NOTICE OF ACCEPTANCE (NOA)

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

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

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

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

DESCRIPTION: Series “EL-150” Aluminum Fixed Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. W16-70, titled “ES-EL150 Fixed Aluminum Wdw. (L.M.I)”, sheets 1, 2, 2.1, 3, 3.1, 4 and 5 through 9 of 9, dated 11/13/16, with revision D dated 06/12/21, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E., bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, Barranquilla, Colombia, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

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

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

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

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

This NOA renews NOA No. 21-0708.03 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 Manuel Perez, P.E.
E.S. Windows, LLC

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. 16-0617.05)
   2. Drawing No. W16-70, titled “ES-EL150 Fixed Aluminum Wdw. (L.M.I)”, sheets 1, 2, 2.1, 3, 3.1, 4 and 5 through 9 of 9, dated 11/13/16, with revision D dated 06/15/21, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq, P.E.
      (Submitted under NOA No. 21-0708.03)

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
      6) Safety Performance Test, (class A) per ANSI Z97.1
      along with marked-up drawings and installation diagram of a series EL-150 aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-12002, dated 04/30/20, signed and sealed by Idalmis Ortega, P.E.
      (Submitted under NOA No. 20-1223.01)
   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) Safety Performance Test, (class A) per ANSI Z97.1
      along with marked-up drawings and installation diagram of a series EL-150 aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-11035, dated 04/30/20, signed and sealed by Idalmis Ortega, P.E.
      (Submitted under NOA No. 20-1223.01)
   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) Safety Performance Test, (class A) per ANSI Z97.1
      along with marked-up drawings and installation diagram of a series EL-150 aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-11027, dated 04/23/20, signed and sealed by Idalmis Ortega, P.E.
      (Submitted under NOA No. 20-1223.01)
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
   along with marked-up drawings and installation diagram of aluminum fixed window,
   prepared by Blackwater Testing, Inc., Test Report No. BT-ESW-16-004, dated
   11/14/16, and revised on 05/10/17, signed and sealed by Constantin Bortes, P.E.
   (Submitted under NOA No. 16-0617.05)
5. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
   2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
   along with marked-up drawings and installation diagram of aluminum fixed window,
   prepared by Blackwater Testing, Inc., Test Report No. BT-ESW-17-012, dated
   05/10/17, signed and sealed by Constantin Bortes, P.E.
   (Submitted under NOA No. 16-0617.05)

C. CALCULATIONS
1. Anchor verification calculations and structural analysis, complying with FBC 5th
   Edition (2014), dated 11/16/16, revised on 12/21/16, updated on 11/09/20 to comply
   with FBC 7th Edition (2020) and further revised on 06/29/21 to include additional
   window sizes, prepared by Al-Farooq Corporation, signed and sealed by Jalal Farooq,
   P.E.
   (Submitted under NOA No. 21-0708.03)
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. 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.
2. 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.
3. Notice of Acceptance No. 20-0622.03 issued to Eastman Chemical Company (MA)
   for their “Saflex Storm - Saflex and Saflex HP Composite Glass Interlayers with
   PET Core” dated 08/06/20, expiring on 12/11/23.
4. Notice of Acceptance No. 20-0622.02 issued to Eastman Chemical Company (MA)
   for their “Saflex HP Clear or Color Glass Interlayers” dated 08/06/20, expiring on
   04/14/23.

Manuel Pérez, P.E.
Product Control Examiner
NOA No. 22-0105.01
Expiration Date: May 18, 2027
Approval Date: February 10, 2022
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

F. STATEMENTS
3. Proposal No. 18-0784 issued by the Product Control Section, dated June 29, 2018, signed by Manuel Perez, P.E. (Submitted under NOA No. 20-1223.01)
4. Proposal No. 19-1230 issued by the Product Control Section, dated November 18, 2019, signed by Manuel Perez, P.E. (Submitted under NOA No. 20-1223.01)

G. OTHERS
1. Notice of Acceptance No. 20-1223.01, issued to E.S. Windows, LLC, for their Series “EL-150” Aluminum Fixed Window – L.M.I., approved on 04/22/21 and expiring on 05/18/22.
E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED
   A. DRAWINGS
      1. None.

   B. TESTS
      1. None.

   C. CALCULATIONS
      1. None.

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

   E. MATERIAL CERTIFICATIONS
      1. Notice of Acceptance No. 20-0915.22 issued to Kuraray America, Inc. for their “Trosifol® Ultracear, Clear and Color PVU Glass Interlayers” dated 11/19/20, expiring on 07/08/24.
      2. 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.
      3. Notice of Acceptance No. 20-0622.03 issued to Eastman Chemical Company (MA) for their “Saflex Storm - Saflex and Saflex HP Composite Glass Interlayers with PET Core” dated 08/06/20, expiring on 12/11/23.
      4. Notice of Acceptance No. 20-0622.02 issued to Eastman Chemical Company (MA) for their “Saflex HP Clear or Color Glass Interlayers” dated 08/06/20, expiring on 04/14/23.

   F. STATEMENTS

   G. OTHERS
      1. Notice of Acceptance No. 21-0708.03, issued to E.S. Windows, LLC, for their Series “EL-150” Aluminum Fixed Windows – L.M.I., approved on 09/02/21 and expiring on 05/18/22.
**ES-FL150**

**FIXED ALUMINUM WINDOW**

Design load ratings for these windows to be as per charts shown on sheets 3 and 3.1.

Approval applies to single units or side by side combinations of fix/fix, or fixed with other window types in modules of two or more windows using Miami-Dade County approved mullions in between. Lower design pressure from windows or mullion approval will apply to entire system.

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 manufacturer’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 officials.

Design loads shown are based on ‘allowable stress design (ASD)’.

**PRODUCT RENEWED**

as complying with the Florida Building Code

NOA-No.: 22-0105.01

Expiration Date: 05/18/2027

By: [Signature]

Miami-Dade Product Control

Windows with fin frame adapters limited to glass types ‘A’, ‘AA’, ‘BB’, ‘DD’ & ‘EE’ only

**DAYLITE OPENINGS:**

D.O. HEIGHT = WINDOW HEIGHT – 3.125"

D.O. WIDTH = WINDOW WIDTH – 3.125"

Windows with glass types ‘AA’, ‘BB’ & ‘AA’ comply with requirements of ANSI 297.1

These windows are rated for large & small missile impact. Splitters are not required.

**PRODUCT REVISED**

as complying with the Florida Building Code

NOA-No.: 21-0708.03

Expiration Date: 05/18/2022

By: [Signature]

Miami-Dade Product Control
GLASS TYPE ‘AA’
7/16" OVERALL LAM. GLASS

1/8" TEMPLE GLASS

1/8" TEMP. AIR SPACE

5/16" AIR SPACE CONSISTING OF:
SPACER:
'HELMA' LOW PROFILE ALUMINUM SPACER
BY 'LINGERMA STUD ENGB' AROUND THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:
SILICONE
DOWSIL 791
GE 2000

GLASS TYPE ‘AA’
7/8" OVERALL INSUL. LAM. GLASS
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NOTE: Width and length dimensions can be oriented vertically or horizontally as shown above.

NOTE: Glass capacities on this sheet are based on ASTM E1300-09 (3 SEC. GUSTS.)
### Design Load Capacity - PSF

**Design Load Capacity - PSF**

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#### Window Dimensions

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**Note:**

- Width and length dimensions can be oriented vertically or horizontally as shown above.
- Glass capacities on this sheet are based on ASTM E1300-09 (3 sec. gusts).
- Allowing 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 allowing loads from those shapes.

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**Product Revised**

As complying with the Florida Building Code

**NOA No:** 21-0708.03

**Expiry Date:** 05/18/2022

**By:** Miami-Dade Product Control

**Product Renewed**

As complying with the Florida Building Code

**NOA No:** 22-0105.01

**Expiry Date:** 05/18/2022

**By:** Miami-Dade Product Control
WOOD BUCKS AND METAL STRUCTURE NOT BY 'E.S. WINDOWS' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

1/4" DIA. TAPCON BY "DW" (Fy=125 KSI, Fv=100 KSI)
1/4" DIA. ULTRACON- BY "DEWALT" (Fy=164 KSI, Fv=148 KSI)

INTO 2" BY WOOD BUCKS OR WOOD STRUCTURES
1 1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)
THRU 1" BY BUCKS INTO CONC. OR MASONRY
1 1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1 1/4" MIN. EMBED INTO MASONRY (JAMBS)

DIRECTLY INTO CONCRETE OR MASONRY
1 1/2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1 1/4" MIN. EMBED INTO MASONRY (JAMBS)

1/4" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)
INTO MIAMI-DADE COUNTY APPROVED MULLIONS OR
INTO METAL STRUCTURES (HEAD/SILL/JAMBS)
(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)

TYPICAL EDGE DISTANCE
INTO CONCRETE AND MASONRY = 2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.
WOOD AT HEAD, SILL OR JAMB 50 = 0.55 MIN.
CONCRETE AT HEAD, SILL OR JAMB F'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS F'c = 2000 PSI MIN.

PRODUCT RENEWED
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PRODUCT REVISED
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NOA-No. 21-0708.03
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**TYPICAL ANCHORS:** See Elev. for Spacing

#10 Wood Screws (Grade 3 CRS)

Into 2" by 4" wood bucks or wood structures

1-1/2" Min. penetration into wood

**INSTALLATION DETAILS WITH FIN FRAME ADAPTERS**

See Sheets 4 & 5 for window details

**PRODUCT RENEWED**

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NOA-No. 22-0105.01

Expiration Date: 05/18/2027

By: Manuel Sano

Miami-Dade Product Control

**PRODUCT REVISED**

as complying with the Florida Building Code

NOA-No. 21-0708.03

Expiration Date: 05/18/2022

By: Manuel Sano

Miami-Dade Product Control
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PRODUCT RENEWED
as complying with the Florida Building Code
NOA-No. 22-0105.01
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By: Manuel Jerez
Miami-Dade Product Control

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