

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)

Poma & Sons, Inc. (dba Poma Architectural metals) 2049 S.W. Poma Drive Palm City, Florida 34990

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: Infinity Postless Glass Railing System

APPROVAL DOCUMENT: Drawing No. IGRS 58-1, titled "Infinity Postless Glass Railing System", sheets 1 through 16 of 16, prepared by Poma & Sons, Inc., dated February 2018, last revised on 10/31/24, signed and sealed by Timothy C. Boudah, P.E., on 10/31/24, bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number & 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, city, state 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 NOA #23-0216.02 and consists of this page 1, evidence submitted pages E-1, E-2 and E-3 as well as approval document mentioned above.

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

MIAMI-DADE COUNTY
APPROVED

Hely A. Melo

NOA No. 24-1203.05 Expiration Date: 04/26/2028 Approval Date: 12/26/2024

Page 1

Poma & Sons, Inc. (dba Poma Architectural metals)

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #18-0312.03

A. DRAWINGS

1. Drawing No. IGRS 58-1, titled "Infinity Postless Glass Railing System", sheets 1 through 16 of 16, prepared by Poma & Sons, Inc., dated February 2018, signed and sealed by Timothy C. Boudah, P.E., on March 06, 2018.

B. TESTS

- 1. Test Report No. **BT-AE-17-001B**, by Blackwater Testing, Inc., dated August 01, 2017, signed and sealed by Constantin Bortes, P.E., testing Infinity Postless Glass Railing System for concentrated and distributed loads per FBC 1618.4.6, Impacts per ANSI Z97.1, Static Wind Load per TAS 202-94 and Large Missile Impact per TAS 201-94.
- 2. Test Report No. **BT-AE-17-001C**, by Blackwater Testing, Inc., dated August 01, 2017, signed and sealed by Constantin Bortes, P.E., testing Infinity Postless Glass Railing System for concentrated and distributed loads per FBC 1618.4.6, Impacts per ANSI Z97.1, Static Wind Load per TAS 202-94 and Large Missile Impact per TAS 201-94.

C. CALCULATIONS

1. Calculation titled "Infinity Postless Glass Railing System", 103 pages, prepared by Timothy C. Boudah, P.E., dated February 2018, signed and sealed by Timothy C. Boudah, P.E., on March 06, 2018.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Florida Building Code, 2014 Edition and 2017 Edition Compliance Letter prepared by Timothy C. Boudah, P.E., dated March 06, 2018, signed and sealed by Timothy C. Boudah, P.E., on March 06, 2018.

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #21-0219.07

A. DRAWINGS

1. Drawing No. IGRS 58-1, titled "Infinity Postless Glass Railing System", sheets 1 through 16 of 16, prepared by Poma & Sons, Inc., dated February 2018, signed and sealed by Timothy C. Boudah, P.E., on April 25, 2022.

B. TESTS

1. None.

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

NOA No. 24-1203.05

Expiration Date: 04/26/2028 Approval Date: 12/26/2024

Poma & Sons, Inc. (dba Poma Architectural metals)

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. Calculation titled "Infinity Postless Glass Railing System", 103 pages, prepared by Timothy C. Boudah, P.E., dated April 25, 2022, signed and sealed by Timothy C. Boudah, P.E., on April 25, 2022.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Florida Building Code, 2020 Edition Compliance Letter prepared by Timothy C. Boudah, P.E., dated April 25, 2022, signed and sealed by Timothy C. Boudah, P.E., on April 25, 2022.

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #23-0216.02

A. DRAWINGS

1. None.

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.

F. STATEMENTS

1. Florida Building Code, 2020 Edition Compliance Letter prepared by Timothy C. Boudah, P.E., dated April 25, 2022, signed and sealed by Timothy C. Boudah, P.E., on April 25, 2022.

4. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. IGRS 58-1, titled "Infinity Postless Glass Railing System", sheets 1 through 16 of 16, prepared by Poma & Sons, Inc., dated February 2018, last revised on 10/31/24, signed and sealed by Timothy C. Boudah, P.E., on 10/31/24.

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

NOA No. 24-1203.05

Expiration Date: 04/26/2028 Approval Date: 12/26/2024

Poma & Sons, Inc. (dba Poma Architectural metals)

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 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.
- F. STATEMENTS
 - 1. Florida Building Code, 2023 Edition Compliance Letter prepared by Timothy C. Boudah, P.E., dated Oct. 31, 2024, signed and sealed by Timothy C. Boudah, P.E., on Oct. 31, 2024.

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

NOA No. 24-1203.05

Expiration Date: 04/26/2028 Approval Date: 12/26/2024

MANUFACTURED BY:



POMA ARCHITECTURAL METALS

INFINITY

Postless Glass Railing System
TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PRODUCT CONTROL REQUIREMENTS

MAXIMUM ALLOWABLE WIND DESIGN PRESSURE:
DRY GLAZED = +115 PSF & -115 PSF
WET GLAZED = +120 PSF & -120 PSF

GENERAL NOTES:

MATERIALS

- A. ALUMINUM FRAMING ELEMENTS TO CONSIST OF ALLOY 6061, 6005, 6063 (TEMPER T5 OR T6) & 5052 WITH MINIMUM MECHANICAL PROPERTIES SPECIFIED IN TABLE A.4.3 OF THE 2020 ALUMINUM DESIGN MANUAL AS PUBLISHED BY THE ALUMINUM ASSOCIATION, INC., ARLINGTON, VIRGINIA.
- B. MECHANICAL FASTENERS TO BE TYPE 304, 316 OR 410 STAINLESS STEEL UNLESS OTHERWISE NOTED.
- C. WELD FILLER ALLOYS SHALL MEET AWS A5.10 STANDARDS, AND AS A MINIMUM, SHALL CONSIST OF ALUMINUM ALLOY 4043 or 5356 (100% Ar) PER AWS D1.2 TABLE 4.2.

ALUMINUM FINISHES:

A DRETREATMENT

(6) STAGE NON-ALKALINE PRETREATMENT SYSTEM WITH AMORPHOUS CHROME PHOSPHATE CONVERSION COATING; 40-90 MG PER FT2

- B. PAINT SYSTEM: CUSTOMER SELECTION OF ONE OF THE FOLLOWING:
 - 1. E.S.P. APPLIED SINGLE COAT SUPER-DURABLE POLYESTER POWDER COAT- MEETS AAMA 2604
 - 2. E.S.P. APPLIED SINGLE COAT HIGH PERFORMANCE FLUOROPOLYMER POWDER COAT- MEETS AAMA 2605
 - 3. E.S.P. APPLIED (2) COAT HIGH PERFORMANCE FLUOROPOLYMER POWDER COAT- EXCEEDS AAMA 2605
 - 4. E.S.P. APPLIED (3) COAT HIGH PERFORMANCE 70% PVDF LIQUID COATING SYSTEM-EXCEEDS AAMA 2605
- C. COLOR: CUSTOMER CHOICE OF STANDARD AVAILABLE COLORS

POMA AND ITS' AFFILIATED COMPANIES ARE APPROVED APPLICATORS FOR THE FOLLOWING COATING MANUFACTURERS:

- A. PPG INDUSTRIE
- B. IFS COATINGS
- C. SHERWIN WILLIAMS
- D. NORTEK POWDER COATINGS
- E. TIGER DRYLAC POWDER COATINGS

CONSTRUCTION:

SHOP FABRICATION AND ASSEMBLY SHALL BE DONE IN ACCORDANCE WITH POMA STANDARDS WITH THE DETAILS SPECIFICALLY AS SHOWN AND NOTED ON THESE DRAWINGS. SHOP CONNECTIONS SHALL BE DONE IN A NEAT, WORKMANLIKE MANNER UTILIZING THE MIG AND/OR TIG WELDING PROCESSES. EXPOSED WELDS WILL REMAIN UNFINISHED UNLESS NOTED OTHERWISE IN THESE DRAWINGS. ANY WELDS NOT SPECIFICALLY SHOWN OR NOTED WILL BE SIZED AND LOCATED BY POMA TO ENSURE PROPER FABRICATION. ALL COMPONENTS SHALL BE FIRMLY ATTACHED TO ONE ANOTHER TO ASSURE FIXED FASTENING FOR THE LIFE OF THE PRODUCT(S). CORNERS SHALL BE HAIRLINE FITTED AND/OR WELDED TO INSURE MAXIMUM STRENGTH DURING USAGE.

NOTE: THE DESIGN OF CERTAIN FACTORY COATED ARCHITECTURAL PRODUCTS MAY REQUIRE THE PLACEMENT OF WEEP HOLES TO PROPERLY EXHAUST PRETREATMENT CHEMICALS USED DURING THE COATING PROCESS. THESE WEEP HOLES SHALL BE LOCATED & SIZED ACCORDINGLY BY POMA DURING THE FABRICATION PROCESSES, AND TO THE EXTENT POSSIBLE, SHALL BE STRATEGICALLY PLACED IN AN INCONSPICUOUS LOCATION. CERTAIN DESIGN LIMITATIONS DO EXIST THAT MAY PREVENT WEEP HOLES FROM BEING CONCEALED FROM NORMAL VIEW. TYPICAL WEEP HOLE SIZE IS 1/4" DIA. BUT IN ANY INSTANCE SHALL NOT EXCEED 1/2".

DELIVERY

DELIVER AND STORE ALL PRODUCT(S) IN A DRY AND SAFE LOCATION IN CLOSE PROXIMITY TO STAGING AREA DESIGNATED AND PROVIDED BY THE GENERAL CONTRACTOR OR OWNER. HANDLE PRODUCT(S) WITH EXTREME CARE TO AVOID MARRING OF THE FINISHED PRODUCT.

INSTALLATION

- 1. PRODUCT(S) SHOULD BE INSTALLED FROM THE TOP FLOOR DOWN WHEN POSSIBLE AND ONLY WHEN ALL MASONRY WORK AND PAINTING IS COMPLETED.
- 2. INSTALL INFINITY BOTTOM BASE RAIL WITH EITHER POMA'S STAINLESS STEEL ANCHOR PIN ASSEMBLY CONSISTING OF 1-1/8" Ø ANCHOR PIN INSTALLED BY MEANS OF SLEEVING, HAMMER DRILLING OR CORE-DRILLING A 1-1/2" MINIMUM TO 4" MAXIMUM DIAMETER HOLE, OR WITH POMA'S 1/2" Ø T-BOLT ANCHOR ASSEMBLY INSTALLED BY MEANS OF HAMMER DRILLED HOLES AT 5/8" MINIMUM TO 1" MAXIMUM DIAMETER. THESE ANCHORING SYSTEMS SHALL BE INSTALLED AS DETAILED AND NOTED IN THESE DRAWINGS USING EPOXY ADHESIVE OR GROUT ANCHORING PRODUCTS AS SPECIFIED IN THESE DRAWINGS, OR ADHESIVE ANCHORING PRODUCTS WHICH HAVE A BOND CHARACTERISTIC VALUE DETERMINED BY PRODUCT TESTING, IN CONFORMANCE WITH ASTM E488, OR PUBLISHED ANCHOR PRODUCT MANUFACTURER'S TEST DATA, PERFORMED IN ACCORDANCE WITH ACI 355.4.
- 3. FIELD SPLICE LOCATIONS OF PRODUCT(S) COMPONENTS SHALL BE DETERMINED BY POMA TO BEST ACCOMMODATE FABRICATION, PAINTING, SHIPPING AND SITE SPECIFIC INSTALLATION. FIELD SPLICES SHALL BE ACCOMPLISHED BY BUTTING ONE MEMBER OF ONE SECTION TO ANOTHER, USING AN INTERIOR/EXTERIOR SLEEVE INSERT OR CONCEALED/EXPOSED CONNECTION TAB OR ANGLE AND FURTHER SECURED BY MEANS OF STAINLESS STEEL FASTENERS, OR NON FERROUS, SELF EXPANDING RIVETS. IT SHOULD BE NOTED THAT, ALTHOUGH ALL FIELD SPLICES WILL BE DONE IN A WORKMANLIKE MANNER, THESE JOINTS MAY BE VISIBLE UPON COMPLETION AND MAY ALSO REQUIRE A MIN. GAP OF 1/8" PER TWENTY FOOT SECTION OF EACH MEMBER, TO ALLOW FOR EXPANSION AND CONTRACTION OF PRODUCT(S) AND/OR STRUCTURE.

NOTE: THE INSTALLING CONTRACTOR SHALL BE RESPONSIBLE TO APPLY A SUITABLE ISOLATION MATERIAL TO ALL ALUMINUM SURFACES THAT MAY CONTACT DISSIMILAR METALS OR LIME-MORTAR, CONCRETE OR OTHER MASONRY MATERIALS. SUITABLE PRODUCTS INCLUDE: HEAVY BODIED BITUMINOUS PAINT, METHACRYLATE LACQUER OR NEOPRENE ISOLATION SHIMS, TAPES OR GASKETS AND HIGH GRADE TWO PART EPOXY ADHESIVES.

HOST STRUCTURE QUALIFICATION NOTES:

 THE PROJECT ENGINEER OF RECORD AND GENERAL CONTRACTOR ARE RESPONSIBLE FOR PROPER DESIGNING AND CONSTRUCTION OF SUITABLE SUBSTRATE FOR ATTACHMENT OF SYSTEMS.

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WET GLAZED-T BOLT SYSTEM PLAN & ELEVATION
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ANCHOR PIN SYSTEM RAILING SECTION DETAIL

SUPPLEMENTAL RAILING ASSEMBLY COMPONENTS

ANCHOR PIN ANCHOR SYSTEM-EXPLODED ISOMETRIC VIEW

T BOLT ANCHOR SYSTEM-EXPLODED ISOMETRIC VIEW

ANCHOR PIN ANCHORING SYSTEM SPACING TABLE

ANCHOR PIN ANCHORING SYSTEM SPACING TABLE

T BOLT ANCHORING SYSTEM SPACING TABLE

T BOLT ANCHORING SYSTEM SPACING TABLE

DRY GLAZED-ANCHOR PIN SYSTEM PLAN & ELEVATION

SHT. NO SHEET TITLE

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GENERAL NOTES

- 2. FOR EXISTING STRUCTURES IT IS ASSUMED THAT THE THE PROJECT ENGINEER OF RECORD AND GENERAL CONTRACTOR HAVE VERIFIED THE EXISTING HOST STRUCTURE HAS BEEN DESIGNED AND CONSTRUCTED TO SAFELY SUPPORT THE LOADS IMPOSED BY THE INFINITY (POSTLESS)
- 3. IT IS RECOMMENDED THAT THE PROJECT ENGINEER OF RECORD AND GENERAL CONTRACTOR REVIEW AS-BUILT CONSTRUCTION RECORDS FOR THE EXISTING HOST STRUCTURE AND/OR VERIFY EXISTING CONCRETE SLABS ARE PROVIDED WITH ADEQUATE REINFORCEMENTS TO SUPPORT IMPOSED RAILING SYSTEM LOADS.
- 4. FOR EXISTING STRUCTURES POMA RECOMMENDS THAT IN-SITU CONCRETE SAMPLING AND CORE TESTS BE PERFORMED BY LICENSED CONCRETE TESTING FIRM, TO DETERMINE ACTUAL CONCRETE COMPRESSIVE STRENGTH OF EXISTING CONCRETE BALCONY SLABS.
- 5. SEE TABLES ON SHEETS 13 THRU 16 FOR MINIMUM CONCRETE COMPRESSIVE STRENGTH (F'c) REQUIREMENTS FOR INFINITY GRS INSTALLED FOR BALCONY GUARDRAIL/RAILING WITHIN DESIGNATED WIND DESIGN PRESSURE LIMITS.

CLEANING AND PROTECTION:

- ON DELIVERY ALL PRODUCT(S) WILL HAVE A PROTECTIVE COVERING OVER THE TOP HANDRAIL CAP ONLY. IMMEDIATELY UPON COMPLETION OF INSTALLATION OF RAILING FRAME, INSTALLER SHALL REMOVE PROTECTIVE COVER.
- 2. AFTER INSTALLATION GENERAL CONTRACTOR OR OWNER SHALL BE RESPONSIBLE FOR PROTECTING PRODUCT(S) DURING BALANCE OF
- 3. PAINTED ALUMINUM SURFACES SHALL BE CLEANED WITH PLAIN WATER CONTAINING A MILD SOAP OR DETERGENT. NO ABRASIVE AGENTS OR HARSH CHEMICALS ARE TO BE USED. (NOTE: ALL FACTORY COATED MATERIALS REQUIRE PERIODIC MAINTENANCE ESPECIALLY THOSE SUBJECT TO OCEAN SALT AIR OR HARMFUL CHEMICAL ENVIRONMENTS (WITHIN 1 MILE), WHICH REQUIRE WASHING A MINIMUM OF ONCE EVERY (3) MONTHS. APPLICATION OF AN APPROVED UV PROTECTANT AFTER WASHING IS RECOMMENDED-REFER TO AAMA 609 & 610; CLEANING AND MAINTENANCE GUIDE FOR ARCHITECTURALLY FINISHED ALUMINUM.

APPLICABLE GOVERNING BUILDING CODES: 1 2

- THE INFINITY GUARDRAIL/RAILING COMPONENTS SPECIFIED AND SHOWN IN THIS PRODUCT APPROVAL DOCUMENT ARE SHOP FABRICATED AND ASSEMBLED TO WITHSTAND LOADS REQUIRED BY THE 8TH EDITION 2023 FLORIDA BUILDING CODE-BUILDING, AS THEY PERTAIN TO VARIOUS RAILING AND GUARDRAIL LIVE LOAD CONDITIONS CONSISTENT WITH SECTION 1607.8.1, WITH APPLICABLE SAFETY FACTOR PRESCRIBED BY SECTION 2407.1.1.
- CONSISTENT WITH THE 8TH EDITION 2023 FLORIDA BUILDING CODE-BUILDING, SECTION 1618.4.6.3, HVHZ SPECIAL LOAD CONSIDERATIONS, THE INFINITY (POSTLESS) GLASS RAILING SYSTEM CAPACITY HAS BEEN TESTED AT TWO TIMES (2x) THE DESIGNATED MAXIMUM DESIGN WIND PRESSURE (AS REQUIRED BY MIAMI-DADE BCCO CHECKLIST #0460) BY PRODUCT TESTING PERFORMED BY BLACKWATER TESTING, INC. (TEST REPORT No. BT-AE-17-001B, AND TEST REPORT No. BT-AE-17-001C), IN CONFORMANCE WITH TEST APPLICATION STANDARD TAS 202, ALONG WITH GLAZING DYNAMIC IMPACT TESTS CONFORMING TO ANSI Z97.1, TEST CATEGORY CLASS A STANDARDS, CONSISTENT WITH 2023 FBC-B SECTION 2406.4.4, AND SECTION 2407.1.

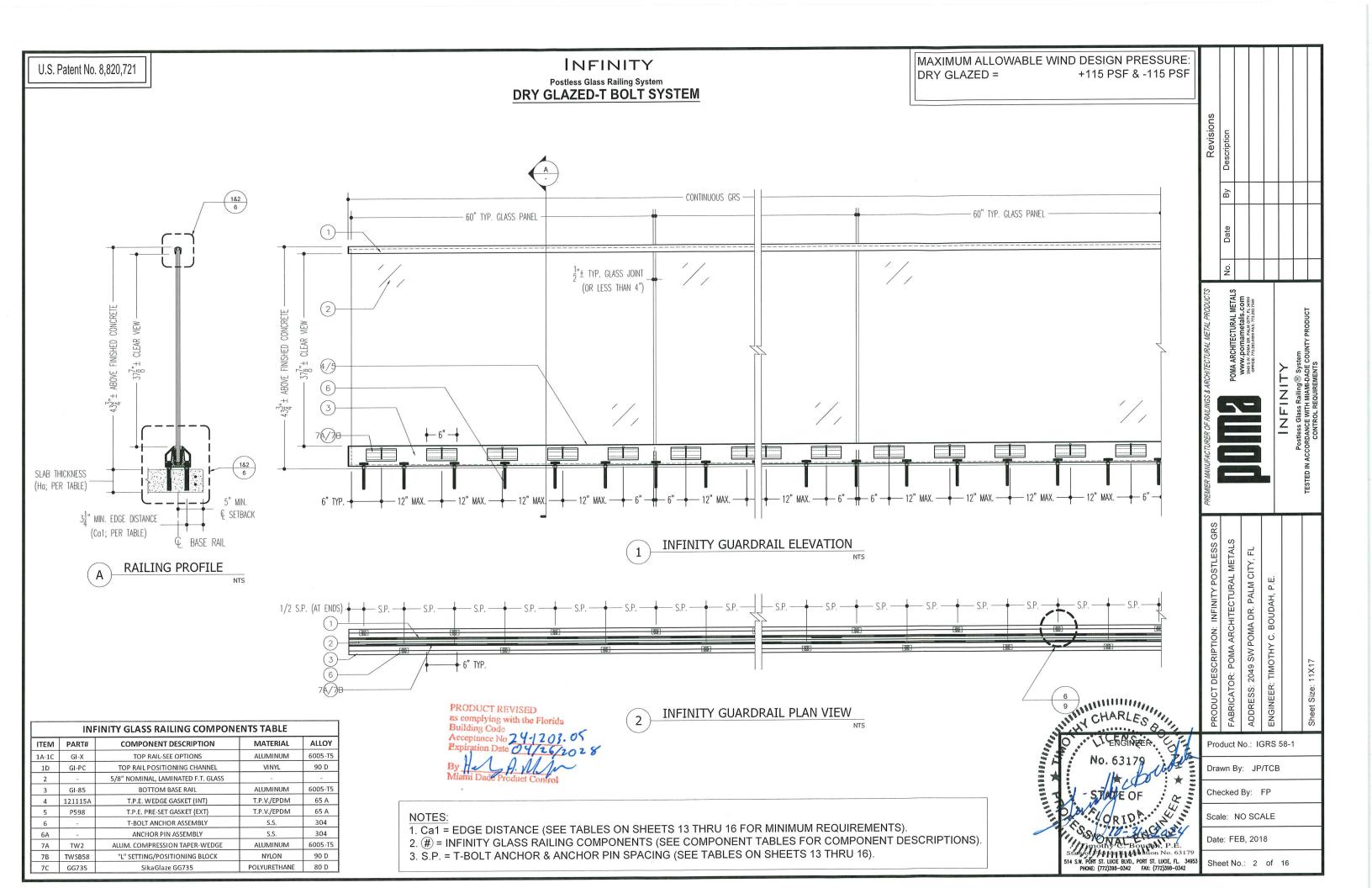
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 24-1203.05
Expiration Date 04/26/202
By Address Product Control

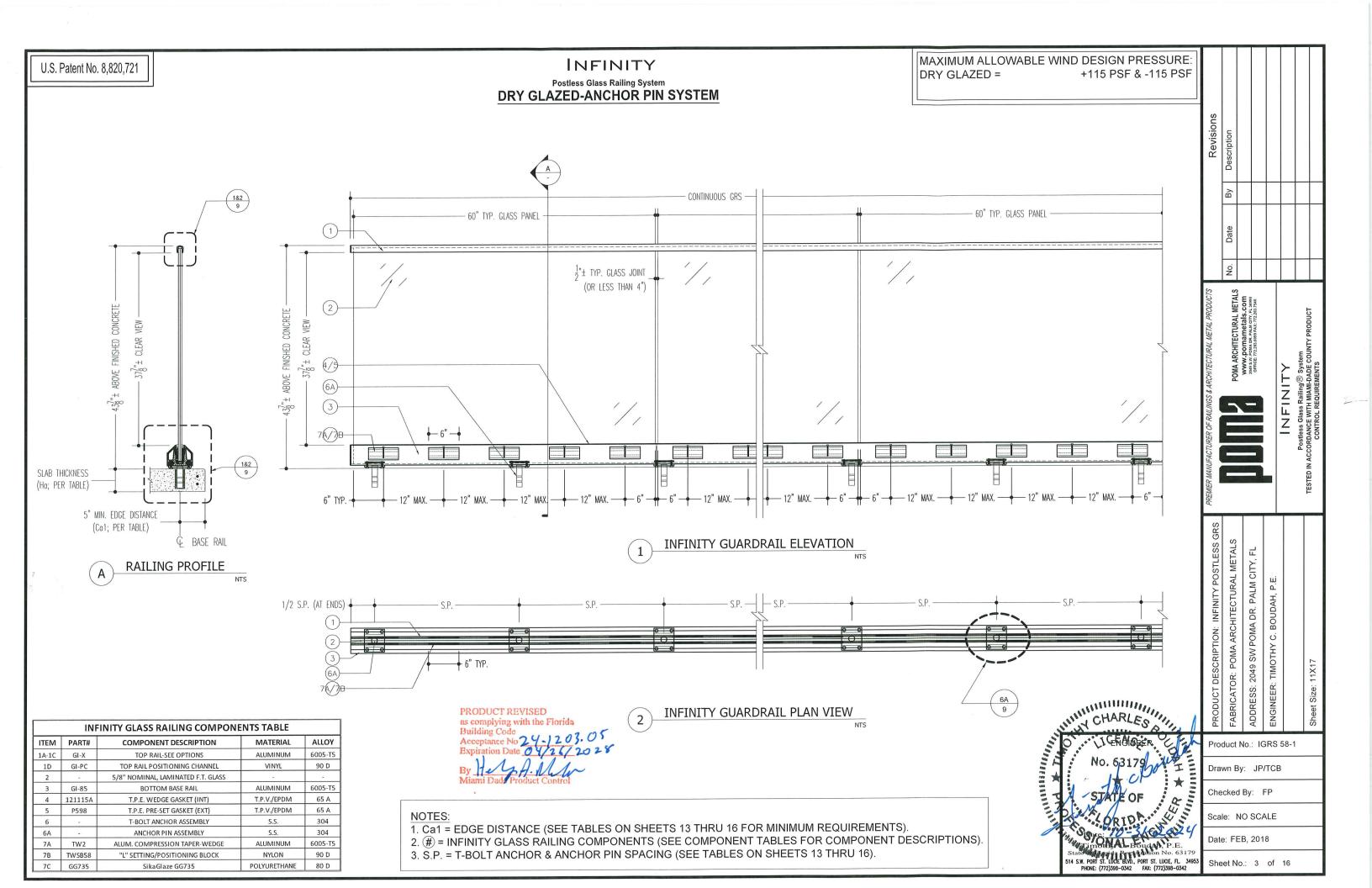
L FINITY POMA ARCHITECTURAL METALS . PALM CITY, SW POMA DR. S 2049 -ABRICATOR: Product No.: IGRS 58-1 Drawn Bv: JP/TCB Checked By: FP Scale: NO SCALE Date: FEB, 2018

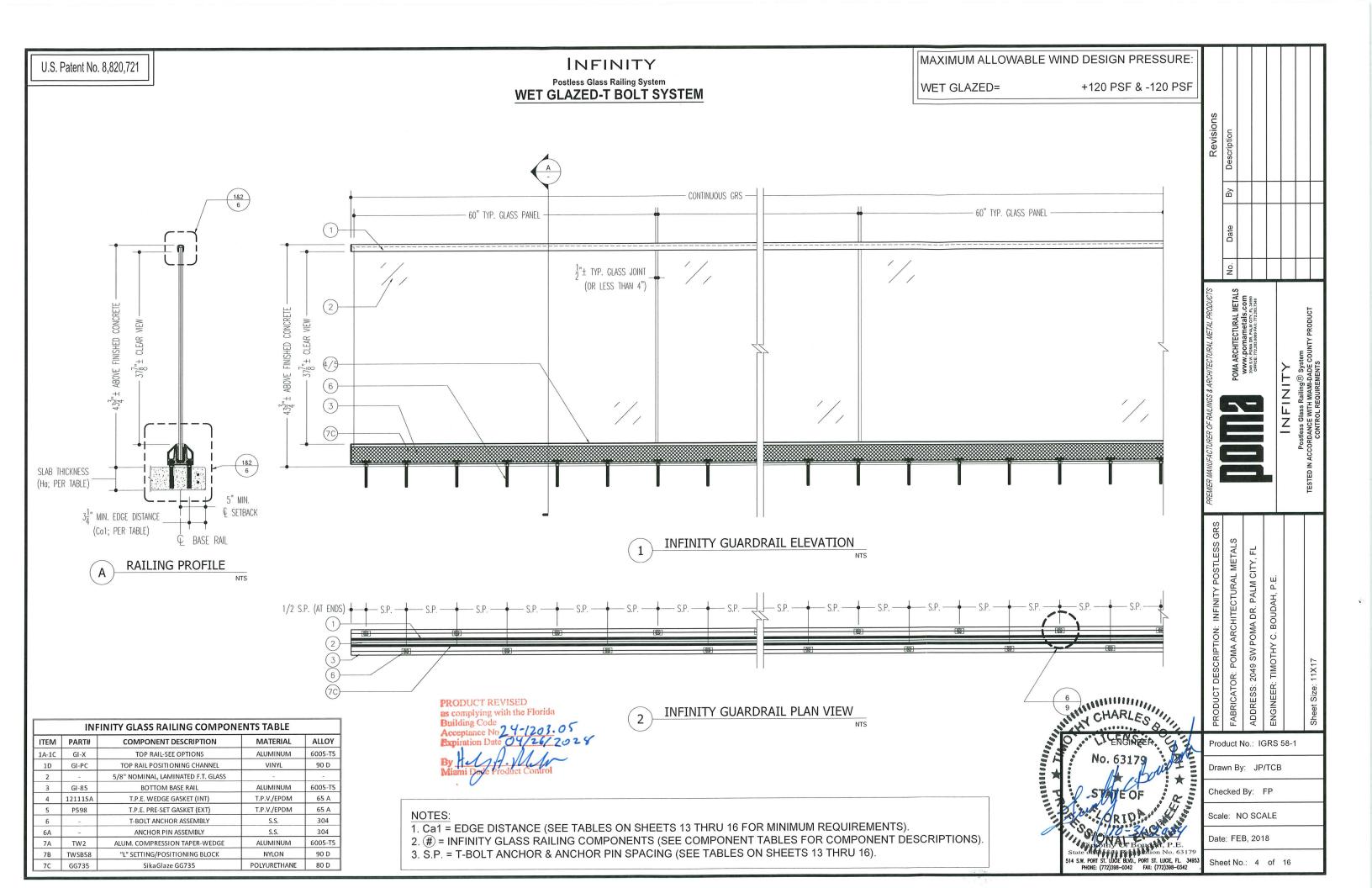
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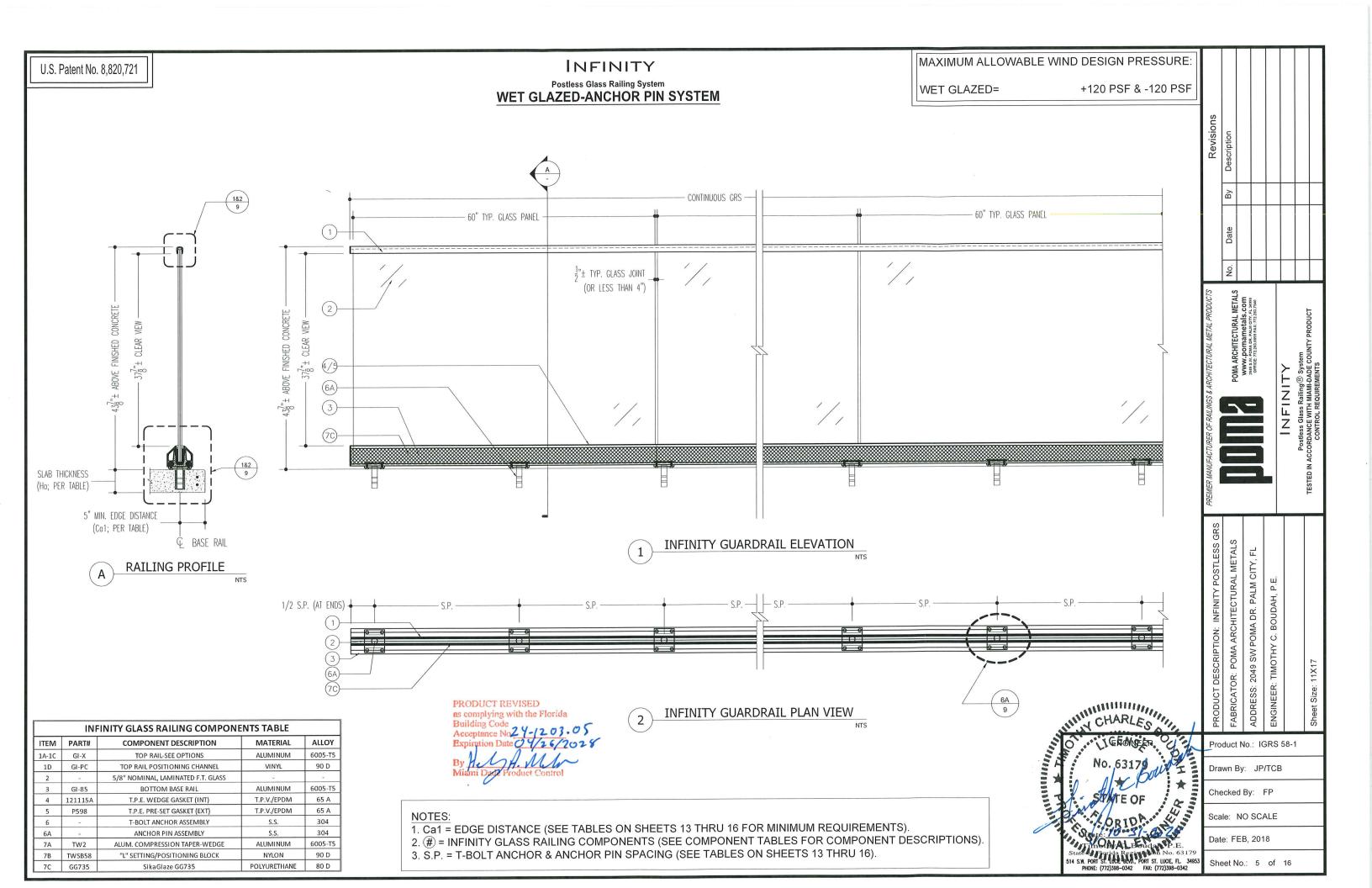
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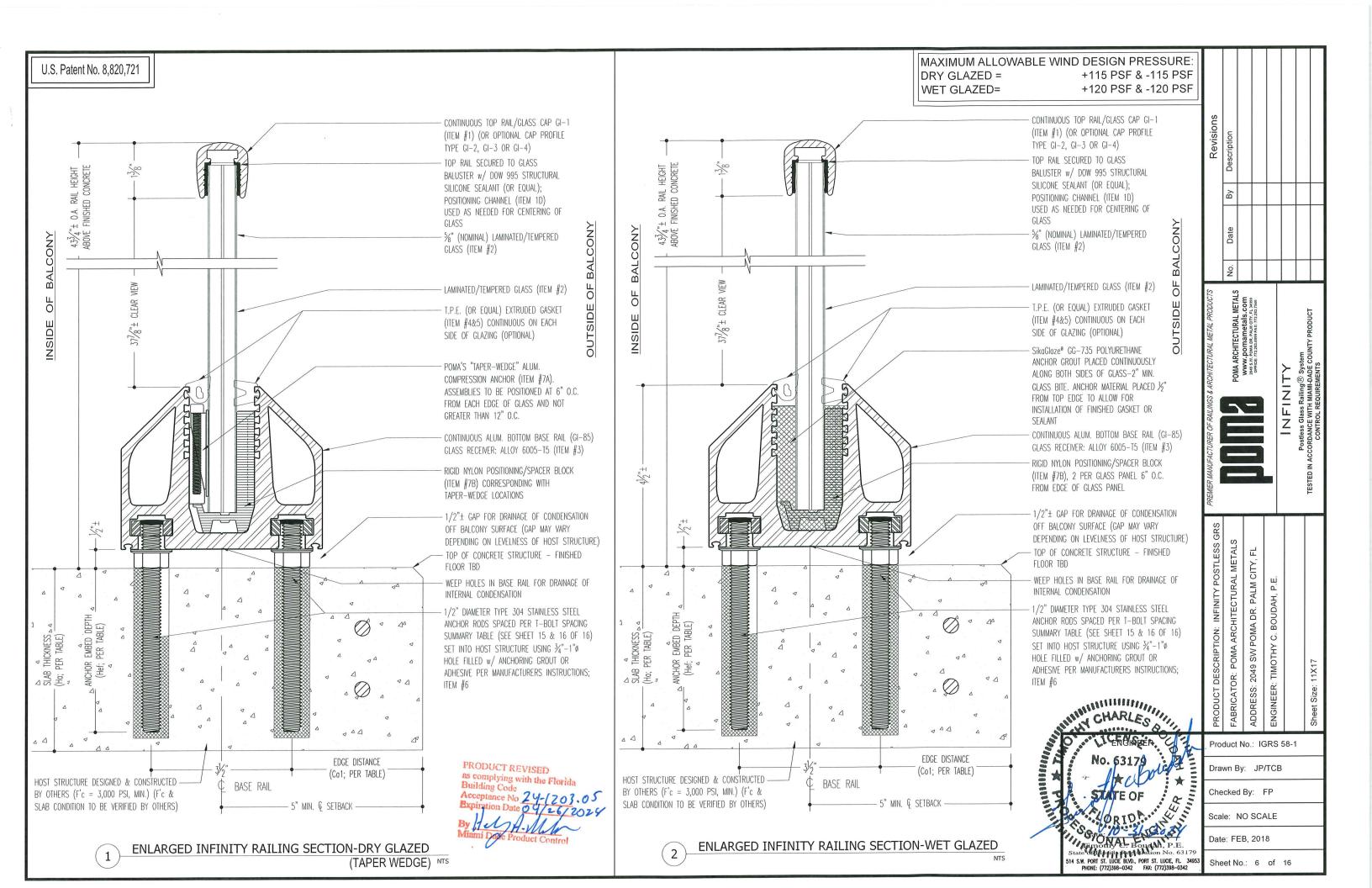
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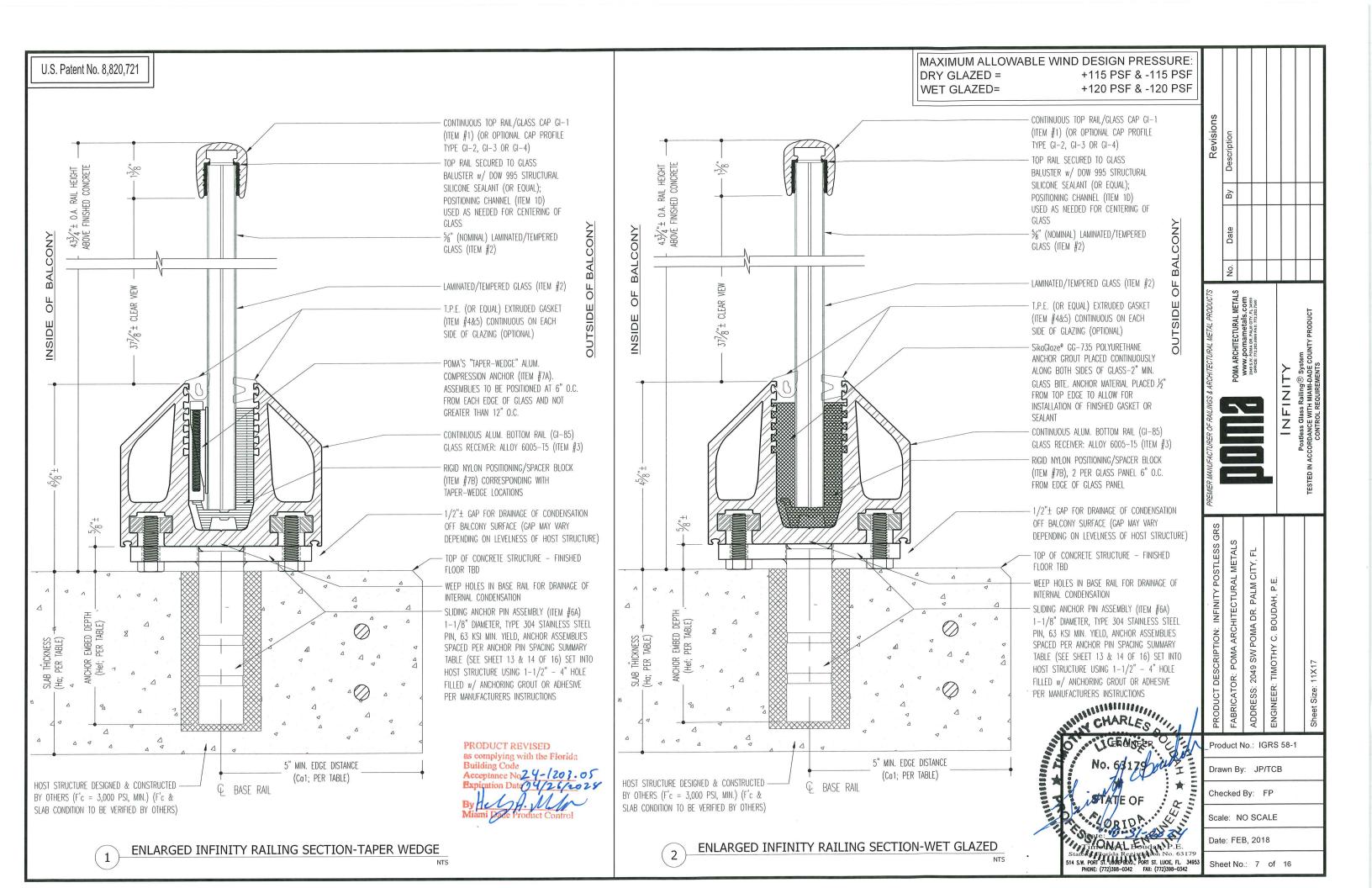


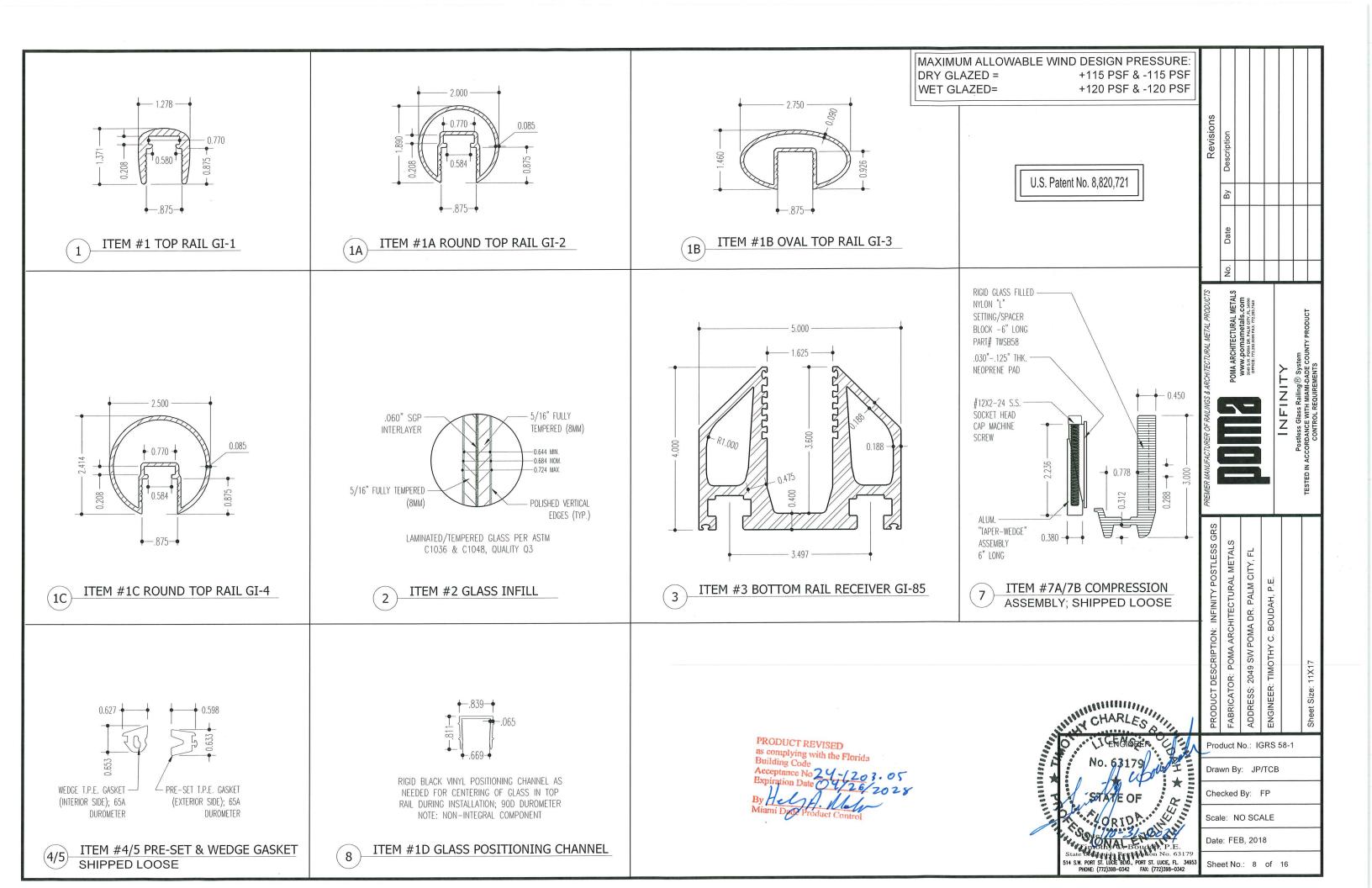


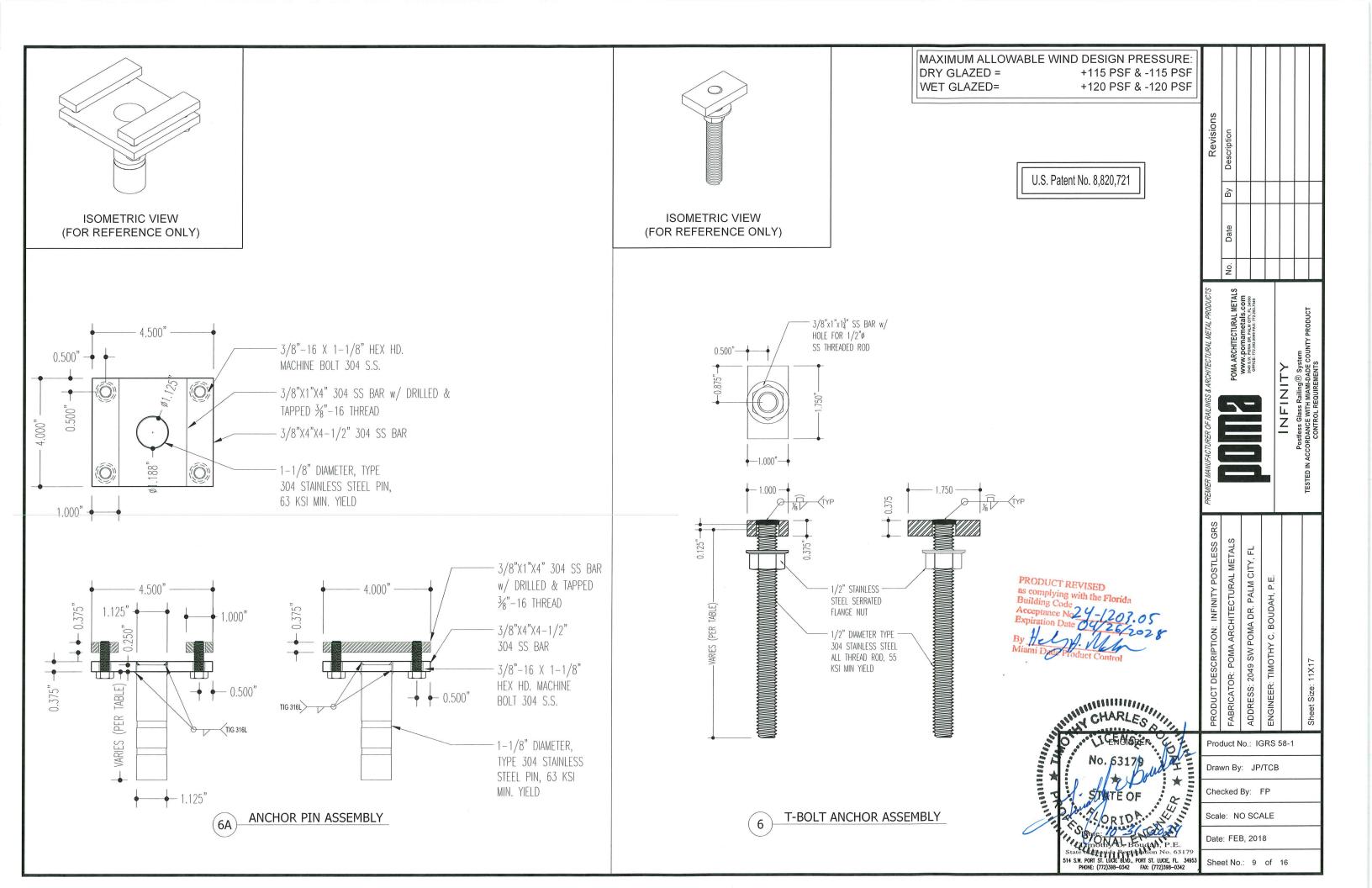


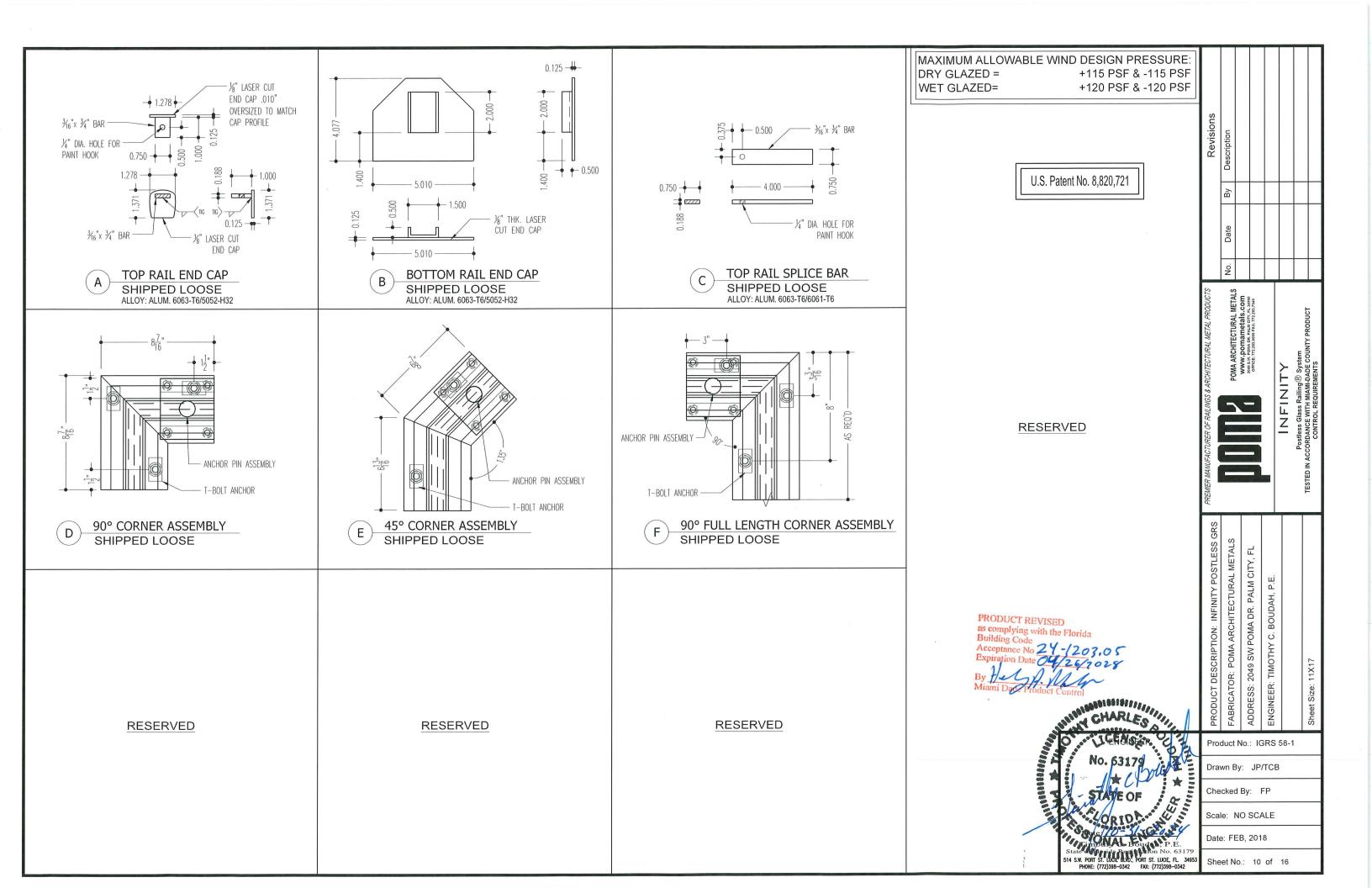


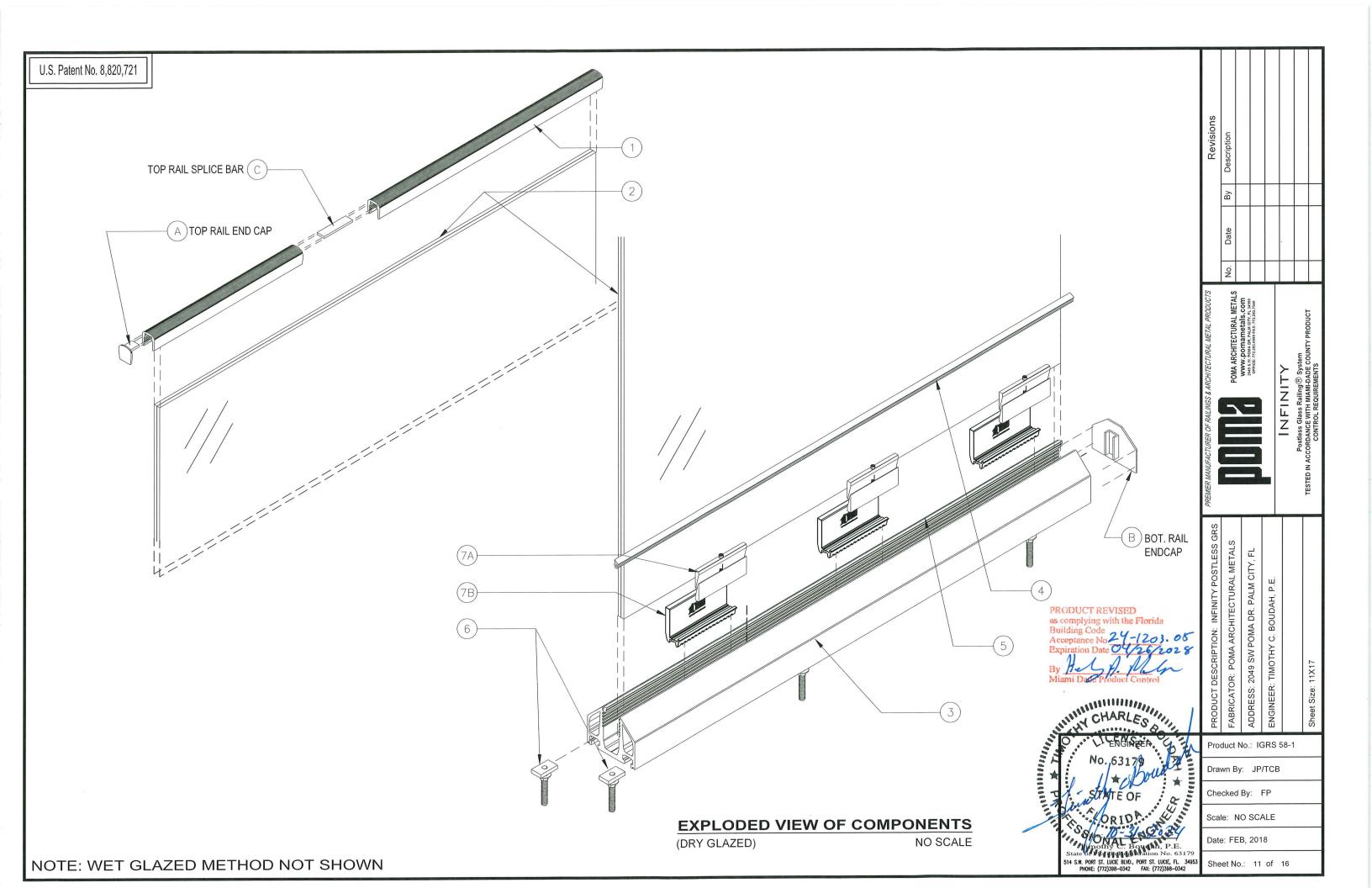


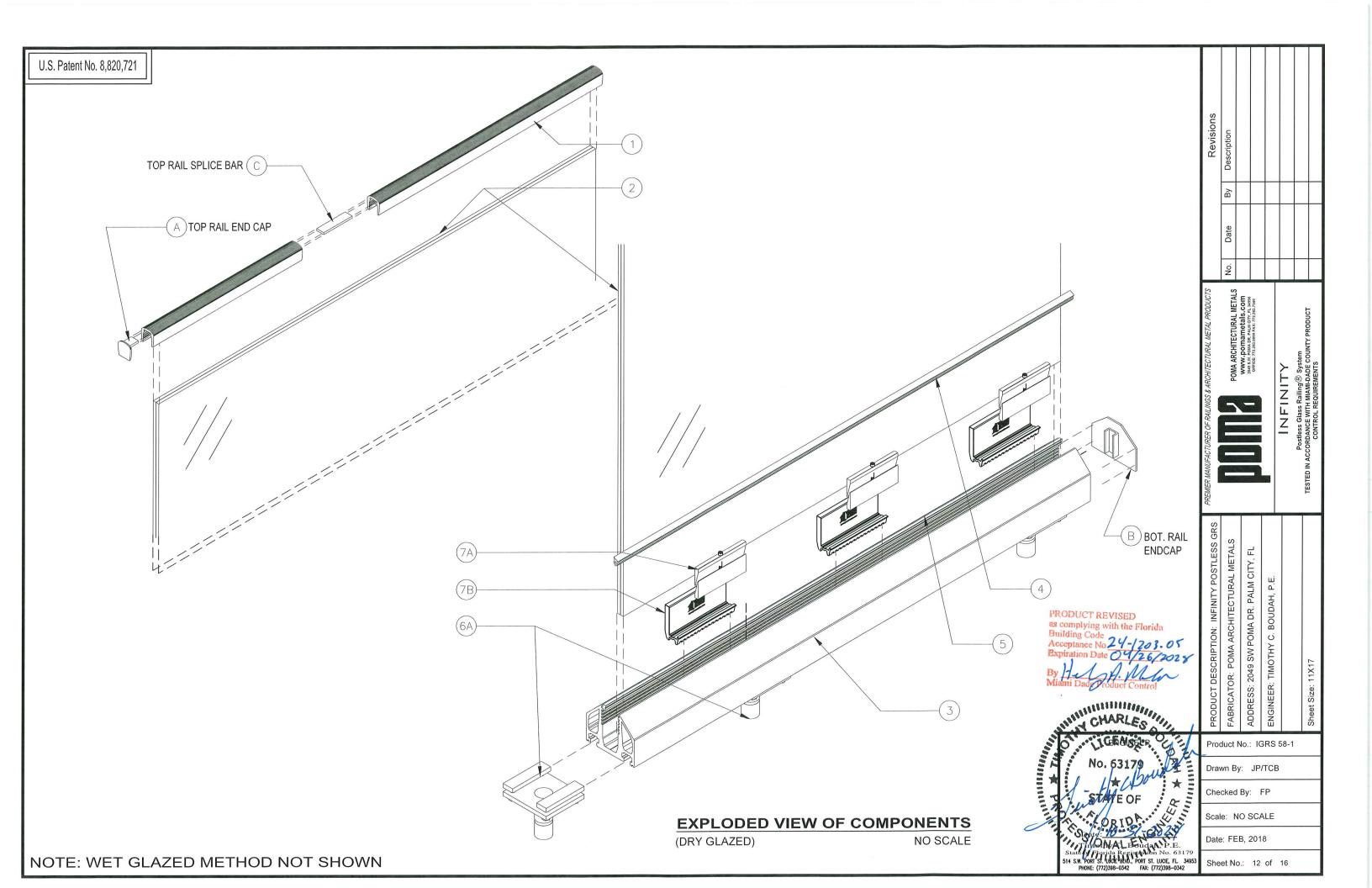












BOTTOM-BASE RAIL ANCHORAGE SUMMARY CHART 1-1/8" Ø ANCHOR PIN SPACING Vs. CONCRETE SLAB SETTING PARAMETERS

MAXIMUM DESIGN WIND PRESSURE (NEG. OR POS.)	MINIMUM ANCHOR PIN EMBEDMENT DEPTH	MAXIMUM ANCHOR PIN SPACING	MINIMUM CONCRETE SLAB COMPRESSIVE STRENGTH	MINIMUM CHARACTERISTIC BOND STRESS
(Pw)	(Hef)	(Sp)	(F'c)	(Funcr)
			≥ 4,725 PSI	2,575 PSI
		28.75 INCH	5,000	2,545
	3.0 INCH		5,500	2,495
	-		6,000	2,460
		30.0 INCH	≥ 5,725 PSI	2,835 PSI
			≥ 3,350 PSI	2,190 PSI
			3,500	2,170
			4,000	2,100
		28.75 INCH	4,500	2,050
			5,000	2,010
			5,500	1,975
			6,000	1,950
	3.5 INCH		≥ 4,000 PSI	2,430 PSI
	0.0 111011		4,500	2,355
		30.0 INCH	5,000	2,310
			5,500	2,260
			6,000	2,225
			≥ 4,600 PSI	2,590 PSI
		31.0 INCH	5,000	2,545
		31.0 114011	5,500	2,500
			6,000	2,460
			3,000 PSI	1,815 PSI
			3,500	1,755
		28.75 INCH	4,000	1,705
			4,500	1,670
			5,000	1,640
			5,500	1,610
			6,000	1,590
		30.0 INCH	3,000 PSI	2,090 PSI
	4.0 INCH		3,500	2,015
			4,000	1,960
120 PSF			4,500	1,915
			5,000	1,880
			5,500	1,850
			6,000	1,820
			≥ 3,350 PSI	2,260 PSI
			3,500	2,235
			4,000	2,165
		31.0 INCH	4,500	2,120
			5,000	2,080
			5,500	2,045
			6,000	2,020
			3,000 PSI	1,500 PSI
			3,500	1,460
			4,000	1,420
		28.75 INCH	4,500	1,390
			5,000	1,365
			5,500	1,345
			6,000	1,330
			3,000 PSI	1,730 PSI
			3,500	1,675
			4,000	1,630
	4.5 INCH	30.0 INCH	4,500	1,595
			5,000	1,570
			5,500	1,545
			6,000	1,525
			3,000 PSI	1,920 PSI
			3,500	1,860
			4,000	1,810
		31 0 INCH		
		31.0 INCH	4,500	1,770
			5,000	1,735
			5,500	1,710
			6,000	1,685

MAXIMUM DESIGN WIND PRESSURE (NEG. OR POS.) (Pw)	MINIMUM ANCHOR PIN EMBEDIMENT DEPTH (Hef)	MAXIMUM ANCHOR PIN SPACING (Sp)	MINIMUM CONCRETE SLAB COMPRESSIVE STRENGTH (F'c)	MINIMUM CHARACTERISTIC BOND STRESS (Funct)
			≥ 3,825 PSI	2,325 PSI
			4,000	2,300
		20.76 INCL	4,500	2,240
		20.75 INCH	5,000	2,190
			5,500	2,147
		28.75 INCH 5,000 5,500 6,000 ≥ 4,700 PSI 5,000 5,500 6,000 ≥ 5,400 PSI 31.0 INCH 5,500 6,000 32.0 INCH 26,250 PSI 3,500 4,000 28.75 INCH 4,500 5,000 5,500	2,120	
	3.0 INCH		≥ 4,700 PSI	2,560 PSI
	3.0 INCH	20.0 INCH	5,000	2,530
		30.0 INCH	5,500	2,480
			6,000	2,435
			≥ 5,400 PSI	2,765 PSI
		31.0 INCH	5,500	2,755
			6,000	2,705
		32.0 INCH	≥ 6,250 PSI	2,955 PSI
		28.75 INCH	3,000 PSI	1,925 PSI
			3,500	1,855
			4,000	1,800
			4,500	1,760
			5,000	1,725
115 PSF			5,500	1,695
			75 INCH 4,500 1,760 5,000 1,725 5,500 1,695 6,000 1,675 ≥ 3,300 PSI 2,180 PSI	1,675
				2,180 PSI
			3,500	2,150
			4,000	2,085
		30.0 INCH	4,500	2,035
			5,000	1,995
	3.5 INCH		5,500	1,960
			6,000	1,930
			≥ 3,800 PSI	2,350 PSI
			4,000	2,335
		24.5 [NO1]	4,500	2,265
		31.0 INCH	5,000	2,220
			5,500	2,180
			6,000	2,145
			≥ 4,350 PSI	2,520 PSI
			4,500	2,500
		32.0 INCH	5,000	2,470
			5,500	2,405
			6,000	2,370

MAXIMUM DESIGN WIND PRESSURE (NEG. OR POS.) (Pw)	MINIMUM ANCHOR PIN EMBEDIMENT DEPTH (Hef)	MAXIMUM ANCHOR PIN SPACING (Sp)	MINIMUM CONCRETE SLAB COMPRESSIVE STRENGTH (F'c)	MINIMUM CHARACTERISTIC BOND STRESS (Funci)
(* **)	(1.01)	1941	3,000 PSI	1,550 PSI
			3,500	1,500
			4,000	1,460
		28.75 INCH	4,500	1,430
		LUTO INOT	5,000	1,405
			5,500	1,385
			6,000	1,365
			3,000 PSI	1,800 PSI
			3.500	1,740
			4,000	1,695
		30.0 INCH	4,500	1,655
		00.0 11.011	5,000	1,625
			5,500	1,600
			6,000	1,580
	4.0 INCH		3,000 PSI	2,030 PSI
			3,500	1,940
			4,000	1,885
		31.0 INCH	4,500	1,845
		01.0 11011	5,000	1,810
			5,500	1,780
			1,755	
		32.0 INCH	6,000 ≥ 3,175 PSI	2,195 PSI
			3,500	2,140
			4,000	2,085
			4,500	2,035
			5,000	1,995
			5,500	1,970
			6,000	1,935
115 PSF		28.75 INCH	3,000 PSI	1,280 PSI
			3,500	1,240
			4,000	1,210
			4,500	1,190
			5,000	1,170
			5,500	1,150
			6,000	1,140
			3,000 PSI	1,490 PSI
			3,500	1,445
			4,000	1,405
		30.0 INCH	4,500	1,380
			5,000	1,355
			5,500	1,335
	A S INCL		6,000	1,320
	4.5 INCH		3,000 PSI	1,665 PSI
			3,500	1,610
			4,000	1,570
		31.0 INCH	4,500	1,535
			5,000	1,510
			5,500	1,485
			6,000	1,470
			3,000 PSI	1,850 PSI
			3,500	1,785
			4,000	1,735
		32.0 INCH	4,500	1,700
			5,000	1,670
			5,500	1,645
			6,000	1,620

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 2 1 203.05
Expiration Date 0 4/26/2028

By A. M. Miami Date Product Control

CHARLES

No. 63179

STATE OF

State of Figure Resistation No. 63179
514 S.W. PORT ST. LUCIE FL. 34953
PHONE: (772)398-0342

FAX: (772)398-0342

Product No.: IGRS 58-1

FABRICATOR: POMA ARCHITECTURAL METALS ADDRESS: 2049 SW POMA DR. PALM CITY, FL

| NFINITY
Postless Glass Railing® System
ccorpance with Mambabe coun

Revisions

Drawn By: JP/TCB

Checked By: FP

Scale: NO SCALE

Date: FEB, 2018

Sheet No.: 13 of 16

BOTTOM-BASE RAIL ANCHORAGE SUMMARY CHART 1-1/8" Ø ANCHOR PIN SPACING Vs. CONCRETE SLAB SETTING PARAMETERS

MAXIMUM DESIGN WIND PRESSURE (NEG. OR POS.)	MINIMUM ANCHOR PIN EMBEDMENT DEPTH	MAXIMUM ANCHOR PIN SPACING	MINIMUM CONCRETE SLAB COMPRESSIVE STRENGTH	MINIMUM CHARACTERISTIC BOND STRESS		
(Pw)	(Hef)	(Sp)	(F'c)	(Funcr)		
(FW)	(riet)	(0)/	≥ 3,475 PSI	2,205 PSI		
			3,500	2,200		
			4,000	2,140		
		28.75 INCH	4,500	2,080		
		20.75 111011	5,000	2,035		
			5,500	2,000		
			6,000	1,970		
			≥ 4,300 PSI	2,440 PSI		
			4,500	2,410		
	3.0 INCH	30.0 INCH	5,000	2,360		
		00.0 111011	5,500	2,315		
			6,000	2,280		
			≥ 5,000 PSI	2,625 PSI		
		31.0 INCH	5,500	2,575		
		01.0 11011	6,000	2,540		
			≥ 5,725 PSI	2,825 PSI		
		32.0 INCH	6.000	2.800		
	ŀ	33.0 INCH	≥ 6,525 PSI	3,050 PSI		
		28.75 INCH	3,000 PSI	1,790 PSI		
			3,500	1,720		
≤110.98 PSF			4,000	1,675		
- 110.00 1.01			4,500	1,640		
SEE CHART			5,000	1,610		
NOTE # 9			5,500	1,580		
			6,000	1,560		
			3,000 PSI	2,080 PSI		
			3,500	2,000		
			4,000	1,950		
		30.0 INCH	4,500	1,900		
		30.0 INOH	5,000	1,865		
			5,500	1,830		
			5,500 1,830 6,000 1,805			
	3.5 INCH		≥ 3,500 PSI	2,235 PSI		
	VIII. AUGUSTA		4,000	2,170		
			4,500	2,120		
		31.0 INCH	5,000	2,075		
			5,500	2,040		
			6,000	2,010		
			≥ 4,050 PSI	2,400 PSI		
			4,500	2,350		
		32.0 INCH	5,000	2,295		
			5,500	2,255		
			6,000	2,220		
			≥ 4,750 PSI	2,550 PSI		
			5,000	2,520		
		33.0 INCH	5,500	2,475		
			6,000	2,435		

MAXIMUM DESIGN WIND PRESSURE	MINIMUM ANCHOR PIN EMBEDMENT	MAXIMUM ANCHOR PIN	MINIMUM CONCRETE SLAB COMPRESSIVE	MINIMUM CHARACTERISTIC	
(NEG. OR POS.)	DEPTH	SPACING	STRENGTH	BOND STRESS	
(Pw)	(Hef)	(Sp)	(F'c)	(Funcr)	
			3,000 PSI	1,440 PSI	
			3,500	1,390	
			4,000	1,355	
		28.75 INCH	4,500	1,330	
			5,000	1,305	
			5,500	1,285	
			6,000	1,270	
			3,000 PSI	(l'uner) 1,440 PSI 1,390 1,355 1,330 1,305 1,285 1,270 1,680 PSI 1,620 1,580 1,550 1,550 1,520 1,495 1,475 1,880 PSI 1,815 1,770 1,725 1,695 1,665 1,645 2,080 PSI 2,010 1,955 1,910 1,875 1,845 1,820 2,240 PSI 2,210	
			3,500	1,620	
			4,000	1,580	
		30.0 INCH	4,500	1,550	
			5,000	1,520	
≤110.98 PSF			5,500	1,495	
	4.0 INCH		6,000	1,475	
SEE CHART		31.0 INCH	3,000 PSI	1,880 PSI	
NOTE #9			3,500	1,815	
			4,000	1,770	
			4,500	1,725	
			5,000	1,695	
			5,500	1,665	
			5,000	1,645	
			3,000 PSI	2,080 PSI	
			3,500	2,010	
			4,000	1,955	
		32.0 INCH	4,500	1,910	
			5,000	1,875	
			5,500	1,845	
			6,000	1,820	
			≥ 3,350 PSI	2,240 PSI	
			3,500	2,210	
			4,000	2,150	
		33.0 INCH	4,500	2,100	
			5,000	2,060	
			5,500	2,025	
			6,000	1,995	

MAXIMUM DESIGN	MINIMUM ANCHOR	MAXIMUM	MINIMUM CONCRETE	MINIMUM		
WIND PRESSURE	PIN EMBEDMENT	ANCHOR PIN	SLAB COMPRESSIVE	CHARACTERISTIC		
(NEG. OR POS.)	DEPTH	SPACING	STRENGTH	BOND STRESS		
(Pw)	(Hef)	(Sp)	(F'c)	(l'uncr)		
			3,000 PSI	1,185 PSI		
			3,500	1,150		
			4,000	1,125		
		28.75 INCH	4,500	1,105		
			5,000	1,085		
			5,500	1,075		
			SLAB COMPRESSIVE STRENGTH (F'c) (Funcr) 3,000 PSI 1,185 PSI 3,500 1,105 4,000 1,125 4,500 1,075 6,000 1,075 6,000 1,075 6,000 1,075 6,000 1,350 4,000 1,385 5,500 1,245 5,500 1,245 6,000 1,265 5,500 1,245 6,000 1,265 5,500 1,245 6,000 1,250 4,000 1,265 5,500 1,245 6,000 1,230 3,000 PSI 1,550 PSI 3,500 1,445 4,500 1,415 5,500 1,445 5,500 1,455 4,000 1,470 1,350 1,350 4,500 1,470 1,500 1,470 1,500 1,470 1,500 1,505 1,500 1,395 6,000 1,375 3,000 PSI 1,740 PSI 3,500 1,670 4,000 1,630 4,500 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,000 1,595 5,500 1,540 6,000 1,530 3,000 PSI 1,590 PSI			
			3,000 PSI	1,400 PSI		
			3,500	1,350		
			4,000	1,310		
		30.0 INCH	4,500	1,285		
≤110.98 PSF			5,000	1,265		
			5,500	1,245		
SEE CHART	4.5 INCH		6,000	1,230		
NOTE #9		31.0 INCH	3,000 PSI	1,550 PSI		
			3,500	1,505		
			4,000	1,465		
			4,500	1,440		
			5,000	1,415		
			5,500	1,395		
			6,000	1,375		
			3,000 PSI	1,740 PSI		
			3,500	1,670		
			4,000	1,630		
		32.0 INCH	4,500	1,595		
			5,000	1,565		
			5,500	1,540		
			6,000	1,530		
			3,000 PSI	1,900 PSI		
			3,500	1,840		
			4,000	1,790		
		33.0 INCH	4,500	1,755		
			5,000	1,720		
			5,500	1,695		
			6,000	1,680		

INFINITY ANCHOR PIN BOTTOM-BASE RAIL ANCHORAGE SUMMARY CHART NOTES:

- ALL ANCHOR PIN EMBEDMENT PARAMETERS LISTED (Hef, Sp, F'C, AND I'unc) ARE BASED ON THE FOLLOWING SETTING PARAMETERS: A) ANCHOR PIN EDGE DISTANCE (Ca1) = 6" (MIN.)
- B) CONCRETE SLAB THICKNESS (Ha) MUST NOT BE LESS THAN THE 1 1/2" x Hef, AS FOLLOWING, WHERE Ca1 = 6" (MIN.):

H
4.5
5.:
6

- 2. ANCHOR PIN SHALL CONSIST OF A.I.S.I. TYPE 304 STAINLESS STEEL (OR EQUAL) WITH ULTIMATE TENSILE STRENGTH =/> 101 KSI, WITH MINIMUM YIELD STRENGTH = 63 KSI.
- 73. ANCHOR PIN HOLE DIAMETER (Do) IS BASED ON 2 INCH DIAMETER. LARGER HOLE DIAMETER MAY REQUIRE INCREASE IN EDGE DISTANCE (Ca1) AND/OR INCREASE IN DESIGNATED MINIMUM SLAB
- 5. EXISTING CONCRETE SLAB MUST BE PROVIDED WITH CONTINUOUS EDGE REINFORCING BAR, OR OTHER SUPPLEMENTAL EDGE REINFORCING STEEL
- *6. THE ANCHOR PIN EMBEDMENT PARAMETERS, AS LISTED, HAS BEEN DETERMINED IN STRICT CONFORMANCE WITH ACI 318-14, CHAPTER 17, CRITERIA FOR ANCHORING STEEL ELEMENTS INTO EXISTING CONCRETE, WITH AMENDMENTS PRESCRIBED BY AC308-2013, EFFECTIVE AUGUST 2016 (AS INCORPORATED IN ACI 318-14, CHAPTER 17), CURRENTLY ADOPTED AND APPLIED IN ACI 318-19 (REAPPROVED.) 2022). THE LIMIT STATE FAILURE MODE FOR THE ANCHOR PIN EMBEDMENT PARAMETERS, AS LISTED, IS BASED ON THE MINIMUM CHARACTERISTIC BOND STRESS VALUES.
- . INFINITY (POSTLESS) GLASS RAILING SYSTEM HAS BEEN LABORATORY TESTED IN CONFORMANCE WITH TAS 202-94 FOR STRUCTURAL TEST PRESSURE UP TO 240 PSF (POS. & NEG.) WITH 1 1/8" Ø ANCHOR PIN EMBEDDED WITH SIKADUR ® 32, HI-MOD, LPL EPOXY BONDING ADHESIVE AND IS APPROVED FOR DEIGN WIND PRESSURE EQUAL TO OR LESS THAN 130 PSF (POS. OR NEG.).
- 8. EPOXY OR GROUT ANCHORING PRODUCTS (OTHER THAN SIKADUR @ 32, HI-MOD, LPL EPOXY) SELECTED FOR EMBEDDING THE 1 1/8" Ø ANCHOR PIN INTO EXISTING CONCRETE SLAB MUST HAVE A CHARACTERISTIC BOND STRESS VALUE (Funct) DETERMINED BY PRODUCT TESTING, OR PUBLISHED ANCHOR PRODUCT MANUFACTURER'S TEST DATA, PERFORMED IN ACCORDANCE WITH LATEST EDITION OF ASTM E488 TESTING STANDARDS AND/OR ACI 355.4. THE CHARACTERISTIC BOND STRESS VALUE (Funct) LISTED IN THE SUMMARY CHART IS BASED ON UNCRACKED CONCRETE WITH ANCHOI PIN INSTALLED IN ROTARY HAMMER DRILLED HOLE WHICH IS CLEANED AND DRY AT TIME ANCHOR PIN IS SET.
- 9. DESIGN BENDING MOMENT ON GLASS RAILING SYSTEM IS GOVERNED BY CODE PRESCRIBED LIVE LOAD, 2023 FBC-B SECTION 1607.9.1.= 50 PLF, WITH REQUIRED SAFETY FACTOR OF 4 PER SECTION 2407.1.1, FOR GUARDRAILS INSTALLED WHERE DESIGN WIND PRESSURE > 108.5 PSF. LATERAL SHEAR ON GLASS RAILING SYSTEM IS GOVERNED BY DESIGN WIND PRESSURE > 55 PSF

11. SITE SPECIFIC STRUCTURAL CALCULATIONS SHALL BE PERFORMED BY THE E.O.R., OR DELEGATED DESIGN PROFESSIONAL, TO DETERMINE ANCHOR PIN EMBEDMENT LENGTH AND ANCHOR PIN EDGE DISTANCE, FOR INSTALLATION OF THE INFINITY RAILING ANCHOR PIN SYSTEM INTO SLAB THICKNESS WITH CONCRETE COMPRESSIVE STRENGTHS, WHICH ARE NOT LISTED WITHIN THE ANCHORAGE

REINFORCED HOST STRUCTURE DESIGNED -& CONSTRUCTED BY OTHERS (F'c = 3,000 PSI, MIN.) (F'c & SLAB CONDITION TO BE VERIFIED BY OTHERS)

> SLIDING ANCHOR PIN ASSEMBLY SPACING (SP)

BOTTOM-BASE RAIL 1-1/8" DIA. ANCHOR PIN SETTING DIAGRAM PRODUCT REVISED as complying with the Florida

Date: FEB, 2018 Time IN AL Bouday P.E. State of Florida Registration No. 63179 514 S.W. FORT ST. LUCE BLUE, FORT ST. LUCE, FL. 34953

Product No.: IGRS 58-1

ADDRESS:

FABRICATOR:

2049 SW POMA DR. PALM CITY

INFINITY

Revisions

Drawn By: JP/TCB

Checked By: FP

Scale: NO SCALE

Sheet No.: 14 of 16



BOTTOM-BASE RAIL ANCHORAGE SUMMARY CHART T-BOLT ANCHOR SPACING Vs. CONCRETE SLAB & SETTING PARAMETERS

MAXIMUM DE SIGN WIND PRESSURE	MINIMUM ANCHOR BOLT EMBEDMENT	MINIMUM ANCHOR BOLT	MAXIMUM T-BOLT SPACING	MINIMUM CONCRETE SLAB COMPRESSIVE	MINIMUM CHARACTERISTIC
(NEG. OR POS.) (Pw)	DEPTH (Hef)	EDGE DISTANCE (Ca1)	(STAGGERED)	STRENGTH	BOND STRESS
(PW)	(nei)	(Ca1)	(Sp) 7.75 INCH	(F'c) 3,000 PSI	(Funcr) 1,845 PSI
			8.0	3,150	1,930
			8.50	3,500	2.083
			9.0	4,000	2,300
			9.75	4,500	2,480
	3.0 INCH		10.0	4,700	2,560
			10.25	5,000	2,640
			10.875	5,500	2,835
			11.0	5,540	2,875
			11.50	6,000	3,050
					-,,,,,
			8.75 INCH	3,000 PSI	1.735 PSI
			9.0	3,100	1,800
			9.50	3,500	1,930
			10.0	3,700	2,065
	a E INOU		10.25	4,000	2,130
	3.5 INCH		11.0	4,500	2,350
			11.75	5,000	2,530
			12.0	5,100	2,590
			12.25	5,500	2,660
			13.0	6,000	2,845
120 PSF		4.25 INCH			
			10.0 INCH	3,000 PSI	1,710 PSI
			10.75	3,500	1.870
			11.0	3,550	1,925
			11.75	4,000	2,110
	4.0 INCH		12.0	4,100	2,150
	1.0 111011	ļ	12.50	4.500	2,260
			13.0	4,725	2,370
			13.25	5,000	2,425
			14.0	5,500	2,585
			15.0	6,000	2,800
			11.0 INCH	3,000 PSI	1,625 PSI
			12.0	3,350	1.815
			12.25	3,500	1,865
			13.0	3,850	2,070
	4.5 INCH		13.25	4,000	2,125
			14.0	4,400	2,270
			14.25	4,500	2,245
			15.0	5,000	2,385
		ļ	16.0	5,500	2,670
			16.75	6,000	2,820

MAXIMUM DESIGN WIND PRESSURE (NEG. OR POS.)	MINIMUM ANCHOR BOLT EMBEDMENT DEPTH	MINIMUM ANCHOR BOLT EDGE DISTANCE	MAXIMUM T-BOLT SPACING (STAGGERED)	MINIMUM CONCRETE SLAB COMPRESSIVE STRENGTH	MINIMUM CHARACTERISTIC
(Pw)	(Hef)	(Ca1)	(SP)	(F'c)	BOND STRESS (Funcr)
(1-11)	(rici)	(car)	7.75 INCH	3,000 PSI	1,830 PSI
			8.0	3,150	1,910
			8.50	3,500	2,060
			9.0	4,000	2,215
			9.75	4,500	2,450
	3.0 INCH		10.0	4,700	2,525
			10.25	5,000	2.610
			10.75	5,500	2,760
			11.0	5,600	2.835
			11.50	6,000	2,990
			8.75 INCH	3,000 PSI	1,720 PSI
			9.0	3,100	1,785
			9.5	3,500	1,920
			10.0	3,700	2,042
	2.5 INCH		10.25	4,000	2,110
	3.5 INCH		11.0	4,500	2,300
			11.75	5,000	2,490
			12.0	5,100	2,555
			12.25	5,500	2,615
			13.0	6,000	2,810
115 PSF		4.0 INCH			
			10.0 INCH	3,000 PSI	1,690 PSI
			10.75	3,500	1,855
			11.0	3,550	1,915
			11.75	4,000	2,075
	4.0 Inch		12.0	4,100	2,150
	4.0 ilicii		12.50	4,500	2,235
			13.0	4,725	2,360
]	13.25	5,000	2,390
			14.0	5,500	2,580
			15.0	6,000	2,815
			11.25 INCH	3,000 PSI	1,745 PSI
			12.0	3,300	1,915
			12.25	3,500	1,950
		-	13.0	3,850	2,105
	4.5 INCH		13.25	4,000	2,150
	200000 10000000000	ļ	14.0	4,400	2,305
		ļ	14.25	4,500	2,355
		ļ	15.0	5,000	2,497
		}	16.0	5,500	2,710
			16.75	6,000	2,845

MAXIMUM DE SIGN WIND PRESSURE (NEG. OR POS.) (Pw)	MINIMUM ANCHOR BOLT EMBEDMENT DEPTH (Hef)	MINIMUM ANCHOR BOLT EDGE DISTANCE (Ca1)	MAXIMUM T-BOLT SPACING (STAGGERED) (Sp)	MINIMUM CONCRETE SLAB COMPRESSIVE STRENGTH (F'c)	MINIMUM CHARACTERISTK BOND STRESS (Funcr)
1	,,	1-2-7	8.0 INCH	3,000 PSI	1,830 PSI
			8.75	3,500	2,055
			9.0	3,670	2,130
			9.25	4,000	2,204
	3.0 INCH		10.0	4,500	2,430
			10.50	5,000	2.580
			11.0	5,275	2,725
			11.25	5,500	2,800
			11.75	6,000	2,947
	ii.				-10,11
			9.0 INCH	3,000 PSI	1,712 PSI
			10.0	3,500	1,960
			10.75	4,000	2,147
			11.0	4,150	2,210
	0.5.111011		11.50	4,500	2,331
	3.5 INCH		12.0	4,850	2,460
			12.25	5,000	2,515
			12.875	5,500	2,667
			13.0	5,550	2,699
			13.50	6,000	2,819
≤ 110.98 PSF			10.25 INCH	3,000 PSI	1,673 PSI
		4.0 INCH	11.0	3,300	1,840
SEE CHART		4.0 111011	11.25	3,500	1,890
NOTE#6			12.0	3,850	2,070
			12.25	4,000	2,125
	4.0 INCH		13.0	4,500	2,270
			13.75	5,000	2,425
			14.0	5,050	2,490
			14.75	5,500	2,650
			15.0	5,625	2,705
			15.50	6,000	2,807
			11.75 INCH	3,000 PSI	1,775 PSI
			12.0	3,000 PSI	1,775 PSI
		,	12.75	3,100	1,830
			13.0	3,575	2,025
			13.75	4,000	2,025
			14.0	4,100	2,165
	4.5 INCH		14.75	4,100	2,220
	4.0 111011		15.0	4,550	2,360
			15.75	5,000	
İ					2,555
			16.0	5,100	2,640
			16.75	5,500	2,750
3			17.0	5,600	2,800
			17.50	6,000	2,885

INFINITY ADDRESS: 2049 SW POMA DR. PALM CITY, FL

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 24-/203.05
Expiration Date 04/26/2028
By H. A. M.

Jones: AL Bouclan P.E.
State Forida Registration No. 63179
514 S.W. PORT ST. U.GE, FL. 34953
PHONE: (772)398-0342 FAX: (772)398-0342

Product No.: IGRS 58-1

Drawn By: JP/TCB

Checked By: FP

Scale: NO SCALE

Date: FEB, 2018

Sheet No.: 15 of 16

BOTTOM-BASE RAIL ANCHORAGE SUMMARY CHART T-BOLT ANCHOR SPACING Vs. CONCRETE SLAB & SETTING PARAMETERS

MAXIMUM DE SIGN	MINIMUM ANCHOR	MINIMUM	MAXIMUM	MINIMUM CONCRETE	MINIMUM
WIND PRESSURE	BOLT EMBEDMENT	ANCHOR BOLT	T-BOLT SPACING	SLAB COMPRESSIVE	CHARACTERISTIC
(NEG. OR POS.)	DEPTH	EDGE DISTANCE	(STAGGERED)	STRENGTH	BOND STRESS
(Pw)	(Hef)	(Ca1)	(Sp)	(F'c)	(Funcr)
			7.25 INCH	3,000 PSI	1,795 PSI
			7.75	3,500	1,950
			8.0	3,600	2,030
	3.0 INCH		8.50	4,000	2,185
	0.0 INCIT		9.0	4,500	2,345
			9.50	5,000	2,500
			10.0	5,500	2,660
			10.50	6,000	2,820
			8.25 INCH	3,000 PSI	1,710 PSI
			9.0	3,500	1,920
			9.75	4,000	2,125
			10.0	4,150	2,190
	3.5 INCH		10.25	4,500	2,245
			11.0	5,000	2,475
			11.50	5,500	2,580
			12.0	5,725	2,730
≤110.98 PSF			12.25	6,000	2,790
SEE CHART			9.50 INCH	3,000 PSI	1,800 PSI
NOTE#6		3.5 INCH	10.0	3,250	1,925
		0.0 111011	10.25	3,500	1,975
			11.0	4.000	2.170
	4.0 INCH		12.0	4,500	2,410
			12.75	5,000	2,590
			13.0	5,200	2,650
			13.25	5,500	2,695
			14.0	6,000	2,880
				-,	2,000
			10.0 INCH	3,000 PSI	1,685 PSI
		ŀ	11.0	3,100	1,960
×		1	11.75	3,500	2.120
			12.0	3,600	2.180
		İ	12.50	4,000	2,275
		l l	13.0	4,150	2.420
	4.5 INCH	ľ	13.50	4,500	2.505
		1	14.0	4,725	2,650
			14.50	5.000	2,735
		ŀ	15.0	5,275	2.850
		ŀ	15.25	5,500	2,900
		- H	16.0	6,000	3,075

MAXIMUM DE SIGN WIND PRE SSURE (NEG. OR POS.) (PW)	MINIMUM ANCHOR BOLT EMBEDMENT DEPTH (Hef)	MINIMUM ANCHOR BOLT EDGE DISTANCE (Ca1)	MAXIMUM T-BOLT SPACING (STAGGERED) (Sp)	MINIMUM CONCRETE SLAB COMPRESSIVE STRENGTH (F'c)	MINIMUM CHARACTERISTI BOND STRESS (Funct)
			6.75 INCH	3,000 PSI	1,730 PSI
			7.0	3,100	1,815
			7.25	3,500	1,890
			8.0	4,000	2,135
	3.0 INCH		8.50	4,500	2,295
			9.0	5,000	2,460
			9.50	5,500	2,615
			10.0	6,000	2,775
			7.75 INCH	3,000 PSI	1,720 PSI
			8.0	3,050	1,795
			8.50	3,500	1,930
			9.0	3,750	2,085
			9.25	4,000	2,150
	3.5 INCH		9.75	4,500	2,290
			10.0	4,550	2,370
≤110.98 PSF			10.50	5,000	2,505
			11.0	5,500	2,645
SEE CHART			11.50	6,000	2,780
NOTE#6		3.25 INCH	9.25 INCH	3,000 PSI	1,920 PSI
			9.75	3,500	2,030
			10.0	3,550	2,125
			10.50	4,000	2,220
			11.0	4.200	2,370
	4.0 INCH		11.25	4,500	2,415
			12.0	5,000	2,610
			12.75	5,500	2,810
			13.0	5,650	2,880
			13.50	6,000	3,010
			40.05 111011		
			10.25 INCH	3,000 PSI	1,975 PSI
			11.0	3,350	2,170
			11.25	3,500	2,220
			12.0	4,000	2,390
	4.5 INCH		13.0	4,500	2,645
			13.75	5,000	2,815
	J		14.0	5,100	2,885
			14.50	5,500	2,990
			15.0	5,700	3,150
			15.50	6,000	3,250

REINFORCED HOST STRUCTURE DESIGNED & CONSTRUCTED BY OTHERS (F'c = 3,000 PSI, MIN.) (F'c & SLAB CONDITION TO BE VERIFIED BY OTHERS) SLIDING T-BOLT -ASSEMBLY SPACING (SP) -5" MIN. € SETBACK

BOTTOM-BASE RAIL T-BOLT ANCHOR SETTING DIAGRAM

INFINITY T-BOLT ANCHOR ASSEMBLY BOTTOM-BASE RAIL ANCHORAGE SUMMARY CHART NOTES:

- 1. T-BOLT ANCHOR SPACING LISTED REFLECT THE STAGGERED BOLT SPACING DIMENSION (Sp). ALTERNATIVE BOLT SPACING MAY BE USED, WHEN CALCULATIONS ARE CONDUCTED TO DETERMINE CONCRETE SLAB PARAMETERS, F'c, Hef, AND Ca1.
- 2. CONCRETE SLAB THICKNESS (Ha) MUST NOT BE LESS THAN THE 1 1/2" + Hef, AS FOLLOWING:

Ha 3.0 Inch 4.5 Inches (MIN.) 3.5 5.0 4.0 5.5 4.5 6.0

- 3. T-BOLT ALL-THREAD-ROD (ATR) SHALL CONSIST OF A I.S.I. TYPE 304 STAINLESS STEEL, CONFORMING TO ASTM F593 CW THAT PROVIDE ULTIMATE TENSILE STRENGTH =/> 100 KSI, WITH MINIMUM YIELD STRENGTH = 55 KSI., OR EQUAL.
- 4. T-BOLT (ATR) HOLE DEPTH MUST BE DRILLED NO LESS THAN 1/4" DEEPER THAN SPECIFIED BOLT EMBEDMENT DEPTH, Hef.
- 5. THE T-BOLT ANCHOR SPACING SUMMARY CHART MAY BE USED WITH ANY NON-CORROSIVE EPOXY OR GROUT, RECOGNIZED AS AN ANCHORING ADHESIVE FOR THREADED STEEL ANCHOR RODS, WHICH HAS A CHARACTERISTIC BOND STRESS VALUE (Γuncr), DETERMINED BY PRODUCT TESTING IN CONFORMANCE WITH ICC-ES AC308, OR ANCHOR ADHESIVE MANUFACTURER'S PRODUCT TEST DATA, PERFORMED IN ACCORDANCE WITH LATEST EDITION OF ASTM E488 TESTING STANDARDS AND/OR ACI 355.4, FOR UNCRACKED CONCRETE, INSTALLED IN TEMPERATURE CATEGORY 'A', DRY CONDITION
- 6. DESIGN BENDING MOMENT ON GLASS RAILING SYSTEM IS GOVERNED BY CODE PRESCRIBED LIVE LOAD, 2023 FBC-B, SECTION 1607.9.1.= 50 PLF, WITH REQUIRED SAFETY FACTOR OF 4 PER SECTION 2407.1.1, FOR GUARDRAILS INSTALLED WHERE DESIGN WIND PRESSURE ≤ 110.98 PSF. LATERAL SHEAR ON GLASS RAILING SYSTEM IS GOVERNED BY DESIGN WIND PRESSURE > 55.6 PSF.
 - 7. INTERPOLATION BETWEEN DESIGNATED WIND DESIGN PRESSURES, THE T-BOLT ANCHOR SPACING, AND CHARACTERISTIC BOND STRESS IS ALLOWED FOR THE T-BOLT ANCHOR BOLT EDGE DISTANCE (Ca 1) LISTED, OR GREATER.

PRODUCT REVISED

HINTER CHARLES AND MY CHARLES

Product No.: IGRS 58-1

ADDRESS:

2049 SW POMA DR. PALM CITY

INFINITY

Revisio

Drawn By: JP/TCB

Checked By: FP

Scale: NO SCALE

Date: FEB, 2018

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