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

The Folding Sliding Door Company, LLC
290 Spring View Commerce Drive, Bldg. #12
Debary, FL 32713

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 HD-82 Aluminum (Thermally broken) Out folding Door-L.M.I.

APPROVAL DOCUMENT: Drawing No. FSD006 Rev E, titled “Series HD82-70 Outfolding”, sheets 1 through 11 of 11, prepared by Building Drops, Inc., dated 09/24/13 and last revised on 06-26-2018, signed and sealed by Hermes F. Noreno, 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: Large and Small Missile Impact Resistant

Limitations:
1. See Design Pressure rating Vs glazing types and sill types (Water Barrier threshold detail A/5 or Recess threshold detail X/11 & Y/11) in sheet 1. See anchor layout, including Jamb anchor Schedule in sheet 2.
2. See sheet 8 for max frame size (frame height x frame width) to arrange various out folding qualified configurations. The max panel size not to exceed tested 36-1/8” wide and 91-1/4” high, nor max 96-1/16” tested frame height, in any configuration per charts in sheet 8.
3. Recess threshold is not approved for water resistant unless complies w/ FBC requirements.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, 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 revises # 15-1207.01 and consists of this page 1 and evidence pages E-1, E-2, E-3 & E-4, as well as

NOA No. 18-0712.08
Expiration Date: February 19, 2020
Approval Date: August 16, 2018
Page 1
The Folding Sliding Door Company, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

I. Evidence submitted in previous files

A. DRAWINGS
   1. Manufacturer's die drawings and sections (submitted under file referenced below).
   2. Drawing No. FSD006 Rev D, titled “Series HD82-70 Out folding”, sheets 1 through 11 of 11, prepared by Building Drops, Inc., dated 09/24/13 and last revised on 10/03/16, signed and sealed by Hermes F. Norero, P.E.

B. TESTS (submitted under file #15- 1207.01/#13-1028.03)
   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 (See applicable threshold)
      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 aluminum out/in folding doors, prepared by National Certified Testing Lab, Test Report No. NCTL-210-3846-1, dated 02/0/13 signed and sealed by Gerald J. Ferrara, P.E.
   (Note: This test report was re-issued by National certified Testing Lab with name change on 07/18/14, signed & sealed by Gerald J. Ferrara, P.E. This test report also has an addendum letter dated 02/19/14, issued by the lab.)

C. CALCULATIONS
   1. Anchor verification calculations and structural analysis, complying with FBC-2014, prepared by Building Drops Inc., dated 10/02/15 and last revised on 10/11/16, signed and sealed by Hermes F. Norero, 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. for their “Sentry Glass® (Clear and White) Interlayer”, expiring on 07/04/18.
   2. Test reports for Technofrom 18.6mm Flat I-Strut, Test reports No. ETC-07-1043-19094.0, dated 02/18/08 and ETC-07-1043-20048.0 dated 09/19/07, issued by ETC Laboratories for Xenon Arch weathering per ASTM G-26 and tensile test per ASTMD-638, signed by Joseph L. Doldan, P.E. and Test report No. 60520.01-106-18 dated 12/14/05, issued by Architectural Testing for “Technofrom I-Strut” for smoke density per ASTMD-2843 and rate of burning per ASTMD-635, signed and sealed by Joseph A. Reed, P.E.
   3. Technical strength properties cut sheet of LMI Custom Mixing’s EPDM compound #D04080-03 per ASTM C846, extruded by Performance Elastomers.

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 18-0712.08
Expiration Date: February 19, 2020
Approval Date: August 16, 2018
F. STATEMENTS
2. Statement letters dated 07/14/14 from Folding Door Company Limited (UK) and Folding Door Company, LLC to cancel original NOA application and distribution agreement, signed by Kehinde Jolaoso, Managing Director and David Shearman, C. E. O. on behalf of their respective companies.
3. Addendum letter dated 02/19/14, issued by National Certified Testing Lab, signed and sealed by Gerald J. Ferrara, P. E.
4. Lab compliance as part of the above referenced test report.

G. OTHER
1. This NOA revises NO. #13-1028.03, expiring 02/19/20.
2. Test proposal #12-0911 dated June 12, 2012, approved by RER.
3. Commercial relation-Supply agreement of propriety hardware between Folding Sliding Door Limited (UK) and Folding Sliding Door Company, LLC (USA).
4. Summary of conference call dated July 10, 2014 issued by RER.

2. Evidence submitted in previous files

A. DRAWINGS
1. Manufacturer's die drawings and sections.
2. Drawing No. FSD006 Rev B, titled “Series HD82-70 Out folding”, sheets 1 through 11 of 11, prepared by Building Drops, Inc., dated 09/24/13 and last revised on 02-11-2015, signed and sealed by Hermes F. Norero, P.E.

B. TESTS (submitted under file #13-1028.03)
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 (See applicable threshold)
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 aluminum out/in folding doors, prepared by National Certified Testing Lab, Test Report No. NCTL-210-3846-1, dated 02/0/13 signed and sealed by Gerald J. Ferrara, P. E.
(Note: This test report was re-issued by National certified Testing Lab with name change on 07/18/14, signed & sealed by Gerald J. Ferrara, P.E. This test report also has an addendum letter dated 02/19/14, issued by the lab.)

C. CALCULATIONS
1. Anchor verification calculations and structural analysis, complying with FBC-2010, prepared by Building Drops Inc., dated 10/21/13, 05/05/14 and last revised on 10-16-2014, signed and sealed by Hermes F. Norero, P.E.
2. Glazing complies w/ ASTME-1300-02 & -04

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 18-0712.08
Expiration Date: February 19, 2020
Approval Date: August 16, 2018
D. QUALITY ASSURANCE
   1. Miami Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS
   1. Notice of Acceptance No. 11-0624.02 issued to E.I. DuPont DE Nemours & Co., Inc. for their “DuPont Sentry Glass ®”, expiring on 01/14/17.
   2. Test reports for Technoform 18.6mm Flat I-Strut, Test reports No. ETC-07-1043-19094.0, dated 02/18/08 and ETC-07-1043-20048.0 dated 09/19/07, issued by ETC Laboratories for Xenon Arch weathering per ASTM G-26 and tensile test per ASTM-638 , signed by Joseph L. Doldan, P.E. and Test report No. 60520.01-106-18 dated 12/14/05, issued by Architectural Testing for “Technoform I-Strut” for smoke density per ASTM-2843 and rate of burning per ASTM-635, signed and sealed by Joseph A. Reed, P.E.
   3. Technical strength properties cut sheet of LMI Custom Mixing’s EPDM compound #D04080-03 per ASTM C846, extruded by Performance Elastomers.

F. STATEMENTS
   5. Statement letter of conformance FBC 2010 and letter of no financial interest, Building Drops Inc., dated 04/24/13, signed and sealed by Hermes F. Norero, P.E.
   6. Statement letters dated 07/14/14 from Folding Door Company limited (UK) and Folding Door Company, LLC to cancel original NOA application and distribution agreement, signed by Kehinde Jolaoso, Managing Director and David Shearman, C. E. O. on behalf of their respective companies.
   7. Addendum letter dated 02/19/14, issued by National Certified Testing Lab, signed and sealed by Gerald J. Ferrara, P. E.
   8. Lab compliance as part of the above referenced test report.

G. OTHER
   2. Commercial relation-Supply agreement of propriety hardware between Folding Sliding Door limited (UK) and Folding Sliding Door Company, LLC (USA).

3. New Evidence submitted

A. DRAWINGS
   1. Drawing No. FSD006 Rev E, titled “Series HD87-70 Outfolding”, sheets 1 through 11 of 11, prepared by Building Drops, Inc., dated 09/24/13 and last revised on 06-261-2018, signed and sealed by Hermes F. Norero, P.E.
      Note: The DWG revision is only for FBC code and glazing manufacturer update, only.

B. TESTS
   1. None.

C. CALCULATIONS
   1. None.
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

E. MATERIAL CERTIFICATIONS

F. STATEMENTS
   2. Commercial relation-Supply agreement of propriety hardware between Folding Sliding Door limited (UK) and Folding Sliding Door Company, LLC (USA)

G. OTHER
   1. This NOA revises NOA # 15-1207.01, expiring 02/19/20.
   2. Commercial relation-Supply agreement of propriety hardware between Folding Sliding Door limited (UK) and Folding Sliding Door Company, LLC (USA)

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 18-0712.08
Expiration Date: February 19, 2020
Approval Date: August 16, 2018
THE FOLDING SLIDING DOOR COMPANY

HD82-70 MM FOLDING OUTFOLDING DOOR SYSTEM

GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 6TH EDITION (2017) FLORIDA BUILDING CODE (FBC), INCLUDING WHIZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
   - TAS 203-94
   - TAS 202-94
   - TAS 203-94

2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X WOOD & STEEL FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.

3. 3X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURAL BUCK DESIGN AND INSTALLATIONS IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.

4. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEPART FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT. FOR NON-HVHZ AREA, INSTALLATION TO BE REVISED BY AHJ (AUTHORITY HAVING JURISDICTION).

5. Deviation from the Corresponding Florida Product Approval in HVHZ area requires one time approval from Miami-Dade County or AHJ.

6. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.

7. DOOR FRAME MATERIAL: ALUMINUM 6063-T6

8. GlASS SHALL MEET THE REQUIREMENTS OF ASTM E 1300 GLASS CHARTS. SEE SHEET 7 FOR GLAZING DETAILS.

9. DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM UNIT FRAMING SHALL BE PROTECTED AS DFREED IN THE 6TH EDITION FBC.

10. GLAZING GASKETS SHALL MEET THE REQUIREMENTS OF THE 6TH EDITION FBC.

11. A BEAD OF SEALANT AROUND THE ENTIRE PERIMETER OF THE FRAME IS TO BE USED TO SEAL SYSTEM TO THE SUBSTRATE.
ELEVATION
OUTSWING SL3R UNIT SHOWN

NOTE:
1. AT JAMBS ONE (1) ADDITIONAL ANCHOR REQUIRED THROUGH EACH HINGE. ANCHORS THROUGH HINGES ARE IN ADDITION TO THE SPECIFIED O.C. ANCHOR SPACING.
2. TESTED SIZE SHOWN. SEE SHEET 8 FOR OTHER QUALIFIED CONFIGURATIONS.
3. MAXIMUM ALLOWED FRAME WIDTH = 1.5 X 223.75" = 335.625" SUCH THAT THE MAXIMUM PANEL SIZE, AS SHOWN HEREIN, IS NOT EXCEEDED.

ANCHOR LAYOUT

JAMB ANCHOR SCHEDULE

<table>
<thead>
<tr>
<th>SUBSTRATE</th>
<th>O.C. SPACING</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD</td>
<td>3.5/16&quot;</td>
</tr>
<tr>
<td>CONCRETE/MASONRY</td>
<td>6.3/4&quot;</td>
</tr>
<tr>
<td>STEEL STUD</td>
<td>5.7/8&quot;</td>
</tr>
</tbody>
</table>

SEE SCHEDULE ABOVE FOR O.C. SPACING BASED ON SUBSTRATE
NOTE:

1. AT JAMBS ONE (1) ADDITIONAL ANCHOR REQUIRED THROUGH EACH HINGE. ANCHORS THROUGH HINGES ARE IN ADDITION TO THE SPECIFIED O.C. ANCHOR SPACING.
2. TESTED SIZE SHOWN. SEE SHEET 8 FOR OTHER QUALIFIED CONFIGURATIONS.
3. MAXIMUM ALLOWED FRAME WIDTH + 1.5 x 223.75" = 335.625" SUCH THAT THE MAXIMUM PANEL SIZE, AS SHOWN HEREIN, IS NOT EXCEEDED.
NOTE:
1. AT JAMBS ONE (1) ADDITIONAL ANCHOR REQUIRED THROUGH EACH HINGE ANCHORS THROUGH HINGES ARE IN ADDITION TO THE SPECIFIED O.C. ANCHOR SPACING.
2. TESTED SIZE SHOWN 
   SEE SHEET B FOR OTHER QUALIFIED CONFIGURATIONS.
3. MAXIMUM ALLOWED FRAME WIDTH 
   = 1.5 X 223.75" = 335.625" SUCH THAT THE MAXIMUM PANEL SIZE, AS SHOWN HEREIN, IS NOT EXCEEDED.
**VERTICAL SECTION A**

SILL - CONCRETE/MASONRY

WATER BARRIER/STANDARD THRESHOLD

- W: 1/4 WEEP HOLES AT 18" O.C. IN WATER BARRIER AND RECESSED THRESHOLD
- 1/4" ITW TAPCON OR 1/4" ELOD ULTRACON INSTALLATION ANCHOR
- 2 1/2" MIN. EMBEDMENT

**VERTICAL SECTION B**

HEAD - 2X WOOD BUCK

- MAX UNIT HEIGHT 96-1/16"
- SEE GLAZING OPTIONS, SHEET 7
- EXTERIOR FINISH BY OTHERS
- CONCRETE/MASONRY BY OTHERS
- SILICONE SEALANT BY OTHERS
- 3" MIN. EMBEDMENT
- 1/4" MAX. SHIM SPACE

**VERTICAL SECTION C**

HEAD - STEEL STUD

- MAX UNIT HEIGHT 96-1/16"
- SEE GLAZING OPTIONS, SHEET 7
- EXTERIOR FINISH BY OTHERS
- CONCRETE/MASONRY BY OTHERS
- SILICONE SEALANT BY OTHERS
- 3" MIN. EMBEDMENT

**VERTICAL SECTION D**

SILL - 2X WOOD FRAME

RECESSED THRESHOLD

- W: 1/4 WEEP HOLES AT 18" O.C. IN WATER BARRIER AND RECESSED THRESHOLD
- 1/4" OR. 5 TEX SCREW INSTALLATION ANCHOR
- MIN. 3 THREADS PENETRATION BEYOND STEEL STRUCTURE
- 1/4" MAX. SHIM SPACE
- 3" MIN. EMBEDMENT
**GLAZING NOTES:**

1. ALL GLAZING CONFIGURATIONS SHALL COMPLY WITH SAFETY GLAZING REQUIREMENTS OUTLINED IN THE 6TH EDITION (2017) FBC WITH EVIDENCE TO BE SUPPLIED TO BUILDING OFFICIAL.
2. SPACER SYSTEM
   2.1. ALUMINUM BOX SPACER AT PERIMETER OF GLASS.
   2.2. PRIMARY SEALANT IS PIB-29-BL BY ADCO
   2.3. SECONDARY SILICONE SEALANT IS GE3723, TWO PART
3. GLAZING GASKET ARE OF THERMOPLASTIC ELASTOMER (TPE) CUSTOM MIXING COMPOUND DH4080-03
   3.1. 81 SHORE A HARDNESS.
   3.2. TENSILE STRENGTH = 2063 PSI
   3.3. ELONGATION = 273%
4. SPECIFIC GRAVITY = 1.18
5. GLAZING GASKETS SHALL COMPLY WITH THE 6TH EDITION (2017) FBC.

---

**HORIZONTAL SECTION**

**JAMB - 2X WOOD FRAME LOCKING JAMB**

- 1" O.A. INSULATED GLASS consisting of:
  - 3/16" TEMPERED GLASS,
  - 1/32" ALUMINUM BOX SPACER,
  - 3/16" HEAT STRENGTHENED GLASS
- 0.090" SentryGlas interlayer by Kuraray,
- 3/16" HEAT STRENGTHENED GLASS

**Horizonal Section**

**INTERMEDIATE LOCK AT CARRIER**

- 1" O.A. INSULATED GLASS consisting of:
  - 9/32" ALUMINUM BOX SPACER,
  - 3/16" HEAT STRENGTHENED GLASS
- 0.090" SentryGlas interlayer by Kuraray,
- 3/16" HEAT STRENGTHENED GLASS

---

**GLAZING DETAIL 1**

- 1/2" GLASS BITE

**GLAZING DETAIL 2**

- 1/2" GLASS BITE

---

**NOTE:** SEE SHEET 8 FOR APPLICABLE HARDWARE DETAILS AND LOCATIONS FOR EACH CONFIGURATION.
**Panel Assembly**

**Typical Panel Corner Assembly**

**Notes:**
1. **Maximum Panel Size:** 36-1/8" x 91-1/4".
2. **Terminal Panel Hardware:**
   - A. "Odd to Odd" Panel Count (I.E. 3L3R Config.) - Requires 5-Pt Lock (Item 29) on Active Swing Panel.
   - B. "Odd to Even" Panel Count (I.E. 3L2R Config.) - Requires 5-Pt Lock (Item 29) on Active Swing Panel and One End Carrier Set (Item 27) on Carrier Joint Panel.
   - C. "Even to Even" Panel Count (I.E. 2L4R Config.) - Requires One End Carrier Set (Item 27) on Both Carrier Joint Panels.
   - D. "Odd Panel Count Into Jamb (I.E. 5L Config.) - Requires 5-Pt Lock (Item 29) on Active Swing Panel.
   - E. "Even Panel into Jamb (I.E. 6L) - Requires One End Carrier Set (Item 26)
3. Hinged Joint Panels - All hinged panels require five center hinges (Item 23 or 24) and 2-Pt Lock (Item 26)
4. Carrier Joint Panels - All carrier panels require an intermediate carrier set (Item 25), and five hinges (Item 23)

**Panel CT.**

**Qualified Configurations**

<table>
<thead>
<tr>
<th>Panel CT.</th>
<th>1L</th>
<th>1R</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1L1R</td>
<td>2L1R</td>
<td>2R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>1L1R</td>
<td>2L1R</td>
<td>3L</td>
<td>3R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>1L3R</td>
<td>2L3R</td>
<td>2L2R</td>
<td>4L</td>
<td>4R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>1L4R</td>
<td>3L1R</td>
<td>3L2R</td>
<td>5L</td>
<td>5R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>1L5R</td>
<td>3L4R</td>
<td>3L3R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>1L5R</td>
<td>3L4R</td>
<td>3L3R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>1L6R</td>
<td>3L5R</td>
<td>3L4R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>1L6R</td>
<td>3L5R</td>
<td>3L4R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>1L8R</td>
<td>3L6R</td>
<td>3L5R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>1L8R</td>
<td>3L6R</td>
<td>3L5R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>1L8R</td>
<td>3L6R</td>
<td>3L5R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>1L8R</td>
<td>3L6R</td>
<td>3L5R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>1L8R</td>
<td>3L6R</td>
<td>3L5R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>1L8R</td>
<td>3L6R</td>
<td>3L5R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>1L8R</td>
<td>3L6R</td>
<td>3L5R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>1L8R</td>
<td>3L6R</td>
<td>3L5R</td>
<td>6L</td>
<td>6R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Panel Dimensions:**
- **335.625" Max. Frame Width**
- **96.06" Max. Frame Height**

**Notes:**
- Frame corner assembly is similar using (2) frame corner keys (38).
### BILL OF MATERIALS

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION</th>
<th>PART NO.</th>
<th>MATERIAL</th>
<th>MANUFACTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FRAME HEAD (WITH ITEM 13)</td>
<td>8202</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>2</td>
<td>FRAME JAMB/STILE (WITH ITEM 12)</td>
<td>8203</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>3</td>
<td>FRAME THRESHOLD (WITH ITEM 13)</td>
<td>8001</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>4</td>
<td>PANEL RAIL (WITH ITEM 12)</td>
<td>8201</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>5</td>
<td>PANEL STILE (WITH ITEM 12)</td>
<td>8201</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>6</td>
<td>ACTIVE STILE ADAPTOR</td>
<td>8211</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>7</td>
<td>ASTRAGAL ADAPTOR</td>
<td>8210</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>8</td>
<td>GLAZING BEAD</td>
<td>8208</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>9</td>
<td>THRESHOLD ADAPTOR</td>
<td>7003</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>10</td>
<td>DUST COVER</td>
<td>G1194</td>
<td>PLASTIC</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>11</td>
<td>SMALL THERMAL STRUT</td>
<td>---</td>
<td>POLYAMIDE</td>
<td>TECHNOFORM</td>
</tr>
<tr>
<td>12</td>
<td>LARGE THERMAL STRUT</td>
<td>---</td>
<td>POLYAMIDE</td>
<td>TECHNOFORM</td>
</tr>
<tr>
<td>13</td>
<td>BOTTOM RAIL GASKET</td>
<td>HD82BPG</td>
<td>EPDM</td>
<td>PERFORMANCE ELASTOMER</td>
</tr>
<tr>
<td>14</td>
<td>TOP RAIL GASKET</td>
<td>FSDBTG</td>
<td>EPDM</td>
<td>PERFORMANCE ELASTOMER</td>
</tr>
<tr>
<td>15</td>
<td>HEAD GASKET</td>
<td>HD82TPG</td>
<td>EPDM</td>
<td>PERFORMANCE ELASTOMER</td>
</tr>
<tr>
<td>16</td>
<td>STILE GASKET</td>
<td>HD82PGW</td>
<td>EPDM</td>
<td>PERFORMANCE ELASTOMER</td>
</tr>
<tr>
<td>17</td>
<td>ASTRAGAL SEAL</td>
<td>HD82FG</td>
<td>EPDM</td>
<td>PERFORMANCE ELASTOMER</td>
</tr>
<tr>
<td>18</td>
<td>COMPRESSION SEAL</td>
<td>F135</td>
<td>EPDM</td>
<td>PERFORMANCE ELASTOMER</td>
</tr>
<tr>
<td>19</td>
<td>INT. GLAZING GASKET</td>
<td>E732</td>
<td>EPDM</td>
<td>PERFORMANCE ELASTOMER</td>
</tr>
<tr>
<td>20</td>
<td>EXT. GLAZING GASKET</td>
<td>E732</td>
<td>EPDM</td>
<td>PERFORMANCE ELASTOMER</td>
</tr>
<tr>
<td>21</td>
<td>REINFORCEMENT (STILES)</td>
<td>---</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>22</td>
<td>TOP PILE</td>
<td>FS75BS</td>
<td>NYLON BRUSH</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>23</td>
<td>CENTER HINGE</td>
<td>FSH5</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>24</td>
<td>OFFSET HINGE</td>
<td>FSHH</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>25</td>
<td>INT. CARRIER SET</td>
<td>FS70RAHD</td>
<td>AL. 6063-T5</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>26</td>
<td>END CARRIER SET</td>
<td>FS70RHD</td>
<td>ALUM./S.S.</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>27</td>
<td>SINGLE CARRIER SET</td>
<td>FS70RPSW</td>
<td>ALUM./S.S.</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>28</td>
<td>INTERNAL SHOOT BOLT (TOP)</td>
<td>FSRA250</td>
<td>S.S./ZINC</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>29</td>
<td>5-PT LATCH W/ DEADBOLT</td>
<td>FS5PL</td>
<td>STEEL</td>
<td>GU</td>
</tr>
<tr>
<td>30</td>
<td>INTERNAL SHOOT BOLT (BOTTOM)</td>
<td>FSNAS250</td>
<td>STEEL</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>31</td>
<td>BI-FOLD 2-PT LOCK</td>
<td>FS2PL</td>
<td>STEEL</td>
<td>GU</td>
</tr>
<tr>
<td>32</td>
<td>FINGERBOLT</td>
<td>FS82/4/600</td>
<td>STEEL</td>
<td>FSD CO.</td>
</tr>
<tr>
<td>33</td>
<td>HOOK KEEP</td>
<td>FS8K</td>
<td>STEEL</td>
<td>GU</td>
</tr>
<tr>
<td>34</td>
<td>CENTER KEEP</td>
<td>FSCKL/R</td>
<td>STEEL</td>
<td>GU</td>
</tr>
</tbody>
</table>

### Diagrams

1. FRAME HEAD
   - ALUMINUM 6063-T5
   - 1.312" x 1.800" x 1.296" x 0.080"
   - Material: POLYAMIDE

2. FRAME JAMB/STILE
   - ALUMINUM 6063-T5
   - 1.999" x 2.030" x 2.800" x 0.068"

3. FRAME THRESHOLD
   - ALUMINUM 6063-T5
   - 2.839" x 2.052" x 2.399" x 0.088"

4. PANEL RAIL
   - ALUMINUM 6063-T5
   - 2.399" x 1.508" x 0.844" x 0.070"

5. PANEL STILE
   - ALUMINUM 6063-T5
   - 2.800" x 2.800" x 2.800" x 0.844"

6. ACTIVE STILE ADAPTOR
   - ALUMINUM 6063-T5
   - 2.800" x 2.800" x 2.800" x 0.844"

7. ASTRAGAL ADAPTOR
   - ALUMINUM 6063-T5
   - 2.800" x 2.800" x 2.800" x 0.844"

8. GLAZING BEAD
   - ALUMINUM 6063-T5
   - 2.800" x 2.800" x 2.800" x 0.844"

### Notes
- Items #23 through #27 and Items #35 through #37 may be constructed alternatively, from grade 316 stainless steel.
# Bill of Materials

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Part No.</th>
<th>Material</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Lever Handle</td>
<td>FSLL</td>
<td>Aluminum</td>
<td>FSD Co.</td>
</tr>
<tr>
<td>36</td>
<td>Half Cylinder</td>
<td>FSHC</td>
<td>Brass/Steel</td>
<td>FSD Co.</td>
</tr>
<tr>
<td>37</td>
<td>Full Cylinder</td>
<td>FSFC</td>
<td>Brass/Steel</td>
<td>FSD Co.</td>
</tr>
<tr>
<td>38</td>
<td>Frame Corner Key</td>
<td>---</td>
<td>Aluminum</td>
<td>FSD Co.</td>
</tr>
<tr>
<td>39</td>
<td>Panel Corner Key</td>
<td>---</td>
<td>Aluminum</td>
<td>FSD Co.</td>
</tr>
<tr>
<td>40</td>
<td>Solid Tongue</td>
<td>8211S</td>
<td>Aluminum</td>
<td>FSD Co.</td>
</tr>
<tr>
<td>41</td>
<td>Bottom Pile</td>
<td>FS75BS</td>
<td>Nylon Brush</td>
<td>FSD Co.</td>
</tr>
</tbody>
</table>

### Diagram

- **Small Thermal Strut Polyamide**: 0.460" x 0.072"
- **Large Thermal Strut Polyamide**: 1.120" x 0.072"
- **Bottom Rail Gasket EPDM**: 0.417" x 0.800"
- **Top Rail Gasket EPDM**: 0.368" x 0.260"
- **Head Gasket EPDM**: 0.417" x 0.439"
- **Stile Gasket EPDM**: 0.422" x 0.457"
- **Astragal Seal EPDM**: 0.753" x 0.533"
- **Compression Seal EPDM**: 0.287" x 0.393"
- **Interior Glazing Gasket EPDM**: 0.372" x 0.536"
- **Exterior Glazing Gasket EPDM**: 0.363" x 0.539"
- **Reinforcement Aluminum 6063-T5**: 0.492" x 1.000" x 0.059"
- **Top Pile Polyethylene**: 0.629" x 1.274"
- **Center Hinge Aluminum 6063-T5**: 0.640" x 1.274"
- **Offset Hinge Aluminum 6063-T5**: 0.640"
- **Intermediate Carrier Set Aluminum 6063-T5**: 3.120" x 1.520" x 2.882"
- **End Carrier Set Aluminum 6063-T5**: 3.120" x 1.520" x 2.067"
- **SINGLE CARRIER SET Aluminum 6063-T5**: 1.520" x 2.067"
- **Solid Tongue Aluminum 6063-T5**: 0.850" x 0.629" x 1.484"
- **Bottom Pile Polyethylene**: 0.329" x 2.067"
WOOD & CONC. SUBSTRATES SHOWN MUST BE RECESS AND/OR ROUTED TO ACCOMMODATE THESE COMPONENTS PRIOR TO INSTALLATION. ALL Edge DISTANCES AND EMBBEDMENTS FOR ANCHORS MUST BE MAINTAINED AS NOTED IN THIS SHEET.

WATER BARRIER THRESHOLD
(SEE INSTALLATION DETAIL A/5)

FLUSH RECESS THRESHOLD (SILL)
(SEE INSTALLATION DETAILS X/11 & Y/11 ABOVE)