



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

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

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 **E** dated 01/09/21, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, 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, **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.

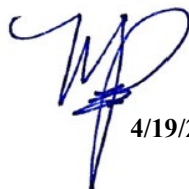
ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

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 **revises NOA No. 19-0516.02** 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.**




4/19/21

NOA No. 21-0127.07
Expiration Date: October 28, 2024
Approval Date: April 29, 2021
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

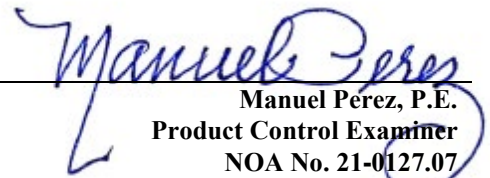
1. Manufacturer's die drawings and sections.
(Submitted under NOA No. 09-0623.01)
2. Drawing No. **W10-25**, titled "Series 9500 Aluminum Fixed Wdw. (L.M.I.)", sheets 1 through 9 of 9, dated 04/20/10, with revision **D** dated 01/25/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 18-0212.03)

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, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 18-0212.03)
2. Glazing complies with **ASTM E1300-09**


Manuel Perez, P.E.
Product Control Examiner
NOA No. 21-0127.07
Expiration Date: October 28, 2024
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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. **17-0808.02** issued to **Kuraray America, Inc.** for their **"SentryGlas® (Clear and White) Glass Interlayers"** dated 12/28/17, expiring on 07/04/23.
2. 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 May 13, 2019, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 19-0516.02)
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. **18-0212.03**, issued to E.S. Windows, LLC for their Series "9500" Aluminum Fixed Window - L.M.I., approved on 05/03/18 and expiring on 10/28/19.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 21-0127.07
Expiration Date: October 28, 2024
Approval Date: April 29, 2021

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. 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 **E** dated 01/19/21, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

B. TESTS

1. None.

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.
2. Glazing complies with **ASTM E1300-09**

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

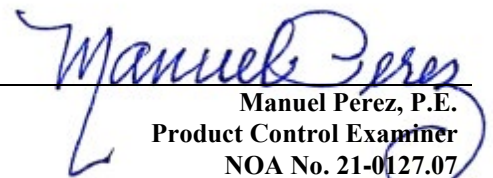
1. Notice of Acceptance No. **18-0725.11** issued to **Kuraray America, Inc.** for their “**Kuraray SentryGlas® Xtra™ (SGX™) Clear Glass Interlayer**” dated 05/23/19, expiring on 05/23/24.
2. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America, Inc.** for their “**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**” dated 05/09/19, expiring on 07/08/24.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 6th Edition (2017)**, with **FBC 7th Edition (2020)**, and of no financial interest, dated November 16, 2020, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.

G. OTHERS

1. Notice of Acceptance No. **19-0526.02**, issued to E.S. Windows, LLC, for their Series “9500” Aluminum Fixed Window – L.M.I., approved on 06/20/19 and expiring on 10/28/24.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 21-0127.07
Expiration Date: October 28, 2024
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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) 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.

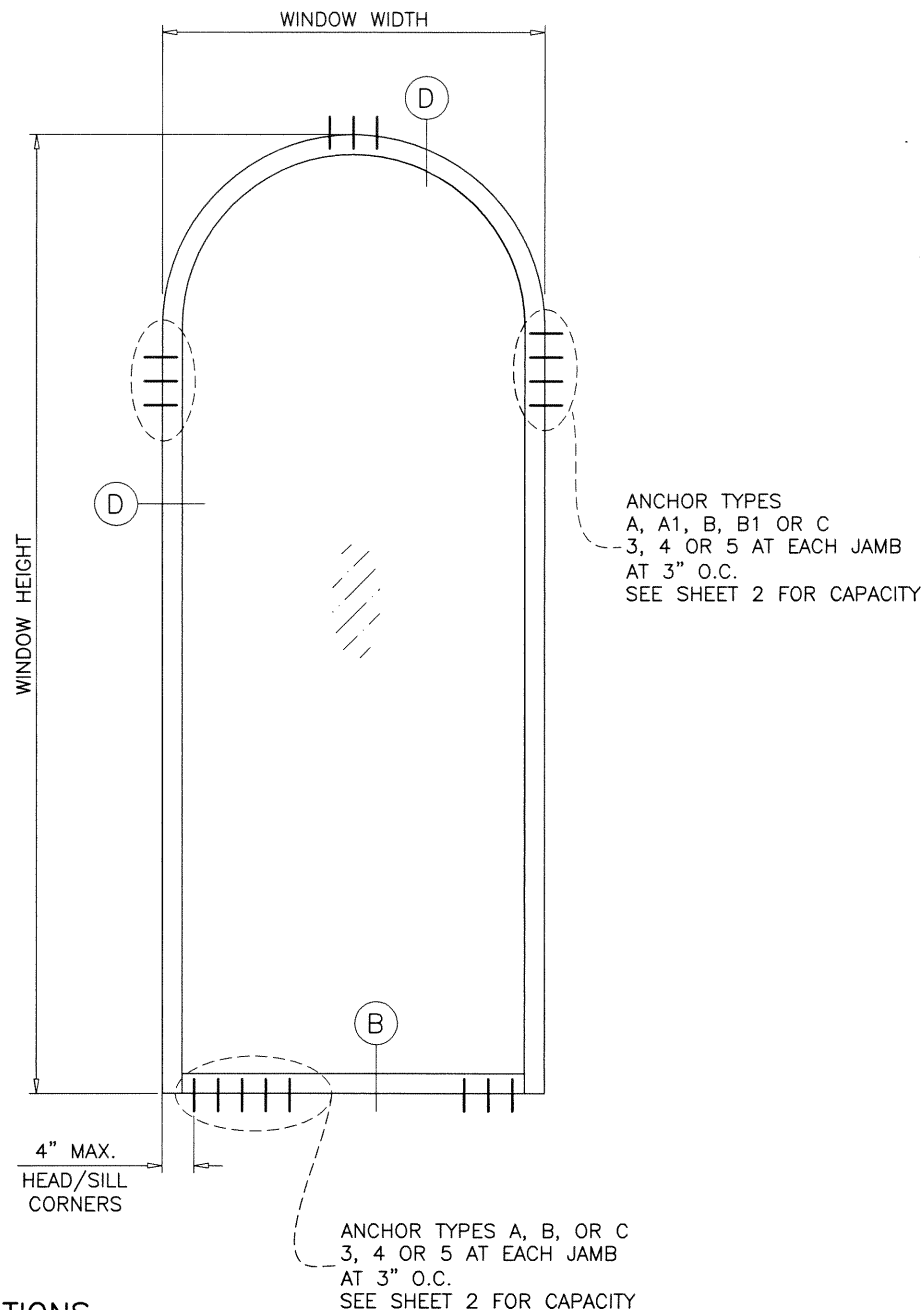
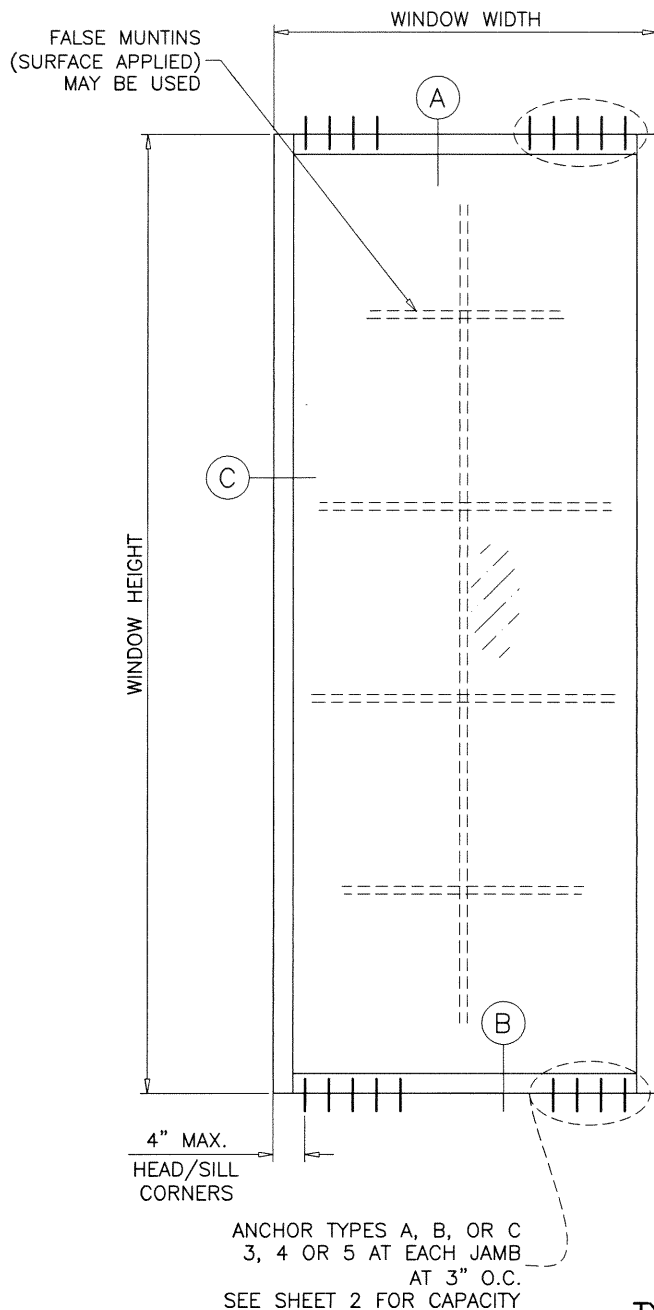
A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

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 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)'.



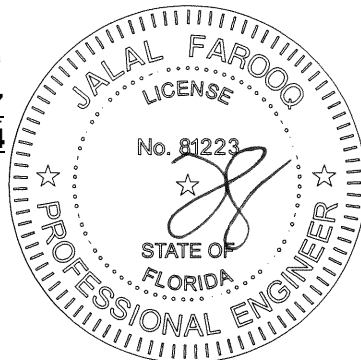
TYPICAL ELEVATIONS

DAYLITE OPENINGS:
D.L.O. HEIGHT = WINDOW HEIGHT - 5.0"
D.L.O. WIDTH = WINDOW WIDTH - 5.0"

LAMINATED GLASS
INSUL. LAM. GLASS
LARGE MISSILE IMPACT

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **21-0127.07**
Expiration Date: **10/28/2024**
By: *Manuel Fern*
Miami-Dade Product Control

JAN 21 2021



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

afC
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

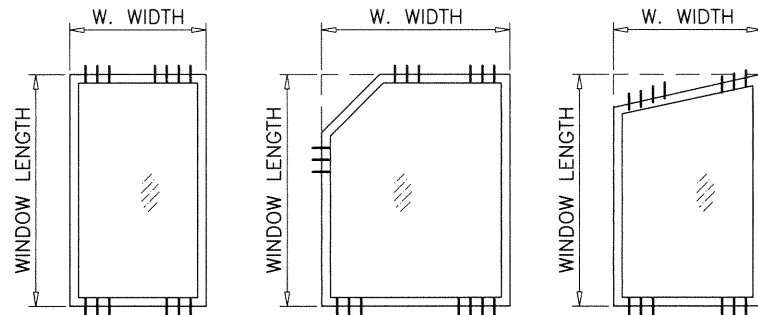
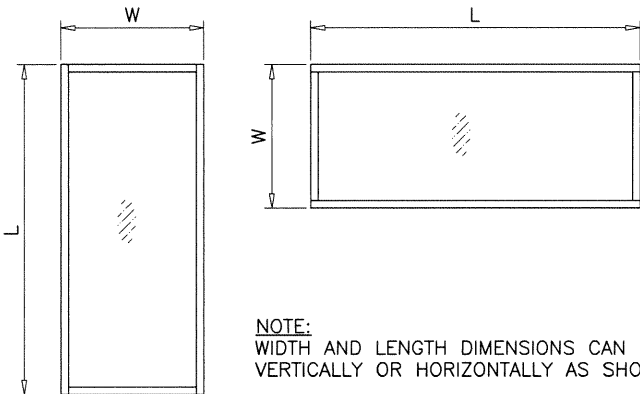
SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description
A	03.13.12		UPDATED TO 2010 FBC
B	06.15.12		REV. PER PERA COMMENTS
C	08.01.14		UPDATED TO 2014 FBC
D	01.25.18		UPDATED TO 2017 FBC
E	01.19.21		UPDATED TO 2020 FBC

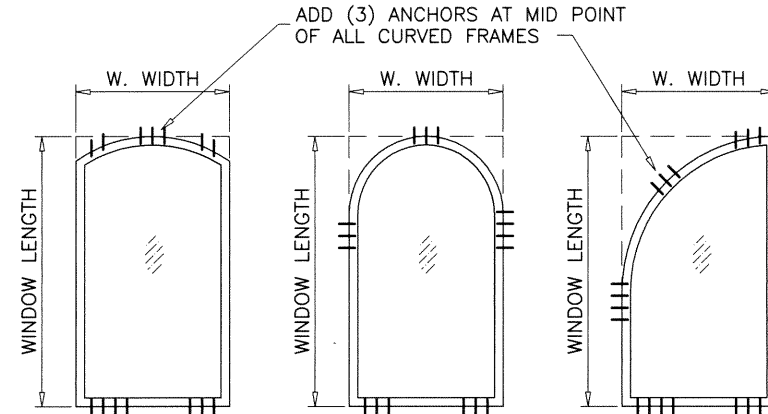
date: 04-20-10
scale:
dr. by: TARIQ
chk. by:

drawing no.
W10-25
sheet 1 of 9

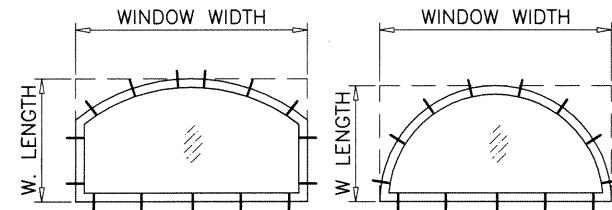
GLASS LOAD CAPACITY – PSF				
WINDOW DIMS.		GLASS TYPE 'A'	GLASS TYPE 'B'	GLASS TYPES 'A1' & 'B1'
WIDTH (W)	LENGTH (L)	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)
30"	90"	65.0	120.0	90.0
36"		65.0	120.0	90.0
42"		65.0	120.0	90.0
48"		65.0	120.0	90.0
54"		65.0	120.0	90.0
60"		65.0	120.0	90.0
30"	96"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

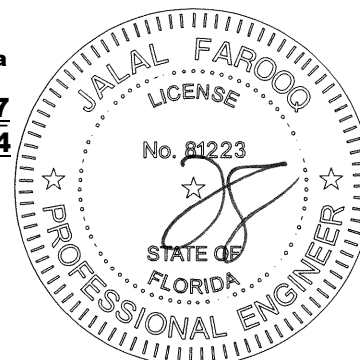
ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES.

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.

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

PRODUCT REVISED
as complying with the Florida Building Code
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Expiration Date: **10/28/2024**
By: *Manuel Fern*
Miami-Dade Product Control



JAN 21 2021

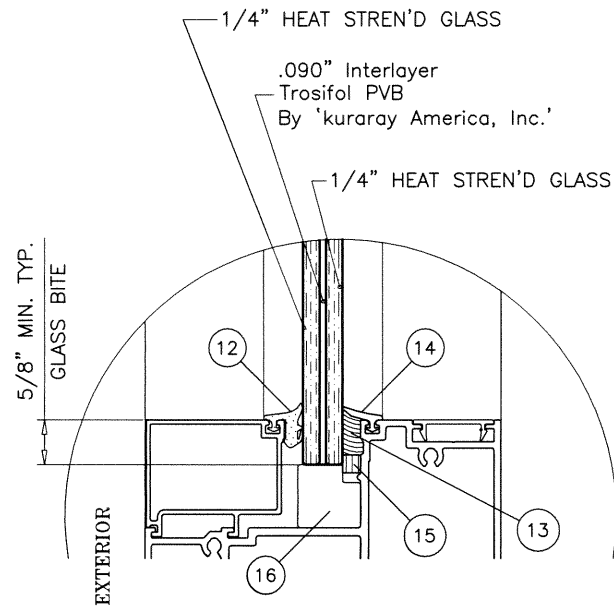
af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
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SERIES 9500 ALUMINUM FIXED WDW. (L.M.I.)
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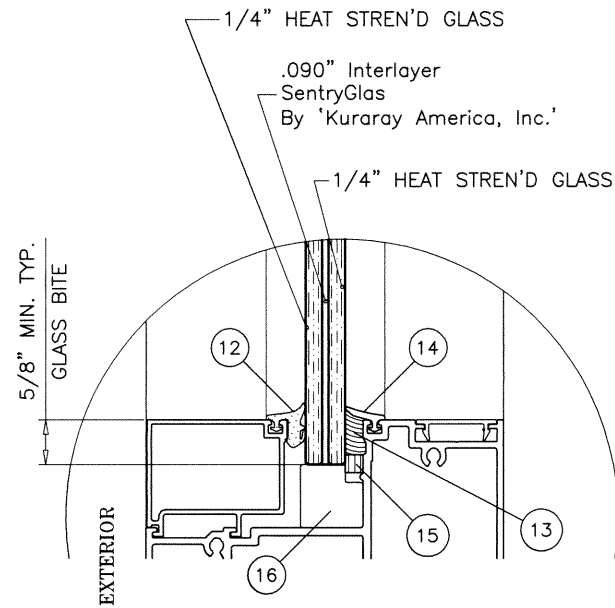
no	date	by	description
A	03.13.12	NO	CHANGE THIS SHEET
B	06.15.12	REV.	PER PERA COMMENTS
C	08.01.14	UPDATED	TO 2014 FBC
D	01.25.18	UPDATED	TO 2017 FBC
E	01.19.21	UPDATED	TO 2020 FBC

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

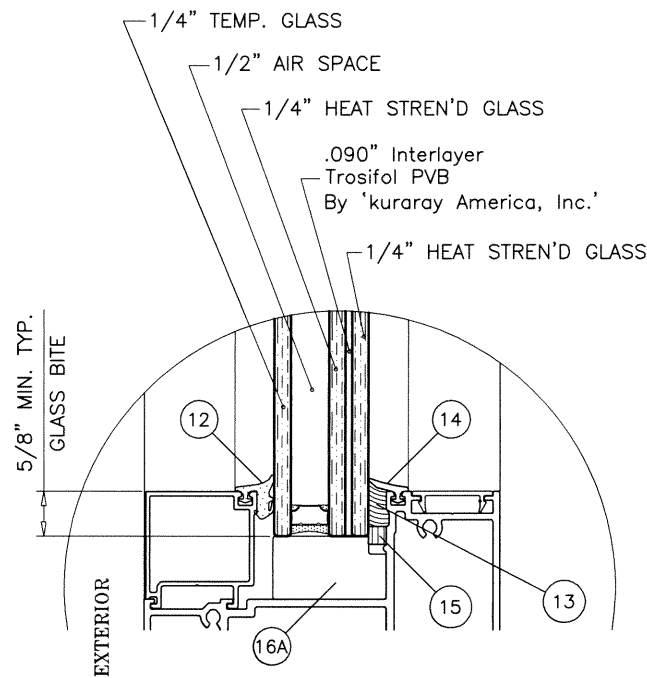
drawing no.
W10-25
sheet **2** of **9**



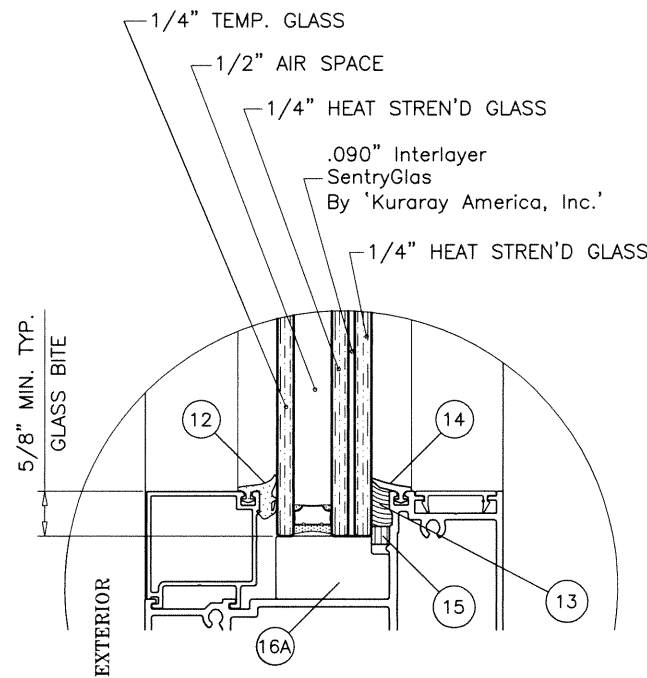
GLASS TYPE 'A'
9/16" OVERALL LAMINATED GLASS



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



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



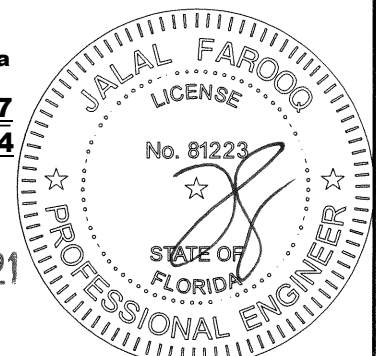
GLASS TYPE 'B1'
1-5/16" OVERALL INSUL. LAM. GLASS

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 REVISED
as complying with the Florida
Building Code
NOA-No. 21-0127.07
Expiration Date: 10/28/2024
By: *Manuel Fern*
Miami-Dade Product Control

JAN 21 2021



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

revisions:	
no	date by description
A	03.13.12 UPDATED TO 2010 FBC
B	06.15.12 REV. PER PERA COMMENTS
C	08.01.14 UPDATED TO 2014 FBC
D	01.25.18 UPDATED TO 2017 FBC
E	01.19.21 UPDATED TO 2020 FBC

date: 04-20-10

scale: 3/8" = 1"

dr. by: TARIQ

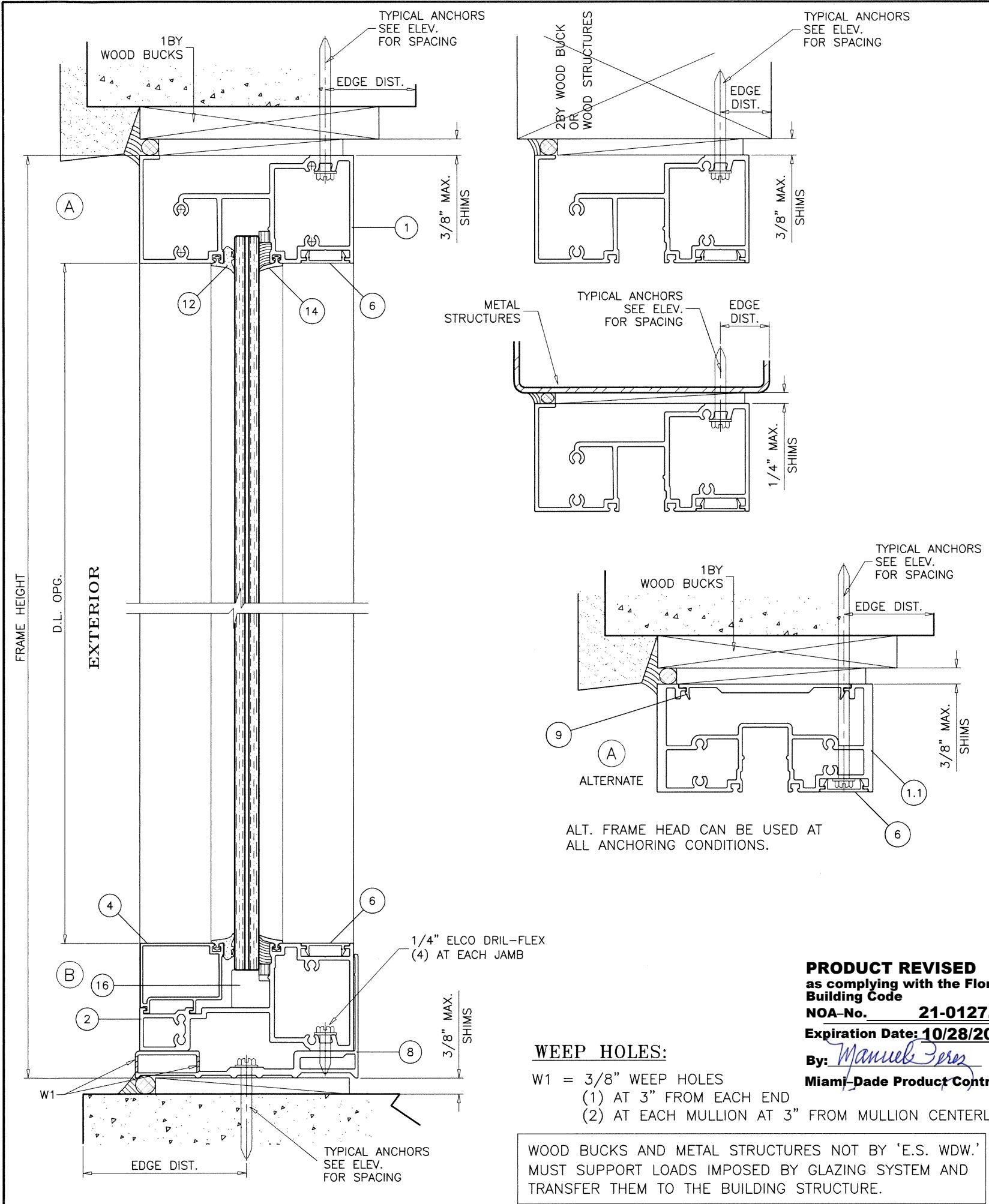
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drawing no.

W10-25

sheet 3 of 9

W10-25ES



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.

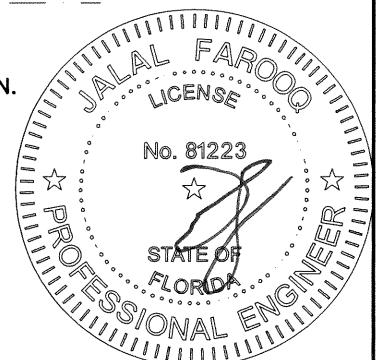
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NOA-No. 21-0127.07
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By: *Manuel Perez*
Miami-Dade Product Control

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.

LAMINATED GLASS

JAN 21 2021



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

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
A	03.13.12		NO CHANGE THIS SHEET
B	06.15.12		REV. PER PERA COMMENTS
C	08.01.14		UPDATED TO 2014 FBC
D	01.25.18		UPDATED TO 2017 FBC
E	01.19.21		UPDATED TO 2020 FBC

date: 04-20-10

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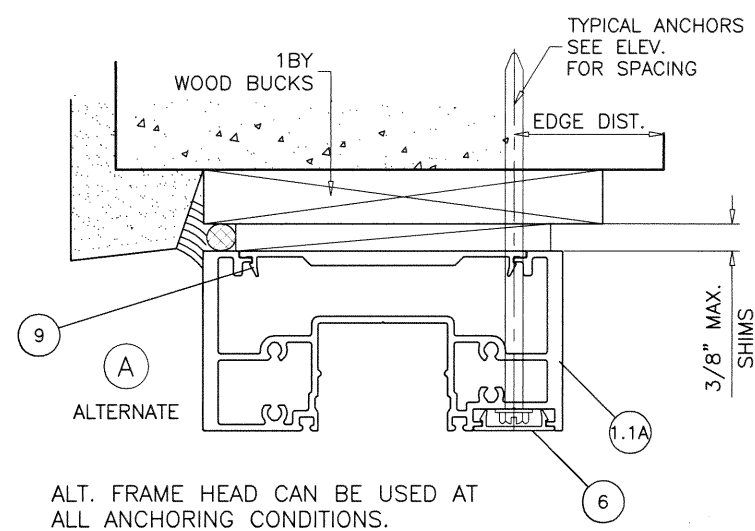
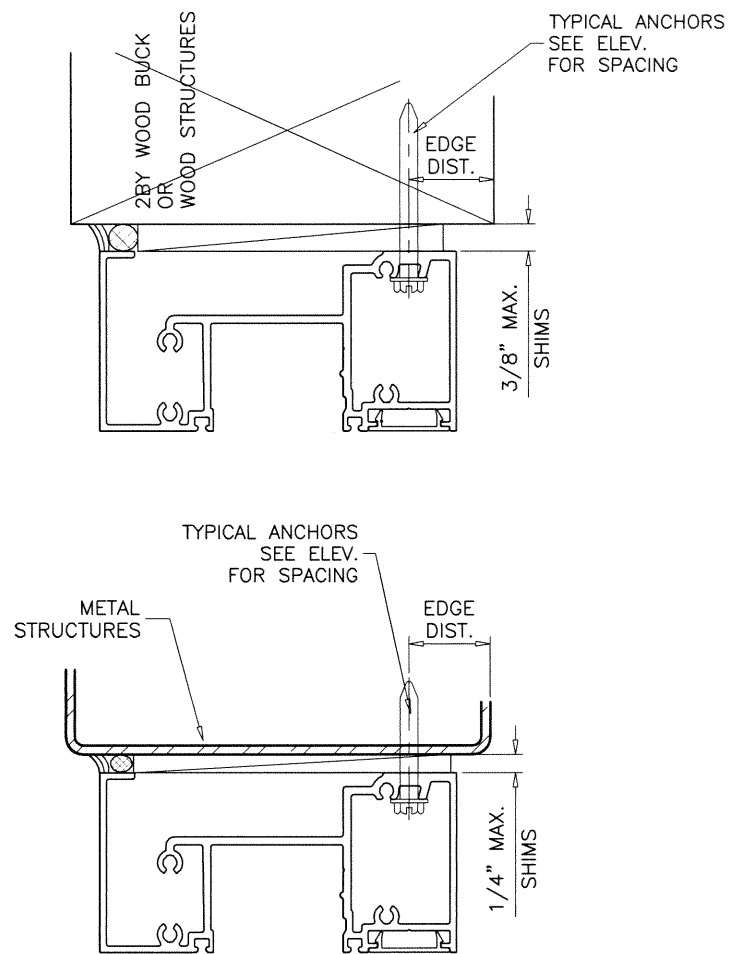
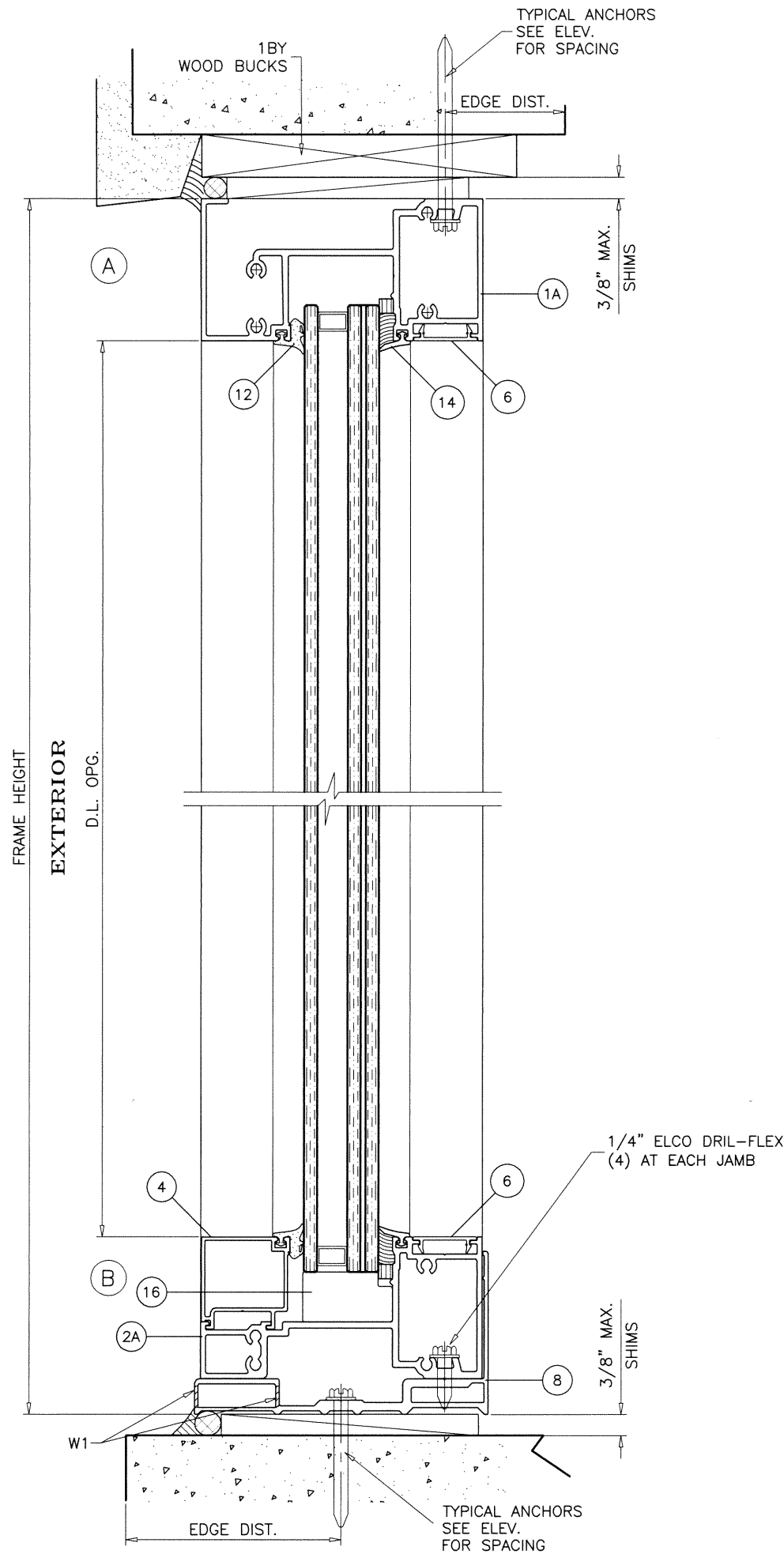
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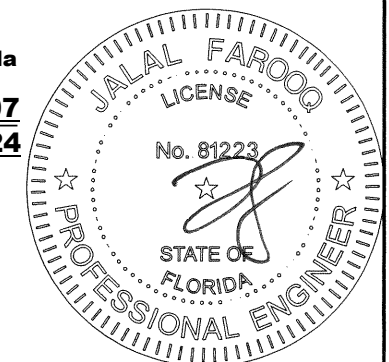
sheet 4 of 9



INSUL. LAM. GLASS

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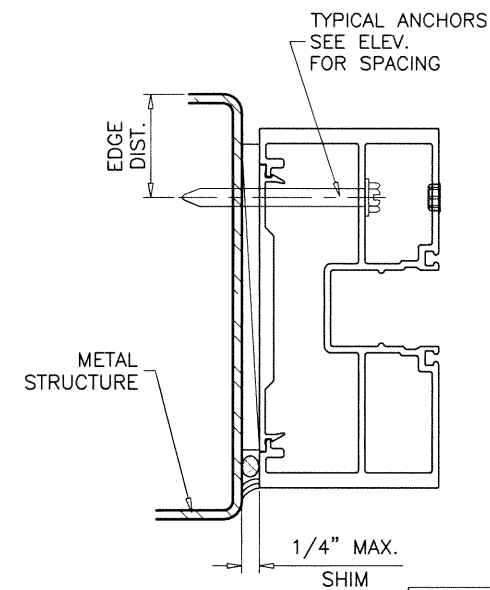
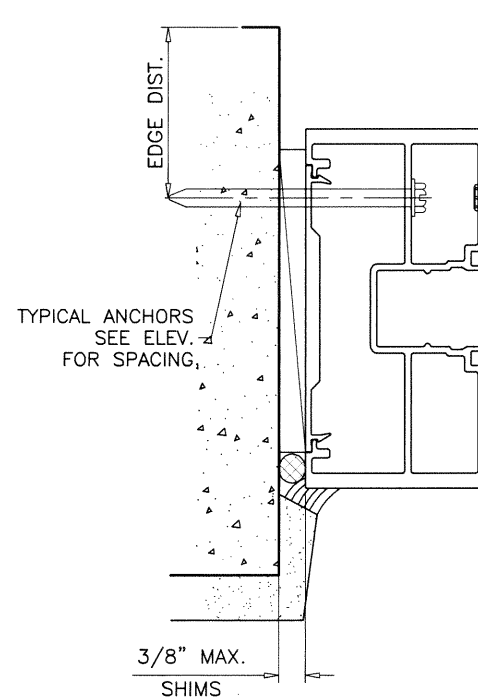
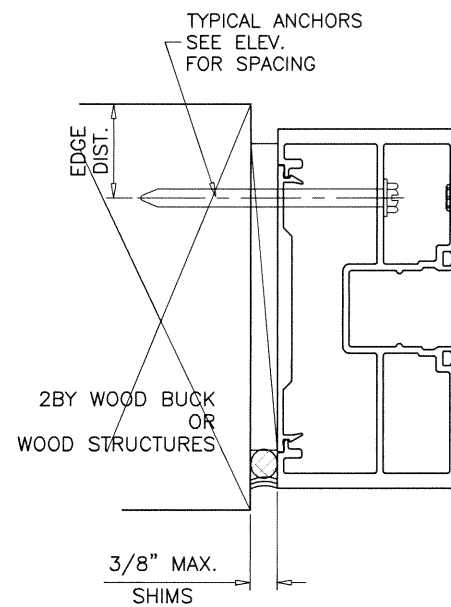
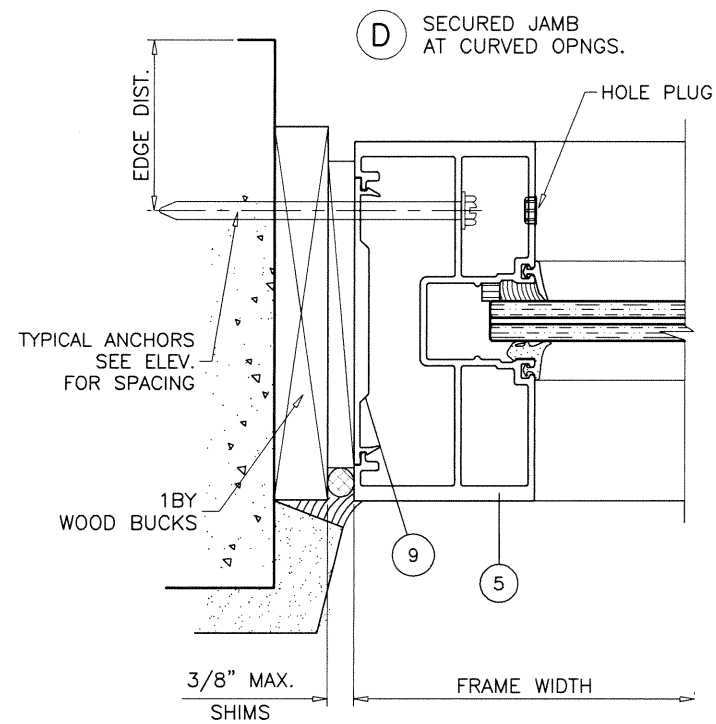
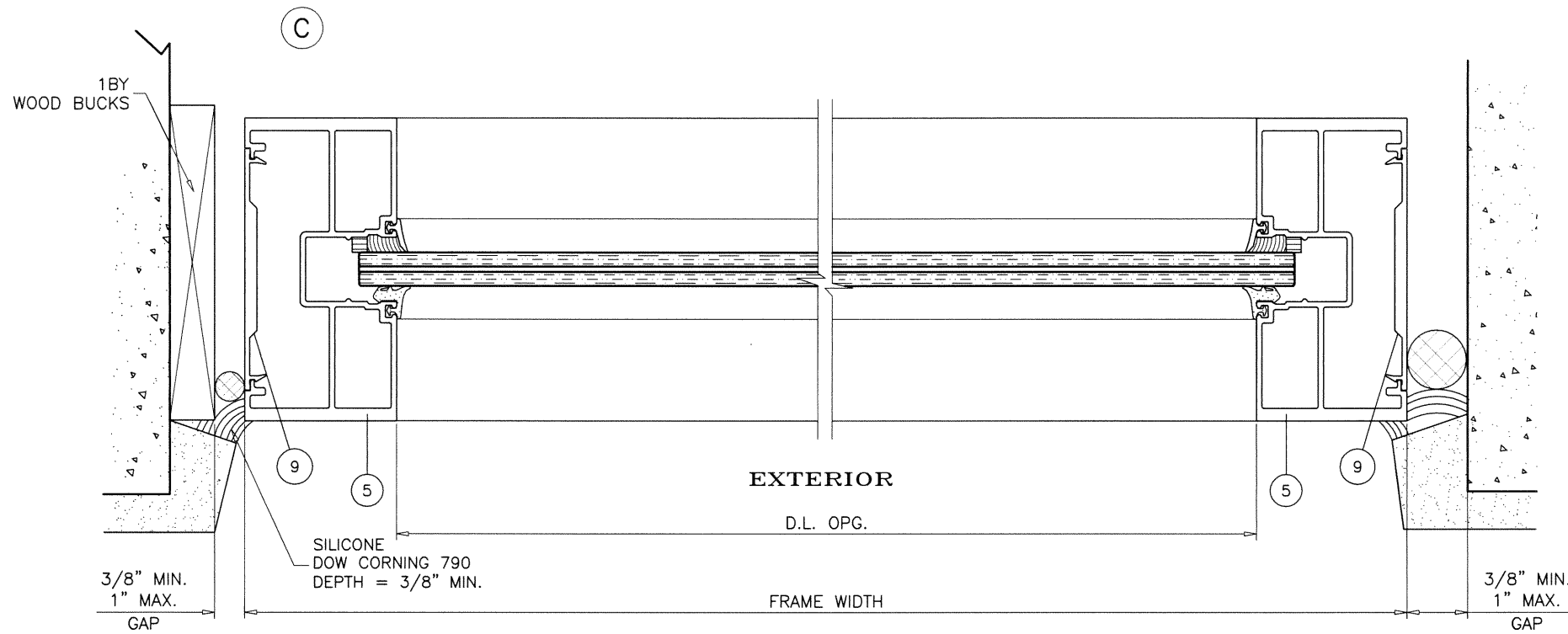
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COMP-ANL W10-25ES

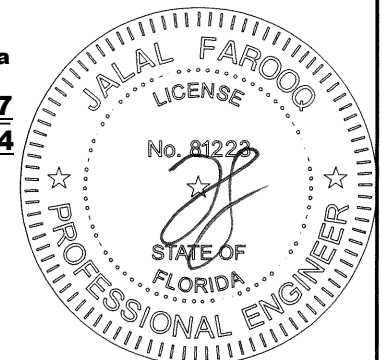
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chk. by:					
sheet 5 of 9					



LAMINATED GLASS

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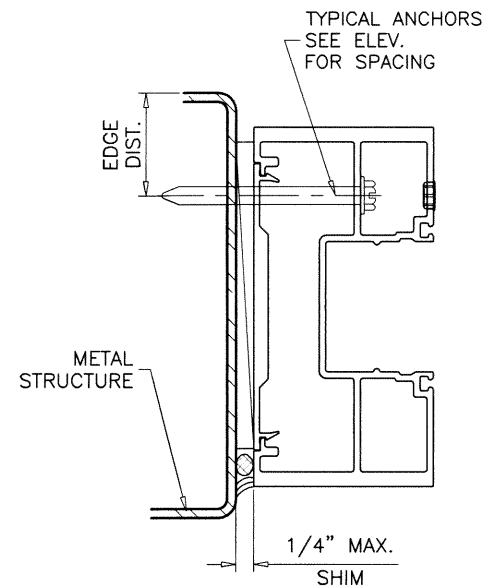
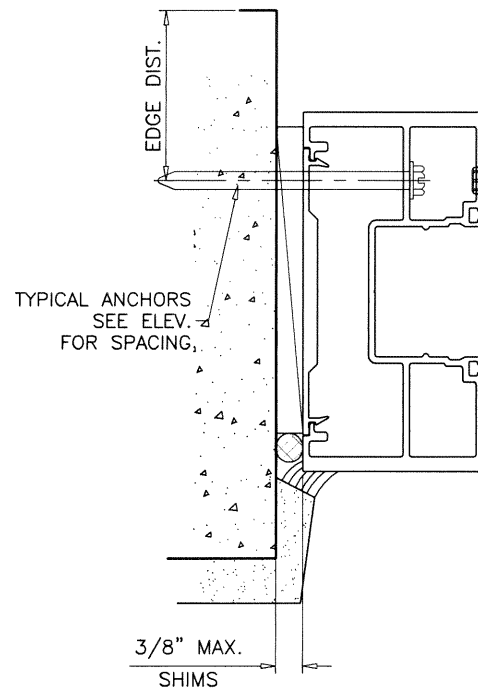
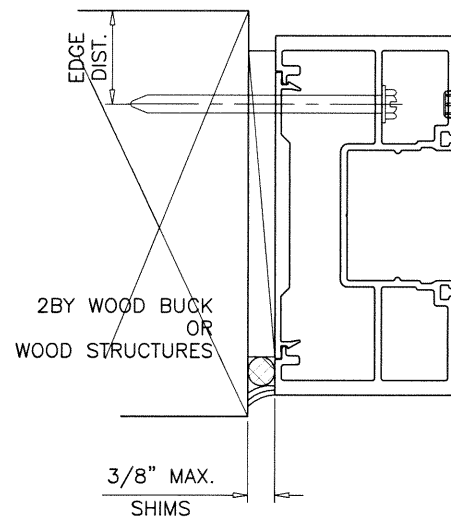
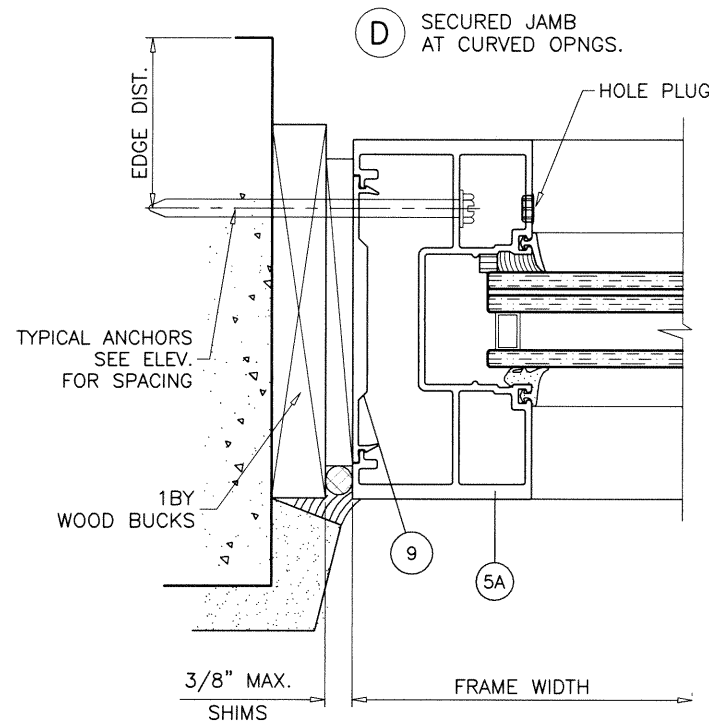
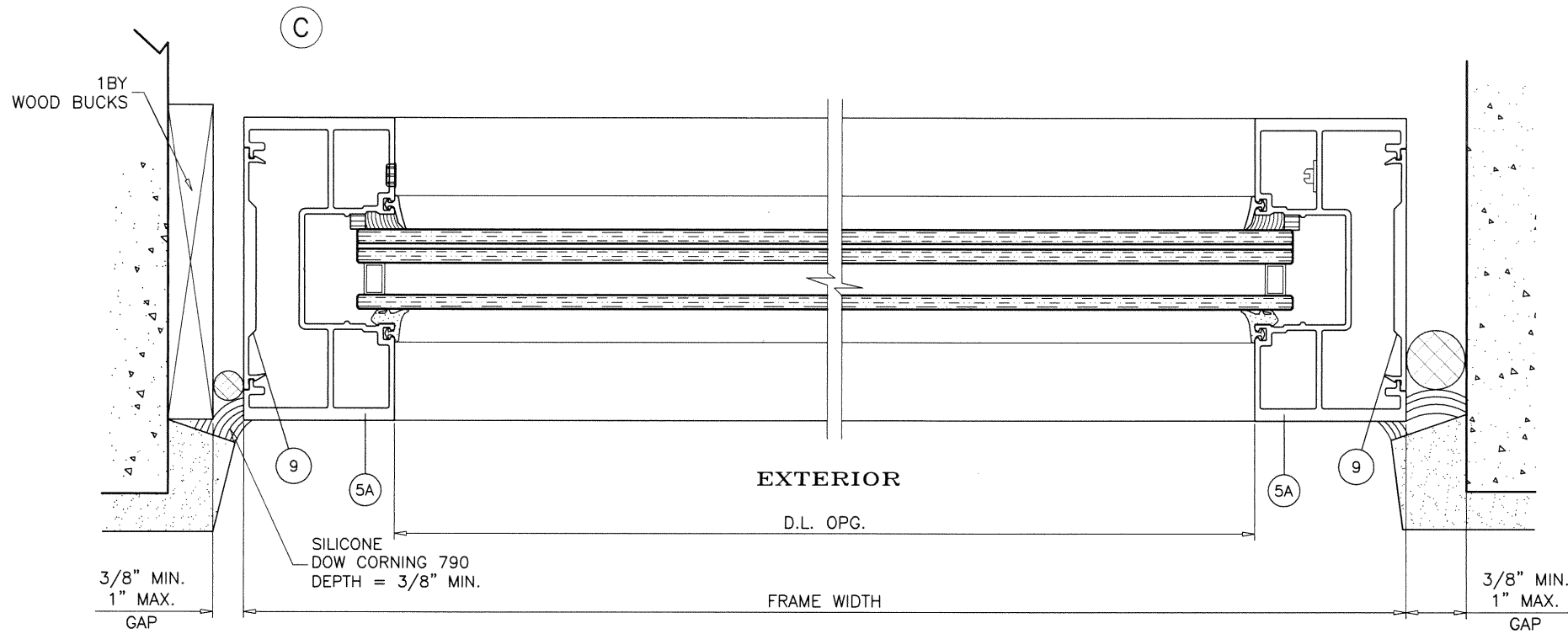
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COMP-ANL W10-25ES

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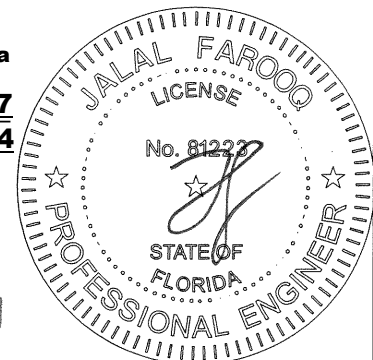
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INSUL. LAM. GLASS

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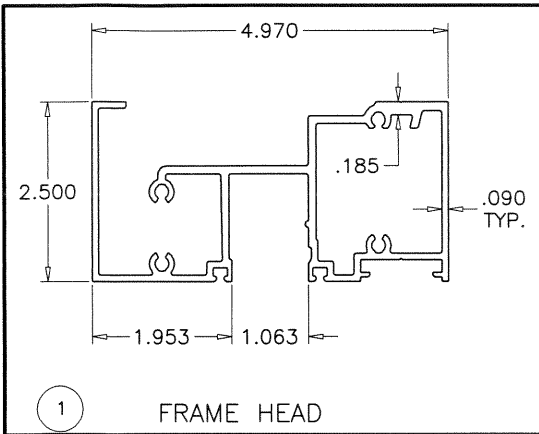
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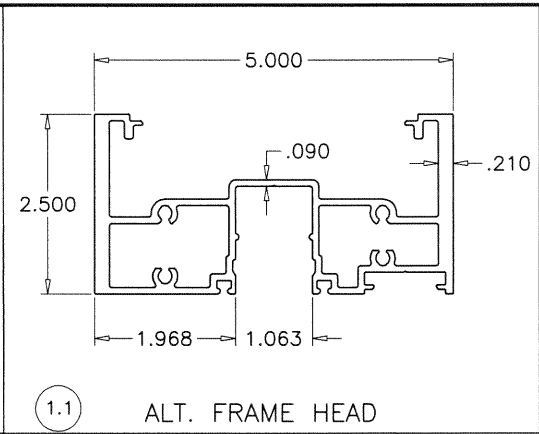
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chk. by:	

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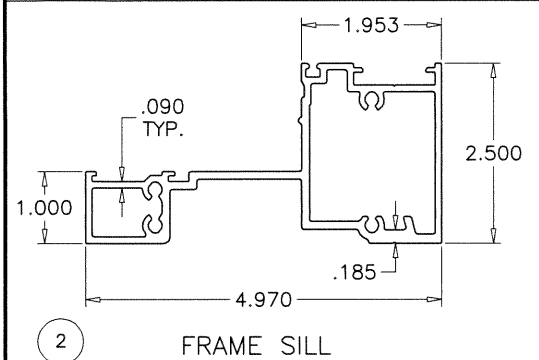
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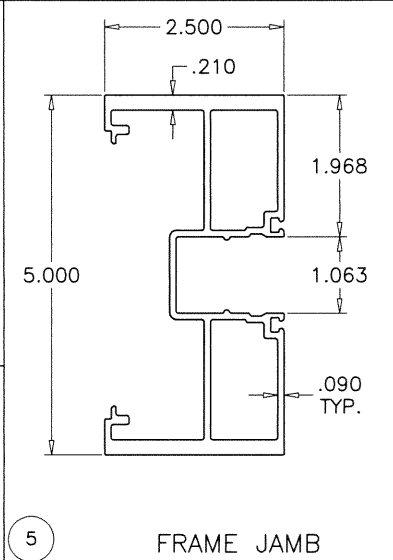
1 FRAME HEAD



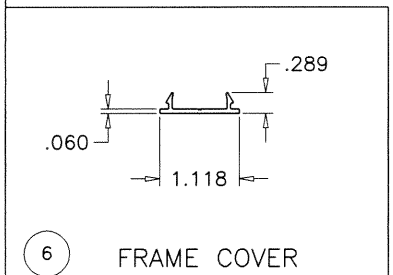
1.1 ALT. FRAME HEAD



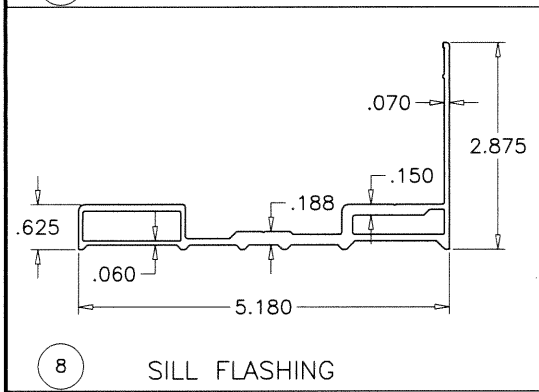
2 FRAME SILL



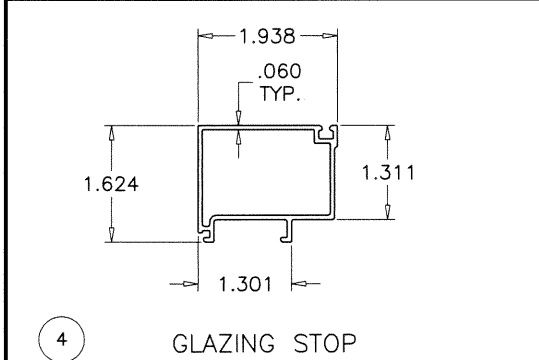
5 FRAME JAMB



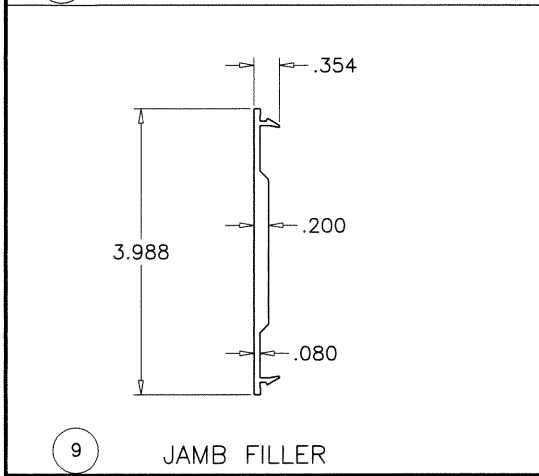
6 FRAME COVER



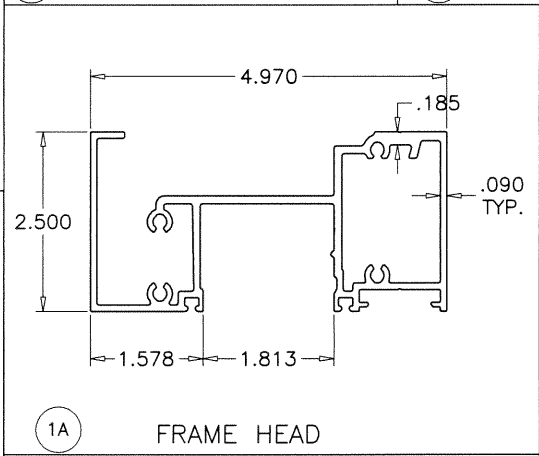
8 SILL FLASHING



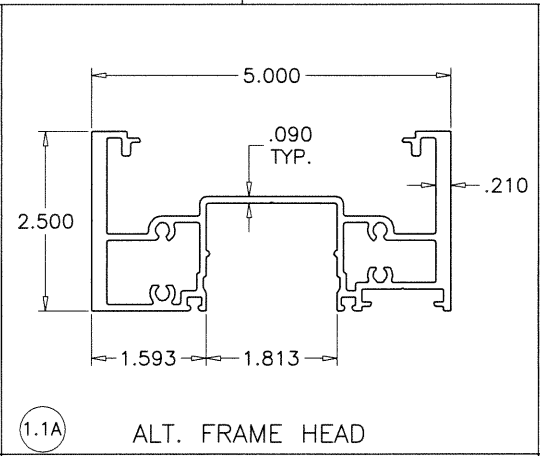
4 GLAZING STOP



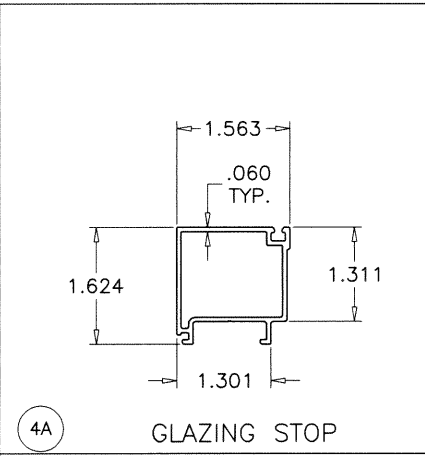
9 JAMB FILLER



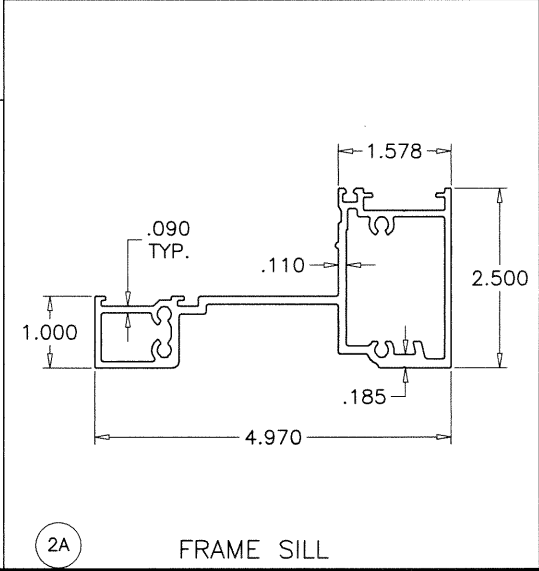
1A FRAME HEAD



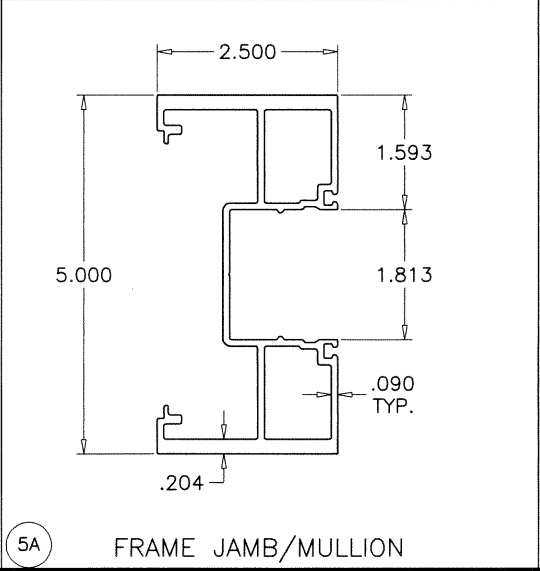
1.1A ALT. FRAME HEAD



4A GLAZING STOP



2A FRAME SILL



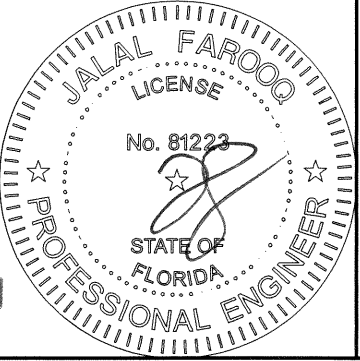
5A FRAME JAMB/MULLION

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.

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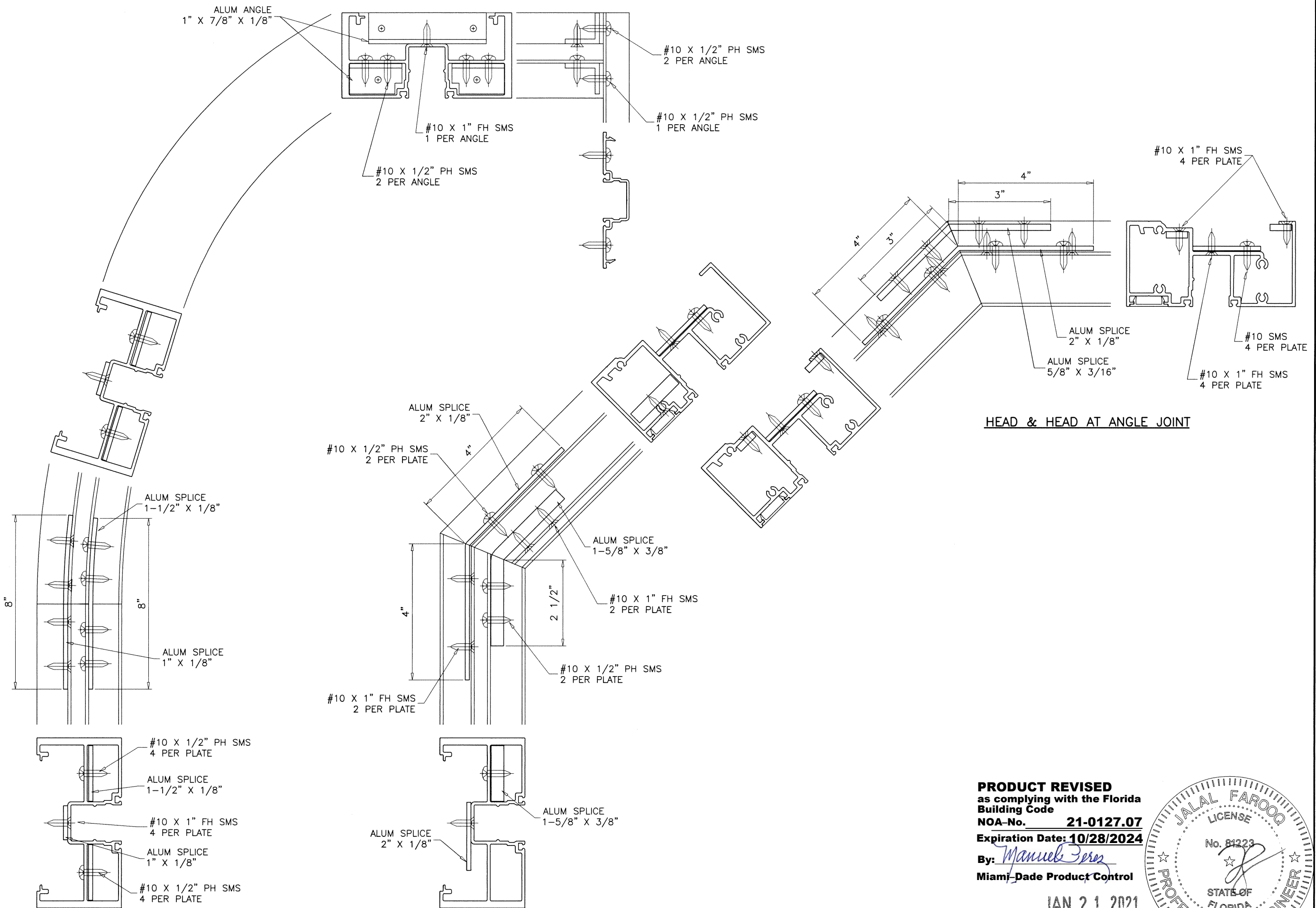
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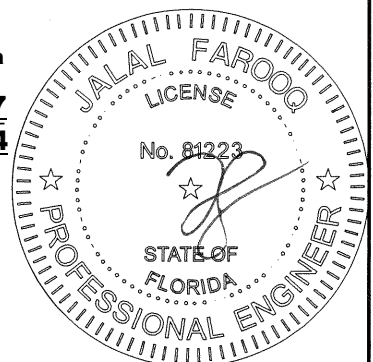
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sheet **8** of **9**



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