TKO Doors, Div. of 4Front Engineered Solutions, Inc.
N56 W24701 N. Corporate Circle
Sussex, WI 53089

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: Model VC-4 WL Dock Plastic Sectional Garage Door up to 10'-0” Wide x 12'-0” High
APPROVAL DOCUMENT: Drawing No. 15-2401, titled “Fiberglass Dock Doors VC-4 WL Overhead Garage Door”, sheet 1 through 7 of 7, dated 05/06/2013, with last revision dated 06/21/2016, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E. on 03/29/2018, 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: A permanent label with the manufacturer’s name or logo, manufacturing address, model number, the positive and negative design pressure rating, indicate impact rated if applicable, installation instruction drawing reference number, approval number (NOA), the applicable test standards, and the statement reading ‘Miami-Dade County Product Control Approved’ is to be located on the door’s side track, bottom angle, or inner surface of a panel.

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 renews and revises NOA #15-0916.11 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.
The submitted documentation was reviewed by Carlos M. Utrera, P.E.

NOA No 16-0725.06
Expiration Date: November 28, 2023
Approval Date: May 24, 2018
Page 1
TKO Doors, Div. of 4Front Engineered Solutions, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous NOA's

A. DRAWINGS "Submitted under NOA #15-0916.11"
   1. Drawing No. 15-2401, titled "Fiberglass Dock Doors VC-4 WL Overhead Garage Door", sheet 1 through 7 of 7, dated 05/06/2013, with last revision dated 05/18/2015, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TESTS "Submitted under NOA #13-0521.06"
   2. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
      2) Large Missile Impact Test per FBC, TAS 201-94
      3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
      4) Forced Entry Test, per FBC TAS 202-94

C. CALCULATIONS "Submitted under NOA #15-0916.11"
   1. Jamb anchor calculations prepared by Engineering Express, dated 05/05/2015, signed and sealed by Frank L. Bennardo, P.E.

   "Submitted under NOA #13-0521.06"
   2. Jamb anchor calculations prepared by Engineering Express, dated 05/14/2013, signed and sealed by Frank L. Bennardo, P.E.

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

E. MATERIAL CERTIFICATIONS "Submitted under NOA #13-0521.06"
   1. Test report on Flame Spread Index and Smoke Developed Index per UL-723 of EXPS foam insulation, Test Report No. BRYX.R3573 dated 07/12/2010.

F. STATEMENTS "Submitted under NOA #15-0916.11"
   1. Statement letter of code conformance with the 5th edition (2014) FBC issued by Engineering Express, dated 05/18/2015, signed and sealed by Frank L. Bennardo, P.E.
   2. Statement letter of no financial interest issued by Engineering Express, dated 05/18/2015, signed and sealed by Frank L. Bennardo, P.E.

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 16-0725.06
Expiration Date: November 28, 2023
Approval Date: May 24, 2018

E - 1
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. New evidence submitted

A. DRAWINGS
   1. Drawing No. 15-2401, titled “Fiberglass Dock Doors VC-4 WL Overhead Garage Door”, sheet 1 through 7 of 7, dated 05/06/2013, with last revision dated 06/21/2016, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E. on 03/29/2018.

B. TESTS
   1. Test report on Airflow (Infiltration and Exfiltration) Rate, per ASTM E283-04 of a Verticool 4” (VC-4) WL dock door, prepared by Intertek/ATI, Test Report No. E7174.01-602-18, dated 07/21/2015, signed and sealed by Justin P. McDonald, P.E.

C. CALCULATIONS
   1. None.

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

E. MATERIAL CERTIFICATIONS
   1. None.

F. STATEMENTS
   2. Statement letter of no financial interest issued by Engineering Express, dated 03/29/2018, signed and sealed by Frank L. Bennardo, P.E.

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 16-0725.06
Expiration Date: November 28, 2023
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E - 2
VC-4 WL DOCK DOORS
LARGE MISSILE IMPACT RESISTANT

GENERAL NOTES
1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE SIXTH EDITION (2017), FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE, PER TAS 201 / 202 / 203 STANDARDS.
2. NO 3%/2%/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM.
3. WIND LOAD DURATION FACTOR Cn=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
4. POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED PER SEPARATE ENGINEERING IN ACCORDANCE WITH THE GOVERNING CODE. PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASCE 7 AND CHAPTER 1620 OF THE FLORIDA BUILDING CODE SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.
5. DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED Pressures DIVIDED BY A 1.5 SAFETY FACTOR.
6. THE DESIGN DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
7. CONTRACTOR SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
8. ALL BOLTS & WASHERS SHALL BE ZINC-COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 KSI U.O.N.
9. ALL DISSEMBLABLE MATERIALS IN CONTACT SHALL BE PAINTED, PLATED OR OTHERWISE INSULATED.
10. DOOR HEIGHT MAY VARY UP TO A MAXIMUM HEIGHT OF 144", PROVIDED THAT INDIVIDUAL PANEL HIGHTS DO NOT EXCEED 48".

ALLOWABLE DESIGN PressURES
+52.0 PSF
-52.0 PSF

PRODUCT REVISED as complying with the Florida Building Code N0A-No. 18-0729.06 Expiration Date 11/28/2023

By Miami-Date Product Control

VA 11-0000 MD 8-0000 TC 4-0000 MD 0-0000 NA 8-0000 NM 0-0000 PC 4-0000 MD 0-0000
ANCHORING NOTES:

1. THIS SYSTEM SHALL BE ANCHORED WITH ANY OF THE ANCHORING METHODS SHOWN HEREIN, WITH (2) ANCHORS LOCATED 3" AND 12" FROM THE BOTTOM OF THE TRACK AND 12" O.C. MAX THEREAFTER OR EVERY OTHER MOUNTING SLOT.

2. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.

3. WHERE ANCHORS FASTEN TO NARROW FACE OF STUD FRAMING, ANCHOR SHALL BE LOCATED IN CENTER OF NOMINAL 2" (MIN) WOOD STUD (I.E., 3/4" EDGE DISTANCE IS ACCEPTABLE FOR ANCHORS TO WOOD FRAMING).

4. WOOD HOST STRUCTURE SHALL BE "SOUTHERN PINE" GRADE 2 OR GREATER DENSITY.

5. MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR DETAIL. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.

6. WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.

7. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.

8. MACHINE SCREWS SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE EITHER A PAN HEAD, TRUSS HEAD, OR WAFER HEAD ("SIDEWALK BOLT") U.N.O.

DETAIL A

STEEL ANGLE TRACK TO BLOCK/CONCRETE

1. STEEL ANGLE TRACK
2. ANCHOR HOLE
3. MIN. EDGE DIST.
4. TRACK LINER
5. (SEE ANCHORING NOTES)
6. 1/2" FLAT WASHER
7. POWERS DOUBLE EXPANSION ANCHOR TO HOLLOW OR GROUT FILLED CONCRETE BLOCK WITH 1-1/2" MIN. EMBED. 4" MIN. EDGE DISTANCE CENTER OF CELLS.
8. POWERS WEDGE BOLT ANCHOR, 2" MIN. EDGE DISTANCE, 2-1/2" MIN. EMBED. INTO GROUT FILLED CONCRETE BLOCK.

DETAIL B

ANGLE TO STEEL WITH PLUG WELD

1. TRACK LINER
2. 1/2" FLAT WASHER
3. POWERS LONG STITCH WELD (FULLY FILLED TRACK ANCHOR SLOT, ETCHX ELECTRODE)
4. 1/2-10 WIRE ELECTRICAL WIRE

DETAIL C

FLOOR TO TRACK BRACKET

1. 12,000 O.C. TYP
2. 9,000 MAX O.C.
3. 3,000 MAX O.C.
4. ANCHOR
5. BRACKET, FLOOR TO TRACK PART NO. 20-00007
6. TYPE OF ANCHOR DETERMINED BY FLOOR MATERIAL

TEST MOUNTING ON WOOD
FASTENER NOTE:
FIXED PLUNGERS, HANDLES, AND TPU BRACKETS ARE MOUNTED TO THE PANEL USING (4) 1/4-20 X 5.50" CARBAGE BOLTS AND (4) 1/4-20 FLANGE NUTS.
HINGE SETS ARE MOUNTED TO THE PANELS USING:
(4) 1/4-20 X 5.50" CARBAGE BOLTS AND 1/4-20 FLANGE NUTS.
Panel plates are mounted to the panels using:
(10) 1/4-20 X 5.50" CARBAGE BOLTS AND 1/4-20 FLANGE NUTS.
SLIDE LOCKS ARE MOUNTED TO THE PANELS USING
(4) #14 X 1/2" TEK SCREWS.

WALL BRACKET, WINDLOAD
AST STEEL, ZINC PLATED
PART NO. 30-00357

Hinge plate, female
PART NO. 20-00111
13-GA HRPO CLEAR ZINC

KNOCK-OUT LOCK PIN, WINDLOAD
1/8 CARBON STEEL, ZINC PLATED
PART NO. 10-00237

CENTRER POST ASSEMBLY, HEAVY
ALKUMINUM ALLOY 6005-T6
TKO PART NO. 30-00957

KNOCK OUT LOCK PART NO. 30-00580
(SEE SHEET 7 OF 7 FOR LOCATION)

10-GA HRPO CLEAR ZINC
HANDLE PART NO. 20-00918

13-GA HRPO CLEAR ZINC FINISH
BRACKET POST PART NO. 20-02318

13-GA HRPO CLEAR ZINC FINISH
MIN 12-GA STEEL HOUSING

18-GA A653 G90 COVER, PLUNGER PART NO. 20-01459

15-GA A653 G90 PANEL PLATE
PART NO. 20-01814

10-GA A653 G90 FLOOR BRACKET
PART NO. 20-02505

KIT CENTER POST, HEAVY-VIAL
Aluminium Alloy 6005-T6
TKO PART NO. 30-00957

3/4" DIAL LANYARD
POST TETHER, Y
PART NO. 10-00350

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 16-0725.06
Expiration Date 11/28/2023
By
Miami-Dade Product Control