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 “6600-3 Tracks” Aluminum Sliding Glass Doors (Dry glazed) w/ reinforcements-SMI

APPROVAL DOCUMENT: Drawing No. W17-79 Rev A, titled “Series 6600-3 track Alum Sliding Glass Door (SMI)”, sheets 1 through 16 of 16 (include sheets 6.1 & 10.1), prepared by Al-Farooq Corporation, dated FEB 21, 2018, 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 SGD w/wo Head Receptor (HR) Design Pressures (DP) Vs. Reinforcements & glazing options in sheet 4. See sheet 2 for SGD elevation without HR and anchors capacity charts in sheet 5 at Head & at sill. Lower DP controls.
2. See sheet 3 for SGD elevation w/ HR doors and Head/sill anchors capacity charts in sheet 5. The max Exterior Positive DP not to exceed = +120.0 PSF, all the cases. See max frame area limitations in elevations sheets 2 & 3.
3. See sheet 6 (un-reinforced operable & Fixed panel) & 6.1 (re-inf exterior fixed panels & operable interior). See sheet 12 with free jamb installation for un-reinf & reinforced panels using sheets 6 & 6.1 door configurations. Corner anchors at head/sill, along with intermediate, per sheets 1 & 2 are required.

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 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. 17-0505.01  
Expiration Date: March 28, 2023  
Approval Date: March 28, 2018  
Page 1
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS
1. Manufacturer's die drawings and sections.
2. Drawing No. W17-79 Rev A, titled “Series 6600-3 track Alum Sliding Glass Door (SMI)”, sheets 1 through 16 of 16 (include sheets 6.1 & 10.1), prepared by Al-Farooq Corporation, dated FEB 21, 2018, 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) 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 OXXXXO (B-1) aluminum sliding glass door (3-tracks), prepared by Fenestration Testing Laboratories, Test Report No. FTL-9548 (FTL 17096), dated 06/06/2017, signed and sealed by Idalmis Ortega, P.E.

2. Additional 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 XXO aluminum sliding glass door, prepared by Blackwater Testing Inc, Test Report No. BT-ESW-15-005 and -006, dated JUL 21, 2015, signed and sealed by Yamil G. Kuri, P.E.

   along with marked-up drawings and installation diagram of OXXO aluminum sliding glass door, prepared by Fenestration Testing Laboratories, 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.

   Along with marked-up drawings and installation diagram of OXXX aluminum SGD, prepared by Fenestration Testing Laboratories, Test Report No. FTL-6990 (FTL12051), dated 08/06/12, signed and sealed by Marlin D. Brinson, P.E.

   (All test reports under items B (2) were submitted under files # 15-0602.07/#13-0723.01).

C. CALCULATIONS
2. Glazing complies w/ ASTME-1300-02 & -04.

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

       Ishaq L. Chanda, P.E.
       Product Control Examiner
       NOA No. 17-0505.01
       Expiration Date: March 28, 2023
       Approval Date: March 28, 2018
E. MATERIAL CERTIFICATIONS
1. Notice of Acceptance No. 17-0808.02 issued to Kuraray America, Inc. (former E.I. DuPont DeNemours & Co., Inc.) for the “Sentry Glass® Interlayer”, expiring on 07/4/23.
2. Notice of Acceptance No. 16-1117.01 issued to Kuraray America, Inc. (former E.I. DuPont DeNemours & Co., Inc.) for “Trofosil, ultra-clear & color” (former “Kuraray Butacite PVB Interlayer”, expiring on 07/08/19.
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 03-20-18, signed and sealed by Javad Ahmad, P.E.
2. Lab compliance as part of the above referenced test report.

G. OTHER
1. This 3-tracks NOA is supplemented by 2-Tracks Alum SGD from NOA #15-0602.07/#13-0723.01.
2. 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.

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 17-0505.01
Expiration Date: March 28, 2023
Approval Date: March 28, 2018
DAYUTE OPENINGS WIDTHS:
FIXED STILE–INTERLOCK = PANEL WIDTH = 7.437".
INTERLOCK–ASTRAGAL = PANEL WIDTH = 6.375".
LOCK STILE–INTERLOCK = PANEL WIDTH = 7.187".
DAYUTE OPENING HEIGHT:
PANEL HEIGHT = 7.375".
PANEL HEIGHT = DOOR FRAME HEIGHT = 1.750" (W/O RECEPTOR).
PANEL HEIGHT = OVERALL HEIGHT = 3.500" (W/ RECEPTOR).

INSTRUCTIONS:
USE CHARTS AS FOLLOWS.

STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE.

STEP 2 DETERMINE DOOR CAPACITY FROM TABLES ON SHEET 4 FOR THE GLASS TYPE AND REINFORCING TO USE.

STEP 3 USING CHARTS ON SHEET 5 FOR HEAD (W/O W/ RECEPTOR) AND ALL ANCHORS 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.

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 REGO. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

SERIES ES-6600-3 TRACK
ALUMINUM SLIDING GLASS DOOR

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).

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.

MADE OF STAINLESS STEEL OR STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISMISUAL MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2014/2017 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT 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 TYPE 'C'
9/16" OVERALL LAMINATED GLASS

GLASS TYPE 'C1'
1-1/4" OVERALL INSUL. LAM. GLASS

GLAZING OPTIONS

3/8" AIR SPACE CONSISTING OF:
SPACER:
*Helm* LOW PROFILE ALUMINUM SPACER
BY 'LINGERMAN GMBH'
AROUND THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:
SILICONE
DOW CORNING 791
GE 2000

LAMINATED GLASS
INSUL. LAM. GLASS
SMALL MISSILE IMPACT
3 TRACK SGD SYSTEM
TYPICAL ELEVATION (TESTED)
OXX-XOX (DOORS WITH HEAD RECEPTOR)
MAX. FRAME AREA NOT TO EXCEED 235.9 SQ. FT.

HEAD ANCHORS AT INTERLOCK/ASTRAGAL ENDS
CLUSTER OF 8 OR 9 SEE SHEET 5 FOR CAPACITY

HEAD ANCHORS AT FREE STANDING JAMB
CLUSTER OF 4 OR 5 SEE SHEET 5 FOR CAPACITY

REINFORCEMENTS SEE SHEETS 6 & 6.1

SILL ANCHORS AT INTERLOCK/ASTRAGAL ENDS
CLUSTER OF 7 SEE SHEET 5 FOR CAPACITY

SILL ANCHORS AT FREE STANDING JAMB
CLUSTER OF 4, 5 OR 6 SEE SHEET 5 FOR CAPACITY

4 1/2" MAX.
CORNERS

4 1/2" MAX.
EXT.
CORNERS

13 3/4" 47 1/4" MAX.
TYP.

283 3/8"
DOOR FRAME WIDTH

42 1/8" D.L. ORG.
49 1/2"
PANEL WIDTH

4 1 1/4" MAX.
CORNERS

4 1 1/4" MAX.
EXT.
CORNERS

13 3/4" 47 1/4" MAX.
TYP.

37" MAX.
TYP.

FEB 21 2018
**DESIGN LOAD CAPACITY - PSF**

(WITH OR WITHOUT HEAD RECEPTOR)

<table>
<thead>
<tr>
<th>PANEL WIDTH</th>
<th>DOOR FRAME HEIGHT</th>
<th>GLASS 'C' &amp; 'C1'</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCHES</td>
<td>WITHOUT REINF.</td>
<td>WITH REINFORCING</td>
</tr>
<tr>
<td></td>
<td>EXT(+), INT(-)</td>
<td>EXT(+), INT(-)</td>
</tr>
<tr>
<td>36</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td>48</td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td>54</td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td>60</td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
<td>85.0</td>
</tr>
</tbody>
</table>

CHART ABOVE SHOWS FRAME HEIGHTS FOR DOORS WITHOUT HEAD RECEPTOR.

FOR DOORS WITH HEAD RECEPTORS OVERALL HEIGHT = DOOR FRAME HT. FROM CHART – 2".

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

---

**FEB 2 1 2019**

STATE OF FLORIDA

NO. T09032
# Head Anchor Load Capacity - PSF (Doors Without Head Receptacle)

(Applies to Sheet No. 2, Unit 2.20)

<table>
<thead>
<tr>
<th>Anchor Type</th>
<th>Anchor Type 'A'</th>
<th>Anchor Type 'B'</th>
<th>Anchor Type 'C'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel Width</td>
<td>Height (inches)</td>
<td>Height (inches)</td>
<td>Height (inches)</td>
</tr>
<tr>
<td>36</td>
<td>13.50</td>
<td>13.50</td>
<td>13.50</td>
</tr>
<tr>
<td>42</td>
<td>13.50</td>
<td>13.50</td>
<td>13.50</td>
</tr>
<tr>
<td>48</td>
<td>13.50</td>
<td>13.50</td>
<td>13.50</td>
</tr>
<tr>
<td>54</td>
<td>12.00</td>
<td>12.00</td>
<td>12.00</td>
</tr>
<tr>
<td>60</td>
<td>10.80</td>
<td>10.80</td>
<td>10.80</td>
</tr>
</tbody>
</table>

Head Anchor Load Capacity - PSF (Doors With Head Receptacle, Applies to Sheet No. 2, Unit 2.20)

<table>
<thead>
<tr>
<th>Anchor Type</th>
<th>Anchor Type 'D'</th>
<th>Anchor Type 'E'</th>
<th>Anchor Type 'F'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shim Space</td>
<td>1/4&quot; Max. Shim</td>
<td>9 Shim</td>
<td>9 Shim</td>
</tr>
<tr>
<td>Panel Width</td>
<td>Height (inches)</td>
<td>Height (inches)</td>
<td>Height (inches)</td>
</tr>
<tr>
<td>36</td>
<td>13.50</td>
<td>13.50</td>
<td>13.50</td>
</tr>
<tr>
<td>42</td>
<td>13.50</td>
<td>13.50</td>
<td>13.50</td>
</tr>
<tr>
<td>48</td>
<td>13.50</td>
<td>13.50</td>
<td>13.50</td>
</tr>
<tr>
<td>54</td>
<td>12.00</td>
<td>12.00</td>
<td>12.00</td>
</tr>
<tr>
<td>60</td>
<td>10.80</td>
<td>10.80</td>
<td>10.80</td>
</tr>
</tbody>
</table>

---

**Chart Above Shows Frame Heights for Doors Without Head Receptacle.**

Limit all exterior loads to +120.0 PSF max. For reinforced SGD system per sheets 4 & 6.

Limit all exterior loads to +80.0 PSF max. For un-reinforced SGD system per sheets 4 & 6.1

---


---

See chart on Sheet 4 for design load capacity of desired glass size and reinforcing types.

See chart above for head and sill anchor capacity. Lower design pressures from door load chart, head anchor chart or sill anchor chart will apply to entire system.

---

FEB 3 2018

No. 70582

drawing no.

sheet 5 of 16
3-TRACKS UN-REINFORCED S.G.D.

APPROVED CONFIGURATIONS

MAX. 6 PANELS OR LESS
MAX. FRAME AREA NOT TO EXCEED 236.1 SQ. FT. (DOORS WITHOUT HEAD RECEPTORS)
MAX. FRAME AREA NOT TO EXCEED 235.9 SQ. FT. (DOORS WITH HEAD RECEPTORS)

NOTE:
1. CONFIGURATIONS SHOWN FOR ILLUSTRATION PURPOSES ONLY
2. FOR APPLICABLE DESIGN PRESSURES SEE SHEET 4.
3. FOR ANCHOR DETAILS SEE SHEETS 7 THRU 11.

Approved as complying with the
Florida Building Code
Date: 2/21/16
Approval No. 0515-2015-01
Attainable Door Product Control
By: [Signature]
NOTE:
1. CONFIGURATIONS SHOWN FOR ILLUSTRATION PURPOSES ONLY
2. FOR APPLICABLE DESIGN PRESSURES AND REINFORCEMENTS REQUIREMENTS SEE SHEET 4.
3. FOR ANCHOR DETAILS SEE SHEETS 7 THRU 11.

 APPROVED CONFIGURATIONS
MAX. 6 PANELS OR LESS
MAX. FRAME AREA NOT TO EXCEED 236.1 SQ. FT. (DOORS WITHOUT HEAD RECEPTORS)
MAX. FRAME AREA NOT TO EXCEED 235.9 SQ. FT. (DOORS WITH HEAD RECEPTORS)

3-TRACKS REINFORCED S.G.D.

Approved as complying with the.
Florida Building Code.
Date: 2/1/2018

Mineral Dade Product Control

FEB 2 1 2018
UNITS WITHOUT HEAD RECEPTORS
(SEE SHEET 9 WITH HEAD RECEPTOR)

WEEPHOLES:
W1 = 1/2" LONG WEEP NOTCHES
(1) AT 7" FROM EACH END
(2) AT MIDSPAN AT 16" O.C.

W2 = 1/2" LONG WEEP NOTCHES
(1) AT 10" FROM EACH END
(2) AT MIDSPAN AT 16" O.C.
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.

**Typical Anchors:** See elev. for spacing

- **Type 'A'**
  - 5/16" Dia. Ultracor by Elco (F_n, = 177 ksi, F_y = 155 ksi)
  - Into 2BY wood bucks or wood structures
  - 1-1/2" min. penetration into wood
  - Thru 1BY wood bucks into concrete
  - 1-3/8" Min. embed into concrete

- **Type 'B'**
  - 5/16" Dia. Ultracor by Elco (F_n, = 177 ksi, F_y = 155 ksi)
  - Directly into concrete
  - 1-3/4" min. embed

- **Type 'C'**
  - 5/16" Dia. Tecks or self drilling screws (Grade 5 CRS)
  - Into miami-dade county approved mullions or
  - Into metal structures
  - (3) threads min. penetration beyond substrate
  - Aluminum: 1/8" Thk. min. (6063-T5 Min.)
  - Steel: 1/8" Thk. min. (F_y = 36 ksi Min.)
  - Steel in contact with aluminum to be plated or painted

- **Type 'BB'**
  - 5/16" Dia. Ultracor by Elco (F_n, = 177 ksi, F_y = 155 ksi)
  - Directly into concrete
  - 1-1/2" min. embed

- **At Sill (For doors w/o head receptor)**

- **5/16" Dia. Ultracor by Elco (F_n, = 177 ksi, F_y = 155 ksi)**
  - Into 2BY wood bucks or wood structures
  - 1-1/2" min. penetration into wood
  - Thru 1BY bucks into conc. or blocks
  - 1-1/4" min. embed into concrete or blocks
  - Directly into concrete or blocks
  - 1-1/2" min. embed into concrete
  - 1-3/4" min. embed into blocks

- **5/16" Dia. Tecks or self drilling screws (Grade 5 CRS)**
  - Into miami-dade county approved mullions or
  - Into metal structures
  - (3) threads min. penetration beyond substrate
  - Aluminum: 1/8" Thk. min. (6063-T5 Min.)
  - Steel: 1/8" Thk. min. (F_y = 36 ksi Min.)
  - Steel in contact with aluminum to be plated or painted

**Anchor Edge Distances:**
- Into concrete (A) = 1-3/8" min. (Ext. or int. tracks at head/sill)
- Into concrete (B) = 2-1/2" min. (Middle track at head/sill)
- Into masonry = 2" min.
- Into wood structure = 1-1/4" min.
- Into metal structure = 3/4" min.
- Wood at head or jamses SG = 0.55 Min.
- Concrete at head, sill or jamses FC = 3000 psi Min.
- C-90 hollow/filled block at jamses F'm = 2000 psi Min.

**Alternate Substrates for units without head receptors**

---

*Note*: The text above is a representation of the technical specifications for anchoring systems, typically used in construction to ensure safety and structural integrity. The diagram illustrates the typical anchoring methods and edge distances for various types of anchors and substrates.
UNITS WITH HEAD RECEPTORS
HEAD RECEPTOR MOUNT SHOWN,
SEE ELEVATION ON SHEET 3,
DESIGN LOAD CAPACITY ON SHEET 4,
AND ANCHOR CAPACITY CHART IN SHEET 5

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'O'- 5/16" DIA. ULTRACON BY 'ELCO' (Fy = 177 KSI, Fm = 155 KSI)
DIRECTLY INTO CONCRETE
1-3/4" MIN. EMBED

5/16" DIA. SELF DRILLING SCREWS (GRADE 5 CRS)
INTO MIAMI-DADE COUNTY APPROVED MULLIONS
OR
INTO METAL STRUCTURES
(3) THREADS MIN. PENETRATION BEYOND SUBSTRATE
ALUMINUM: 1/8" THK. MIN. (6063-T6 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 (A) = 1-3/8" MIN. (EXT. OR INT. TRACKS AT HEAD/SILL)
INTO CONCRETE (B) = 2-1/2" MIN. (MIDDLE TRACK AT HEAD/SILL)
INTO METAL STRUCTURE = 1-1/2" MIN.
CONCRETE AT HEAD/SILL f'c = 3000 PSI MIN.
3-TRACKS UN-REINFORCED S.G.D.
3-TRACKS REINFORCED S.G.D.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART #</th>
<th>QUANTITY</th>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
<th>MANF./SUPPLIER/REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>ES-6600-005</td>
<td>2/ PANEL</td>
<td>TOP AND BOTTOM RAIL (INSUL. LAM. GLASS)</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E2</td>
<td>ES-6600-006</td>
<td>1/ PANEL</td>
<td>LOCK STILE (INSUL. LAM. GLASS)</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E3</td>
<td>ES-6600-007</td>
<td>1/ PANEL</td>
<td>INTERLOCK STILE (INSUL. LAM. GLASS)</td>
<td>6065-T6</td>
<td>-</td>
</tr>
<tr>
<td>E4</td>
<td>ES-6600-008</td>
<td>1</td>
<td>ASTRAGAL ADAPTER</td>
<td>6065-T6</td>
<td>-</td>
</tr>
<tr>
<td>E5</td>
<td>ES-6600-012</td>
<td>2</td>
<td>SNAP-IN JAMB COVER (OPTIONAL)</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E6</td>
<td>ES-6600-013</td>
<td>1</td>
<td>TRACK INSERT</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E8B</td>
<td>ES-6600-014A</td>
<td>AS REQ'D.</td>
<td>RETAINER ANGLE, 7/&quot; LONG</td>
<td>6063-T6</td>
<td>AT INTERLOCK LOCATIONS</td>
</tr>
<tr>
<td>E7</td>
<td>ES-6600-016</td>
<td>AS REQ'D.</td>
<td>ASTRAGAL REINFORCEMENT, FULL PANEL LENGTH</td>
<td>6005-T5</td>
<td>-</td>
</tr>
<tr>
<td>E8</td>
<td>ES-6600-017</td>
<td>AS REQ'D.</td>
<td>INTERLOCK REINFORCEMENT, FULL PANEL LENGTH</td>
<td>6005-T5</td>
<td>-</td>
</tr>
<tr>
<td>E9</td>
<td>ES-6600-018</td>
<td>AS REQ'D.</td>
<td>HEAD COVER (OPTIONAL)</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E10</td>
<td>ES-6600-023</td>
<td>1/ PANEL</td>
<td>LOCK STILE (LAM. GLASS)</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E11</td>
<td>ES-6600-024A</td>
<td>2/ PANEL</td>
<td>TOP AND BOTTOM RAIL (LAM. GLASS)</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E12</td>
<td>ES-6600-025</td>
<td>1/ PANEL</td>
<td>INTERLOCK STILE (LAM. GLASS)</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E13</td>
<td>ES-6600-026</td>
<td>1</td>
<td>ASTRAGAL STILE (LAM. GLASS)</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E13A</td>
<td>ES-6600-028</td>
<td>1</td>
<td>ASTRAGAL STILE (INSUL. LAM. GLASS)</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E13B</td>
<td>ES-6600-032</td>
<td>2/ FIX. PANEL</td>
<td>FIXED PANEL BOTTOM GUIDE, 7/&quot; LONG</td>
<td>6063-T5</td>
<td>-</td>
</tr>
<tr>
<td>E14</td>
<td>ES-6600-050</td>
<td>1</td>
<td>FRAME HEAD AT RECEPTOR</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E15</td>
<td>ES-6600-051</td>
<td>1</td>
<td>FRAME SILL</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E16</td>
<td>ES-6600-052</td>
<td>2</td>
<td>FRAME JAMB</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E17</td>
<td>ES-6600-053</td>
<td>1</td>
<td>HEAD RECEPTOR</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E18</td>
<td>ES-6600-054</td>
<td>1</td>
<td>RECEPTOR REINFORCEMENT, FULL LENGTH</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E19</td>
<td>ES-6600-055</td>
<td>1</td>
<td>FRAME HEAD</td>
<td>6063-T6</td>
<td>-</td>
</tr>
<tr>
<td>E20</td>
<td>ES-6600-028</td>
<td>1</td>
<td>SILL RESIN</td>
<td>6063-T5</td>
<td>-</td>
</tr>
<tr>
<td>E21</td>
<td>ES-OF-001A</td>
<td>AS REQ'D.</td>
<td>FIX. PANEL CLIP, 4&quot; LONG, AT 1/3 POINTS</td>
<td>6063-T5</td>
<td>-</td>
</tr>
<tr>
<td>M2</td>
<td>ES-6600-062A</td>
<td>4/ PANEL</td>
<td>GLAZING SKEW</td>
<td>SILICONE</td>
<td>DUROMETER 65±5 SHORE A, EXTRUSIONS S.A.</td>
</tr>
<tr>
<td>M3</td>
<td>ES-6600-001</td>
<td>4/ PANEL</td>
<td>GLAZING GASKET (INSUL. LAM. GLASS)</td>
<td>SILICONE</td>
<td>DUROMETER 65±5 SHORE A, EXTRUSIONS S.A.</td>
</tr>
<tr>
<td>M4</td>
<td>ES-4018A</td>
<td>AS REQ'D.</td>
<td>GLAZING GASKET</td>
<td>EPDM</td>
<td>DUROMETER 75±5 SHORE A</td>
</tr>
<tr>
<td>M8</td>
<td>ES-5008A</td>
<td>AS REQ'D.</td>
<td>BULB W/STRIPPING</td>
<td>SILICONE</td>
<td>DUROMETER 65±5 SHORE A</td>
</tr>
<tr>
<td>M9</td>
<td>E-214</td>
<td>AS REQ'D.</td>
<td>ASTRAGAL ADAPTER W/STRIPPING</td>
<td>VINYL</td>
<td>THERMOPLASTIC ELASTOMER, DUROMETER 65±5 SHORE A</td>
</tr>
<tr>
<td>M12</td>
<td>O3001790</td>
<td>AS REQ'D.</td>
<td>FABRIC COATED FOAM WEATHERSEAL</td>
<td>POLYETHYLENE</td>
<td>Q-LONG</td>
</tr>
<tr>
<td>M13</td>
<td>O2501790</td>
<td>AS REQ'D.</td>
<td>JAMB W/STRIPPING</td>
<td>POLYETHYLENE</td>
<td>Q-LONG</td>
</tr>
<tr>
<td>M14</td>
<td>O2001790</td>
<td>AS REQ'D.</td>
<td>INTERLOCK W/STRIPPING</td>
<td>POLYETHYLENE</td>
<td>Q-LONG</td>
</tr>
<tr>
<td>M15</td>
<td>O1507270</td>
<td>AS REQ'D.</td>
<td>INTERLOCK W/STRIPPING</td>
<td>POLYETHYLENE</td>
<td>Q-LONG</td>
</tr>
<tr>
<td>M16</td>
<td>W223012K</td>
<td>AS REQ'D.</td>
<td>FILE W/STRIPPING</td>
<td>POLYPROPYLENE</td>
<td>-</td>
</tr>
<tr>
<td>M17</td>
<td>W22322N</td>
<td>AS REQ'D.</td>
<td>FILE W/STRIPPING AT INTERLOCK</td>
<td>POLYPROPYLENE</td>
<td>-</td>
</tr>
<tr>
<td>M18</td>
<td>P0304 AFK</td>
<td>-</td>
<td>ADHESIVE FILE PAD (4&quot; x 1&quot; x 1/2&quot;)</td>
<td>ULTRAFAB</td>
<td>-</td>
</tr>
<tr>
<td>M19</td>
<td>G02-24A/460-02-A</td>
<td>2/ PANEL</td>
<td>ROLLER</td>
<td>-</td>
<td>PARABO Ble</td>
</tr>
<tr>
<td>M20</td>
<td>69800-001</td>
<td>-</td>
<td>ROLLER SCREW CAP</td>
<td>PVC</td>
<td>-</td>
</tr>
<tr>
<td>M21</td>
<td>PS01-1005-006</td>
<td>1</td>
<td>MORTISE LOCK KEEPER</td>
<td>-</td>
<td>INTERLOCK</td>
</tr>
<tr>
<td>M22</td>
<td>PS01-0035-008</td>
<td>1</td>
<td>TWO POINT 3-PLY HOOK LOCK</td>
<td>-</td>
<td>INTERLOCK</td>
</tr>
<tr>
<td>M23</td>
<td>PS01-0100-117</td>
<td>1/ MOV. PANEL</td>
<td>HANDLE SET</td>
<td>-</td>
<td>INTERLOCK</td>
</tr>
<tr>
<td>M27</td>
<td>#12 x 1 1/2&quot;</td>
<td>4/ CORNER</td>
<td>FRAME ASSEMBLY SCREWS</td>
<td>ST. STEEL</td>
<td>P.H. SMS</td>
</tr>
<tr>
<td>M28</td>
<td>#12 x 1 3/4&quot;</td>
<td>AS REQ'D.</td>
<td>RECEPTOR FASTENERS</td>
<td>ST. STEEL</td>
<td>P.H. SMS</td>
</tr>
<tr>
<td>M29</td>
<td>#12 x 1 1/4&quot;</td>
<td>AS REQ'D.</td>
<td>BUMPER FASTENERS</td>
<td>ST. STEEL</td>
<td>P.H. SMS</td>
</tr>
<tr>
<td>M30</td>
<td>#10 x 1 1/4&quot;</td>
<td>4/ CORNER</td>
<td>PANEL ASSEMBLY SCREWS</td>
<td>ST. STEEL</td>
<td>P.H. SMS</td>
</tr>
<tr>
<td>M31</td>
<td>#8 x 3/4&quot;</td>
<td>2/ ROLLER</td>
<td>ROLLER FASTENERS</td>
<td>ST. STEEL</td>
<td>F.H. SMS</td>
</tr>
<tr>
<td>M32</td>
<td>#10 x 1/2&quot;</td>
<td>2/ CLIP</td>
<td>FIX. CLIP FASTENERS</td>
<td>ST. STEEL</td>
<td>MAIN SMS</td>
</tr>
<tr>
<td>M33</td>
<td>#8 x 1 1/2&quot;</td>
<td>3/ HANDLE</td>
<td>HANDLE FASTENERS</td>
<td>ST. STEEL</td>
<td>F.H. SMS</td>
</tr>
<tr>
<td>M34</td>
<td>#10 x 1/2&quot;</td>
<td>2/ CLIP</td>
<td>FIX. PANEL CLIP FASTENERS</td>
<td>ST. STEEL</td>
<td>F.H. SMS</td>
</tr>
<tr>
<td>M35A</td>
<td>#10 x 1/2&quot;</td>
<td>4/ ANGLE</td>
<td>ASTRAGAL RETAINER FASTENERS</td>
<td>ST. STEEL</td>
<td>F.H. SMS</td>
</tr>
<tr>
<td>M36</td>
<td>#8 x 1 1/2&quot;</td>
<td>AS REQ'D.</td>
<td>ASTRAGAL ADAPTER FASTENERS, AT 4&quot; FROM EACH END</td>
<td>ST. STEEL</td>
<td>P.H. SMS</td>
</tr>
<tr>
<td>M36A</td>
<td>#8 x 3/5&quot;</td>
<td>2/ GUIDE</td>
<td>BOTTOM GUIDE FASTENERS</td>
<td>ST. STEEL</td>
<td>P.H. SMS</td>
</tr>
</tbody>
</table>

**SEALANT:**

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

**LOCK:**

SURFACE MOUNT METALLIC HANDLE AT 43-1/4" FROM BOTTOM FASTENED TO LOCK STILE WITH (2) #10-32 x 2-1/2" ON MS SURFACE MOUNT METALLIC 3 PLY DUAL HOOK LOCK 43-1/4" FROM BOTTOM FASTENED TO LOCK STILE WITH (3) #8 x 3/4" PH SMS SURFACE MOUNT METALLIC ADAPTER AT 43-1/4" FROM BOTTOM FASTENED TO FRAME JAMB AND ASTRAGAL STILE WITH (3) #8 x 3/4" PH SMS

Approved as complying with the Florida Building Code

Date 5/22/2001

Malaya Under Product Control

By

FEB 21 2018