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

E.S. Windows, LLC
3550 N. W. 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 “ES-6600 Ultra” Aluminum Sliding Glass Doors(Dry glazed) w/ reinforcements-SMI

APPROVAL DOCUMENT: Drawing No. W14-14 Rev G, titled “ES-6600 Ultra Alum Sliding Glass Door (SMI)”, sheets 1 through 14 of 14, prepared by Al-Farooq Corporation, dated 07-11-14 and last revised on DEC 26, 2018, signed and sealed by Javad Ahmad, 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: Small Missile Impact Resistant

Limitations:
2. See Head anchors capacity charts for both secure and free jambs w/ Sill anchor note, in sheet 5. Lower DP shall control from all applicable charts for the entire system.
3. (4) Panels or less configured options (see sheet 6), not to exceed tested frame/panel area and tested panel height.
4. See sheet 6, for fixed panel arrangement using alum clip item M-29 (top/bottom), threshold cover item #E-11 and head cover item #E-18.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, Barranquilla, Columbia 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 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 & renews # 15-0727.06 consists of this page 1 and evidence pages E-1, E-2, E-3 & E-4, as well as approval document mentioned above.

The submitted documentation was reviewed by Ishaq I. Chanda, P.E.

NOA No. 18-0426.06
Expiration Date: September 19, 2023
Approval Date: January 10, 2019
Page 1
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted in previous files
   
A. DRAWINGS
   1. Manufacturer's die drawings and sections.
   2. Drawing No. W14-14, titled “ES-6600 Ultra Alum Sliding Glass Door (SMI)”, sheets 1 through 13 of 13, prepared by Al-Farooq Corporation, dated JAN 16, 2015, signed and sealed by Javad Ahmad, P.E.

B. TESTS (submitted under file #14-0408.02)
   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) Small Missile Impact Test per FBC, TAS 201-94
      5) Large Missile Impact Test per FBC, TAS 201-94
      6) Cyclic Wind Pressure Loading per FBC, TAS 203-94
      7) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94
   
Along with marked-up drawings and installation diagram of OXXO aluminum SGD, prepared by Fenestration Testing Laboratories, Test Report No. FTL- 7651 (FTL13074), dated 02/04/14, signed and sealed by Idalmis Ortega, P.E.

2. Additional Referenced 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) Small 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 OXXX aluminum sliding glass door, prepared by, prepared by Fenestration Testing Laboratories, Test Report No. FTL- 6293 (FTL 10063), dated 10/15/10 and FTL- 5669 (FTL 08057), signed and sealed by Jorge A. Causo, P.E. and Michael Wenzel, P.E. respectively and Test Report No. FTL-7130 (FTL 12093), dated 04/05/13 and last revised on 09-12-13, signed and sealed by Marlin D. Brinson, P.E.

C. CALCULATIONS
   1. Anchor verification calculations and structural analysis, complying with FBC-2014, prepared by Al Farooq Corporation, dated JUL 15, 2014, NOV 12, 2014 and last revised on 01/16/15, signed and sealed by Javad Ahmad, P.E.
   2. Engineering structural analysis of reinforced rails wider than 48", prepared by Al Farooq Corporation, dated NOV 12, 2012, signed and sealed by Javad Ahmad, P.E.
   3. 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. 11-0624.01 issued to E.I. DuPont DeNemours & Co., Inc. for their “DuPont Butacite PVB @ Interlayer”, expiring on 12/11/16.

   Ishaq I. Chanda, P.E.
   Product Control Examiner
   NOA No. 18-0426.06
   Expiration Date: September 19, 2023
   Approval Date: January 10, 2019
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS
1. Statement letter of conformance to FBC 2014(5\textsuperscript{th} edition) and letter of no financial interest, prepared by Al Farooq Corporation, dated 07/15/14, signed and sealed by Javad Ahmad, P.E.
2. Lab compliance as part of the above referenced test report.
3. Statement letter of clarification via e-mail dated 01/20/15 for test report FTL-7651, issued by Fenestration testing lab, signed by Ms. Iliana Sanchez.
4. ES Windows Distribution agreement -Energia Solar, S.A. and ES Windows, LLC, dated 09/12/13, signed by Ms. Adriana Montoya, Manager and Andres Chamorro, General manager respectively on behalf of the companies.

G. OTHER
1. Test proposals, prepared by Al-Farooq Corp. and approved by RER dated 04/11/13 & 01/16/15.

2. Evidence submitted in previous files

A. DRAWINGS
1. Drawing No. W14-14, titled Series “ES-6600 Ultra Alum. Sliding Glass Door (SMI)”, sheets 1 through 13 of 13, dated 01/16/15, with revision D dated 07/20/15, prepared by Al–Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS (submitted under file #15-0727.06)
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) Small 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 OXXO aluminum SGD (2–Tracks), prepared by Blackwater Testing, Inc., Test Report No. BT-ESW-15-006, dated 06/17/15, signed and sealed by Yamil Gerardo Kuri, P.E.

C. CALCULATIONS
1. Anchor verification calculations and structural analysis, complying with FBC 5\textsuperscript{th} Edition (2014), prepared by Al–Farooq Corporation, dated 04/09/15, signed and sealed by Javad Ahmad, P. E.

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

E. MATERIAL CERTIFICATIONS
2. Notice of Acceptance No. 14-0916.11 issued to Kuraray America, Inc. for their “SentryGlas® (Clear and White) Glass Interlayers” dated 06/25/15, expiring on 07/04/18.

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 18-0426.06
Expiration Date: September 19, 2023
Approval Date: January 10, 2019
E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

E. MATERIAL CERTIFICATIONS
1. Notice of Acceptance No. 17-0808.02 issued to Kuraray America, Inc. (Former E.I. DuPont De Nemours) for the “Sentry Glass® clear & white interlayer”, expiring on 07/04/23.
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.
3. Notice of Acceptance No. 17-0712.05 issued to Eastman Chemical Company (MA) for the “Saflex Clear and Color Glass Interlayers”, expiring on 05/21/21.

F. STATEMENTS
1. Statement letter of conformance to FBC 2017 (6th Edition) and “No financial interest” dated 12/31/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

G. OTHER
1. This NOA revises & renews # 15-0727.06, expiring 09/19/23.

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 18-0426.06
Expiration Date: September 19, 2023
Approval Date: January 10, 2019
These doors are rated for small missile impact.

Miami-Dade County approved impact resistant shutters required for installations up to 30 ft. of grade.

Shutters not reqd. for installations above 30 ft. of grade.

Series ES-6600 Ultra

Aluminum sliding glass door

This product has been designed and tested to comply with the requirements of the 2017 (5th Edition) Florida Building Code including high velocity hurricane zone (HVHZ).

1-by 2-by 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 2017 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.
GLASS TYPES 'A' & 'AA'
9/16" OVERALL LAMINATED GLASS

GLASS TYPE 'A1'
1 1/4" OVERALL INSUL. LAM. GLASS

GLASS TYPE 'A2'
1 1/4" OVERALL INSUL. LAM. GLASS

GLAZING OPTIONS

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

DESIGN LOAD CAPACITY - PSF
(APPLICABLE TO SECURED & FREE JAMBS)

CHART ABOVE TO BE USED AS PER INSTRUCTIONS
SHOWN ON SHEETS 3 & 4.

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

3/8" AIR SPACE CONSISTING OF:
SPACER:
'HELMA' LOW PROFILE ALUMINUM SPACER
BY 'LINGERMAN GmbH'
AROUND THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:
SILICONE
DOWSL 791
GE 2000
DAYLITE OPENINGS WIDTHS:
FIXED STILE-INTERLOCK = NOM. PANEL WIDTH - 7.437"
INTERLOCK-ASTRALGAL = NOM. PANEL WIDTH - 6.375"
LOCK STILE-INTERLOCK = NOM. PANEL WIDTH - 7.187"
DAYLITE OPENING HEIGHT:
PANEL HEIGHT = 7.375"
PANEL HEIGHT = DOOR FRAME HEIGHT - 1.625"

MAX. FRAME AREA OF S.G.D. SHALL NOT EXCEED FRAME AND PANEL AREA OF TESTED UNIT PER FBC REQUIREMENTS.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS FOR SECURED JAMB S.G.D.

STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLOC HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.

STEP 2 DETERMINE DOOR CAPACITY FROM TABLES ON SHEET 2 FOR THE GLASS TYPE AND REINFORCING TO USE.

STEP 3 USING CHART ON SHEET 5 FOR HEAD ANCHORS CAPACITY SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.

STEP 4 THE LOWEST VALUE RESULTING FROM STEPS 2 AND 3 SHALL APPLY TO ENTIRE SYSTEM.

TYPICAL ELEVATION
OXXO (SECURED JAMBS) (TESTED UNIT)
DAYLITE OPENINGS WIDTHS:
FIXED STILE-INTERLOCK = NOM. PANEL WIDTH - 7.437"  INTERLOCK-ASTRALG = NOM. PANEL WIDTH - 6.375"  LOCK STILE-INTERLOCK = NOM. PANEL WIDTH - 7.187"
DAYLITE OPENING HEIGHT:
PANEL HEIGHT = 7.375"
PANEL HEIGHT = DOOR FRAME HEIGHT - 1.625"
MAX. FRAME AREA OF S.G.D. SHALL NOT EXCEED FRAME AND PANEL AREA OF TESTED UNIT PER FBC REQUIREMENTS.

INSTRUCTIONS:
USE CHARTS AS FOLLOWS FOR UNANCHORED JAMB S.G.D.

STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.

STEP 2 DETERMINE DOOR CAPACITY FROM TABLES ON SHEET 2 FOR THE GLASS TYPE AND REINFORCING TO USE.

STEP 3 USING CHART ON SHEET 5 FOR HEAD ANCHORS CAPACITY SELECT ANCHOR OPPOSITE WITH DESIGN RATING MORE THAN DESIGN LOAD SPECCED IN STEP 1 ABOVE.

STEP 4 USING UNANCHORED FREE STANDING JAMB AND REINFORCING OPTIONS FROM SHEET 12, SELECT THE DESIGN LOAD MORE THAN THE LOAD IN STEP 1, 2 & 3.

STEP 5 THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

TYPICAL ELEVATION
OXGO (UNSECURED FREE STANDING JAMBS) (TESTED UNIT)
NOTE: SHALL APPLY TO ANCHORS AT FRAME HEAD

**These Tables apply to Anchors at Frame Head**

- **ANCHOR CHARTS apply to** anchors for doors with unsecured jambs (open form)
- See Charts in Sheet 1 for design charts for securing used
- Both secured and unsecured (open) jambs for doors with secured jambs with anchor charts
- **ANCHOR CHARTS apply to** anchors for doors with secured jambs (closed form)
- See Charts in Sheet 1 for design charts for securing used
- Both secured and unsecured (open) jambs for doors with secured jambs with anchor charts

**See Chart 2 for capacity charts for entire system.**

### Anchors at Frame Head

<table>
<thead>
<tr>
<th>Frame Head</th>
<th>1/4&quot; MAX. SHEAR</th>
<th>1/2&quot; MAX. SHEAR</th>
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<tbody>
<tr>
<td>No. 1</td>
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<tr>
<td>No. 2</td>
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<td>No. 11</td>
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<tr>
<td>No. 12</td>
<td></td>
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</tbody>
</table>

**Series 15-5000 Ultra Alum S.G. Door (S.M.I.)**

**E.S. WINDOWS, LLC**

**350 N.W. 49 STREET**

**MIAMI, FL 33142**

**Tel. (305) 638-5151 Fax (305) 638-5156**

**AL-FAROOQ CORPORATION**

**Engineers & Product Development**

**9350 Sunset Drive, Suite 200**

**Miami, Florida 33173**

**Tel. (305) 264-0220 Fax (305) 262-8578**

**COMP-ACL W14-14ESW**
NOTE:
1. OPERABLE PANEL TO BE ON EXTERIOR TRACKS WITH SAFEGUARD.
2. CONFIGURATIONS SHOWN FOR ILLUSTRATION PURPOSES ONLY.
3. FOR APPLICABLE DESIGN PRESSURES SEE INSTRUCTIONS IN SHEETS 3 & 4.
4. PER ANCHOR DETAILS SEE SHEETS B THRU N.
5. THE FRAME AREA OF ALTERNATE SIZE UNIT SHALL NOT EXCEED FRAME & PANEL AREA AND HEIGHT OF TESTED UNIT PER FBC REQUIREMENTS.

CLIP REQUIRED AT OXX DOORS ONLY AT TOP AND BOTTOM, SECURED WITH (2) #10 SMS PER EXTERIOR FIXED PANEL LEG (TOTAL 6 PER CLIP)
<table>
<thead>
<tr>
<th>ITEM #</th>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
<th>MANUF./SUPPLIER/REMARKS</th>
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<tbody>
<tr>
<td>E1</td>
<td>ES-6500-001</td>
<td>1 STANDARD FRAME HEAD</td>
<td>6083-76</td>
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<tr>
<td>E2</td>
<td>ES-6500-002</td>
<td>1 FRAME SILL</td>
<td>6083-76</td>
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</tr>
<tr>
<td>E3</td>
<td>ES-6500-003</td>
<td>2 STANDARD FRAME JAMB</td>
<td>6083-76</td>
<td>–</td>
</tr>
<tr>
<td>E4</td>
<td>ES-6500-004</td>
<td>2 HEAVY DUTY FRAME JAMB</td>
<td>6083-76</td>
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</tr>
<tr>
<td>E5</td>
<td>ES-6500-005</td>
<td>2/ PANEL TOP AND BOTTOM RAIL</td>
<td>6083-76</td>
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<td>E5A</td>
<td>ES-6500-004</td>
<td>2/ PANEL TOP AND BOTTOM RAIL (LAM. GLASS)</td>
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<td>ES-6500-006</td>
<td>1 PANEL LOCK STILE (INSUL. LAM. GLASS)</td>
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<td>E7</td>
<td>ES-6500-007</td>
<td>1 PANEL INNER PANEL INTERLOCK STILE (INSUL. LAM. GLASS)</td>
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<td>E7A</td>
<td>ES-6500-025</td>
<td>1 PANEL INNER PANEL INTERLOCK STILE (LAM. GLASS)</td>
<td>6005-T5</td>
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<tr>
<td>E8</td>
<td>ES-6500-025</td>
<td>1 ASTRAGAL STILE (INSUL. LAM. GLASS)</td>
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</tr>
<tr>
<td>E8A</td>
<td>ES-6500-031</td>
<td>1 ASTRAGAL STILE (LAM. GLASS)</td>
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<td>E9</td>
<td>ES-6500-009</td>
<td>1 ASTRAGAL ADAPTER</td>
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<td>E10</td>
<td>ES-6500-010</td>
<td>1 AS RD. AD-ON TRACK</td>
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<td>ES-6500-011</td>
<td>1 AS RD. SNAP-IN JAMB COVER (OPTIONAL)</td>
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<td>E12</td>
<td>ES-6500-013</td>
<td>1 TRACK INSERT</td>
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<td>E14</td>
<td>ES-6500-015</td>
<td>1 AS RD. RETAINER CLIP, 4&quot; LONG</td>
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<tr>
<td>E15</td>
<td>ES-6500-016</td>
<td>1 AS RD. BB CLIP, 4&quot; LONG</td>
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<td>E17</td>
<td>ES-6500-017</td>
<td>1 AS RD. INTERLOCK REINFORCEMENT, FULL PANEL LENGTH</td>
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<td>E18</td>
<td>ES-6500-018</td>
<td>1 AS RD. HEAD COVER FULL LENGTH</td>
<td>6005-T5</td>
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<td>E19</td>
<td>ES-6500-021</td>
<td>1 AS RD. INNER INTERLOCK STILE (LAM. GLASS)</td>
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<tr>
<td>E22</td>
<td>ES-6500-027</td>
<td>1 AS RD. SCREW COVER (OPTIONAL)</td>
<td>6083-76</td>
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<tr>
<td>E29</td>
<td>ES-6500-028</td>
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<td>E32</td>
<td>ES-6500-033</td>
<td>2 AS RD. FIXED PANEL BOTTOM GUIDE</td>
<td>6005-T5</td>
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<tr>
<td>E33</td>
<td>ES-6500-054</td>
<td>1 AS RD. FRAME JAMB ALUMINUM REINFORCING</td>
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<tr>
<td>M1</td>
<td>#12 X 1 1/2&quot;</td>
<td>3/ CORNER FRAME ASSEMBLY SCREWS</td>
<td>ST. STEEL</td>
<td>P.H. SMS</td>
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<tr>
<td>M2</td>
<td>#10 x 1 1/2&quot;</td>
<td>4/ CORNER PANEL ASSEMBLY SCREWS</td>
<td>ST. STEEL</td>
<td>P.H. SMS</td>
</tr>
<tr>
<td>M3</td>
<td>#8 X 1&quot;</td>
<td>2/ LOCK FASTENERS</td>
<td>ST. STEEL</td>
<td>F.H. SMS</td>
</tr>
<tr>
<td>M4</td>
<td>#8 X 3/4&quot;</td>
<td>2/ HANDLE HANDLE SET FASTENERS</td>
<td>ST. STEEL</td>
<td>P.H. SMS</td>
</tr>
<tr>
<td>M6</td>
<td>#10 X 1/2&quot;</td>
<td>2/ CLIP RETAINER CLIP FASTENERS</td>
<td>ST. STEEL</td>
<td>F.H. SMS</td>
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<td>M8</td>
<td>E-214</td>
<td>AS RD. ASTRAGAL ADAPTER *STRIPPING</td>
<td>VINYL</td>
<td>THERMOPLASTIC ELASTOMER</td>
</tr>
<tr>
<td>M14</td>
<td>ES-6500-001</td>
<td>4/ PANEL GLAZING GASKET (INSUL. LAM. GLASS)</td>
<td>EPM</td>
<td>DUROMETER 65A5 SHORE A, EXTRUSIONS S.A.</td>
</tr>
<tr>
<td>M14A</td>
<td>ES-6600-001A</td>
<td>4/ PANEL GLAZING GASKET (LAM. GLASS)</td>
<td>EPM</td>
<td>DUROMETER 65A5 SHORE A, TRUDOC</td>
</tr>
<tr>
<td>M15</td>
<td>27-564</td>
<td>4/ PANEL GLAZING GASKET (LAM. GLASS)</td>
<td>EPM</td>
<td>DUROMETER 65A5 SHORE A, EXTRUSIONS S.A.</td>
</tr>
<tr>
<td>M17</td>
<td>G300T190</td>
<td>AS RD. FABRIC COATED FOAM WEATHERSEAL</td>
<td>POLYETHYLENE</td>
<td>Q-LON</td>
</tr>
<tr>
<td>M18</td>
<td>G300T180</td>
<td>AS RD. WEATHERSEAL EXTERIOR</td>
<td>POLYETHYLENE</td>
<td>Q-LON</td>
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<tr>
<td>M19</td>
<td>G100T270</td>
<td>AS RD. INTERLOCK BUMPER</td>
<td>POLYETHYLENE</td>
<td>Q-LON</td>
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<tr>
<td>M20</td>
<td>W232012X</td>
<td>AS RD. TUBE *STRIPPING</td>
<td>POLYPROPYLENE</td>
<td>–</td>
</tr>
<tr>
<td>M21</td>
<td>–</td>
<td>2/ MOV. PANEL TANGENT ACETAL WHEELS IN METALLIC HOUSING</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>M22</td>
<td>P501-10100</td>
<td>1 AS RD. LOCK KEEPER</td>
<td>–</td>
<td>INTERLOCK</td>
</tr>
<tr>
<td>M23</td>
<td>P501-10260</td>
<td>1 AS RD. TWICE 3-FLY HOOK KEEPER</td>
<td>–</td>
<td>INTERLOCK</td>
</tr>
<tr>
<td>M24</td>
<td>P501-0016-XXX</td>
<td>1/ MOV. PANEL HANDLE SET</td>
<td>–</td>
<td>INTERLOCK</td>
</tr>
<tr>
<td>M26</td>
<td>S2019</td>
<td>AS RD. THRESHOLD *STRIPPING</td>
<td>–</td>
<td>AMESBURY</td>
</tr>
<tr>
<td>M27</td>
<td>ES-7000 001</td>
<td>AS RD. SILL *STRIPPING</td>
<td>SILICONE</td>
<td>DUROMETER 6045 SHORE A</td>
</tr>
<tr>
<td>M28</td>
<td>AL-44 A-027</td>
<td>1 AS RD. FIX. PANEL ANGLE, 2&quot; X 2&quot; X 1/8&quot; X 7/8&quot; LONG</td>
<td>6083-76</td>
<td>HEAD/SILL (FIXED PANEL)</td>
</tr>
<tr>
<td>M30</td>
<td>#10 X 1&quot;</td>
<td>4/ CLIP FIX. PANEL ANGLE FASTENERS</td>
<td>6083-76</td>
<td>F.M. SMS</td>
</tr>
<tr>
<td>M32</td>
<td>ES-6500-051</td>
<td>1/4&quot; SPACER FOR JAMB</td>
<td>NYLON</td>
<td>–</td>
</tr>
<tr>
<td>M33</td>
<td>ES-6500-034</td>
<td>1/2&quot; SPACER FOR ASTRAGAL</td>
<td>NYLON</td>
<td>–</td>
</tr>
<tr>
<td>M35</td>
<td>PE204 AF</td>
<td>1 AS RD. ADHESIVE PIECE PAD (4&quot; X 1/2&quot;)</td>
<td>NYLON</td>
<td>ULTRAFAB</td>
</tr>
<tr>
<td>M36</td>
<td>ES-6500-031</td>
<td>1 AS RD. TOP &amp; BOTTOM RAIL REINFORCING</td>
<td>6083-76</td>
<td>1/4&quot; X 1 1/2&quot; X FULL LENGTH</td>
</tr>
<tr>
<td>M37</td>
<td>#10 X 1 1/4&quot;</td>
<td>2/ BAR REINFORCING BAR FASTENERS, AT 6&quot; FROM EACH END</td>
<td>ST. STEEL</td>
<td>F.H. SMS</td>
</tr>
<tr>
<td>M38</td>
<td>W3341N00008</td>
<td>1 AS RD. WEATHERSEAL</td>
<td>PILE</td>
<td>–</td>
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<tr>
<td>M39</td>
<td>ES-6500-301</td>
<td>1 AS RD. BOTTOM SPACER</td>
<td>POLYPROPYLENE</td>
<td>–</td>
</tr>
</tbody>
</table>
TYPICAL ANCHORS IN STAGGERED CLUSTERS AT INTERLOCK/ASTRALGAL HEAD END & IN PAIRS AT FRAME; SEE ELEV. ON SHEETS 3 & 4 FOR SPACING AND SHEET 5 FOR QUANTITY.

PROPERLY SECURED 18OR 28 GUAGE BROWN BUCK (SEE NOTE SHEET 1).

TYPICAL ANCHORS IN STAGGERED CLUSTERS AT INTERLOCK/ASTRALGAL HEAD END & IN PAIRS AT FRAME; SEE ELEV. ON SHEETS 3 & 4 FOR SPACING AND SHEET 5 FOR QUANTITY.

WEEPHOLES:

W = 1/4' x 3' LONG WEEP HOLES AT 4 1/2" FROM EACH END.

POURED & HARDENED HIGH STRENGTH GROUT NON-SHrink, NON-METALIC F = 5000 PSI MIN. NOT BY E.S.WINDOWS MUST TRANSFER SHEAR LOADS TO STRUCTURE.

ANCHORS TYPE B OR B ALT. IN-LINE CLUSTERS AT INTERLOCK/ASTRALGAL SILL END & IN PAIRS AT FRAME; SEE ELEV. ON SHEETS 3 & 4 FOR SPACING AND QUANTITY.

ANCHORS TYPE B OR B ALT. IN STAGGERED CLUSTERS AT INTERLOCK/ASTRALGAL SILL END & IN PAIRS AT FRAME; SEE ELEV. ON SHEETS 3 & 4 FOR SPACING AND QUANTITY.
TYPICAL ANCHORS; SEE ELEV. FOR SPACING

AT HEAD
TYPE 'A'-
5/16" DIA. ULTRACON BY 'ELCO'
(Fu=177 KSI; Fy=155 KSI) (1/2" MAX. SHM)
INTO WOOD STRUCTURES
1-7/8" MIN. PENETRATION INTO WOOD
THRU 1BY OR 2BY WOOD BUCKS INTO CONCRETE
1-1/2" MIN. EMBED INTO CONCRETE

TYPE 'B'-
5/16" DIA. ULTRACON BY 'ELCO'
(Fu=177 KSI; Fy=155 KSI) (1/2" MAX. SHM)
DIRECTLY INTO CONCRETE
1-1/2" MIN. EMBED

TYPE 'C'-
5/16" DIA. TEKS OR SELF DRILLING SCREWS
(GRADE 5 CRS) (3/8" MAX. SHM)
INTO MIAMI-DADE COUNTY APPROVED MULLIONS
AND INTO METAL STRUCTURES
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
ALUMINUM: 1/8" THK. MIN. (6063-75 MIN.)
STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

AT SILL
TYPE 'B'-
5/16" DIA. ULTRACON BY 'ELCO'
(Fu=177 KSI; Fy=155 KSI) (1/2" MAX. SHM)
DIRECTLY INTO CONCRETE
1-1/2" MIN. EMBED

TYPE 'B ALT.'-
1/4" DIA. ULTRACON BY 'ELCO'
(Fu=177 KSI; Fy=155 KSI) (1/2" MAX. SHM)
DIRECTLY INTO CONCRETE
1-3/4" MIN. EMBED

AT JAMBS
5/16" DIA. ULTRACON BY 'ELCO'
(Fu=177 KSI; Fy=155 KSI) (1/2" MAX. SHM)
INTO WOOD STRUCTURES
1-7/8" MIN. PENETRATION INTO WOOD
THRU 1BY OR 2BY WOOD BUCKS INTO CONCRETE OR FILLED BLOCKS
1-1/2" MIN. EMBED INTO CONCRETE OR BLOCKS

5/16" DIA. ULTRACON BY 'ELCO'
(Fu=177 KSI; Fy=155 KSI) (1/2" MAX. SHM)
DIRECTLY INTO CONCRETE OR GROUT FILLED BLOCKS
1-1/2" MIN. EMBED

5/16" DIA. TEKS OR SELF DRILLING SCREWS
(GRADE 5 CRS) (3/8" MAX. SHM)
INTO MIAMI-DADE COUNTY APPROVED MULLIONS
AND INTO METAL STRUCTURES
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
ALUMINUM: 1/8" THK. MIN. (6063-75 MIN.)
STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ANCHOR EDGE DISTANCES
INTO CONCRETE = 2-1/2" MIN. (1/4" ANCHORS)
INTO CONC. OR BLOCKS = 3-1/8" MIN. (5/16" ANCHORS)
INTO WOOD STRUCTURE = 1-1/4" MIN.
INTO METAL STRUCTURE = 3/4" MIN.
WOOD AT HEAD OR JAMBS SD = 0.55 MIN.
CONCRETE AT HEAD, SILL, OR JAMBS Fc = 3000 PSI MIN.
C-90 GROUT FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

1BY OR 2BY WOOD BUCKS AND METAL STRUCTURE NOT BY E.S. WINDOWS
MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM
AND TRANSFER THEM TO THE BUILDING STRUCTURE.

ALTERNATE SUBSTRATES

3/8" MIN. STAGGERED DIAGONAL EDGE DIST.
METAL STRUCTURES
1/2" THK.
(SEE SPEC)
MIA-MI DADE COUNTY
APPROX. MULLIONS
SEE SEPARATE NCA
(SEE SPEC)

TYPICAL ANCHORS
IN STAGGERED CLUSTERS AT INTERLOCK/ASTRALG HEAD END
& IN PARTS AT FRAME
SEE ELEV. ON SHEETS 3 & 4
FOR SPACING AND
SHEET 5 FOR QUANTITY

MIA-MI DADE COUNTY
APPROX. MULLIONS
SEE SEPARATE NCA
(SEE SPEC)

TYPICAL ANCHORS
IN STAGGERED CLUSTERS AT INTERLOCK/ASTRALG HEAD END
& IN PARTS AT FRAME
SEE ELEV. ON SHEETS 3 & 4
FOR SPACING AND
SHEET 5 FOR QUANTITY

ALTERNATE SUBSTRATES

1BY OR 2BY WOOD BUCKS AND METAL STRUCTURE NOT BY E.S. WINDOWS
MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM
AND TRANSFER THEM TO THE BUILDING STRUCTURE.
### FREE STANDING JAMB

<table>
<thead>
<tr>
<th>PANEL</th>
<th>DOOR FRAME PANEL</th>
<th>HEIGHT (IN.)</th>
<th>Width (IN.)</th>
<th>Height (IN.)</th>
<th>Weight (LB.)</th>
<th>Width (IN.)</th>
<th>Height (IN.)</th>
<th>Weight (LB.)</th>
<th>Width (IN.)</th>
<th>Height (IN.)</th>
<th>Weight (LB.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>1&quot; Door Jamb</td>
<td>113.6</td>
<td>120.0</td>
<td>120.0</td>
<td>120.0</td>
<td>120.0</td>
<td>120.0</td>
<td>120.0</td>
<td>120.0</td>
<td>120.0</td>
<td>120.0</td>
</tr>
<tr>
<td>36</td>
<td>1.5&quot; Door Jamb</td>
<td>113.6</td>
<td>120.0</td>
<td>120.0</td>
<td>120.0</td>
<td>120.0</td>
<td>120.0</td>
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<td>120.0</td>
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<tr>
<td>36</td>
<td>2&quot; Door Jamb</td>
<td>113.6</td>
<td>120.0</td>
<td>120.0</td>
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<td>120.0</td>
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<td>120.0</td>
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<td>120.0</td>
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</tr>
</tbody>
</table>

**Note:** Data in this sheet may be used to qualify specified joint sealant to be used at unanchored free standing jamb. Please refer to sealant manufacturer's data and application manual for compatibility of sealant to substrate & door material finish and compliance for warranty. (Under separate review) Conditions or other sealants not covered in this sheet to be engineered separately and to be reviewed by AIA.

This chart to be used with Do Charm in Sheet 1 with elevation sheet 4 and anchor capacity chart Sheet 5. Lower design pressure shall control entire assembly.

**Frame Jamb:**

```
7/8" X 7/8" X 1/8" 
2-3/4" Long
```

**Reinforcement Clip Required at Free Standing Jamb with Steel Reinforcing Only**

**Silicone Dowel:**

 effect of 1/8" MN.

**Door Width:**

```
5/16" MIN.
1/2" MAX.
```

**Silicone Dowel:**

Effect of 1/8" MN.

```
5/16" MIN.
1/2" MAX.
```

**Door Width:**

```
CONCRETE
FRAMED JAMB
WITH STEEL
REINFORCEMENT
```

**Frame Jamb:**

```
ALUM CUP
7/8" X 7/8" X 1/8"
2-3/4" LONG
```

**Connecting Frame Sill to Jamb:**

```
WITH (2) #10 SMS
AT EACH SIDE
```
PANEL TOP/BOTTOM CORNER
LAM. GLASS RAIL & STILE (SHOWN)
INSUL. LAM. GLASS RAIL & STILE (SIMILAR)

FRAME TOP CORNER
STD. JAMB (SHOWN)
H.D. JAMB (SIMILAR)

FRAME BOTTOM CORNER
STD. JAMB (SHOWN)
H.D. JAMB (SIMILAR)