



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

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/economy

NOTICE OF ACCEPTANCE (NOA)

Titan Glass & Aluminum, LLC
450 West 27th Street
Hialeah, Florida 33010

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 RER-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. RER 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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Aluminum Glazed Railing

APPROVAL DOCUMENT: Drawing No. 09-09, titled "Aluminum Glass Railing System", sheets 1 through 6 of 6, prepared by Al-Farooq Corporation, dated December 23, 2009, last revision #E dated November 16, 2015 signed and sealed by Javad Ahmad, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration 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, Hialeah, FL and the 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. The structural adequacy of the supporting structures is not part of this approval & shall be reviewed by the corresponding Building Dept.

This NOA revises & renews NOA # 12-0517.22 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by Hejmy A. Makar, P.E., M.S.



Hejmy A. Makar
12/10/2015

NOA No. 15-0902.03
Expiration Date: 11/24/2020
Approval Date: 12/10/2015
Page 1

Titan Glass & Aluminum, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 10-0419.06

A. DRAWINGS

1. *Drawing No. 09-09, titled " aluminum Glass Railing System ", sheets 1 through 6 of 6, prepared by Al-Farooq Corporation, dated December 23, 2009, last revision #B dated September 15, 2010 signed and sealed by Javad Ahmad, P.E.*

B. TESTS

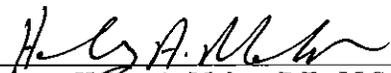
1. *Test Report No. HETI-09-2578, by Hurricane Engineering & Testing, Inc., dated July 30, 2009, signed and sealed by Candido F. Font, P.E.*
2. *Test Report No. HETI-09-2558, by Hurricane Engineering & Testing, Inc., dated November 23, 2009, signed and sealed by Candido F. Font, P.E.*
3. *Test Report No. HETI-09-2564B, by Hurricane Engineering & Testing, Inc., dated July 30, 2009, signed and sealed by Candido F. Font, P.E.*
4. *Test Report No. HETI-09-2564C, by Hurricane Engineering & Testing, Inc., dated July 30, 2009, signed and sealed by Candido F. Font, P.E.*
5. *Test Report No. HETI-09-2564D, by Hurricane Engineering & Testing, Inc., dated July 30, 2009, signed and sealed by Candido F. Font, P.E.*
6. *Test Report No. 5888, by Fenestration Testing Laboratory, Inc., dated March 26, 2009, signed and sealed by Carlos S. Rionda, P.E.*
7. *Test Report No. 5814, by Fenestration Testing Laboratory, Inc., dated March 02, 2009, signed and sealed by Carlos S. Rionda, P.E.*
8. *Test Report No. HETI-09-2592A, by Hurricane Engineering & Testing, Inc., dated November 05, 2009, signed and sealed by Candido F. Font, P.E.*
9. *Test Report No. HETI-09-2592B, by Hurricane Engineering & Testing, Inc., dated November 05, 2009, signed and sealed by Candido F. Font, P.E.*
10. *Test Report No. HETI-09-2592C, by Hurricane Engineering & Testing, Inc., dated November 05, 2009, signed and sealed by Candido F. Font, P.E.*
11. *Test Report No. HETI-09-2519A, by Hurricane Engineering & Testing, Inc., dated May 23, 2009, signed and sealed by Candido F. Font, P.E.*
12. *Test Report No. HETI-09-2519B, by Hurricane Engineering & Testing, Inc., dated May 23, 2009, signed and sealed by Candido F. Font, P.E.*

C. CALCULATIONS

1. *Calculation titled " Aluminum and Glass Balcony Railing " in accordance with the Florida Building Code 2007 Edition High Velocity Hurricane Zone ", sheets 1 through 98 of 98, dated January 21, 2010, by Al-Farooq Corporation, signed and sealed by Arshad Viqar, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor

NOA No. 15-0902.03

Expiration Date: 11/24/2020

Approval Date: 12/10/2015

Titan Glass & Aluminum, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATIONS

1. *Report from Quikrete Cement & Concrete Products.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 12-0517.22

A. DRAWINGS

1. *Drawing No. 09-09, titled " Aluminum Glass Railing System ", sheets 1 through 6 of 6, prepared by Al-Farooq Corporation, dated December 23, 2009, last revision #C dated April 20, 2012 signed and sealed by Javad Ahmad, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

3. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 09-09, titled " Aluminum Glass Railing System ", sheets 1 through 6 of 6, prepared by Al-Farooq Corporation, dated December 23, 2009, last revision #E dated November 16, 2015 signed and sealed by Javad Ahmad, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

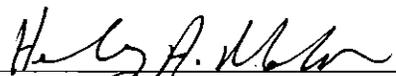
1. *None.*

D. QUALITY ASSURANCE

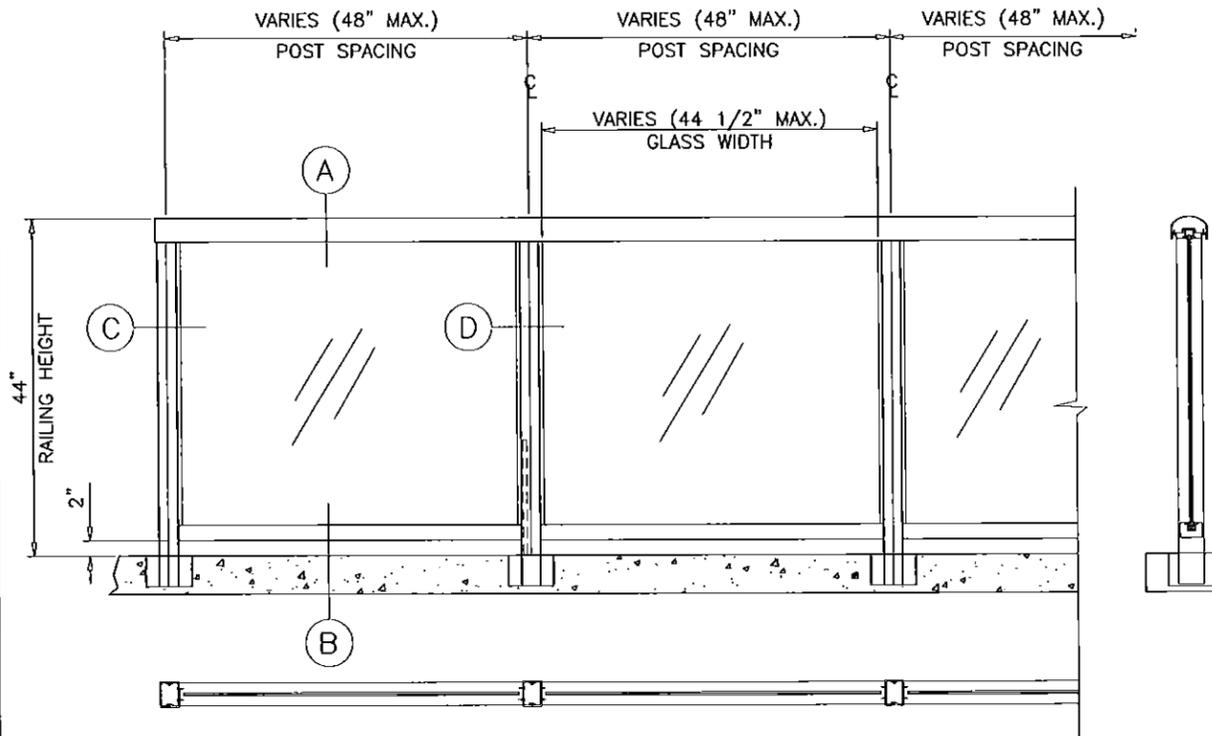
1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

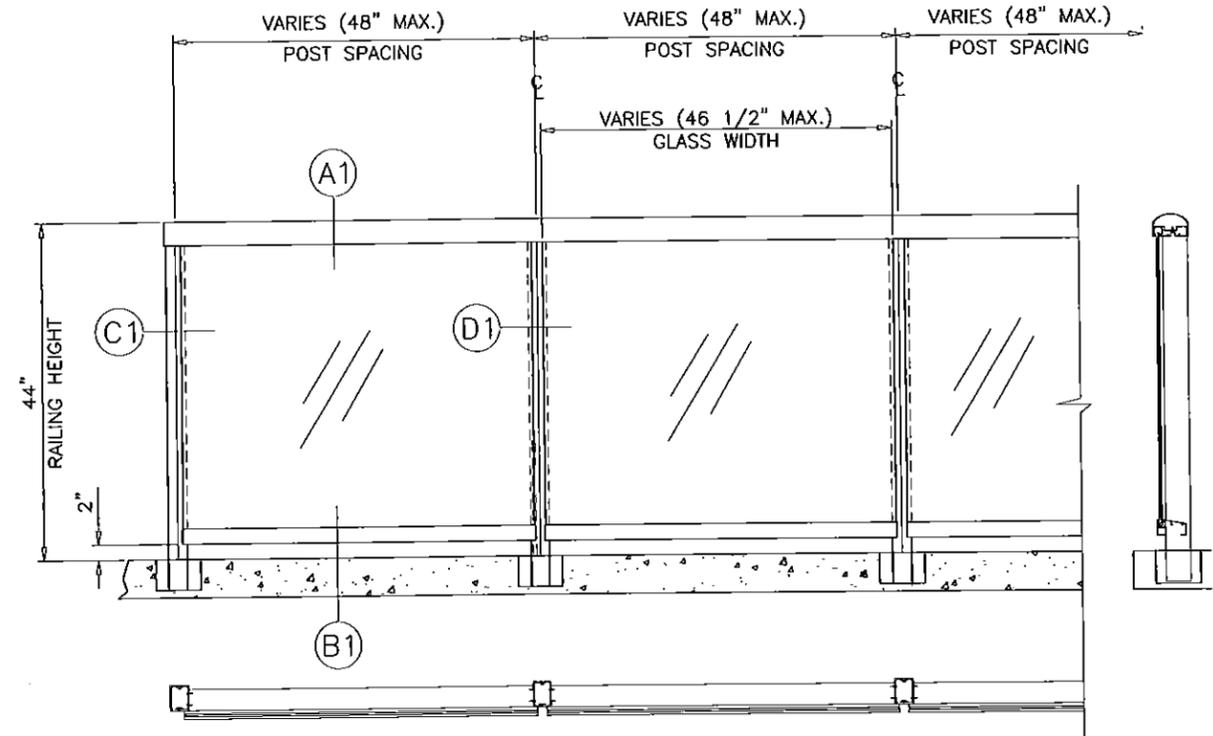
1. *None.*



Henry A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 15-0902.03
Expiration Date: 11/24/2020
Approval Date: 12/10/2015



TYPICAL ELEVATION
CENTERED GLASS



TYPICAL ELEVATION
NON-CENTERED GLASS

ALUMINUM GLASS RAILING SYSTEM

RAILING CAN BE INSTALLED WITH LAMINATED GLASS IN CENTERED OR NON-CENTERED POCKET CONFIGURATIONS. SEE SHEET 2 FOR DESIGN LOAD CAPACITY.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2014 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

DESIGN CRITERIA FOR ALUMINUM, MINIMUM MECHANICAL PROPERTIES, AND SAFETY FACTORS ARE IN ACCORDANCE WITH THE "ALUMINUM CONSTRUCTION MANUAL" LATEST EDITION.

ALUMINUM ALLOYS: ALL EXTRUSIONS SHALL BE ALLOY AS SHOWN.

ALL FASTENERS TO BE NON-MAGNETIC ST. STEEL.

ANCHORING OR LOADING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF CHAPTER M.7 OF THE ALUMINUM DESIGN MANUAL 2010.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0902-03
Expiration Date 11/24/2020
By [Signature]
Miami Dade Product Control

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

NOV 20 2015



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
12335 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

ALUMINUM GLASS RAILING SYSTEM
TITAN GLASS & ALUMINUM, LLC.
450 WEST 27 STREET
HIALEAH, FL. 33010
TEL. (305) 888-0911 FAX. (305) 671-3840

no	date	description	by
A	08.02.10	NO CHANGE THIS SHEET	
B	09.15.10	REV. PER BCOO COMMENTS	
C	04.20.12	UPDATED TO 2010 FBC	
D	08.18.15	UPDATED TO 2014 FBC	
E	11.16.15	REV. PER PER COMMENTS	

date: 12-23-09
scale: 1/2" = 1'-0"
dr. by: HAMID
chk. by:

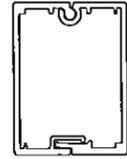
drawing no.
09-09

sheet 1 of 6

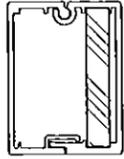
RAILING\09-09TGA

*** POST PERFORMANCE CHART**
DESIGN LOAD CAPACITY-PSF (RAILING HEIGHT = 44 IN.)

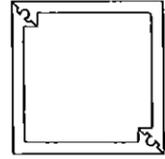
POST SPACING	POST WITHOUT REINFORCING	POST WITH ONE ALUM BAR	SMALL CORNER POST W/O REINF.	SMALL CORNER POST W/ REINF.	LARGE CORNER POST
36"	130.0	130.0	100.0	130.0	125.0
42"	117.0	130.0	90.0	130.0	110.0
48"	105.0	130.0	80.0	120.0	100.0



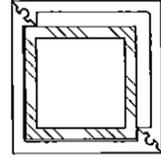
POST WITHOUT REINFORCING



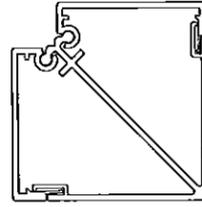
POST WITH ONE ALUM BAR



SMALL CORNER POST W/O REINF.



SMALL CORNER POST WITH REINF.



LARGE CORNER POST

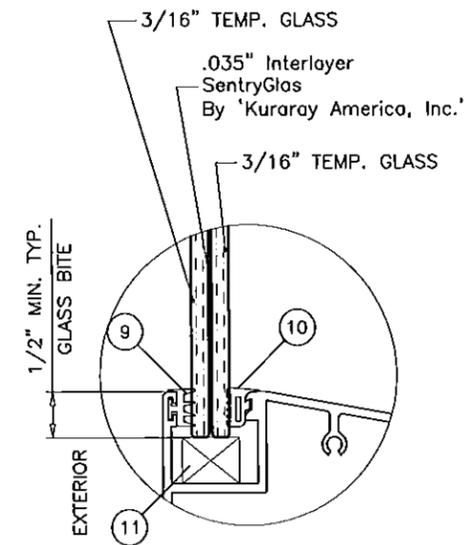
*** POST EMBEDMENT CHART**
(RAILING HEIGHT = 44 IN.)

CONCRETE	HOLE DIA.	POST EMBED	POST SPACING	LOAD CAPACITY
3000 PSI	5 IN.	4 IN.	36 IN.	80.0 PSF
			42 IN.	70.0 PSF
			48 IN.	60.0 PSF
	6 IN.	4 IN.	36 IN.	100.0 PSF
			42 IN.	80.0 PSF
			48 IN.	75.0 PSF
4000 PSI	5 IN.	4 IN.	36 IN.	110.0 PSF
			42 IN.	95.0 PSF
			48 IN.	80.0 PSF
	6 IN.	4 IN.	36 IN.	130.0 PSF
			42 IN.	110.0 PSF
			48 IN.	100.0 PSF
5000 PSI	5 IN.	4 IN.	36 IN.	130.0 PSF
			42 IN.	115.0 PSF
			48 IN.	100.0 PSF
	6 IN.	4-1/4 IN.	36 IN.	130.0 PSF
			42 IN.	130.0 PSF
			48 IN.	120.0 PSF

*** INSTRUCTIONS:**

USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2** USE POST PERFORMANCE CHART TO VERIFY POST CAPACITY FOR THE REQUIRED DESIGN LOAD.
- STEP 3** CHECK GLASS CAPACITY FOR THE REQUIRED DESIGN LOAD FROM GLASS DETAIL.
- STEP 4** USE POST EMBEDMENT CHART TO CHECK POST SPACING AND REQUIRED EMBEDMENT.
- STEP 5** THE LOWER VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.



7/16" LAM. GLASS
MAX. DESIGN LOAD RATING = +100.0 PSF
-130.0 PSF

GLASS DETAIL

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0902.03
Expiration Date 11/24/2020
By *[Signature]*
Miami Data Product Control

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
NOV 2 2015

afc

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

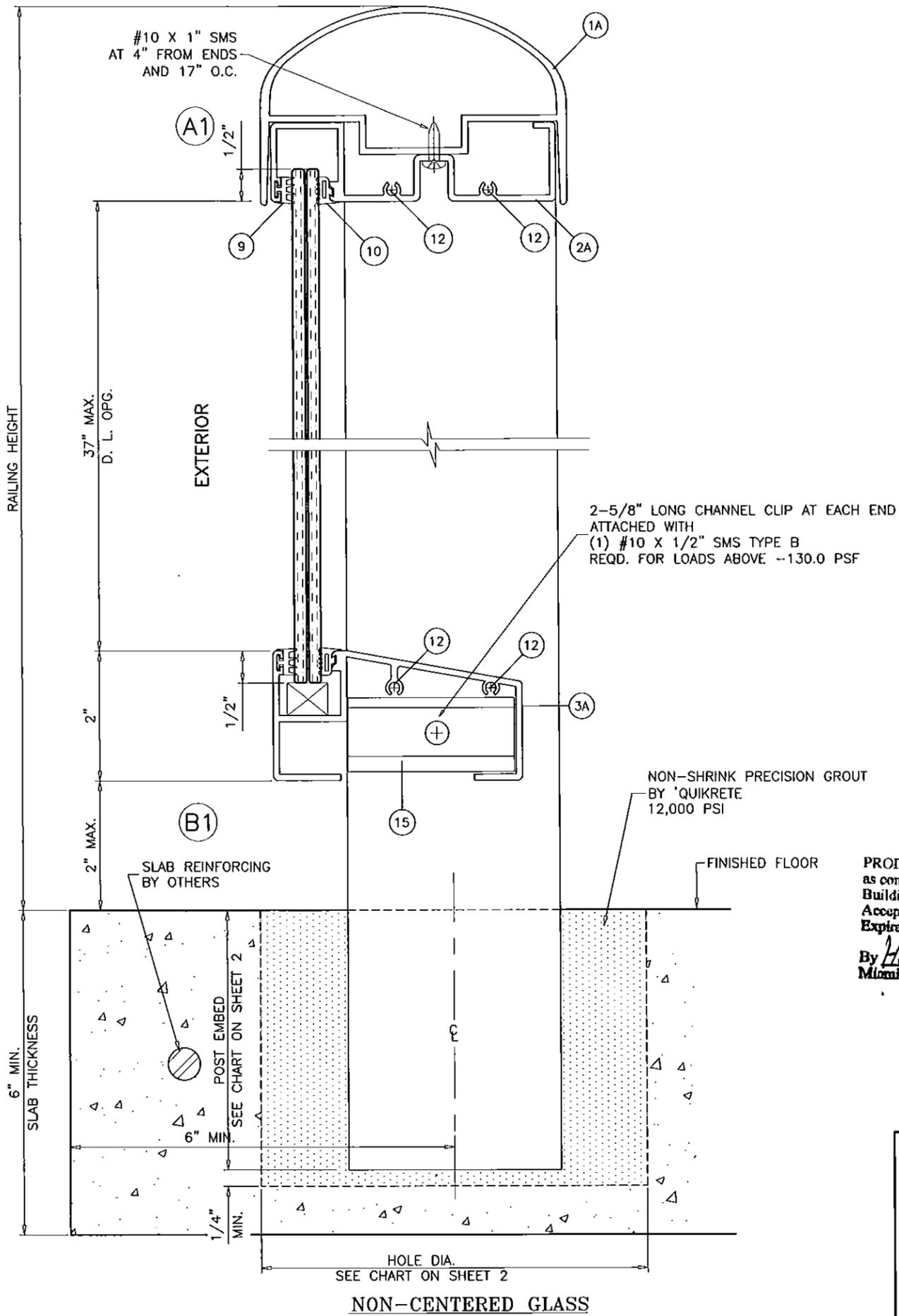
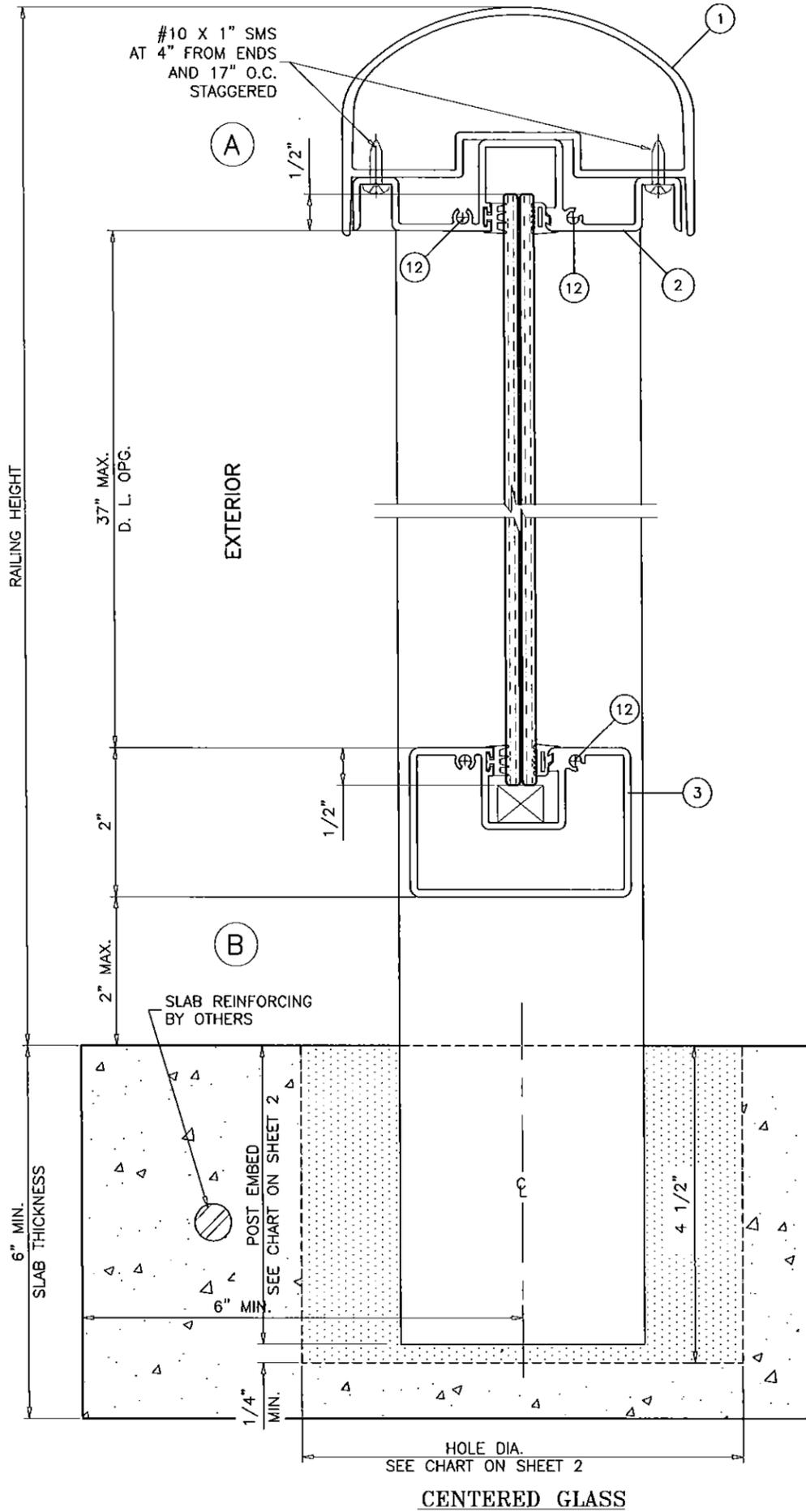
ALUMINUM GLASS RAILING SYSTEM

TITAN GLASS & ALUMINUM, LLC.
450 WEST 27 STREET
HIALEAH, FL. 33010
TEL. (305) 888-0911 FAX. (305) 671-3840

no	date	description	by
A	08.02.10	REV. PER BCCO COMMENTS	
B	09.15.10	REV. PER BCCO COMMENTS	
C	04.20.12	UPDATED TO 2010 FBC	
D	08.18.15	UPDATED TO 2014 FBC	
E	11.16.15	NO CHANGE THIS SHEET	

date: 12-23-09
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
09-09
sheet 2 of 6



PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 15-0902.03
 Expiration Date 11/24/2020
 By *Heidi A. Miller*
 Miami Dade Product Control

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.A.N. 3538
 NOV 20 2015

af c

AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 RAILING\09-09TGA

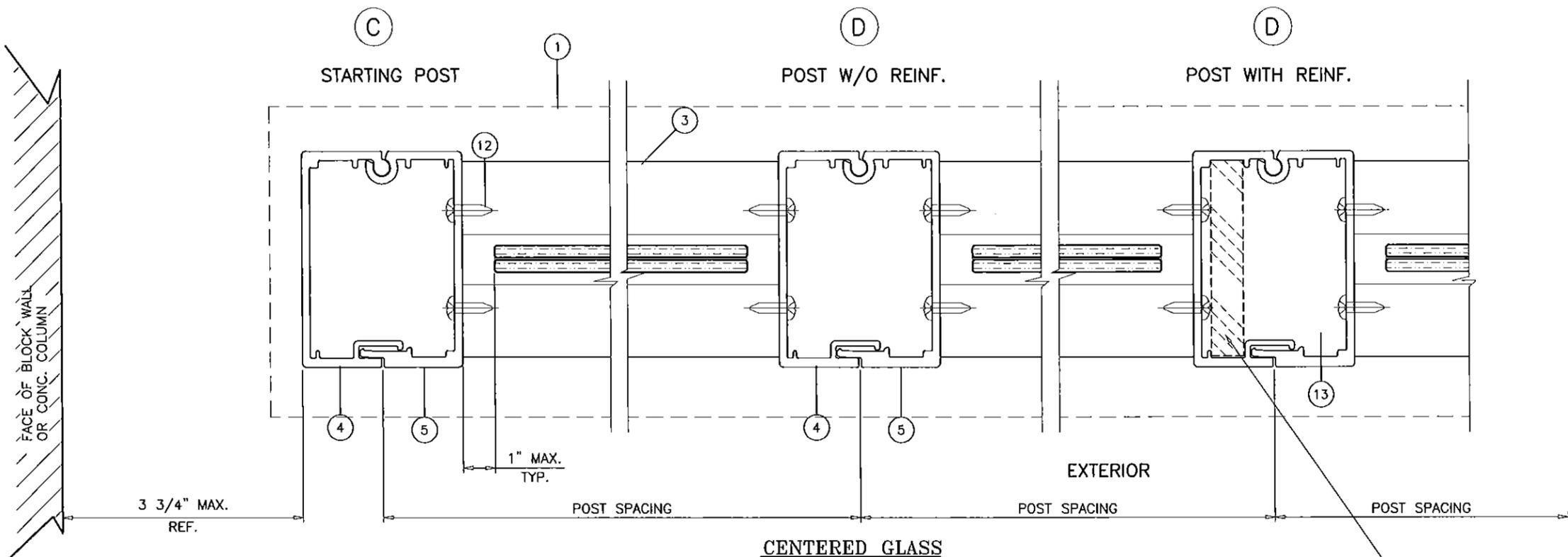
ALUMINUM GLASS RAILING SYSTEM

TITAN GLASS & ALUMINUM, LLC.
 450 WEST 27 STREET
 HIALEAH, FL. 33010
 TEL. (305) 888-0911 FAX. (305) 671-3840

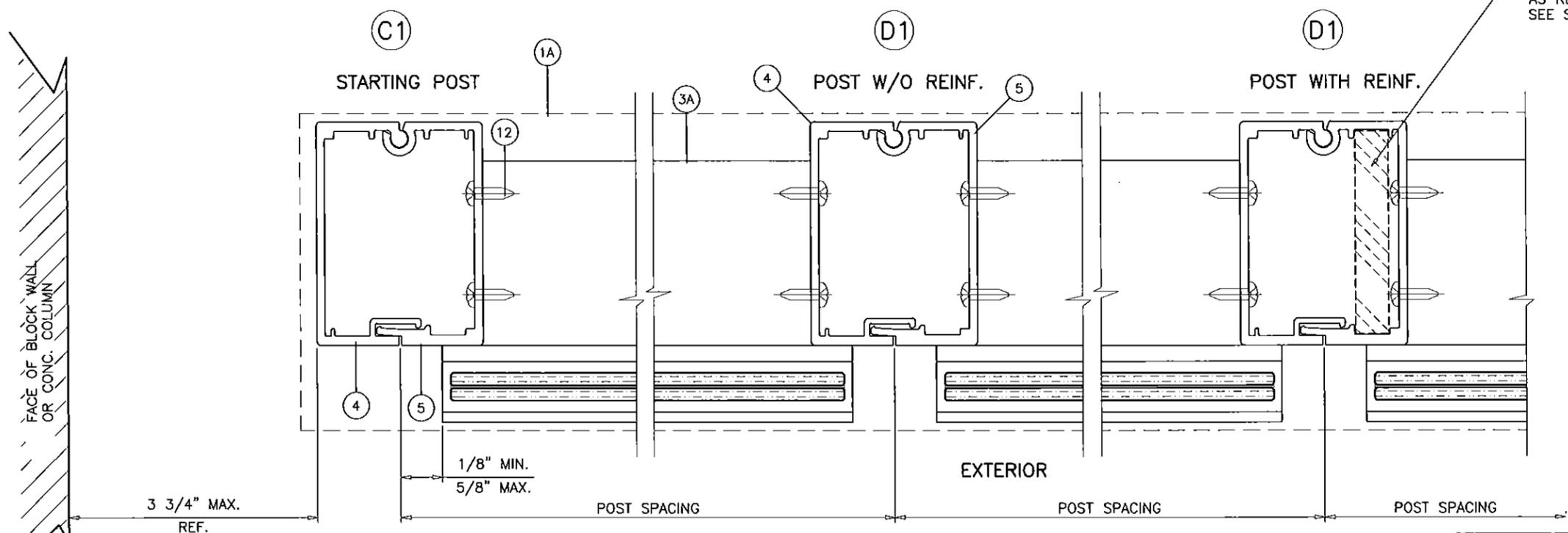
no.	date	by	description
A	08.02.10	REV. PER BCCO COMMENTS	
B	09.15.10	REV. PER BCCO COMMENTS	
C	04.20.12	UPDATED TO 2010 FBC	
D	08.18.15	UPDATED TO 2014 FBC	
E	11.16.15	NO CHANGE THIS SHEET	

date: 12-23-09
 scale: 1/2" = 1"
 dr. by: HAMID
 chk. by:

drawing no. 09-09
 sheet 3 of 6



CENTERED GLASS



NON-CENTERED GLASS

15" LONG POST REINFORCING AS REQD. SEE SHEET 2 FOR CAPACITY

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.A.N. 3638
 NOV 20 2015

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 15-0902.03
 Expiration Date 11/24/2020
 By: *[Signature]*
 Miami Dade Product Control

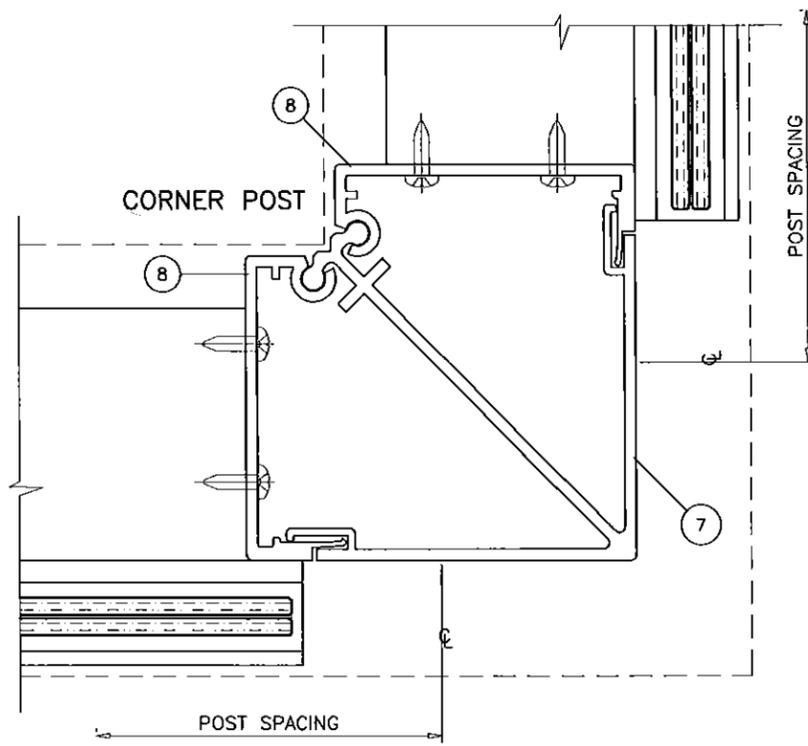
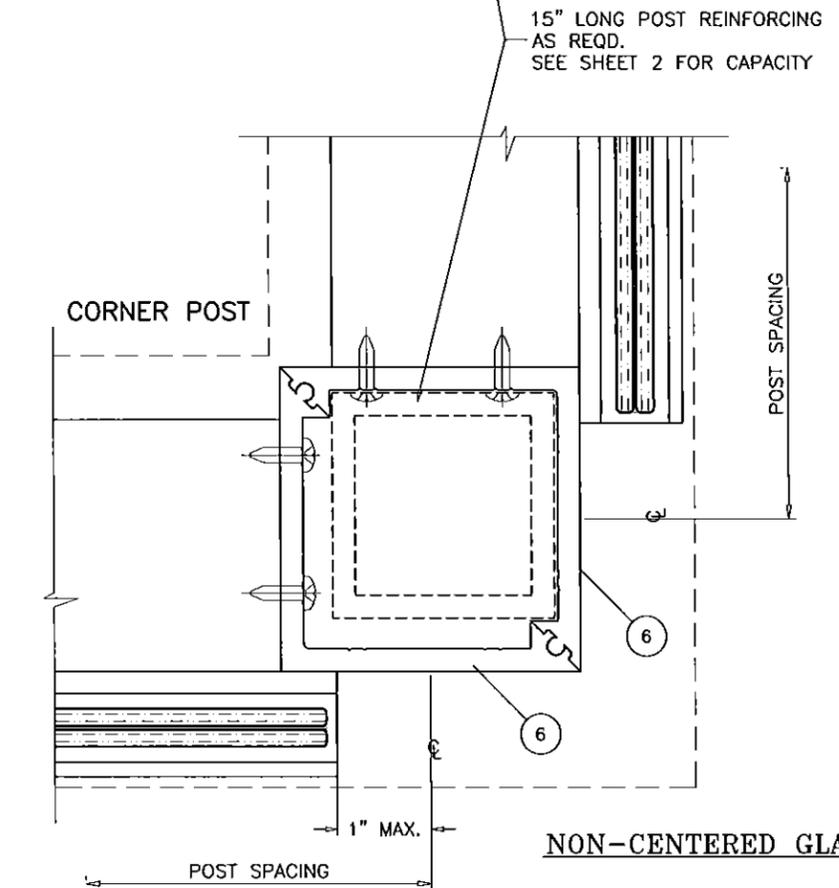
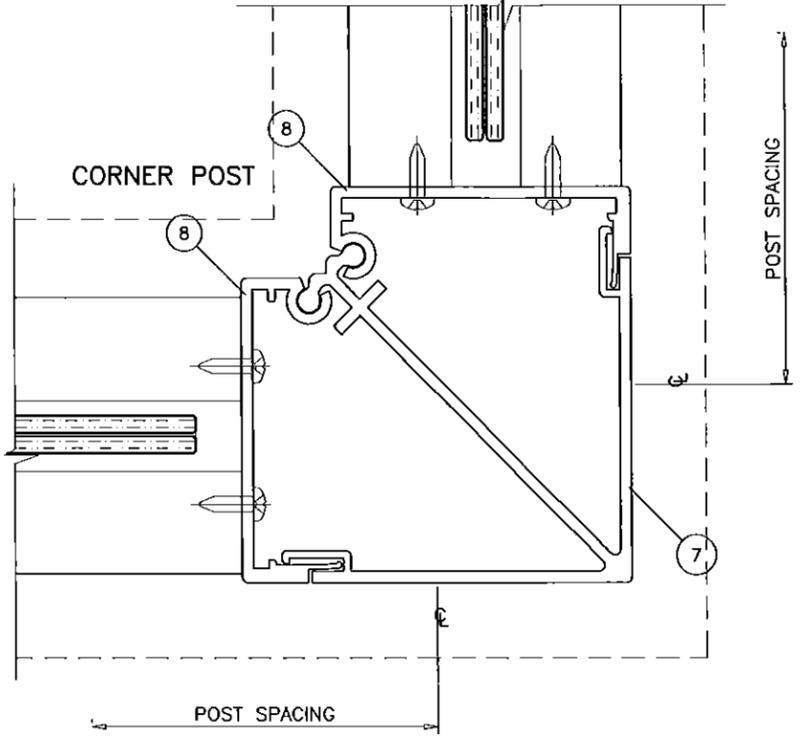
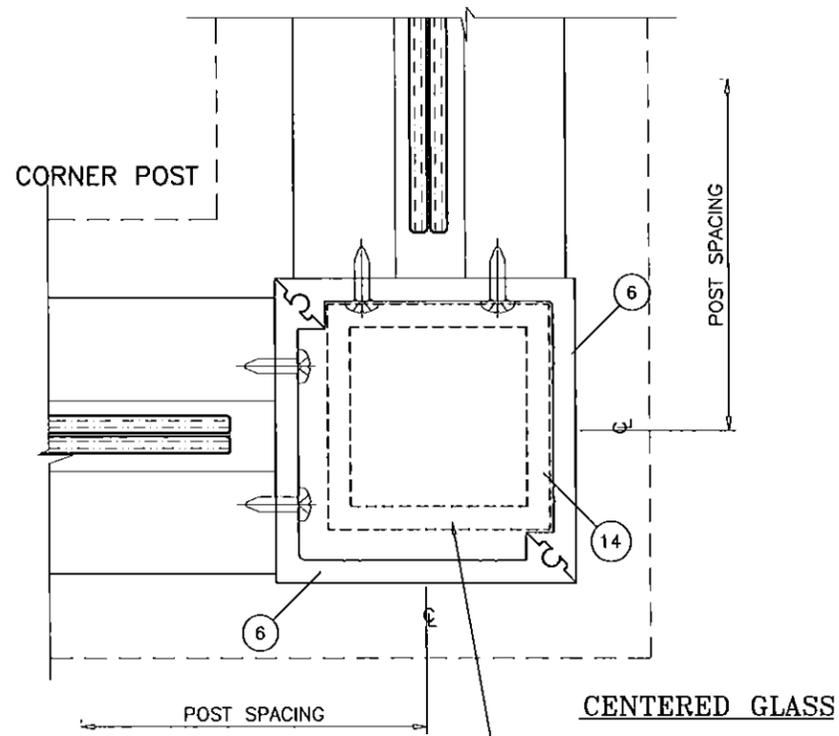
af c
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 RAILING 09-09TGA

ALUMINUM GLASS RAILING SYSTEM
TITAN GLASS & ALUMINUM, LLC.
 450 WEST 27 STREET
 HIALEAH, FL. 33010
 TEL. (305) 888-0911 FAX. (305) 671-3840

no.	date	by	description
A	08.02.10		NO CHANGE THIS SHEET
B	09.15.10		REV. PER BCCO COMMENTS
C	04.20.12		UPDATED TO 2010 FBC
D	08.18.15		UPDATED TO 2014 FBC
E	11.16.15		NO CHANGE THIS SHEET

date: 12-23-09
 scale: 1/2" = 1"
 dr. by: HAMID
 chk. by:

drawing no.
09-09
 sheet 4 of 6



15" LONG POST REINFORCING
AS REQD.
SEE SHEET 2 FOR CAPACITY

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

[Signature]
NOV 20 2015

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0902.03
Expiration Date 11/24/2020

By *[Signature]*
Miami Dade Product Control

af c

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
RAILING 09-09TGA

ALUMINUM GLASS RAILING SYSTEM

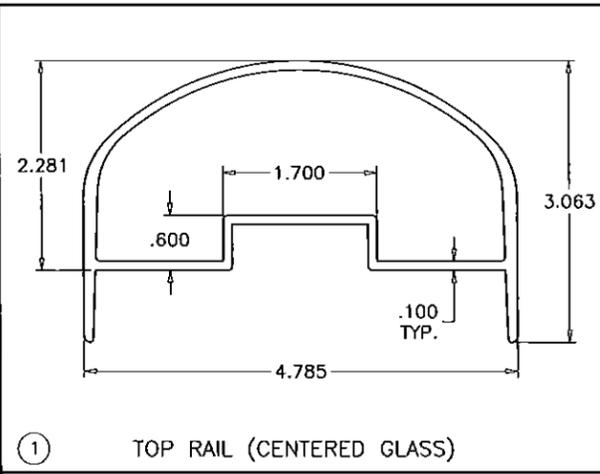
TITAN GLASS & ALUMINUM, LLC.
450 WEST 27 STREET
HIALEAH, FL. 33010
TEL. (305) 888-0911 FAX. (305) 671-3840

no.	date	by	description
A	08.02.10		NO CHANGE THIS SHEET
B	09.15.10		REV. PER BCCO COMMENTS
C	04.20.12		UPDATED TO 2010 FBC
D	08.18.15		UPDATED TO 2014 FBC
E	11.16.15		NO CHANGE THIS SHEET

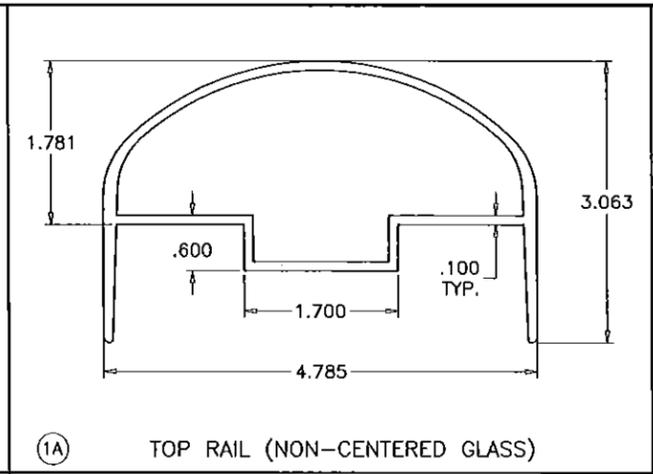
date: 12-23-09
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
09-09

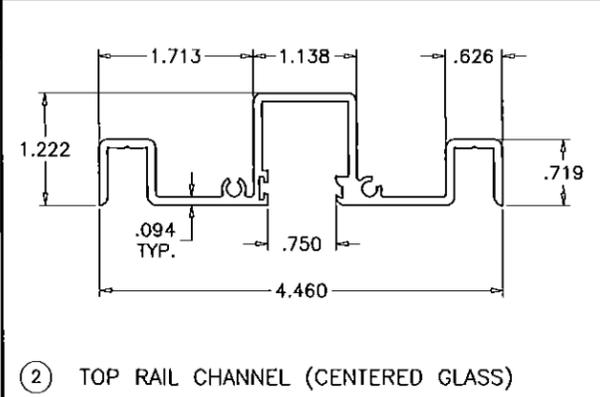
sheet 5 of 6



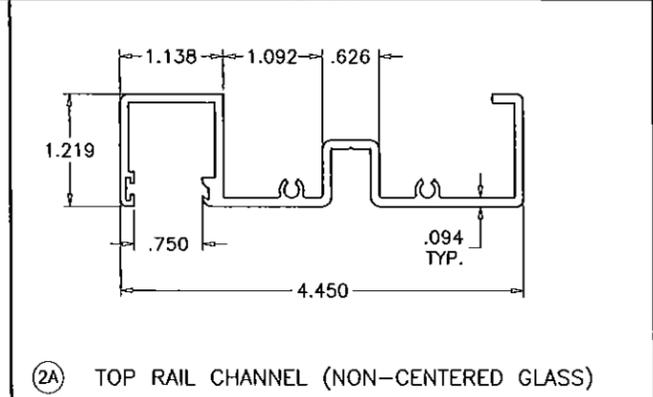
① TOP RAIL (CENTERED GLASS)



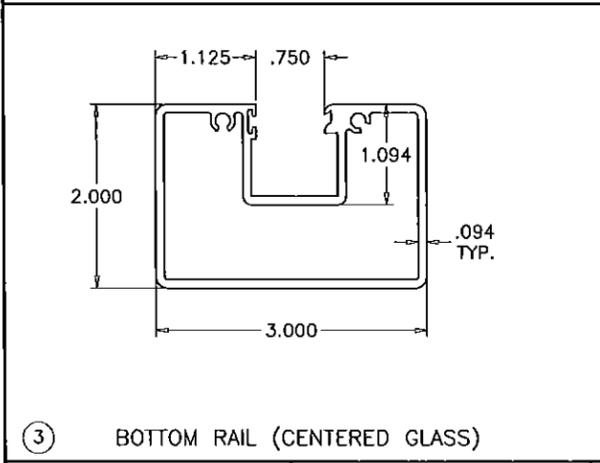
①A TOP RAIL (NON-CENTERED GLASS)



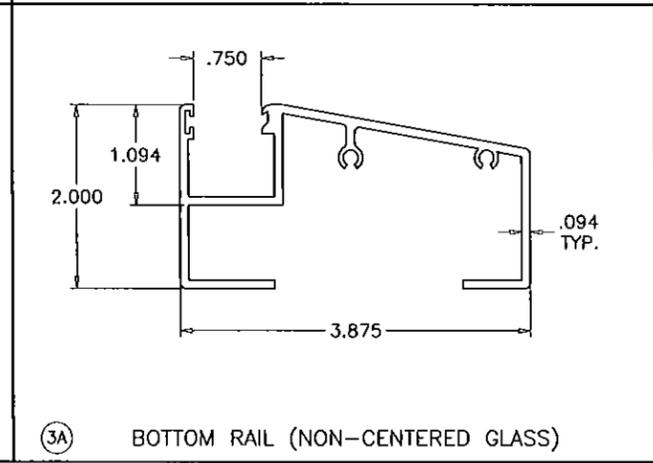
② TOP RAIL CHANNEL (CENTERED GLASS)



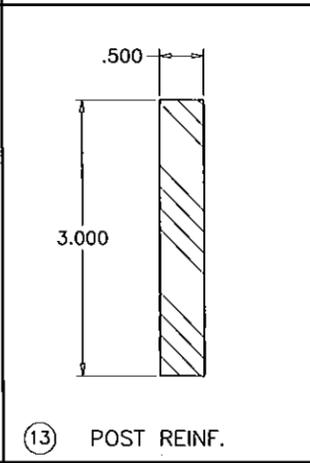
②A TOP RAIL CHANNEL (NON-CENTERED GLASS)



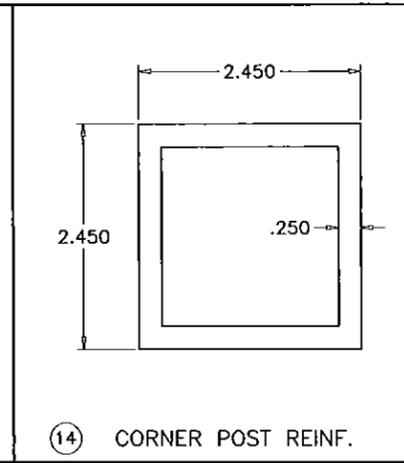
③ BOTTOM RAIL (CENTERED GLASS)



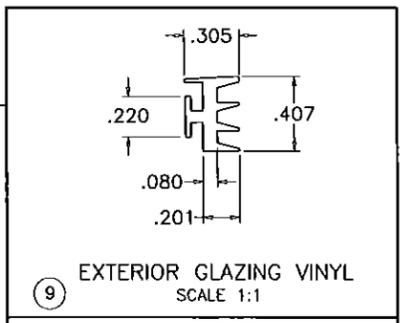
③A BOTTOM RAIL (NON-CENTERED GLASS)



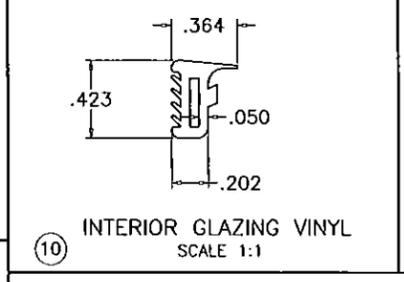
⑬ POST REINF.



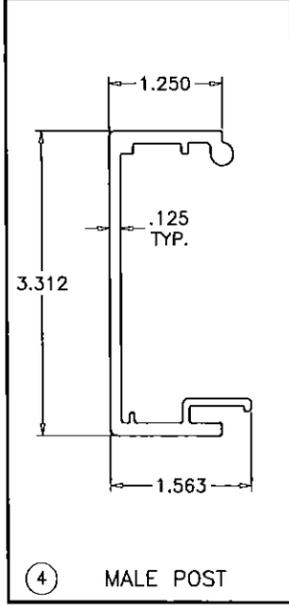
⑭ CORNER POST REINF.



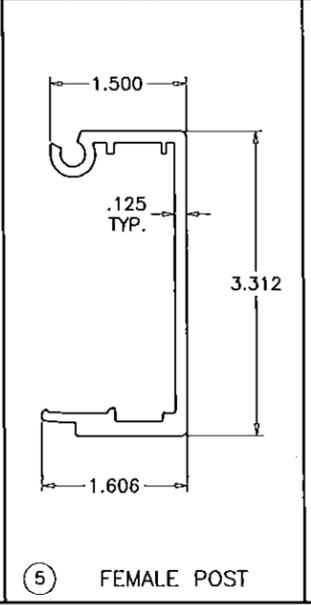
⑨ EXTERIOR GLAZING VINYL
SCALE 1:1



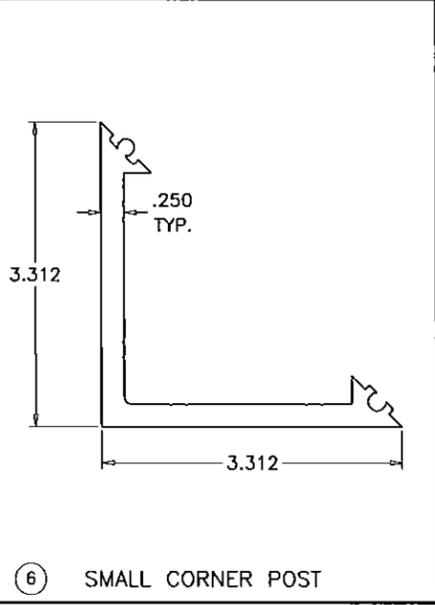
⑩ INTERIOR GLAZING VINYL
SCALE 1:1



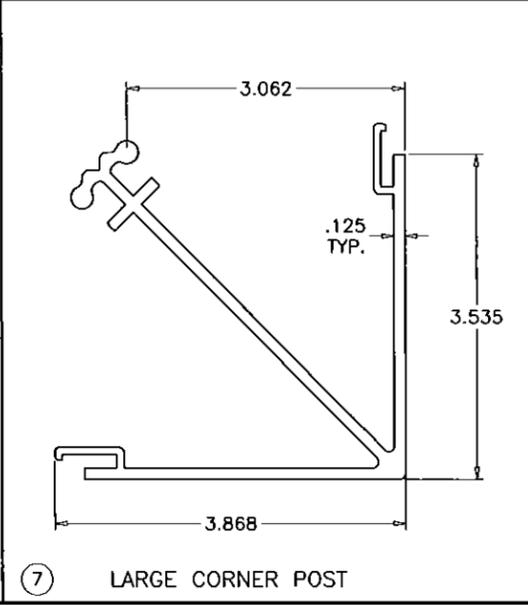
④ MALE POST



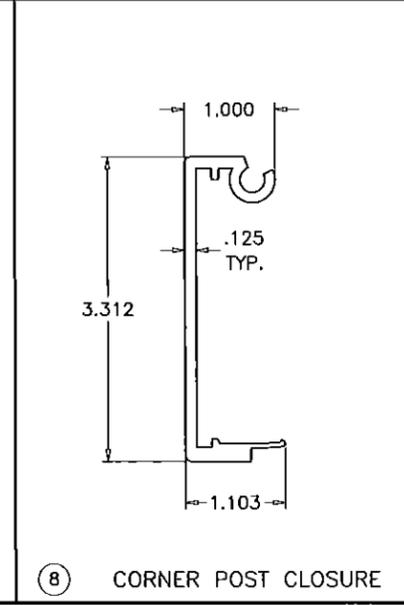
⑤ FEMALE POST



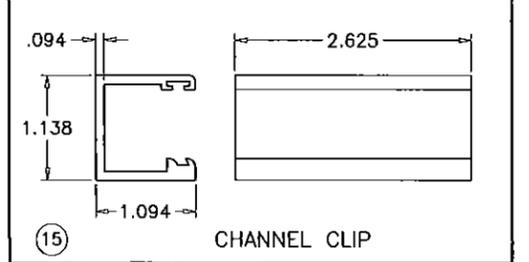
⑥ SMALL CORNER POST



⑦ LARGE CORNER POST



⑧ CORNER POST CLOSURE



⑮ CHANNEL CLIP

ITEM	PART #	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	TGR-10	TOP RAIL CAP (CENTERED GLASS)	6063-T6	-
1A	TGR-105	TOP RAIL CAP (NON-CENTERED GLASS)	6063-T6	-
2	TGR-13	TOP RAIL CHANNEL (CENTERED GLASS)	6063-T6	-
2A	TGR-106	TOP RAIL CHANNEL (NON-CENTERED GLASS)	6063-T6	-
3	TGR-14	BOTTOM RAIL (CENTERED GLASS)	6063-T6	-
3A	TGR-107	BOTTOM RAIL (NON-CENTERED GLASS)	6063-T6	-
4	TGR-101	MALE POST	6061-T6	-
5	TGR-102	FEMALE POST	6061-T6	-
6	TGR-15	SMALL CORNER POST	6061-T6	-
7	TGR-104	LARGE CORNER POST	6061-T6	-
8	TGR-103	CORNER POST CLOSURE	6061-T6	-
9	TGR-108	EXTERIOR GLAZING VINYL, DUROMETER ±65	NEOPRENE	CENTRAL PLASTICS
10	TGR-109	INTERIOR GLAZING VINYL, DUROMETER ±65	NEOPRENE	CENTRAL PLASTICS
11	-	SETTING BLOCKS (1/2" X 5/8" X 3" LONG)	NEOPRENE	2 PER LITE AT 4" FROM ENDS
12	#10 X 1"	ASSEMBLY SCREWS	ST/ST	PH SMS/SDS
13	-	POST REINFORCING BAR	6061-T6	-
14	-	CORNER POST REINFORCING TUBE	6061-T6	-
15	-	CHANNEL CLIP (CUT FROM TGR-107)	6063-T6	-

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

NOV 20 2015

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0902.03
Expiration Date 11/22/2020

By: *[Signature]*
Miami Dade Product Control

afC

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

ALUMINUM GLASS RAILING SYSTEM

TITAN GLASS & ALUMINUM, LLC.
450 WEST 27 STREET
HIALEAH, FL. 33010
TEL. (305) 888-0911 FAX. (305) 671-3840

NO	DATE	BY	DESCRIPTION
A	08.02.10		NO CHANGE THIS SHEET
B	09.15.10		REV. PER BCCO COMMENTS
C	04.20.12		UPDATED TO 2010 FBC
D	08.18.15		UPDATED TO 2014 FBC
E	11.16.15		NO CHANGE THIS SHEET

date: 12-23-09
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
09-09

sheet 6 of 6