NOTICE OF ACCEPTANCE (NOA)

E.S. Windows, LLC
10653 NE 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 ES-9100 Aluminum Outswing Door - S.M.I.

APPROVAL DOCUMENT: Drawing No. W17-60 Rev A, titled “Series ES-9100 Aluminum Outswing Door (S.M.I.)”, sheets 1 through 7 of 7, dated OCT 03, 2017, prepared by AL-Faroq Corporation, signed and sealed by Javad Ahmad, P.E., bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Small Missile Impact Resistant

Limitations:
1. See sheet 1 for Design Pressure ratings per glass types.
2. Only anchor type “B” is applicable at sill installation.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, Baranquilla, Columbia, S.A. and 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 consists of this page 1 and evidence pages E-1 & E-2, as well as approval document mentioned above.
The submitted documentation was reviewed by Ishaq I. Chanda, P.E.

NOA No. 17-0802.15
Expiration Date: October 12, 2022
Approval Date: October 12, 2017
Page 1
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS
1. Manufacturer's die drawings and sections.
2. Drawing No. W17-60 rev A, titled “Series ES-9100 Aluminum Outswing Door (S.M.I)”, sheets 1 through 7 of 7, dated OCT 03, 2017, prepared by AL-Farooq Corporation, 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 (Not performed)
   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, TAS 202-94

Along with marked-up drawings and installation diagram of Alum Single Outswing Doors, prepared by Blackwater Testing, Inc., Test Report No. BT-ESW-17-014, dated 05/12/17, signed and sealed by Constantin Brotes, P.E.

Additional Test report along with marked-up Dwg. of single (X) aluminum outswing doors, issued by Fenestration Testing lab, Inc., Test Report No. FTL-8605, did 08/08/16 signed & sealed by Idalmis Ortega, P.E.

C. CALCULATIONS
1. Anchor verification calculations and structural analysis, complying with FBC-2017 (6th Edition), prepared by Al-Farooq Corp., dated JUL 05, 2017 and last revised on 10/03/17, signed & sealed by Javad Ahmad, P.E.
2. Glazing complies w/ 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. 16-1117.01 issued to Kuraray America, Inc. (former E.I. DuPont DeNemours & 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. 17-0802.15
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E. MATERIAL CERTIFICATIONS (continue):
   3. Notice of Acceptance No. 15-1201.11 issued to Eastman Chemical Company (MA) former Solutia Inc. for their “Saflex Clear or colored interlayer”, expiring on 05/21/21.

F. STATEMENTS
   1. Statement letter of conformance to FBC 2017 (6th Edition) and letter of no financial interest, prepared by Al Farooq Corporation, dated 06/22/17, signed and sealed by Javad Ahmad, P.E.
   2. Lab compliance as part of the above referenced test report.

G. OTHER
   1. Test proposal dated 12/09/14, approved by Jaime D. Gascon, P.E.
   2. Distribution agreement ES Windows-Energia Solar, S.A. and ES Windows, LLC, dated 10/20/10, signed by Ms. Carla G. Torrente and Andres Chamorro respectively (submitted under previous file)

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 17-0802.15
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**ALUMINUM OUTSWING ENTRANCE DOOR**

**ES-9100**

**THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2014 (5TH EDITION)/2017 (6TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).**

18BY 28X WOOD BLOCKS & 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 MANU'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 SHUS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRRESSIBLE.

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

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, IE LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE REDESIGNING 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.

DOORS APPROVED FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.

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**GLASS TYPES 'A', 'ASHI' & 'ASHI':**

- **MAXIMUM DESIGN LOAD RATING = 120.0 SF**
  - (FOR SIZES SHOWN ABOVE OR SMALLER) = 150.0 SF
  - AS PERMITTED BY FBC

**GLASS TYPE 'ASHI':**

- **MAXIMUM DESIGN LOAD RATING = 144.0 SF**
  - (FOR SIZES SHOWN ABOVE OR SMALLER) = 150.0 SF
  - AS PERMITTED BY FBC

DOOR HEIGHT AND WIDTH MUST COMPLY EXPRESS REQUIREMENTS PER FBC AS APPLICABLE.
GLASS OPTIONS

GLASS TYPE 'A'
0/16" OVERALL LAM. H.S. GLASS

GLASS TYPE 'A11'
1-1/16" OVERALL LAM. H.S. GLASS

GLASS TYPE 'A21'
1-1/16" OVERALL INSUL. LAM. H.S. GLASS

GLASS TYPE 'A31'
1-1/16" OVERALL INSUL. LAM. TEMP. GLASS

3/8" AIR SPACE CONSISTING OF:
- SPACER:
  'HELIUM' LOW PROFILE ALUMINUM SPACER
  BY 'LINGERMANN OBERB' IBER
  AROUND THE PERIMETER OF THE GLASS.
- PERIMETER SEALANT:
  SILICONE
  DOW CORNING 791

Drawn to complying with the
AS 1288.1-91

drawn by J. Wang

17-12-062-15

Miami Dade Product Control

by Shang I. Chen

No. 70592

drawing no. W17-60

sheet 2 of 7
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

**TYPE 'A'** - 1/4" DIA. ULTRACON BY 'ELCO' (F=172 KSI, Fy=155 KSI)
- INTO 2B Y WOOD BUCKS OR WOOD STRUCTURES
- 1-1/2" MIN. PENETRATION INTO WOOD (HEAD/JAMBS)
- THRU 1BY BUCKS INTO CONC. OR MASONRY
- 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
- 1-1/4" MIN. EMBED INTO MASONRY (JAMBS)
- DIRECTLY INTO FILLED BLOCKS
- 1-3/4" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

**TYPE 'B'** - 1/4" DIA. ULTRACON BY 'ELCO' (F=172 KSI, Fy=155 KSI)
- DIRECTLY INTO CONCRETE
- 1-3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)

**TYPE 'C'** - 1/4" DIA. TECS OR SELF DRILLING SCREWS (GRADE 5 CRS)
- INTO MIAMI-DADE COUNTY APPROVED MULLIONS OR METAL STRUCTURES (HEAD/JAMBS)
- (3) THREADS MIN. PENETRATION BEYOND SUBSTRATE
  - ALUMINUM: 3/16" 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 = 2-1/2" MIN.
- INTO WOOD STRUCTURE = 1" MIN.
- INTO METAL STRUCTURE = 3/4" MIN.
- WOOD AT HEAD, SILL OR JAMBS SD = 0.55 MIN.
- CONCRETE AT HEAD, SILL OR JAMBS FC = 3000 PSI MIN.
- 0-90 ORGRT FILLED BLOCK AT JAMBS Fm = 2000 PSI MIN.

**WEEP HOLES**:
- W1 = 2" X 3/16" WEEP HOLES AT 1" FROM EACH END AND AT MIDSSPAN
- W2 = 3/4" WEEP NOTCH AT 3/4" FROM EACH END
<table>
<thead>
<tr>
<th>ITEM #</th>
<th>PART #</th>
<th>REQD.</th>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
<th>MANUF./SUPPLIER/REMARKS</th>
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<tbody>
<tr>
<td>E1</td>
<td>ES-9012</td>
<td>1</td>
<td>DOOR FRAME HEAD</td>
<td>6083-T6</td>
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<tr>
<td>E2</td>
<td>ES-9026</td>
<td>1</td>
<td>FRAME SILL</td>
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<td>E3</td>
<td>ES-9013</td>
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<td>FRAME JAMB (STD.)</td>
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<td>E4</td>
<td>ES-9001</td>
<td>1</td>
<td>TOP RAIL</td>
<td>6055-T6</td>
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<tr>
<td>E5</td>
<td>ES-9002</td>
<td>1</td>
<td>BOTTOM RAIL</td>
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<tr>
<td>E6</td>
<td>ES-9003</td>
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<td>HINGE LOCK STILE</td>
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<td>E7</td>
<td>ES-9027</td>
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<td>SILL COVER</td>
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<td>E8</td>
<td>ES-9029</td>
<td>4/ LEAF GLASS STOP (NSUL, LAM. GLASS)</td>
<td>6083-T6</td>
<td>–</td>
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<td>E9</td>
<td>ES-9004</td>
<td>4/ LEAF GLASS STOP (LAM. GLASS)</td>
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<td>E10</td>
<td>ES-9008</td>
<td>AS REQD.</td>
<td>CORNER BLOCK</td>
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<td>E11</td>
<td>ES-9000</td>
<td>AS REQD.</td>
<td>CORNER PLATE</td>
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<td>E12</td>
<td>ES-9010</td>
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<td>SUPPORT ANGLE</td>
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<td>ES-9011</td>
<td>AS REQD.</td>
<td>HINGE BACKUP PLATE</td>
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<td>ES-9016</td>
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<td>SPEAR CLIP</td>
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<td>E16</td>
<td>ES-9005</td>
<td>AS REQD.</td>
<td>W-STRIP ADAPTER</td>
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<td>E17</td>
<td>ES-7050-215</td>
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<td>FRAME JAMBS (NARROW)</td>
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<td>E18</td>
<td>ES-7050-214</td>
<td>2</td>
<td>DOOR STOP</td>
<td>6083-T6</td>
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<td>E19</td>
<td>ALU-A-027</td>
<td>2</td>
<td>BOLT GUIDE ANGLE (2 X 2 X 1/8&quot;)</td>
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<td>AT TOP &amp; BOTTOM OF LOCK STILE</td>
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<tr>
<td>E20</td>
<td>ALU-P-030</td>
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<td>LOCK SPACER PLATE (1-1/2 X 1/8&quot;)</td>
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<tr>
<td>W1</td>
<td>#12 X 1&quot;</td>
<td>AS REQD.</td>
<td>FRANCA LEAF ASSEMBLY FASTENERS</td>
<td>ST/ST</td>
<td>PH SMS</td>
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<tr>
<td>W2</td>
<td>12-24 X 1/2&quot;</td>
<td>AS REQD.</td>
<td>HINGE, INTER. PRTY &amp; SILL SILL</td>
<td>ST/ST</td>
<td>PH MS</td>
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<tr>
<td>W3</td>
<td>5-32 X 1/2&quot;</td>
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<td>BOLT GUIDE ANGLE &amp; LOCK BACKUP PLATE FASTENERS</td>
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<td>PH SMS</td>
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<td>W4</td>
<td>3/8-16 X 1&quot;</td>
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<td>HEX BOLT</td>
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<td>M5</td>
<td>ES-6000-001</td>
<td>AS REQD.</td>
<td>EXTERIOR GLAZING GASKET</td>
<td>EPDM</td>
<td>OURIOMET 7065 SHORE A</td>
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<td>INTERIOR GLAZING GASKET</td>
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<td>BOLT W/STRIPPING</td>
<td>TYPE/POLY/PROPYLENE</td>
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<td>M8</td>
<td>ES-6000-001</td>
<td>2 LITE</td>
<td>SETTING BLOCKS (LAM. GLASS) AT 1/4 POINTS</td>
<td>EPDM</td>
<td>OURIOMET 8065 SHORE A</td>
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<td>M9</td>
<td>ES-6000-004</td>
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<td>SETTING BLOCKS (LAM. GLASS) AT 1/4 POINTS</td>
<td>EPDM</td>
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<tr>
<td>M10</td>
<td>60 AT</td>
<td>AS REQD.</td>
<td>RESIDENTIAL HINGES</td>
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<td>OR. HAHN</td>
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<tr>
<td>M17</td>
<td>–</td>
<td>AS REQD.</td>
<td>DOOR PUSH/PULL</td>
<td>–</td>
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<td>M18</td>
<td>W13272N</td>
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<td>PILE W/STRIPPING AT HEAD</td>
<td>WOOL</td>
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<td>W13351NK</td>
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<tr>
<td>M21</td>
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<td>M22</td>
<td>#12 X 2&quot;</td>
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<td>FRAME SILL ASSEMBLY FASTENERS (NARROW JAMS)</td>
<td>6083-T6</td>
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</tbody>
</table>

**LOCK SINGLE DOOR:**

**OPTION #1:**
- SURFACE MOUNT 3 POINT LOCK SYSTEM (BLO1-6083)
  - BY INTERLOCK USA
  - KEY OPERATED ON EXTERIOR AND THUMB TURN ON INTERIOR
  - LEVER TYPE HANDLE AT 38' FROM BOTTOM ACTIVATES SHOUL BOLTS ENGAGING AT HEAD AND SILL FASTENED WITH:
  - (2) #10 X 3/4" FH SMS

**OPTION #2:**
- SURFACE MOUNT 3 POINT LOCK SYSTEM (MS1950-350)
  - BY ADAMS RITE
  - KEY OPERATED ON EXTERIOR AND THUMB TURN ON INTERIOR FASTENED WITH:
  - (4) #8 X 1/2" FH SMS
  - LEVER TYPE HANDLE AT 38' FROM BOTTOM ACTIVATES SHOUL BOLTS ENGAGING AT HEAD AND SILL FASTENED WITH:
  - (2) 8-32 X 1/2" CH MACHINE SCREWS

**HINGES:**

**OPTION #3:**
- 4-1/2" LONG FLUSH MOUNT STEEL BUTT HINGES
  - BY INTERLOCK USA, (#4 PER LEAF TOP AND BOTTOM HINGES AT 6’ FROM EACH END INTERMEDIATE HINGES AT 30’ G.C. MAX. FASTENED WITH 12-24 X 1/2" FH MACHINE SCREWS FOUR PER HINGE LEAF)

**SEALANTS:**

- ALL FRAME JOINTS AND SEAMS SEALED WITH DOW CORNING 791 SILICONE.