

# 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 49<sup>th</sup> 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 "ES-8000" Aluminum Window Wall System - L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **W07-60**, titled "Series 8000 Alum. Window Wall System (L.M.I.)", sheets 1, 1.1, 2, 3, 4, 4.1, 5, 5.1, 5.2, 6, 6.1, 6.2, 7, 7.1, 8, 9, 9.1, 10, 11 and 12 of 12, dated 08/03/07, with revision **I** dated 07/18/2023, 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. 22-1227.03 and consists of this page 1 and evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

The submitted documentation was reviewed by Sifang Zhao, P.E.



*5.2*. 01/11/2024

NOA No. 23-0724.11 Expiration Date: April 03, 2028 Approval Date: September 14, 2023

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. 15-0826.26)
- 2. Drawing No. **W07-60**, titled "Series 8000 Alum. Window Wall System (L.M.I.)", sheets 1, 1.1, 2, 3, 4, 4.1, 5, 5.1, 5.2, 6, 6.1, 6.2, 7, 7.1, 8, 9, 9.1, 10, 11 and 12 of 12, dated 08/03/07, with revision **H** dated 05/10/21, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E. (Submitted under NOA No. 21-0517.02)

### 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) Forced Entry Test, per FBC 2411.3.2.1 and AAMA 1304-02
  - 5) Large Missile Impact Test per FBC, TAS 201-94
  - 6) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of a Series ES-8000 MK-20-001, prepared by Blackwater Testing, Inc., Test Report No. **BT-ESW-20-036A**, dated 12/18/20, signed and sealed by Michael D. Caldwell, P.E.

(Submitted under NOA No. 21-0517.02)

- 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) Forced Entry Test, per FBC 2411.3.2.1 and AAMA 1304-02
  - 5) Large Missile Impact Test per FBC, TAS 201-94
  - 6) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of a Series ES-9000 aluminum outswing door, prepared by Blackwater Testing, Inc., Test Report No.

**BT-ESW-18-004**, dated 05/17/18, signed and sealed by Constantin Bortes, P.E. (*Submitted under NOA No. 19-1029.08*)

- 3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Drop Load Test, per ANSI Z97.1 (400 foot-pound impact)

along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No.

**FTL-9605**, dated 08/16/17, signed and sealed by Idalmis Ortega, P.E. (*Submitted under NOA No. 18-0129.05*)

Sifang Zhao, P.E. Product Control Examiner NOA No. 23-0724.11

Expiration Date: April 03, 2028 Approval Date: September 14, 2023

# NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)
- B. TESTS (CONTINUED)
  - **4.** 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 window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No.

FTL-8372, dated 03/24/16, signed and sealed by Idalmis Ortega, P.E.

(Submitted under NOA No. 17-0227.08)

- 5. 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) Drop Load Test, per CPSC 16 CFR 1201 (400 foot-pound impact) along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No.

FTL-5447, dated 12/19/07, signed and sealed by Michael R. Wenzel, P.E.

(Submitted under NOA No. 08-0204.06)

## C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with **FBC** 6<sup>th</sup> **Edition** (2017), dated 08/30/17 and 09/12/18, and further updated to comply with **FBC** 7<sup>th</sup> **Edition** (2020), prepared by Al-Farooq Corporation, dated 11/16/20 and 05/07/21, signed and sealed by Jalal Farooq, P.E.
  - (Submitted under NOA No. 21-0517.02)
- 2. Glazing complies with **ASTM E1300-09**

### D. QUALITY ASSURANCE

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

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Sifang Zhao, P.E.
Product Control Examiner
NOA No. 23-0724.11
Expiration Date: April 03, 2028
Approval Date: September 14, 2023

# NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA'S (CONTINUED)
- E. MATERIAL CERTIFICATIONS
  - 1. Notice of Acceptance No. **20-0915.19** issued to **Kuraray America, Inc.** for their "SentryGlas® (Clear and White) Glass Interlayers" dated 11/19/20, expiring on 07/04/23.
  - 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 (CONTINUED)

- 1. Statement letter of conformance, complying with **FBC** 7<sup>th</sup> **Edition** (2020), and of no financial interest, dated May 7, 2021, issued by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
  - Submitted under NOA No. 21-0517.02)
- 2. Distributor Agreement between ES Windows-Energia Solar, S.A., Barranquilla, Columbia, S.A. and E.S. Windows, LLC, Miami, Florida, dated 09/12/13, signed by Ms. Adriana Montoya, Manager and Andres Chamorro, General Manager respectively on behalf of the companies.
  - (Submitted under NOA No. 12-0308.36)
- 3. Private Labeling Agreement document in conformance to Product Control guidelines dated 04/09/09 signed by Jose Nuñez. (Submitted under NOA No. 12-0308.36)
- 4. Laboratory compliance letter for Test Report No. **FTL-5447**, issued by Fenestration Testing Laboratory, Inc., dated 12/19/07, signed and sealed by Michael R. Wenzel, P.E. (*Submitted under NOA No. 08-0204.06*)
- 5. Testing Proposal issued by the Product Control Section, dated 10/16/14, signed by Jaime Gascon, P.E. (Submitted under NOA No. 17-0227.08)

### G. OTHERS

1. Notice of Acceptance No. **21-0517.02**, issued to E.S. Windows, LLC for their Series "ES-8000" Aluminum Window Wall System – L.M.I., approved on 07/01/21 and expiring on 04/03/23.

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Sifang Zhao, P.E.
Product Control Examiner
NOA No. 23-0724.11
Expiration Date: April 03, 2028
Approval Date: September 14, 2023

## E.S. Windows, LLC

#### **NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

#### 1. **NEW EVIDENCE SUBMITTED**

#### A. **DRAWINGS**

1. Drawing No. W07-60, titled "Series 8000 Alum. Window Wall System (L.M.I.)", sheets 1, 1.1, 2, 3, 4, 4.1, 5, 5.1, 5.2, 6, 6.1, 6.2, 7, 7.1, 8, 9, 9.1, 10, 11 and 12 of 12, dated 08/03/07, with revision I dated 07/18/2023, prepared by Al-Faroog Corporation, signed and sealed by Jalal Farooq, P.E.

#### В. **TESTS**

1. None.

#### C. **CALCULATIONS**

1. None.

#### D. **QUALITY ASSURANCE**

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

#### **MATERIAL CERTIFICATIONS** E.

- 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**

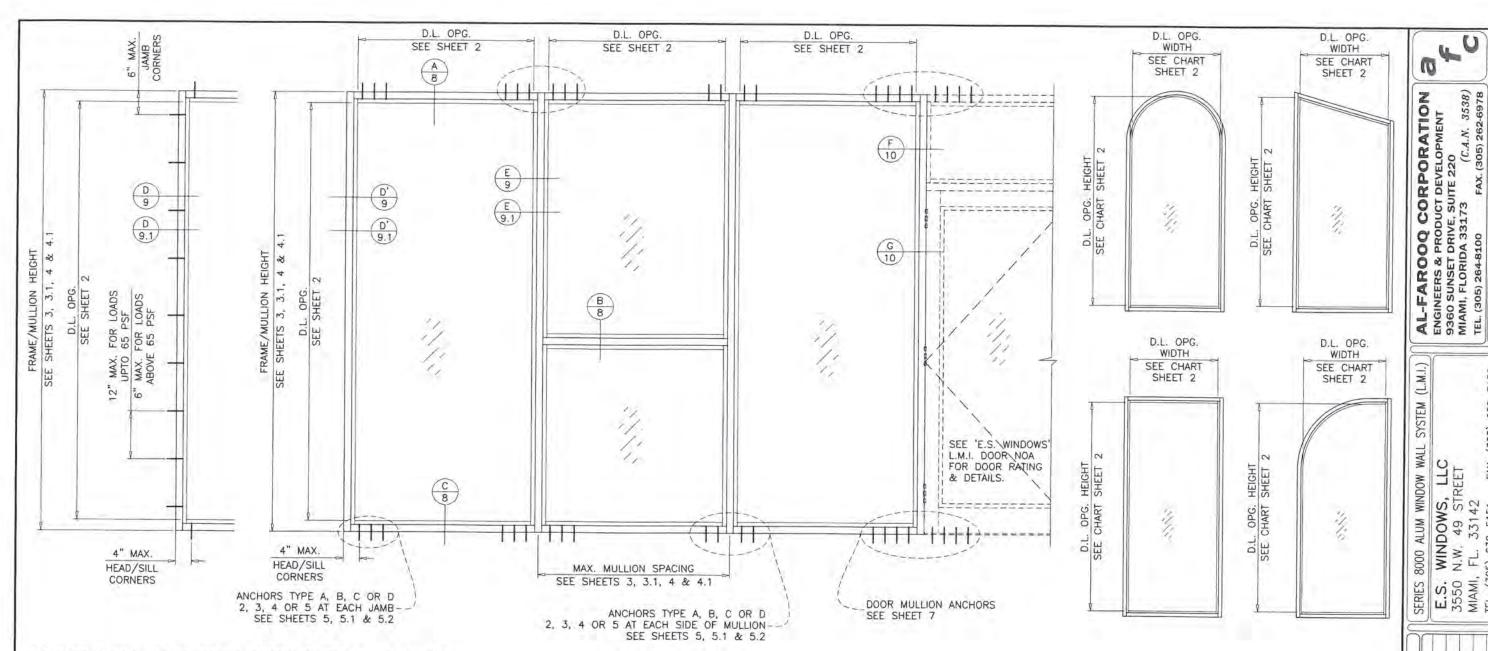
Statement letter of conformance, complying with FBC 7th Edition (2020) and FBC 8th 1. Edition (2023), and of no financial interest, dated July 19, 2023, issued by Al-Faroog Corporation, signed and sealed by Jalal Farooq, P.E.

#### G. **OTHERS**

Notice of Acceptance No. 22-1227.03, issued to E.S. Windows, LLC for their Series 1. "ES-8000" Aluminum Window Wall System - L.M.I., approved on 01/19/2023 and expiring on 04/03/28.

Sifang Zhao, P.E. **Product Control Examiner** NOA No. 23-0724.11 Expiration Date: April 03, 2028

**Approval Date: September 14, 2023** 



# SERIES 8000 ALUMINUM WINDOW WALL SYSTEM THIS SYSTEM IS RATED FOR LARGE MISSILE IMPACT SHUTTERS ARE NOT REQUIRED.

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)'

# TYPICAL ELEVATION

# INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2 SEE CHARTS ON SHEET 2 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE.
- CHECK MULLION CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEETS 3 THRU 4.1 FOR WINDOW WALL MULLION AND SHEETS 6 & 7 FOR DOOR MULLION THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4 CHECK ANCHOR CAPACITY FOR WINDOW WALL SYSTEM USING CHARTS ON SHEETS 5 THRU 5.2 FOR DOOR MULLION ANCHOR CAPACITY SEE CHART ON SHEET 7.
- THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.

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. SINGLE LITES MAY BE INSTALLED VERTICALLY AS SHOWN ABOVE OR HORIZONTALLY.

PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1

LAMINATED GLASS LARGE MISSILE IMPACT

**PRODUCT REVISED** 23-0724.11 NOA-No.

Expiration Date 04/03/2028

Miami-Dade Product Control



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THIIIIII	08-03-07
	date:
	drav
35/	WO

wing no. 7 - 60sheet 1 of 12

WINDOWS, LLC N.W. 49 STREET FL. 33142 305) 638–5151 FAX

E.S. 3550 MIAMI,

description
UPDATED TO 2017 F
NO CHANGE THIS SH
UPDATED TO 2020 F
GENERAL REVISION
UPDATED TO 2023 F

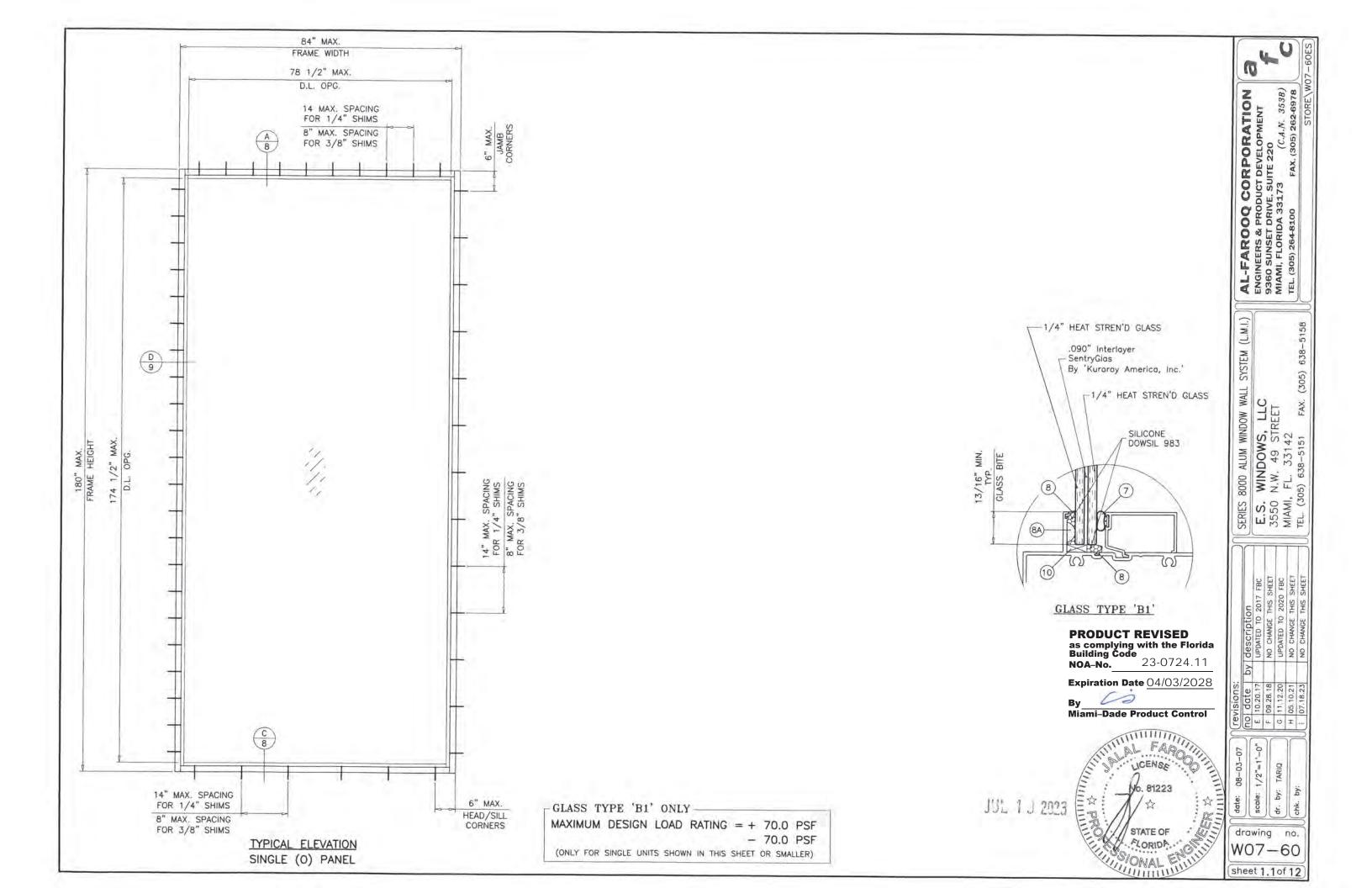
revisions:
no date
E 10.20.17
F 09.28.18
G 11.12.20
H 05.10.21

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by:

P

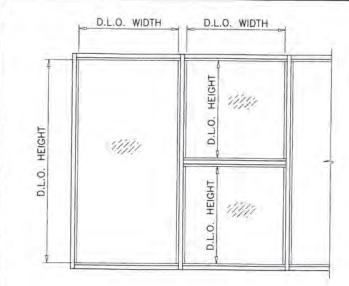
as complying with the Florida Building Code

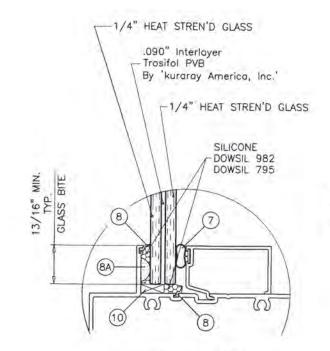


NOMIN	AL DIMS.	GLASS TYPE 'A'	GLASS TYPE 'B
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)
28"		80.0	130.0
32"		80.0	130.0
36"		80.0	130.0
40"		80.0	130.0
44-1/4"	12.7 × 13.20	80.0	130.0
48"	84-1/2"	80.0	130.0
52"		80.0	130.0
56-1/4"		80.0	130.0
60-1/2"			63.6
66-1/2"			58.3
28"		80.0	130.0
32"		80.0	130.0
36"		80.0	130.0
40"		80.0	130.0
44-1/4"	90-1/2"	80.0	130.0
48"		80.0	130.0
52"	1	80.0	130.0
54-1/2"		56.0	70.0
60-1/2"		8.	63.6
66-1/2"		+1	58.3
28"		80.0	130.0
32"		80.0	130.0
36"		80.0	130.0
40"	96-1/2"	80.0	130.0
44-1/4"		80.0	130.0
48"		80.0	130.0
52"		80.0	127.2
54-1/2"		56.0	70.0
60-1/2"		-	63.6
66-1/2"			58.3
28"		80.0	130.0
32"		80.0	130.0
36"		80.0	130.0
40"	102-1/2"	80.0	130.0
44-1/4"	102 1/2	80.0	130.0
48"		80.0	128.9
54-1/2"		56.0	70.0
60-1/2"			63.6
66-1/2"			58.3
28"		80.0	130.0
32"		80.0	130.0
36"		80.0	130.0
40"	108-1/2"	80,0	130.0
44-1/4"	.,.	80.0	130.0
48"		62.2	70.0
54-1/2"		56.0	70.0
60-1/2"			63.6
66-1/2"		7 -	58.3

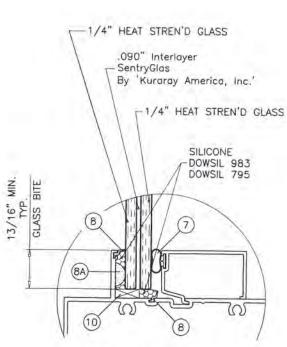
	GLASS LOAD	D CAPACITY -	PSF
NOMIN	VAL DIMS.	GLASS TYPE 'A'	GLASS TYPE 'B
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)/INT.(-)	EXT.(+)/INT.(-)
28"		80.0	130.0
32"		80.0	130.0
36"		80,0	130.0
40"		80.0	130.0
44-1/4"	111 1/0"	80.0	130.0
48-1/2"	114-1/2"	62.2	90.0
51-1/2"		- 12	90.0
54-1/2"		E	70.0
60-1/2"		= =	63.6
66-1/2"		-	58.3
44-1/4"		70.0	90.0
48"		62.2	90.0
50"	120-1/2"	-	90.0
54-1/2"			70.0
60-1/2"		-	63.6
42-1/4"		70.0	90.0
44-1/4"		-	90.0
48"	126-1/2"	- 6 -	90.0
48-1/2"	120-1/2		70.0
54-1/2"			70.0
40"		70.0	90.0
42-1/4"		70.0	90.0
44-1/4"			90.0
46"	132-1/2"		90.0
48-1/2"		197	70.0
54-1/2"		81	70.0
40"		70.0	90.0
42-1/4"		70.0	90.0
44-1/4"	138-1/2"	7	90.0
48-1/2"	130-1/2	14	70.0
54-1/2"			70.0

NOTE: INTERPOLATION BETWEEN WIDTHS ALLOWED.





GLASS TYPE 'A'



GLASS TYPE 'B'

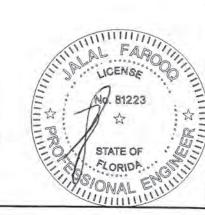
# GLAZING OPTIONS

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 23-0724.11

Expiration Date 04/03/2028

By Miami-Dade Product Control

JUL 1 J 2023



E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL (305) 638-5151 FAX. (305) 638-5158

drawing no. W07-60

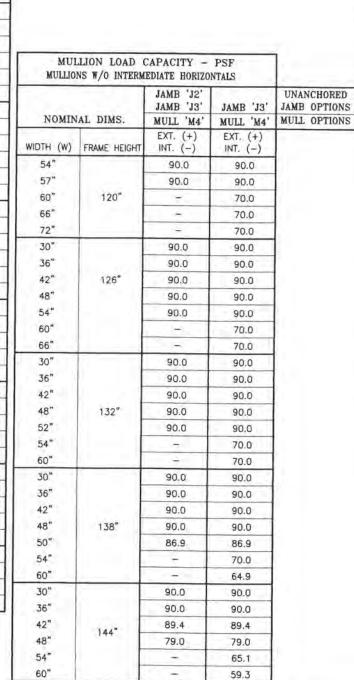
sheet 2 of 12

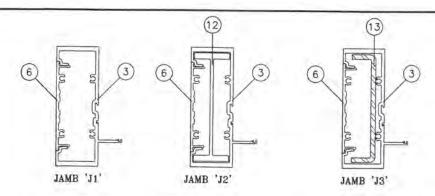
NOTE: GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS).

GLASS

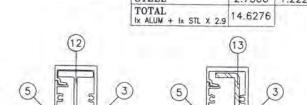
UNANCHORE JAMB OPTION MULL OPTION	JAMB 'J3' MULL 'M4,	JAMB 'J2' JAMB 'J3' MULL 'M3'	JAMB 'J1' MULL 'M2'	JAMB 'J1' MULL 'M1'	AL DIMS.	NOMIN
	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT, (+) INT. (-)	EXT. (+) INT. (-)	FRAME HEIGHT	WIDTH (W)
	130.0	130.0	130.0	130.0		30"
	130.0	130.0	130.0	130.0		36"
No.	130.0	130.0	130.0	130.0	00 1 /07	42"
	130.0	130.0	130.0	130.0	86-1/2"	48"
	130.0	130.0	130.0	130.0		54"
	130.0	1,30.0	130.0	127.3		60"
	130.0	130.0	130.0	130.0		30"
	130.0	130.0	130.0	130.0		36"
	130.0	130.0	130.0	130.0	90"	42"
	130.0	130.0	130.0	130.0	30	48"
	130.0	130.0	130.0	122.9		54"
	130.0	130.0	130.0	114.9		60"
	130.0	130.0	130.0	130.0	- 4	30"
	130.0	130,0	130.0	130.0		36"
	130.0	130.0	130.0	121.1	96"	42"
MUI	130.0	130.0	130.0	108.6	500	48"
MULLIO	130.0	125.6	130.0	99.4		54"
	130.0	116.3	130.0	92.4		60"
NOMIN	130.0	130.0	130.0	130.0	-	30"
1,0,011,	130.0	130.0	130.0	127.6		36"
WIDTH (W)	130.0	130.0	130.0	111.6	98-1/2"	42"
54"	130,0	130.0	130.0	100.0		48"
57"	130.0	118.6	130.0	91.4		54"
60"	130.0	112.4	130.0	86.8		58" 30"
66"	130.0	130.0	130.0	130.0	1	36"
72"	130.0	130.0	130.0	114.5		42"
30"	130.0	130.0	130.0	100.0	102"	48"
36"	130.0	120.9	130.0	81.6	-	54"
42"	130.0	109.8	127.7	79.4	14	56"
48"	723.47	130.0	130.0	113.5		30"
54"	130.0	130.0	130.0	95.9		36"
60"	130.0	120.3	130.0	83.6	108"	42"
66"	130.0	107.0	120.0	74.6		48"
30"	130.0	98.4	110.7	68.8		53"
36"	130.0	130.0	130.0	105.9		30"
42"	130.0	130.0	130.0	89.4		36"
48" 52"	130.0	114.7	125.2	77.8	110-1/2"	42"
54"	130.0	101.9	111.6	69.4		48"
60"	130.0	95.1	104.5	64.9		52"
30"	130.0	130.0	130.0	96.2		30"
36"	130.0	123.8	130.0	81.2		36"
42"	130.0	107.4	113.6	70.6	114"	42"
48"	130.0	95.3	101.1	62.9		48"
50"	130.0	92.0	97.7	60.8		50"
54"	130.0	130.0	130.0	82.3		30"
60"	130.0	111.4	111.5	69.3	120"	36"
30"	130.0	96.5	96.9	60.2		42"
36"	130.0	85.5	86.1	53.5		48"

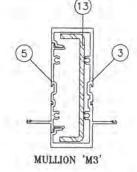
NOTE:			
INTERPOLATION	BETWEEN	WIDTHS	ALLOWED.

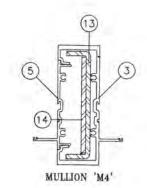




	Sx IN-3	Ix IN 4	Sx IN-3		Ix IN^4	Sx IN-3
6.6509	2.6421	10.6486	4.4452	ALUMINUM	6.6509	2.6421
				STEEL	2.7506	1.2225
				TOTAL Ix ALUM + Ix STL X 2.9	14.6276	1







Ix IN 4	Sx IN^3
6.7195	2.6757

MULLION 'M1'

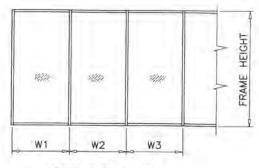
Ix	IN 4	Sx IN-3
10	8072	3.7590

MULLION 'M2'

	Ix IN^4	Sx IN^3	
ALUMINUM	6.7195	2.6757	ALUMINUM
STEEL		1.2225	
TOTAL x ALUM + Ix STL X 2.9	14.6962		TOTAL

JUL 1 J 2023

IN^3		Ix IN^4	Sx IN^3
757	ALUMINUM	6.7195	2.6757
225	STEEL	3.7533	1.668
	TOTAL IX ALUM + IX STL X 2.9	17.6047	



WIDTH (W) = W1AT FRAME JAMB

WIDTH (W) =AT FRAME MULLION PRODUCT REVISED
as complying with the Florida
Building Code 23-0724.11 NOA-No.

**Expiration Date** 04/03/2028

Miami-Dade Product Control

MILLIONS



	MULLIONS	
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revisions	date	10.20,17	09.28.18	11.12.20	05.10.21	D7 18 22
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dote: 08-03-07		scale; -		dr. by: TARIO	14.	Chk. by:
d			ng '_	- 6	no 60	

sheet 3 of 12

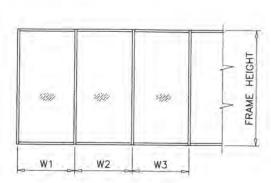
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)

SYSTEM

E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151 FAX. (305

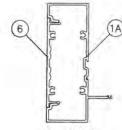
NOMIN	IAL DIMS.	JAMB 'J1A' MULL 'M1A'	JAMB 'J1/ MULL 'M2/			
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)			
30"	1	60.0	70.0			
36"		60.0	70.0			
42"	Server 1	60.0	70.0			
48"	86-1/2"	60.0	70.0			
54"	1	60.0	70.0			
60"		60.0	70.0			
30"		60.0	70.0			
36"		60.0	70.0			
42"	200	60.0	70.0			
48"	90"	60.0	70.0			
54"		60.0	70.0			
60"	-	60.0	70.0			
30"		60.0	70.0			
36"		60.0	70.0			
42"	007	60.0	70.0			
48"	96"	60.0	70.0			
54"		55.6	70.0			
60"		51.5	70.0			
30"		60.0	70.0			
36"		60.0	70.0			
42"	98-1/2"	60.0	70.0			
48"	30-1/2	57.6	70.0			
54"		52.4	70.0			
30"		60.0	70.0			
36"		60.0	70.0			
42"	102"	59.7	70.0			
48"	102	53.2	70.0			
54"		48.3	70.0			
30"		60.0	70.0			
36"		60.0	70.0			
42"	108"	52.6	70.0			
48"	,,,,,	46.8	70.0			
54"		-	70.0			
60"		- DA	70.0			
30"		60.0	70.0			
36"		57.1	70.0			
42"	110-1/2"	49.7	70.0			
48"		44.3	70.0			
54"		-	70.0			
60"		(2)	70.0			
30"		60.0	70.0			
36"		51.8	70.0			
42"	114"	45.1	70.0			
48"		40.1	70.0			
54"		-	70.0			
30"		52.5	70.0			
36"		44.3	70.0			
42"	120"	38.5	70.0			
48"	130	34.2	66.7			
54"	-	-	60.4			
57"		-	57.8			

PSF HORIZONTALS		LLION LOAD WITHOUT INT			
JAMB 'J1A' MULL 'M2A'	NOMIN	AL DIMS.	JAMB 'J1A' MULL 'M1A'	JAMB 'J1A' MULL 'M2A'	UNANCHORED JAMB OPTIONS MULL OPTIONS
EXT. (+) INT. (-)	WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	
70.0	30"			70.0	
70.0	36"	1	to second	70.0	
70.0	42"	126"		64.6	
70.0	48"	120	7-7	57.3	
70.0	54"		12	51.8	
70.0	30"			70.0	
70.0	36"		3141	64.5	
70.0	42"	132"	+	55.9	
70.0	48"	132	- 1	49.6	
70.0	52"		- 1	46.2	
70.0	30"		-	67.1	
70.0	36"			56.3	
70.0	42"	138"	-	48.8	
70.0	48"	136		43.2	
70.0	50"		-	41.6	
70.0	30"			58.9	
70.0	36"	144"	-	49.5	
70.0	42"	134	-	42.8	
70.0	48"			37.8	



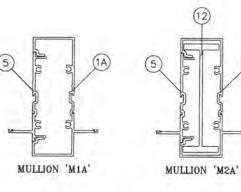
WIDTH (W) = W1 AT FRAME JAMB

W2 + W3 WIDTH (W) =AT FRAME MULLION



JAMB 'JIA'

Ix IN<sup>4</sup> Sx IN<sup>3</sup> 4.1316 1.6902



Ix IN^4 Sx IN^3 4.2902 1.7239

Ix IN<sup>4</sup> Sx IN<sup>3</sup> 8.3779 3.527

PRODUCT REVISED
as complying with the Florida
Building Code 23-0724.11 NOA-No.

**Expiration Date** <u>04/03/2028</u>

00 Miami-Dade Product Control

MULLIONS



JUL 1 J 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

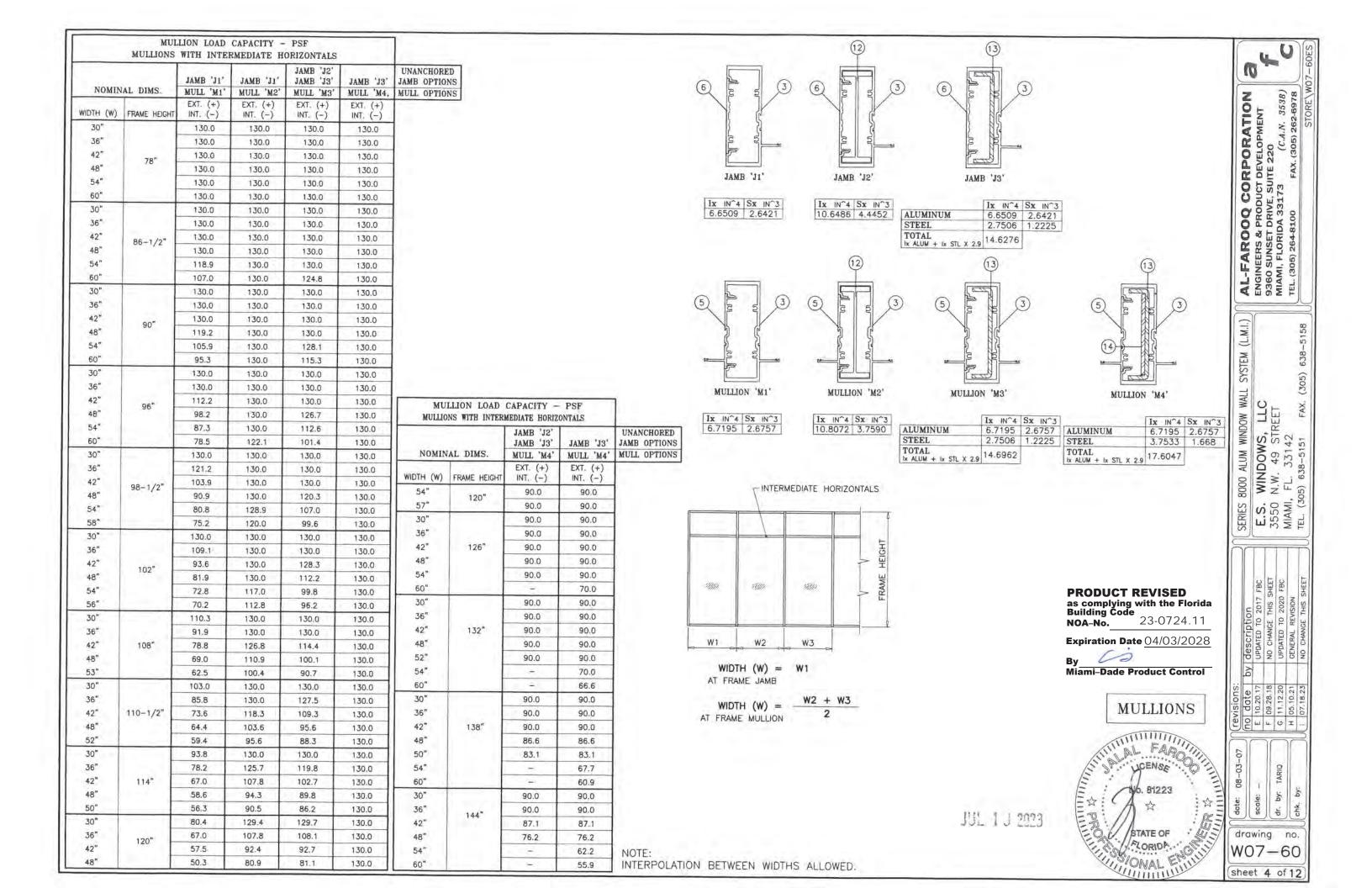
E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151 FAX. (305)

SYSTEM (L.M.I.)

revisions: no date | by description

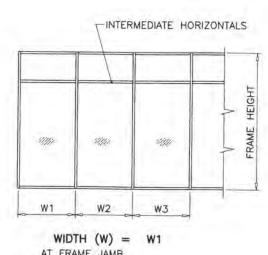
drawing no. W07-60 sheet 3.1 of 12

INTERPOLATION BETWEEN WIDTHS ALLOWED.



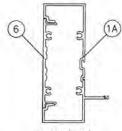
	WITH INTER	RMEDIATE HO	ORIZONTALS				
NOMIN	AL DIMS.	JAMB 'J1A' MULL 'M1A'	JAMB 'J1A MULL 'M2A				
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)				
30"		60.0	70.0				
36"		60.0	70.0				
42"	86-1/2"	60.0	70.0				
48"	50-1/2	60.0	70.0				
54"		60.0	70.0				
60"		55.9	70.0				
30"		60.0	70.0				
36"		60.0	70.0				
42"	00"	60.0	70.0 70.0 70.0				
48"	90"	60.0					
54"		57.1					
60"		51.4	70.0				
30"		60.0	70.0				
36"		60.0	70.0 70.0 70.0				
42"		60.0					
48"	96"	56.1	70.0 70.0 70.0				
54"		49.9					
60"	1	44.9					
30"		60.0	70.0				
36"		60.0	70.0				
42"	00 4 /0"	60.0	70.0				
48"	98-1/2"	53.2	70.0				
54"		47.2	70.0				
30"		60.0	70.0				
36"		60.0	70.0				
42"		56.4	70.0				
48"	102"	49.4	70.0				
54"		43.9	70.0				
30"		60.0					
36"		58.4	70.0				
42"		50.0	70.0				
48"	108"	43.8	70.0				
54"			70.0				
60"		- C-C	70.0				
30"		60.0	70.0				
36"		54.8	70.0				
42"	110-1/2"	47.0	70.0				
48"	110-1/2	41.1	70.0				
54"		- F 11	70.0				
60"		-8-1	70.0				
30"		59.9	70.0				
36"		49.9	70.0				
42"	1140	42.8	70.0				
48"	114"	37.4	70.0				
54"			70.0				
30"		51.4	70.0				
36"		42.8	70.0				
42"	120"	36.7	70.0				
48"	120"	32.1	66.7				
54"		-	60.4				
57"		-	57.8				

NOMIN	AL DIMS.	JAMB 'J1A' MULL 'M1A'	JAMB 'J1A' MULL 'M2A'	UNANCHORED JAMB OPTIONS MULL OPTIONS
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	37 170110
30"	7 7 7	137	70.0	
36"		14:	70.0	
42"	126"	Here I	64.6	
48"	120		57.3	
54"		-1	51.8	0
30"	-	-	70.0	
36"		1027	64.5	
42"	132"		55.9	
48"	132	_ 08 _ 1	49.6	
52"		-	46.2	
30"		-	67.1	
36"			56.3	
42"	138"	D-1.1	48.8	
48"	130	-	43.2	
50"		-	41.6	
30"		- 1	58.9	
36"	144"	-	49.5	
42"	144	5	42.8	
48"			37.8	



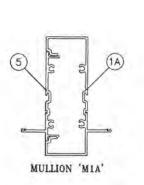
AT FRAME JAMB

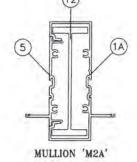
WIDTH (W) = AT FRAME MULLION



JAMB 'J1A'

Ix IN^4 Sx IN^3 4.1316 1.6902





Ix IN^4 Sx IN^3 4.2902 1.7239

Ix IN^4 Sx IN^3 8.3779 3.527

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 23-0724.11

Expiration Date 04/03/2028By Miami-Dade Product Control



JUL 1 J 2023

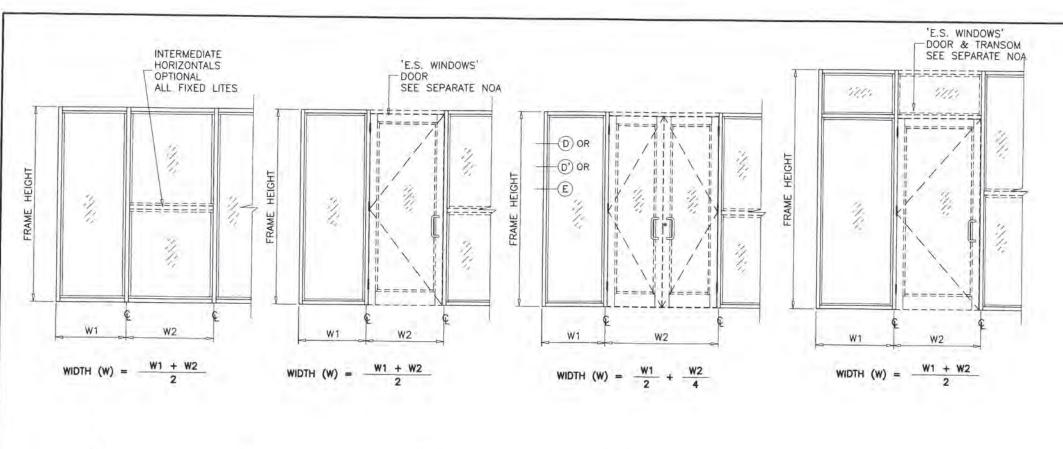
MULLIONS

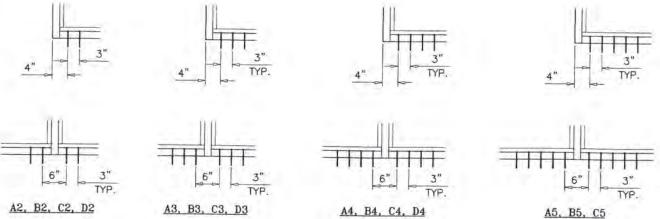
revisions: no date by description drawing no. W07-60 sheet 4.1 of 12

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

| SERIES 8000 ALUM WINDOW WALL SYSTEM (L.M.I.) | E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 | TEL. (305) 638-5158 |

INTERPOLATION BETWEEN WIDTHS ALLOWED.





**PRODUCT REVISED** 

as complying with the Florida Building Code NOA-No. 23-0724.11 NOA-No.

Expiration Date 04/03/2028

Miami-Dade Product Control

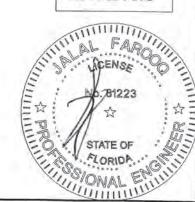
### ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION

A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION D2 = (2) ANCHORS TYPE 'D' AT EACH SIDE OF JAMB AND MULLION A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION B3=(3) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION C3=(3) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION D3 = (3) ANCHORS TYPE 'D' AT EACH SIDE OF JAMB AND MULLION A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION B4 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION D4 = (4) ANCHORS TYPE 'D' AT EACH SIDE OF JAMB AND MULLION A5 = (5) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION B5 = (5) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION C5 = (5) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION

SEE SHEETS 5, 5.1, 5.2 & 7 FOR ANCHOR CAPACITY CHART. SEE SHEET 8 FOR ANCHOR DESCRIPTION.

ANCHORS

JUL 1 3 2023



by description
UPDATED TO 2017
NO CHANGE THIS SI
NO CHANGE THIS SI
NO CHANGE THIS SI
NO CHANGE THIS SI 

drawing no. W07-60

sheet 5 of 12

ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.

													T.(+) &	APACIT INT.(-)	1	DI.												
22200	12 120		1-1-		NCHORS	1				ANCHORS TYPE 'B'					ANCHORS TYPE 'C'						1/4" MAX. SHIM							
	IAL DIMS.			IIM SPA	CE	1	/2" SH	IM SPA	CE	3	8/8" SH	IIM SPA	CE	1	/2" SH	IM SPA	CE	3	/8" SH	IM SPA	CE	1	/2" SH	IM SPA	CE	ANCH	ORS TY	YPE '
	FRAME HEIGHT	A2	A3	A4	A5	A2	A3	A4	A5	B2	B3	B4	B5	B2	В3	B4	B5	C2	СЗ	C4	C5	C2	СЗ	C4	C5	D2	D3	D4
30"		59.1	88.6	118.2	1	46.1	69.2	92.2	115.3	67.9	101.9	130.0	130.0	53.3	79.9	106.5	130.0	115.9	130.0	130.0	130.0	91.4	130.0	130.0	130.0	130.0	130.0	130
36"		49.2	73.9	98.5	123.1	38.4	57.7	76.9	96.1	56.6	84.9	113.2	130.0	44.4	66.6	88.8	111.0	96.6	130.0	130.0	130.0	76.2	114.3	130.0	130.0	130.0	130.0	130
42"		42.2	63.3	84.4	105.5	32.9	49.4	65.9	82.4	48.5	72.8	97.0	121.3	38.1	57.1	76.1	95.1	82.8	123.7	130.0	130.0	65.3	98.0	130.0	130.0	124.0	130.0	130
48" 54"	86-1/2"	36.9	55.4	73.9	92.3	28.8	43.2	57.7	72.1	42.5	63.7	84.9	106.1	33.3	49.9	66.6	83.2	72.4	108.2	130.0	130.0	57.2	85.7	114.3	130.0	108.5	130.0	130
60"		32.8	49.2	65.7	82.1	25.6	38.4	51.2	64.1	37.7	56.6	75.5	94.3	29.6	44.4	59.2	74.0	64.4	96.2	128.7	130.0	50.8	76.2	101.6	127.0	96.4	130.0	130
66"	1	29.5	44.3	59.1	73.9	23.1	34.6	46.1	57.7	34.0	50.9	67.9	84.9	26.6	40.0	53.3	66.6	57.9	86.6	115.9	130.0	45.7	68.6	91.4	114.3	86.8	130.0	130
72"		26.9	40.3	53.7	67.1	21.0	31.4	41.9	52.4	30.9	46.4	61.8	77.3	24.3	36.4	48.5	60.6	52.7	79.0	105.4	130.0	41.5	62.2	83.0	103.7	78.9	118.3	130
30"		24.6	36.9	49.2	61.5	-	28.8	38.4	48.0	28.3	42.5	56.7	70.8	22.2	33.4	44.5	55.6	48.3	72.4	96.6	120.7	38.0	57.0	76.1	95,1	72.3	108.5	130
36"		56.8	85.2	113.6	130.0	44.3	66.5	88.7	110.8	65.3	97.9	130.0	130.0	51.2	76.8	102.4	128.0	111.4	130.0	130.0	130.0	87.9	130.0	130.0	130.0	130.0	130.0	130
42"		2000	71.0	94.6	118.3	36.9	55.4	73.9	92.4	54.4	81.6	108.8	130.0	42.7	64.0	85.3	106.7	92.8	130.0	130.0	130.0	73.2	109.9	130.0	130.0	130.0	130.0	130
48"	1	40.6	60.8	81.1	101.4	31.7	47.5	63.3	79.2	46.6	69.9	93.3	116.6	36.6	54.9	73.1	91.4	79.5	118.9	130.0	130.0	62.8	94.2	125.6	130.0	119.2	130.0	130
54"	90"	35.5	53.2	71.0	88.7	27.7	41.6	55.4	69.3	40.8	61.2	81.6	102.0	32.0	48.0	64.0	80.0	69.6	104.0	130.0	130.0	54.9	82.4	109.9	130.0	104.3	130.0	130
60"		31.5	47.3	63.1	78.9	24.6	36.9	49.3	61.6	36.3	54.4	72.5	90.7	28.4	42.7	56.9	71.1	61.9	92.4	123.7	130.0	48.8	73.2	97.7	122.1	92.7	130.0	130
66"	1	28.4	42.6	56.8	71.0	22.2	33.2	44.3	55.4	32.6	49.0	65.3	81.6	25.6	38.4	51.2	64.0	55.7	83.2	111.4	130.0	43.9	65.9	87.9	109.9	83.4	125.1	130
72"		25.8	38.7	51.6	64.5	20.2	30.2	40.3	50.4	29.7	44.6	59.4	74.3	23.3	35.0	46.6	58.3	50.6	76.0	101.3	126.6	39.9	59.8	79.7	99.7	75.8	113.7	130
30"			35.5	47.3	59.2		27.7	36.9	46.2	27.2	40.9	54.5	68.1	21.4	32.1	42.7	53.4	46.4	69.6	92.8	116.0	36.6	54.8	73.1	91.4	69.5	104.3	130
36"	1	53.2	79.9	106.5	130.0	41.6	62.3	83.1	103.9	61.2	91.8	122.4	130.0	48.0	72.0	96.0	120.0	104.4	130.0	130.0	130.0	82.4	123.6	130.0	130.0	130.0	130.0	130
42"	l t	38.0	66.6	88.7	110.9	34.6	52.0	69.3	86.6	51.0	76.5	102.0	127.5	40.0	60.0	80.0	100.0	87.0	130.0	130.0	130.0	68.7	103.0	130.0	130.0	130.0	130.0	130
48"		100	57.0	76.1	95.1	29.7	44.5	59.4	74.2	43.7	65.6	87.4	109.3	34.3	51.4	68.6	85.7	74.6	111.4	130.0	130.0	58.9	88.3	117.7	130.0	111.7	130.0	130
54"	96"	33.3	49.9	66.6	83.2	26.0	39.0	52.0	64.9	38.3	57.4	76.5	95.6	30.0	45.0	60.0	75.0	65.3	97.5	130.0	130.0	51.5	77.3	103.0	128.8	97.8	130.0	13
60"	-	29.6	44.4	59.2	73,9	23.1	34.6	46.2	57.7	34.0	51.0	68.0	85.0	26.7	40.0	53.3	66.7	58.0	86.7	116.0	130.0	45.8	68.7	91.6	114.4	86.9	130.0	130
66"		26.6	39.9	53.2	66.6	20.8	31.2	41.6	52.0	30.6	45.9	61.2	76.5	24.0	36.0	48.0	60.0	52.2	78.0	104.4	130.0	41.2	61.8	82.4	103.0	78.2	117,3	130
72"		24.2	36,3	48.4	60.5	0=0	28.3	37.8	47.2	27.9	41.8	55.7	69.6	21.9	32.8	43.7	54.6	47.5	71.2	94.9	118.7	37.4	56.1	74.8	93.5	71.1	106.6	130
30"		22.2	33.3	44.4	55.5	10.5	26.0	34.6	43.3	25.5	38.3	51.1	63.8	20.0	30.1	40.1	50.1	43.5	65.3	87.0	108.8	34.3	51.4	68.5	85.7	65.2	97.8	130
36"	+	51.9	77.8	103.8	129.7	40.5	60.8	81.0	101.3	59.6	89.5	119.3	130.0	46.8	70.2	93.6	117.0	101,8	130.0	130.0	130.0	80.3	120.5	130.0	130.0	130.0	130.0	130
42"		43.2 37.1	64.9	86.5	108.1	33.8	50.6	67.5	84.4	49.7	74.6	99.4	124.3	39.0	58.5	78.0	97.5	84.8	126.7	130.0	130.0	66.9	100.4	130.0	130.0	127.0	130.0	130
48"		32.4	55.6	74.1	92.7	28.9	43.4	57.9	72.3	42.6	63.9	85.2	106.5	33.4	50.1	66.8	83.5	72.7	108.6	130.0	130.0	57.4	86.0	114.7	130.0	108.9	130.0	130
54"	98-1/2"	28.8	48.6	64.9	81.1	25.3	38.0	50.6	63.3	37.3	55.9	74.6	93.2	29.2	43.9	58.5	73.1	63.6	95.0	127.2	130.0	50.2	75.3	100.4	125.5	95.3	130.0	130
60"		25.9	38.9	57.7	72.1	22.5	33.8	45.0	56.3	33.1	49.7	66.3	82.8	26.0	39.0	52.0	65.0	56.5	84.5	113.1	130.0	44.6	66.9	89.2	111.5	84.7	127.0	130
66"	1-1	23.6		51.9	64.9	20.3	30.4	40.5	50.6	29.8	44.7	59.6	74.6	23.4	35.1	46.8	58.5	50.9	76.0	101.8	127.2	40.2	60.2	80.3	100.4	76.2	114.3	130
72"	-	21.6	35.4	47.2	59.0		27.6	36.8	46.0	27.1	40.7	54.3	67.9		31.9	42.6	53.2	46.3		92.5		-	54.6	72.9	91.1	69.3	103.9	130
30"		50.1		43.2	54.1	70.1	25.3	33.8	42.2	24.9	37.3	49.8	62.2	- A	29.3	39.0	48.8	42.4	63.6	84.8		33.4	50.1	66.8	83.5	63,5	95.3	12
36"	-   <del> </del>	41.8	75.2 62.6	100.2	125.3	39.1	58.7	78.2	97.8	57.6	86.4	115.2	130.0	45.2	67.8	90.4	112.9	98.3	2.55	130.0	-	77.6	116.3	130.0	130.0	130.0	130.0	130
42"	-	35.8	53.7	83.5	104.4	32.6	48.9	65.2	81.5	48.0	72.0	96.0	120.0	37.6	56.5	75.3	94.1	81.9	122.4	130.0	-	64.6	96.9	129.3		122.7	130.0	130
48"	-		47.0	71.6	89.5	27.9	41.9	55.9	69.8	41.1	61.7	82.3	102.9	32.3	48.4	64.5	80.7	70.2		130.0	1.0	55.4	83.1	110.8	130.0	105.1	130.0	130
54"	102"	1000	41.8	62.6 55.7	78.3	24.4	36.7	48.9	61.1	36.0	54.0	72.0	90.0	28.2	42.4	56.5	70.6	61.4	91.8		130.0	48.5	72.7	96.9	121.2	92.0	130.0	13
60"			37.6	50.1	69.6	21.7	32.6	43.5	54.3	32.0	48.0	64.0	80.0	25.1	37.6	50.2	62.7	54.6	81.6	P. 27 (1)	130.0	43.1	64.6	86.2	107.7	81.8	122.7	130
66"		100	34.2	135353		7	29.3	39.1	48.9	28.8	43.2	57.6	72.0	22.6	33.9	45.2	56.5	49.1	73.4	10000	122.8	38.8	58.2	77.6	96.9	73.6	110.4	130
72"			31.3	45.6 41.8	56.9 52.2	7	26.7	35.6	44.4	26.2	39.3	52.4	65.5	20.6	30.9	41.1	51.4	44.7	67.0	24.12.1	111.7	35.2	52.8	70.4	88.0	66.9	100.4	130
30"			71.0	94.6	118.3	76.0	24.4	32.6	40.7	24.0	36.0	48.1	60.1	-	28.3	37.7	47.1	41.0	61.4		102.4	32.3	48.4	64.5	80.6	61.3	92.0	122
36"	-	39.4		5752	-	36.9	55.4	73.9	92.4	54.4	81.6		130.0	42.7	64.0	85.3	106.7		-		130.0	73.2	109.9	130.0	130.0	130.0	130.0	13
42"	1	33.8	59.2	78.9 67.6	98.6 84.5	30.8	46.2	61.6	77.0	45.3	68.0	122	113.3	35.6	53.3	71.1	88.9	25 2 2			130.0	61.0	91.6			115.9	130.0	130
48"	- H	29.6	44.4	59.2	73.9	26.4	39.6	52.8	66.0	38.9	58.3	77.7	97.1	30.5	45.7	61.0	76.2	66.3			130.0	52.3	78.5		130.0	99.3	130.0	130
54"	108"	26.3	39.4	52.6	65.7	23.1	34.6	46.2	57.7	34.0	51.0	68.0	85.0	26.7	40.0	53.3	66.7	58.0		1	130.0	45.8	68.7		114.4	86.9		13
60"		7.3 E.	35.5	1.5.5.	59.2	20.5	30.8	41.0	51.3	30.2	45.3	60.4	75.6	23.7	35.6	47.4	59.3	51.6	77.0	600	128.9	40.7	61.0	81.4		77,2	115.9	13
66"		21.5	A 8 1	47.3			27.7	36.9	46.2	27.2	40.8	54.4	68.0	21.3	32.0	42.7	53.3	46.4	69.3	200	116.0	36.6	54.9	73.2	91.6	69.5	104.3	13
72"	-	21.0	32.3	43.0	53.8	-5"	25.2	33.6	42.0	24.8	37.1	49.5	61,9	7	29.1	38.9	48.6	42.2	63.3	_	105.5	33.2	49.8	66.5	83.1	63.2	94.8	126
1.2			29.6	39.4	49.3	7	23.1	30.8	38.5	22.7	34.0	45.4	56.7	-	26.7	35.6	44.5	38.7	58.0	77.4	96.7	30.5	45.7	60.9	76.1	57.9	86.9	115

SEE SHEETS 5 AND 8 FOR ANCHOR DESCRIPTION.

PRODUCT REVISED as complying with the Florida Building Code
NOA-No. 23-0724.11

**Expiration Date** <u>04/03/2028</u>

By Miami-Dade Product Control

ANCHORS



08-03-07	(re	revisions:			
	OU OU	no date	þ	by description	11
1	ш	E 10.20.17		NO CHANGE THIS	10,
	)LC	09.28.18		NO CHANGE THIS	100
" TARIO	O	G 11.12.20		UPDATED TO 2020	0
	Ι	Н 05.10.21		GENERAL REVISION	2
oy:		07.18.23		NO CHANCE THE	ľ

JUL 1 J 2023

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 2648100 FAX. (305) 262-6978

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

drawing no.

W07-60

sheet 5.1of 12

											ANC		OAD CA	APACIT INT.(-)	Y - P	SF												
23575	14 5501				NCHOR	S TYPE	'A'			ANCHORS TYPE 'B'					ANCHORS TYPE 'C'						1/4" MAX. SHIM							
2.6	AL DIMS.	T/C SHIM STACE					CE	3	3/8" SHIM SPACE 1/2" SHIM SPACE					3/8" SHIM SPACE					1/2" SHIM SPACE				ORS T	_				
	FRAME HEIGHT	A2	A3	A4	A5	A2	A3	A4	A5	B2	В3	B4	B5	B2	B3	B4	B5	C2	C3	C4	C5	C2	C3	C4	C5	D2	D3	
30"		46.3	69.4	92.5	115.6	36.1	54.2	72.2	90.3	53.2	79.8	106.3	130.0	41.7	62.6	83.4	104.3	90.7	130.0	130.0	130.0	71.6	107.4	130.0	130.0	130.0	130.0	-
36"		38.5	57.8	77.1	96.4	30.1	45.1	60.2	75.2	44.3	66.5	88.6	110.8	34.8	52.1	69.5	86.9	75.6	112.9	130.0	130.0	59.7	89.5	119.3	130.0	113.2	130.0	-
42"		33.0	49.6	66,1	82.6	25.8	38.7	51.6	64.5	38.0	57.0	76.0	94.9	29.8	44.7	59.6	74.5	64.8	96.8	129.6	130.0	51.1	76.7	102.3	127.8	97.1	130.0	
48"	110-1/2"	28.9	43.4	57.8	72.3	22.6	33.8	45.1	56.4	33.2	49.8	66.5	83.1	26.1	39.1	52.1	65.2	56.7	84.7	113.4	130.0	44.7	67.1	89.5	111.9	84.9	127.4	-
54"		25.7	38.5	51.4	64.2	20.1	30.1	40.1	50.1	29.5	44.3	59.1	73.8	23.2	34.8	46.3	57.9	50.4	75.3	100.8	126.0	39.8	59.7	79.5	99.4	75.5	113.2	1
60"		23.1	34.7	46.3	57.8	-	27.1	36.1	45.1	26.6	39.9	53.2	66.5	20.9	31.3	41.7	52.1	45.4	67.8	90.7	113.4	35.8	53.7	71.6	89.5	67.9	101.9	
66"		21.0	31.5	42.0	52.6		24.6	32.8	41.0	24.2	36.3	48.4	60.5	1-	28.5	38.0	47.5	41.2	61.9	82.5	103.1	32.5	48.7	65.0	81.2	61.8	92.6	-
72"		140	28.9	38.5	48.2		22.6	30.1	37.6	22.2	33.3	44.4	55.5		26.1	34.8	43.5	37.8	56.7	75.6	94.5	29.8	44.7	59.5	74.4			-
30"		44.8	67.3	89.7	112.1	35.0	52.5	70.0	87.5	51.5	77.3	103.1	128.8	40.4	60.6	80.8	101.1	87.9	130.0	130.0	130.0	69.4	104.1	130.0		56.6	84.9	-
36"		37.4	56.0	74.7	93.4	29.2	43.7	58.3	72.9	42.9	64.4	85.9	107.4	33.7	50.5	67.4	84.2	73.3	109.5	130.0	130.0			-	130.0	130.0	130.0	-
12"		32.0	48.0	64.0	80.1	25.0	37.5	50.0	62.5	36.8	55.2	73.6	92.0	28.9	43.3	57.7	72.2	62.8	93.8	-		57.8	86.7	115.6	130.0	109.8	130.0	
8"	114"	28.0	42.0	56.0	70.1	21.9	32.8	43.7	54.7	32.2	48.3	64.4	80.5	25.3	37.9	50.5	75.55	1 2 3 3 3		125.6	130.0	49.6	74.3	99.1	123.9	94.1	130.0	
4"	114"	24.9	37.4	49.8	62.3	154-1	29.2	38.9	48.6	28.6	42.9	57.3	71.6	22.5			63.2	54.9	82.1	109.9	130.0	43.4	65.1	86.7	108.4	82.3	123.5	1
0"		22.4	33.6	44.8	56.0	DBC.	26.2	35.0	43.7	25.8	38.7	51.5			33.7	44.9	56.1	48.8	73.0	97.7	122.1	38.5	57.8	77.1	96.4	73.2	109.8	i
6"		20.4	30.6	40.8	50.9	-	23.9	31.8	39.8	23.5	235		64.4	20.2	30.3	40.4	50.5	44.0	65.7	87.9	109.9	34.7	52.0	69.4	86.7	65.9	98.8	
2"	1	-	28.0	37.4	46.7	13	21.9	29.2	36.5		35.2	46.9	58.6	-	27.6	36.8	46.0	40.0	60.0	80.0	99.9	31.5	47.2	63.0	78.7	59.9	89.8	
0"		42.6	63.9	85.2	106.5	33.2	49.9			21.5	32.3	43.0	53.8	-	25.3	33.7	42.2	36.6	55.0	73.3	91,6	28.9	43.3	57.7	72.1	54.9	82.3	
6"		35.5	53.2	71.0	88.7	27.7		66.5	83.1	49.0	73.4	97.9	122.4	38.4	57.6	76.8	96.0	83.5	124.8	130.0	130.0	65.9	98.9	130.0	130.0	125.1	130.0	į
2"		30.4	45.6				41.6	55.4	69.3	40.8	61.2	81.6	102.0	32.0	48.0	64.0	80.0	69.6	104.0	130.0	130.0	54.9	82.4	109.9	130.0	104.3	130.0	ĺ
3"	120"		- A-00-A	60.8	76.1	23.7	35.6	47.5	59.4	35.0	52.5	69.9	87.4	27.4	41.1	54.9	68.6	59.7	89.1	119.3	130.0	47.1	70.6	94.2	117.7	89.4	130.0	į
	120	26.6	39.9	53.2	66.6	20.8	31.2	41.6	52.0	30.6	45,9	61.2	76.5	24.0	36.0	48.0	60.0	52.2	78.0	104.4	130.0	41.2	61.8	82.4	103.0	78.2	117.3	į
4"		23.7	35.5	47.3	59.2	-	27.7	36.9	46.2	27.2	40.8	54.4	68.0	21.3	32.0	42.7	53.3	46.4	69.3	90,0	90.0	36.6	54.9	73.2	90.0	69.5	90.0	
0"		21.3	31.9	42.6	53.2		24.9	33.2	41.6	24.5	36.8	49.0	61.3	=	28.8	38.5	48.1	41.8	62.7	83.6	90.0	32.9	49.3	65.8	82.2	62.6	90.0	-
6"		-	29.0	38.7	48.4		22.7	30.2	37.8	22.3	33.4	44,6	55.7	-	26.2	35.0	43.7	38.0	57.0	76.0	90.0	29.9	44.9	59.8	74.8	56.9	85.3	
2"			26.6	35.5	44.4		20.8	27.7	34.6	20.4	30.6	40.9	51.1	1.0.1	24.0	32.1	40.1	34.8	52.2	69.6	87.0	27.4	41.1	54.8	68.5	52.1	78.2	
0"		40.6	60.8	81.1	90.0	31.7	47.5	63.3	79.2	46.6	69.9	90.0	90.0	36.6	54.9	73.1	90.0	79.5	90.0	90.0	90.0	62.8	90.0	90.0	90.0	90.0	90.0	•
6"		33.8	50.7	67.6	84.5	26.4	39.6	52.8	66.0	38.9	58.3	77.7	90,0	30.5	45.7	61.0	76.2	66.3	90.0	90.0	90.0	52.3	78.5	90.0	90.0	90.0	90.0	į
2"		29.0	43.5	57.9	72.4	22.6	33.9	45.2	56.5	33.3	50.0	66.6	83.3	26.1	39.2	52.2	65.3	56.8	84.9	90.0	90.0	44.8	67.3	89.7	90.0	85.1	90.0	-
3"	126"	25.4	38.0	50.7	63.4	G-21.	29.7	39.6	49.5	29.1	43.7	58.3	72.9	22.9	34.3	45.7	57.1	49.7	74.3	90.0	90.0	39.2	58.9	78.5	90.0	74.5	90.0	
1"		22.5	33.8	45.1	56.3	€.	26.4	35.2	44.0	25.9	38.9	51.8	64.8	20.3	30.5	40.6	50.8	44.2	66.0	88.4	90.0	34.9	52.3	69.8	87.2	66.2	90.0	
)"		20.3	30.4	40.6	50.7	CEL	23.7	31.7	39.6	23.3	35.0	46.7	58.4	1,4	27.5	36.6	45.8	39.8	59.7	79.6	90.0	31.3	47.0	62.7	78.3	59.6	89.4	
0"		38.7	58.1	77.4	90.0	30.2	45.3	60.5	75.6	44.5	66.8	89.0	90.0	34.9	52.4	69.8	87.3	75.9	90.0	90.0	90.0	59.9	89.9	90.0	90.0	90.0	20000	
5"		32.3	48.4	64.5	80.7	25.2	37.8	50.4	63.0	37.1	55.6	74.2	90.0	29.1	43.6	58.2	72.7	63.3	90.0	90.0	90.0	49.9	74.9	90.0			90.0	
2"	132"	27.7	41.5	55.3	69.1	21.6	32.4	43.2	54.0	31.8	47.7	63.6	79.5	24.9	37.4	49.9	62.3	54.2	81.0	90.0	90.0	7.50			90.0	90.0	90.0	
3"	102	24.2	36.3	48.4	60.5	10	28.3	37.8	47.2	27.8	41.7	55.6	69.5	21.8	32.7	43.6	54.5	47.5	70.9	90.0	90.0	42.8 37.5	64.2	85.6	90.0	81.2	90.0	
4"		21.5	32.3	43.0	53.8	D#OIL	25.2	33.6	42.0	24.8	37.1	49.5	61.9	-	29.1	38.9	48.6	42.2	53.3	84.4	90.0		56.2	74.9	90.0	71.1	90.0	
D*		-	29.0	38.7	48.4	-	22.7	30.2	37.8	22.3	33.4	44.6	55.7	-	26.2	35.0	43.7	38.0	57.0		500 V 0 H	33.2	49.8	66.5	83.1	63.2	90.0	
)"		37.0	55.6	74.1	92.6	28.9	43.4	57.8	72.3	42.6	63.9	85.1	90.0	33.4	50.1	66.8	83.5	72.6	90.0	76.0	90.0	29.9	44.9	59.8	74.8	56.9	85.3	
5"		30.9	46.3	61.7	77.2	24.1	36.1	48.2	60.2	35.5	53.2	71.0	88.7	27.8	41.7	55.7	1000		10117	90.0	90,0	57.3	86.0	90.0	90.0	90.0	90.0	
			39.7	52.9	66.1	20.7	31.0	41.3	51.6	30.4	45.6	60.8	76.0	23.9	-		69.6	60.5	90.0	90.0	90.0	47.8	71.7	90.0	90.0	90.0	90.0	
311	138	23.1	34.7	46.3	57.9	-	27.1	36.1	45.2	26.6	39.9	53.2		N75 N	35.8	47.7	59.6	51.9	77.5	90.0	90.0	40.9	61.4	81.9	90.0	77.7	90.0	
in .	-	20.6	30.9	41.2	51.4	L.	24.1	32.1	40.2	23.7	100		66.5	20.9	31.3	41.7	52.2	45.4	67.8	90.0	90.0	35.8	53.7	71.7	89.6	68.0	90.0	1
		-1	27.8	37.0	46.3	-	21.7	28.9			35.5	47.4	59.2	-	27.9	37.2	46.5	40.4	60.5	80.7	90.0	31.8	47.7	63.6	79.5	60.4	90.0	
w ·		35.5	53.2	71.0	88.7	27.7	41.6		36.1	21.3	32.0	42.6	53.3	70.0	25.1	33.4		36.3	54.5	72.7	90.0	28.6	42.9	57.2	71.5	54.4	81.6	
	-	29.6	44.4	59.2				55.4	69.3	40.8	61.2	81.6	90.0	32.0	48.0	64.0	80.0	69.6	90.0	90.0	90.0	54.9	82.4	90.0	90.0	90.0	90.0	
,,	13.	25.4	-		73.9	23.1	34.6	46.2	57.7	34.0	51.0	68.0	85.0	26.7	40.0	53.3		58.0	86.7	90.0	90.0	45.8	68.7	90.0	90.0	86.9	90.0	
	144	1	38.0	50.7	63.4		29.7	39.6	49.5	29.1	43.7	58.3	72.9	22.9	34.3	45.7	57.1	49.7	74.3	90.0	90.0	39.2	58.9	78.5	90.0	74.5	90.0	
."	H	22.2	33.3	44.4	55.5	e.	26.0	34.6	43.3	25.5	38.3	51.0	63.8	20.0	30.0	40.0	50.0	43,5	65.0	87.0	90.0	34.3	51.5	68.7	85.8	65.2	90.0	1
		-	29.6	39.4	49.3	75-		30.8	38.5	22.7	34.0	45.4	56.7	7	26.7	35.6	44.5	38.7	58.0	77.4	90.0	30.5	45.7	60.9	76.1	57.9	86.9	İ
)"		_	26.6	35.5	44.4	nc=di	20.8	27.7	34.6	20.4	30.6	40.9	51.1		24.0	32.1	40.1	34.8	52.2	69.6	87.0	27.4	41.1	54.8	68.5	52.1	78.2	Í

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED. SEE SHEET 5 FOR ANCHOR TYPES.

JUL 1 3 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 E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5158

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-0724.11

Expiration Date <u>04/03/2028</u>

By Miami-Dade Product Control

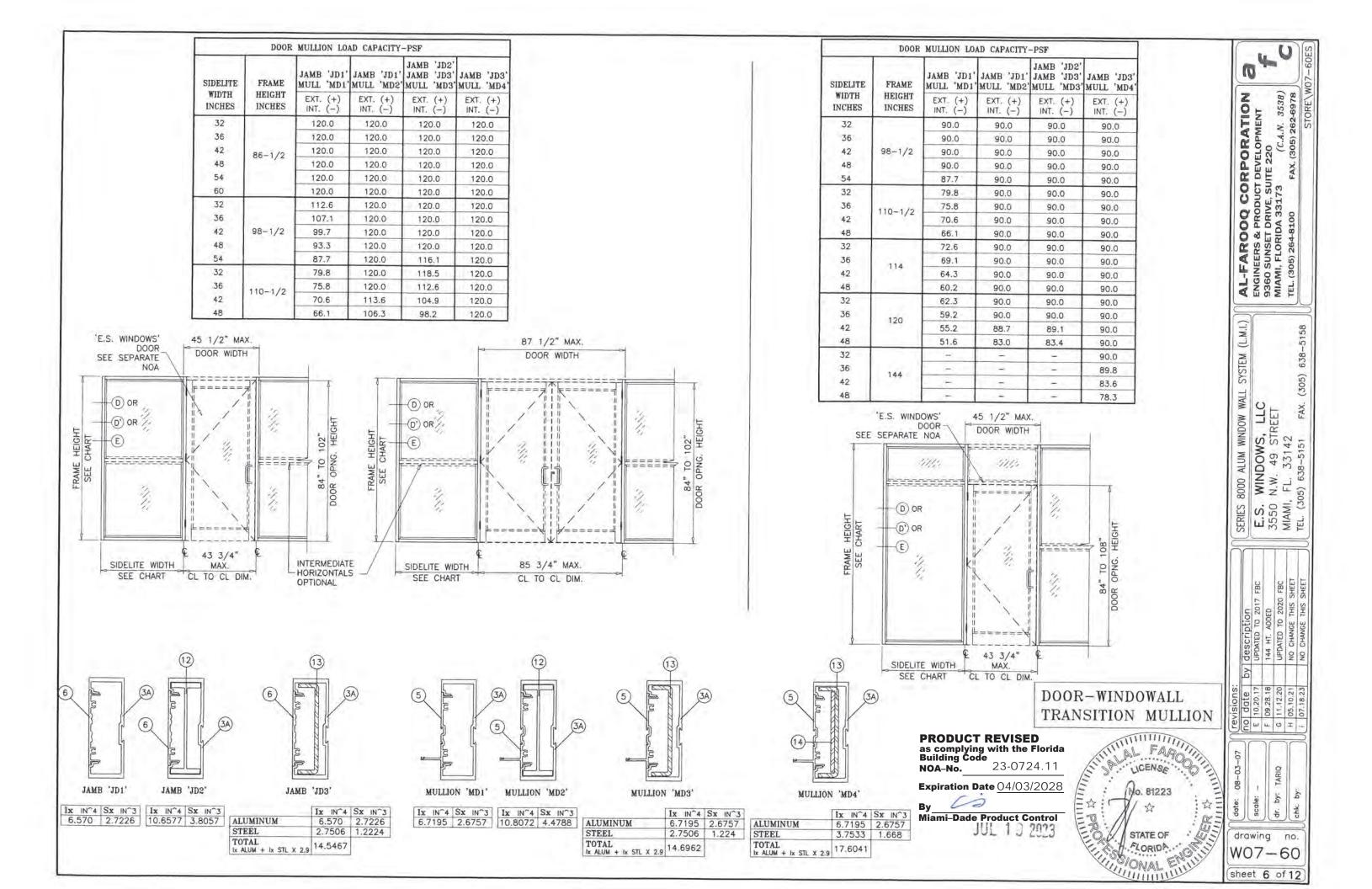
ANCHORS

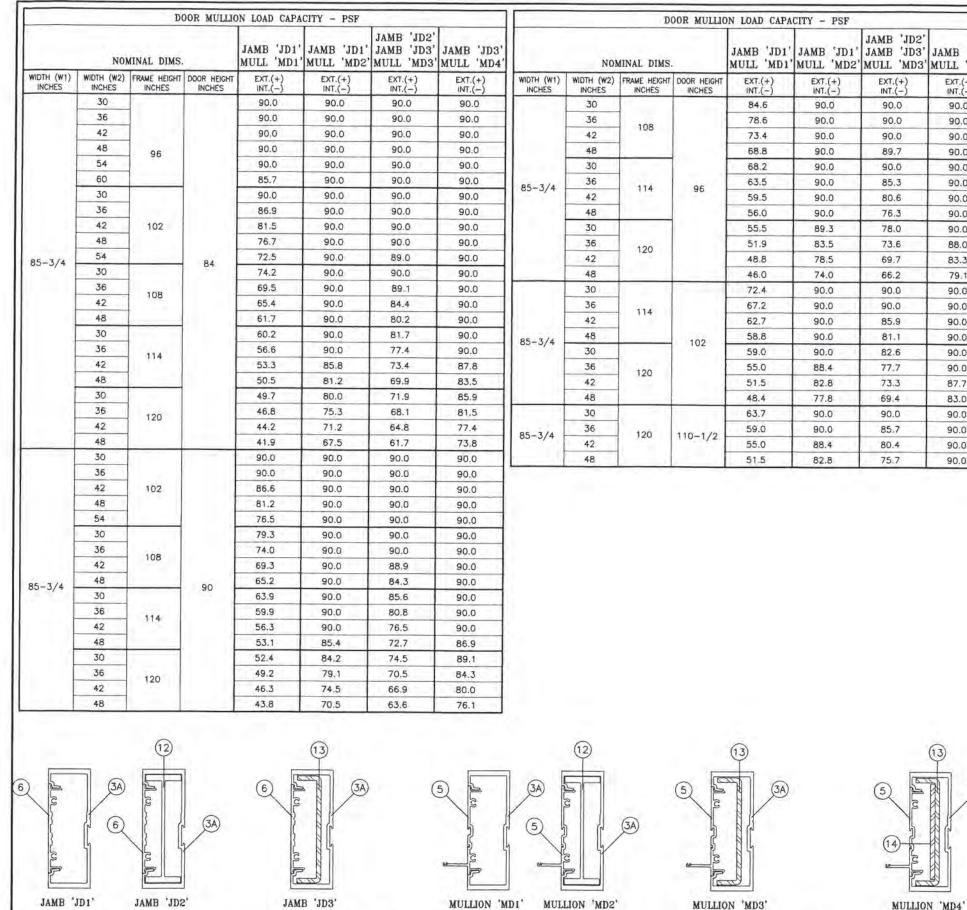


| Scale: - | Control of the control

drawing no.

W07-60 sheet 5.2 of 12





Ix IN^4 Sx IN^3 | Ix IN^4 Sx IN^3 | 6.7195 | 2.6757 | 10.8072 | 4.4788

Ix IN^4 Sx IN^3 6.570 2.7226

2.7506 1.2224

ALUMINUM

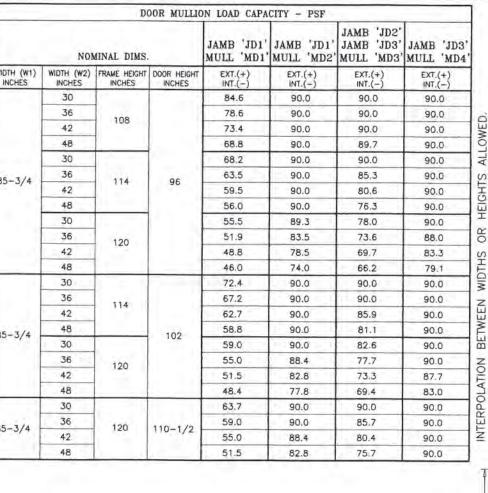
Ix ALUM + Ix STL X 2.9 14.5467

STEEL

TOTAL

Ix IN-4 Sx IN-3 Ix IN-4 Sx IN-3

6.570 2.7226 10.6577 3.8057



Ix IN'4 Sx IN'3

6.7195 2.6757

1.224

ALUMINUM

Ix ALUM + Ix STL X 2.9 17.6041

STEEL

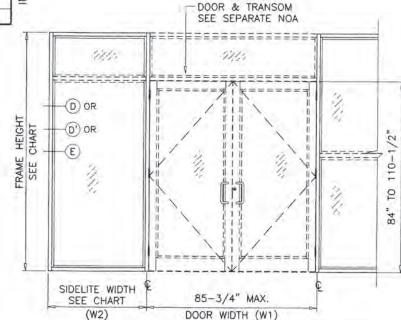
TOTAL

ALUMINUM

1x ALUM + 1x STL X 2.9 14.6962

STEEL

TOTAL



'E.S. WINDOWS'

DOOR-WINDOWALL TRANSITION MULLION

**PRODUCT REVISED** as complying with the Florida **Building Code** 23-0724.11 NOA-No.

**Expiration Date** 04/03/2028

Miami-Dade Product Control

Ix IN'4 Sx IN'3 6.7195 2.6757

3.7533 1.668



revisions:	no date	E 10.20.17	F 09.28.18	G 11.12.20	H 05.10.21	1 07.18.23
date: 08-03-07	11	scale: -		dr. by: TARIO	1	cnk. by:

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

SYSTEM

WALL

WINDOW

ALUM

8000

SERIES

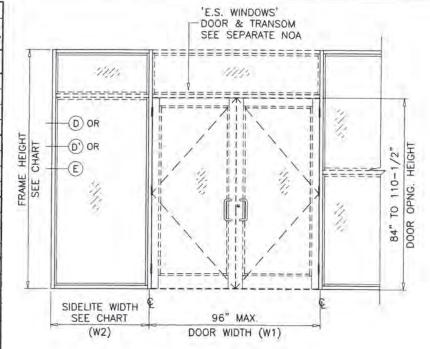
WINDOWS, N.W. 49 STF FL. 33142 (05) 638-5151

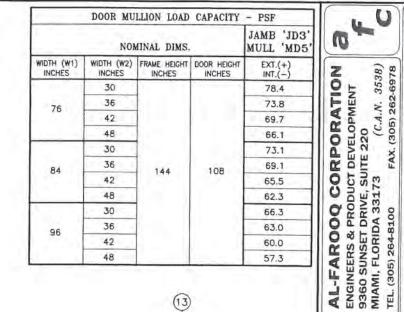
drawing no. W07 - 60

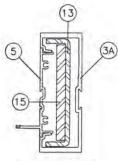
sheet 6.1 of 12

	NO	MINAL DIMS.		JAMB 'JD3' MULL 'MD4
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)
	30			90.0
	36			90.0
	42			90.0
	48	96		90.0
	54	30		90.0
	60			90.0
	30			90.0
	36			90.0
	42	102		90.0
	48			90.0
96	54		84	90.0
90	30		.04	90.0
1	36	100		90.0
	42	108		90.0
	48			89.4
	30			90.0
	36	114		85.5
	42	11.4		81.5
	48			77.8
	30			79.1
	36	120		75.3
	42	120		71.8
	48			68.7
	30			90.0
	36			90.0
	42	102		90.0
	48		90.0	
	54			90.0
	30			90.0
	36	108		90.0
	42	100		90.0
96	48		90	90.0
22	30			90.0
	36	114		89.5
	42	1,14		85.1
	48			81.1
	30			82.1
	36	120	I	78.0
	42		1	74.3

	NO	MINAL DIMS.		JAMB 'JD3 MULL 'MD4			
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)			
	30			90.0			
	36	108		90.0			
	42	100		90.0			
	48	-		90.0			
	30			90.0			
96	36	114	96	90.0			
30	42	114	30	89.8			
	48			85.3			
	30			86.1			
	36	120		81.6			
	42	120		77.5			
	48			73.9			
	30			90.0			
	36	114		90.0			
	42	114		90.0			
96	48		102	90.0			
30	30		102	90.0			
	36	120		86.3			
	42	120		81.8			
	48			77.7			
	30			90.0			
96	36	120	110-1/2	90.0			
30	42	120	1/2	90.0			
	48			85.1			
	30			57.0			
96	36	144	108	54.2			
50	42	133	100	51.6			
	48	i de la companya de l	p	49.2			







MULLION 'MD5'

	Ix IN^4	Sx IN-3
ALUMINUM	6.7195	2.6757
STEEL	4.7506	2.1114
TOTAL	20.3598	

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 23-0724.11

Expiration Date  $\underline{04/03/2028}$ 

By \_\_\_\_\_\_ Miami-Dade Product Control

DOOR-WINDOWALL TRANSITION MULLION



JUL 1 J 2023

revisions:	no date		F 09.28.18	G 11.12.20	H 05.10.21	
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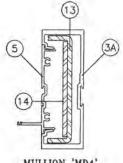
E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151 FAX. (

drawing no.
W07-60
Sheet 6.2 of 12

		(13)			
6	La lon	Sum.		(3A)	
	TO TO	The state of the s			
	JAMB	'JD	3,		

70.9

	Ix IN 4	Sx IN 3
ALUMINUM	6.570	2.7226
STEEL	2.7506	1.2224
TOTAL Ix ALUM + Ix STL X 2.9	14.5467	

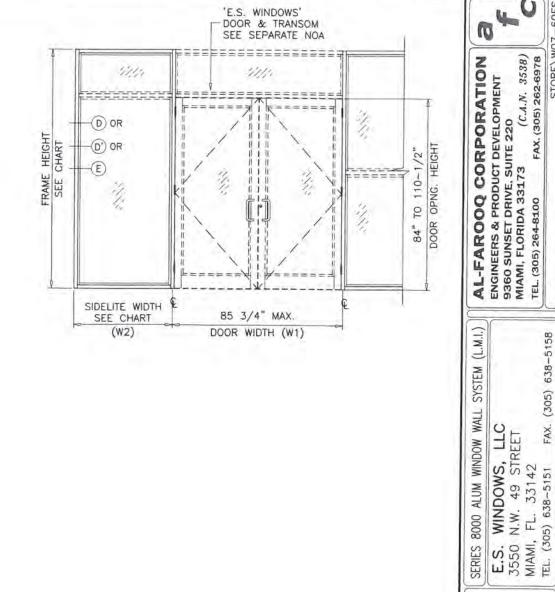


MULLION 'MD4'

	Ix IN 4	Sx IN'3
ALUMINUM	6.7195	2.6757
STEEL	3.7533	1.668
TOTAL Ix ALUM + Ix STL X 2.9	17.6041	

	NO	MINAL DIMS.		'C4'	'C5'	'C6'
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
	30		INCIDES	89.6	90.0	90.0
	36			85.0	90.0	90.0
	42			80.8	90.0	90.0
	48	96		77.0	90.0	90.0
	54			73.6	90.0	90.0
	60			70.4	88.0	90.0
	30			86.0	90.0	90,0
	36	N = 11		81.5	90.0	90.0
	42	102		77.4	90.0	90.0
	48				73.8	90.0
85-3/4	54			84	70.4	88.0
85-3/4	30			82.7	90.0	90.0
	36			78.3	90.0	90.0
	42			74.3	90.0	90.0
	48			70.8	88.4	90.0
	30			79.7	90.0	90.0
	36	114	1	75.4	90.0	90.0
	42			71.5	89.4	90.0
	48			68.0	85.0	90.0
	30			76.9	90.0	90.0
	36	120	120	1	72.6	90.0
1	42			120		68.9
	48			65.4	81.8	90.0
	30		120	84.1	90.0	90.0
	36			79.7	90.0	90.0
	42	120		75.8	90.0	90.0
	48			72.3	90.0	90.0
	54			69.1	86.4	90.0
3	30			80.9	90.0	90.0
	36	108		76.7	90.0	90.0
	42	.,,,,,		72.9	90.0	90.0
5-3/4	48		90	69.4	86.8	90.0
	30			78.0	90.0	90.0
	36	114		73.9	90.0	90.0
	42	1.3		70.1	87.7	90.0
	48			66.8	83.5	90.0
	30			75.3	90.0	90.0
	36	120		71.2	89.1	90.0
1	42	11.75.7		67.6	84.5	90.0
	40					4 4 1 1 2

	NO	MINAL DIMS.	1 2	'C4'	'C5'	'C6'		
WIDTH (W1) INCHES	WIDTH (W2)	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)		
	30			79.2	90,0	90.0		
	36 42	108		75.1	90.0	90.0		
		108		71.5	89.3	90.0		
	48			68.1	85.2	90.0		
	30		0 15	76.4	90.0	90.0		
85-3/4	36	114	96	72.4	90.0	90.0		
05-3/4	42	120	30	68.8	86.0	90.0		
- 1- 1	48			65.6	82.0	90.0		
	30		7 [	73.8	90.0	90.0		
	36		120	120		69.9	87.4	90.0
	42					66.4	83.0	90.0
	48			63.2	79.0	90.0		
	30			74.9	90.0	90.0		
	36	114		71.0	88.8	90.0		
	42	114		67.6	84.5	90.0		
85-3/4	48 30	-	102	64.4	80.5	90.0		
			102	72.4	90.0	90.0		
	36	120		68.6	85.7	90.0		
	42	120		65.2	81.5	90.0		
	48			62.1	77.7	90.0		
	30		-	70.4	88.0	90.0		
85-3/4	36	120	110-1/2	66.8	83.5	90.0		
00-3/4	42	120	110-1/2	63.6	79.5	90.0		
	48		1	60.7	75.9	90.0		



PRODUCT REVISED as complying with the Florida Building Code NOA-No. 23-0724.11

Expiration Date 04/03/2028

00 By Miami-Dade Product Control

TRANSITION MULLION ANCHORS

JUL 1 J 2023

'C4' AT SILL ALL CASES

date: 08-03-07	))(re	revisions:		
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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.J.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

drawing no. W07-60

sheet 7 of 12

6" 3" TYP.	6" 3" TYP.	6" 3" TYP.
<u> </u>	<u> </u>	<u> </u>
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		III li
<u>'C4'</u>	<u>*C5'</u>	<u>'C6'</u>

# ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION

C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION

C5 = (5) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION

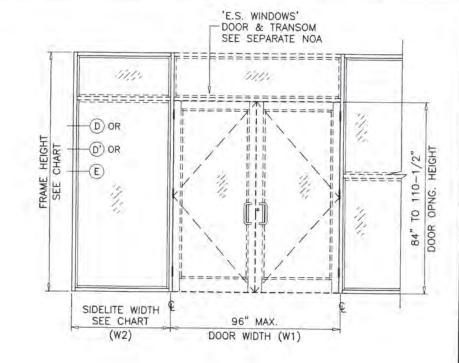
C6 = (6) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION

ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.

	NO	MINAL DIMS.		'C4'	'C5'	'C6'	
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	
	30		NO.ALS	82.4	90.0	90.0	
		36		- 3	78.5	90.0	90.0
	42			74.9	90.0	90.0	
	48	96		71.7	89.6	90.0	
	54			68.7	85.8	90.0	
96	60			65.9	82.4	90.0	
	30			79.2	90.0	90.0	
	36			75.3	90.0	90.0	
	42	102		71.8	89.8	90.0	
	48			68.7	85.8	90.0	
	54		84	65.8	82.2	90.0	
	30			76.2	90.0	90.0	
	36	108		72.4	90.0	90.0	
	42			69.0	86.3	90.0	
	48			65.9	82.4	90.0	
	30			73.4	90.0	90.0	
	36	114		69.8	87.2	90.0	
	42	1550		66.4	83.0	90.0	
	48			63.4	79.2	90.0	
	30			70.9	88.6	90.0	
	36	120	120		67.3	84.1	90.0
1	42			120		64.0	80.0
	48			61.0	76.3	90.0	
	30	120		77.3	90.0	90.0	
1	36	120		73.7	90.0	90.0	
	42	102		70.3	87.9	90.0	
1	48			67.3	84.1	90.0	
	54			64.5	80.6	90.0	
	30			74.5	90.0	90.0	
	36	108		70.9	88.6	90.0	
	42	100		67.6	84.5	90.0	
96	48		90	64.6	80.8	90.0	
50.0	30			71.8	89.8	90.0	
	36	114		68.3	85.4	90.0	
	42	6.2		65.1	81.4	90.0	
	48			62.2	77.7	90.0	
1	30		17	69.4	86.7	90.0	
	36	120		65.9	82.4	90.0	
1	42	7.5		62.8	78.5	90.0	
	48			59.9	74.9	89.9	

	NO	MINAL DIMS.		'C4'	'C5'	'C6'					
WIDTH (W1)	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)					
	30			72.8	90.0	90.0					
	36	100		69.4	86.7	90.0					
	42	108		66.3	82.8	90.0					
96	48		1	63,4	79.2	90.0					
	30			70,3	87.9	90.0					
	36	114	96	66.9	83.7	90.0					
	42	114	30	63.8	79.8	90.0					
	48			61.0	76.3	90.0					
	30	7		68.0	84.9	90.0					
	36	120		64.6	80.8	90.0					
	42	120		61.6	77.0	90.0					
	48	I		58.9	73.6	88.3					
	30			68.8	86.1	90.0					
	36	114		65.6	82.0	90.0					
	42		114		62.6	78.3	90.0				
96	48		102	102	102	102	102	102	102 59.9	74.9	89.9
96	30	120		66.6	83.2	90.0					
	36			63.4	79.2	90.0					
	42	120		60.5	75.6	90.0					
	48			57.8	72.3	86.7					
96	30	t =		64.7	80.9	90.0					
	36	120	110-1/2	61.7	77.1	90.0					
	42	120	110-1/2	58.9	73.7	88.4					
	48			56.4	70.5	84.6					
	30			57.8	72.3	86.7					
96	36	144	108	54.9	68.7	82.4					
30		100	52.3	65.4	78.5						
	48			49.9	62.4	74.9					

'C6'



PRODUCT REVISED as complying with the Florida Building Code NOA-No. 23-0724.11

**Expiration Date** <u>04/03/2028</u>

00 Miami-Dade Product Control

TRANSITION MULLION ANCHORS

'C4' AT SILL ALL CASES

### ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION

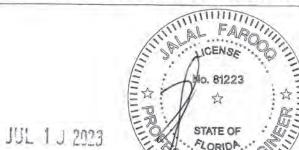
'C5'

TYP.

'C4'

- C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION
- C5 = (5) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION
- C6 = (6) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION

ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.



by:

drawing no.

W07-60

sheet 7.1 of 12

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

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

(C.A.N. 3538) FAX. (305) 262-6978

