E.S. Windows, LLC  
10653 N.E. Quaybridge Ct.  
Miami, FL 33138  

**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 4000 Aluminum Sliding Glass Door w/ Reinforcements-LMI  
**APPROVAL DOCUMENT:** Drawing No. W03-100 Rev O, titled “Series-4000 Aluminum Sliding Glass Door (LMI), sheets 1 through 7 of 7, prepared by Al-Farooq Corporation, dated 11/08/03 and last revised on SEP 07, 2017, signed and sealed by Javad Ahmad, 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

**Limitations:**  
1. See sheet 2 for Design Pressure (DP) Vs Glass types, size & reinforcing levels for (4) Panels or less configured SGD and sheet 2 for taller (2) panels configured OX, XO or XX w/ Heavy Duty reinforcing. Exterior (positive) design pressures are limited to +70 PSF w/ 2-1/2” sill & up to +85 PSF w/ 3-1/4” sill for OX or XO and +80 PSF w/ 3-1/4” sill for XX door.  
2. Max. Door frame area not to exceed 96”x192” = 128 ft² (4-panel) or 98”x111” = 75.5 ft² (2-HD panel), corresponding to the tested area.

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, Barranquilla, Columbia, state and series and following statement: "Miami-Dade County Product Control Approved", 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 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 #17-0505.05 and consists of this page 1 and evidence pages E-1, E-2 & E-3, as well as approval document mentioned above. The submitted documentation was reviewed by Ishaq I. Chanda, P.E.
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous approvals

A. DRAWINGS
   1. Manufacturer's die drawings and sections (submitted under files below)
   2. Drawing No. W03-100 Rev M, titled “Series-4000 Aluminum Sliding Patio Door (LMI),
      sheets 1 through 7 of 7, prepared by Al-Farooq Corporation, dated 11/08/03 and last revised
      on OCT 21, 2015, signed and sealed by Javad Ahmad, P.E.

B. TESTS (Submitted under files #15-0629.01/#14-0923.11-1115.03/#12-0312.03/#09-0210.07
       and #08-0417.03)
   1. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
      2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
      3) Water Resistance Test, per FBC, TAS 202-94
      4) Large Missile Impact Test per FBC, TAS 201-94
      5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
      6) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94

Along with marked-up drawings and installation diagram of an Aluminum Sliding Glass Door,
prepared by Fenestration Testing Laboratory, Inc., Test Report No(s). FTL-3908, dated
10/09/03, FTL-3909, dated 09/26/03, FTL-3910, dated 09/30/03 and FTL-4287, dated 09/22/04,
signed and sealed by Joseph Chan, P.E. and the Test Report No. FTL-4287, dated 09/22/04,
signed and sealed by Edmundo Largaespada, P.E.

2. Additional Reference test reports No. FTL-5471, dated 01/24/08 and FTL 7894 (Tandem
   Nylon Rollers), per TAS 201/203-94, issued by Fenestration Testing Lab, signed & sealed
   by Michael Wenzel, P.E. and Idalmis Ortega, P.E., respectively.

C. CALCULATIONS
   1. Anchor verification calculation, complying w/ FBC 2014(5th Edition), dated 07/31/2015,
      prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
   2. Glazing complies with ASTME-1300-02,-04 & -09.

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

E. MATERIAL CERTIFICATIONS
   1. Notice of Acceptance No. 14-0916.11 issued to Kuraray America, Inc. (Former E.I.
      DuPont DeNemours & Co., Inc. for the “Sentry Glass ® (Clear and White) Glass
      Interlayers”, expiring on 07/04/18.
   2. Notice of Acceptance No. 14-0916.10 issued to Kuraray America, Inc. (Former E.I.
      DuPont DeNemours & Co., Inc. for the “Kurray Butacite PVB Interlayers”, expiring on

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 18-0905.06
Expiration Date: March 18, 2024
Approval Date: October 18, 2018
E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS
1. Statement letter of compliance to FBC 2014 (5th Edition) and of no financial interest issued by Al-Farooq Corp., dated 07/29/15, signed and sealed by Javad Ahmad, P.E.
2. Statement of Lab compliance, part of above test reports.
3. Distribution agreement dated 03/05/14 between ES Windows, LLC & Energia Solar, SA, and Colombia, signed by Andres Chamorro (Gen MGR) and Clara Garcia (Sales MGR), respectively on behalf of their companies (submitted under #13-1115.03)

G. OTHER
1. This NOA revises NOA #14-0923.11, expiring March 18, 2019.
2. Tent proposal # 07-3815, approved by BCCO and dated 07/01/14 by RER.

2. Evidence submitted under previous approval

A. DRAWINGS
1. Manufacturer's die drawings and sections.
2. Drawing No. W03-100 Rev O, titled “Series-4000 Aluminum Sliding Glass Door (LMI), sheets 1 through 7 of 7, prepared by Al-Farooq Corporation, dated 11/08/03 and last revised on SEP 07, 2017, signed and sealed by Javad Ahmad, P.E.

B. TESTS
1. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
   2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
   3) Water Resistance Test, per FBC, TAS 202-94
   4) Large Missile Impact Test per FBC, TAS 201-94
   5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
   6) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94

Along with marked-up drawings and installation diagram of an Aluminum Sliding Glass Door, prepared by Blackwater Testing, Inc., Test Report No(s). BT-ESW-15-004, dated 04/18/2016, signed and sealed by YamilG.
Kuri, P.E.

C. CALCULATIONS
1. Anchor verification calculation, complying w/ FBC 2017 (6th Edition), dated 11/18/2016 and last revised on 09-07-17, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

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

E. MATERIAL CERTIFICATIONS
1. Notice of Acceptance No. 16-1117.01 issued to Kuraray America, Inc. (former E.I. DuPont DE Nemours & Co., Inc.) for “Trosifol: Ultra clear, clear & color PVB glass interlayer” (former “Kuraray Butacite PVB Interlayer”), expiring on 07/08/19.

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 18-0905.06
Expiration Date: March 18, 2024
Approval Date: October 18, 2018
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS
   1. Statement letter of conformance to FBC 2014(5th edition) and FBC 2017(6th Edition), dated 09/06/17 prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

G. OTHER
   1. This NOA revises NOA # 15-0629.01, expiring 03/18/2019.

2. New Evidence submitted

A. DRAWINGS
   1. Drawing No. W03-100 Rev O, titled “Series-4000 Aluminum Sliding Glass Door (LMI), sheets 1 through 7 of 7, prepared by Al-Farooq Corporation, dated 11/08/03 and last revised on SEP 07, 2017, signed and sealed by Javad Ahmad, P.E.

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. 16-1117.01 issued to Kuraray America, Inc. (former E.I. DuPont DE Nemours & Co., Inc.) for “Trosifol: Ultra clear, clear & color PVB glass interlayer” (former “Kuraray Butacite PVB Interlayer”), expiring on 07/08/19.

F. STATEMENTS
   1. Statement letter dated AUG 27, 2018 for renewal and still conformance to FBC 2017 (6th edition), prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

G. OTHER
   1. This NOA renews NOA # 17-0505.05, expiring 03/18/2024.

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 18-0905.06
Expiration Date: March 18, 2024
Approval Date: October 18, 2018
DOORS GLAZED WITH LAMINATED GLASS RATED FOR LARGE & SMALL MISSILE IMPACT AND REQUIRE NO SHUTTERS.

DAYLITE OPENINGS WIDTHS:
FIXED/LOCK STILE-INTERLOCK = PANEL WIDTH = 5.375"
INTERLOCK-ASTRALAG = PANEL WIDTH = 5.625"

DAYLITE OPENING HEIGHT:
PANEL HEIGHT = 5.00"

PANEL HEIGHT = DOOR FRAME HEIGHT = 1.250"

SERIES-4000 ALUM SLIDING GLASS DOOR
DESIGN LOAD RATING FOR DOORS TO BE AS PER CHARTS SHOWN AND APPROVED CONFIGURATIONS ON SHEETS 2 AND 3.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2014 (5TH EDITION)/2017 (6TH EDITION) FLORIDA BUILDING CODE (INTERIOR HURRICANE WIND SPEED ZONE II) (HZ2).

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 EMBEMENT 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-COMPRRESSIBLE, MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSiMMAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2014/2017 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC PRODUCT, I.E., LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THE PRODUCT AND SEALING AROUND OPENINGS FOR WATER INFLATION RESISTANCE ETC.

CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.
SEE SHEET 3 FOR GX, XO OR XX DOORS WITH HEAVY REINFORCING

DESIGN LOAD CAPACITY – PSF
(ALL CONFIGURATIONS SHOWN ON THIS SHEET)
GLASS TYPES: 'A', 'B' OR 'C'

<table>
<thead>
<tr>
<th>NOMINAL PANEL WIDTH</th>
<th>DOOR FRAME HEIGHT</th>
<th>NO REINFORC'D</th>
<th>MEDIUM REINFORC'D</th>
<th>HEAVY REINFORC'D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EXT. (+) INT. (+)</td>
<td>EXT. (+) INT. (+)</td>
<td>EXT. (+) INT. (+)</td>
</tr>
<tr>
<td>36</td>
<td>81 1/4</td>
<td>70.0 80.0</td>
<td>70.0 80.0</td>
<td>70.0 80.0</td>
</tr>
<tr>
<td>54</td>
<td></td>
<td>-</td>
<td>-</td>
<td>70.0 80.0</td>
</tr>
<tr>
<td>30</td>
<td>96</td>
<td>-</td>
<td>-</td>
<td>70.0 80.0</td>
</tr>
</tbody>
</table>

DOOR HEIGHT AND WIDTH SIZE MUST COMPLY WITH EGRESS REQUIREMENTS PER FBC AS REQUIRED.

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC, GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

APPROVED CONFIGURATIONS
DESIGN LOAD CAPACITY – PSF
(OX, XO OR XX ONLY)
HEAVY REINFORCING (SEE DETAIL SHEET 5)

<table>
<thead>
<tr>
<th>PANEL WIDTH</th>
<th>DOOR FRAME HEIGHT</th>
<th>CLASS TYPE 'A'</th>
<th>CLASS TYPE 'B'</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>80.0</td>
<td>103.0</td>
<td>80.0</td>
</tr>
<tr>
<td>36</td>
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</tr>
<tr>
<td>54</td>
<td>72.6</td>
<td>63.5</td>
<td>77.1</td>
</tr>
</tbody>
</table>

For 'XX' doors, limit exterior loads to +80.0 PSF.

The shown ext. (+) loads require 3-1/4" sill height.

Reduce ext. (+) load capacity to +70.0 PSF if 2-1/2" sill height is used.

Int. (-) loads remain unchanged.

Door height and width size must comply with egress requirements for FBC as required.

Typical Elevation (OX) (Shown)
This size to have heavy reinforcing at interlocks (See Sheet 5)

Approved Configurations

Note:
Glass capacities on this sheet are based on ASTM E1300-09 (3 sec. Gusts) and Florida Building Commission Declaratory Statement DCA05-DEC-219.
TYPICAL ANCHORS: SEE ELEV. FOR SPACING

1/4" DIA. ULTRASONIC BY "ELCO" (Fy = 177 KSI, Fy = 155 KSI) INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION INTO WOOD (HEAD/JAMBS)
THRU 1BY BUCKS INTO CONC. OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

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

1/4" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)
INTO MIAMI-DADE COUNTY APPROVED MULLIONS OR
INTO METAL STRUCTURES (HEAD/JAMBS)
(3) THREADS MIN. PENETRATION BEYOND SUBSTRATE
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLAYED OR PAINTED)

TYPICAL EDGE DISTANCE
INTO CONCRETE AND MASONRY = 2-1/2" MIN.
INTO WOOD STRUCTURE = 3/4" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD OR JAMBS SP = 0.55 MIN.
CONCRETE AT HEAD, SILL OR JAMBS Fc = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS F'm = 2000 PSI MIN.

SEALANT:
ALL JOINTS AND FRAME CONNECTIONS SEALED WITH WHITE/ALUMINUM COLORED SILICONE.

WEEPHOLES:
W1 = 1-3/4" WEEP NOTCH AT EACH END
W2 = 3/4" WEEP NOTCH AT EACH END
W3 = 3" x 1/4" WEEP HOLES AT 2" FROM EACH END
HEAVY REINFORCING
AT EXTERIOR/INTERIOR INTERLOCK & ASTRAGAL STILES

TYPICAL ANCHORS IN PAIRS
SEE ELEV. FOR SPACING

2½" WOOD BUCK
SEE NOTE SHEET 1

1/4" SHIM
#10 X 1/2" PH SMS
2" CUP

INTERLOCK STILES
ASTRALGAL STILE
DOOR FRAME WIDTH

TYPICAL ANCHORS IN PAIRS
SEE ELEV. FOR SPACING

METAL STRUCTURES

FIX. PANEL ON INSIDE TRACK

1/4" MAX.
SHIM

CONCRETE MASONRY

TYPICAL ANCHORS IN PAIRS
SEE ELEV. FOR SPACING

1/4" SHIM
MAX.

DOOR FRAME WIDTH

SCREEN OPTL.
**MEDIUM REINFORCING**

AT EXT. INTERLOCK & ASTRALAG STILES

**NO REINFORCING**

**INTERLOCK STILES**

**ASTRALAG STILE**

**SCREEN OPT**

**INTERLOCK STILES**

**E**

**D**

**INTERLOCK STILES**

**ASTRALAG STILE**

**SCREEN OPT**