



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/building

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

E.S. Windows, LLC
3550 NW 49th Street
Miami, FL 33142

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 “9500” Aluminum Fixed Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W10-25**, titled “Series 9500 Aluminum Fixed Wdw. (L.M.I.)”, sheets 1 through 9 of 9, dated 04/20/10, with revision **F** dated 09/12/23, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E., bearing the Miami-Dade County Product Control Renewal 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, **Barranquilla, Colombia**, 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.

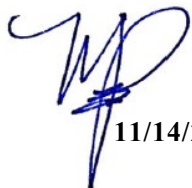
ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

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 **renews NOA No. 23-0928.21** and consists of this page 1 and evidence pages E-1, E-2, and E-3, as well as approval document mentioned above.

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




 11/14/24

NOA No. 24-1107.02
Expiration Date: October 28, 2025
Approval Date: November 21, 2024
 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS


1. Manufacturer's die drawings and sections.
(Submitted under NOA No. 09-0623.01)
2. Drawing No. **W10-25**, titled "Series 9500 Aluminum Fixed Wdw. (L.M.I.)", sheets 1 through 9 of 9, dated 04/20/10, with revision **F** dated 09/12/23, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
(Submitted under NOA No. 23-0928.21)

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
along with marked-up drawings and installation diagram of an aluminum fixed window, both prepared by Fenestration Testing Laboratory, Inc., Test Reports No. **FTL-6129**, dated 03/10/10, and **FTL-5991**, dated 10/02/09, both signed and sealed by Jorge A. Causo, P.E.
(Submitted under NOA No. 09-0623.01)
2. 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, FBC 2411 3.2.1, TAS 202-94
along with marked-up drawings and installation diagram of an aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-5546**, dated 01/09/09, signed and sealed by Michael R. Wenzel, P.E.
(Submitted under NOA No. 09-0623.01)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC 6th Edition (2017), dated 09/29/17, and updated on 11/16/20 to comply with FBC 7th Edition (2020), prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
(Submitted under NOA No. 21-0127.07)
2. Glazing complies with **ASTM E1300-09**



Manuel Pérez, P.E.
Product Control Examiner
NOA No. 24-1107.02
Expiration Date: October 28, 2025
Approval Date: November 21, 2024

E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

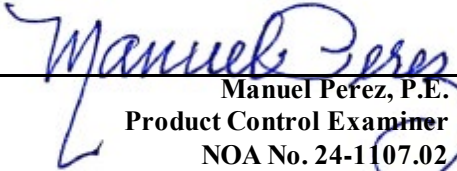
1. Notice of Acceptance No. **22-1116.01** issued to **Kuraray America, Inc.** for their “**SentryGlas® (Clear and White) Glass Interlayers**” dated 12/15/22, expiring on 07/04/28.
2. Notice of Acceptance No. **20-0915.22** issued to **Kuraray America, Inc.** for their “**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**” dated 11/19/20, expiring on 07/08/24.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 7th Edition (2020)**, with **FBC 8th Edition (2023)**, and of no financial interest, dated September 25, 2023, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
(Submitted under NOA No. 23-0928.21)
2. Laboratory compliance letter for Test Reports No. **FTL-6129**, dated 03/10/10, and **FTL-5991**, dated 10/02/09, both issued by Fenestration Testing Laboratory, Inc., both signed and sealed by Jorge A. Causo, P.E.
(Submitted under NOA No. 09-0623.01)
3. Laboratory compliance letter for Test Report No. **FTL-5546**, dated 01/09/09, issued by Fenestration Testing Laboratory, Inc., signed and sealed by Michael R. Wenzel, P.E.
(Submitted under NOA No. 09-0623.01)

G. OTHERS

1. Notice of Acceptance No. **21-0127.07**, issued to E.S. Windows, LLC, for their Series “9500” Aluminum Fixed Window – L.M.I., approved on 04/29/21 and expiring on 10/28/24.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 24-1107.02
Expiration Date: October 28, 2025
Approval Date: November 21, 2024

E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. None.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

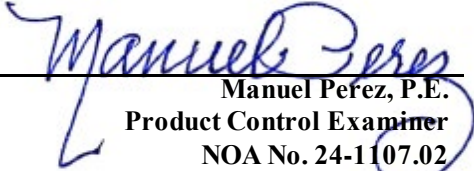
1. Notice of Acceptance No. **23-0717.30** issued to **Kuraray America, Inc.** for their “**SentryGlas® (Clear and White) Glass Interlayers**” dated 08/31/23, expiring on 07/04/28.
2. Notice of Acceptance No. **24-0205.08** issued to **Kuraray America, Inc.** for their “**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**” dated 03/21/24, expiring on 07/08/29.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 8th Edition (2023)**, and of no financial interest, dated November 6, 2024, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
2. Letter from consultant requesting a 1-year extension to allow time to perform verification test, dated 11/05/24 issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
3. Testing agreement letter, dated 11/05/24 between IFET, Inc. and E.S. Windows, LLC, issued by IFET, Inc. and signed by Luis Macias, CEO, IFET, Inc.

G. OTHERS

1. Notice of Acceptance No. **23-0928.21**, issued to E.S. Windows, LLC, for their Series “9500” Aluminum Fixed Window – L.M.I., approved on 11/09/23 and expiring on 10/28/24.
2. This is a one-year approval, subjected to successful verification test, the final approval will be issued for a total of 5 years.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 24-1107.02
Expiration Date: October 28, 2025
Approval Date: November 21, 2024

THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

SERIES 9500 ALUMINUM FIXED WINDOWS

DESIGN LOAD CAPACITY FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEET 2.
 SEE GLASS LOAD CAPACITY CHART FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE.
 SEE ANCHOR LOAD CAPACITY CHART FOR NUMBER OF ANCHORS REQUIRED AT EACH CORNER.
 LOWER DESIGN PRESSURES FROM GLASS OR ANCHOR CHARTS WILL APPLY TO ENTIRE SYSTEM.

CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2020 (7TH EDITION)/2023 (8TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

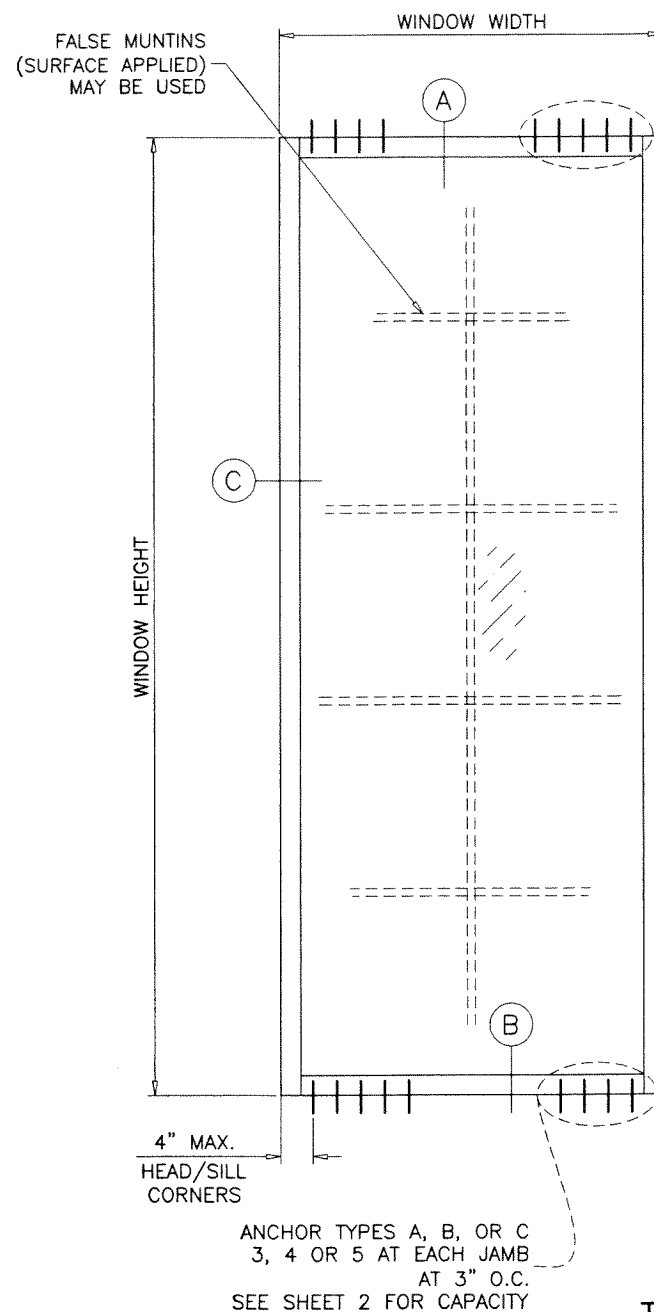
ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2020/2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

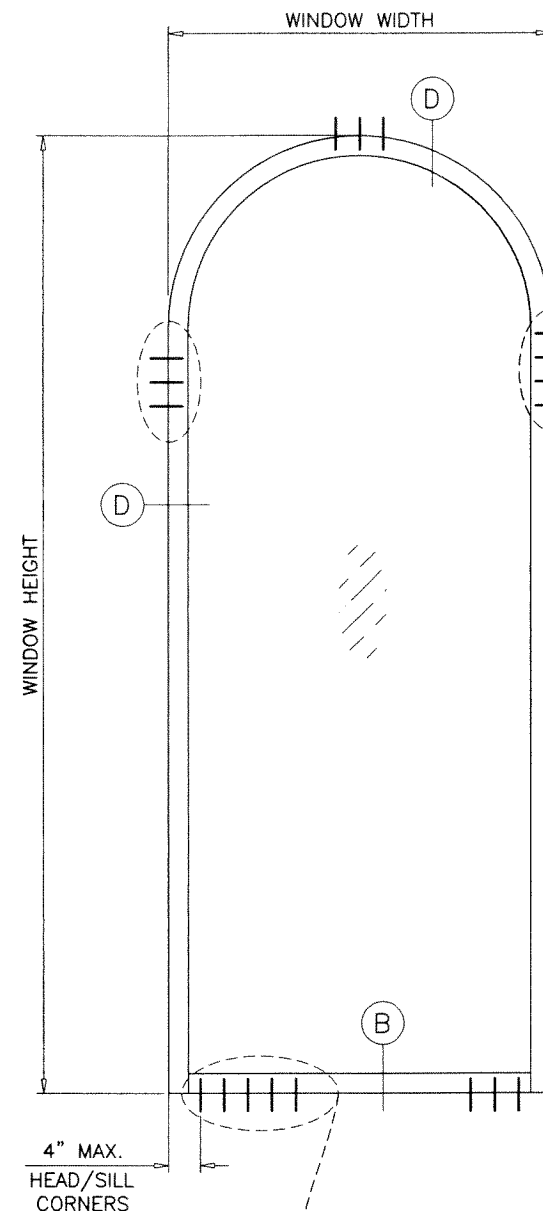
THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.

CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.



ANCHOR TYPES A, B, OR C
 3, 4 OR 5 AT EACH JAMB
 AT 3" O.C.
 SEE SHEET 2 FOR CAPACITY



ANCHOR TYPES A, B, OR C
 3, 4 OR 5 AT EACH JAMB
 AT 3" O.C.
 SEE SHEET 2 FOR CAPACITY

ANCHOR TYPES
 A, A1, B, B1 OR C
 3, 4 OR 5 AT EACH JAMB
 AT 3" O.C.
 SEE SHEET 2 FOR CAPACITY

TYPICAL ELEVATIONS

DAYLITE OPENINGS:

D.L.O. HEIGHT = WINDOW HEIGHT - 5.0"
 D.L.O. WIDTH = WINDOW WIDTH - 5.0"

PRODUCT RENEWED
 as complying with the Florida Building Code
 NOA-No. **24-1107.02**

Expiration Date: **10/28/2025**
 By: *Manuel Perez*

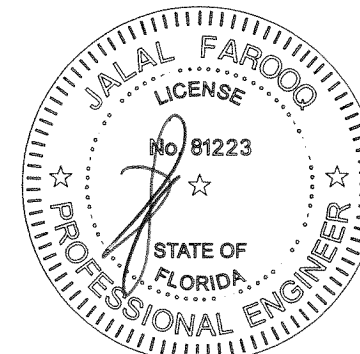
Miami-Dade Product Control

PRODUCT REVISED
 As complying with the Florida Building Code
 NOA-No. **23-0928.21**

Expiration Date: **10/28/2024**
 By: *Manuel Perez*

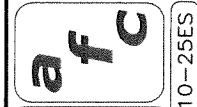
Miami-Dade Product Control

LAMINATED GLASS
 INSUL. LAM. GLASS
 LARGE MISSILE IMPACT



WINDOWS WITH GLASS TYPES 'A' & 'B' COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.

SEP 27 2023



AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 3538)
 TEL. (305) 264-8100 FAX. (305) 262-6978
 COMP-ANL\W10-25ES

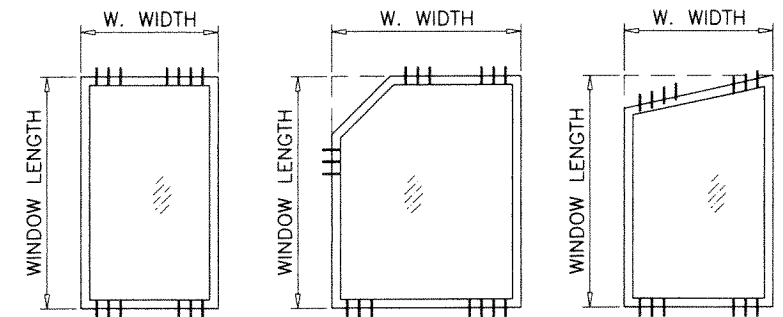
SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description
C	08.01.14		UPDATED TO 2014 FBC
D	01.25.18		UPDATED TO 2017 FBC
E	01.19.21		UPDATED TO 2020 FBC
F	09.12.23		UPDATED TO 2023 FBC

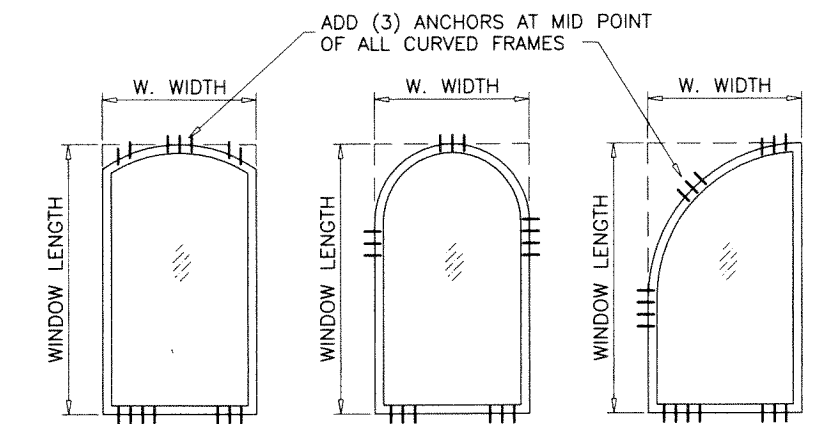
date: 04-20-10
 scale:
 dr. by: TARIQ
 chk. by:

drawing no.
W10-25
 sheet 1 of 9

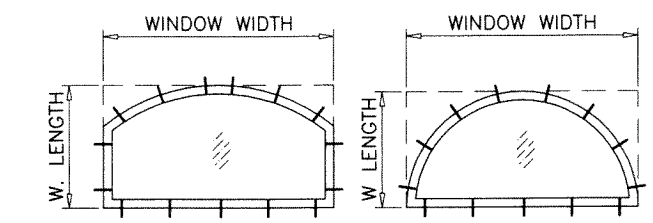
GLASS LOAD CAPACITY - PSF				
WINDOW DIMS.		GLASS TYPE 'A'	GLASS TYPE 'B'	GLASS TYPES 'A1' & 'B1'
WIDTH (W)	LENGTH (L)	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)
30"	90"	65.0	120.0	90.0
36"		65.0	120.0	90.0
42"		65.0	120.0	90.0
48"		65.0	120.0	90.0
54"		65.0	120.0	90.0
60"		65.0	120.0	90.0
30"	96"	65.0	120.0	90.0
36"		65.0	120.0	90.0
42"		65.0	120.0	90.0
48"		65.0	120.0	90.0
54"		65.0	120.0	90.0
60"		65.0	120.0	90.0
30"	102"	65.0	120.0	90.0
36"		65.0	120.0	90.0
42"		65.0	120.0	90.0
48"		65.0	120.0	90.0
54"		65.0	120.0	90.0
60"		65.0	120.0	90.0
30"	108"	65.0	120.0	90.0
36"		65.0	120.0	90.0
42"		65.0	120.0	90.0
48"		65.0	120.0	90.0
30"	114"	65.0	120.0	90.0
36"		65.0	120.0	90.0
42"		65.0	120.0	90.0
48"		65.0	120.0	90.0
30"	120"	65.0	120.0	90.0
36"		65.0	120.0	90.0
42"		65.0	120.0	90.0
48"		65.0	120.0	90.0



SEE CHART AT RIGHT FOR NUMBER OF ANCHORS REQUIRED AT EACH CORNER OF THESE SHAPES.



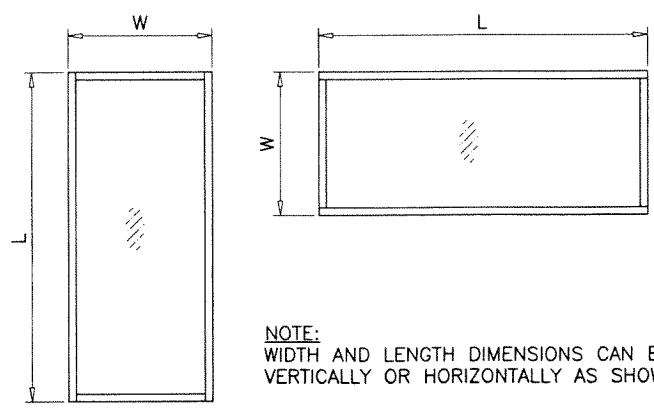
SEE CHART AT RIGHT FOR NUMBER OF ANCHORS REQUIRED AT EACH CIRCULAR OR SQUARE CORNER JOINT. USE (3) ADDL. ANCHORS AT MID POINT OF CIRCULAR FRAMES.



ALTERNATE ANCHORING AT CIRCULAR SHAPES USE ANCHORS AT 4" FROM EACH END AND 16" O.C. MAX.

ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES.

ANCHORS LOAD CAPACITY - PSF							
WINDOW DIMS.		ANCHOR TYPES 'A', 'B' & 'C'			ANCHOR TYPES 'A1' & 'B1'		
		3 ANCHORS	4 ANCHORS	5 ANCHORS	3 ANCHORS	4 ANCHORS	5 ANCHORS
WIDTH (W)	LENGTH (L)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
30"	90"	120.0	120.0	120.0	120.0	120.0	120.0
36"		120.0	120.0	120.0	120.0	120.0	120.0
42"		115.7	120.0	120.0	106.8	120.0	120.0
48"		101.2	120.0	120.0	94.2	120.0	120.0
54"		90.0	119.9	120.0	84.4	112.5	120.0
60"		81.0	107.9	120.0	76.5	102.0	120.0
30"	96"	120.0	120.0	120.0	120.0	120.0	120.0
36"		120.0	120.0	120.0	115.7	120.0	120.0
42"		108.4	120.0	120.0	99.8	120.0	120.0
48"		94.9	120.0	120.0	88.0	117.3	120.0
54"		84.3	112.4	120.0	78.8	105.0	120.0
60"		75.9	101.2	120.0	71.4	95.2	120.0
30"	102"	120.0	120.0	120.0	120.0	120.0	120.0
36"		119.1	120.0	120.0	108.6	120.0	120.0
42"		102.1	120.0	120.0	93.7	120.0	120.0
48"		89.3	119.1	120.0	82.5	110.0	120.0
54"		79.4	105.8	120.0	73.8	98.5	120.0
60"		71.4	95.2	120.0	65.5	90.0	120.0
30"	108"	120.0	120.0	120.0	120.0	120.0	120.0
36"		112.4	120.0	120.0	102.3	120.0	120.0
42"		96.4	120.0	120.0	88.3	117.7	120.0
48"		84.3	112.4	120.0	77.7	103.6	120.0
30"	114"	120.0	120.0	120.0	115.4	120.0	120.0
36"		106.5	120.0	120.0	96.8	120.0	120.0
42"		91.3	120.0	120.0	83.4	111.2	120.0
48"		79.9	106.5	120.0	73.4	97.9	120.0
30"	120"	120.0	120.0	120.0	109.5	120.0	120.0
36"		101.2	120.0	120.0	91.8	120.0	120.0
42"		86.7	115.7	120.0	79.1	105.4	120.0
48"		75.9	101.2	120.0	69.6	92.8	116.0



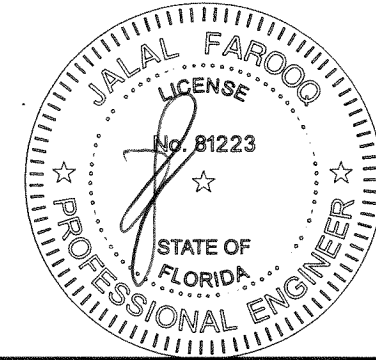
NOTE: WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.

NOTE: SEE GLASS LOAD CAPACITY CHART FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE. SEE ANCHOR LOAD CAPACITY CHART FOR NUMBER OF ANCHORS REQUIRED AT EACH CORNER. LOWER DESIGN PRESSURES FROM GLASS OR ANCHOR CHARTS WILL APPLY TO ENTIRE SYSTEM.

NOTE: GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS).

PRODUCT RENEWED
as complying with the Florida Building Code
NOA-No. **24-1107.02**
Expiration Date: **10/28/2025**
By: *Manuel Perez*
Miami-Dade Product Control

PRODUCT REVISED
As complying with the Florida Building Code
NOA-No. **23-0928.21**
Expiration Date: **10/28/2024**
By: *Manuel Perez*
Miami-Dade Product Control



SEP 27 2023

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
(C.A.N. 3538)

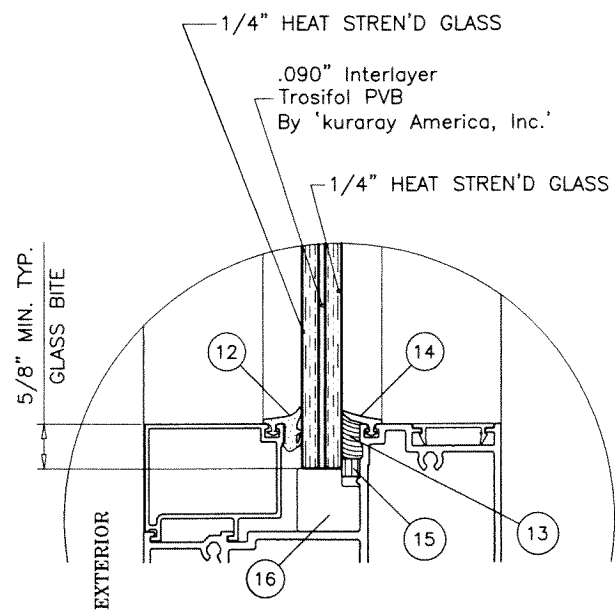
SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

no.	date	description
C	08.01.14	UPDATED TO 2014 FBC
D	01.25.18	UPDATED TO 2017 FBC
E	01.19.21	UPDATED TO 2020 FBC
F	09.12.23	NO CHANGE THIS SHEET

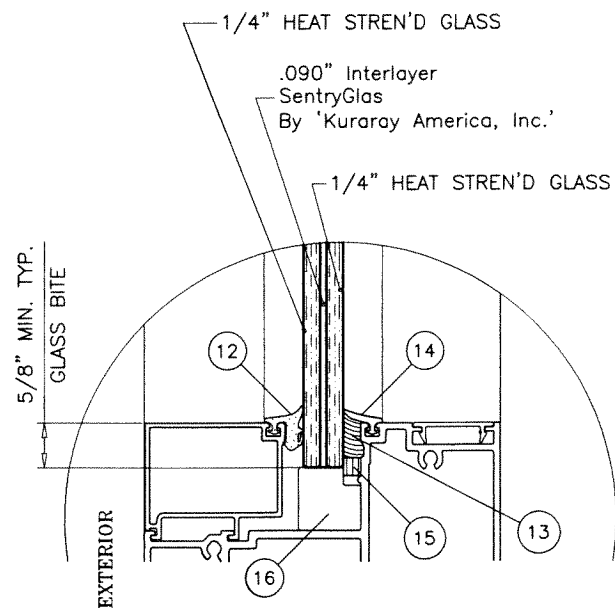
date:	04-20-10
scale:	-
dr. by:	TARIQ
chk. by:	

drawing no. **W10-25**
sheet 2 of 9

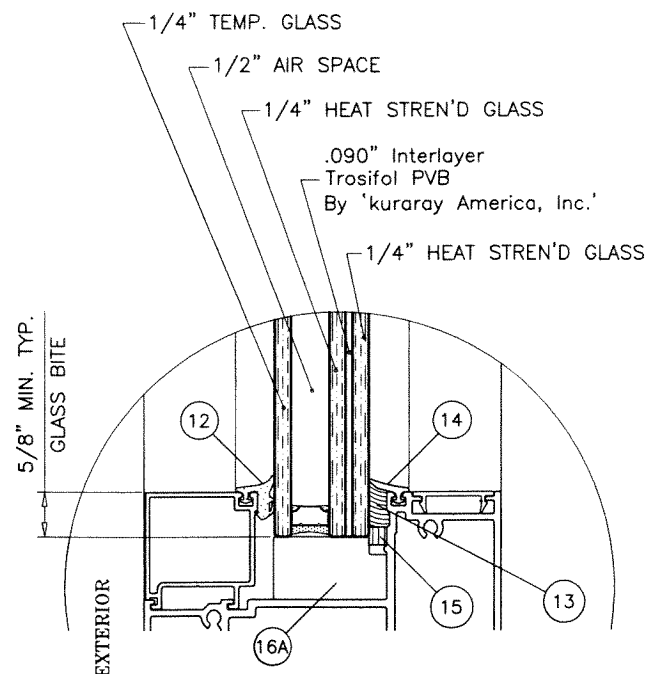
COMP-ANL\W10-25ES



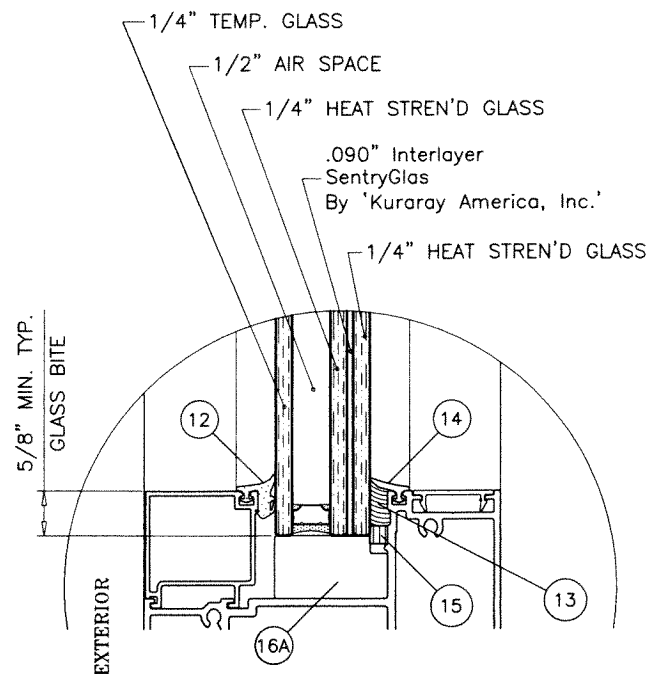
GLASS TYPE 'A'
9/16" OVERALL LAMINATED GLASS



GLASS TYPE 'B'
9/16" OVERALL LAMINATED GLASS



GLASS TYPE 'A1'
1-5/16" OVERALL INSUL. LAM. GLASS



GLASS TYPE 'B1'
1-5/16" OVERALL INSUL. LAM. GLASS

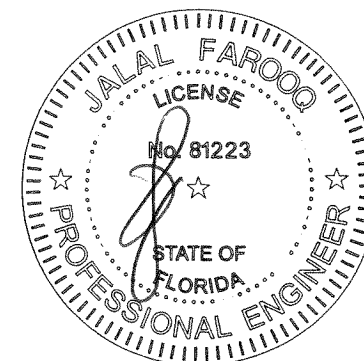
GLAZING OPTIONS

1/2" AIR SPACE CONSISTING OF:
SPACER:
 'HELIMA' LOW PROFILE ALUMINUM SPACER
 BY 'LINGERMANN GMBH'
 AROUND THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:
 SILICONE
 DOWSIL 791
 GE 2000

PRODUCT RENEWED
 as complying with the Florida
 Building Code
 NOA-No. **24-1107.02**
 Expiration Date: **10/28/2025**
 By: *Manuel Ferrer*
 Miami-Dade Product Control

PRODUCT REVISED
 As complying with the Florida
 Building Code
 NOA-No. **23-0928.21**
 Expiration Date: **10/28/2024**
 By: *Manuel Ferrer*
 Miami-Dade Product Control

SEP 27 2023



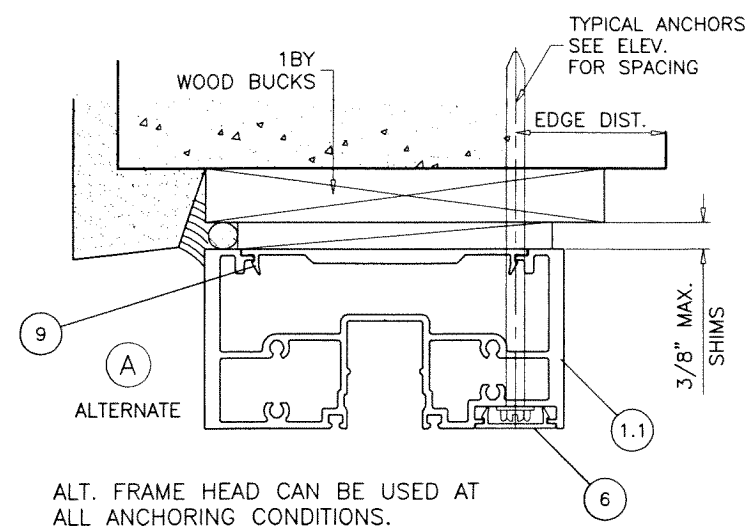
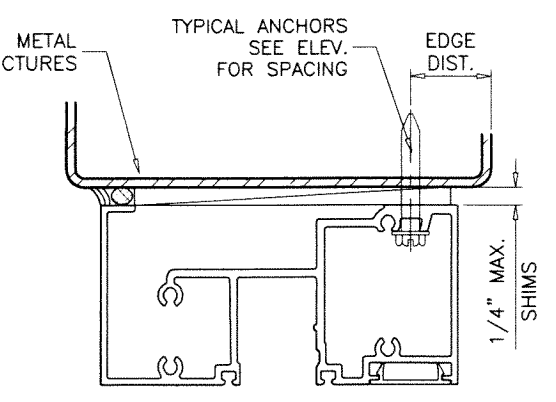
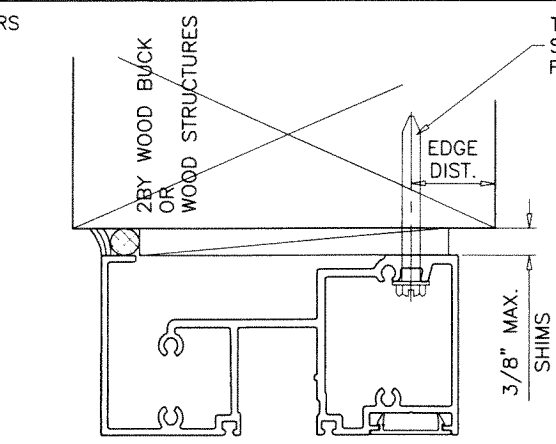
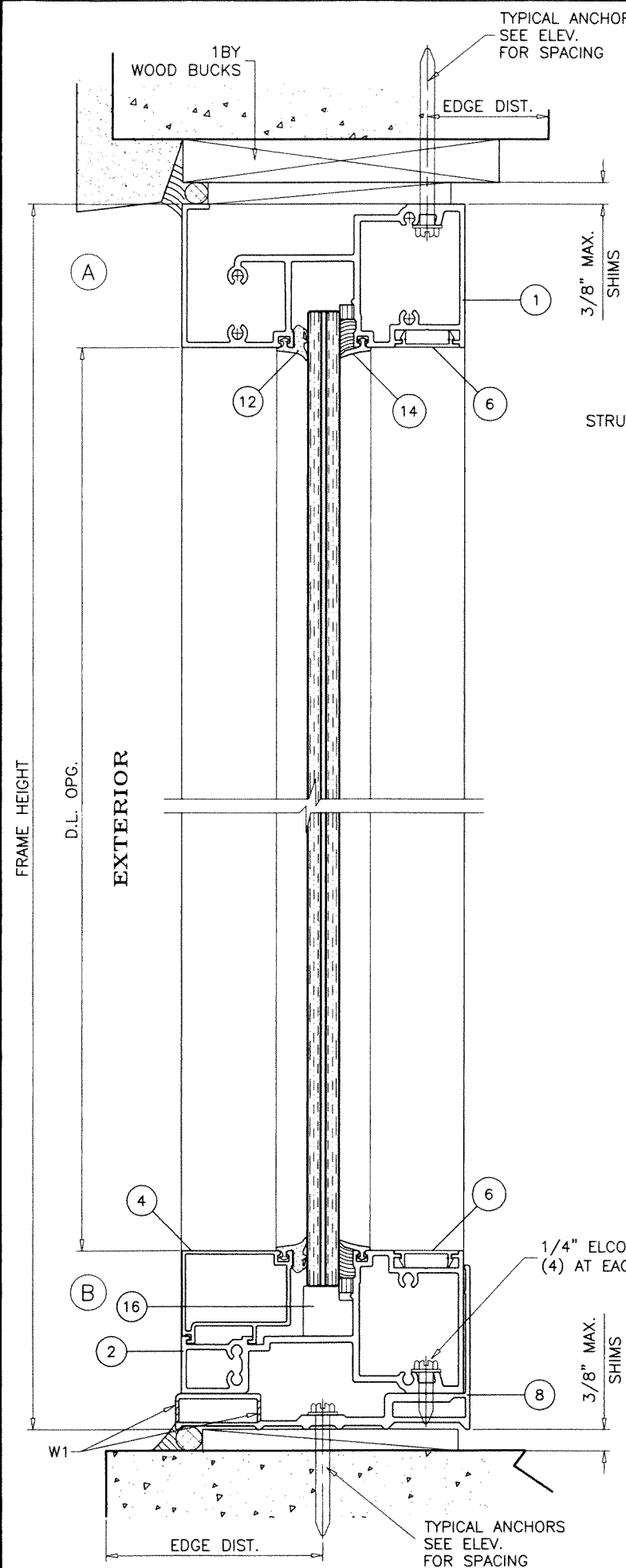
af c
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 3538)
 TEL. (305) 264-8100 FAX. (305) 262-6978
 COMP-ANL\W10-25ES

SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description
C	08.01.14		UPDATED TO 2014 FBC
D	01.25.18		UPDATED TO 2017 FBC
E	01.19.21		UPDATED TO 2020 FBC
F	09.12.23		NO CHANGE THIS SHEET

date: 04-20-10
 scale: 3/8" = 1"
 dr. by: TARIQ
 chk. by:

drawing no.
W10-25
 sheet 3 of 9



ALT. FRAME HEAD CAN BE USED AT ALL ANCHORING CONDITIONS.

PRODUCT RENEWED
as complying with the Florida Building Code

NOA-No. **24-1107.02**
Expiration Date: **10/28/2025**
By: *Manuel Perez*
Miami-Dade Product Control

PRODUCT REVISED
As complying with the Florida Building Code

NOA-No. **23-0928.21**
Expiration Date: **10/28/2024**
By: *Manuel Perez*
Miami-Dade Product Control

WEEP HOLES:

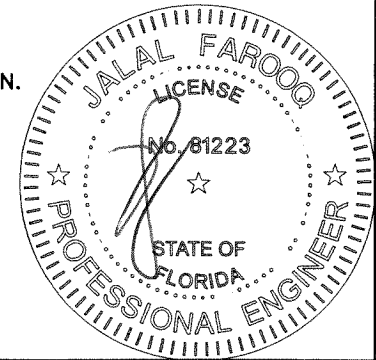
- W1 = 3/8" WEEP HOLES
- (1) AT 3" FROM EACH END
- (2) AT EACH MULLION AT 3" FROM MULLION CENTERLINE.

WOOD BUCKS AND METAL STRUCTURES NOT BY 'E.S. WDW.' MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

- TYPICAL ANCHORS:** SEE ELEV. FOR SPACING
- TYPE 'A'**- 1/4" DIA. KWIK-CON II+ BY 'HILTI' (Fu=138 KSI, Fy=137 KSI)
 INTO WOOD STRUCTURES
 2" MIN. PENETRATION INTO WOOD
 THRU 1BY OR 2BY WOOD BUCKS INTO CONCRETE
 2" MIN. EMBED INTO CONCRETE
 DIRECTLY INTO CONCRETE
 2" MIN. EMBED INTO CONC.
- ANCHOR EDGE DISTANCES**
 INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.
- TYPE 'A1'**- 1/4" DIA. KWIK-CON II+ BY 'HILTI' (Fu=138 KSI, Fy=137 KSI)
 THRU 1BY OR 2BY WOOD BUCKS INTO BLOCKS
 DIRECTLY INTO BLOCKS
 2" MIN. EMBED INTO BLOCK
- ANCHOR EDGE DISTANCES**
 INTO BLOCKS = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.
- TYPE 'B'**- 5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/2" MIN. PENETRATION INTO WOOD
 THRU 1BY WOOD BUCKS INTO CONCRETE
 1-1/4" MIN. EMBED INTO CONCRETE
 DIRECTLY INTO CONCRETE
 1-1/4" MIN. EMBED INTO CONC.
- ANCHOR EDGE DISTANCES**
 INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN. (1/4" ANCHORS)
 INTO WOOD STRUCTURE = 1-1/4" MIN. (5/16" ANCHORS)
- TYPE 'B1'**- 5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)
 THRU 1BY OR 2BY WOOD BUCKS INTO BLOCKS
 DIRECTLY INTO BLOCKS
 1-3/4" MIN. EMBED INTO GROUT-FILLED BLOCK
- ANCHOR EDGE DISTANCES**
 INTO FILLED BLOCK = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.
- TYPE 'C'**- 1/4" DIA. TEKS OR SELF-DRILLING SCREWS (GRADE 5 CRS)
 INTO MIAMI-DADE COUNTY APPROVED MULLIONS OR
 INTO METAL STRUCTURES
 (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
 STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)
- ANCHOR EDGE DISTANCES**
 INTO METAL STRUCTURE = 1/2" MIN.
- WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
 CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
 C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

LAMINATED GLASS

SEP 27 2023



af c
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 TEL. (305) 264-8100 FAX. (305) 262-6978
 (C.A.N. 3538)

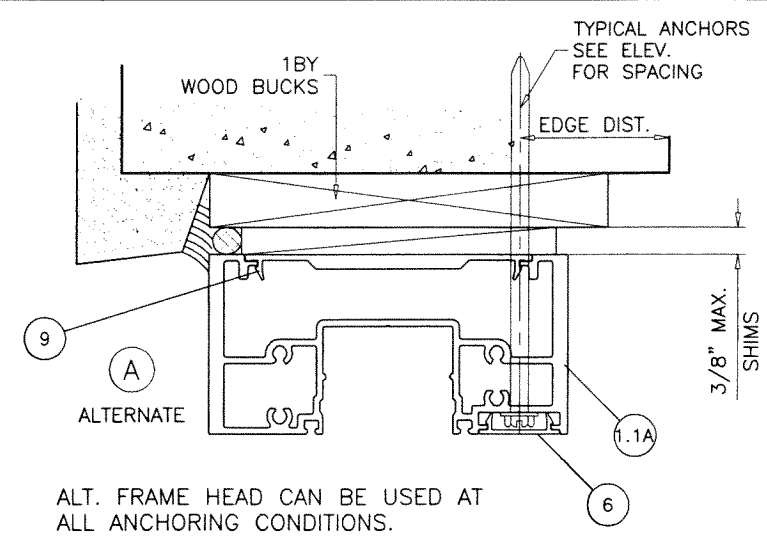
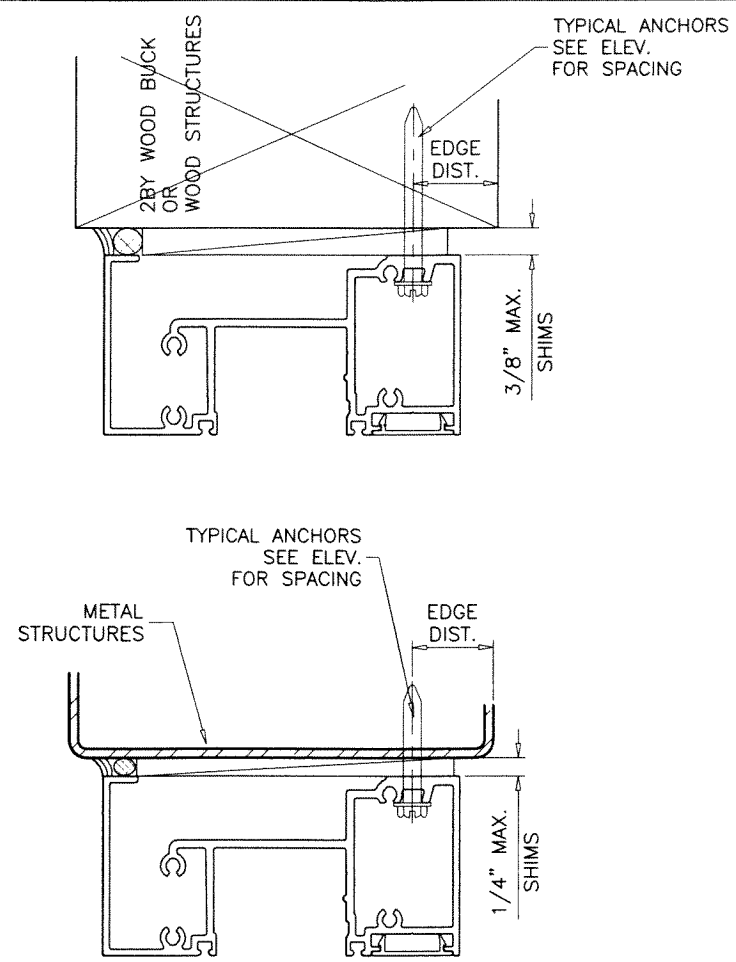
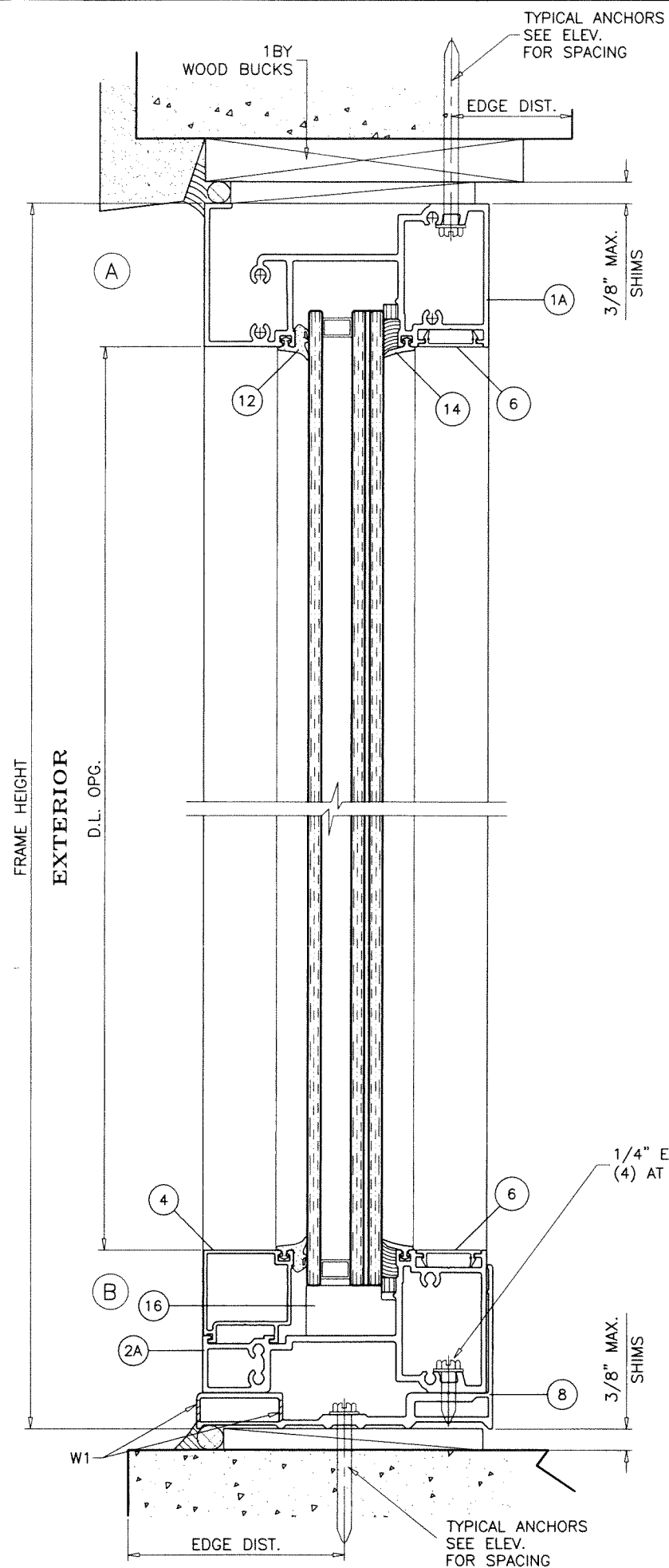
SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	description
C	08.01.14	UPDATED TO 2014 FBC
D	01.25.18	UPDATED TO 2017 FBC
E	01.19.21	UPDATED TO 2020 FBC
F	09.12.23	NO CHANGE THIS SHEET

date: 04-20-10
 scale: 3/8" = 1"
 dr. by: TARIQ
 chk. by:

drawing no. **W10-25**
 sheet 4 of 9

COMP-ANL\W10-25ES



ALT. FRAME HEAD CAN BE USED AT ALL ANCHORING CONDITIONS.

PRODUCT RENEWED
as complying with the Florida Building Code
NOA-No. **24-1107.02**
Expiration Date: **10/28/2025**

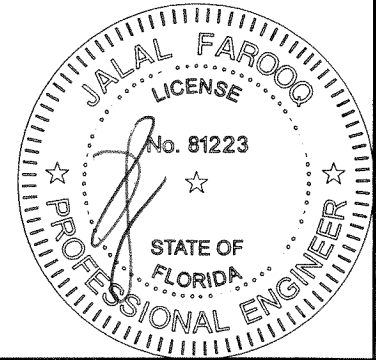
By: *Manuel Ferraz*
Miami-Dade Product Control

PRODUCT REVISED
As complying with the Florida Building Code
NOA-No. **23-0928.21**
Expiration Date: **10/28/2024**

By: *Manuel Ferraz*
Miami-Dade Product Control

INSUL. LAM. GLASS

SEP 27 2023



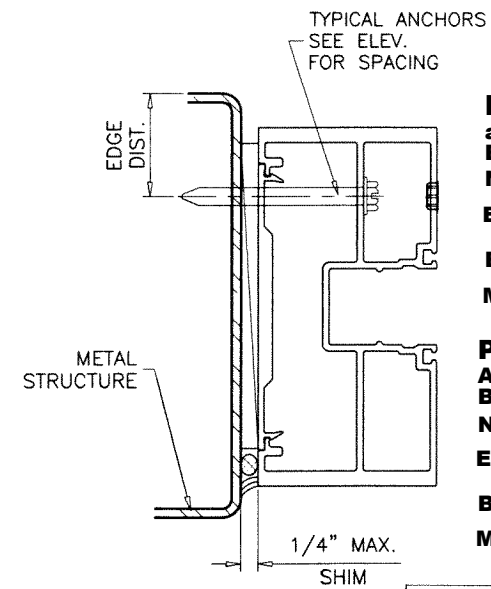
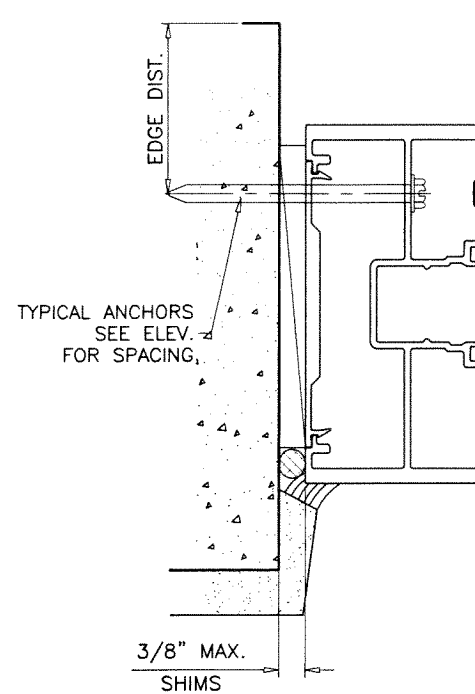
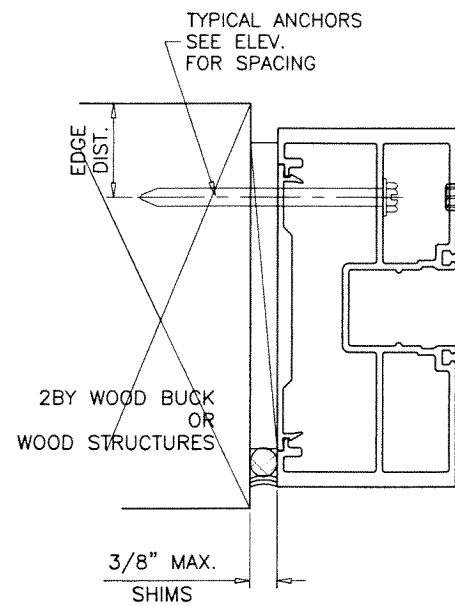
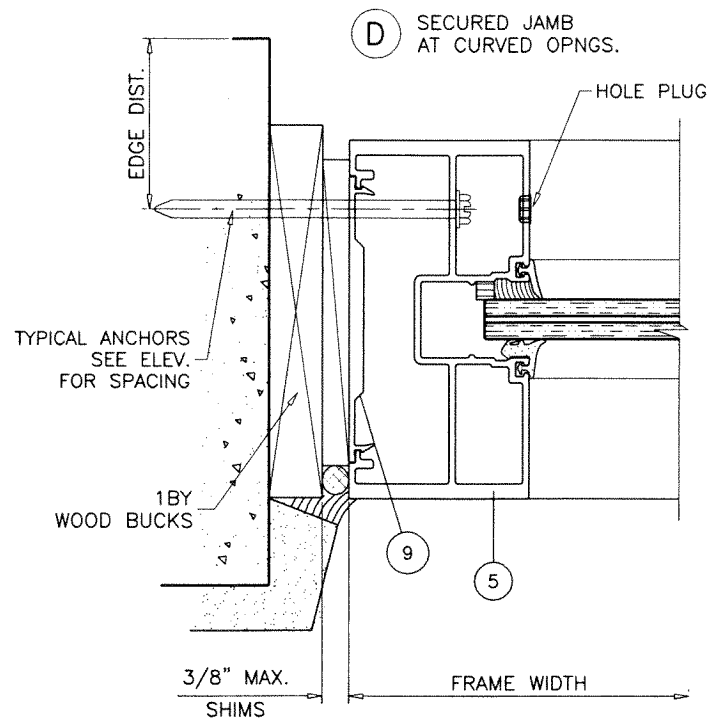
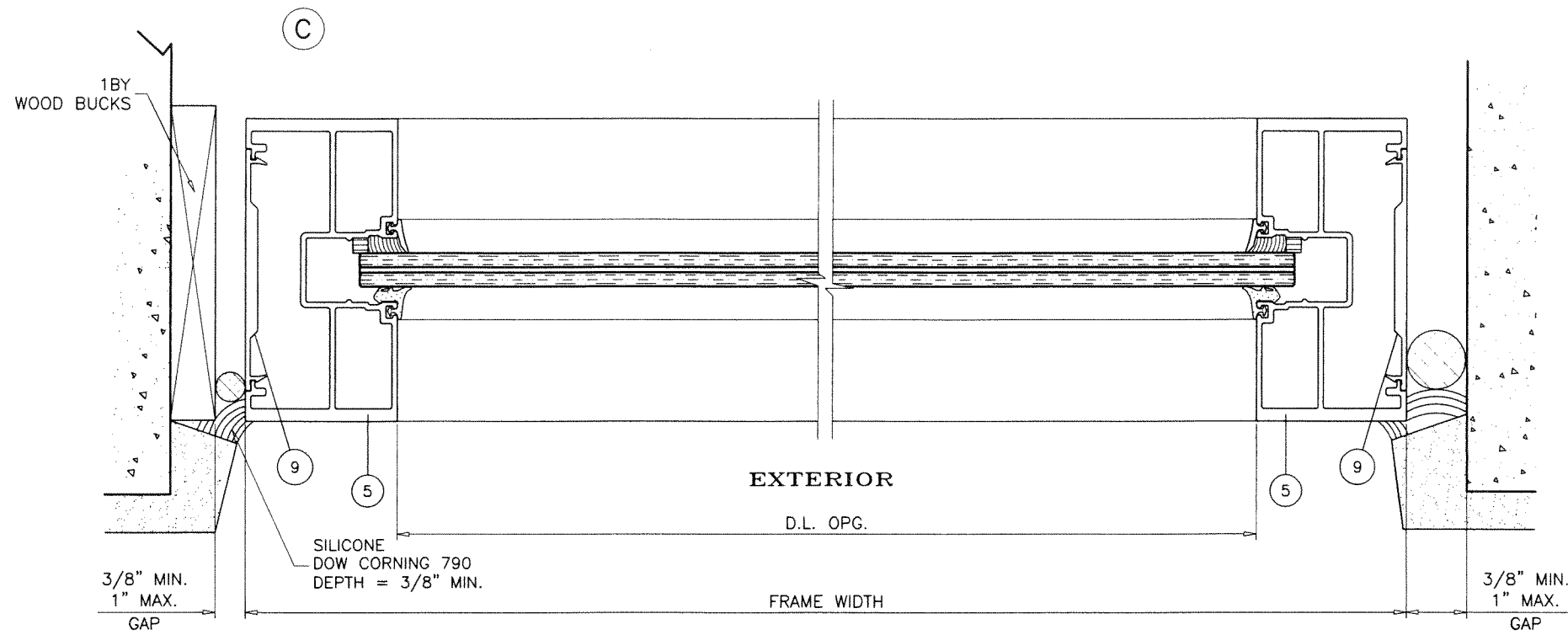
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL W10-25ES

SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description
C	08.01.14		NO CHANGE THIS SHEET
D	01.25.18		UPDATED TO 2017 FBC
E	01.19.21		UPDATED TO 2020 FBC
F	09.12.23		NO CHANGE THIS SHEET

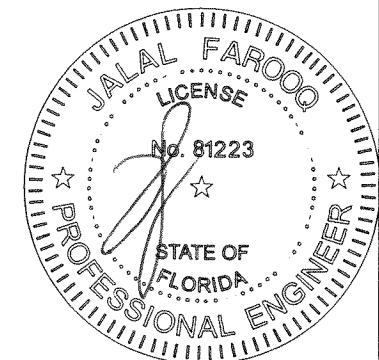
date: 04-20-10
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W10-25
sheet 5 of 9



LAMINATED GLASS

SEP 27 2023



af c
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220 (C.A.N. 3538)
 MIAMI, FLORIDA 33173
 TEL. (305) 264-8100 FAX. (305) 262-6978
 COMP-ANL\W10-25ES

SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL. (305) 638-5151 FAX. (305) 638-5158

PRODUCT RENEWED
 as complying with the Florida Building Code
 NOA-No. **24-1107.02**
 Expiration Date: **10/28/2025**

By: *Manuel Perez*
 Miami-Dade Product Control

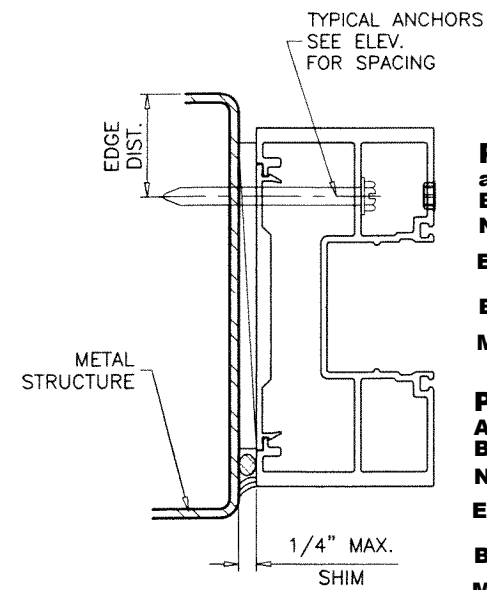
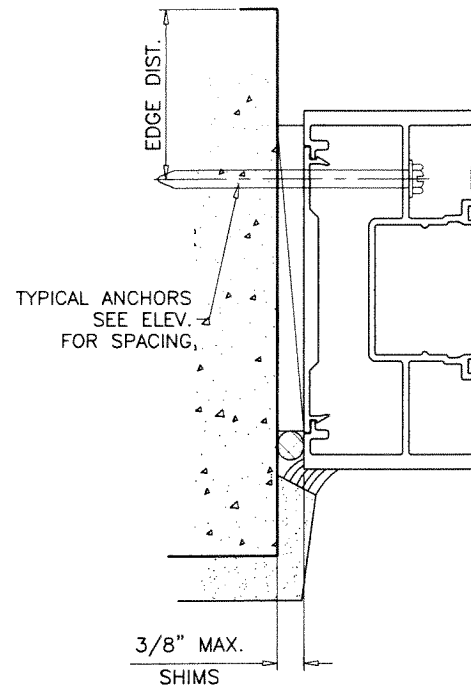
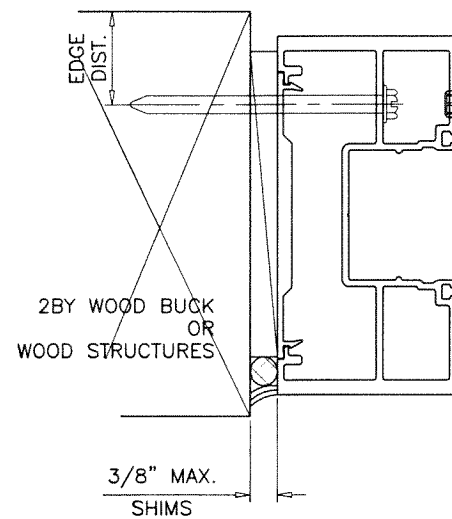
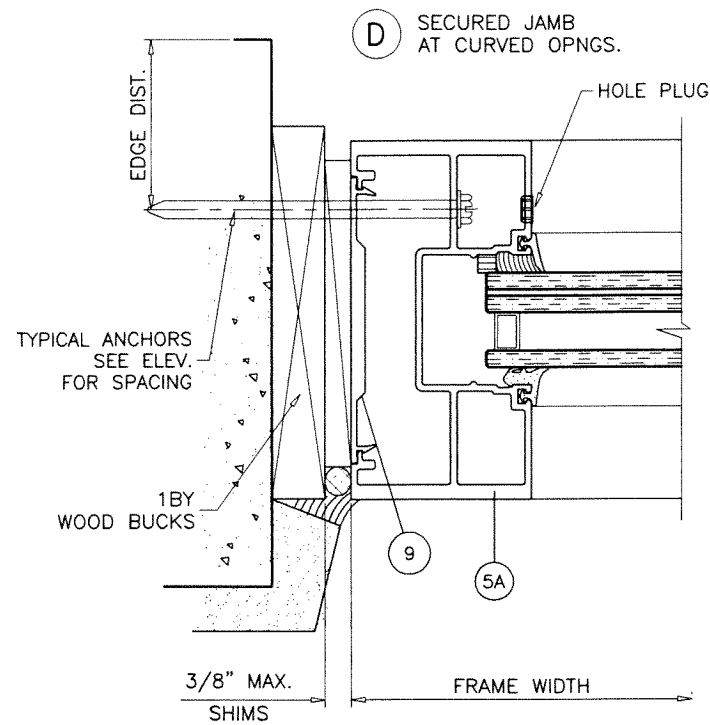
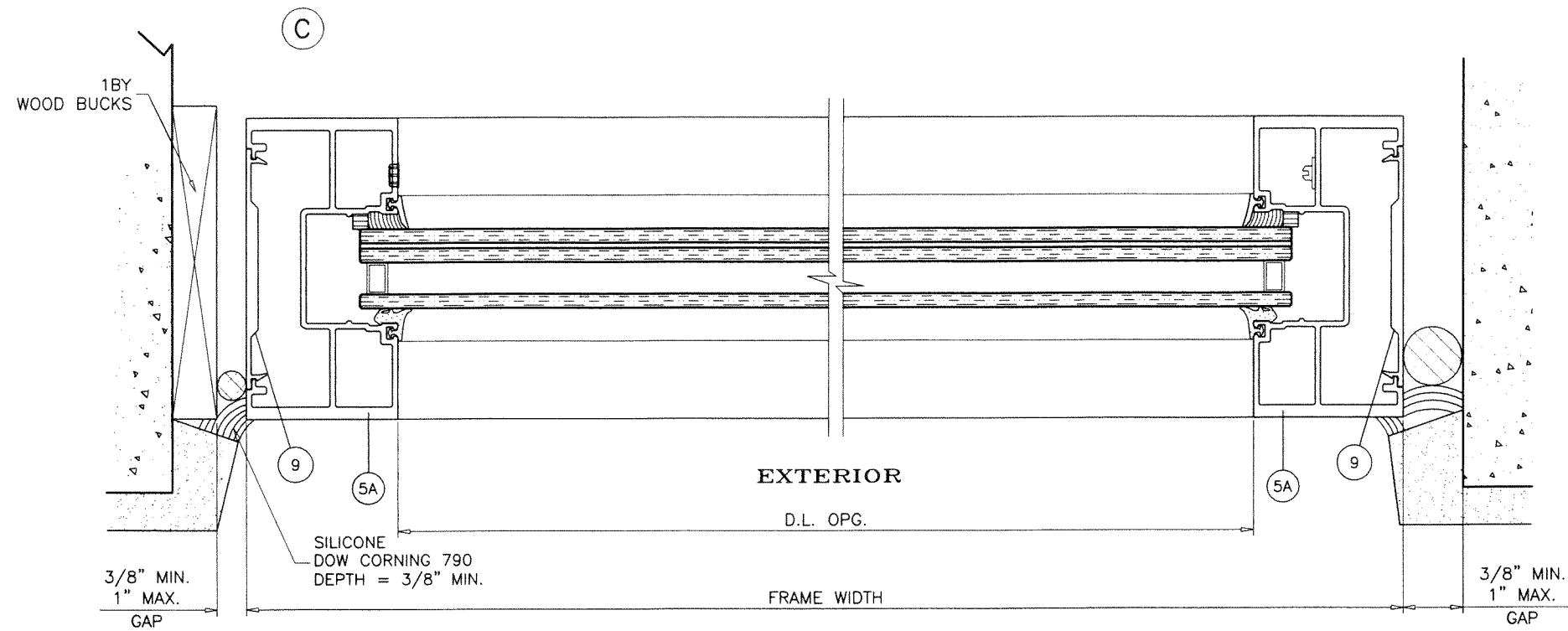
PRODUCT REVISED
 As complying with the Florida Building Code
 NOA-No. **23-0928.21**
 Expiration Date: **10/28/2024**

By: *Manuel Perez*
 Miami-Dade Product Control

revisions:	no	date	by	description
	C	08.01.14		NO CHANGE THIS SHEET
	D	01.25.18		UPDATED TO 2017 FBC
	E	01.19.21		UPDATED TO 2020 FBC
	F	09.12.23		NO CHANGE THIS SHEET

date: 04-20-10
 scale: 3/8" = 1"
 dr. by: TARIQ
 chk. by:

drawing no.
W10-25
 sheet 6 of 9



PRODUCT RENEWED
as complying with the Florida Building Code

NOA-No. **24-1107.02**

Expiration Date: **10/28/2025**

By: *Manuel Ferrer*
Miami-Dade Product Control

PRODUCT REVISED
As complying with the Florida Building Code

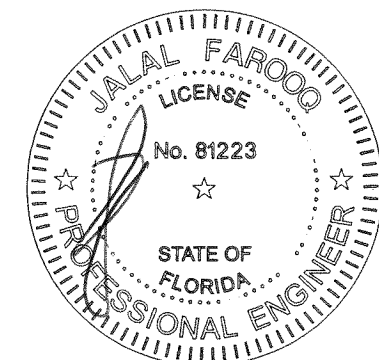
NOA-No. **23-0928.21**

Expiration Date: **10/28/2024**

By: *Manuel Ferrer*
Miami-Dade Product Control

INSUL. LAM. GLASS

SEP 27 2023



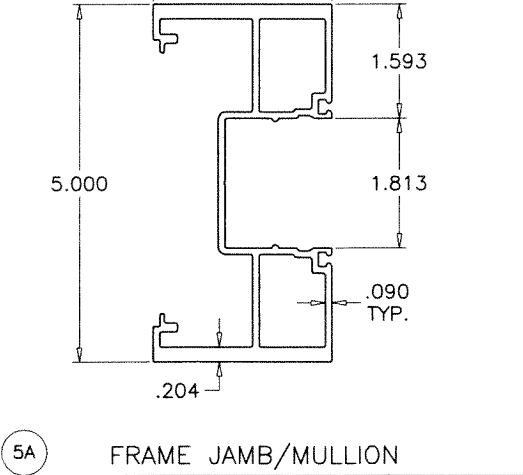
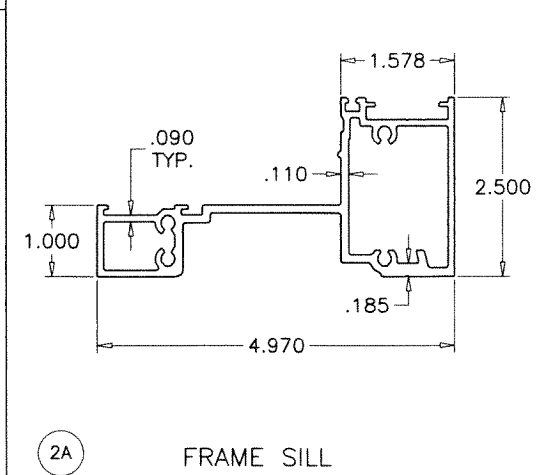
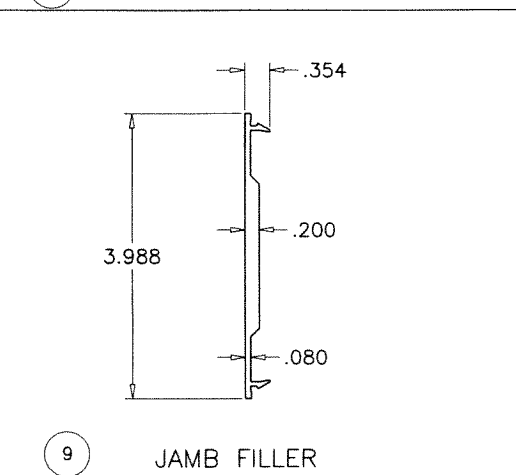
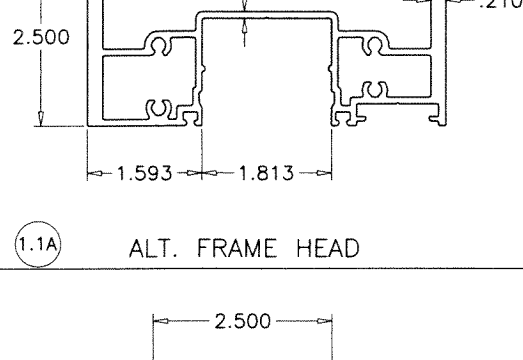
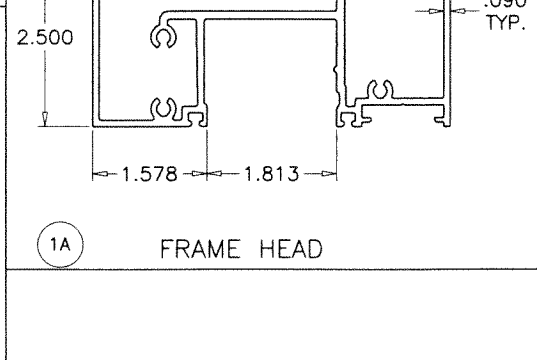
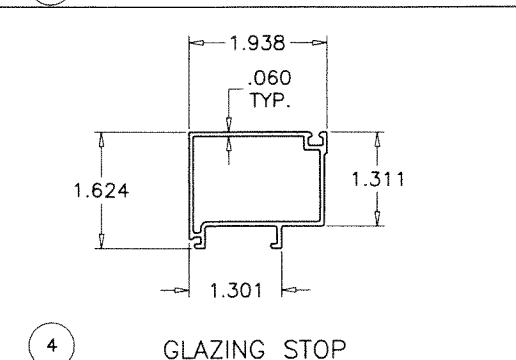
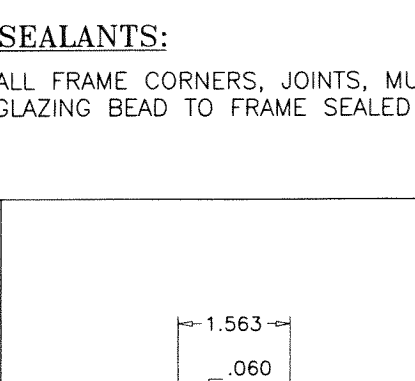
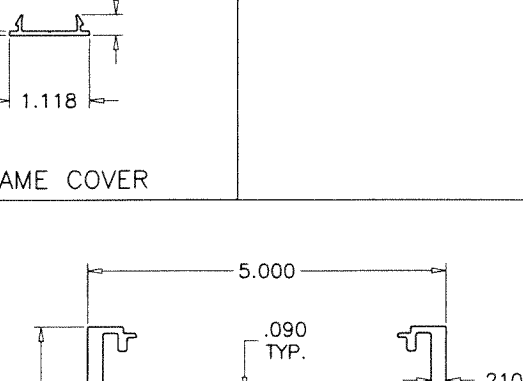
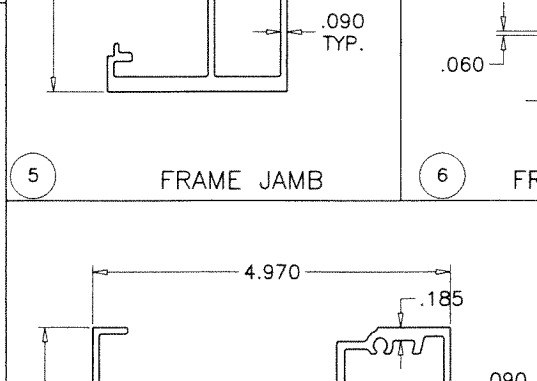
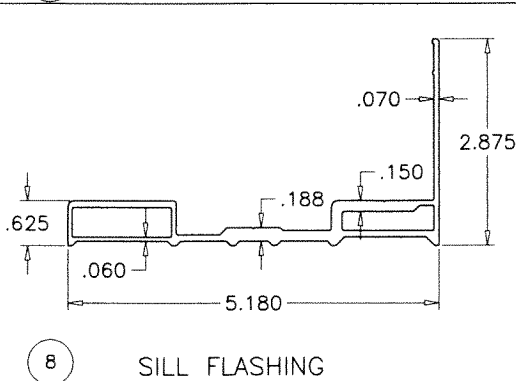
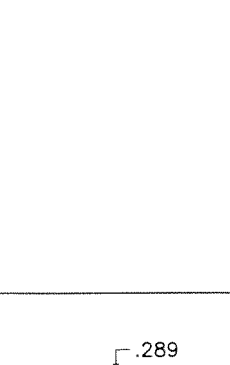
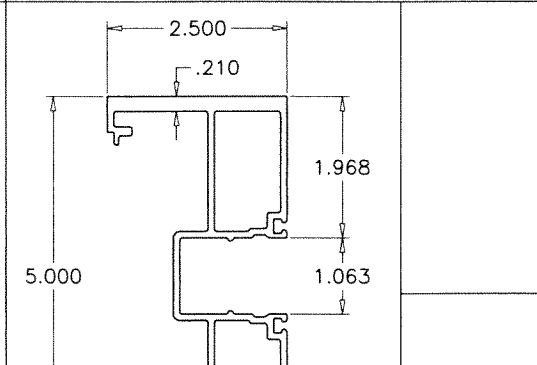
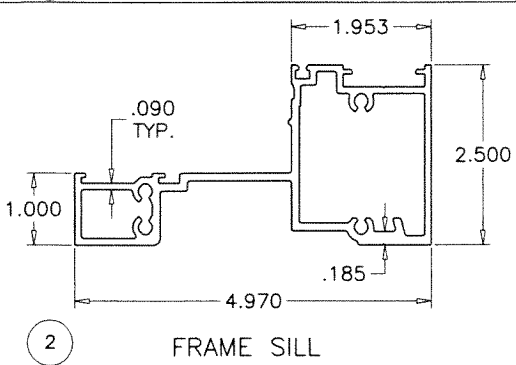
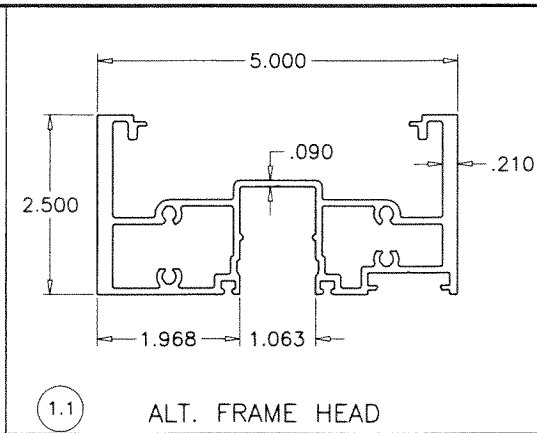
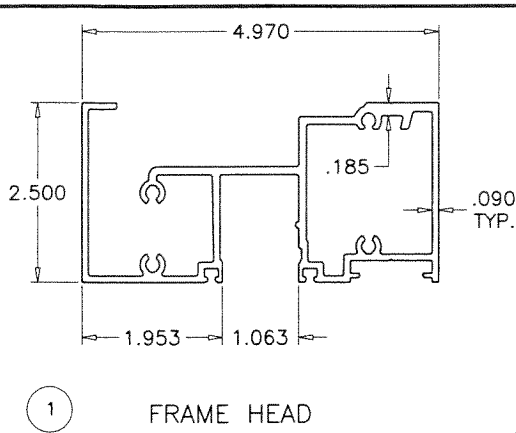
af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\W10-25ES

SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description
C	08.01.14		NO CHANGE THIS SHEET
D	01.25.18		UPDATED TO 2017 FBC
E	01.19.21		UPDATED TO 2020 FBC
F	09.12.23		NO CHANGE THIS SHEET

date: 04-20-10
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W10-25
sheet 7 of 9



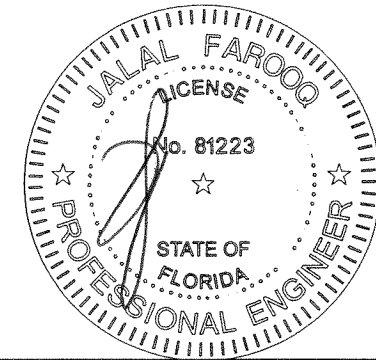
ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES9506	AS REQD.	FRAME HEAD (LAM. GLASS)	6063-T6	-
1.1	ES9511	AS REQD.	ALT. FRAME HEAD (LAM. GLASS)	6063-T6	-
2	ES9503	AS REQD.	FRAME SILL (LAM. GLASS)	6063-T6	-
4	ES9504	AS REQD.	GLAZING STOP (LAM. GLASS)	6063-T5	-
5	ES9507	AS REQD.	FRAME JAMB/MULLION (LAM. GLASS)	6063-T6	-
6	ES9502	AS REQD.	FRAME COVER	6063-T5	-
8	ES9501	AS REQD.	SILL FLASHING	6063-T5	-
9	ES9016	AS REQD.	JAMB FILLER	6063-T6	-
11	#12 X 1"	AS REQD.	FRAME ASSEMBLY SCREWS	ST/ST	P.H. SMS
12	27-432	AS REQD.	WEDGE GASKET	EPDM	DUROMETER 65±5 SHORE A
13	-	AS REQD.	GLAZING COMPOUND	SILICONE	DOW CORNING 795 OR 983
14	27-434	AS REQD.	TRIM GASKET	EPDM	DUROMETER 65±5 SHORE A
15	-	AS REQD.	INTERIOR SPACER 1/4" X 1/4"	POLYURETHANE	-
16	-	AS REQD.	SETTING BLOCK (LAM. GLASS)	EPDM	DUROMETER 75±5 SHORE A
16A	-	AS REQD.	SETTING BLOCK (INSUL. LAM. GLASS)	EPDM	DUROMETER 75±5 SHORE A
17	-	AS REQD.	SIDE BLOCK	EPDM	DUROMETER 75±5 SHORE A
1A	ES-9554	AS REQD.	FRAME HEAD (INSUL. LAM. GLASS)	6063-T6	-
1.1A	ES-9558	AS REQD.	ALT. FRAME HEAD (INSUL. LAM. GLASS)	6063-T6	-
2A	ES-9551	AS REQD.	FRAME SILL (INSUL. LAM. GLASS)	6063-T6	-
4A	ES-9552	AS REQD.	GLAZING STOP (INSUL. LAM. GLASS)	6063-T5	-
5A	ES-9555	AS REQD.	FRAME JAMB/MULLION (INSUL. LAM. GLASS)	6063-T6	-

SEALANTS:

ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER OF GLAZING BEAD TO FRAME SEALED WITH SILICONE SEALANT.

PRODUCT RENEWED
 as complying with the Florida Building Code
 NOA-No. **24-1107.02**
 Expiration Date: **10/28/2025**
 By: *Manuel Perez*
 Miami-Dade Product Control

PRODUCT REVISED
 as complying with the Florida Building Code
 NOA-No. **23-0928.21**
 Expiration Date: **10/28/2024**
 By: *Manuel Perez*
 Miami-Dade Product Control



SEP 27 2023

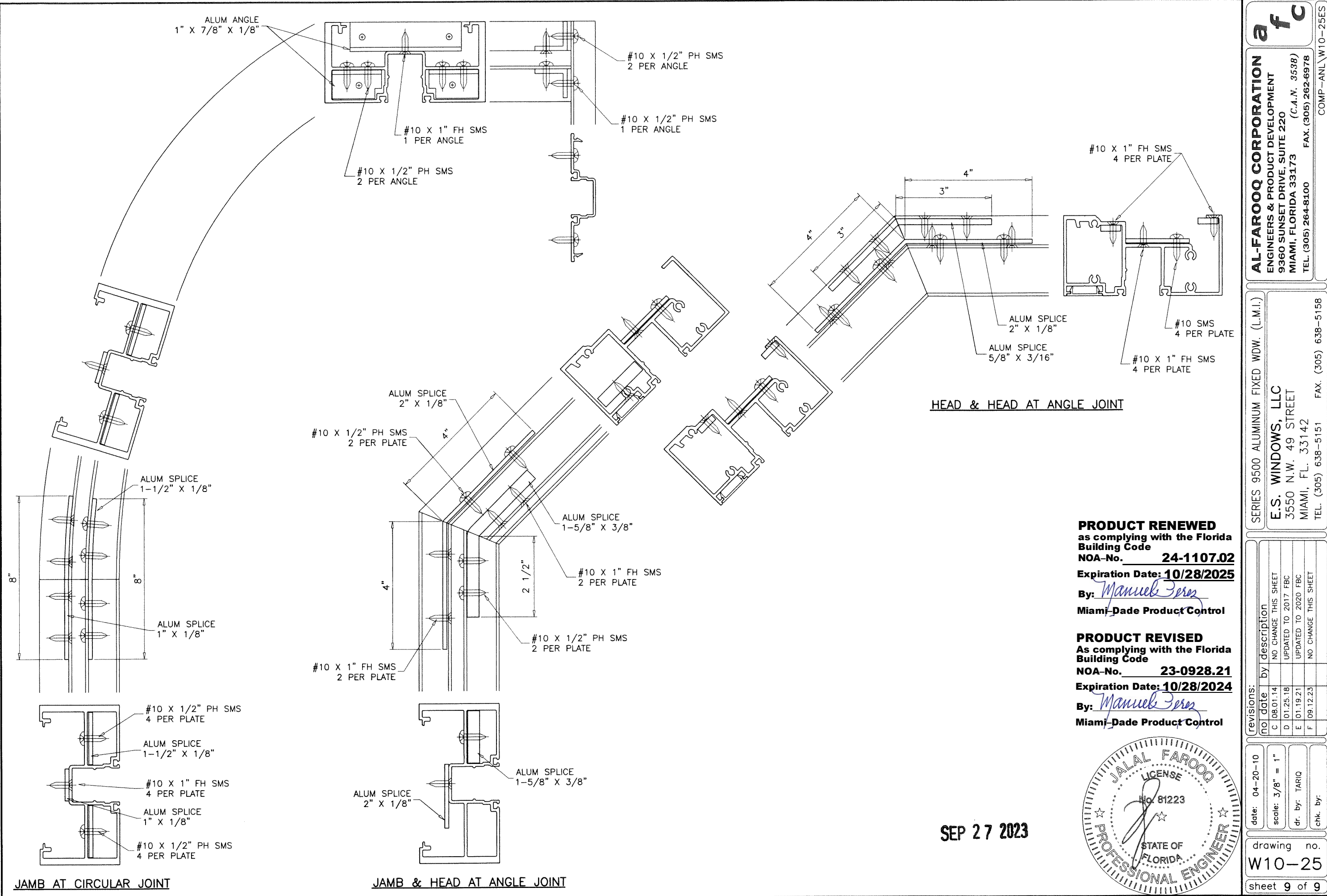
af c
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 TEL. (305) 264-8100 FAX. (305) 262-6978
 (C.A.N. 3538)

SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	no	date	by	description
	C	08.01.14		UPDATED TO 2014 FBC
	D	01.25.18		UPDATED TO 2017 FBC
	E	01.19.21		UPDATED TO 2020 FBC
	F	09.12.23		NO CHANGE THIS SHEET

date: 04-20-10
 scale: 3/8" = 1"
 dr. by: TARIQ
 chk. by:

drawing no. **W10-25**
 sheet 8 of 9



af c
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220 (C.A.N. 3538)
 MIAMI, FLORIDA 33173
 TEL. (305) 264-8100 FAX. (305) 262-6978
 COMP-ANL W10-25ES

SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL. (305) 638-5151 FAX. (305) 638-5158

PRODUCT RENEWED
 as complying with the Florida Building Code
 NOA-No. **24-1107.02**
 Expiration Date: **10/28/2025**
 By: *Manuel Ferns*
 Miami-Dade Product Control

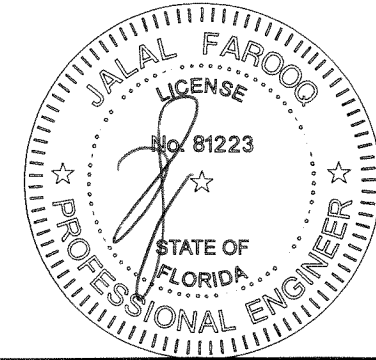
PRODUCT REVISED
 As complying with the Florida Building Code
 NOA-No. **23-0928.21**
 Expiration Date: **10/28/2024**
 By: *Manuel Ferns*
 Miami-Dade Product Control

no	date	description
C	08.01.14	NO CHANGE THIS SHEET
D	01.25.18	UPDATED TO 2017 FBC
E	01.19.21	UPDATED TO 2020 FBC
F	09.12.23	NO CHANGE THIS SHEET

date: 04-20-10
 scale: 3/8" = 1"
 dr. by: TARIQ
 chk. by:

drawing no. **W10-25**
 sheet 9 of 9

SEP 27 2023



JAMB AT CIRCULAR JOINT

JAMB & HEAD AT ANGLE JOINT

HEAD & HEAD AT ANGLE JOINT