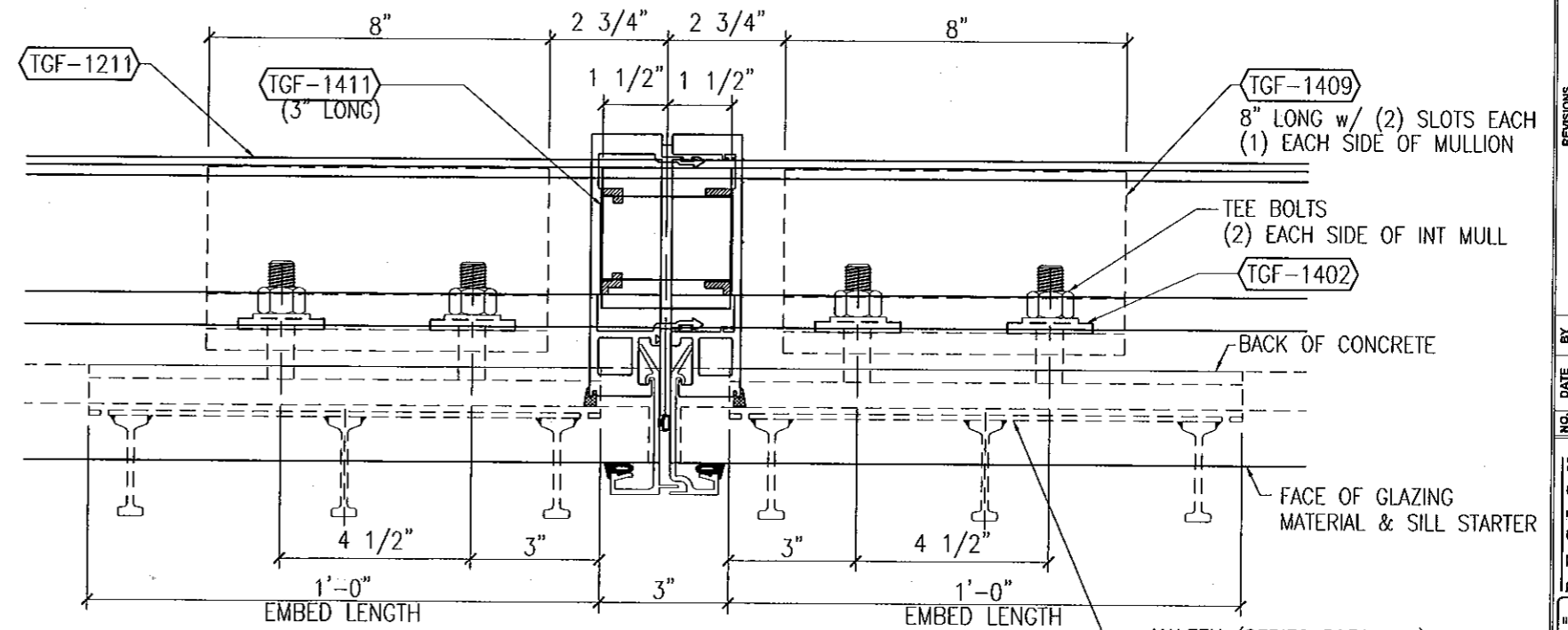
1A SILL STRAP ANCHOR AT JAMB (PLAN VIEW)
 AT PRECAST PANEL & STRAP ANCHOR CLIPS (SEE DETAILS 2 & 4/30)
 ANCHORED w/ HALFEN EMBED



2A HEAD STRAP ANCHOR AT JAMB (PLAN VIEW)
 AT PRECAST PANEL & STRAP ANCHOR CLIPS (SEE DETAILS 1 & 3/30)
 ANCHORED w/ HALFEN EMBED

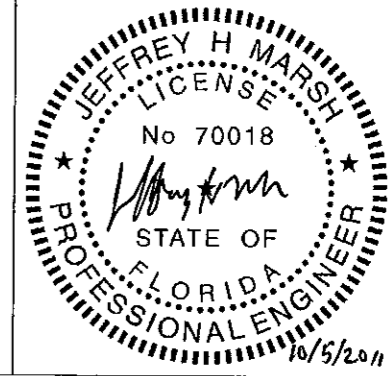


1B SILL STRAP ANCHOR AT INT MULL (PLAN VIEW)
 AT PRECAST PANEL & STRAP ANCHOR CLIPS (SEE DETAILS 2 & 4/30)
 ANCHORED w/ (2) HALFEN EMBEDS



2B HEAD STRAP ANCHOR AT INT MULL (PLAN VIEW)
 AT PRECAST PANEL & STRAP ANCHOR CLIPS (SEE DETAILS 1 & 3/30)
 ANCHORED w/ (2) HALFEN EMBEDS

FOR MIAMI-DADE CO. B.C.C.O.
 Approved as complying with the
 Florida Building Code
 Date 10/20/10
 NOA# 11-0421.04
 Miami Dade Product Control
 By [Signature]



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 1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
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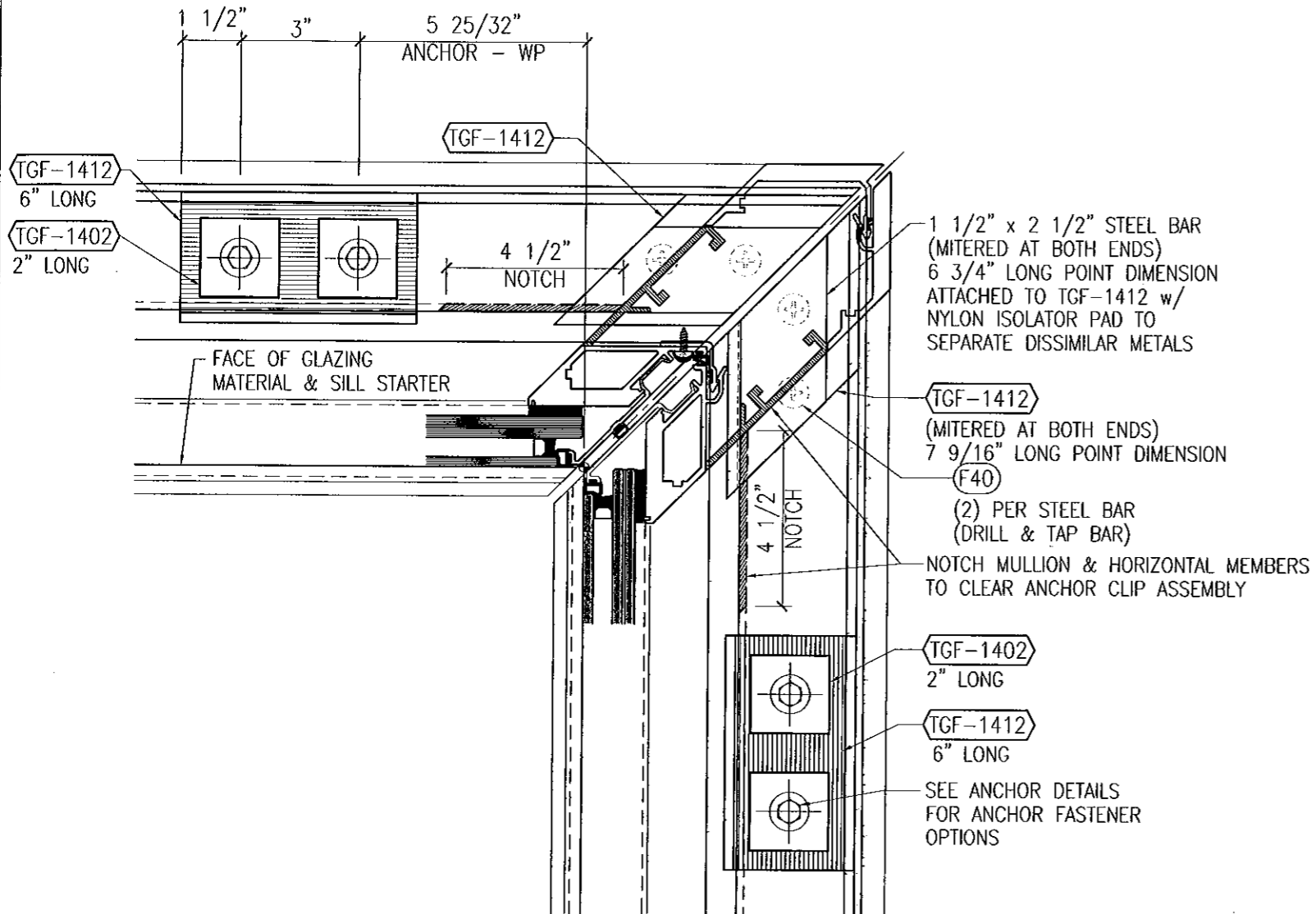
TRAINOR

ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND

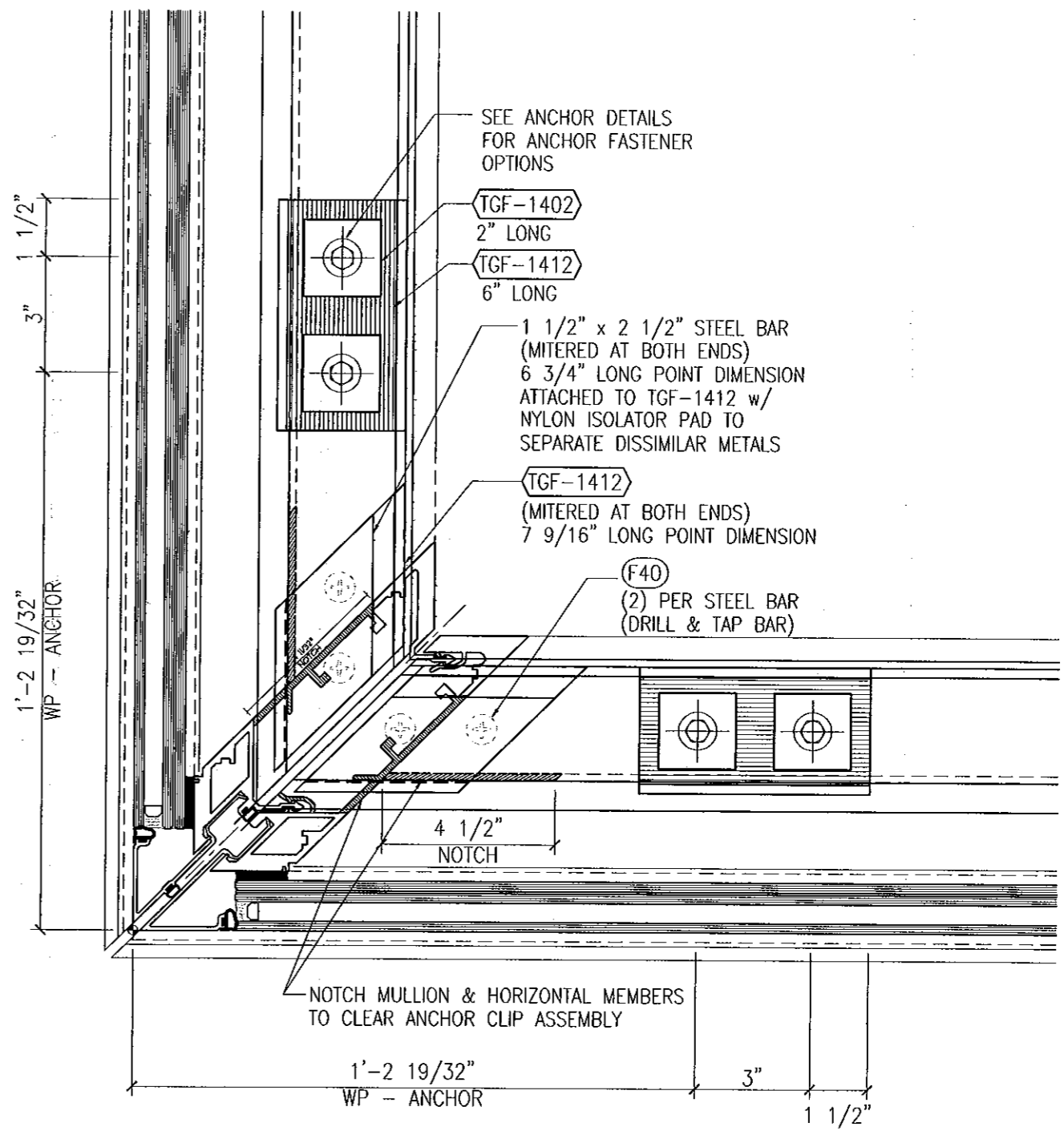
NO.	DATE	BY	REVISIONS
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DESIGN ENGINEERING & CONSULTING
 2905 N. CLEVELAND BLVD., SUITE 100
 POKERFLAKE, TEXAS 75074
 PH. 972-944-0000
 FAX 972-944-0004

Date 3-3-11 Scale QUARTER
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 Sheet No 30 / 41



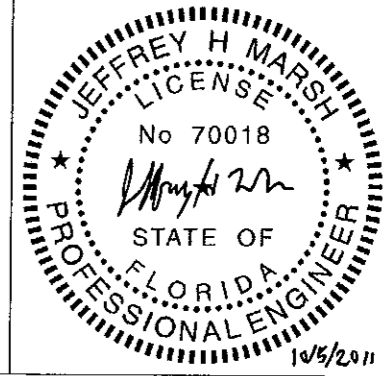
1 SILL ANCHOR AT INSIDE CORNER MULL (PLAN VIEW)
AT SINGLE-SPAN & MULTI-SPAN SILLS



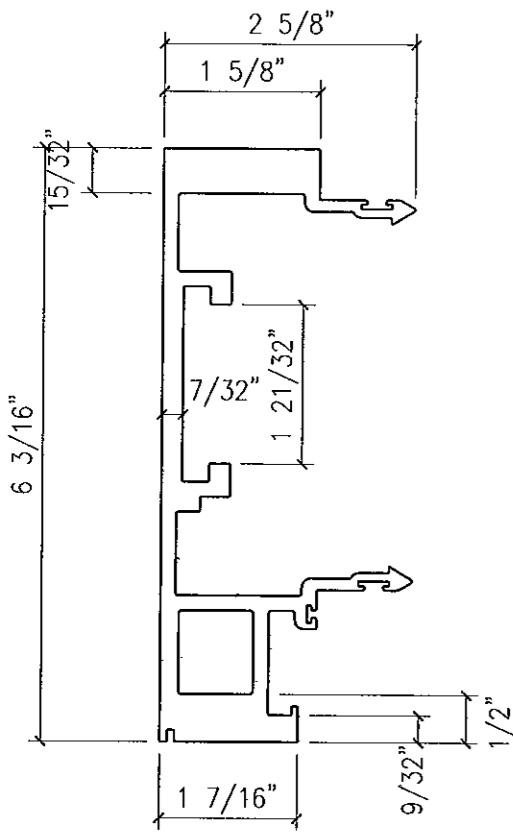
2 SILL ANCHOR AT OUTSIDE CORNER MULL (PLAN VIEW)
AT SINGLE-SPAN & MULTI-SPAN SILLS

FOR MIAMI-DADE CO. B.C.C.O.

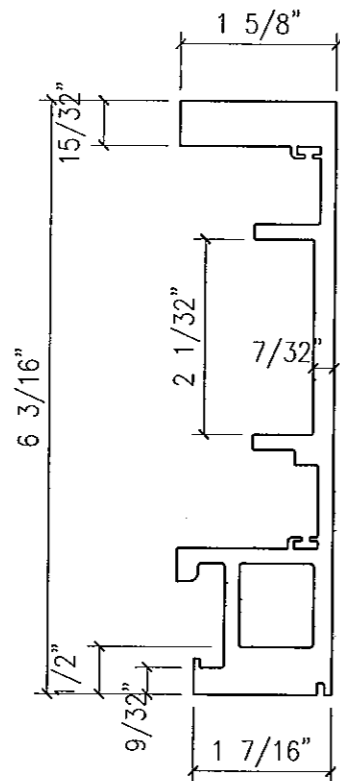
Approved as complying with the
Florida Building Code
Date 10/20/2011
NOA# 11-0421-04
Miami Dade Product Control
By [Signature]



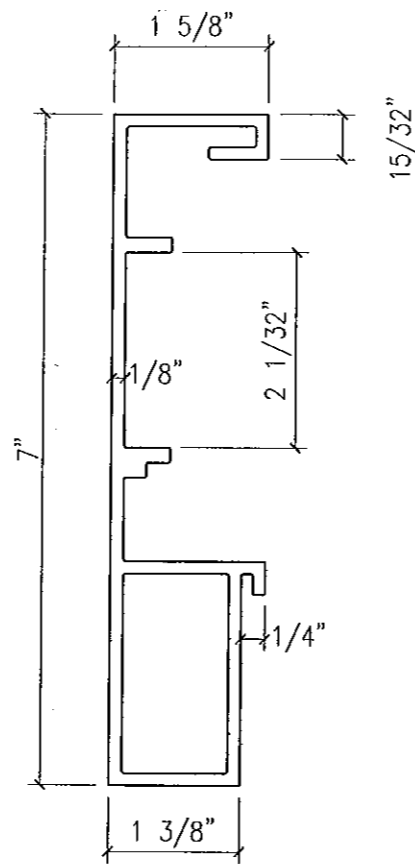
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Sheet No	
31 / 41	



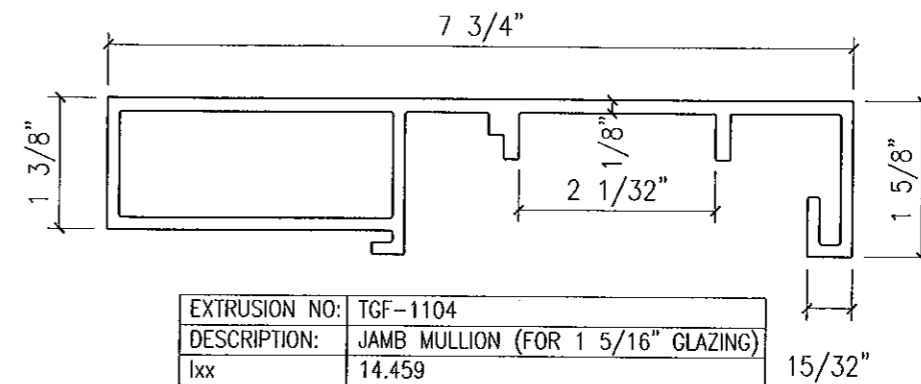
EXTRUSION NO:	TGF-1101
DESCRIPTION:	MALE MULLION
Ixx	16.527
Sxx	5.299
ALLOY	6063-T6



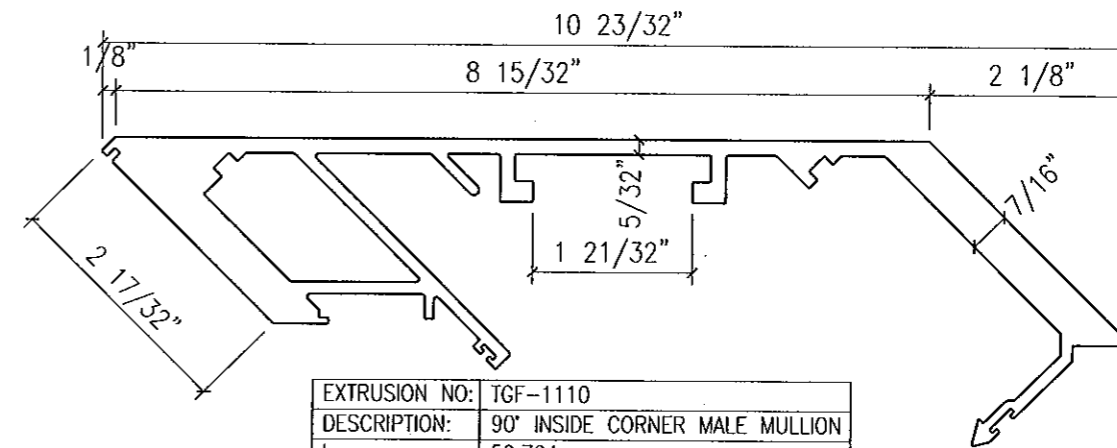
EXTRUSION NO:	TGF-1102
DESCRIPTION:	FEMALE MULLION
Ixx	15.478
Sxx	4.865
ALLOY	6063-T6



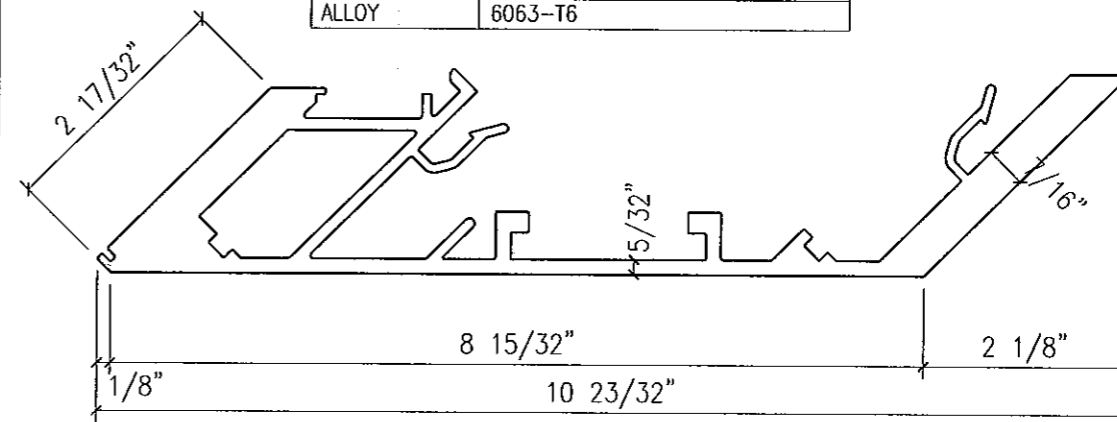
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DESCRIPTION:	JAMB MULLION (FOR 9/16" GLAZING)
Ixx	
Sxx	
ALLOY	6063-T6



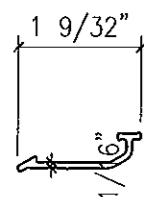
EXTRUSION NO:	TGF-1104
DESCRIPTION:	JAMB MULLION (FOR 1 5/16" GLAZING)
Ixx	14.459
Sxx	3.608
ALLOY	6063-T6



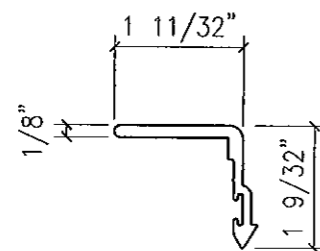
EXTRUSION NO:	TGF-1110
DESCRIPTION:	90° INSIDE CORNER MALE MULLION
Ixx	52.724
Sxx	9.210
ALLOY	6063-T6



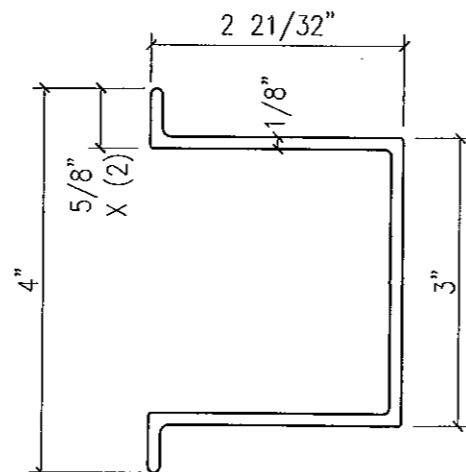
EXTRUSION NO:	TGF-1111
DESCRIPTION:	90° INSIDE CORNER FEMALE MULLION
Ixx	51.199
Sxx	8.850
ALLOY	6063-T6



EXTRUSION NO:	TGF-1114
DESCRIPTION:	ANTI BUCKLING CLIP
Ixx	0.001
Sxx	0.005
ALLOY	6063-T6



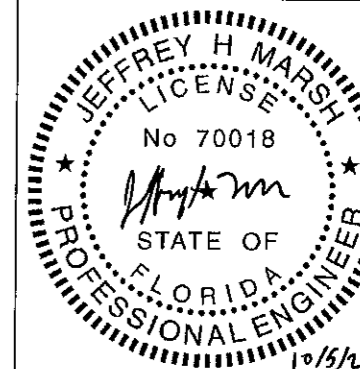
EXTRUSION NO:	TGF-1115
DESCRIPTION:	90° I.S. CORNER ANTI BUCKLING CLIP
Ixx	0.049
Sxx	0.053
ALLOY	6063-T6



EXTRUSION NO:	TGF-1116
DESCRIPTION:	JAMB CONNECTION CLIP
Ixx	1.964
Sxx	0.982
ALLOY	6063-T6

FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the
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Date 10/20/2011
NOA# 11-0401.04
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By [Signature]



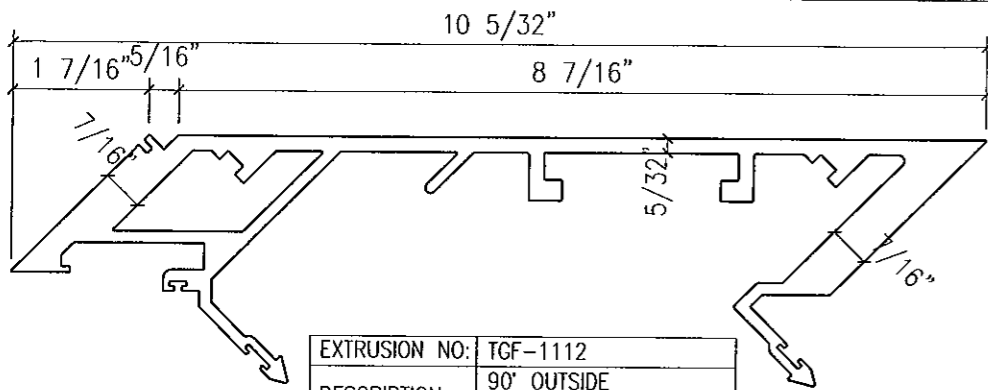
TRAINOR

GLASS COMPANY
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
www.trainorglass.com

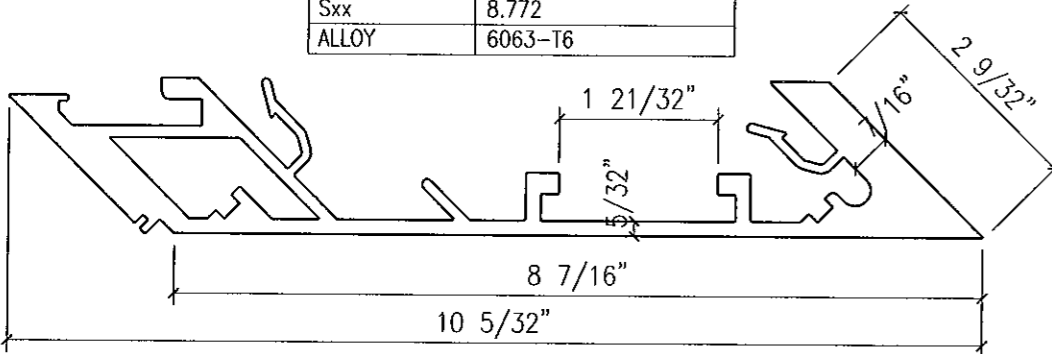
NO.	DATE	BY	REVISIONS
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DESIGN ENGINEERING & CONSULTING
INC.
2008 N. GULF BLVD., SUITE 140
DUBLIN, TEXAS 75640
TEL: 972-444-8888
FAX: 972-444-8888

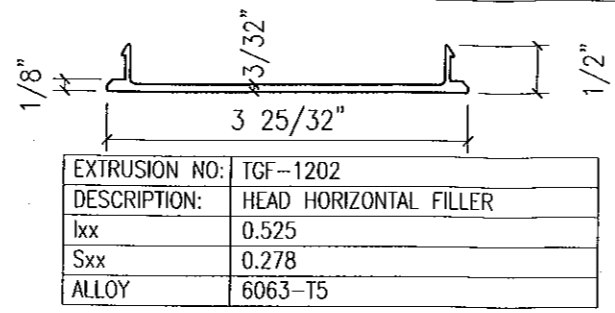
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Sheet No	
32 / 41	



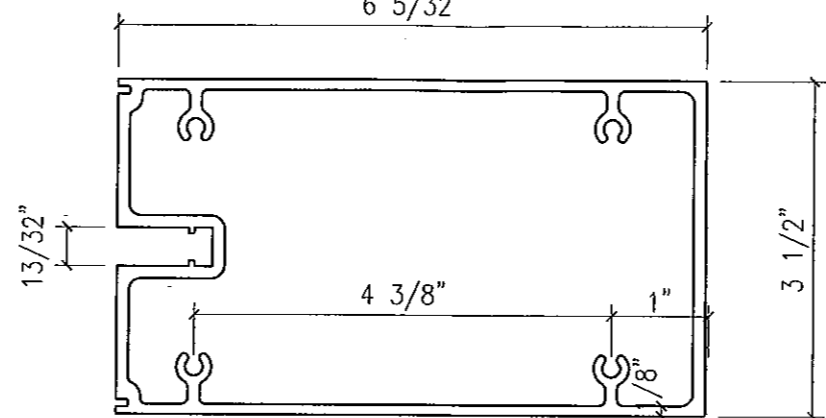
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DESCRIPTION:	90° OUTSIDE CORNER MALE MULLION
lxx	45.575
Sxx	8.772
ALLOY	6063-T6



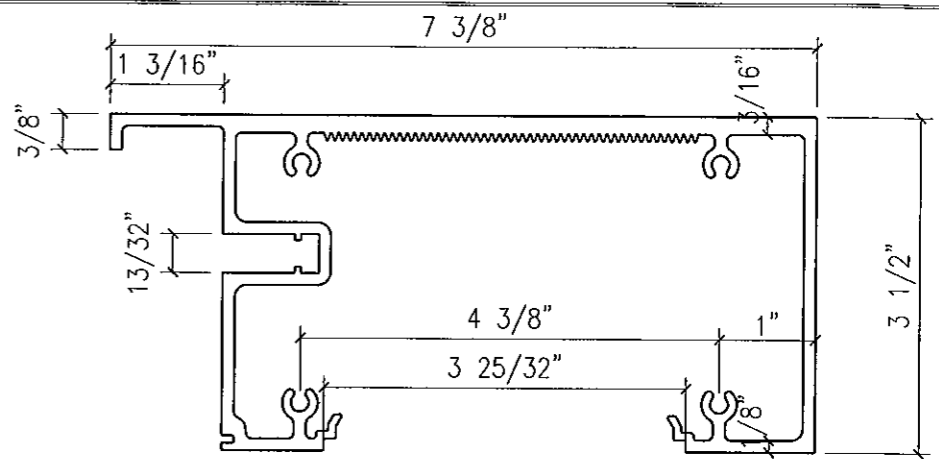
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DESCRIPTION:	90° OUTSIDE CORNER FEMALE MULLION
lxx	46.015
Sxx	8.702
ALLOY	6063-T6



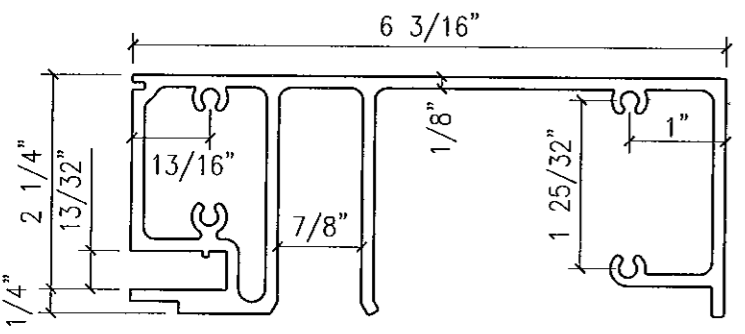
EXTRUSION NO:	TGF-1202
DESCRIPTION:	HEAD HORIZONTAL FILLER
lxx	0.525
Sxx	0.278
ALLOY	6063-T5



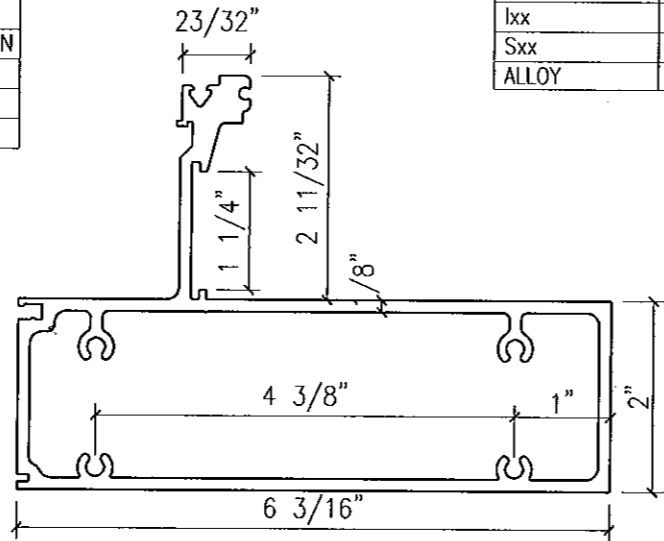
EXTRUSION NO:	TGF-1203
DESCRIPTION:	3 1/2" INT HORIZONTAL
lxx	15.478
Sxx	4.680
ALLOY	6063-T6



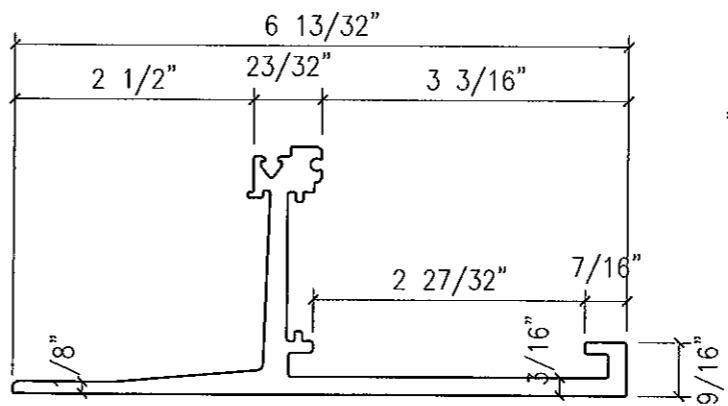
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DESCRIPTION:	HEAD HORIZONTAL (1 5/16" INFILLS)
lxx	19.482
Sxx	4.641
ALLOY	6063-T6



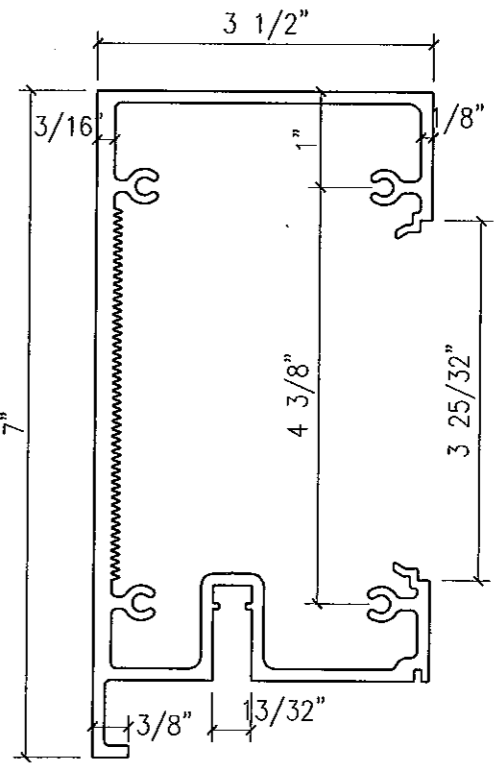
EXTRUSION NO:	TGF-1204
DESCRIPTION:	STACK HORIZONTAL SILL
lxx	12.536
Sxx	3.596
ALLOY	6063-T6



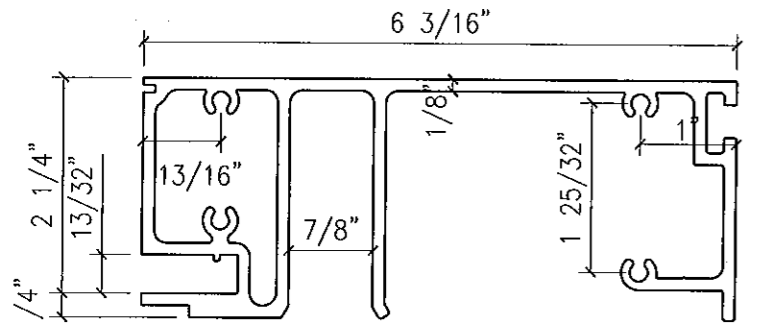
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DESCRIPTION:	EXPANSION HORIZONTAL GUTTER
lxx	11.170
Sxx	3.323
ALLOY	6063-T6



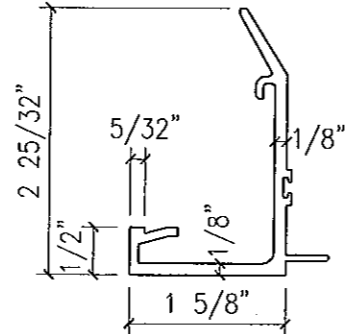
EXTRUSION NO:	TGF-1210
DESCRIPTION:	LIGHT SILL STARTER FOR 9/16" GLASS
lxx	.
Sxx	.
ALLOY	6063-T6



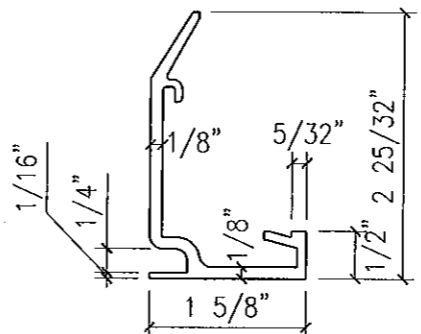
EXTRUSION NO:	TGF-1221
DESCRIPTION:	HEAD HORIZONTAL (9/16" INFILLS)
lxx	.
Sxx	.
ALLOY	6063-T6



EXTRUSION NO:	TGF-1205
DESCRIPTION:	STACK HORIZ'L SILL w/ STOOL TRIM POCKET
lxx	12.536
Sxx	3.596
ALLOY	6063-T6

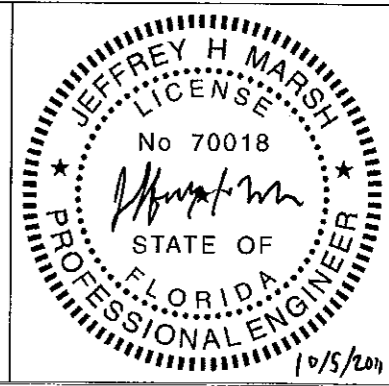


EXTRUSION NO:	TGF-1368
DESCRIPTION:	3 1/2" MALE FACE CAP (9/16" GLAZING)
lxx	.
Sxx	.
ALLOY	6063-T5



EXTRUSION NO:	TGF-1369
DESCRIPTION:	3 1/2" FEMALE FACE CAP (9/16" GLAZING)
lxx	.
Sxx	.
ALLOY	6063-T5

FOR MIAMI-DADE CO. B.C.C.O.
 Approved as complying with the Florida Building Code
 Date 10/20/2011
 NOA# 11-0401.04
 Miami Dade Product Control
 By [Signature]

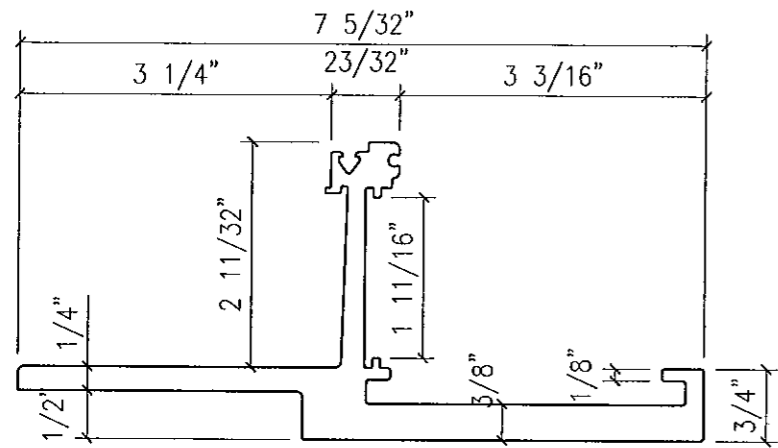


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Drawing No	4326440
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Sheet No	33 / 41

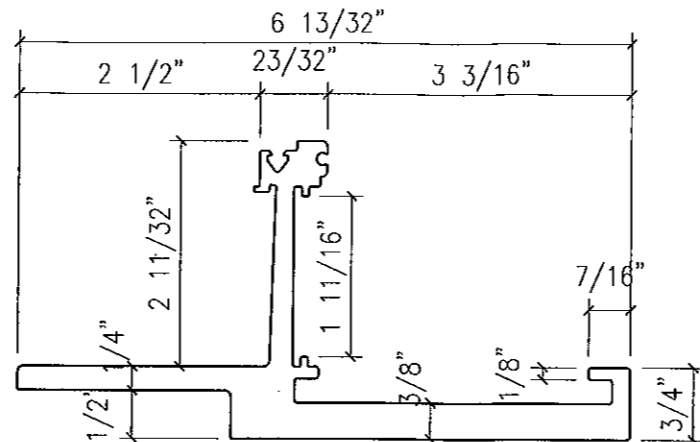
TRAINOR

GLASS COMPANY
 1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
 PH. (561) 863-7078 FAX (561) 863-7088
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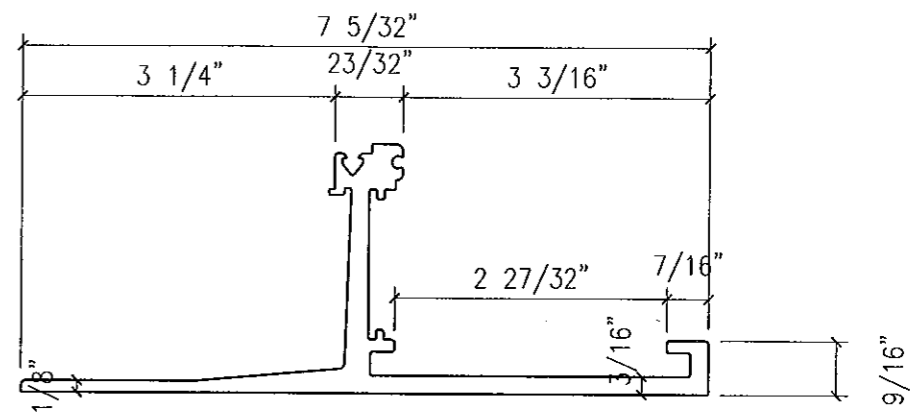
ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND



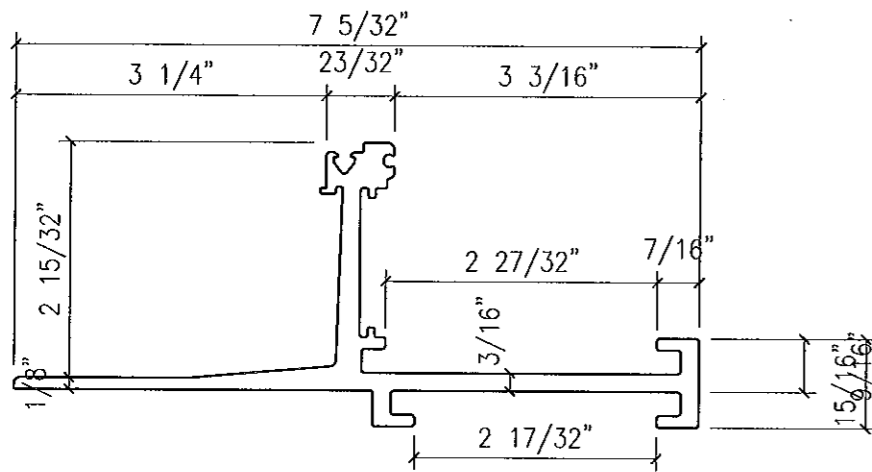
EXTRUSION NO:	TGF-1207
DESCRIPTION:	HEAVY SILL STARTER FOR 1 5/16" GLASS
lxx	.
Sxx	.
ALLOY	6063-T6



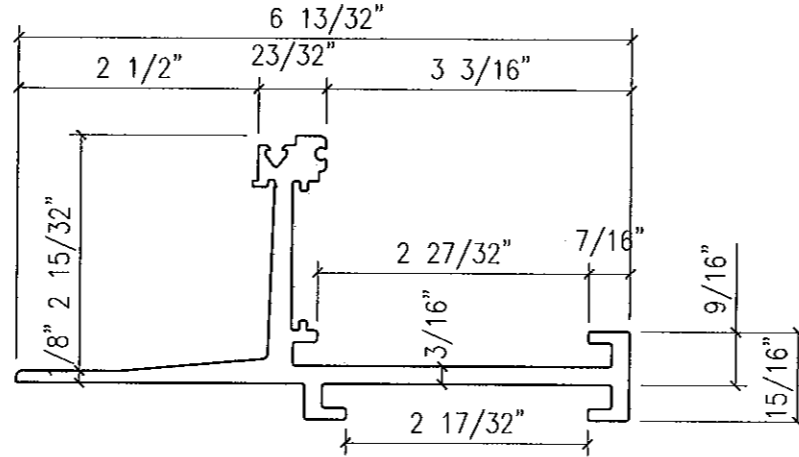
EXTRUSION NO:	TGF-1208
DESCRIPTION:	HEAVY SILL STARTER FOR 9/16" GLASS
lxx	.
Sxx	.
ALLOY	6063-T6



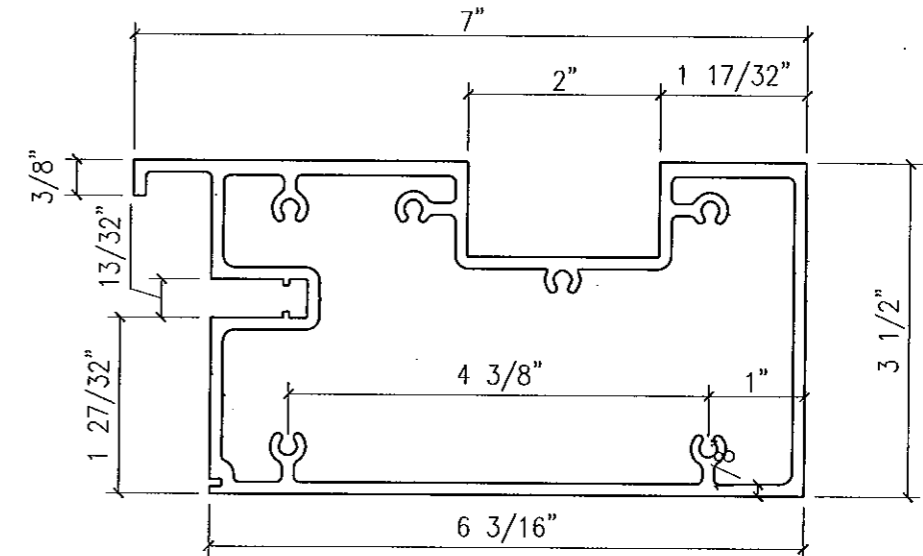
EXTRUSION NO:	TGF-1209
DESCRIPTION:	LIGHT SILL STARTER FOR 1 5/16" GLASS
lxx	.
Sxx	.
ALLOY	6063-T6



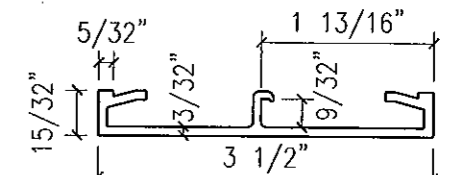
EXTRUSION NO:	TGF-1211
DESCRIPTION:	SILL STARTER FOR 1 5/16" GLASS AT STRAP ANCHOR
lxx	.
Sxx	.
ALLOY	6063-T6



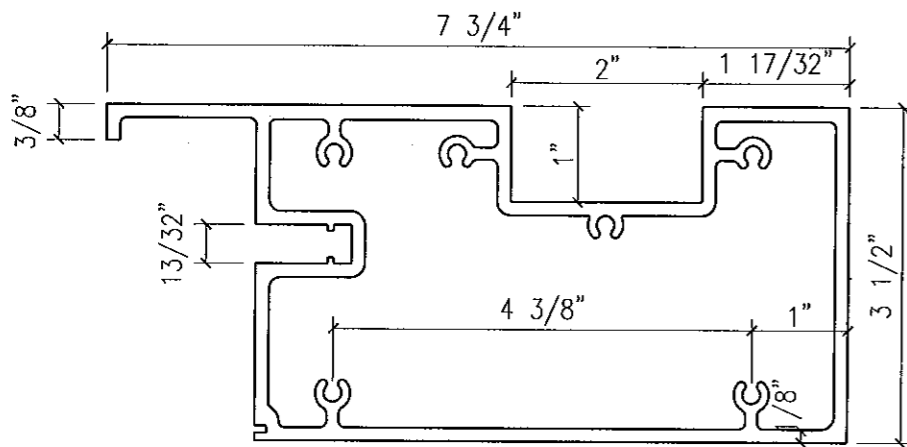
EXTRUSION NO:	TGF-1212
DESCRIPTION:	SILL STARTER FOR 9/16" GLASS AT STRAP ANCHOR
lxx	.
Sxx	.
ALLOY	6063-T6



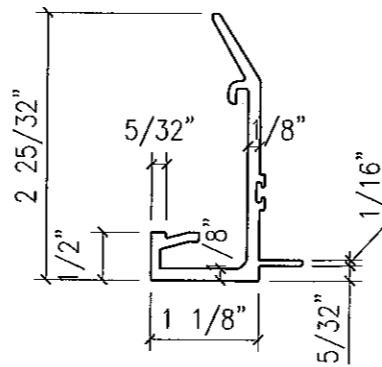
EXTRUSION NO:	TGF-1216
DESCRIPTION:	HEAD HORIZ'L FOR 9/16" GLASS w/ STRAP ANCHOR
lxx	.
Sxx	.
ALLOY	6063-T6



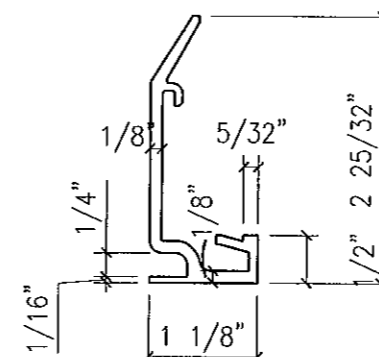
EXTRUSION NO:	TGF-1332
DESCRIPTION:	3 1/2" INT HORIZ FACE CAP
lxx	.
Sxx	.
ALLOY	6063-T5



EXTRUSION NO:	TGF-1217
DESCRIPTION:	HEAD HORIZ'L FOR 1 5/16" GLASS w/ STRAP ANCHOR
lxx	11.170
Sxx	3.323
ALLOY	6063-T6

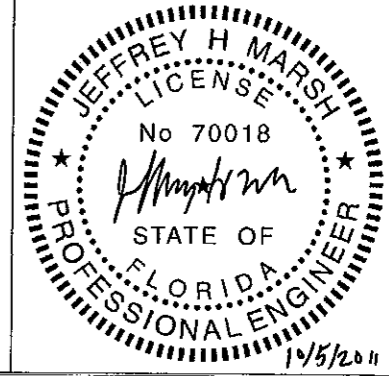


EXTRUSION NO:	TGF-1301
DESCRIPTION:	2 1/2" MALE FACE CAP FOR (9/16" GLAZING)
lxx	.
Sxx	.
ALLOY	6063-T5

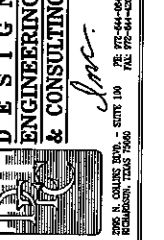


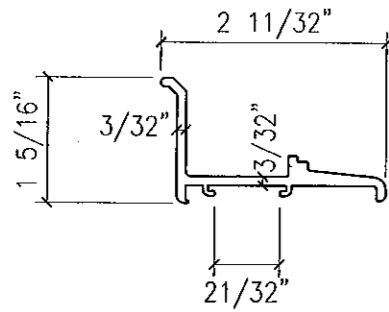
EXTRUSION NO:	TGF-1302
DESCRIPTION:	2 1/2" FEMALE FACE CAP FOR (9/16" GLAZING)
lxx	.
Sxx	.
ALLOY	6063-T5

FOR MIAMI-DADE CO. B.C.C.O.
 Approved as complying with the Florida Building Code
 Date 10/20/2011
 NOA# 11-0401.00
 Miami Dade Product Control
 By *[Signature]*

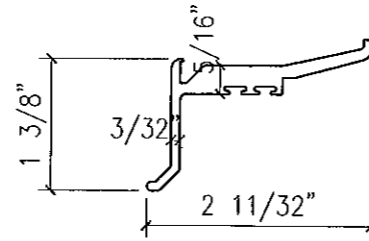


NO.	DATE	BY	REVISIONS
1			
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10			

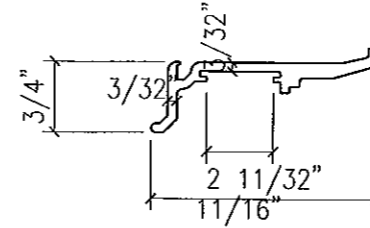




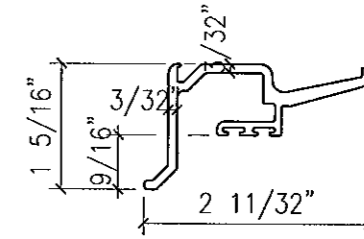
EXTRUSION NO:	TGF-1303
DESCRIPTION:	GLAZING ADAPTER FOR (9/16" CAPTURED HEAD)
Ixx	.
Sxx	.
ALLOY	6063-T5



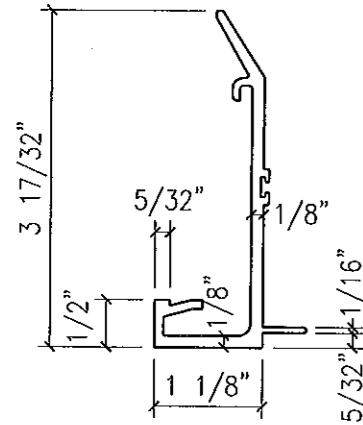
EXTRUSION NO:	TGF-1304
DESCRIPTION:	GLAZING ADAPTER FOR (9/16" CAPTURED STACK HORIZ)
Ixx	.
Sxx	.
ALLOY	6063-T5



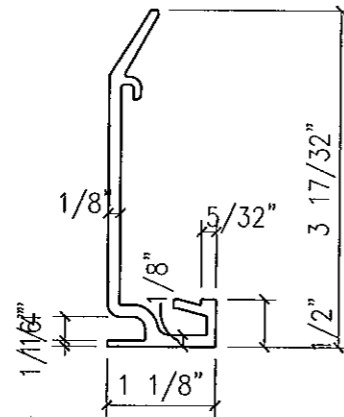
EXTRUSION NO:	TGF-1305
DESCRIPTION:	GLAZING ADAPTER FOR (9/16" CAPTURED INT HORIZ)
Ixx	.
Sxx	.
ALLOY	6063-T5



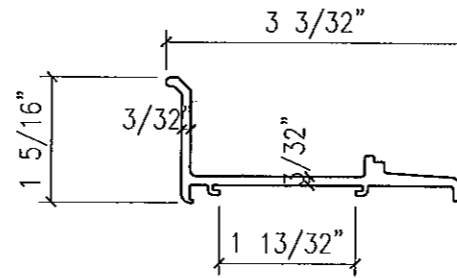
EXTRUSION NO:	TGF-1306
DESCRIPTION:	GLAZING ADAPTER FOR (9/16" CAPTURED RIBBON SILL STARTER)
Ixx	.
Sxx	.
ALLOY	6063-T5



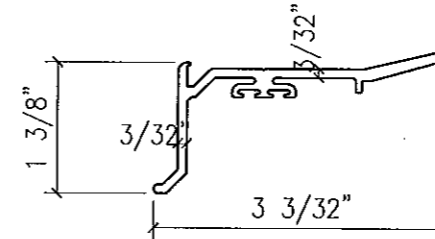
EXTRUSION NO:	TGF-1311
DESCRIPTION:	2 1/2" MALE FACE CAP FOR (1 5/16" GLAZING)
Ixx	.
Sxx	.
ALLOY	6063-T5



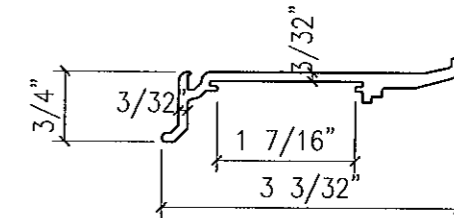
EXTRUSION NO:	TGF-1312
DESCRIPTION:	2 1/2" FEMALE FACE CAP FOR (1 5/16" GLAZING)
Ixx	.
Sxx	.
ALLOY	6063-T5



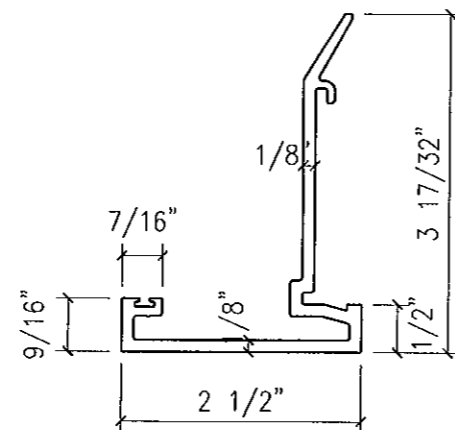
EXTRUSION NO:	TGF-1313
DESCRIPTION:	GLAZING ADAPTER (1 5/16" CAPTURED HEAD)
Ixx	.
Sxx	.
ALLOY	6063-T5



EXTRUSION NO:	TGF-1314
DESCRIPTION:	GLAZING ADAPTER FOR (1 5/16" CAPTURED STACK HORIZ)
Ixx	.
Sxx	.
ALLOY	6063-T5



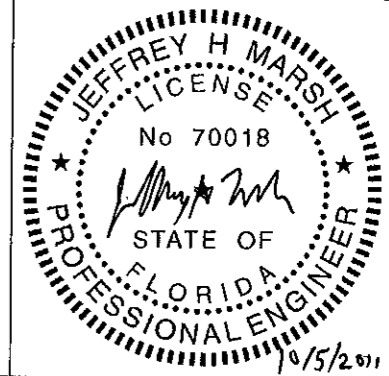
EXTRUSION NO:	TGF-1315
DESCRIPTION:	GLAZING ADAPTER FOR (1 5/16" CAPTURED INT HORIZ)
Ixx	.
Sxx	.
ALLOY	6063-T5



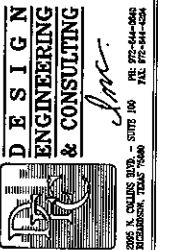
EXTRUSION NO:	TGF-1325
DESCRIPTION:	2 1/2" JAMB FACE CAP (1 5/16" GLAZING)
Ixx	.
Sxx	.
ALLOY	6063-T5

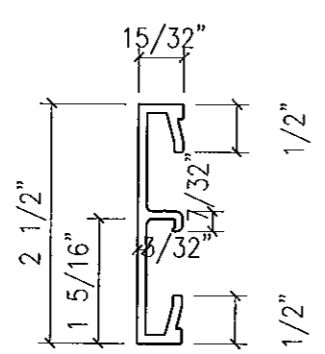
FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the Florida Building Code
 Date 10/20/2011
 NOA# 11-04201.04
 Miami Dade Product Control
 By [Signature]

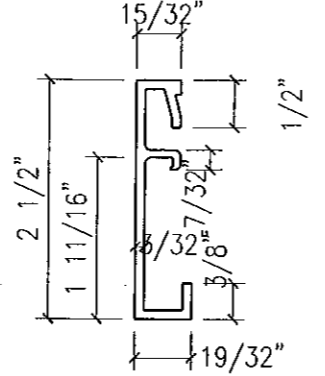


NO.	DATE	BY	REVISIONS

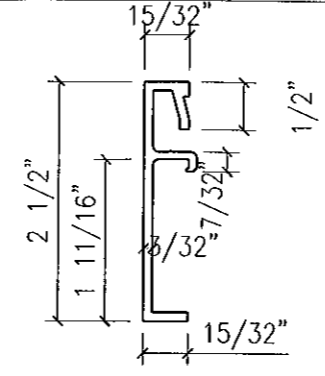




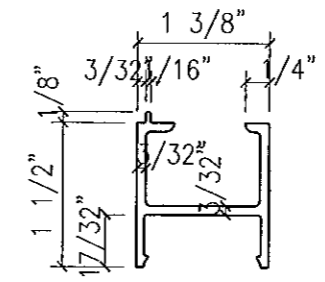
EXTRUSION NO:	TGF-1331
DESCRIPTION:	2 1/2" INT HORIZ. FACE CAP
Ixx	.
Sxx	.
ALLOY	6063-T5



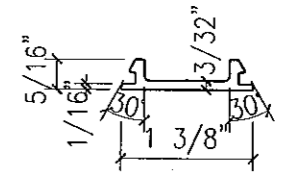
EXTRUSION NO:	TGF-1333
DESCRIPTION:	2 1/2" HEAD FACE CAP
Ixx	.
Sxx	.
ALLOY	6063-T5



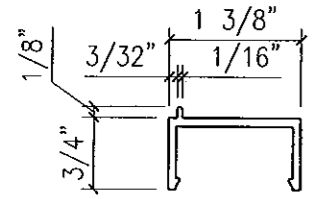
EXTRUSION NO:	TGF-1334
DESCRIPTION:	2 1/2" STACK HORIZ. FACE CAP
Ixx	.
Sxx	.
ALLOY	6063-T5



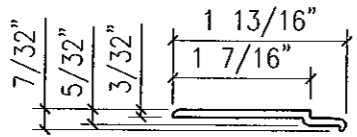
EXTRUSION NO:	TGF-1342
DESCRIPTION:	1 5/16" POCKET FILLER
Ixx	.
Sxx	.
ALLOY	6063-T5



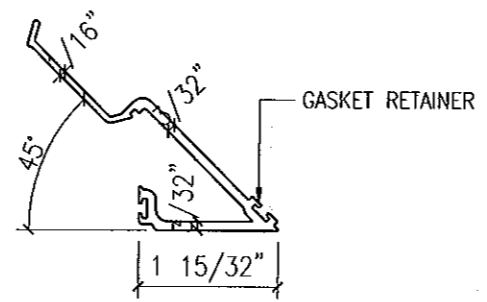
EXTRUSION NO:	TGF-1343
DESCRIPTION:	POCKET FILLER SNAP COVER
Ixx	.
Sxx	.
ALLOY	6063-T5



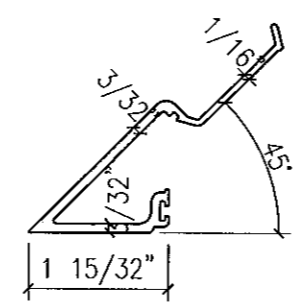
EXTRUSION NO:	TGF-1344
DESCRIPTION:	9/16" POCKET FILLER
Ixx	.
Sxx	.
ALLOY	6063-T5



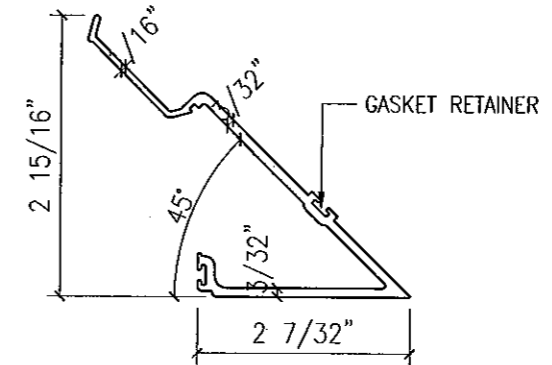
EXTRUSION NO:	TGF-1346
DESCRIPTION:	1 5/16" GLAZING ADAPTER AT STACK GUTTER
Ixx	.
Sxx	.
ALLOY	6063-T5



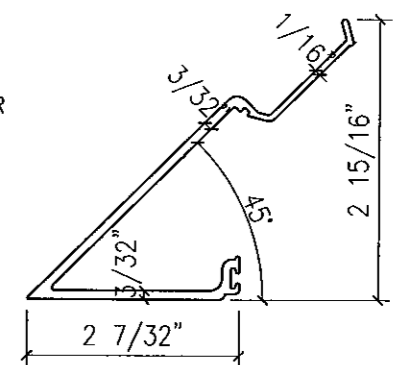
EXTRUSION NO:	TGF-1350
DESCRIPTION:	9/16" GLAZING FIN AT 90° OUTSIDE CORNER
Ixx	.
Sxx	.
ALLOY	6063-T5



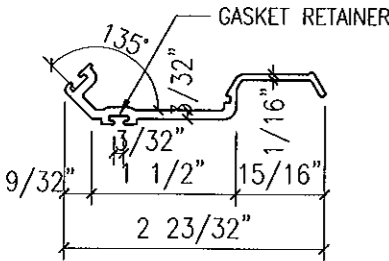
EXTRUSION NO:	TGF-1351
DESCRIPTION:	9/16" GLAZING FIN AT 90° OUTSIDE CORNER
Ixx	.
Sxx	.
ALLOY	6063-T5



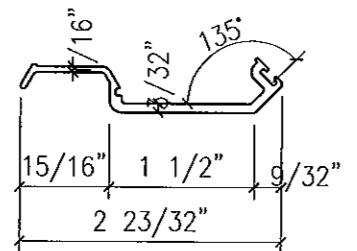
EXTRUSION NO:	TGF-1352
DESCRIPTION:	1 5/16" GLAZING FIN AT 90° OUTSIDE CORNER
Ixx	.
Sxx	.
ALLOY	6063-T5



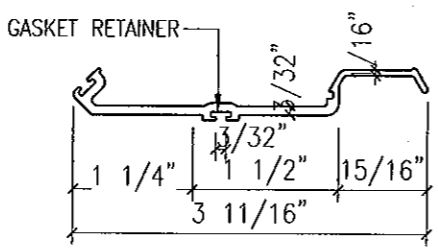
EXTRUSION NO:	TGF-1353
DESCRIPTION:	1 5/16" GLAZING FIN AT 90° OUTSIDE CORNER
Ixx	.
Sxx	.
ALLOY	6063-T5



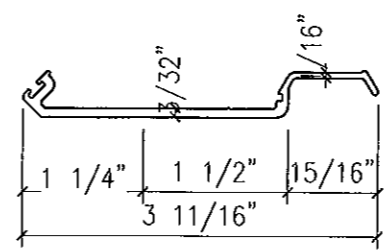
EXTRUSION NO:	TGF-1354
DESCRIPTION:	9/16" GLAZING FIN AT 90° INSIDE CORNER
Ixx	.
Sxx	.
ALLOY	6063-T5



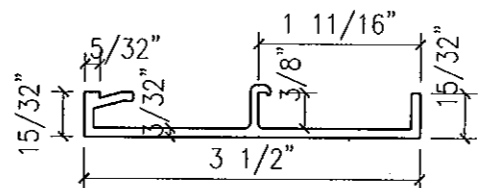
EXTRUSION NO:	TGF-1355
DESCRIPTION:	9/16" GLAZING FIN AT 90° INSIDE CORNER
Ixx	.
Sxx	.
ALLOY	6063-T5



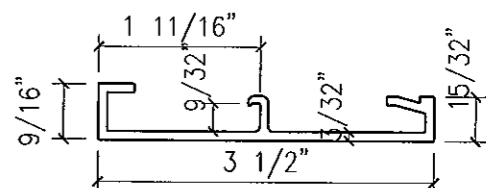
EXTRUSION NO:	TGF-1356
DESCRIPTION:	1 5/16" GLAZING FIN AT 90° INSIDE CORNER
Ixx	.
Sxx	.
ALLOY	6063-T5



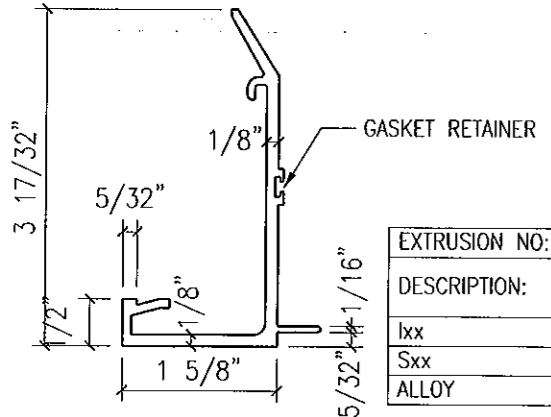
EXTRUSION NO:	TGF-1357
DESCRIPTION:	1 5/16" GLAZING FIN AT 90° INSIDE CORNER
Ixx	.
Sxx	.
ALLOY	6063-T5



EXTRUSION NO:	TGF-1365
DESCRIPTION:	3 1/2" DL SILL FACE CAP
Ixx	.
Sxx	.
ALLOY	6063-T5

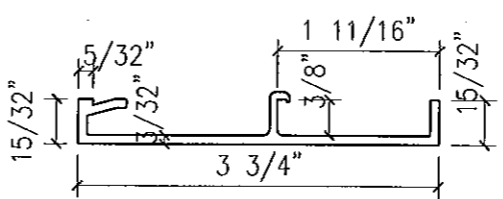
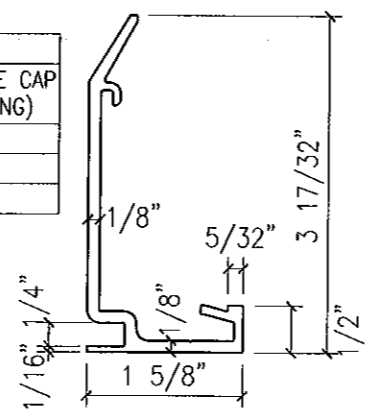


EXTRUSION NO:	TGF-1366
DESCRIPTION:	3 1/2" HEAD FACE CAP
Ixx	.
Sxx	.
ALLOY	6063-T5



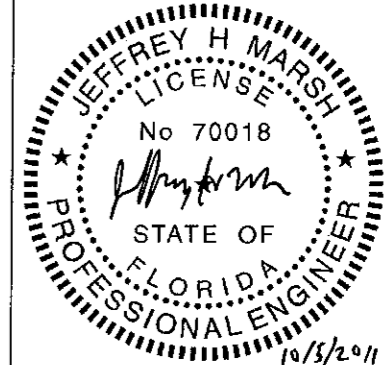
EXTRUSION NO:	TGF-1321
DESCRIPTION:	3 1/2" MALE FACE CAP FOR (1 5/16" GLAZING)
Ixx	.
Sxx	.
ALLOY	6063-T5

EXTRUSION NO:	TGF-1322
DESCRIPTION:	3 1/2" FEMALE FACE CAP FOR (1 5/16" GLAZING)
Ixx	.
Sxx	.
ALLOY	6063-T5



EXTRUSION NO:	TGF-1367
DESCRIPTION:	3 3/4" WL SILL FACE CAP
Ixx	.
Sxx	.
ALLOY	6063-T5

FOR MIAMI-DADE CO. B.C.C.O.
 Approved as complying with the Florida Building Code
 Date 10/16/2011
 NOA# 11-0401.04
 Miami Dade Product Control
 By [Signature]



Date	3-3-11	Scale	HALF
Drawing No	4326440	Drawing Title	130 PSF LARGE MISSILE IMPACT EXTRUSIONS
Sheet No	36		141

EXTRUSION NO:	TGF-1401
DESCRIPTION:	J HOOK (FACE OF SLAB) ANCHOR CLIP
lxx	.
Sxx	.
ALLOY	6005-T5

EXTRUSION NO:	TGF-1402
DESCRIPTION:	SERRATED WASHER
lxx	.
Sxx	.
ALLOY	6005-T5

EXTRUSION NO:	TGF-1403
DESCRIPTION:	MULLION ANCHOR CLIP
lxx	.
Sxx	.
ALLOY	6005-T5

EXTRUSION NO:	TGF-1404
DESCRIPTION:	ANTI-WALK / ANTI-LIFT
lxx	.
Sxx	.
ALLOY	6005-T5

EXTRUSION NO:	TGF-1405
DESCRIPTION:	MULLION ANCHOR BAR / LIFTING LUG
lxx	.
Sxx	.
ALLOY	6005-T5

EXTRUSION NO:	TGF-1363
DESCRIPTION:	3 1/2" JAMB FACE CAP FOR (9/16" GLAZING)
lxx	.
Sxx	.
ALLOY	6063-T5

EXTRUSION NO:	TGF-1407
DESCRIPTION:	MULL ANCHOR CLIP AT 90° INSIDE CORNER
lxx	.
Sxx	.
ALLOY	6005-T5

EXTRUSION NO:	TGF-1408
DESCRIPTION:	MULL ANCHOR CLIP AT 90° OUTSIDE CORNER
lxx	.
Sxx	.
ALLOY	6005-T5

EXTRUSION NO:	TGF-1409
DESCRIPTION:	STRAP ANCHOR CLIP AT SILL ATTACHMENT BAR
lxx	.
Sxx	.
ALLOY	6005-T5

EXTRUSION NO:	TGF-1364
DESCRIPTION:	3 1/2" JAMB FACE CAP FOR (1 5/16" GLAZING)
lxx	.
Sxx	.
ALLOY	6063-T5

EXTRUSION NO:	TGF-1410
DESCRIPTION:	STRAP ANCHOR CLIP AT HEAD ATTACHMENT BAR
lxx	.
Sxx	.
ALLOY	6005-T5

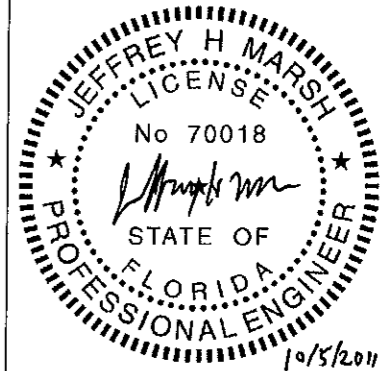
EXTRUSION NO:	TGF-1411
DESCRIPTION:	SILL ANCHOR MULLION LUG
lxx	.
Sxx	.
ALLOY	6005-T5

EXTRUSION NO:	TGF-1412
DESCRIPTION:	SILL STARTER REINFORCING AT ANCHOR PLATE
lxx	.
Sxx	.
ALLOY	6005-T5

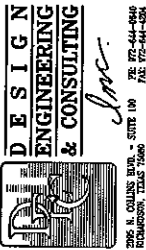
EXTRUSION NO:	TGF-1406
DESCRIPTION:	REINFORCEMENT ATTACHMENT BAR
lxx	.
Sxx	.
ALLOY	6005-T5

FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the Florida Building Code
 Date 10/20/2011
 NOA# 11-0201.04
 Miami Dade Product Control
 By *[Signature]*



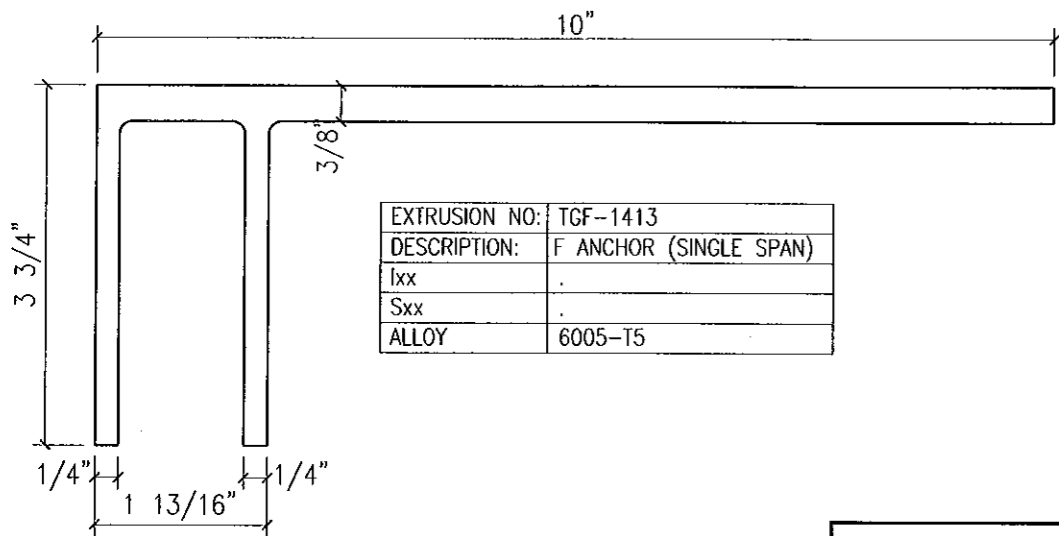
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Drawing No	4326440	Drawing Title	130 PSF LARGE MISSILE IMPACT EXTRUSIONS
Sheet No	37 / 41		



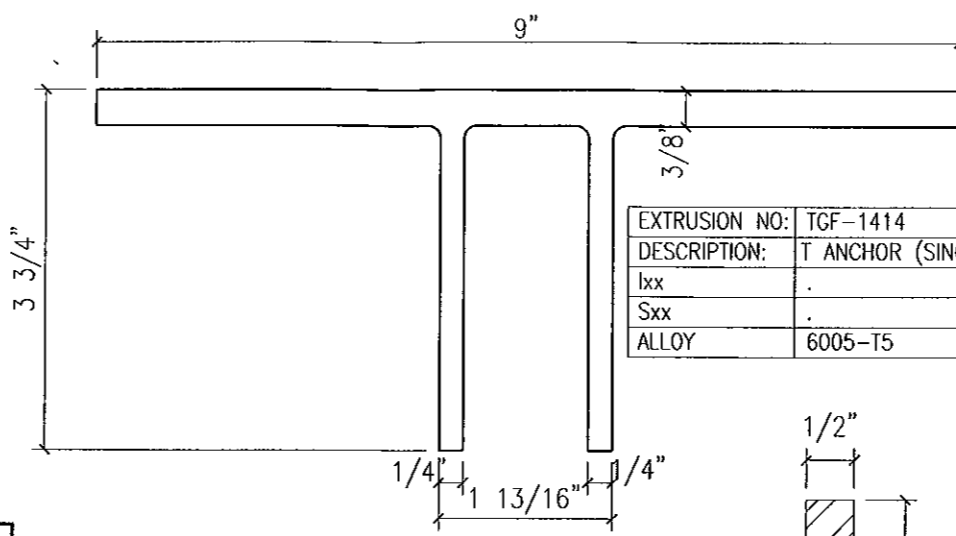
NO.	DATE	BY	REVISIONS
1			
2			
3			
4			
5			



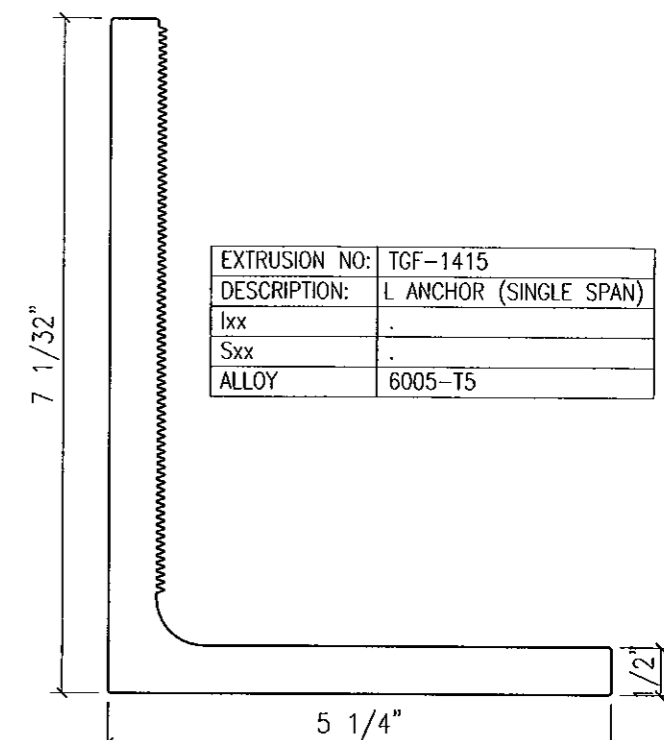
G L A S S C O M P A N Y
 1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
 PH. (561) 863-7078 FAX (561) 863-7088
 www.trainorglass.com
 ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND



EXTRUSION NO:	TGF-1413
DESCRIPTION:	F ANCHOR (SINGLE SPAN)
Ixx	.
Sxx	.
ALLOY	6005-T5

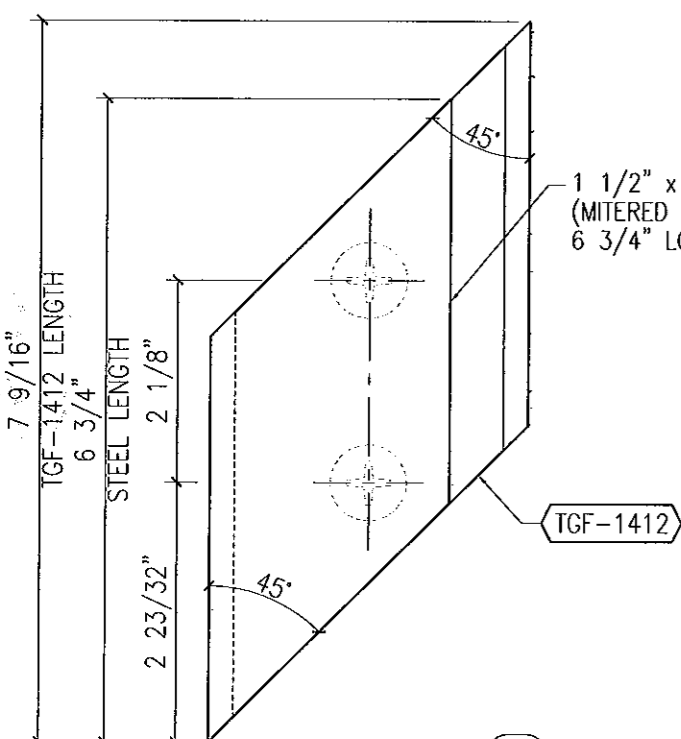


EXTRUSION NO:	TGF-1414
DESCRIPTION:	T ANCHOR (SINGLE SPAN)
Ixx	.
Sxx	.
ALLOY	6005-T5



EXTRUSION NO:	TGF-1415
DESCRIPTION:	L ANCHOR (SINGLE SPAN)
Ixx	.
Sxx	.
ALLOY	6005-T5

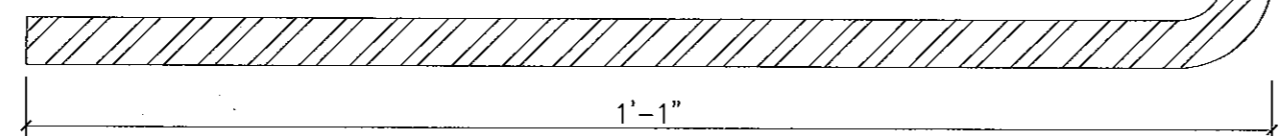
NOTE:
STEEL IN CONTACT WITH ALUMINUM MUST BE COATED w/ RED OXIDE PRIMER



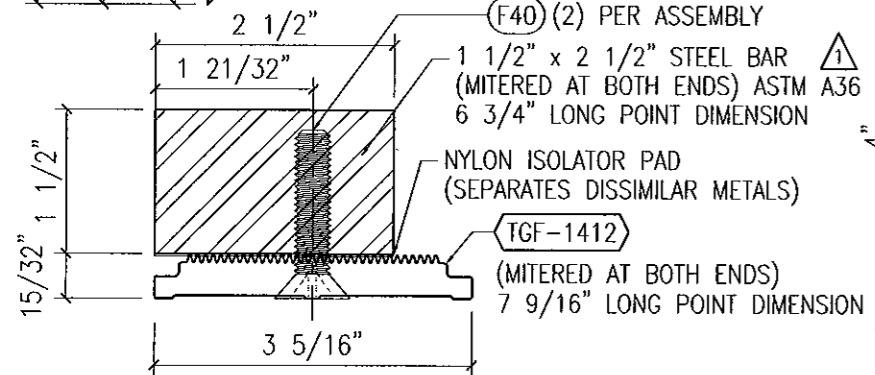
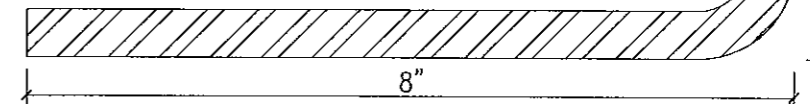
1 1/2" x 2 1/2" STEEL BAR
(MITERED AT BOTH ENDS)
6 3/4" LONG POINT DIMENSION

PART NO:	SA1
DESCRIPTION:	5" x 13" x 1/2" THICK STEEL ANGLE
Ixx	.
Sxx	.
ALLOY	STEEL-ASTM A36 Δ

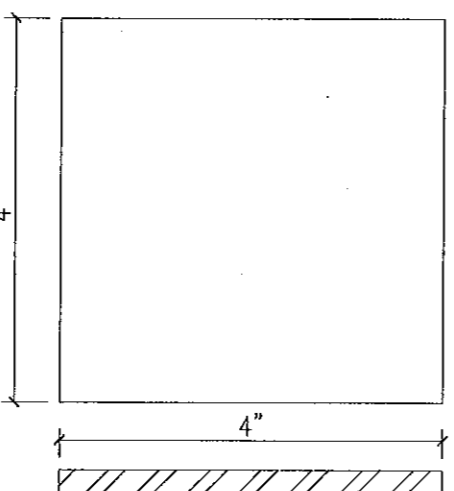
COATED WITH RED OXIDE PRIMER



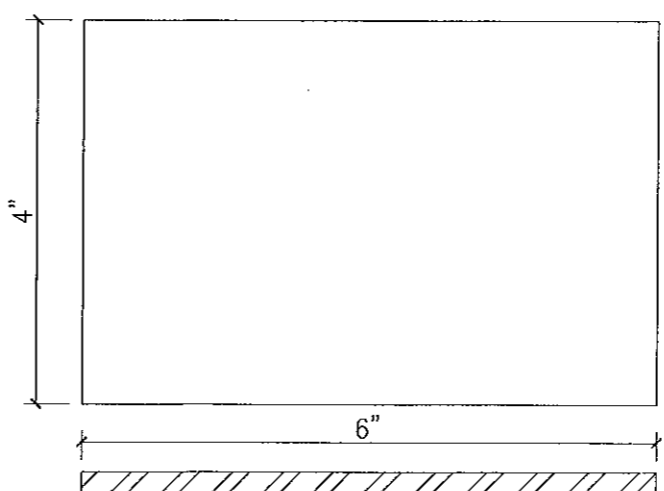
PART NO:	SA2
DESCRIPTION:	5" x 8" x 1/2" THICK STEEL ANGLE
Ixx	.
Sxx	.
ALLOY	STEEL-ASTM A36 Δ



(F40) (2) PER ASSEMBLY
1 1/2" x 2 1/2" STEEL BAR Δ
(MITERED AT BOTH ENDS) ASTM A36
6 3/4" LONG POINT DIMENSION
NYLON ISOLATOR PAD
(SEPARATES DISSIMILAR METALS)
TGF-1412
(MITERED AT BOTH ENDS)
7 9/16" LONG POINT DIMENSION



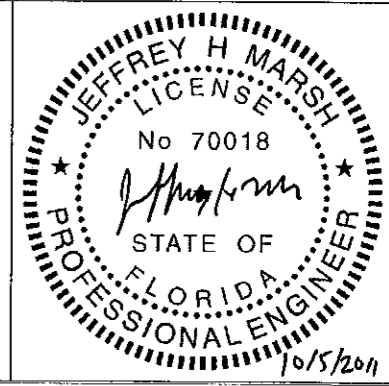
PART NO:	SP1
DESCRIPTION:	4" x 4" x 1/4" STEEL PLATE
Ixx	.
Sxx	.
ALLOY	STEEL-ASTM A36 Δ



PART NO:	SP2
DESCRIPTION:	4" x 6" x 1/4" STEEL PLATE
Ixx	.
Sxx	.
ALLOY	STEEL-ASTM A36 Δ

CORNER ANCHOR CLIP ASSEMBLY (HEAD/SILL)	
EXTRUSION NO:	TGF-1412 DOUBLE-MITERED
DESCRIPTION:	SILL STARTER REINFORCING ANCHOR PLATE FASTENED TO 1 1/2" x 2 1/2" STEEL BAR w/ (2) 3/8" x 1 1/2" FH MACHINE SCREWS
Ixx	.
Sxx	.
ALLOY	6005-T5 (TGF-1412 ONLY)

FOR MIAMI-DADE CO. B.C.C.O.
Approved as complying with the Florida Building Code
Date 10/20/2011
NOA# 11-0201-04
Miami Dade Product Control
By *[Signature]*

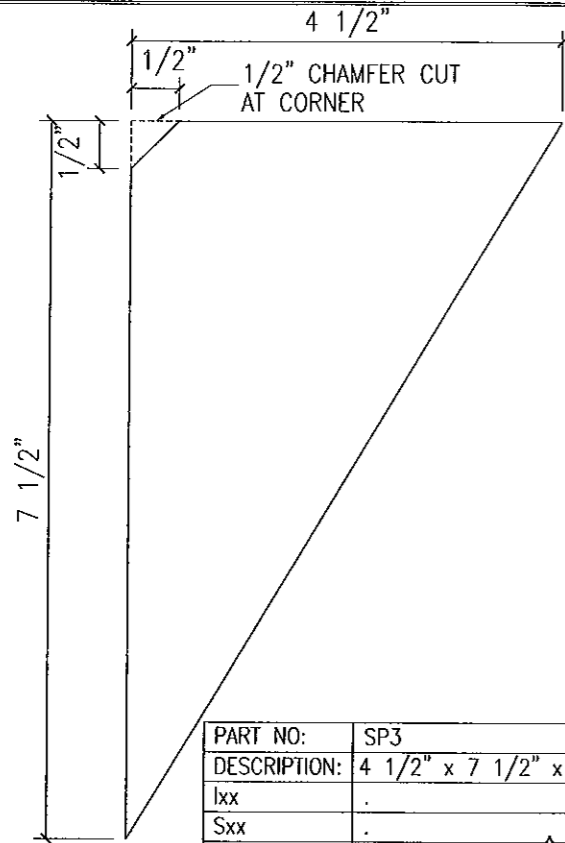


Date	3-3-11	Scale	HALF
Drawing No	4326440	Drawing Title	130 PSF LARGE MISSILE IMPACT EXTRUSIONS
Sheet No	38 / 41		

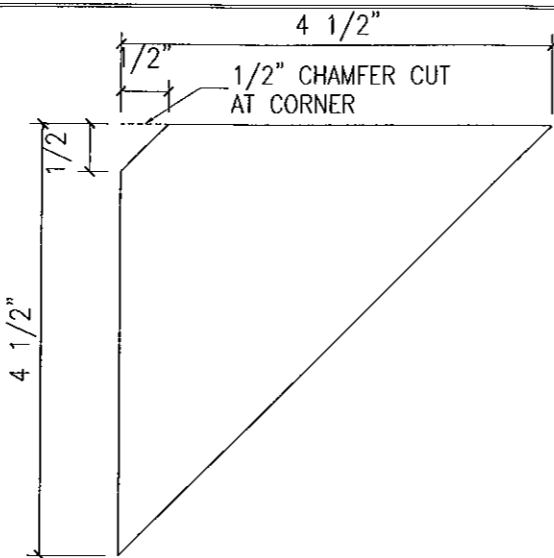
TRAINOR
ILLINOIS FLORIDA GEORGIA NEW JERSEY COLORADO TEXAS ARIZONA VIRGINIA MARYLAND
GLASS COMPANY
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
www.trainorglass.com

NO.	DATE	BY	REVISIONS
1	10/20/11
2
3
4
5

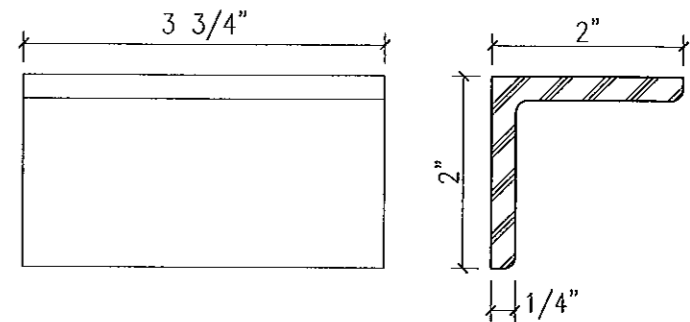
DESIGN ENGINEERING & CONSULTING
INC.
1101 13TH STREET WEST RIVIERA BEACH, FLORIDA 33404
PH. (561) 863-7078 FAX (561) 863-7088
www.trainorglass.com



PART NO:	SP3
DESCRIPTION:	4 1/2" x 7 1/2" x 3/8" GUSSET PLATE
Ixx	.
Sxx	.
ALLOY	STEEL-ASTM A36 Δ 1

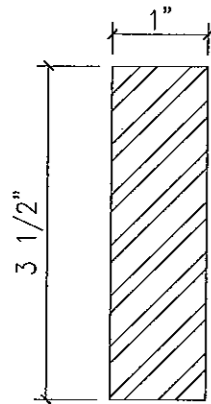


PART NO:	SP4
DESCRIPTION:	4 1/2" x 4 1/2" x 3/8" GUSSET PLATE
Ixx	.
Sxx	.
ALLOY	STEEL-ASTM A36 Δ 1



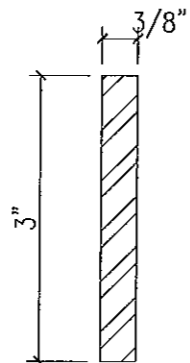
EXTRUSION NO:	AA1
DESCRIPTION:	2" x 2" x 1/4" THICK ALUM ANGLE
Ixx	.
Sxx	.
ALLOY	6061-T6

NOTE:
STEEL IN CONTACT WITH
ALUMINUM MUST BE COATED
w/ RED OXIDE PRIMER



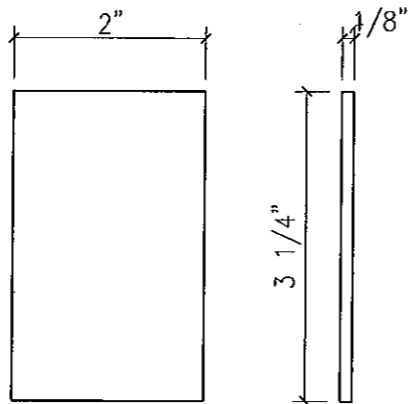
PART NO:	SB-1
DESCRIPTION:	3 1/2" x 1" STEEL REINF. BAR
Ixx	.
Sxx	.
ALLOY	STEEL-ASTM A36 Δ 1

COATED WITH RED OXIDE PRIMER

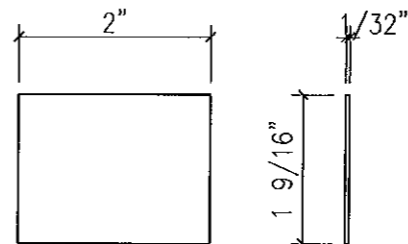


PART NO:	SB-2
DESCRIPTION:	3" x 3/8" STEEL REINF. BAR
Ixx	.
Sxx	.
ALLOY	STEEL-ASTM A36 Δ 1

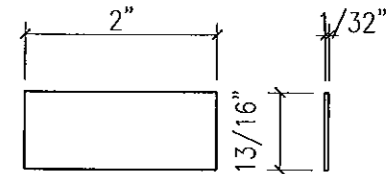
COATED WITH RED OXIDE PRIMER



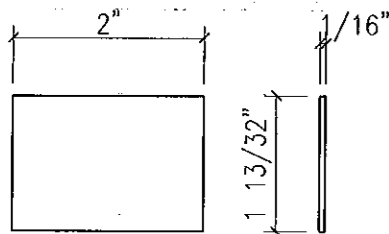
EXTRUSION NO:	AP1
DESCRIPTION:	1/8" x 3 1/4" END DAM PLATE
Ixx	.
Sxx	.
ALLOY	3003-H14



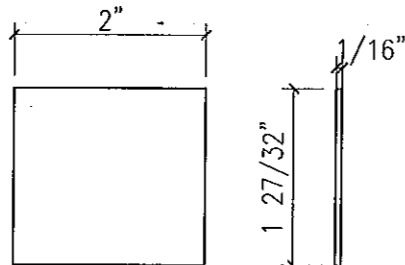
EXTRUSION NO:	AP2
DESCRIPTION:	.040" x 1 9/16" ALUM WATER DIVERTER (2" LONG) AT 1 5/16" GLASS
Ixx	.
Sxx	.
ALLOY	3003-H14



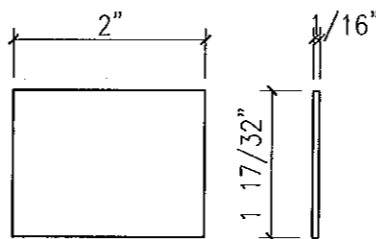
EXTRUSION NO:	AP3
DESCRIPTION:	.040" x 13/16" ALUMINUM WATER DIVERTER (2" LONG) AT 9/16" GLASS
Ixx	.
Sxx	.
ALLOY	3003-H14



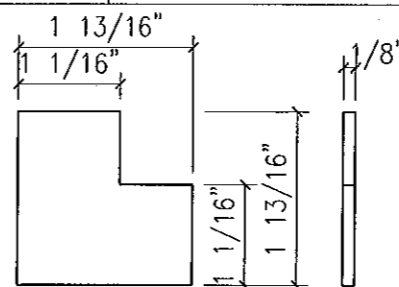
EXTRUSION NO:	AP4
DESCRIPTION:	1/16" x 1 13/32" ALUMINUM PLATE (2" LONG) AT HORIZ'L STACK JOINT
Ixx	.
Sxx	.
ALLOY	3003-H14



EXTRUSION NO:	AP5
DESCRIPTION:	1/16" x 1 27/32" ALUMINUM PLATE (2" LONG) AT STARTER SILL SPLICE
Ixx	.
Sxx	.
ALLOY	3003-H14



EXTRUSION NO:	AP6
DESCRIPTION:	1/16" x 1 17/32" ALUMINUM PLATE (2" LONG) AT STARTER SILL SPLICE
Ixx	.
Sxx	.
ALLOY	3003-H14



EXTRUSION NO:	AP7
DESCRIPTION:	1/8" THICK ALUM CORNER PLATE
Ixx	.
Sxx	.
ALLOY	3003-H14

FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the Florida Building Code
Date 10/26/2011
NOA# 11-0401.04
Miami-Dade Product Control
By [Signature]

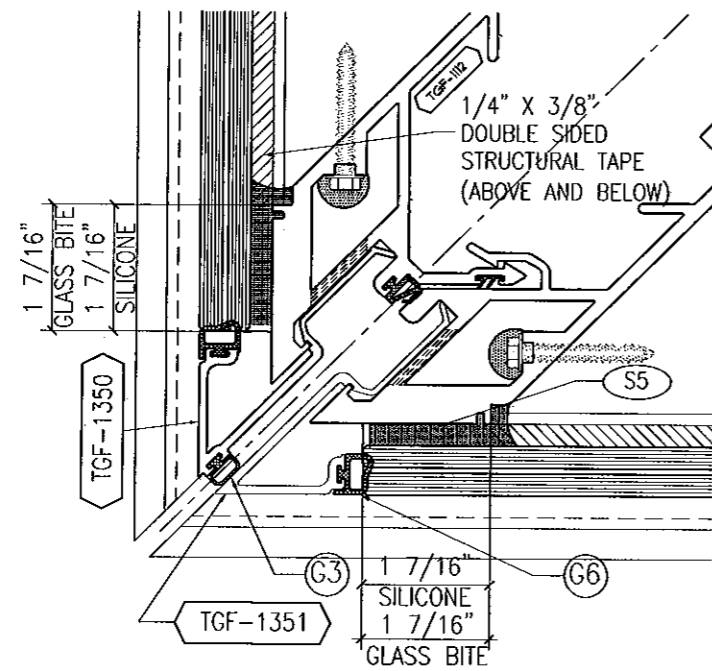
JEFFREY H MARSH
LICENSE
No 70018
PROFESSIONAL ENGINEER
STATE OF FLORIDA
10/5/2011

NO.	DATE	BY	REVISIONS
1	10/26/11	ME	ISSUED FOR QUOTE
2			
3			
4			
5			

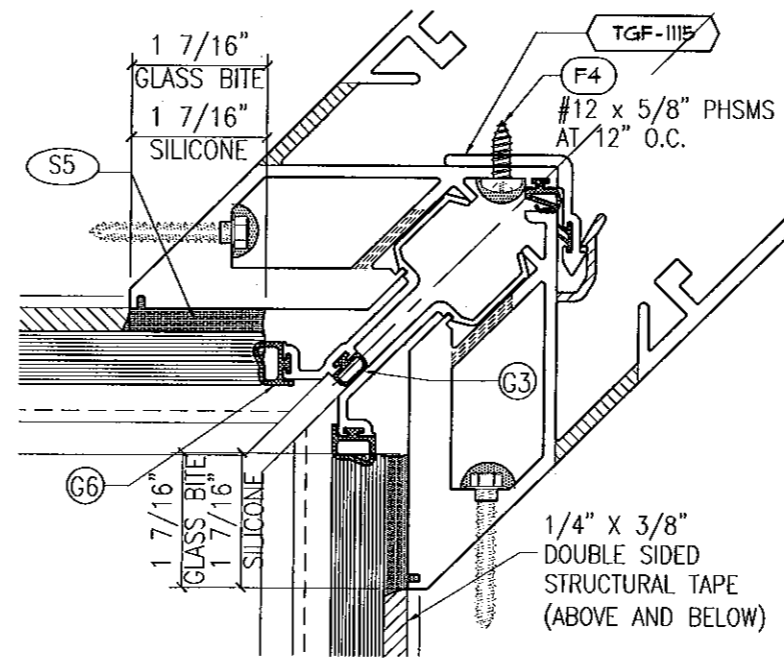
DESIGN
ENGINEERING
& CONSULTING
INC.
STATE OF FLORIDA
EXPIRES 12/31/2011

1 7/16" SILICONE BOND WIDTH CHART												
WINDLOAD 130 PSF	(SMALLEST LEG OF LARGEST LITE OF GLASS) - INCHES											
	24	30	36	42	48	52	54	56.5	60	66	72	76
	OK	OK	OK	OK	OK	OK	OK	OK	OK	FAIL	FAIL	FAIL

A: 1 7/16" SILICONE BOND WIDTH IS ACCEPTABLE FOR I.S. AND O.S. CORNER MULLIONS ONLY



1 REGLAZED SSG OS CORNER MULLION
w/ 1 5/16" OR 9/16" THICK GLASS OR COMPOSITE PANEL



2 REGLAZED SSG IS CORNER MULLION
w/ 1 5/16" OR 9/16" THICK GLASS OR COMPOSITE PANEL

NO.	DATE	BY	REVISIONS

DESIGN ENGINEERING & CONSULTING

Jane

REG. 872-944-088
2002 N.W. 13TH ST., SUITE 300
MIAMI, FL 33136

FOR MIAMI-DADE CO. B.C.C.O.

Approved as complying with the Florida Building Code
Date 10/20/2011
NOA# 11-0401-04
Miami Dade Product Control
By *[Signature]*

JEFFREY H MARSH
LICENSE
No 70018
[Signature]
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
10/5/2011

Date	Scale
3-3-11	HALF
Drawing No	
4326440	
Drawing Title	
130 PSF LARGE MISSILE IMPACT REGLAZE DETAILS	
Sheet No	
41 / 41	