MIAMI-DADE COUNTY
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)

Sunshine Windows Manufacturing, Inc.
1745 W. 33rd Place
Hialeah, FL 33012

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 "2009-2" Outswing Aluminum Casement Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. **CS01-18**, titled "Series 2009-2 Outswing Casement Windows Large Missile Impact Resistant", sheets 1 through 7 of 7, dated 01/30/18, prepared by manufacturer, signed and sealed by Francisco Hernandez, P.E., bearing the Miami–Dade County Product Control Approval stamp with the Notice of Acceptance number and 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, 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 consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

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

MIAMI-DADE COUNTY APPROVED

8/9/18

Sunshine Windows Manufacturing, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **CS01-18**, titled "Series 2009-2 Outswing Casement Windows Large Missile Impact Resistant", sheets 1 through 7 of 7, dated 01/30/18, prepared by manufacturer, signed and sealed by Francisco Hernandez, 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, and TAS 202-94

   along with marked-up drawings and installation diagram of: series 2009 outswing casement window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-9455,** dated 06/29/17, signed and sealed by Idalmis Ortega, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 6th Edition (2017)**, dated 03/03/18, prepared, signed and sealed by Francisco Hernandez, 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. **17-1114.14** issued to **Kuraray America, Inc.** for their "**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**" dated 01/18/18, expiring on 07/08/19.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 6th Edition (2017),** dated June 6, 2018, issued, signed and sealed by Francisco Hernandez, P.E.
2. Statement letter of no financial interest, dated June 6, 2018, issued, signed and sealed by Francisco Hernandez, P.E.
3. Proposal No. **16-1497** issued by the Product Control Section, dated December 19, 2016, signed by Manuel Perez, P.E.

G. OTHERS

1. None.

Manuel Perez

Manuel Perez, P.E.
Product Control Examiner
NOA No. 18-0611.02
Expiration Date: August 16, 2023
Approval Date: August 16, 2018

GENERAL NOTES:

1.– THIS PRODUCT MEETS THE REQUIREMENTS OF FBC 6TH EDITION (2017).

2.– SHUTTERS ARE NOT REQUIRED.

3.– REFERENCE TEST REPORT FTL–9455 DATED ON 06/29/2017.

4.– FOR ANCHOR TYPE AND SPACING REFER TO ELEVATION ON SHEET 2 OF 7 AND TYPICAL SECTIONS ON SHEETS 5, 6 AND 7 OF 7.

5.– 1" BY OR 2" BY WOOD BUCKS, NOT INCLUDED IN THE SCOPE OF THIS PRODUCT APPROVAL, SHALL BE PROPERLY ANCHORED AND SEALED TO SUSTAIN AND TRANSFER THE LOADS IMPOSED BY THE GLAZING SYSTEM TO THE STRUCTURE. SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO WINDOW INSTALLATION.

6.– WOOD HOST STRUCTURE, NOT INCLUDED IN THE SCOPE OF THIS PRODUCT APPROVAL, SHALL BE SOUTHERN YELLOW PINE G = 0.55 OR GREATER DENSITY AND SHALL BE APPROVED BY BUILDING OFFICIAL PRIOR TO WINDOW INSTALLATION.

7.– CONCRETE / MASONRY STRUCTURE FOR UNIT ATTACHMENT SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

- CONCRETE STRENGTH Fc'28 = 3000 PSI MIN.
- GROUT FILLED BLOCKS: BLOCKS SHALL CONFORM TO ASTM C90, 8–INCH THICK, NORMAL WEIGHT WIT A MINIMUM COMPRESSIVE STRENGTH OF 1.9 KSI. THE MINIMUM COMPRESSIVE STRENGTH OF MASONRY Fm' SHALL BE 2 KSI.
  BLOCKS SUPPORTING GLAZING UNITS SHALL BE FILLED WITH 3 KSI MINIMUM CORE–FILL CEMENTITIOUS GROUT.

8.– STEEL HOST STRUCTURE NOT INCLUDED IN THE SCOPE OF THIS PRODUCT APPROVAL SHALL NOT BE LESS THAN 1/8" THICK. STEEL SHALL BE A–36 Fy = 36 KSI MIN. STEEL STRUCTURE SHALL BE APPROVED BY BUILDING OFFICIAL PRIOR TO WINDOW INSTALLATION.

9.– ALUMINUM HOST STRUCTURE NOT INCLUDED IN THE SCOPE OF THIS PRODUCT APPROVAL. THE THICKNESS OF THE ALUMINUM HOST STRUCTURE SHALL NOT BE LESS THAN 1/8". ALUMINUM SHALL BE 6063–T6 AND SHALL BE APPROVED BY BUILDING OFFICIAL PRIOR TO WINDOW INSTALLATION.

10.– ALUMINUM IN CONTACT WITH DISSIMILAR MATERIALS SHALL BE PROTECTED (BY OTHERS) AS SPECIFIED IN FBC.

11.– SURFACE APPLIED COLONIAL FALSE MUNTINS CAN BE USED.

12.– USE NON–SHRINK, NON–METALLIC HYDRAULIC CEMENT GROUT PER ASTM C1107/C1107M STANDARD SPECIFICATION FOR PACKAGED DRY.

13.– GLASS: 5/16" NOMINAL LAMINATED GLASS COMPOSED OF (2) 1/8" HEAT STRENGTHENED GLASS WITH 0.09" TROSIFOL PVB INTERLAYING FILM BY KURARAY AMERICA INC.

14.– GLASS SHALL PENETRATE 0.73" INTO THE ALUMINUM FRAME POCKET AND WILL BE SECURED WITH DOW 899 SILICONE SEALANT (SEE GLAZING DETAIL ON SHEET 6 OF 7).

15.– FRAME CORNERS, FRAME AND PANEL SEAMS, FRAME ASSEMBLY FASTENERS AND FRAME SILL INSTALLATION FASTENERS TO BE SEALED.

16.– ULTRACON ANCHORS BY ELCO Fu = 177 Ksi, Fy = 155 Ksi.

ANCHORS SHALL BE AS FOLLOWS:

- 1/4" ø ULTRACON BY ELCO WITH 1 3/4" MIN. EMBEDMENT INTO CONCRETE OR GROUT FILLED BLOCK.
- 1/4" ø ULTRACON BY ELCO WITH 1 1/2" MIN. EMBEDMENT INTO WOOD.
- 1/4" ø KWIK–FLEX BY HILTI OR DRIL–FLEX BY ELCO GR 5 SELF DRILLING SCREWS THROUGH METAL WITH MIN. 3 THREADS BEYOND THE SUBSTRATE.

WIND LOAD A.S.D. FACTOR NOTE:

THE DESIGN PRESSURES SHOWN ON THIS CHART ARE FOR ALLOWABLE STRESS DESIGN. WIND LOADS CALCULATED BASED UPON "ULTIMATE WIND SPEED" AS DETERMINED FROM ASCE 7–10 OR IBC 2012 ARE PERMITTED TO BE MULTIPLIED BY 0.6 FOR COMPARISON BETWEEN THE ACTING WIND LOADS AND THE DESIGN PRESSURE OF THE UNITS.

INDEX OF DRAWINGS:

1 OF 7.– GENERAL NOTES, INDEX OF DRAWINGS AND WIND LOAD A.S.D FACTOR NOTE.

2 OF 7.– TYPICAL ELEVATION, DESIGN PRESSURES CHART, HINGE LOCATION DETAIL AND OPERATOR LOCATION DETAIL.

3 OF 7.– VERTICAL AND HORIZONTAL SECTIONS.

4 OF 7.– EXTRUSIONS AND MATERIAL LIST.

5 OF 7.– TYPICAL SECTIONS AT HEAD.

6 OF 7.– TYPICAL SECTIONS AT JAMBS.

7 OF 7.– TYPICAL SECTIONS AT SILL

THIS PRODUCT IS IMPACT RESISTANT
SHUTTERS ARE NOT REQUIRED

Approved as complying with the Florida Building Code
Date: Aug. 16, 2018
NOA#: 18-0611.02
Miami-Dade Product Control
Manuel Perez

FRANCISCO HERNANDEZ LICENSE No. 51393 STATE OF FLORIDA PROFESSIONAL ENGINEER
6-6-18

FRANCISCO HERNANDEZ
FLORIDA PE # 51393

Sunshine Windows Manufacturing, Inc.
1785 W. 33rd Place
Hialeah, Florida 33012
Ph: (305)364–9952
Fax:(305)828–5118

SERIES 2009-2
OUTSWING CASEMENT WINDOWS
LARGE MISSILE IMPACT RESISTANT

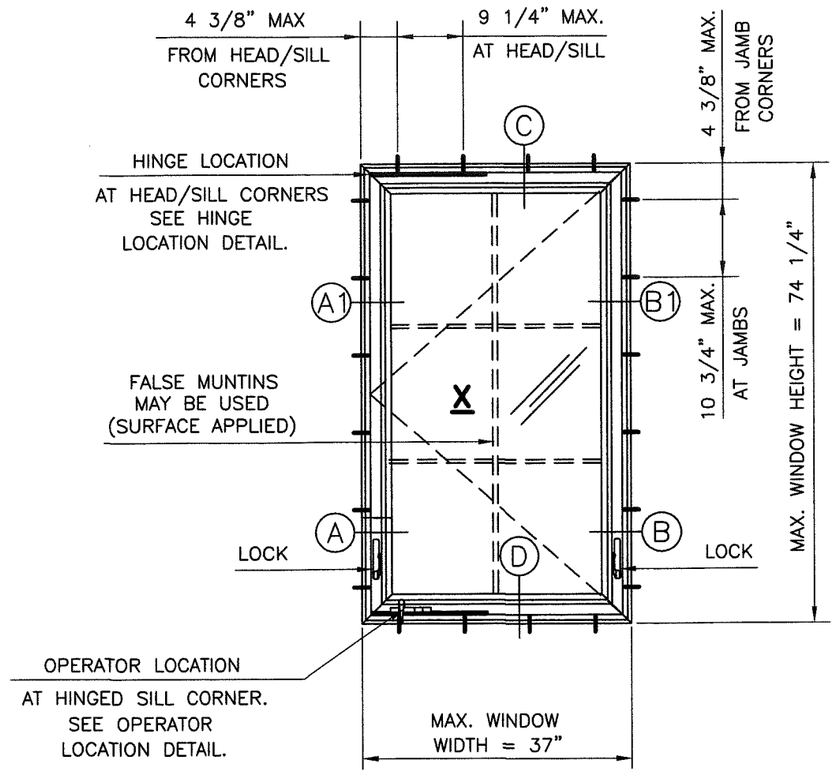
No	DATE	REVISION

DRAWING No.
CS01–18
DATE: 1/30/2018
SCALE: N.T.S.

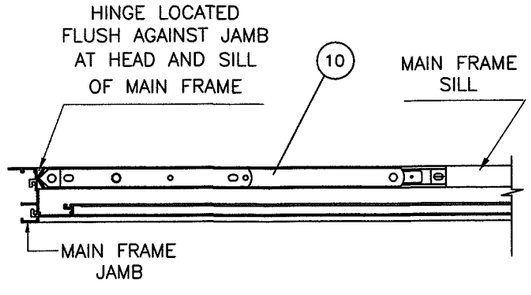
DESIGN PRESSURES CHART - PSF

IMPACT RESISTANT GLASS

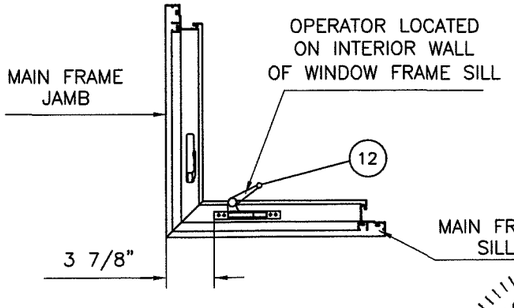
	WINDOW DIMENSION		ANCHORS		5/16" IMPACT GLASS	
	WIDTH	HEIGHT	PER HEAD & SILL	PER JAMB	EXT.	INT.
STANDARD SIZES	19 1/8"	26"	2	3	90.00	90.00
	26 1/2"		3		90.00	90.00
	37"		4		90.00	90.00
	19 1/8"	38 3/8"	2	4	90.00	90.00
	26 1/2"		3		90.00	90.00
	37"		4		90.00	90.00
	19 1/8"	50 5/8"	2	5	90.00	90.00
	26 1/2"		3		90.00	90.00
	37"		4		90.00	90.00
	19 1/8"	63"	2	7	90.00	90.00
	26 1/2"		3		90.00	90.00
	37"		4		90.00	90.00
	19 1/8"	74 1/4"	2	8	90.00	90.00
	26 1/2"		3		90.00	90.00
	37"		4		90.00	90.00
MODULAR SIZES	24"	24"	3	3	90.00	90.00
	36"		4		90.00	90.00
	24"	36"	3	4	90.00	90.00
	36"		4		90.00	90.00
	24"	48"	3	5	90.00	90.00
	36"		4		90.00	90.00
	24"	60"	3	6	90.00	90.00
	36"		4		90.00	90.00
	24"	72"	3	7	90.00	90.00
	36"		4		90.00	90.00



SINGLE VENT CASEMENT WINDOW



HINGE LOCATION DETAIL



OPERATOR LOCATION DETAIL

THIS PRODUCT IS IMPACT RESISTANT
SHUTTERS ARE NOT REQUIRED

Approved as complying with the Florida Building Code
Date Aug. 16, 2018
NOA# 18-0611.02
Miami Dade Product Control
Manuel Perez

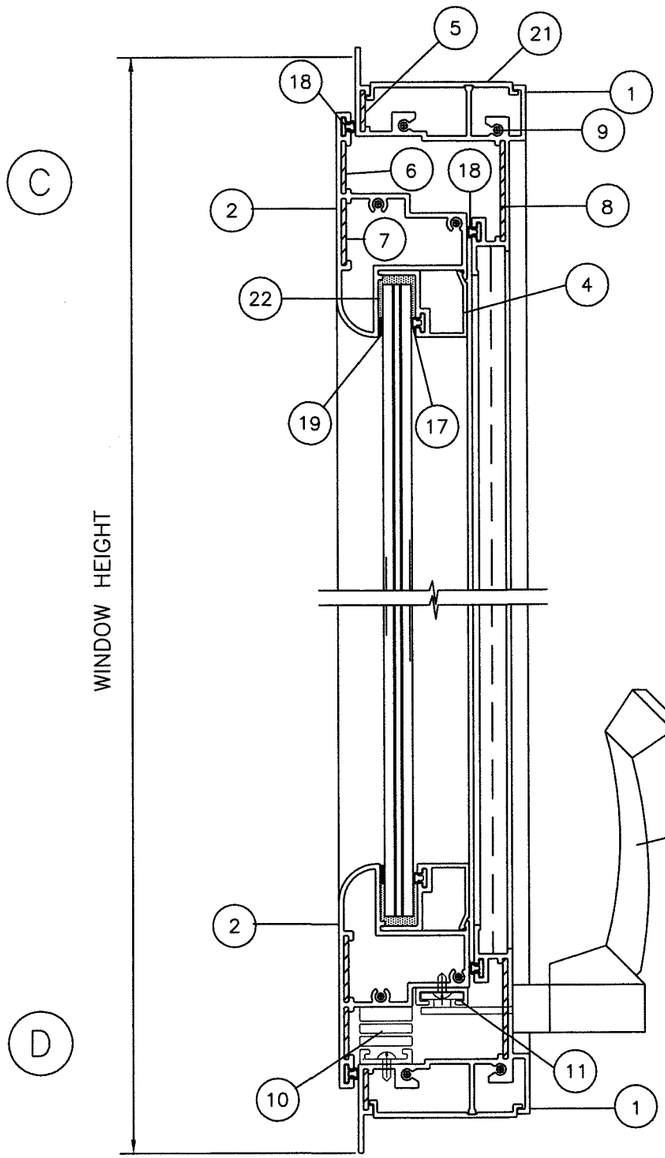
FRANCISCO HERNANDEZ LICENSE No. 51393 STATE OF FLORIDA PROFESSIONAL ENGINEER
6-6-18
FRANCISCO HERNANDEZ
FLORIDA PE # 51393

Sunshine Windows Manufacturing, Inc.
1785 W. 33rd Place
Hialeah, Florida 33012
Ph: (305)364-9952
Fax:(305)828-5118

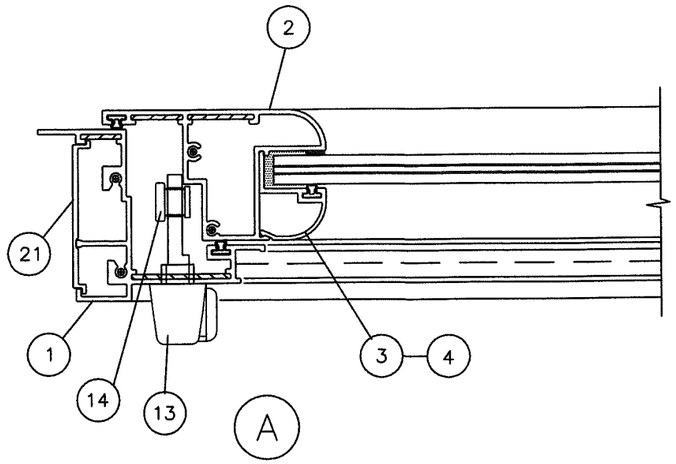
SERIES 2009-2
OUTSWING CASEMENT WINDOWS
LARGE MISSILE IMPACT RESISTANT

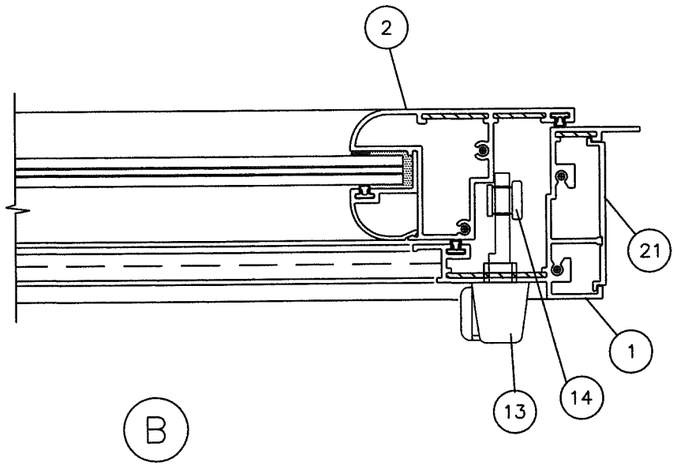
No	DATE	REVISION

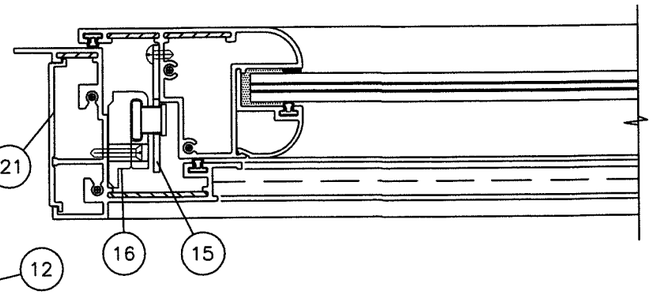
DRAWING No. CS01-18
DATE: 1/30/2018
SCALE: N.T.S.
SHEET 2 OF 7

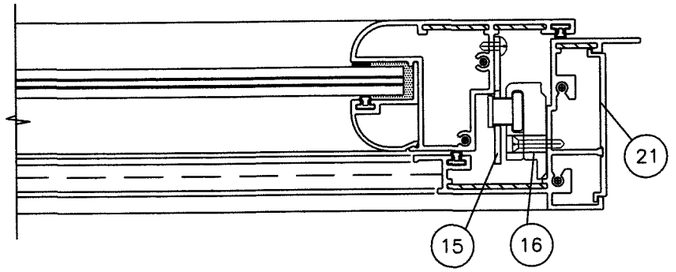


VERTICAL SECTION









THIS PRODUCT IS IMPACT RESISTANT
SHUTTERS ARE NOT REQUIRED

Approved as complying with the Florida Building Code
Date Nov. 16, 2018
NOA# 18-1611.03
Miami Dade Product Control
Manuel Perez

FRANCISCO HERNANDEZ
LICENSE
No. 51393
STATE OF FLORIDA
PROFESSIONAL ENGINEER
6-6-18
FRANCISCO HERNANDEZ
FLORIDA PE # 51393

Sunshine Windows Manufacturing, Inc.
1785 W. 33rd Place
Hialeah, Florida 33012
Ph: (305)364-9952
Fax:(305)828-5118

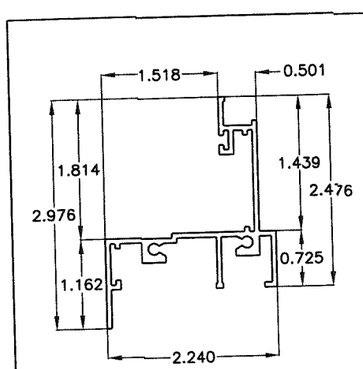
SERIES 2009-2
OUTSWING CASEMENT WINDOWS
LARGE MISSILE IMPACT RESISTANT

No	DATE	REVISION

DRAWING No.
CS01-18
DATE: 1/30/2018
SCALE: 1/2" = 1"
SHEET 3 OF 7

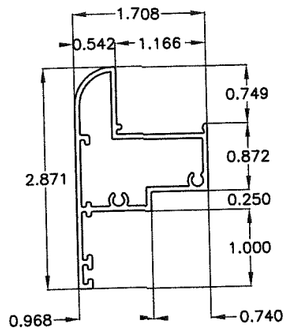
MATERIAL LIST

ITEM #	PART #	QTY	DESCRIPTION	MATERIAL	REMARKS
1	050155	4	FIXED FRAME	6063–T6	SAPA
2	050154	1	VENT FRAME	6063–T6	SAPA
			NOT USED		
4	050158	AS RQD	GLAZING BEAD	6063–T6	SAPA
5	PJS–45–SS	1	.057" THICK CORNER KEY	STAINLESS STEEL	SULLIVAN & ASSOC.
6	PJS–46–SS	1	.057" THICK CORNER KEY	STAINLESS STEEL	SULLIVAN & ASSOC.
7	PJS–47–SS	1	.057" THICK CORNER KEY	STAINLESS STEEL	SULLIVAN & ASSOC.
8	PJS–48–SS	1	.057" THICK CORNER KEY	STAINLESS STEEL	SULLIVAN & ASSOC.
9	# 8 X 1" PH SMS	16	ASSEMBLY SCREWS	STEEL	AMERICAN FASTENERS
10	304CJ200–12AE	1	EGRESS 4 BAR HINGE	STAINLESS STEEL	SULLIVAN & ASSOC.
11	CS–100T–SS	1	TRACK	STAINLESS STEEL	SULLIVAN & ASSOC.
12	CS–OP950	1	SINGLE ARM OPERATOR	STEEL	SULLIVAN & ASSOC.
13	CS–210	2	MULTI–POINT LOCK	ZINC	SULLIVAN & ASSOC.
14	CS–TB	2	TIE BAR	STEEL	SULLIVAN & ASSOC.
15	CS–350–EG	AS RQD	KEEPERS	STEEL	SULLIVAN & ASSOC.
16	CS–20320	AS RQD	TIE BAR GUIDE	NYLON	SULLIVAN & ASSOC.
17	MPI P/N 2534	AS RQD	GLAZING BEAD BULB	VINYL	SULLIVAN & ASSOC.
18	E20310KN	AS RQD	WEATHER STRIP BULB	VINYL	ULTRAFAB
19	ZIALOC	AS RQD	GLAZING TAPE	FOAM	TBP
20	–	–	NOT USED	–	
21	051366	4	FULL LENGTH SHEAR PLATE	6063–T6	SAPA
22	DOW 899	AS RQD	GLAZING SEALANT	SILICONE	COASTAL CONST.



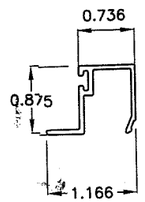
FIXED FRAME
050155
6063–T6

(1)



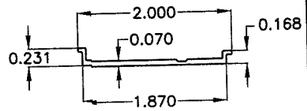
SASH FRAME
050154
6063–T6

(2)



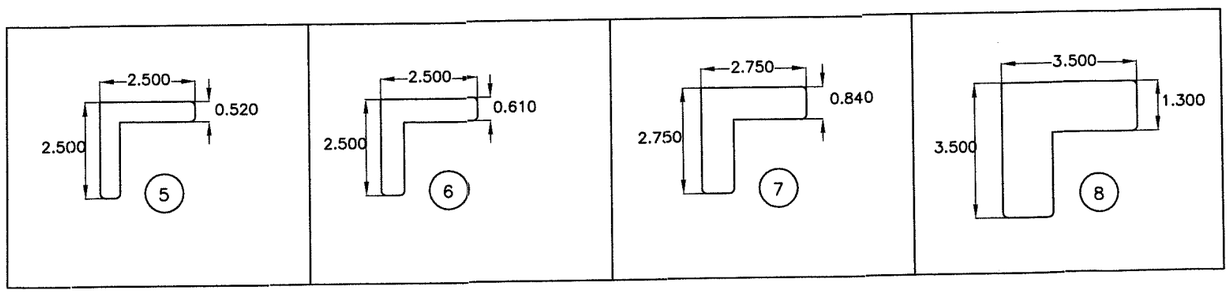
GLAZING BEAD
050158
6063–T6

(4)



SHEAR PLATE
051366
6063–T6

(21)



CORNER KEYS

THIS PRODUCT IS IMPACT RESISTANT
SHUTTERS ARE NOT REQUIRED

Approved as complying with the Florida Building Code
Date Aug. 16, 2018
NOA# 18-0611.02
Miami-Dade Product Control

FRANCISCO HERNANDEZ LICENSE No. 51393 STATE OF FLORIDA PROFESSIONAL ENGINEER
6-6-18
FRANCISCO HERNANDEZ
FLORIDA PE # 51393

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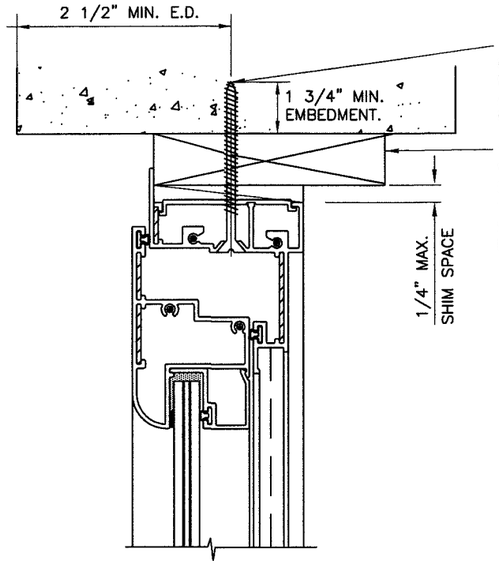
SERIES 2009-2
OUTSWING CASEMENT WINDOWS
LARGE MISSILE IMPACT RESISTANT

No	DATE	REVISION

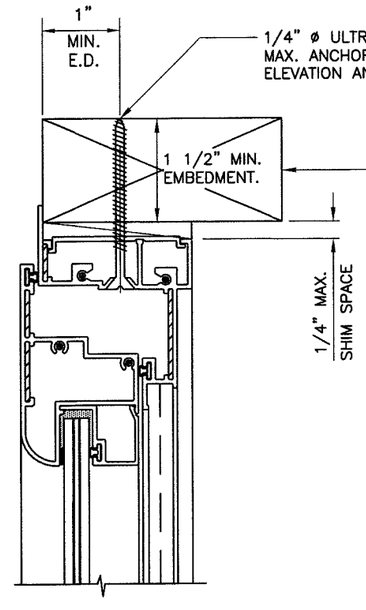
DRAWING No.
CS01–18
DATE: 1/30/2018
SCALE: N.T.S.



1/4" ø ULTRACON WITH 1 3/4" MIN. PENETRATION INTO CONCRETE OR GROUT FILLED BLOCK THROUGH 1 BY WOOD BUCK. FOR MAX. ANCHOR SPACING AND NUMBER OF ANCHORS REFER TO ELEVATION AND DESIGN PRESSURES CHART ON SHEET 2 OF 7.

1" BY WOOD BUCK
WOOD BUCKS BY OTHERS MUST BE PROPERLY SEALED AND ANCHORED TO TRANSFER LOADS TO THE STRUCTURE .
SHOULD BE APPROVED BY BUILDING OFFICIAL PRIOR TO WINDOW INSTALLATION,

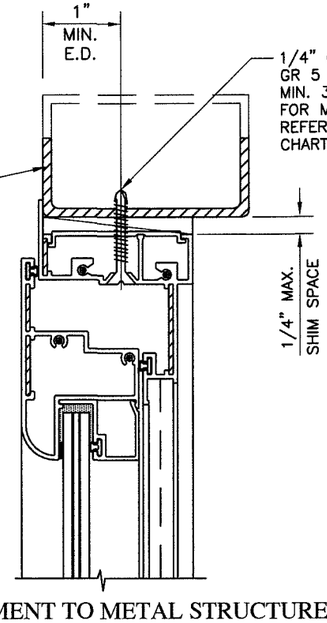
ATTACHMENT TO CONCRETE



1/4" ø ULTRACON WITH 1 1/2" MIN. PENETRATION INTO WOOD. FOR MAX. ANCHOR SPACING AND NUMBER OF ANCHORS REFER TO ELEVATION AND DESIGN PRESSURES CHART ON SHEET 2 OF 7.

2" BY WOOD BUCK
WOOD BUCKS BY OTHERS MUST BE PROPERLY SEALED AND ANCHORED TO TRANSFER LOADS TO THE STRUCTURE .
SHOULD BE APPROVED BY BUILDING OFFICIAL PRIOR TO WINDOW INSTALLATION.

ATTACHMENT TO WOOD



1/4" ø KWIK–FLEX BY HILTI OR DRIL–FLEX BY ELCO GR 5 SELF DRILLING SCREWS THROUGH METAL WITH MIN. 3 THREADS BEYOND THE SUBSTRATE.
FOR MAX. ANCHOR SPACING AND NUMBER OF ANCHORS REFER TO TYPICAL ELEVATION AND DESIGN PRESSURES CHART ON SHEET 2 OF 7.

METAL STRUCTURE BY OTHERS OR MIAMI–DADE COUNTY APPROVED MULLION. (UNDER SEPARATE APPROVAL).

MINIMUM THICKNESS = 1/8"

ATTACHMENT TO METAL STRUCTURE

TYPICAL SECTIONS AT HEAD

Approved as complying with the Florida Building Code
Date Aug. 16, 2018
NOA# 18-0611.02
Miami-Dade Product Control

FRANCISCO HERNANDEZ LICENSE No. 51393 STATE OF FLORIDA PROFESSIONAL ENGINEER
6-6-18

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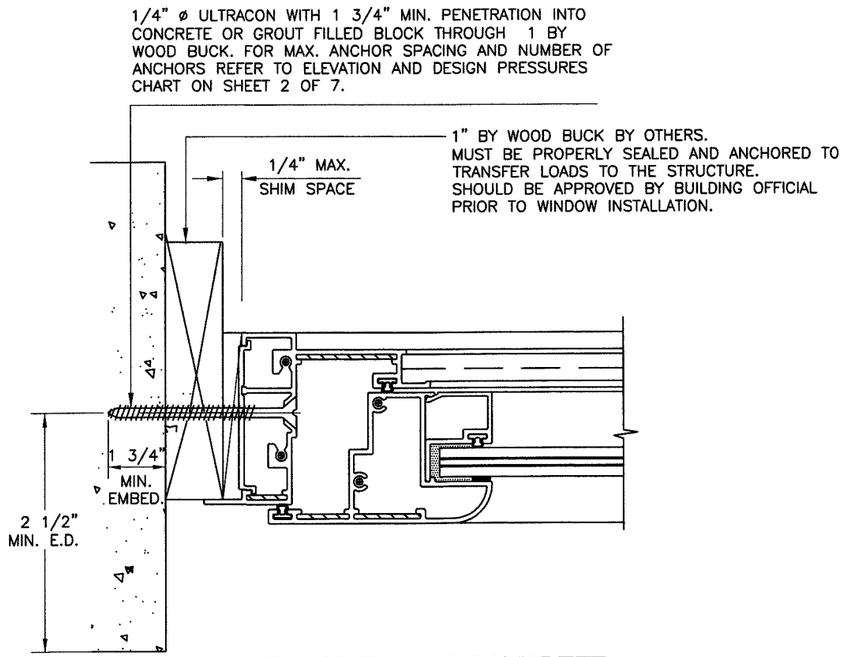
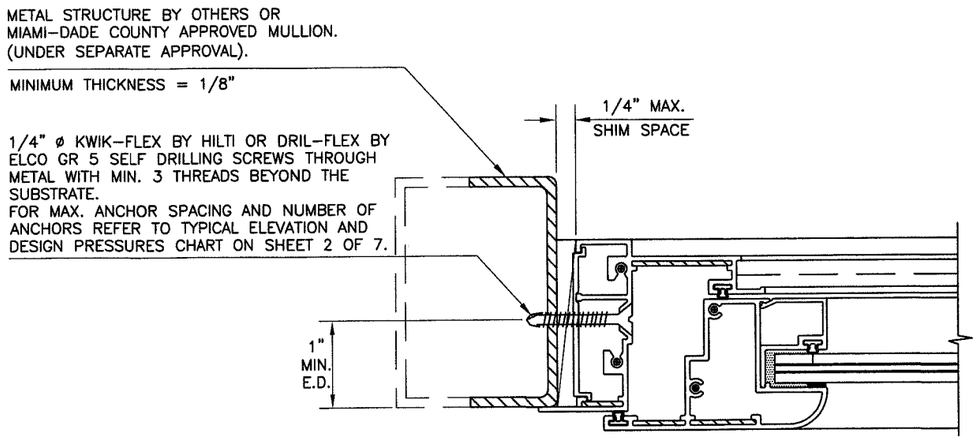
OUTSWING CASEMENT WINDOWS
LARGE MISSILE IMPACT RESISTANT

No	DATE	REVISION

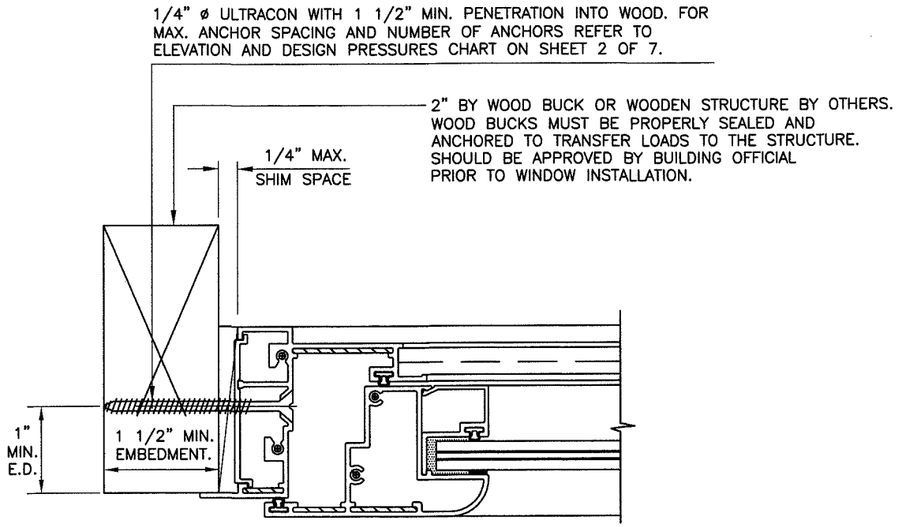
DRAWING No.
CS01-18
DATE: 1/30/2018
SCALE: 1/2" = 1'



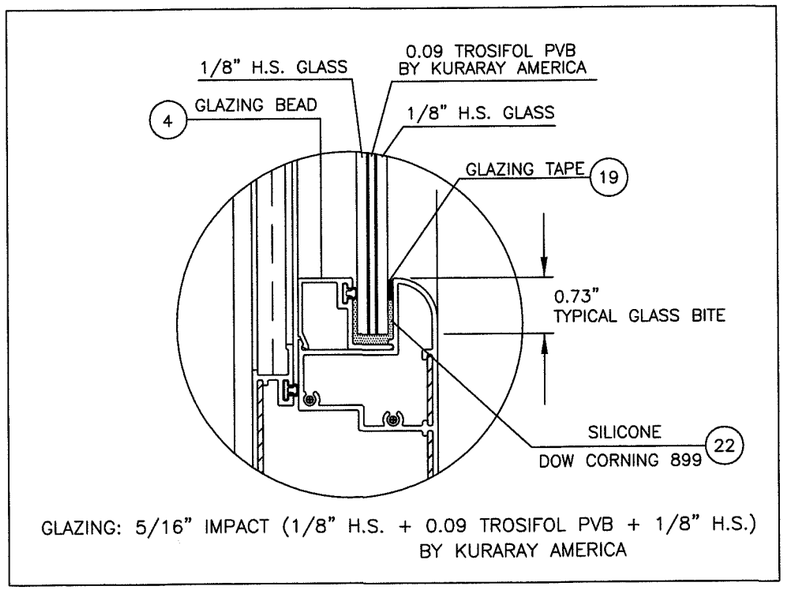
ATTACHMENT TO CONCRETE



ATTACHMENT TO METAL STRUCTURE



ATTACHMENT TO WOOD



GLAZING DETAIL

TYPICAL SECTIONS AT JAMBS

Approved as complying with the Florida Building Code
Date Aug. 16, 2018
NOA# 18-0611.02
Miami-Dade Product Control
Manuel Perez

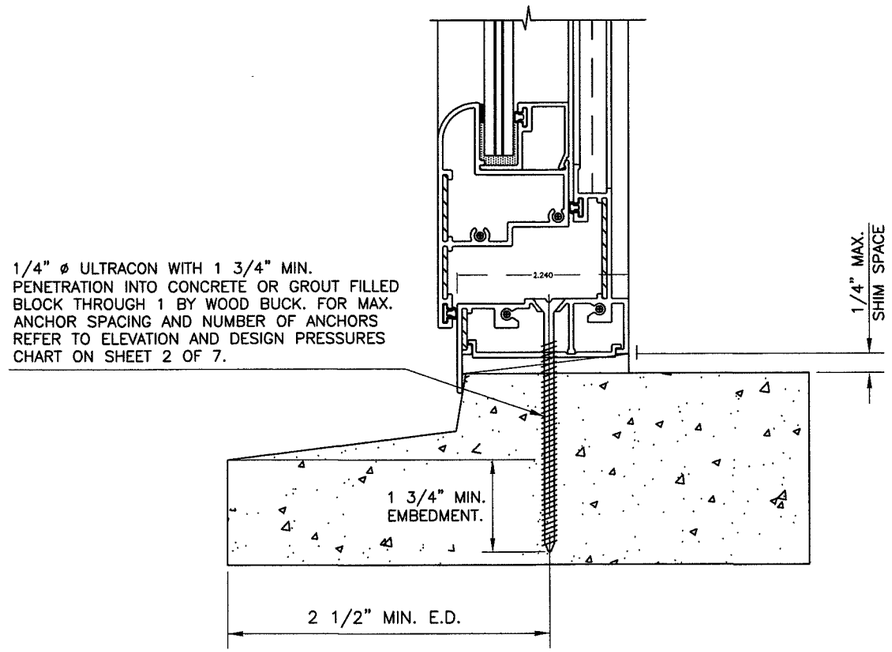
FRANCISCO HERNANDEZ LICENSE No. 51393 STATE OF FLORIDA PROFESSIONAL ENGINEER
6-6-18
FRANCISCO HERNANDEZ
FLORIDA PE # 51393

Sunshine Windows Manufacturing, Inc.
1785 W. 33rd Place
Hialeah, Florida 33012
Ph: (305)364-9952
Fax:(305)828-5118

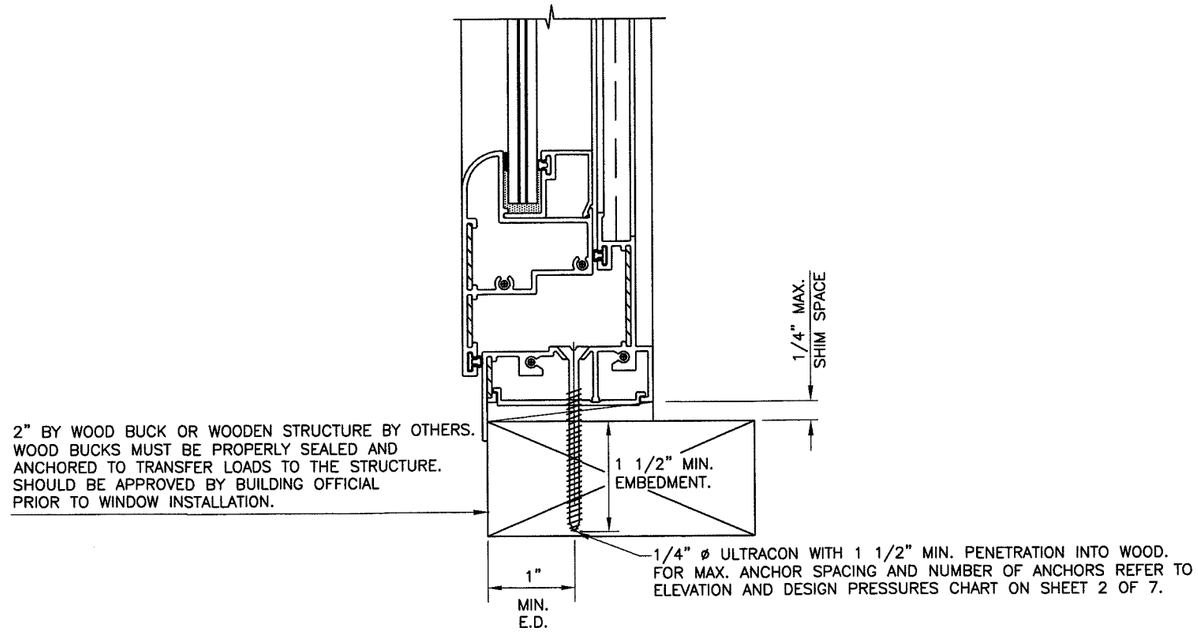
SERIES: 2009-2
OUTSWING CASEMENT WINDOWS
LARGE MISSILE IMPACT RESISTANT

No	DATE	REVISION

DRAWING No. CS01-18
DATE: 1/30/2018
SCALE: 1/2" = 1"
SHEET 6 OF 7



ATTACHMENT TO PRE-CAST SILL



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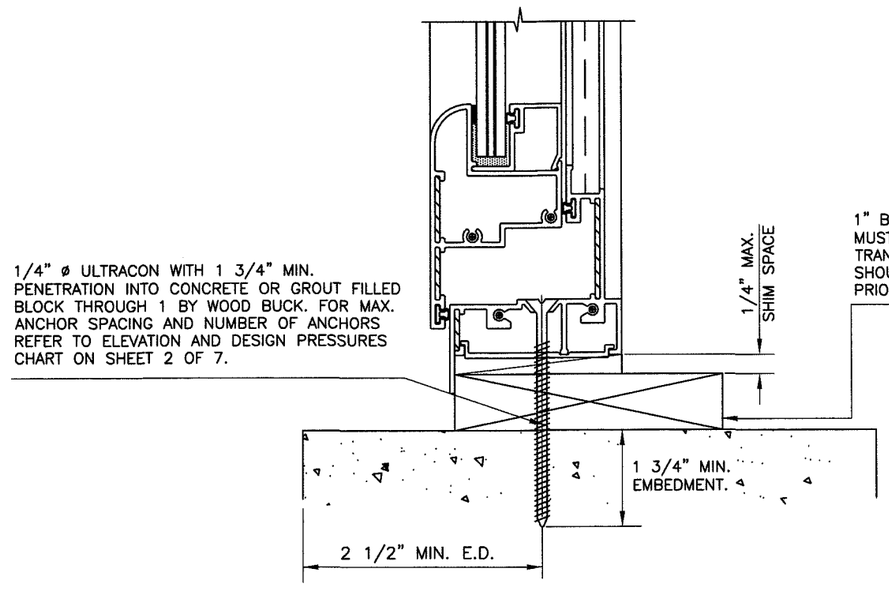

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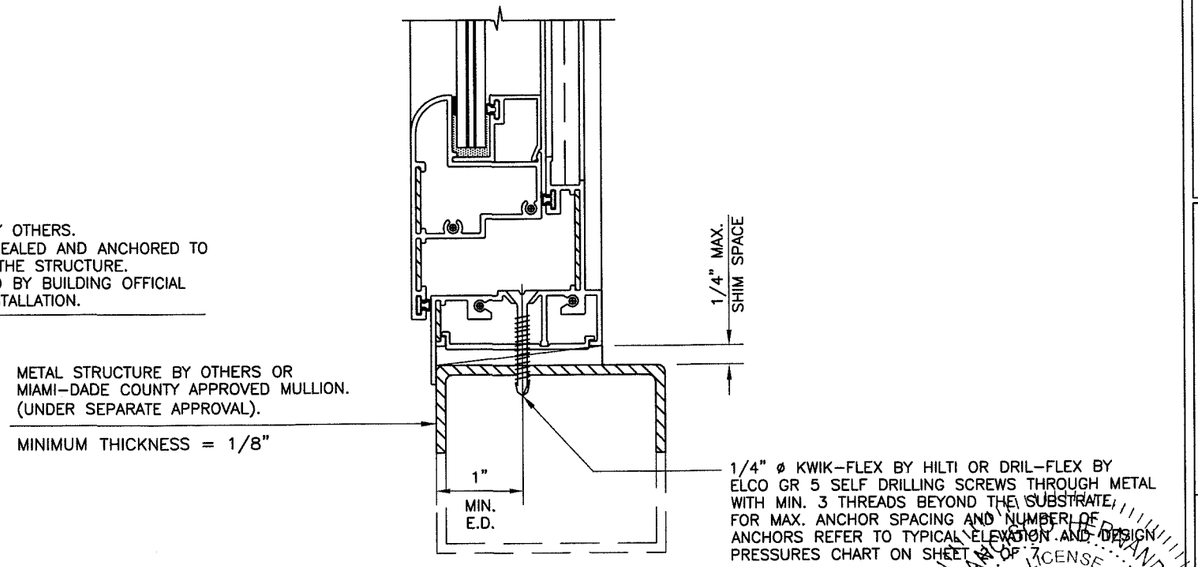

ATTACHMENT TO METAL STRUCTURE

TYPICAL SECTIONS AT SILL

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SCALE: 1/2" =1"
SHEET 7 OF 7