



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: "EconoGuard" Aluminum Glazed Railing System

APPROVAL DOCUMENT: Drawing No. P15-0000, titled "EconoGuard Aluminum Glazed Railing", sheets 1 through 9 of 9, prepared by Poma & Sons, Inc., dated June 20, 2017, last revised on Oct. 29, 2024, signed and sealed by Timothy C. Boudah, P.E., on Oct. 29, 2024, 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, 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 #23-0216.01 and consists of this page 1, evidence submitted pages E-1 and E-2 as well as approval document mentioned above.

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



Helmy A. Makar
12/26/24

NOA No. 24-1203.04
Expiration Date: 03/22/2028
Approval Date: 12/26/2024

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #17-0807.26

A. DRAWINGS

1. *Drawing No. P15-0000, titled "EconoGuard Aluminum Glazed Railing", sheets 1 through 9 of 9, prepared by Poma & Sons, Inc., dated June 20, 2017, signed and sealed by Timothy C. Boudah, P.E., on July 12, 2017.*

B. TESTS

1. *Test Report No. BT-AE-16-001, by Blackwater Testing, Inc., dated July 26, 2016, signed and sealed by Yamil Gerardo Kuri, P.E., testing EconoGuard Welded Modular 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.*
2. *Test Report No. BT-AE-16-002, by Blackwater Testing, Inc., dated November 16, 2016, signed and sealed by Constantin Bortes, P.E., testing EconoGuard Welded Modular 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.*

C. CALCULATIONS

1. *Calculation titled "EconoGuard welded Modular Glass Railing System", prepared by Timothy C. Boudah, P.E., dated May, 2017, signed and sealed by Timothy C. Boudah, P.E., on June 20, 2017.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *FBC, 2014 Edition & 2017 Edition Compliance Letter prepared by Timothy C. Boudah, P.E., dated 07/12/17, signed & sealed by Timothy C. Boudah, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #21-0219.06

A. DRAWINGS

1. *Drawing No. P15-0000, titled "EconoGuard Aluminum Glazed Railing", sheets 1 through 9 of 9, prepared by Poma & Sons, Inc., dated June 20, 2017, signed and sealed by Timothy C. Boudah, P.E., on April 25, 2022.*

B. TESTS


1. *None.*

C. CALCULATIONS

1. *Calculation titled "EconoGuard welded Modular Glass Railing System", prepared, 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.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 24-1203.04
Expiration Date: 03/22/2028
Approval Date: 12/26/2024

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

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *FBC, 2020 Edition Compliance Letter prepared by Timothy C. Boudah, P.E., dated 04/25/22, signed & sealed by Timothy C. Boudah, P.E.*

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #23-0216.01

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. *FBC, 2020 Edition Compliance Letter prepared by Timothy C. Boudah, P.E., dated 04/25/22, signed & sealed by Timothy C. Boudah, P.E.*

4. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. P15-0000, titled "EconoGuard Aluminum Glazed Railing", sheets 1 through 9 of 9, prepared by Poma & Sons, Inc., dated June 20, 2017, last revised on Oct. 29, 2024, signed and sealed by Timothy C. Boudah, P.E., on Oct. 29, 2024.*

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. *FBC, 2023 Edition Compliance Letter prepared by Timothy C. Boudah, P.E., dated 10/29/24, signed & sealed by Timothy C. Boudah, P.E.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 24-1203.04
Expiration Date: 03/22/2028
Approval Date: 12/26/2024

MANUFACTURED BY:



POMA ARCHITECTURAL METALS

ECONOGUARD

Welded Modular Glass Railing System

TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PRODUCT CONTROL REQUIREMENTS

MAXIMUM ALLOWABLE WIND DESIGN PRESSURE:
EMBEDDED POST = (+130 PSF, -130 PSF)
POST BASE PLATE = (+60 PSF, -60 PSF)

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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. PRETREATMENT: (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
- C. COLOR: CUSTOMER CHOICE OF STANDARD AVAILABLE COLORS

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

- B. PPG INDUSTRIES
- C. IFS COATINGS
- D. SHERWIN WILLIAMS
- E. NORTEK POWDER COATINGS
- F. TIGER DRYLAC POWDER COATINGS

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 24-1203.04
Expiration Date 03/22/2028
By *[Signature]*
Miami Dade Product Control

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 EMBEDDED POST GUARDRAIL/RAILING POST IN CLEAN CORE/HAMMER DRILLED HOLE, SLEEVED OR BLOCKED OUT HOLE, MEASURING 4" MINIMUM DIAMETER, AND NOT LESS THAN 1/4" DEEPER THAN THE REQUIRED POST EMBEDMENT DEPTH, AS SHOWN IN THESE PLANS. ANCHOR POST WITH A NON SHRINK, NON METALLIC, STRUCTURAL GROUT IN CONFORMANCE WITH GROUT MANUFACTURER'S WRITTEN INSTRUCTIONS, OR ENGINEER APPROVED ALTERNATE, AS DETAILED AND NOTED IN THESE PLANS.

3. INSTALL BASE PLATE POST GUARDRAIL/RAILING POST WITH STAINLESS STEEL MECHANICAL EXPANSION ANCHOR BOLTS OR STAINLESS STEEL ALL-THREAD-RODS ANCHORED IN 2 PART HIGH STRENGTH EPOXY, WITH MATCHING WASHERS AND HEAVY HEX HEAD NUT, AS DETAILED AND NOTED IN THESE PLANS, OR ENGINEER APPROVED ALTERNATE.
4. FIELD SPLICE LOCATIONS OF PRODUCT(S) COMPONENTS SHALL BE DETERMINED BY POMA TO BEST ACCOMMODATE FABRICATION, PAINTING, SHIPPING AND INSTALLATION AND MAY OR MAY NOT BE NOTATED WITHIN THIS SHOP DRAWING PACKAGE. 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.

HOST STRUCTURE QUALIFICATION NOTES:

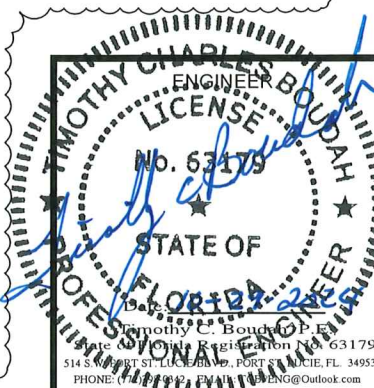
1. THE PROJECT ENGINEER OF RECORD AND GENERAL CONTRACTOR ARE RESPONSIBLE FOR PROPER DESIGNING AND CONSTRUCTION OF SUITABLE SUBSTRATE FOR ATTACHMENT OF SYSTEMS.
2. FOR EXISTING STRUCTURES IT IS ASSUMED THAT THE THE PROJECT ENGINEER OF RECORD AND GENERAL CONTRACTOR HAVE VERIFIED THE EXISTING HOST STRUCTURE HAS BEEN DESIGNED AND CONSTRUCTED TO SAFELY SUPPORT THE LOADS IMPOSED BY THE ECONOGUARD RAILING SYSTEM.
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 IMPOSING 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 TABLE No. 1 AND TABLE No. 2 FOR MINIMUM CONCRETE COMPRESSIVE STRENGTH (F'c) REQUIREMENTS FOR BALCONY GUARDRAIL/RAILING INSTALLATION WITHIN DESIGNATED WIND DESIGN PRESSURE LIMITS.

CLEANING AND PROTECTION:

1. 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 CONSTRUCTION.
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.

APPLICABLE GOVERNING BUILDING CODES:

1. THE 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 1607.9.1, WITH APPLICABLE SAFETY FACTOR PRESCRIBED BY SECTION 2407.1.1.
2. IN ACCORDANCE WITH THE 8TH EDITION (2023) FLORIDA BUILDING CODE-BUILDING, SECTION 1618.4.6.3, HVHZ SPECIAL LOAD CONSIDERATIONS, THE ECONOGUARD WELDED MODULAR GLASS RAILING SYSTEM /GLASS PANEL ASSEMBLY 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 AT FENESTRATION TESTING LABORATORY, INC. (LAB. No. 8881, PROJECT No. 15-6151), AND BY BLACKWATER TESTING, INC. (TEST REPORT No. BT-AE-16-001, AND TEST REPORT No. BT-AE-16-002), IN CONFORMANCE WITH TEST APPLICATION STANDARD TAS 202, ALONG WITH GLAZING DYNAMIC IMPACT TESTS CONFORMING TO ANSI Z97.1, TEST CATEGORY CLASS A STANDARDS, AS REQUIRED BY SECTION 2406.4.4, AND SECTION 2407.1, CONSISTENT WITH THE 2023 FBC-B CODES.



Revisions

No.	Date	By	Description
1	4/26/2020	T.B.	UPDATE CODE REFERENCES TO 2020 FBC-B
2	10/29/2024	T.B.	UPDATE CODE REFERENCES TO 2023 FBC-B

PREMIER MANUFACTURER OF RAILINGS & ARCHITECTURAL METAL PRODUCTS

POMA ARCHITECTURAL METALS
www.pomametals.com
OFFICE: 772.283.2009 FAX: 772.283.2540



ECONOGUARD
Welded Modular Glass Railing System
TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PRODUCT CONTROL REQUIREMENTS

PRODUCT DESCRIPTION: EconoGUARD GR5

FABRICATOR: POMA ARCHITECTURAL METALS

ADDRESS: 2049 SW POMA DR. PALM CITY, FL

ENGINEER: TIMOTHY C. BOUDAH P.E.

Sheet Size: 11X17

Job No.: P15-0000

Drawn By: JGP/TCB

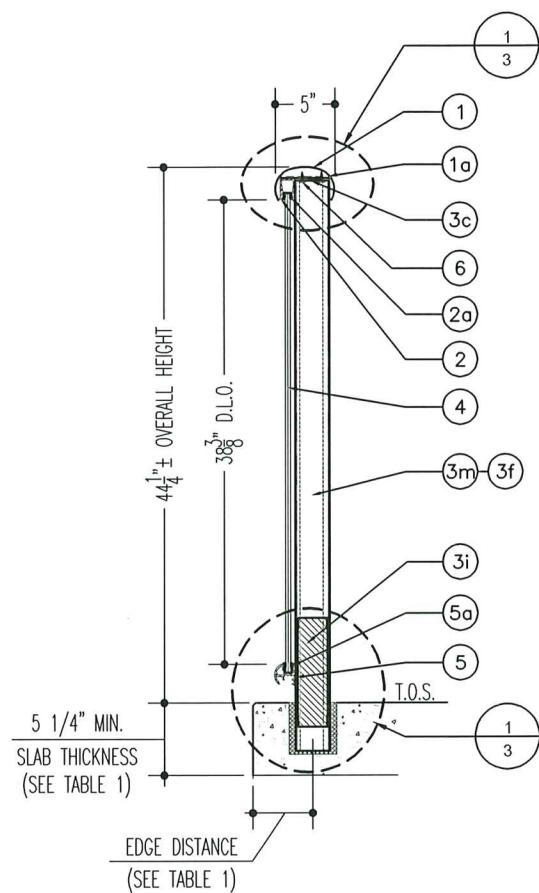
Checked By: FP

Scale: AS NOTED

Date: 6.20.2017

Sheet No.: 1 of 9

MAXIMUM ALLOWABLE WIND DESIGN PRESSURE:
EMBEDDED POST = (+130 PSF, -130 PSF)



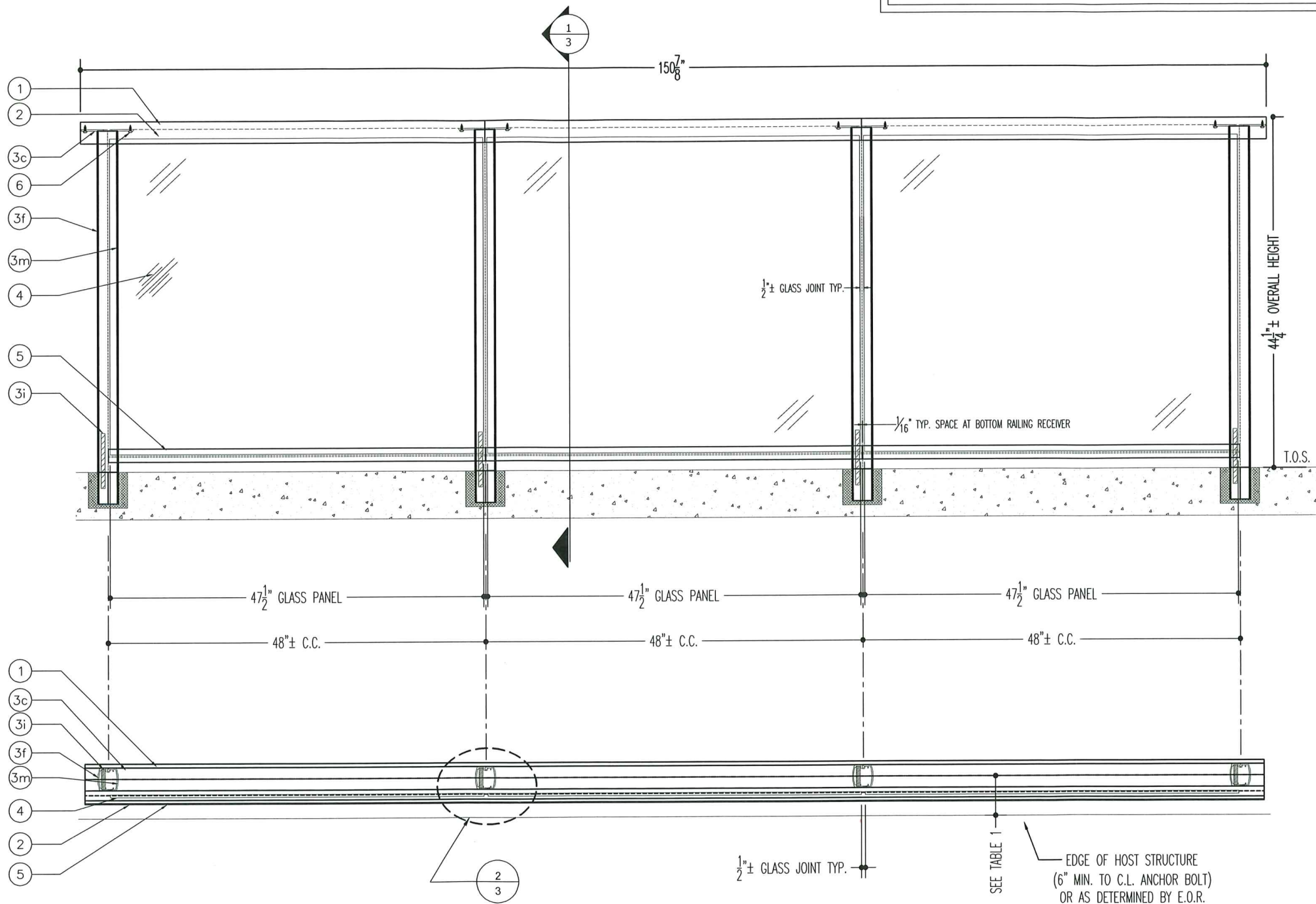
RAILING PROFILE

NTS

EconoGUARD
Welded Modular Glass Railing System
EMBEDDED POST SYSTEM

EconoGUARD GLASS RAILING COMPONENTS

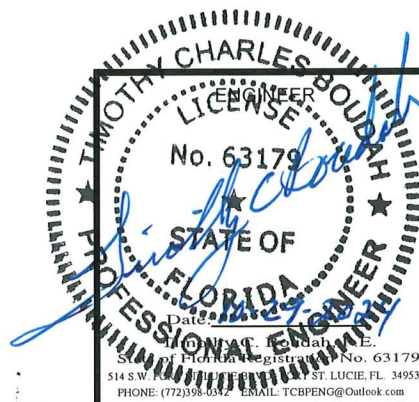
ITEM	PART #	COMPONENT DESCRIPTION	MATERIAL	ALLOY
1	GE-1	TOP HANDRAIL	ALUMINUM	6063-T6
1a	GE-i	TOP RAIL INNER SLEEVE-NOT TESTED	ALUMINUM	6063-T6
2	GE-10	MID RAIL RECEIVER	ALUMINUM	6005-T5
2a	316x2T	TPV CHANNEL GASKET, TOP EDGE	TPV/EPDM	-
3m	GE-PM	MALE PIVOTING POST SUPPORT	ALUMINUM	6005-T5
3f	GE-PF	FEMALE PIVOTING POST SUPPORT	ALUMINUM	6005-T5
3c	-	POST CLIP	ALUMINUM	6063-T6
3i	-	POST REINFORCING INSERT BAR	ALUMINUM	6061-T6
4	-	3/16\" FT + .035 SGP + 3/16\" FT, LAMINATED, TEMPERED GLASS INFILL	-	-
5	GE-20	BOTTOM RAIL RECEIVER	ALUMINUM	6005-T5
5a	316x2B	TPV CHANNEL GASKET, BOTTOM EDGE	TPV/EPDM	-
6	H1	#14-14 x 3/4 S.M.S. (OR 1/4\" ALUM. RIVET)	S.S./ALUM	304/6063



EconoGUARD RAILING PLAN AND ELEVATION

NTS

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 24-1203.04
Expiration Date 03/22/2028
By: *[Signature]*
Miami Dade Product Control



Revisions			
No.	Date	By	Description

PREMIER MANUFACTURER OF RAILINGS & ARCHITECTURAL METAL PRODUCTS

POMA

POMA ARCHITECTURAL METALS
www.pomametals.com
OFFICE: 772.398.0012 FAX: 772.263.7549

ECONOGUARD
Welded Modular Glass Railing System
TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PRODUCT CONTROL REQUIREMENTS

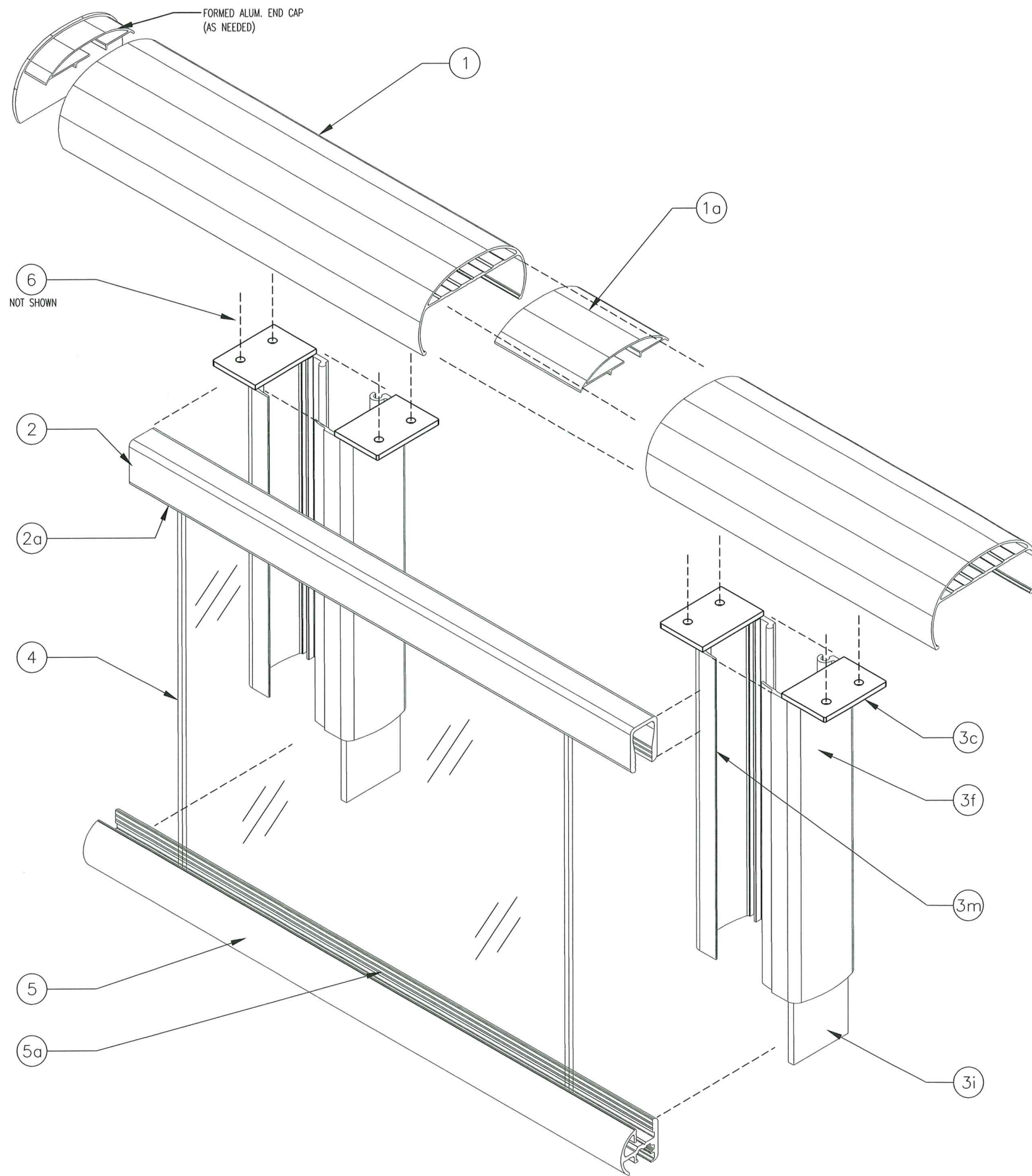
PRODUCT DESCRIPTION: EconoGUARD GR5
FABRICATOR: POMA ARCHITECTURAL METALS
ADDRESS: 2049 SW POMA DR. PALM CITY, FL
ENGINEER: TIMOTHY C. BOUDAH P.E.
Sheet Size: 11X17

Job No.: P15-0000
Drawn By: JGP/TCB
Checked By: FP
Scale: AS NOTED
Date: 6.20.2017
Sheet No.: 2 of 9



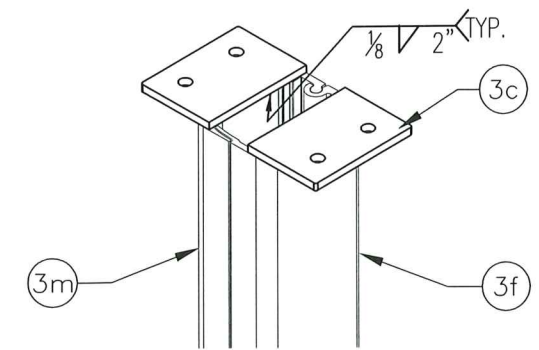
1 GUARDRAIL SECTION DETAIL

Job No.: P15-0000
Drawn By: JGP/TCB
Checked By: FP
Scale: AS NOTED
Date: 6.20.2017
Sheet No.: 3 of 9

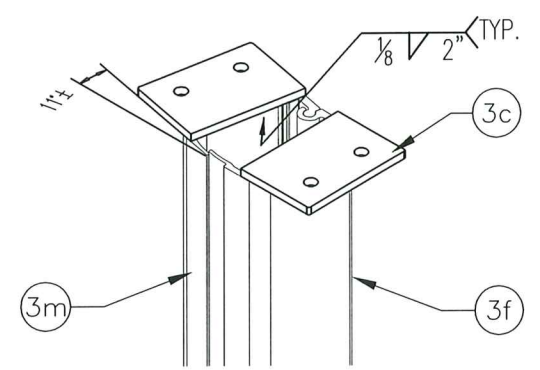


EMBEDDED POST GUARDRAIL ASSEMBLY EXPLODED VIEW

MAXIMUM ALLOWABLE WIND DESIGN PRESSURE:
EMBEDDED POST = (+130 PSF, -130 PSF)



PIVOTING POST IN FIXED POSITION

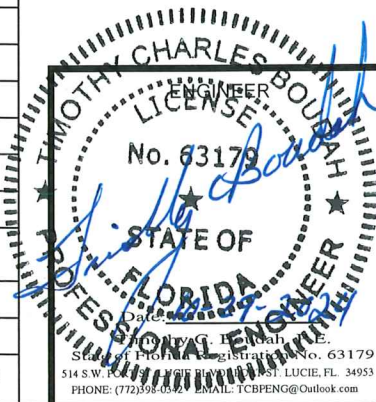


PIVOTING POST IN ROTATION

ECONOGUARD
Welded Modular Glass Railing System
EMBEDDED POST SYSTEM

EconoGUARD GLASS RAILING COMPONENTS				
ITEM	PART #	COMPONENT DESCRIPTION	MATERIAL	ALLOY
1	GE-1	TOP HANDRAIL	ALUMINUM	6063-T6
1a	GE-i	TOP RAIL INNER SLEEVE-NOT TESTED	ALUMINUM	6063-T6
2	GE-10	MID RAIL RECEIVER	ALUMINUM	6005-T5
2a	316x2T	TPV CHANNEL GASKET, TOP EDGE	TPV/EPDM	-
3m	GE-PM	MALE PIVOTING POST SUPPORT	ALUMINUM	6005-T5
3f	GE-PF	FEMALE PIVOTING POST SUPPORT	ALUMINUM	6005-T5
3c	-	POST CLIP	ALUMINUM	6063-T6
3i	-	POST REINFORCING INSERT BAR	ALUMINUM	6061-T6
4	-	3/16" FT + .035 SGP + 3/16" FT, LAMINATED, TEMPERED GLASS INFILL	-	-
5	GE-20	BOTTOM RAIL RECEIVER	ALUMINUM	6005-T5
5a	316x2B	TPV CHANNEL GASKET, BOTTOM EDGE	TPV/EPDM	-
6	H1	#14-14 x 3/4 S.M.S. (OR 1/4" ALUM. RIVET)	S.S./ALUM	304/6063

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 24-1203.04
Expiration Date 03/22/2028
By *Heidi A. Miller*
Miami Dade Product Control



Revisions

No.	Date	By	Description

PREMIER MANUFACTURER OF RAILINGS & ARCHITECTURAL METAL PRODUCTS

POMA

POMA ARCHITECTURAL METALS
www.pomametals.com
3095 S.W. 10TH AVE. SUITE 100
MIAMI, FL 33135
(772) 598-0000

ECONOGUARD

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

PRODUCT DESCRIPTION: EconoGUARD GRs

FABRICATOR: POMA ARCHITECTURAL METALS

ADDRESS: 2049 SW POMA DR. PALM CITY, FL

ENGINEER: TIMOTHY C. BOUDAH P.E.

Sheet Size: 11X17

Job No.: P15-0000

Drawn By: JGP/TCB

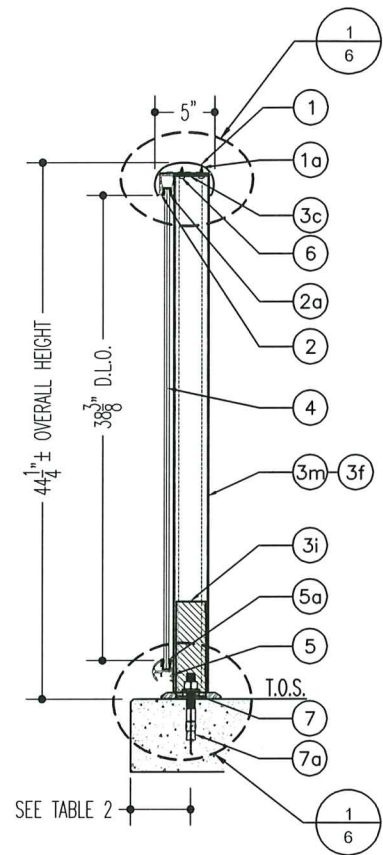
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Scale: AS NOTED

Date: 6.20.2017

Sheet No.: 4 of 9

MAXIMUM ALLOWABLE WIND DESIGN PRESSURE:
POST BASE PLATE = (+60 PSF, -60 PSF)

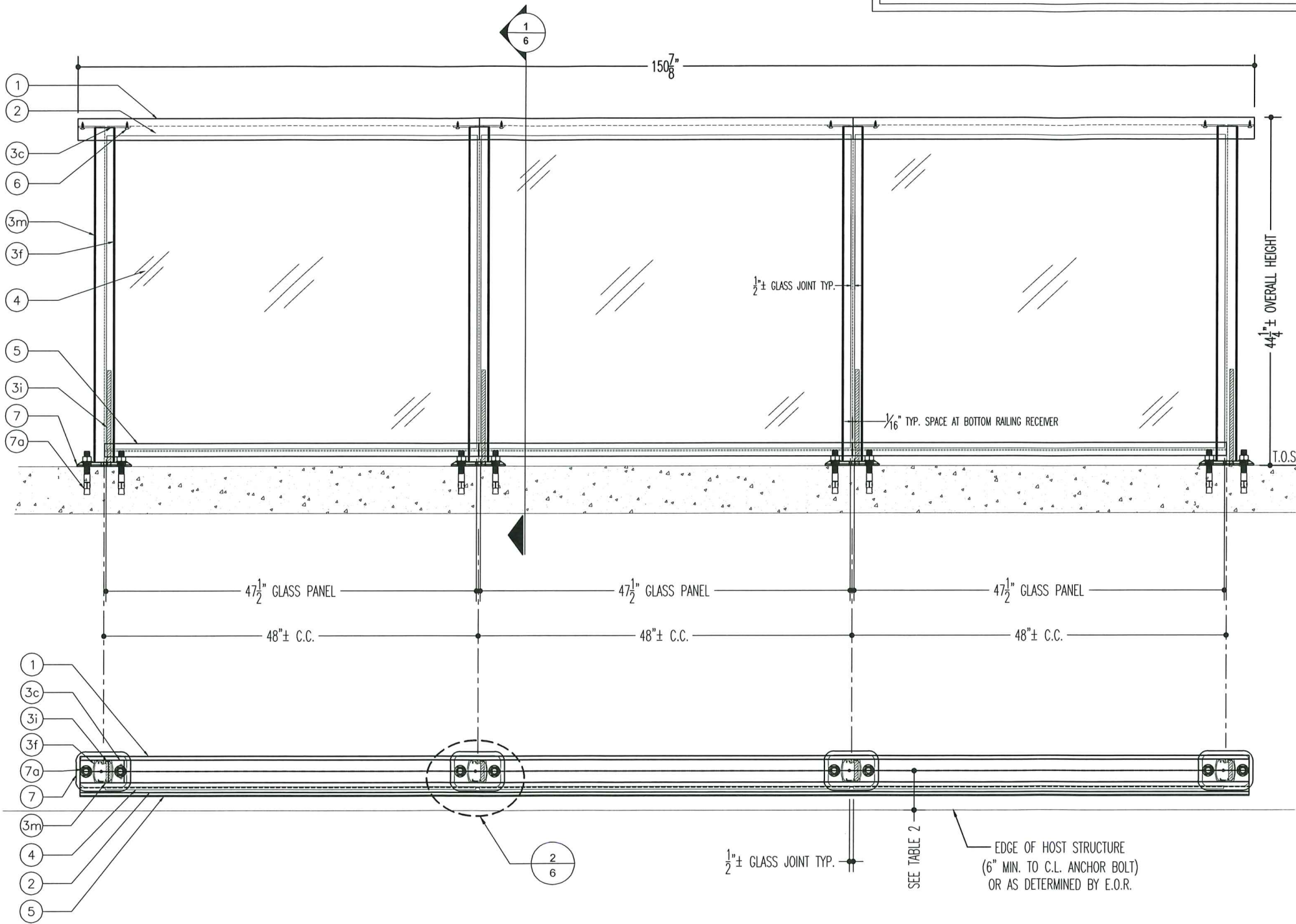


RAILING PROFILE
NTS

EconoGUARD
Welded Modular Glass Railing System
POST BASE PLATE SYSTEM

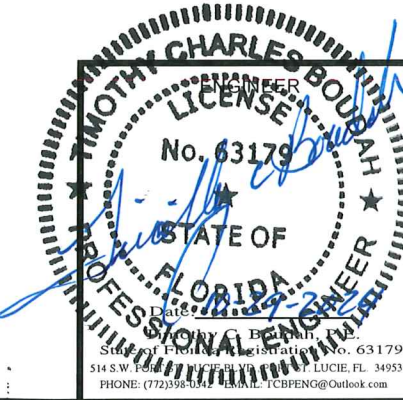
EconoGUARD GLASS RAILING COMPONENTS

ITEM	PART #	COMPONENT DESCRIPTION	MATERIAL	ALLOY
1	GE-1	TOP HANDRAIL	ALUMINUM	6063-T6
1a	GE-i	TOP RAIL INNER SLEEVE--NOT TESTED	ALUMINUM	6063-T6
2	GE-10	MID RAIL RECEIVER	ALUMINUM	6005-T5
2a	316x2T	TPV CHANNEL GASKET, TOP EDGE	TPV/EPDM	-
3m	GE-PM	MALE PIVOTING POST SUPPORT	ALUMINUM	6005-T5
3f	GE-PF	FEMALE PIVOTING POST SUPPORT	ALUMINUM	6005-T5
3c	-	POST CLIP	ALUMINUM	6063-T6
3i	-	POST REINFORCING INSERT BAR	ALUMINUM	6061-T6
4	-	3/16" FT + .035 SGP + 3/16" FT, LAMINATED, TEMPERED GLASS INFILL	-	-
5	GE-20	BOTTOM RAIL RECEIVER	ALUMINUM	6005-T5
5a	316x2B	TPV CHANNEL GASKET, BOTTOM EDGE	TPV/EPDM	-
6	H1	#14-14 x 3/4 S.M.S. (OR 1/4" ALUM. RIVET)	S.S./ALUM	304/6063
7	BP	5"X7"X1/2" THK. BASEPLATE	ALUMINUM	6061-T6
7a	H2	MECH. EXP. ANCHOR OR ATR AS REQUIRED BY TABLE 2 w/ MATCHING NUT & WASHER	STAINLESS STEEL	304



EconoGUARD RAILING PLAN AND ELEVATION
NTS

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 24-1203.04
Expiration Date 03/22/2028
By: *[Signature]*
Miami Dade Product Control



Revisions

No.	Date	By	Description

PREMIER MANUFACTURER OF RAILINGS & ARCHITECTURAL METAL PRODUCTS

poma

ECONOGUARD
Welded Modular Glass Railing System
TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PRODUCT CONTROL REQUIREMENTS

PRODUCT DESCRIPTION: EconoGUARD GRS

FABRICATOR: POMA ARCHITECTURAL METALS

ADDRESS: 2049 SW POMA DR. PALM CITY, FL

ENGINEER: TIMOTHY C. BOUDAH P.E.

Sheet Size: 11X17

Job No.: P15-0000

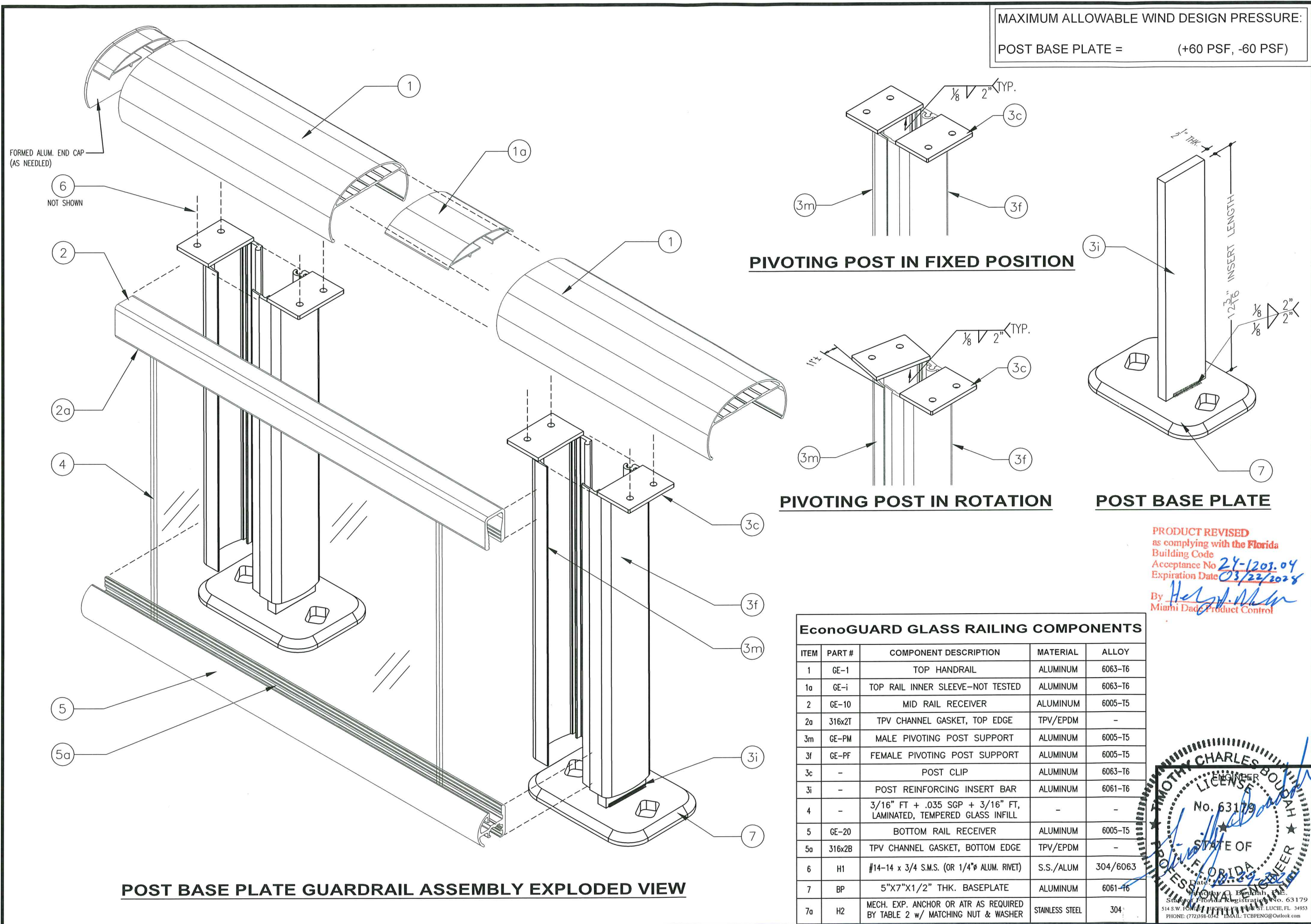
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Checked By: FP

Scale: AS NOTED

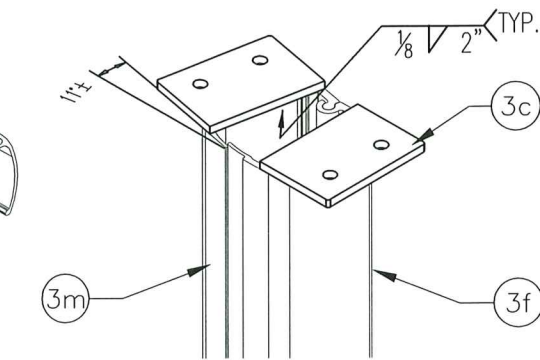
Date: 6.20.2017

Sheet No.: 5 of 9

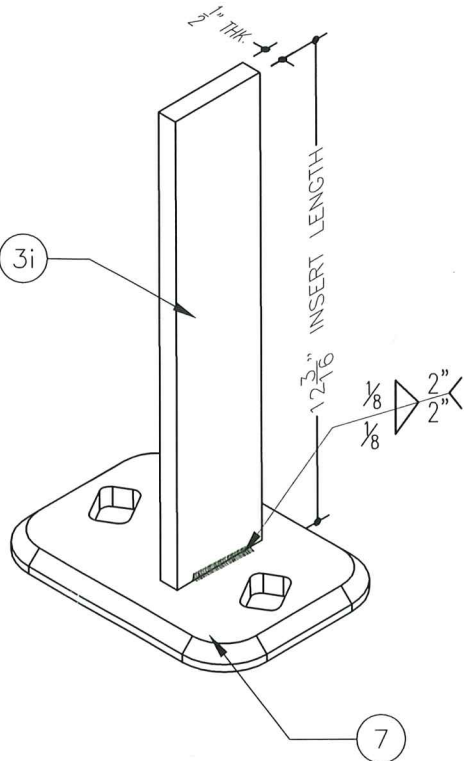


MAXIMUM ALLOWABLE WIND DESIGN PRESSURE:
POST BASE PLATE = (+60 PSF, -60 PSF)

PIVOTING POST IN FIXED POSITION



PIVOTING POST IN ROTATION



POST BASE PLATE

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 24-1203.04
Expiration Date 03/23/2028
By: *[Signature]*
Miami Dad Product Control

EconoGUARD GLASS RAILING COMPONENTS				
ITEM	PART #	COMPONENT DESCRIPTION	MATERIAL	ALLOY
1	GE-1	TOP HANDRAIL	ALUMINUM	6063-T6
1a	GE-i	TOP RAIL INNER SLEEVE-NOT TESTED	ALUMINUM	6063-T6
2	GE-10	MID RAIL RECEIVER	ALUMINUM	6005-T5
2a	316x2T	TPV CHANNEL GASKET, TOP EDGE	TPV/EPDM	-
3m	GE-PM	MALE PIVOTING POST SUPPORT	ALUMINUM	6005-T5
3f	GE-PF	FEMALE PIVOTING POST SUPPORT	ALUMINUM	6005-T5
3c	-	POST CLIP	ALUMINUM	6063-T6
3i	-	POST REINFORCING INSERT BAR	ALUMINUM	6061-T6
4	-	3/16" FT + .035 SGP + 3/16" FT, LAMINATED, TEMPERED GLASS INFILL	-	-
5	GE-20	BOTTOM RAIL RECEIVER	ALUMINUM	6005-T5
5a	316x2B	TPV CHANNEL GASKET, BOTTOM EDGE	TPV/EPDM	-
6	H1	#14-14 x 3/4 S.M.S. (OR 1/4" ALUM. RIVET)	S.S./ALUM	304/6063
7	BP	5"X7"X1/2" THK. BASEPLATE	ALUMINUM	6061-T6
7a	H2	MECH. EXP. ANCHOR OR ATR AS REQUIRED BY TABLE 2 w/ MATCHING NUT & WASHER	STAINLESS STEEL	304

[Professional Engineer Seal for Timothy Charles Boudah, State of Florida, License No. 63179]

Revisions

No.	Date	By	Description

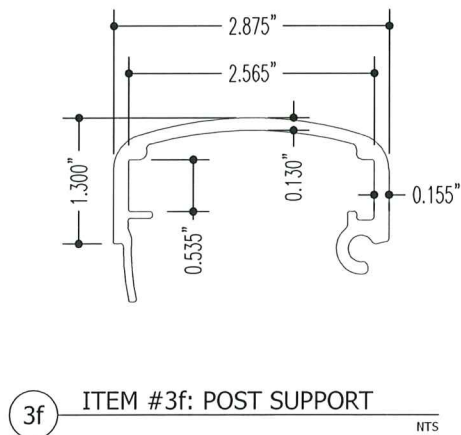
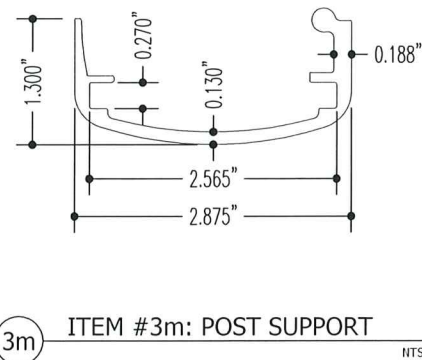
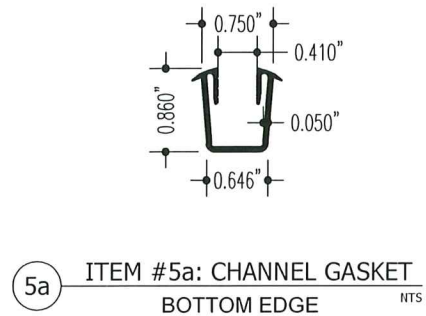
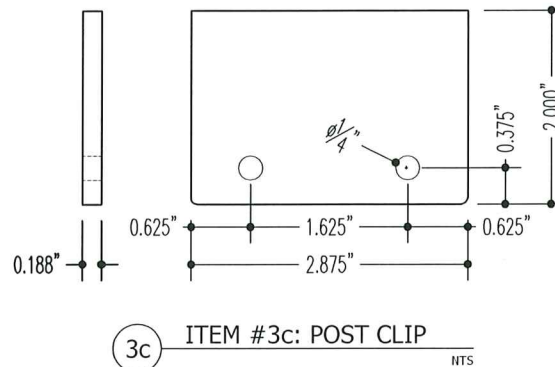
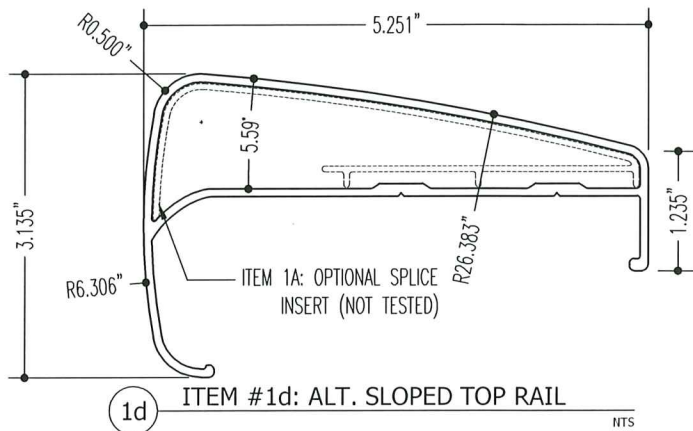
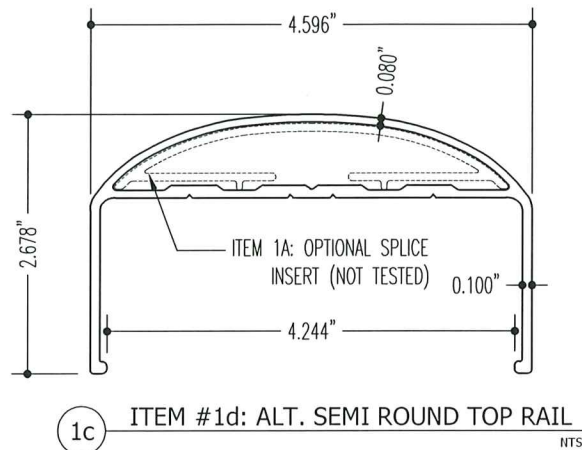
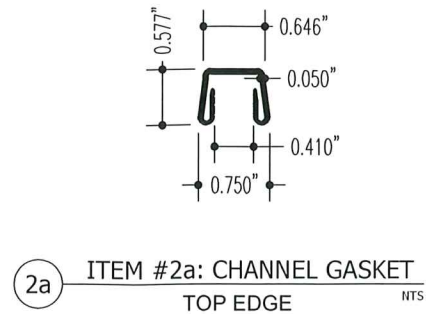
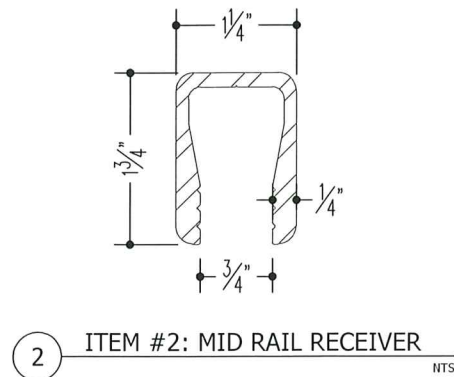
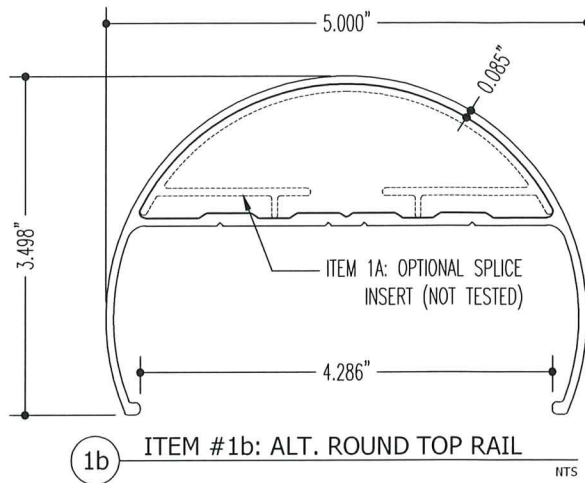
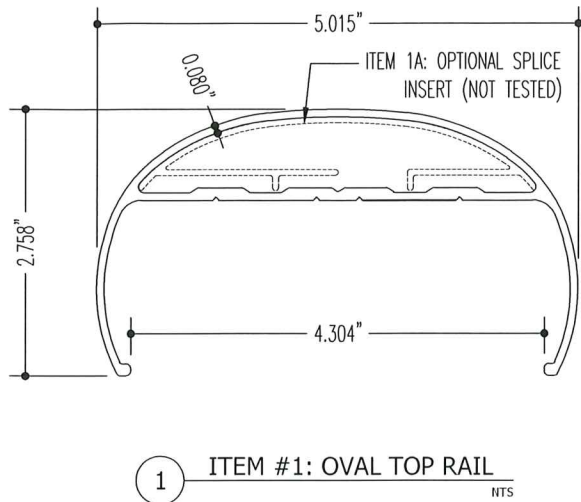
PREMIER MANUFACTURER OF RAILINGS & ARCHITECTURAL METAL PRODUCTS

poma

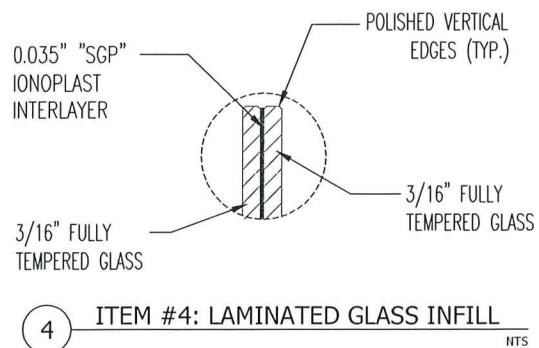
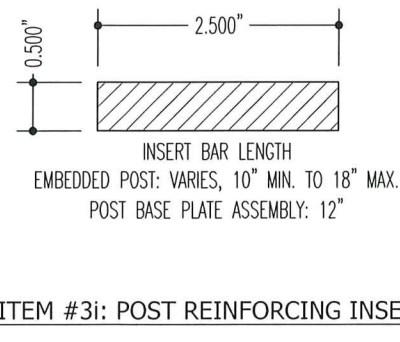
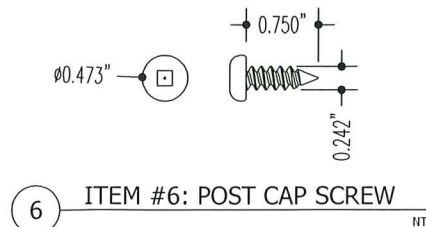
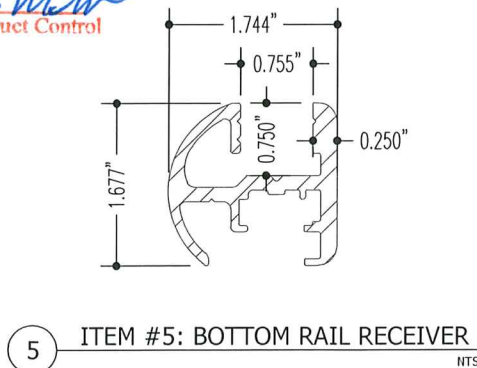
POMA ARCHITECTURAL METALS
www.pomametals.com
OFFICE: 772.283.0099 FAX: 772.283.7546

ECONOGUARD
Welded Modular Glass Railing System
TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PRODUCT CONTROL REQUIREMENTS

PRODUCT DESCRIPTION: EconoGUARD GRs	Job No.: P15-0000
FABRICATOR: POMA ARCHITECTURAL METALS	Drawn By: JGP/TCB
ADDRESS: 2049 SW POMA DR. PALM CITY, FL	Checked By: FP
ENGINEER: TIMOTHY C. BOUDAH P.E.	Scale: AS NOTED
	Date: 6.20.2017
	Sheet No.: 7 of 9



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 24-1203.04
Expiration Date 03/22/2028
By Heidi A. Miller
Miami Data Product Control



MAXIMUM ALLOWABLE WIND DESIGN PRESSURE:
EMBEDDED POST = (+130 PSF, -130 PSF)
POST BASE PLATE = (+60 PSF, -60 PSF)

Revisions		Description		By		Date		No.	

PREMIER MANUFACTURER OF RAILINGS & ARCHITECTURAL METAL PRODUCTS

POMA

POMA ARCHITECTURAL METALS
www.pomametals.com
2049 SW POMA DR. PALM CITY, FL 32909
OFFICE: 772.265.0099 FAX: 772.263.7440

ECONOGUARD
Welded Modular Glass Railing System
TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PRODUCT CONTROL REQUIREMENTS

PRODUCT DESCRIPTION: EconoGuard GR5
FABRICATOR: POMA ARCHITECTURAL METALS
ADDRESS: 2049 SW POMA DR. PALM CITY, FL
ENGINEER: TIMOTHY C. BOUDAH P.E.
Sheet Size: 11X17

Job No.: P15-0000
Drawn By: JGP/TCB
Checked By: FP
Scale: AS NOTED
Date: 6.20.2017
Sheet No.: 8 of 9

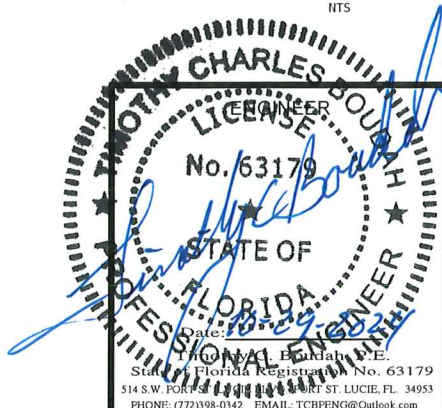


TABLE 2 RAILING POST BASE PLATE ANCHOR BOLT VARIABLES							
ANCHOR BOLT TYPE	ANCHOR BOLT DIAMETER (INCHES)	MAXIMUM POST SPACING (INCHES)	MAXIMUM DESIGN WIND PRESSURE (NEG. OR POS.) PSF	MINIMUM CONCRETE COMPRESSIVE STRENGTH (PSI)	MINIMUM BOLT EMBEDMENT DEPTH (INCHES)	MINIMUM SLAB THICKNESS (INCHES)	MINIMUM BOLT EDGE DISTANCE (INCHES)
MECHANICAL EXPANSION ANCHOR BOLT (SEE NOTE #1)	1/2 ∅	48	60	4,200	4.0	6.0	6.0
			60	4,500	3 7/8	6.0	6.0
			65	4,800	4.0	6.0	6.0
	5/8 ∅	48	60	4,100	4.0	6.0	6.0
			60	4,600	3 3/4	5 5/8	6.0
			65	4,200	4 1/4	6.0	6.0
		52	65	4,800	4.0	6.0	6.0
			60	4,200	4 1/4	6.0	6.0
			65	4,700	4 3/8	6.0	6.0
	3/4 ∅	48	60	4,000	4.0	6 3/4	6.0
			60	4,450	3 3/4	6 3/4	6.0
			65	4,000	4 3/8	6 3/4	6.0
			65	4,600	4.0	6 3/4	6.0
			70	4,200	4 1/2	6 3/4	6.0
		52	60	4,600	4.0	6 3/4	6.0
			65	4,800	4 1/4	6 3/4	6.0
			65	4,600	4 3/8	6 3/4	6.0
			70	4,900	4 1/2	6 3/4	6.0
ALL-THREAD-ROD ANCHOR BOLT (SEE NOTE #2)	5/8 ∅	48	60	4,500	4.0	5 1/4	6.0
			60	5,000	4.0	5 1/4	6.0
	3/4 ∅	48	60	4,000	4.0	6.0	6.0
			60	4,000	3 3/4	5 5/8	6.0
			60	4,000	3 1/2	5 1/4	6.0
			65	4,000	4.0	6.0	6.0
		50	60	4,000	4.0	6.0	6.0
			60	4,000	3 3/4	5 5/8	6.0
			65	4,500	4.0	6.0	6.0
		52	60	4,000	4.0	6.0	6.0

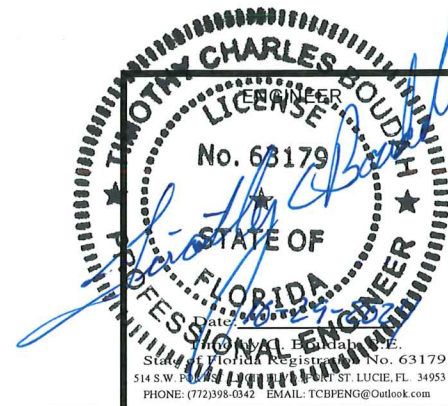
- TABLE 2 NOTES:
- MECHANICAL EXPANSION ANCHOR BOLT SHALL CONSIST OF THE FOLLOWING, EQUAL, OR BETTER:
 - SIMPSON STRONG-TIE COMPANY, INC. "STRONG-BOLT 2" STAINLESS STEEL (A.I.S.I. TYPE 304, MIN.) WEDGE ANCHOR, TORQUE-CONTROLLED MECHANICAL EXPANSION BOLT WITH MATCHING WASHER AND HEAVY HEX HEAD NUT, MANUFACTURED IN CONFORMANCE WITH FLORIDA PRODUCT APPROVAL NO. FL15730.6; WITH TEST DATA PUBLISHED IN ICC-ES REPORT ESR-3037; OR UPDATED/CURRENT ISSUE.
 - OVERALL LENGTH OF MECHANICAL EXPANSION ANCHOR BOLT MUST BE SELECTED TO ACHIEVE THE MINIMUM SPECIFIED BOLT EMBEDMENT DEPTH.
 - BOLT HOLE DIAMETER MUST BE NO GREATER THAN 1/8" LARGER THEN SPECIFIED BOLT DIAMETER.
 - BOLT HOLE DEPTH MUST BE DRILLED NO LESS THAN 1/4" DEEPER THEN SPECIFIED BOLT EMBEDMENT DEPTH.
 - BOLT INSTALLATION TORQUE IN ACCORDANCE WITH MECHANICAL EXPANSION BOLT MANUFACTURE'S WRITTEN INSTALLATION INSTRUCTIONS.
 - ALL-THREAD-ROD (ATR) ANCHOR BOLT SHALL CONSIST OF THE FOLLOWING, EQUAL, OR BETTER:
 - ALL-THREAD-ROD (ATR) SHALL BE MANUFACTURED IN CONFORMING TO MECHANICAL PROPERTIES OF ASTM F593 CW, CONSISTING OF A.I.S.I. TYPE 304 STAINLESS STEEL (MIN.) HAVING AN ULTIMATE TENSILE STRENGTH = 100 KSI, AND MINIMUM YIELD STRENGTH = 55 KSI (AT 0.2% STRAIN), OR BETTER.
 - NUTS SHALL BE HEAVY DUTY HEX HEAD, STAINLESS STEEL (A.I.S.I. TYPE 304 MIN.) CONFORMING TO ASTM F594, ALLOYS, GROUP 1, OR EQUAL.
 - ATR SHALL BE PROVIDED WITH PLAIN FLAT STAINLESS STEEL (A.I.S.I. TYPE 304 MIN.) WASHER (0.062" THICK, MIN.) CONFORMING TO ANSI/ASME B 18.22.1, TYPE A, OR EQUAL.
 - OVERALL LENGTH OF ATR MUST BE DETERMINED TO ACHIEVE THE MINIMUM SPECIFIED BOLT EMBEDMENT DEPTH.
 - ATR BOLT HOLE DEPTH MUST BE DRILLED NO LESS THAN 1/4" DEEPER THEN SPECIFIED BOLT EMBEDMENT DEPTH.
 - ATR BOLT HOLE DIAMETER MUST BE NO LESS THAN 1/8" LARGER AND NO GREATER THAN 3/16" LARGER THEN SPECIFIED BOLT DIAMETER.
 - ATR ANCHOR BOLT TO BE SET WITH SIKI ANCHORFIX-500 ADHESIVE, OR EQUAL.
 - ALL DRILL HOLES MUST BE CLEANED IN ACCORDANCE WITH THE ANCHOR ADHESIVE MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - ANCHOR ADHESIVE MUST BE ALLOWED TO CURE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. AFTER ADHESIVE HAS REACHED THE REQUIRED MINIMUM CURE TIME, ATR ANCHOR BOLT NUT MUST BE TIGHTENED TO A MINIMUM TORQUE. UNLESS OTHERWISE DETERMINED BY E.O.R., ATR BOLT INSTALLATION TORQUE AS FOLLOWS:
 - 5/8"∅ ATR: 50 TO 55 FT. LBS.
 - 3/4"∅ ATR: 90 TO 95 FT. LBS.
 - INTERPOLATION BETWEEN DESIGNATED WIND DESIGN PRESSURES IS NOT ALLOWED. USE HIGHEST WIND DESIGN PRESSURE BETWEEN ANY TWO DESIGNATED PRESSURE VALUES.

MAXIMUM ALLOWABLE WIND DESIGN PRESSURE:
EMBEDDED POST = (+130 PSF, -130 PSF)
POST BASE PLATE = (+60 PSF, -60 PSF)

TABLE 1 RAILING POST EMBEDMENT VARIABLES						
MAXIMUM DESIGN WIND PRESSURE, PSF (NEG. OR POS.)	MAXIMUM POST SPACING (INCHES)	MINIMUM INSERT BAR HEIGHT ABOVE T.O.S. (INCHES)	MINIMUM POST EMBEDMENT DEPTH (INCHES)	MINIMUM SLAB THICKNESS (INCHES)	MINIMUM POST HOLE EDGE DISTANCE (INCHES)	MINIMUM CONCRETE COMPRESSIVE STRENGTH (PSI)
= / < 60	60	4.0	4.0	5 1/4	6.0	4,200
70	60	6.0	4.0	5 1/4	6.0	4,200
80	60	6.0	4.0	5 1/4	6.0	4,200
90	60	8.0	4.0	5 1/4		4,200
100	60	10.0	4.0	5 1/4	6.0	4,200
110	52	12.0	4.0	5 1/4	6.0	4,200
120	48	12.0	4.0	5 1/4	6.0	4,200
130	48	12.0	4.0	5 1/4	6.0	4,200

- TABLE 1 NOTES:
- TABLE 1 IS PROVIDED ONLY AS A GUIDELINE, TO SHOW REQUIRED RELATIONSHIP BETWEEN POST EMBEDMENT DEPTH, REINFORCING INSERT BAR HEIGHT ABOVE TOP OF SLAB, POST HOLE EDGE DISTANCE, SLAB THICKNESS, AND CONCRETE SLAB COMPRESSIVE STRENGTH AT THE DESIGNATED DESIGN WIND PRESSURE.
 - EXISTING CONDITIONS OF THE HOST STRUCTURE/BALCONY SLAB AND THE ACTUAL CONCRETE COMPRESSIVE STRENGTH MUST BE DETERMINED BY THE GENERAL CONTRACTOR, E.O.R., OR OTHERS, AND PROVIDED TO POMA BEFORE POST EMBEDMENT DEPTH AND MINIMUM EDGE DISTANCE CAN BE DETERMINED.
 - INTERPOLATION BETWEEN DESIGNATED WIND DESIGN PRESSURES IS NOT ALLOWED. USE HIGHEST WIND DESIGN PRESSURE BETWEEN ANY TWO DESIGNATED PRESSURE VALUES.
 - DEPTH OF POST HOLE MUST BE 1/4" (MIN.) GREATER THEN MINIMUM POST EMBEDMENT DEPTH.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 24-1203.04
Expiration Date 03/22/2028
By *Healy A. Nelson*
Miami Data Product Control



Revisions							
		Description	By	Date			
		No.					
<div>PREMIER MANUFACTURER OF RAILINGS & ARCHITECTURAL METAL PRODUCTS</div> <div>POMA</div> <div>POMA ARCHITECTURAL METALS www.pomametals.com 2049 S.W. POMA DR. PALM CITY, FL 34909 OFFICE: (772) 395-0342 FAX: (772) 393-7540</div> <div>ECONOGUARD Welded Modular Glass Railing System TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PRODUCT CONTROL REQUIREMENTS</div>							
PRODUCT DESCRIPTION: EconoGUARD GRS							
FABRICATOR: POMA ARCHITECTURAL METALS							
ADDRESS: 2049 SW POMA DR. PALM CITY, FL							
ENGINEER: TIMOTHY C. BOUDAH P.E.							
		Sheet Size: 11X17					
Job No.: P15-0000							
Drawn By: JGP/TCB							
Checked By: FP							
Scale: AS NOTED							
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Sheet No.: 9 of 9							