NOTICE OF ACCEPTANCE (NOA)

Titan Glass & Aluminum, LLC
450 West 27 Street
Hialeah, FL 33010

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 “TSD-5000 Dry-Glazed” Aluminum Sliding Glass Door - L.M.I.

APPROVAL DOCUMENT: Drawing No. W12-62, titled “Series ‘TSD-5000’ Alum. Sliding Glass Door (L.M.I)”, sheets 1 through 8 of 8, dated 11/21/12 with revision C dated 03/07/18, prepared by Al-Farooq Corporation, 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: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, 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 revises and renews NOA No. 14-0909.14 and consists of this page 1 and evidence pages E-1, E-2, E-3, and E-4, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.

NOA No. 18-0322.04
Expiration Date: March 14, 2023
Approval Date: April 19, 2018
Page 1
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA’s

A. DRAWINGS
   1. Manufacturer’s die drawings and sections.
      (Submitted under NOA No. 12-1213.02 and 14-0909.14)
   2. Drawing No. W12-60, titled “Series ‘TSD-5000’ Alum. Sliding Glass Door (L.M.I.)”,
      sheets 1 through 8 of 8, dated 11/21/12 with revision B dated 07/30/14, prepared by
      Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS
   1. Test reports on: 1) Large Missile Impact Test, per FBC, TAS 201-94
      2) Cyclic Wind Pressure Loading per PA 203-94
      along with marked-up drawings and installation diagram of an aluminum sliding glass
      door 2-Track System, prepared by Fenestration Testing Laboratory, Inc., Test Report
      No. FTL-7837, dated 08/01/14, signed and sealed by Idalmis Ortega, P.E.
   2. 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 and Assembly Test, Type C, Grade 10, per ASTM F
      842, per FBC 2411.3.2.1 and TAS 202-94
      along with marked-up drawings and installation diagram of an aluminum sliding glass
      door 2-Track System, prepared by Fenestration Testing Laboratory, Inc., Test Report
      No. FTL-7456, dated 09/13/13, signed and sealed by Marlin D. Brinson, P.E.
   3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
      2) Uniform Static Air Pressure Test, Loading per PA 202-94
      3) Water Resistance Test, per PA 202-94
      4) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
      along with marked-up drawings and installation diagram of sliding door 2-Track
      system, prepared by Hurricane Engineering Testing, Inc., Test Report No.
      HETI-12-4066, dated 11/14/12, signed and sealed by Rafael E. Droz-Seda, P.E.
      (Submitted under NOA No. 12-1213.02)
B. TESTS (CONTINUED)
4. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
   2) Cyclic Wind Pressure Loading per PA 203-94
   along with marked-up drawings and installation diagram of sliding door 2-Track
   System, prepared by Hurricane Engineering Testing, Inc., Test Reports No.
   HETI-12-4067 and HETI-12-4069, both dated 11/14/12, signed and sealed by Rafael
   E. Droz-Seda, P.E.
   (Submitted under NOA No. 12-1213.02)

C. CALCULATIONS
1. Anchor verification calculations and structural analysis, complying with FBC 5th
   Edition (2014), prepared by Al-Farooq Corporation, dated 08/11/14, signed and
   sealed by Javad Ahmad, P.E.
   (Submitted under NOA No. 14-0909.14)
2. Glazing complies with ASTM E1300-04/09 and with DCA 05-DEC-219 Florida

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 DeNemours & Co., Inc.
   for their “DuPont SentryGlas® Interlayer” dated 08/25/11, expiring on 01/14/17.
2. TREMCO Part EPDM Rubber Extrusions complying with ASTM C864
   Specification for Dense Elastomeric Compression Seal Gaskets Option II exceptions,
   ASTM D 2240 Durometer 85 Hardness Shore “A”, ASTM D412 Standard Test
   Methods for Vulcanized Rubber and Thermoplastic Elastomers-Tension of 1900 PSI,
   ASTM D395B Test Methods for Rubber Property-Compression Set for 22 HRS 212°F
   30%, ASTM D 624 Test Method for Tear Strength of Conventional Vulcanized
   Rubber and Thermoplastic Elastomers of 158 lb./ in., ASTM D 1149 Standard Test
   Methods for Rubber Deterioration-Cracking in an Ozone Controlled Environment
   2089 ksf, 100hrs @104°F, 20% Elongation—“No Cracks” and ASTM D 746 Standard
   Test Method for Brittleness Temperature @ -40°F of Plastics and Elastomers by
   Impact Flame Propagation, Option II=“No Limits-Passed”.

[Signature]
Manuel Perez, P.E.
Product Control Examiner
NOA No. 18-0522.04
Expiration Date: March 14, 2023
Approval Date: April 19, 2018

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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS
1. Statement letter of no financial interest, conformance and complying with FBC 5th Edition (2014), issued by Al-Farooq Corporation, dated 04/24/14, signed and sealed by Javad Ahmad, P.E.
2. Laboratory compliance letter for Test Report No. FTL-7837, issued by Fenestration Testing Laboratory, Inc., dated 08/01/14, signed and sealed by Idalmis Ortega, P.E.
3. Proposal issued by the Product Control Section, dated 02/03/14, signed by Jaime D. Gascon, P.E.
4. Laboratory compliance letter for Test Report No. FTL-7456, issued by Fenestration Testing Laboratory, Inc., dated 09/13/13, signed and sealed by Marlin D. Brinson, P.E.
5. Department of State Certification of TITAN GLASS & ALUMINUM, LLC as a limited liability company, active and organized under the laws of the State of Florida, dated 06/07/13 and signed by T. Hampton, Secretary of State.
   (Submitted under NOA No. 14-0909.14)
6. Laboratory compliance letters for Test Reports No. HETI-12-4066, HETI-12-4067 and HETI-12-4069, issued by Hurricane Engineering Testing, Inc., all dated 11/14/12, signed and sealed by Rafael E. Droz-Seda, P.E.
   (Submitted under NOA No. 12-1213.02)
7. Proposal issued by the Product Control Section, dated 08/09/12, signed by Jaime D. Gascon, P.E.
   (Submitted under NOA No. 12-1213.02)

G. OTHERS
1. Notice of Acceptance No. 12-1213.02, issued to Titan Glass & Aluminum, LLC for their Series “TSD-5000” Aluminum Sliding Glass Door – Dry-Glazed – L.M.I., approved on 03/14/13 and expiring on 03/14/18.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 18-0322.04
Expiration Date: March 14, 2023
Approval Date: April 19, 2018
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED
A. DRAWINGS
1. Drawing No. W12-60, titled “Series ‘TSD-5000’ Alum. Sliding Glass Door (L.M.I.)”, sheets 1 through 8 of 8, dated 11/21/12 with revision C dated 03/07/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS
1. None

C. CALCULATIONS
1. Anchor verification calculations and structural analysis, comply with FBC 6th Edition (2017), dated 03/05/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

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

E. MATERIAL CERTIFICATIONS
1. Notice of Acceptance No. 17-0808.02 issued to Kuraray America, Inc. for their “SentryGlas® (Clear and White) Glass Interlayers” dated 12/28/17, expiring on 07/04/23.

F. STATEMENTS
1. Statement letter of conformance, complying with FBC 6th Edition (2017), and of no financial interest, dated 03/05/18, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

G. OTHERS

Manuel Perez, P.E.
Product Control Examiner
NOA No. 18-0322:04
Expiration Date: March 14, 2023
Approval Date: April 19, 2018
E - 4
Series 'TSO-5000' Aluminum Sliding Glass Door

Design Load Rating for Doors to be as per Chart Shown Above.

This product has been designed and tested to comply with the requirements of the 2017 (6th Edition) Florida Building Code including High Velocity Hurricane Zone (HVHZ).

1x1x30 or 2x17 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/aluminum screws, that come into contact with other dissimilar materials shall meet the requirements of the 2017 Florida Building 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, relieving 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.

Laminated Glass
Large Missile Impact
Dry Glazed

Mar 19 2018

Product Revised according to the Florida Building Code

NOTE: Glass capacities on this sheet are based on ASTM E1330-09 (3 sec. gusts) and Florida Building Commission, Declaratory Statement DGAS-DEC-219.

These doors are rated for large & small missile impact. shutters are not required.
### TYPICAL ANCHORS: SEE ELEV. FOR SPACING

**TYPE 'A'-**

1/4" DIA. ULTRACORE BY "ELCO" (Fy=177 KS, Fy=155 KS)

- INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
  - 1-1/2" MIN. PENETRATION INTO WOOD
  - THRU 1BY BUCKS INTO CONCRETE
    - 1-1/2" MIN. EMBED INTO CONCRETE

**TYPE 'B'-**

1/4" DIA. ULTRACORE BY "ELCO" (Fy=177 KS, Fy=155 KS)

- DIRECTLY INTO CONCRETE
  - 1-1/2" MIN. EMBED

**TYPE 'C'-**

#14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)

- INTO MIAMI-DADE COUNTY APPROVED MULLIONS OR INTO METAL STRUCTURES
  - (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
    - ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
    - STEEL: 1/8" THK. MIN. (Fy = 36 KS MIN.)
    - (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

**TYPE 'A'-**

1/4" DIA. ULTRACORE BY "ELCO" (Fy=177 KS, Fy=155 KS)

- INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
  - 1-1/2" MIN. PENETRATION INTO WOOD
  - THRU 1BY BUCKS INTO CONCRETE OR BLOCKS
  - 1-1/4" MIN. EMBED INTO CONCRETE OR BLOCKS

**TYPE 'B'-**

1/4" DIA. ULTRACORE BY "ELCO" (Fy=177 KS, Fy=155 KS)

- DIRECTLY INTO CONCRETE OR BLOCKS
  - 1-1/4" MIN. EMBED INTO CONCRETE OR BLOCKS

**TYPE 'C'-**

#14 SMS OR SELF DRILLING SCREWS (GRADE 5 CRS)

- INTO MIAMI-DADE COUNTY APPROVED MULLIONS OR INTO METAL STRUCTURES
  - (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
    - ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
    - STEEL: 1/8" THK. MIN. (Fy = 36 KS MIN.)
    - (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

### ANCHOR EDGE DISTANCES

- INTO CONCRETE AND BLOCKS: 2-1/2" MIN.
- INTO WOOD STRUCTURE: 1" MIN.
- INTO METAL STRUCTURE: 3/4" MIN.

- WOOD AT HEAD OR JAMBS 5G = 0.55 MIN.
- CONCRETE AT HEAD, SILL, OR JAMBS Fc = 3000 PSI MIN.
- C-90 HOLLOW/FILLED BLOCK AT JAMBS F'm = 2000 PSI MIN.

### ITEM # | PART # | QUANTITY | DESCRIPTION | MATERIAL | MANUF./SUPPLIER/REMARKS
--- | --- | --- | --- | --- | ---
1 | TQA101 | 1 | FRAME HEAD | 6005A-T6 | ---
2 | TQA102 | 1 | FRAME SILL | 6005A-T6 | ---
3 | TQA112 | AS REQ'D | SILL RISER | 6063-T6 | ---
4A | TQA103 | 2 | FRAME JAMB | 6063-T6 | ---
4B | TQA115 | 2 | OFFSET FRAME JAMB | 6063-T6 | ---
5 | TQA107 | AS REQ'D | RETAINING CUP 7" LONG | 6005A-T6 | MTL. STILES HEAD & SILL ENDS
6 | TQA104 | 1/PANEL | PANEL TOP RAIL | 6063-T6 | ---
7 | TQA105 | 1/PANEL | PANEL STD. BOTTOM RAIL | 6063-T6 | ---
7A | TQA141 | 1/PANEL | PANEL HI. BOTTOM RAIL | 6063-T6 | ---
8 | TQA110 | AS REQ'D | PANEL LOCK STILE | 6063-T6 | ---
9 | TQA109 | AS REQ'D | PANEL INTERLOCK STILE | 6005A-T6 | ---
10 | TQA114 | AS REQ'D | PANEL FEMALE ASTRALGAL | 6063-T6 | ---
11 | TQA113 | AS REQ'D | PANEL MALE ASTRALGAL | 6063-T6 | ---
12 | 2 | JAMB FASTENER COVER | 6005-T5 | OPTIONAL (NOT SHOWN)
13 | TQA111 | 3/FIX.PANEL | FIXED PANEL RETAINING CUP 2" LONG | 6063-T5 | SECURE W/1 #10 X 1-1/2" FH SMS
13A | TQA116 | OPTIONAL | RETAINING PANEL COVER | 6063-T5 | ---
14 | TQA147 | AS REQ'D | GLAZING GASKET | SKAVOLIPRO -
15 | TQA125 | 2/PANEL | PANEL TOP GUIDE (0.02 x 1.40 x .270") | NYLON | ---
16 | TQA148 | 2/FIX.PANEL | FIXED PANEL BOTTOM GUIDE (5.3 x 0.1 x .70") | NYLON | ---
17 | 2/GUIDE | BOTTOM GUIDE INST. SCREWS | --- | #10 x 3/4" FH SMS | ---
18 | 2/GUIDE | FRAME & PANEL ASSY. SCREWS | --- | #10 x 1" FH SMS | ---
19 | 2/CUP | RETAINING CUP SCREWS | --- | #10/24 x 1/2 FH MS | ---
20 | 1/PANEL | MORTICE LOCK - MULTI POINT | AMESBURY | --- | ---
21 | 2/SQUARE | LOCK INSTALLATION SCREWS | --- | #6-32 x 1/2" FH SMS | ---
22 | 270 MULTI POINT | 1/LOCK | LOCK KEEPER | 6063-T5 | ---
23 | 1/LOCK | LOCK KEEPER - CUSTOM FILLER TUBE | 6063-T5 | --- | ---
24 | 10 x 13/4" FH SMS | AS REQ'D | KEEPER MOUNTING SCREWS STD. | AT 1-1/4" FROM ENDS & 23" O.C. | ---
25 | 10 x 13/4" FH SMS | AS REQ'D | KEEPER MOUNTING SCREWS MULTI PT. | AT 1-1/4" FROM ENDS & 23" O.C. | ---
26 | 10 x 29/32 | 1/LOCK | INTERIOR & EXTERIOR PULL | AMESBURY | ---
27 | 29/32 | 2/PANEL | INTERIOR PULL | --- | ---
28 | 2/PANEL | ROLLER ASSY. | AMESBURY | --- | ---
29 | 2/ROLLER | ROLLER INSTALLATION SCREWS | --- | #6 x 1/2" FH SMS | ---
30 | 2/ROLL | TOP RAIL W/STRIP AT INTERLOCKS | FIN SEAL BY ULTRAFAB | --- | ---
31 | 2/ROLL | VERTICAL W/STRIP AT JAMBS & ASTRALGAL | FIN SEAL BY ULTRAFAB | --- | ---
32 | 2/ROLL | BOTT. RAIL W/STRIP AT JAMBS & ASTRALGAL | FIN SEAL SKIRTING BY ULTRAFAB | --- | ---
33 | 2/ROLL | BOTT. RAIL W/STRIP SQUARE BULK | --- | --- | ---
34 | 2/PANEL | 3 1/4" x 5/8" x 1/2" HIGH, ADESIVE BACK PAD | SILL/INTERLOCK LOCATION | --- | ---
35 | 2/PANEL | 3 1/4" x 1 1/2" x 1/2" HIGH, ADESIVE BACK PAD | SILL/INTERLOCK LOCATION | --- | ---
36 | 2/PANEL | 3 1/4" x 1 1/2" x 1/2" HIGH, ADESIVE BACK PAD | HEAD/INTERLOCK/ASTRALGAL LOCATION | --- | ---
37 | 2/PANEL | 3 1/4" x 3 1/2" x 1/2" HIGH, ADESIVE BACK PAD | HEAD/INTERLOCK/ASTRALGAL LOCATION | --- | ---