



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)

Hardware and Glass Group LLC
8th the Green Salte #7407
Dover, Delaware 19901

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: "Series BR86 Aluminum Glazed Railing System

APPROVAL DOCUMENT: Drawing No. HWG003, titled "Series BR86 Railing System with 1" Laminated Glass", 4 sheets, prepared by Building Drops, signed and sealed by Hermes F. Norero, P.E., on Sept. 26, 2024, bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and the approval date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state 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 consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above.

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



Helmy A. Makar
10/10/24

NOA No. 24-0520.02
Expiration Date: 10/10/2029
Approval Date: 10/10/2024

Hardware and Glass Group LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. HWG003, titled "Series BR86 Railing System with 1" Laminated Glass", 4 sheets, prepared by Building Drops, signed and sealed by Hermes F. Norero, P.E., on Sept. 26, 2024.*

B. TESTS

1. *Test Report No. **BT-HWG-23-001**, by Blackwater Testing, Inc., dated 12/22/2023, signed & sealed by Michael D. Caldwell, P.E., testing Glass Railing for concentrated and distributed loads per FBC 1618.4.6, Impacts per ANSI Z97.1, Impacts per TAS 201-94 and Static Wind Load per TAS 202-94.*

C. CALCULATIONS

1. *Calculation titled "BR86 Railing System with 1" Laminated Glass", dated January 16, 2024, prepared by Building Drops, signed and sealed by Hermes F. Norero, P.E.*

D. QUALITY ASSURANCE

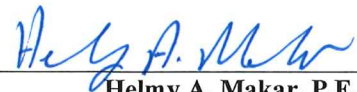
1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. ***Florida Building Code, 2023 Edition Compliance Letter** prepared by Building Drops, signed and sealed by Hermes F. Norero, P.E., on Sept. 26, 2024.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 24-0520.02
Expiration Date: 10/10/2029
Approval Date: 10/10/2024

c:\users\sebastian\hermes\building drops, inc\building drops landing - common\projects\hardware and glass group\limited\md-23-0508 - md submittal - br86 glass railing system\dwgs\hgw003.dwg 9/25/2024 8:11 AM

HARDWARE AND GLASS GROUP, LLC.

BR86 RAILING SYSTEM WITH 1" LAMINATED GLASS

GENERAL NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 8TH EDITION FLORIDA BUILDING CODE (FBC), **INCLUDING** HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
 - ANSI Z97.1
 - TAS 201-94
 - TAS 202-94
- ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
- APPROVED IMPACT PROTECTIVE SYSTEM **IS NOT REQUIRED** ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
- CHANNEL MATERIAL: ALUMINUM 6063-T6
- GLASS MEETS THE REQUIREMENTS OF ASTM E1300 GLASS CHARTS. SEE SHEET 1 FOR GLAZING DETAIL.

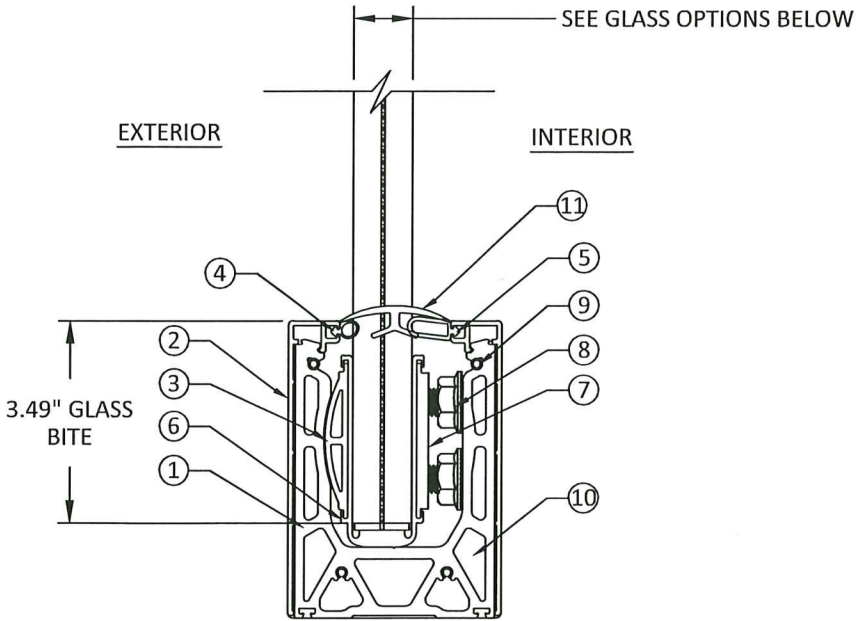
INSTRUCTIONS FOR USE:

- DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BUILDING HEIGHT, AND WIND ZONE USING THE APPLICABLE ASCE 7 STANDARD.
- SEE DESIGN PRESSURE TABLE ON SHEET 3 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE AND THE MAXIMUM RAILING HEIGHT BASED ON THE CONCENTRATED AND DISTRIBUTED LIVE LOADS.
- SEE ANCHOR SPECIFICATIONS ON SHEET 3.

GLAZING NOTES:

- GLASS TYPE COMPLIES WITH ASTM E1300 REQUIREMENTS. PER THE FBC TEMPER AND SAFETY GLAZING REQUIREMENTS SHALL BE REVIEWED ON A SITE SPECIFIC BASIS.
- SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN FBC CHAPTER 24.
- SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER FBC CHAPTER 24.
- D.L.O. AND DESIGN PRESSURES MAY NOT EXCEED MAX VALUES SHOWN HEREIN.

TABLE OF CONTENTS	
SHEET	SHEET DESCRIPTION
1	GENERAL NOTES AND GLAZING DETAIL
2	ELEVATION
3	ANCHOR DETAILS AND DESIGN PRESSURE TABLE
4	BILL OF MATERIALS & COMPONENTS



GLAZING DETAIL

GLASS OPTION 1:

1" O.A. LAMINATED GLASS:
-15/32" (12mm) TEMPERED GLASS
-0.060" (1.52mm) SENTRYGLAS INTERLAYER BY KURARAY
-15/32 (12mm) TEMPERED GLASS

GLASS OPTION 2:

1" O.A. LAMINATED GLASS:
-1/2" (12.7mm) TEMPERED GLASS
-0.060" (1.52mm) SENTRYGLAS INTERLAYER BY KURARAY
-1/2" (12.7mm) TEMPERED GLASS

Approved as complying with the
Florida Building Code
Date 10/10/24
NOA# 24-0520-02
Miami Dade Product Control
By *H. A. M. W.*



HARDWARE AND GLASS GROUP, LLC.
8 THE GREEN SUITE #7407
DOVER, DE 19901
PH: (323) 647-5800

TITLE: BR86 RAILING SYSTEM
WITH 1" LAMINATED GLASS

GENERAL NOTES AND
GLAZING DETAIL

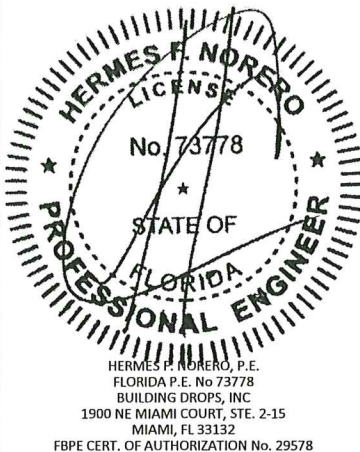
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI COURT, STE. 2-15
MIAMI, FL 33132
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



DATE: 01.15.24

DWG. BY: SH
CHK. BY: HFN

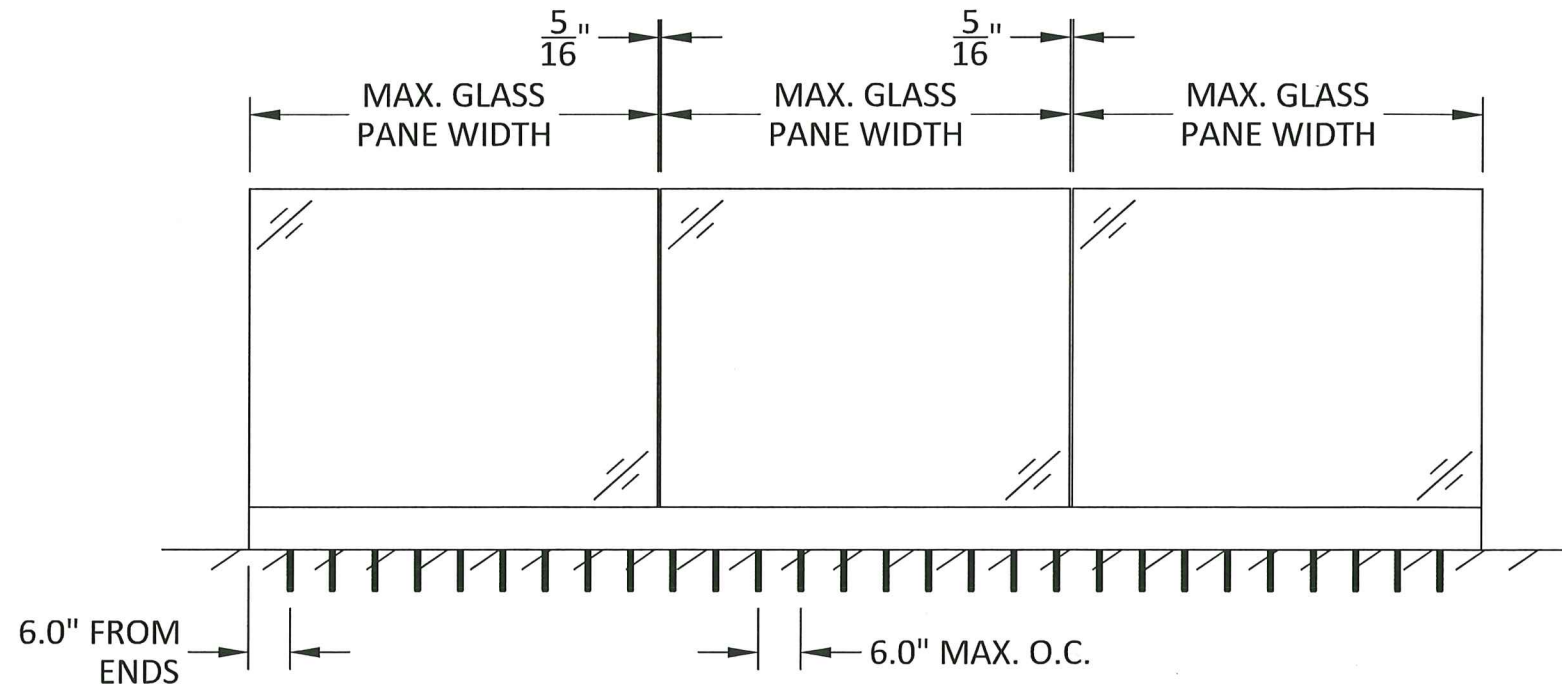
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DWG. #: HWG003

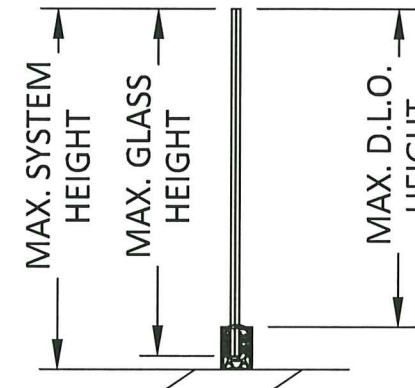
SHEET:

1

OF 4



NOTE: SEE SHEET 3 FOR DESIGN PRESSURE TABLE AND ANCHOR DETAILS.



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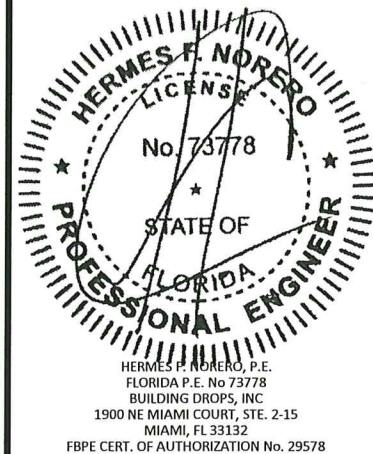
TITLE: BR86 RAILING SYSTEM
WITH 1" LAMINATED GLASS
ELEVATION &
DESIGN PRESSURE TABLES

PREPARED BY:
BUILDING DROPS, INC.
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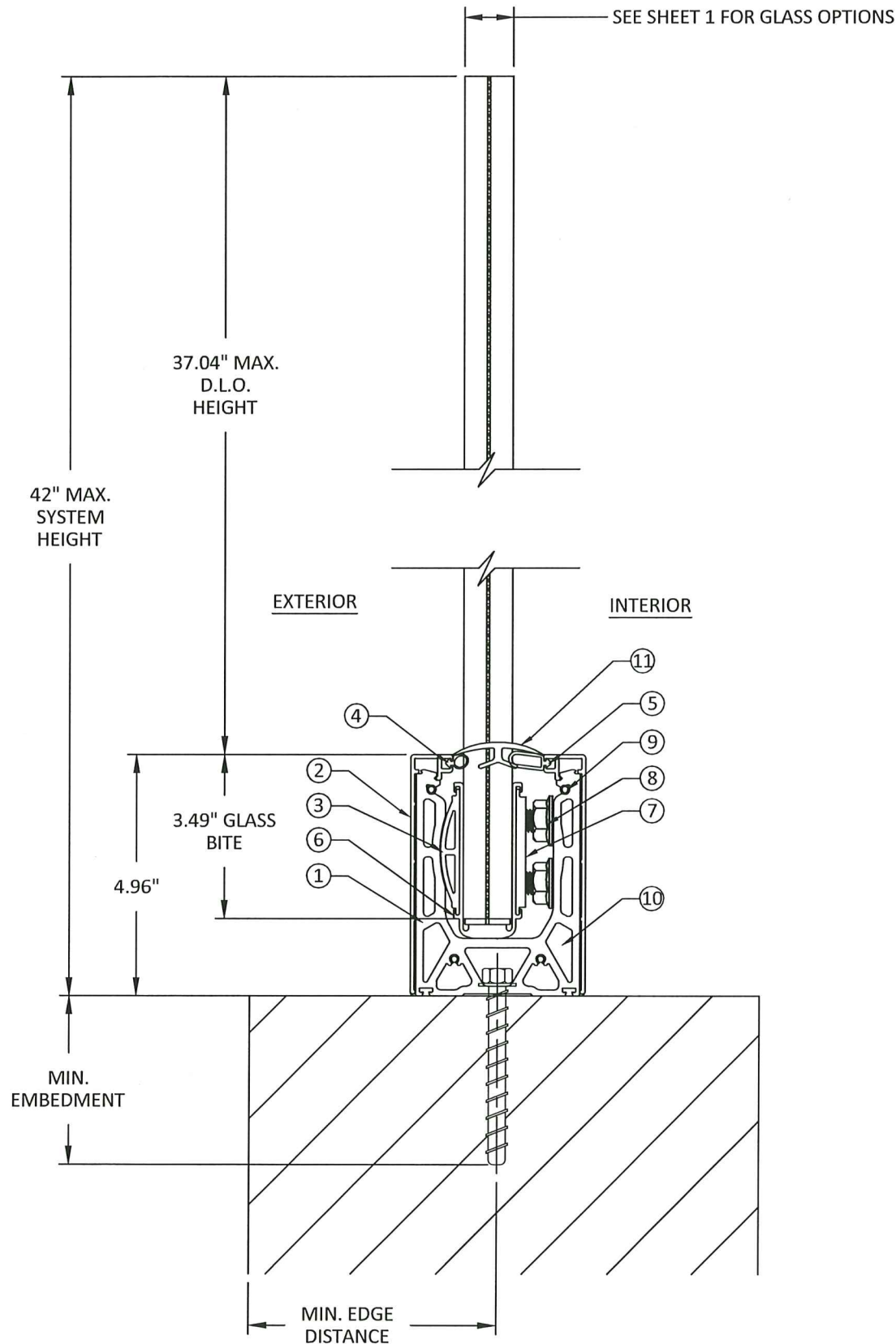


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DWG. BY:	SH
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	HWG003
SHEET:	2



DESIGN PRESSURE TABLE (PSF)			
GLASS PANE WIDTH (IN)	RAILING HEIGHT (IN)		
	30	36	42
30	90.00	90.00	90.00
36	90.00	90.00	90.00
42	90.00	90.00	90.00
48	90.00	90.00	90.00

ANCHOR SCHEDULE			
SUBSTRATE	ANCHOR SCHEDULE	MIN. EMBEDMENT	MIN. EDGE DISTANCE
CONCRETE: $f'_c=4000\text{PSI}$	1/2" DEWALT SCREW-BOLT+	4.25"	4"
STEEL: $F_y = 33\text{KSI MIN.}$ (0.50" MIN. THK.)	1/2" SELF-DRILLING OR SELF-TAPPING SCREW	THREE THREADS MIN. PENETRATION PAST STRUCTURE	0.75"

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8 THE GREEN SUITE #7407
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TITLE: BR86 RAILING SYSTEM WITH 1" LAMINATED GLASS

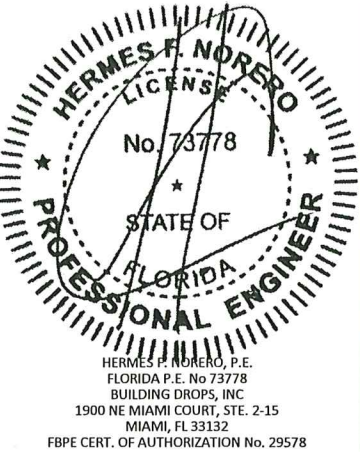
ANCHOR LAYOUTS

PREPARED BY:
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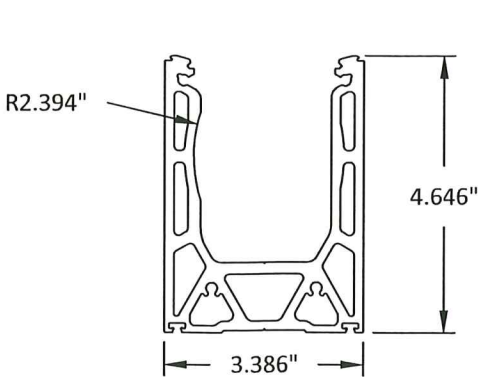
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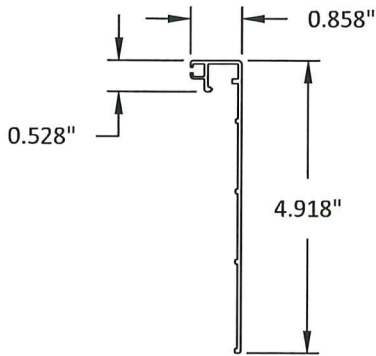
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DWG. BY:	SH
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	HWG003
SHEET:	3

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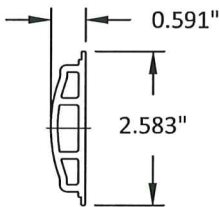
BILL OF MATERIALS			
ITEM	PART NO.	DESCRIPTION	MATERIAL
1	BR86C	CHANNEL	6063-T6
2	BR86CP	FULL COVER	6063-T5/6463-T5
3	BR86SRP	CURVE PLATE	6063-T5
4	BR68-R4	RUBBER	EPDM
5	BR68-R17	RUBBER	EPDM
6	BR-RU21.6	U GASKET	TPV
7	BR86-PP	STAINLESS STEEL PLATE	2205 STAINLESS STEEL
8	FLANGE NUTS	30 LB-FT TORQUE	316 STAINLESS STEEL
9	BR68 CONNECT PIN	ALIGNING PIN	316 STAINLESS STEEL
10	BR86ECB	END CAP	6063-T5/6463-T5
11	BR86GC	GLASS DIVIDER	EPDM
12	BR86SW	WASHER	6063-T6



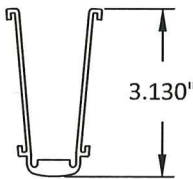
1 CHANNEL



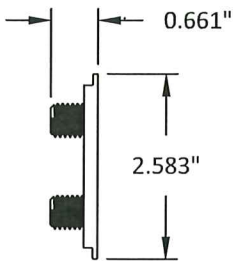
2 FULL COVER



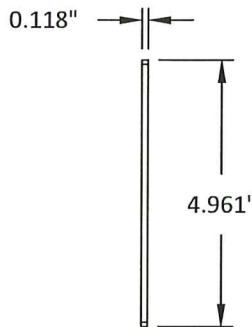
3 CURVE PLATE



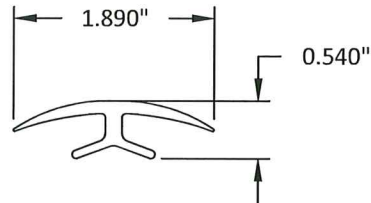
6 U GASKET



7 STAINLESS STEEL PLATE



10 END CAP



11 GLASS DIVIDER

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Miami Dade Product Control
By [Signature]



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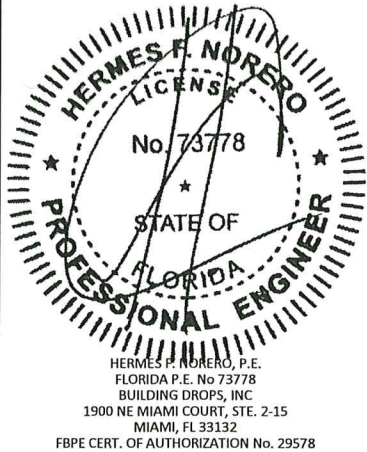
VERTICAL SECTIONS

PREPARED BY:
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SHEET:

4

OF 4