



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

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

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

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.-

DESCRIPTION: Series "TFX-2750" Aluminum Fixed Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. **15-257**, titled "Titan Series TFX-2750 Aluminum Fixed Window - Large & Small Impact Rated", sheets 1 through 5 of 5, dated 08/25/15, prepared by ENGCO Inc., signed and sealed by Pedro M. De Figueiredo, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and 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, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA# 14-0107.09 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**



Handwritten signature
1/22/16

NOA No. 15-0902.04
Expiration Date: March 11, 2019
Approval Date: January 28, 2016
Page 1

Titan Glass & Aluminum, LLC

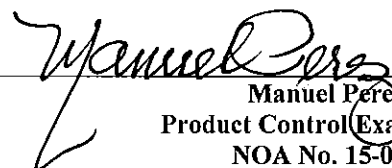
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA# 08-0919.02)
2. Drawing No 15-257, titled "Titan Series TFX-2750 Aluminum Fixed Window - Large & Small Impact Rated", sheets 1 through 5 of 5, dated 08/25/15, prepared by ENGCO Inc., signed and sealed by Pedro M. De Figueiredo, P.E.

B. TESTS

1. Test reports on:
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94
 - 7) Drop Load Test, per FBC and per ANSI Z 97.1along with marked-up drawings and installation diagram of series TFX-2750 aluminum fixed window with insulated glass, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL 7701**, dated 03/14/14, signed and sealed by Idalmis Ortega, P.E.
2. Test reports on:
 - 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 2) Small Missile Impact Test per FBC, TAS 201-94
 - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94along with marked-up drawings and installation diagram of series 2009-80 aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-6233**, dated 05/11/10, signed and sealed by Jorge A. Causo, P.E.
(Submitted under NOA# 10-0719.13)
3. Test reports on:
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94along with marked-up drawings and installation diagram of series 2007 aluminum picture window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL 5282**, dated 07/23/07, signed and sealed by Carlos S. Rionda, P.E.
(Submitted under NOA# 08-0919.02)



Manuel Perez, P.E.
Product Control Examiner
NOA No. 15-0902.04

Expiration Date: March 11, 2019
Approval Date: January 28, 2016

Titan Glass & Aluminum, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (CONTINUED)

4. Test report on: 1) Drop Load Test, per FBC and per ANSI Z 97.1, along with marked-up drawings and installation diagram of series 2007 aluminum picture window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL 5635**, dated 08/06/08, signed and sealed by Carlos S. Rionda P.E.
(Submitted under NOA# 08-0919.02)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 5th Edition (2014)**, dated 08/25/15 and 12/15/15, prepared by ENGCO Inc., signed and sealed by Pedro M. De Figueiredo, P.E.
2. Glazing complies with **ASTM E1300-09**.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

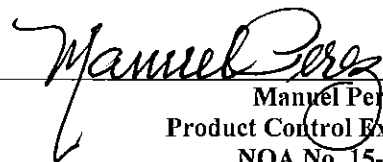
1. Notice of Acceptance No. **14-0916.10** issued to **Kuraray America, Inc.** for their "**Butacite® PVB Glass Interlayer**" dated 04/25/15, expiring on 12/11/16.
2. Notice of Acceptance No. **14-0916.11** issued to **Kuraray America, Inc.** for their "**SentryGlas® (Clear and White) Glass Interlayers**" dated 06/25/15, expiring on 07/04/18.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 5th Edition (2014)**, and of no financial interest, dated August 26, 2015, issued by ENGCO Inc., signed and sealed by Pedro M. De Figueiredo, P.E.
2. Laboratory compliance letter for Test Report No. **FTL-5282**, issued by Fenestration Testing Laboratory, Inc., dated August 10, 2007, signed and sealed by Carlos S. Rionda, P.E.
(Submitted under NOA# 08-0919.02)
3. Proposal No. **13-0332** issued by the Product Control Section, dated May 16, 2013, signed by Manuel Perez, P.E.

G. OTHERS

1. Notice of Acceptance No. **14-0107.09**, issued to Titan Glass & Aluminum, LLC for their Series "**TFX-2750**" Aluminum Fixed Window - L.M.I., approved on 03/20/14 and expiring on 03/11/19.

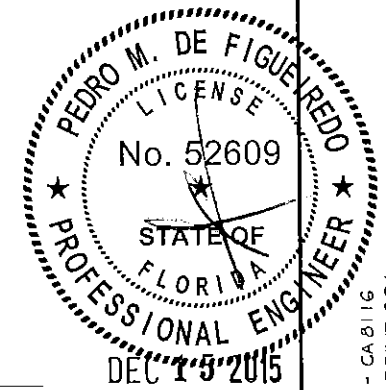


Manuel Perez, P.E.
Product Control Examiner
NOA No. 15-0902.04

Expiration Date: March 11, 2019
Approval Date: January 28, 2016

TITAN SERIES TFX-2750

ALUMINUM FIXED WINDOW LARGE AND SMALL MISSILE IMPACT RESISTANT



ENGINEERING SEAL
PEDRO DE FIGUEIREDO
PE 52609
ENGINEERING
ENGCO INC. - CA 8116
5595 ORANGE DRIVE 201
DAVIE - FLORIDA - 33314
ENGCO@AOL.COM

GENERAL NOTES:

FLORIDA BUILDING CODE 2014 HVHZ
LARGE & SMALL MISSILE IMPACT RATED

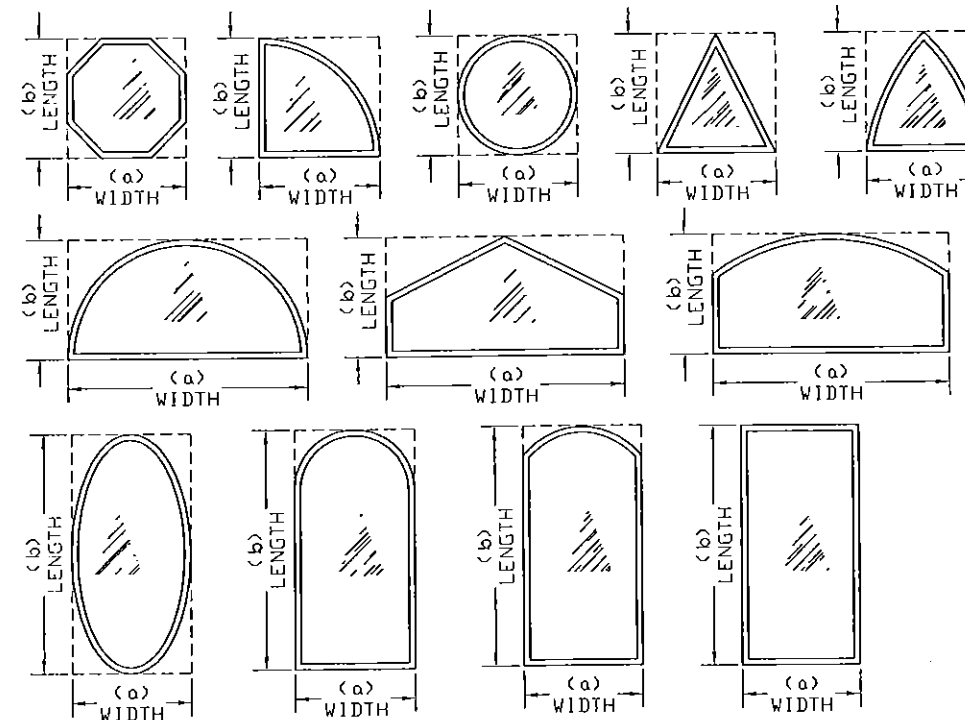
- 1- CODE: THIS PRODUCT HAS BEEN TESTED AND DESIGNED IN ACCORDANCE WITH THE FBC 2014 INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 2- DEFINITION: THIS PRODUCT IS AN ALUMINUM FIXED WINDOW DESIGNED, CONSTRUCTED AND TESTED PROVIDING PROTECTION FROM HURRICANE FORCE WINDS AND WIND BORNE DEBRIS (LARGE & SMALL MISSILE) WITHIN THE ALLOWABLE DESIGNED PRESSURES AND LIMITATIONS STATED IN THIS APPROVAL. INSTALLATION OF HURRICANE PROTECTION DEVICES IS NOT REQUIRED.
- 3- POSTING: PRODUCT SHALL BE LABELED AS PER FBC 2014. THE PERMANENT LABEL, MARKING OR ETCHING SHALL PROVIDE TRACTABILITY TO THE MANUFACTURER AND PRODUCT. THE FOLLOWING SHALL ALSO BE REQUIRED EITHER ON THE PERMANENT LABEL OR ON A TEMPORARY SUPPLEMENTAL LABEL APPLIED BY THE MANUFACTURER: INFORMATION IDENTIFYING THE MANUFACTURER, THE PRODUCT MODEL/SERIES NUMBER, POSITIVE AND NEGATIVE DESIGN PRESSURE RATING, PRODUCT MAXIMUM SIZE, GLAZING THICKNESS, IMPACT-RESISTANCE RATING IF APPLICABLE, THE FLORIDA PRODUCT APPROVAL NUMBER, APPLICABLE TEST STANDARD(S), AND MIAMI DADE NOA NUMBER, THE TEMPORARY SUPPLEMENTAL LABEL SHALL REMAIN ON THE WINDOW UNTIL FINAL APPROVAL BY THE BUILDING OFFICIAL. SAMPLE LABEL:

"TITAN SERIES TFX-2750 FIXED WINDOW
TITAN GLASS & ALUMINUM, LLC - MIAMI - FLORIDA
LARGE & SMALL MISSILE IMPACT RATED
MIAMI-DADE PRODUCT CONTROL APPROVED
- 4- LOADS: DESIGNED LOAD CALCULATED BASED ON THE ASCE 7-10 AND TO BE PROVIDED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE PRESSURES HERE IN SPECIFIED. THE DESIGN PRESSURES, AS DETERMINED FROM ASCE 7-10, ARE TO BE MULTIPLIED BY 0.6
- 5- MATERIAL: ALL ALUMINUM PARTS TO BE 6063-T6 ALLOY OR AS NOTED AND GLAZING TO BE LAMINATED IMPACT GLASS AS SPECIFIED ON THIS APPROVAL.
- 6- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THE CURRENT SET OF DRAWINGS. INSTALLATION AND LOADS AS PER THIS APPROVAL. ANCHOR SPACING AND LOADS MUST NOT EXCEED THE MAXIMUM LIMITS SPECIFIED BY THIS APPROVAL.
- 7- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:
 - 7.1- THE STABILITY OF THE STRUCTURE WHERE THE PRODUCT IS TO BE ATTACHED INSURING PROPER ANCHORAGE.
 - 7.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.
 - 7.3- THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT.
- 8- DISSIMILAR MATERIALS: WHERE ALUMINUM IS IN CONTACT OR FASTENED TO DISSIMILAR MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL, INSTALLATION SHALL MEET THE REQUIREMENTS OF CHAPTER M.7 OF THE ALUMINUM DESIGN MANUAL 2010.

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| 3 OF 5 | TYPICAL ELEVATIONS AND PERIMETER SECTIONS |
| 4 OF 5 | TYPICAL FRAME ANCHORAGE |
| 5 OF 5 | BILL OF MATERIALS, WINDOW COMPONENTS AND CORNER ASSEMBLY |

APPROVED ALTERNATE WINDOW SHAPES



* MAXIMUM DESIGN PRESSURE RATING (psf) FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE DETERMINED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE (a x b) OR RECTANGLE (a x b) AS SHOWN IN DOTTED LINES AND OBTAINING MAXIMUM DESIGN PRESSURE RATING (psf) FOR THOSE ALTERNATE SHAPES FROM TABLES ON SHEET 2.

MIAMI-DADE BCCO:
PRODUCT REVISED
complying with the Florida
Building Code
Acceptance No. 15-0902.04
Expiration Date March 11, 2019
By *Manuel Perez*
Miami Dade Product Control

PRODUCT:
TITAN SERIES TFX-2750
ALUMINUM FIXED WINDOW
LARGE & SMALL IMPACT RATED

MANUFACTURER:
TITAN GLASS & ALUMINUM, LLC
450 WEST 27TH STREET
HIALEAH, FLORIDA, 33010
PHONE: (305) 888-0911
FAX: (305) 671-3840

PK
DRAFTING & MORE INC.
SCALE:
NA
DATE:
08/25/2015
DRAWING #
15-257
SHEET
1 OF 5

TABLE 1
DESIGNED PRESSURES FOR
WINDOWS WITH GLASS TYPE A

| (a) in | (b) in | Pd (psf) | | (a) in | (b) in | Pd (psf) | | | |
|-----------|-----------|----------|-----|-----------|-----------|----------|-----|----|----|
| | | PDS | NEG | | | PDS | NEG | | |
| 36 | 108 | 114 | 150 | 50 | 66 | 114 | 114 | | |
| | 114 | 114 | 149 | | 72 | 114 | 114 | | |
| | 120 | 114 | 147 | | 78 | 114 | 114 | | |
| | 126 | 114 | 146 | | 84 | 114 | 114 | | |
| | 132 | 114 | 114 | | 90 | 114 | 114 | | |
| | 138 | 114 | 114 | | 96 | 114 | 114 | | |
| | 144 | 114 | 114 | | 120 | 114 | 114 | | |
| | 150 | 114 | 114 | | 60 | 106 | 106 | | |
| | 156 | 114 | 114 | | 66 | 106 | 106 | | |
| | 162 | 114 | 114 | | 72 | 106 | 106 | | |
| 42 | 78 | 114 | 136 | 54 | 78 | 106 | 106 | | |
| | 84 | 114 | 136 | | 84 | 106 | 106 | | |
| | 90 | 114 | 136 | | 90 | 106 | 106 | | |
| | 96 | 114 | 136 | | 96 | 106 | 106 | | |
| | 102 | 114 | 135 | | 102 | 106 | 106 | | |
| | 108 | 114 | 133 | | 108 | 106 | 106 | | |
| | 114 | 114 | 114 | | 111 | 106 | 106 | | |
| | 143 | 114 | 114 | | 60 | 95 | 95 | | |
| | 72 | 114 | 124 | | 66 | 95 | 95 | | |
| | 46 | 78 | 114 | | 124 | 60 | 72 | 95 | 95 |
| 84 | | 114 | 124 | 78 | 95 | | 95 | | |
| 90 | | 114 | 124 | 84 | 95 | | 95 | | |
| 96 | | 114 | 124 | 90 | 95 | | 95 | | |
| 102 | | 114 | 114 | 96 | 95 | | 95 | | |
| 130 | | 114 | 114 | 100 | 95 | | 95 | | |
| 66 | | 114 | 119 | 66 | 86 | | 86 | | |
| 72 | | 114 | 119 | 72 | 86 | | 86 | | |
| 48 | | 78 | 114 | 119 | 66 | | 78 | 86 | 86 |
| | | 84 | 114 | 119 | | | 84 | 86 | 86 |
| | 90 | 114 | 119 | 90 | | 86 | 86 | | |
| | 96 | 114 | 114 | 72 | | 79 | 79 | | |
| | 125 | 114 | 114 | 78 | | 79 | 79 | | |
| | | | | 83 | | 79 | 79 | | |

TABLE 2
DESIGNED PRESSURES FOR
WINDOWS WITH GLASS TYPE B

| (a) in | (b) in | Pd (psf) | | (a) in | (b) in | Pd (psf) | | |
|-----------|-----------|----------|-----|-----------|-----------|----------|-----|--|
| | | PDS | NEG | | | PDS | NEG | |
| 36 | 60 | 80 | 80 | 42 | 60 | 80 | 80 | |
| | 72 | 80 | 80 | | 72 | 80 | 80 | |
| | 78 | 80 | 80 | | 78 | 80 | 80 | |
| | 84 | 80 | 80 | | 82 | 80 | 80 | |
| | 90 | 80 | 80 | | 60 | 80 | 80 | |
| | 96 | 80 | 80 | | 66 | 80 | 80 | |
| 42 | 60 | 80 | 80 | 46 | 66 | 80 | 80 | |
| | 72 | 80 | 80 | | 72 | 80 | 80 | |
| | 78 | 80 | 80 | | 75 | 80 | 80 | |
| | 84 | 80 | 80 | | 60 | 80 | 80 | |
| | 90 | 80 | 80 | | 66 | 80 | 80 | |
| | 96 | 80 | 80 | | 72 | 80 | 80 | |
| 46 | 60 | 80 | 80 | 50 | 66 | 80 | 80 | |
| | 66 | 80 | 80 | | 69 | 80 | 80 | |
| | 72 | 80 | 80 | | 60 | 80 | 80 | |
| | 78 | 80 | 80 | | 64 | 80 | 80 | |
| | 84 | 80 | 80 | | | | | |
| | 90 | 80 | 80 | | | | | |

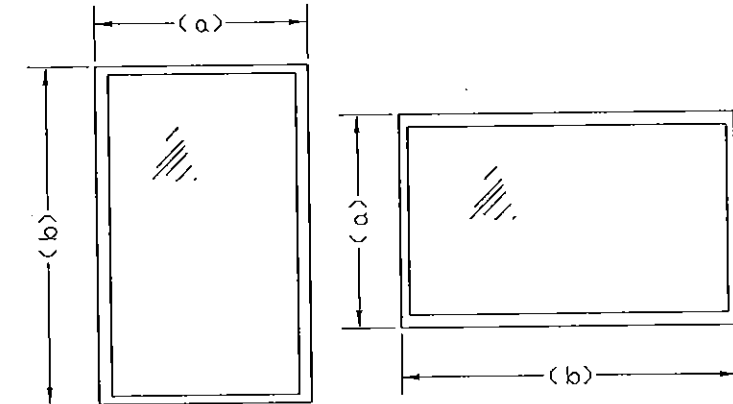
TABLE 3
DESIGNED PRESSURES FOR
WINDOWS WITH GLASS TYPE C

| (a) in | (b) in | Pd (psf) | | (a) in | (b) in | Pd (psf) | |
|-----------|-----------|----------|-----|-----------|-----------|----------|-----|
| | | PDS | NEG | | | PDS | NEG |
| 36 | 60 | 90 | 120 | 42 | 60 | 90 | 120 |
| | 72 | 90 | 120 | | 72 | 90 | 120 |
| | 78 | 90 | 120 | | 78 | 90 | 120 |
| | 84 | 90 | 119 | | 84 | 90 | 119 |
| | 90 | 90 | 111 | | 90 | 90 | 111 |
| | 96 | 90 | 104 | | 96 | 90 | 104 |
| | 102 | 90 | 98 | | 102 | 90 | 98 |
| | 108 | 90 | 93 | | 108 | 90 | 93 |
| | 111 | 90 | 90 | | 111 | 90 | 90 |
| | 60 | 90 | 120 | | 60 | 90 | 120 |
| 42 | 72 | 90 | 119 | 46 | 72 | 90 | 119 |
| | 78 | 90 | 110 | | 78 | 90 | 110 |
| | 84 | 90 | 102 | | 84 | 90 | 102 |
| | 90 | 90 | 95 | | 90 | 90 | 95 |
| | 95 | 90 | 90 | | 95 | 90 | 90 |
| | 60 | 90 | 120 | | 60 | 90 | 120 |
| | 72 | 90 | 109 | | 72 | 90 | 109 |
| | 78 | 90 | 100 | | 78 | 90 | 100 |
| | 84 | 90 | 93 | | 84 | 90 | 93 |
| | 87 | 90 | 90 | | 87 | 90 | 90 |
| 46 | 60 | 90 | 119 | 50 | 60 | 90 | 114 |
| | 72 | 90 | 104 | | 72 | 90 | 100 |
| | 78 | 90 | 96 | | 78 | 90 | 92 |
| | 80 | 90 | 90 | | 80 | 90 | 90 |
| | 60 | 90 | 106 | | 60 | 90 | 106 |
| | 72 | 90 | 93 | | 72 | 90 | 93 |
| 54 | 74 | 90 | 90 | 74 | 90 | 90 | |
| | 60 | 90 | 91 | 60 | 90 | 91 | |

WINDOW NOTES:

1- GLAZING TYPE A, B AND C
COMPLIES WITH REQUIREMENTS
OF ANSI Z97.1

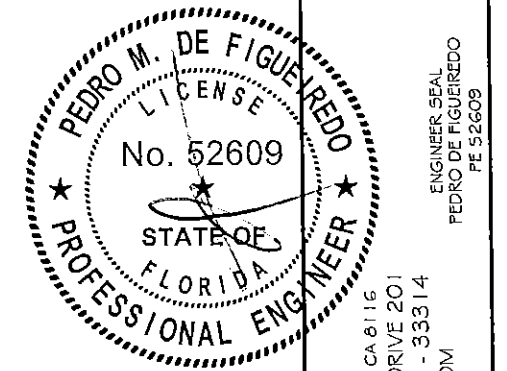
2- FRAME WIDTH (a) AND HEIGHT (b)
CAN BE ROTATED



AIR INFILTRATION ASTM E283
6.24 PSF -- 0.01 cfm/sq.ft

WATER RESISTANCE ASTM E331
13.5 PSF - 15 min
17.1 PSF - 15 mm GLASS TYPE A

FORCE ENTRY ASTM F588
TYPE D WINDOW GRADE 10



DEC 15 2015

ENGINEERING SEAL
PEDRO DE FIGUEIREDO
PE 52609

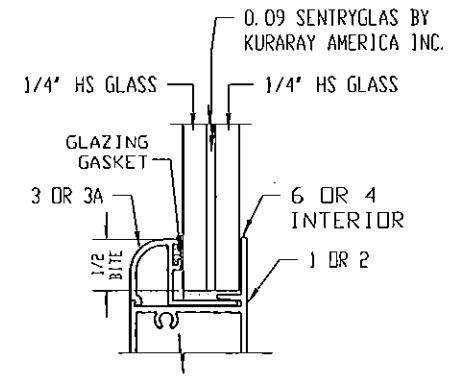
ENGINEERING
ENGCO INC. - CA 8116
5595 ORANGE DRIVE 201
DAVIE - FLORIDA - 33314
ENGCO@AOL.COM

PRODUCT:
TITAN SERIES TFX-2750
ALUMINUM FIXED WINDOW
LARGE & SMALL IMPACT RATED

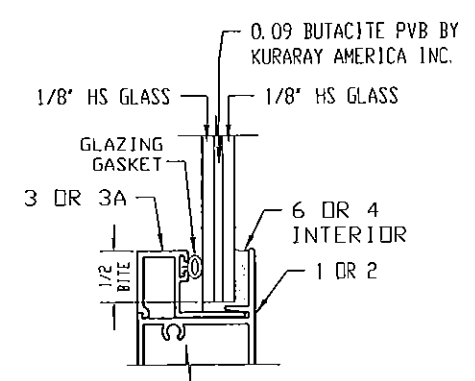
MANUFACTURER:
TITAN
GLASS & ALUMINUM, LLC
450 WEST 27TH STREET
HIALEAH, FLORIDA, 33010
PHONE: (305) 868-0911
FAX: (305) 671-3840

GLAZING OPTIONS

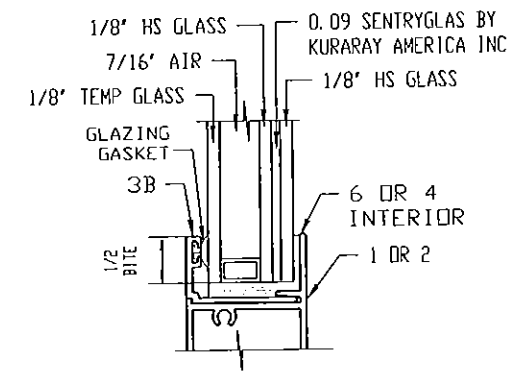
GLASS TYPE A



GLASS TYPE B



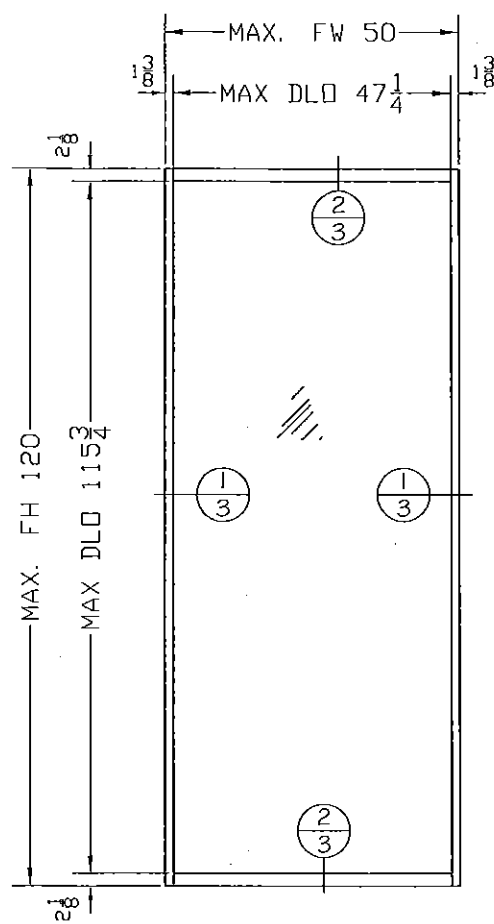
GLASS TYPE C



GLAZING TYPE A, B AND C COMPLIES WITH THE REQUIREMENTS OF ASTM E1300 AND ANSI Z97.1
SETTING BLOCKS ARE REQUIRED FOR WINDOW SILL OVER 36" WIDE

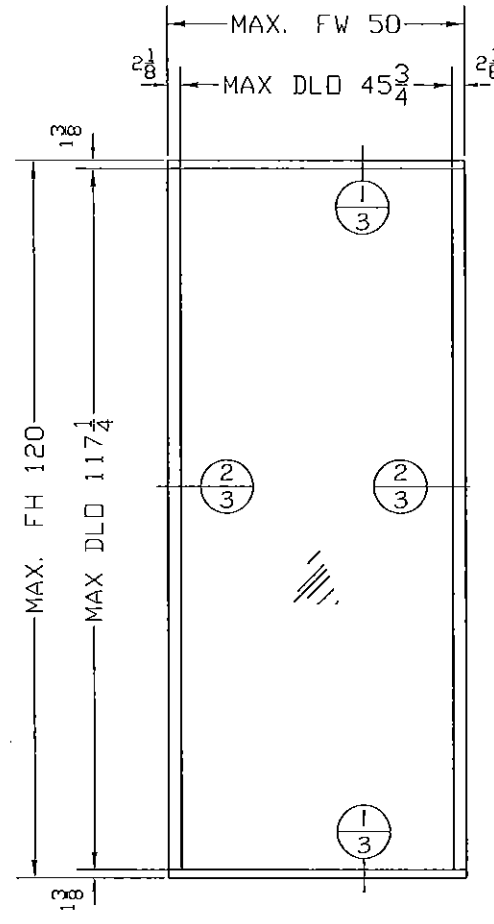
MIAMI-DADE BCCO:
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 15-0902.04
Expiration Date March 11, 2019
By Manuel Perez
Miami Dade Product Control

PK
DRAFTING & MORE INC.
SCALE:
NA
DATE:
08/25/2015
DRAWING #
15-257
SHEET
2 OF 5



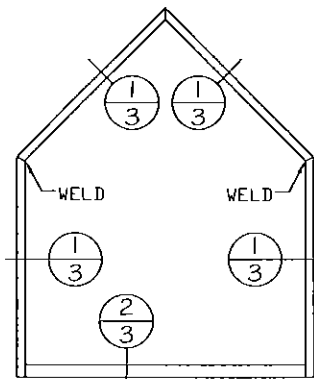
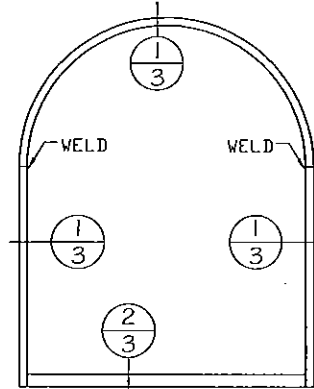
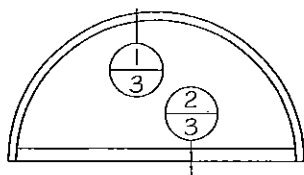
TYPICAL ELEVATION WITH:
1 3/8" JAMB FRAMING
2 1/8" HEADER/SILL FRAMING

FH = DLO + 4 1/4"
FW = DLO + 2 3/4"

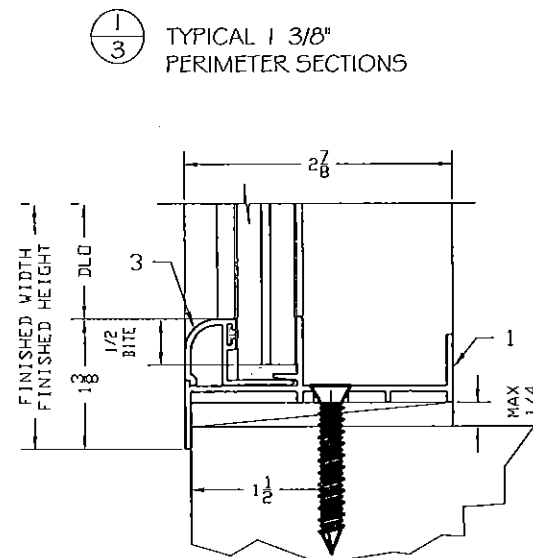


TYPICAL ELEVATION WITH:
2 1/8" JAMB FRAMING
1 3/8" HEADER/SILL FRAMING

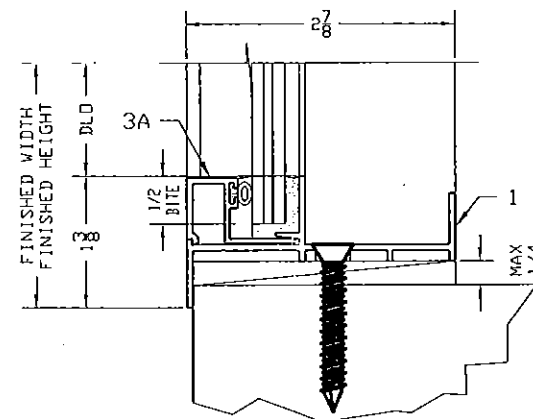
FH = DLO + 2 3/4"
FW = DLO + 4 1/4"



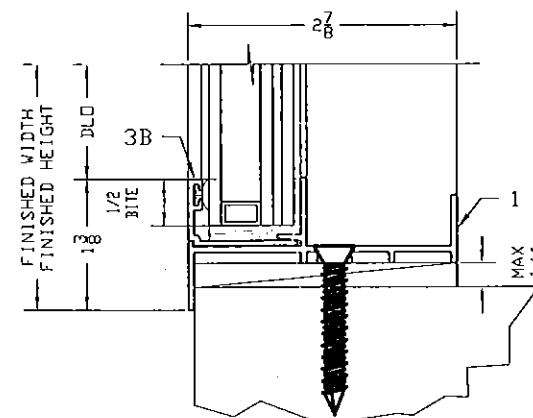
TYPICAL SHAPED WINDOWS ELEVATION WITH:
1 3/8" MAIN FRAME MITER AND WELDED
2 1/8" FRAMING USED FOR 90° CORNERS
FRAME = DLO + 1 3/8" + 2 1/8"
FRAME = DLO + 1 3/8" + 1 3/8"



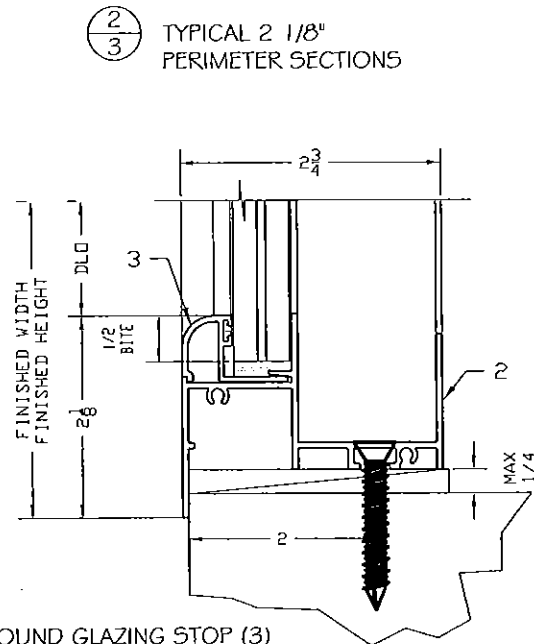
ROUND GLAZING STOP (3)
GLASS TYPE A OR B



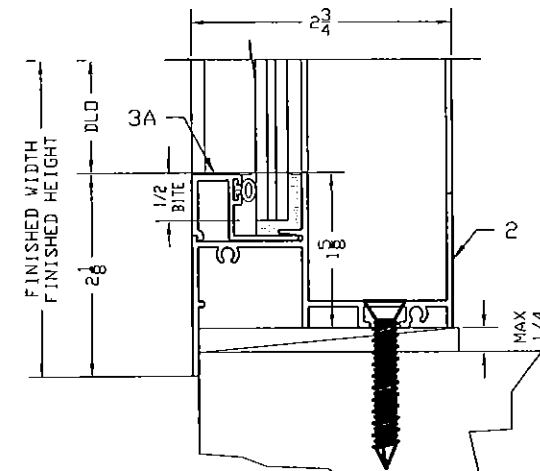
SQUARE GLAZING STOP (3A)
GLASS TYPE A OR B



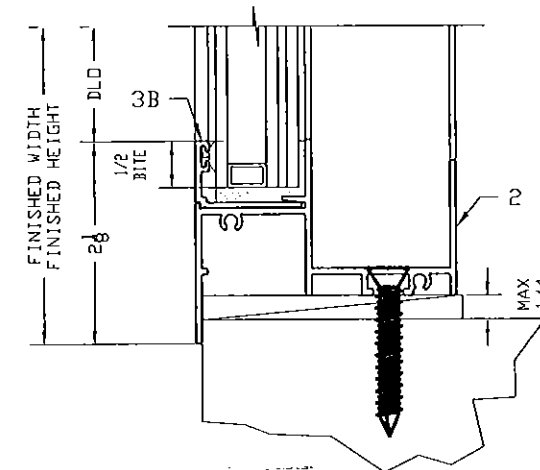
GLAZING STOP (3B)
INSULATED GLASS TYPE C



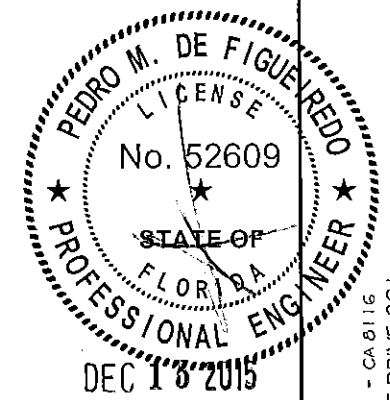
ROUND GLAZING STOP (3)
GLASS TYPE A OR B



SQUARE GLAZING STOP (3A)
GLASS TYPE A OR B



GLAZING STOP (3B)
INSULATED GLASS TYPE C



ENGINEERING
ENSCO INC. - CA 8116
5595 ORANGE DRIVE 201
DAVIE - FLORIDA - 33314
ENSCO@AOL.COM
PE 52609

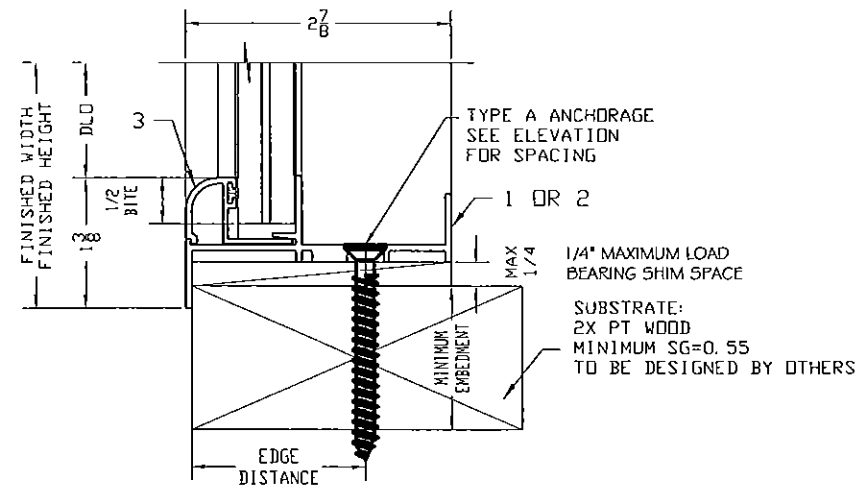
PRODUCT:
TITAN SERIES TFX-2750
ALUMINUM FIXED WINDOW
LARGE & SMALL IMPACT RATED

MANUFACTURER:
TITAN
GLASS & ALUMINUM, LLC
450 WEST 27TH STREET
HIALEAH, FLORIDA, 33010
PHONE: (305) 888-0911
FAX: (305) 671-3840

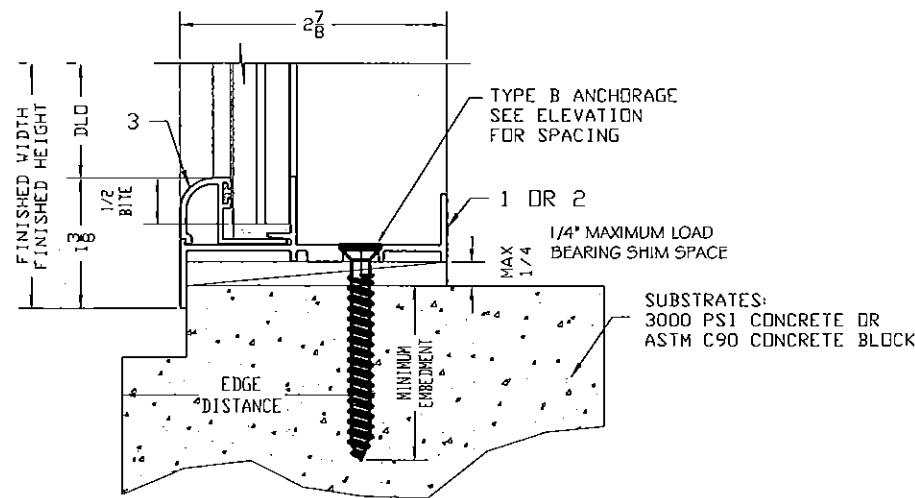
MIAMI-DADE BCCO:
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 15-0902.04
Expiration Date March 11, 2019
By *Manuel Perez*
Miami Dade Product Control

PK
DRAFTING & MORE INC.
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NA
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08/25/2015
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3 OF 5

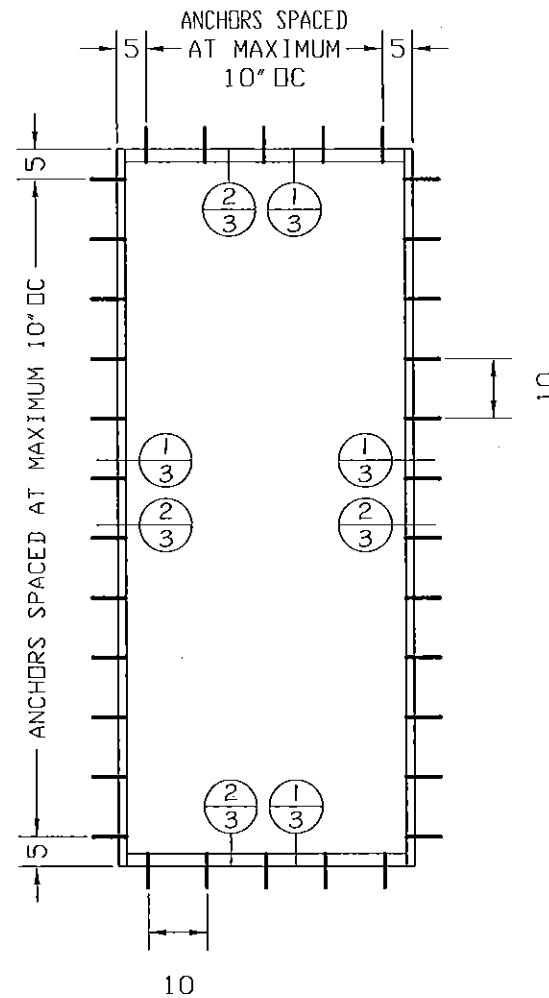
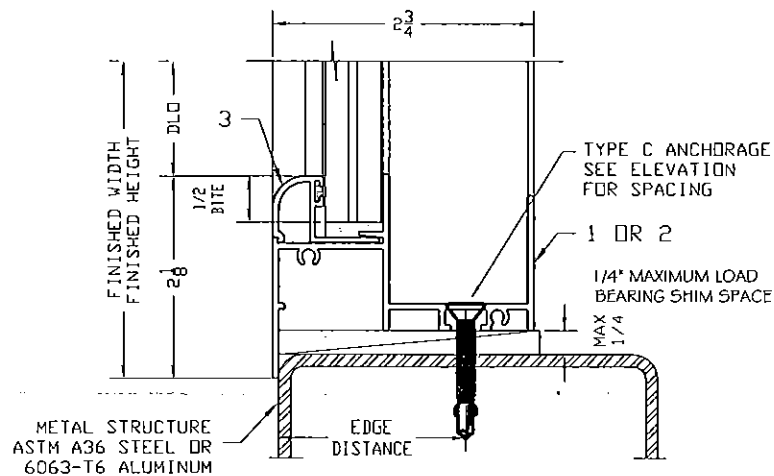
TYPE A ANCHORAGE
ANCHOR INTO 2X WOOD BUCK OR WOOD STRUCTURE



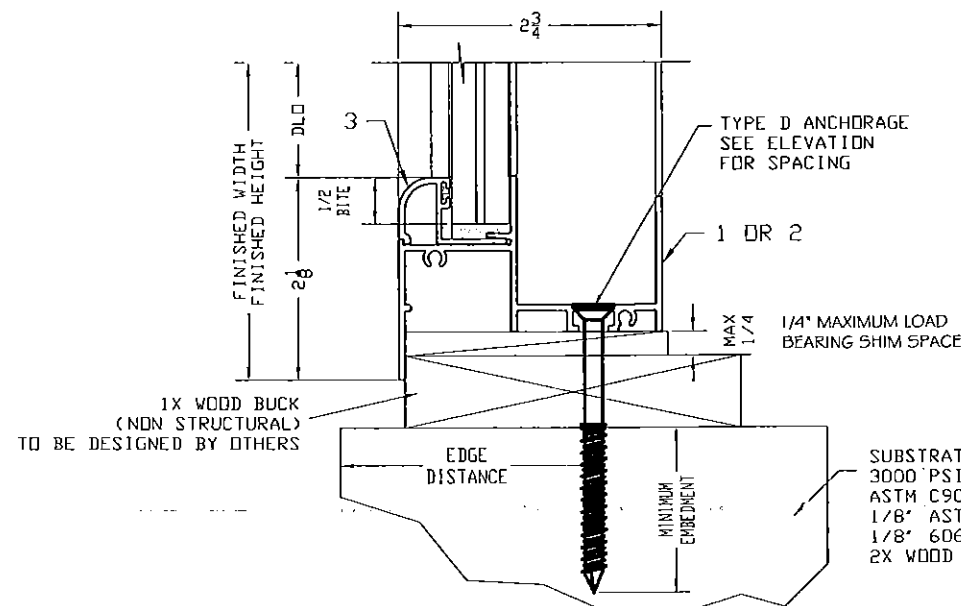
TYPE B ANCHORAGE
ANCHOR INTO CONCRETE OR MASONRY



TYPE C ANCHORAGE
ANCHOR INTO METAL STRUCTURES



TYPE D ANCHORAGE
ANCHORS THRU 1X WOOD BUCK INTO SUBSTRATE



TYPICAL ANCHORS: (SEE ELEVATIONS FOR SPACE)

TYPE A - ANCHORS INTO 2X PT STRUCTURAL BUCK

MINIMUM EMBEDMENT: 1 1/2"
EDGE DISTANCE: 1"
ANCHORS: 1/4" ULTRACONS BY ELCO
1/4" TAPCONS BY ITW BUILDEX
#14 S5 SHEET METAL SCREWS

2X BUCK TO BE DESIGNED BY OTHERS FOR IMPOSED LOADS

TYPE B - ANCHORS INTO CONCRETE (fc >= 3000 PSI) OR ASTM C90 CONCRETE BLOCK

MINIMUM EMBEDMENT: 1 1/4"
EDGE DISTANCE: 2 1/2"
ANCHORS: 1/4" ULTRACONS BY ELCO
1/4" TAPCONS BY ITW BUILDEX

TYPE C - ANCHORS INTO METAL STRUCTURES

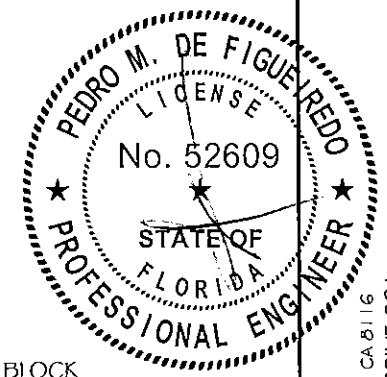
METAL MINIMUM THICKNESS: 1/8"
MATERIAL: ALUMINUM 6063-T6 OR STEEL ASTM A36
EDGE DISTANCE: 3/4"
ANCHORS: 1/4" - 14 SELF DRILLING SCREWS (GR 5)

(STEEL IN CONTACT WITH WINDOW FRAMING TO BE PLATED OR PAINTED)

TYPE D - THRU 1X BUCKS INTO SUBSTRATE

ALL ANCHORS ABOVE
(1X BUCK NON STRUCTURAL TO BE DESIGNED BY OTHERS)

ALL ANCHORAGE OPTIONS ARE APPLICABLE TO HEADER, SILL AND/OR JAMB LOCATIONS
ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS.
ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO
WOOD BUCKS BY OTHERS MUST BE SOUTHERN PINE (G > = 0.55) AND MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
ANCHORS INTO WOOD WERE DESIGNED USING A LOAD DURATION OF 1.6 IN ACCORDANCE WITH NDS STANDARD



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ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609
ENGINEERING
ENSCO INC. - CA 8116
5595 ORANGE DRIVE 201
DAVIE - FLORIDA - 33314
ENSCO@AOL.COM

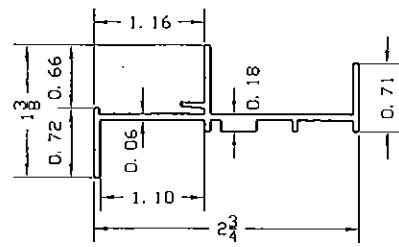
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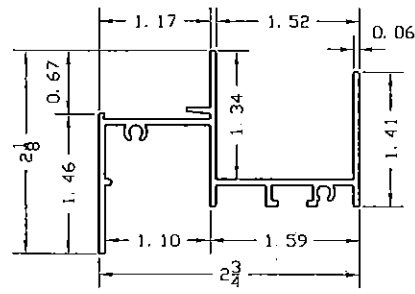
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By *Mmanuel Perz*
Miami Dade Product Control

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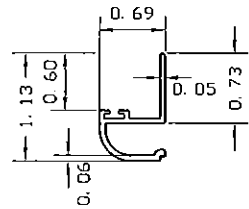
PRODUCT COMPONENTS



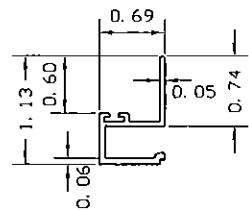
1- FSP 014 - 1 3/8 PERIMETER FRAMING HEADER, SILL AND JAMBS
6063-T6 ALUMINUM ALLOY



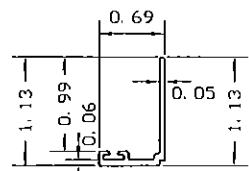
2- FSP 015 - 2 1/8 PERIMETER FRAMING HEADER, SILL AND JAMBS
6063-T6 ALUMINUM ALLOY



3- FSP 017 - ROUND GLAZING STOP
6063-T6 ALUMINUM ALLOY



3A- FSP 017A - SQR GLAZING STOP
6063-T6 ALUMINUM ALLOY

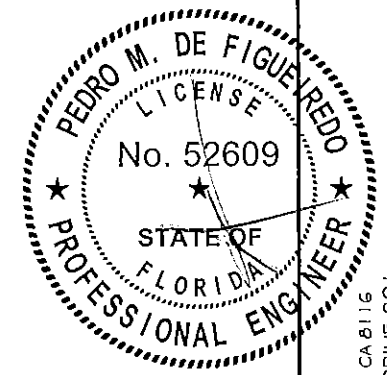
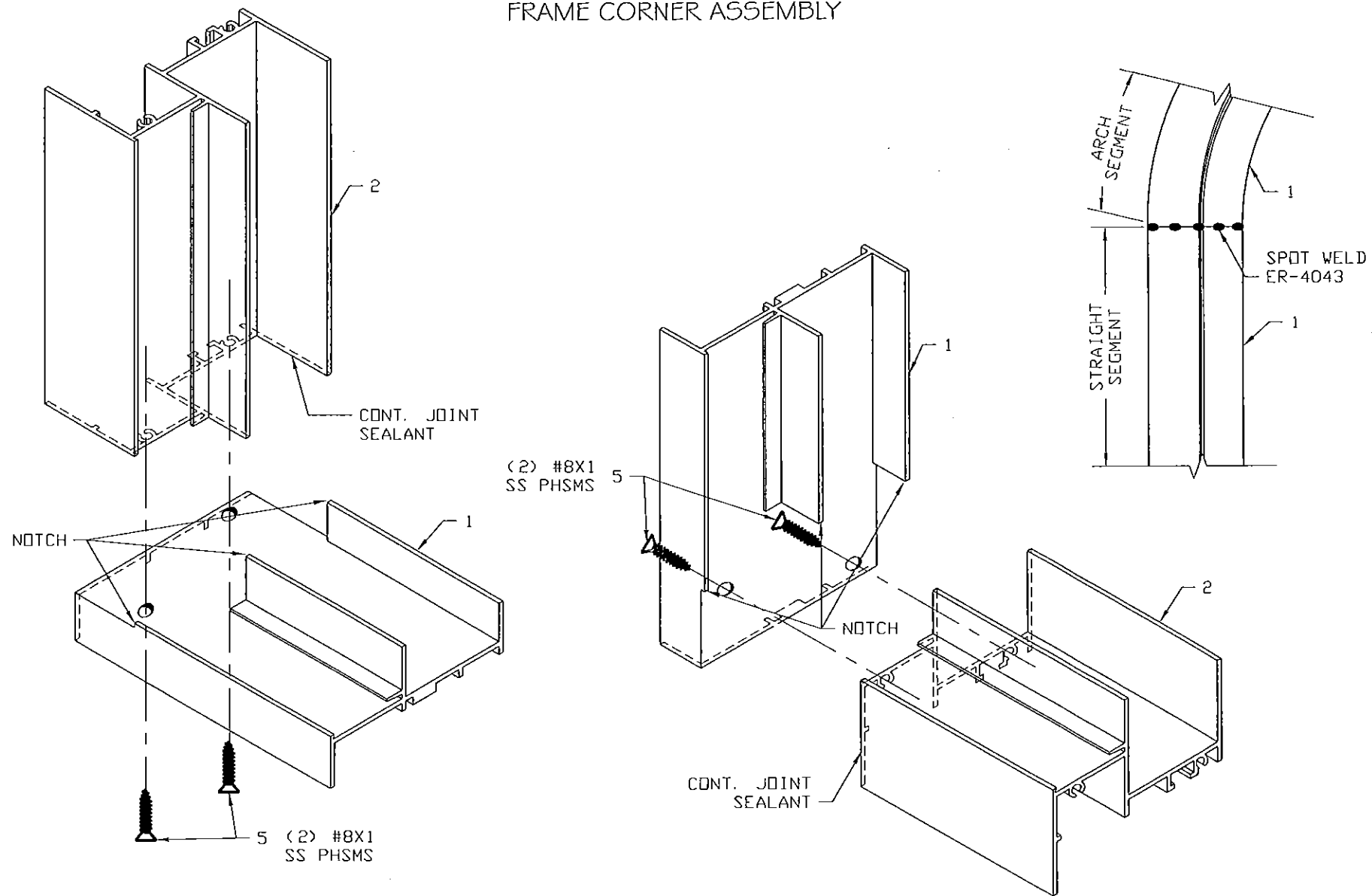


3B- FSP 017B - IG GLAZING STOP
6063-T6 ALUMINUM ALLOY

BILL OF MATERIALS:

| ITEM | PART # | DESCRIPTION | MATERIAL | REMARKS |
|------|-----------|--------------------------------|---------------|---------------|
| 1 | FSP 014 | 1-3/8" PERIMETER FRAME | ALUM. 6063-T6 | |
| 2 | FSP 015 | 2-1/8" PERIMETER FRAMING | ALUM. 6063-T6 | |
| 3 | FSP 017 | ROUND GLAZING STOP | ALUM. 6063-T6 | |
| 3A | FSP 017A | SQUARE GLAZING STOP | ALUM. 6063-T6 | |
| 3B | FSP 017B | INSULATED GLASS GLAZING STOP | ALUM. 6063-T6 | |
| 4 | SEAL 01.1 | DOW 995 SILICONE | SILICONE | DOW CORNING |
| 5 | | #8X1 PH SMS | STEEL | |
| 6 | SEAL 01.2 | PECORA 896 | SILICONE | PECORA |
| 7 | SEAL 01.3 | DOW 899 SILICONE | SILICONE | DOW CORNING |
| 8 | GLASS | 9/16" IMPACT LAMINATED GLASS | GLASS | LARGE MISSILE |
| 8A | GLASS | 5/16" IMPACT LAMINATED GLASS | GLASS | LARGE MISSILE |
| 8B | GLASS | 7/8" IG IMPACT LAMINATED GLASS | GLASS | LARGE MISSILE |

FRAME CORNER ASSEMBLY



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