TKO Doors, Div. of 4Front Engineered Solutions, Inc.
N56 W24701 N. Corporate Circle, Ste A
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 CW WL Dock Plastic Sectional Garage Door up to 10’-0” Wide

APPROVAL DOCUMENT: Drawing No. 15-2402, titled “Fiberglass Dock Doors CW WL Overhead Garage Door”, sheet 1 through 8 of 8, dated 04/14/2011, with last revision dated 02/05/2018, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, 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: 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 revises NOA # 16-0329.05 and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.
The submitted documentation was reviewed by Carlos M. Utrera, P.E.
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous NOA’s

A. DRAWINGS “Submitted under NOA #16-0329.05”
   1. Drawing No. 15-2402, titled “Fiberglass Dock Doors CW WL Overhead Garage Door”, sheet 1 through 7 of 7, dated 04/14/2011, with last revision dated 05/19/2015, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TESTS “Submitted under NOA #11-0513.04”
   1. 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 2411 3.2.1, TAS 202-94
      Along with marked-up drawings and installation diagram of Series/Model CW WL, dock door, prepared by Architectural Testing, Inc., Test Report No. 98517.01-602-18, dated 03/24/2010, signed and sealed by Joseph A. Reed, P.E.
   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
      Along with marked-up drawings and installation diagram of Series/Model CW WL, dock door, prepared by Architectural Testing, Inc., Test Report No. 89514.01-602-18, dated 04/24/2009, signed and sealed by Joseph A. Reed, P.E.

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 16-0725.02
Expiration Date: September 15, 2021
Approval Date: May 24, 2018

E - 1
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (CONTINUED) "Submitted under NOA # 11-0513.04"
7. Test report on Rate of Burn per ASTM D635-06 of different types of plastics, prepared by Architectural Testing, Inc., Test Report No. 92103.02-106-18, dated 08/19/2009, signed and sealed by Joseph A. Reed, P.E.

C. CALCULATIONS "Submitted under NOA # 15-0916.07"
1. Jamb anchor calculations prepared by Engineering Express, dated 05/05/2015, signed and sealed by Frank L. Bennardo, P.E.

"Submitted under NOA # 11-0513.04"
2. Jamb anchor calculations, complying with FBC-2007, prepared by Engineering Express, dated 04/15/2011, 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 # 11-0513.04"

F. STATEMENTS "Submitted under NOA # 15-0916.07"
1. Statement letter of code conformance with the 5th edition (2014) FBC issued by Engineering Express, dated 05/19/2015, signed and sealed by Frank L. Bennardo, P.E.
2. Statement letter of no financial interest issued by Engineering Express, dated 05/19/2015, signed and sealed by Frank L. Bennardo, P.E.

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 16-0725.02
Expiration Date: September 15, 2021
Approval Date: May 24, 2018
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. New evidence submitted

A. DRAWINGS
1. Drawing No. 15-2402, titled "Fiberglass Dock Doors CW WL Overhead Garage Door", sheet 1 through 8 of 8, dated 04/14/2011, with last revision dated 02/05/2018, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TESTS
1. 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
   along with marked-up drawings and installation diagram of Series/Model Cruiser Weight (CW) WL dock doors, prepared by Intertek, Test Report No. 102936264MID-003, dated 05/01/2017, signed and sealed by Joseph A. Reed, P.E.

2. Test report on Airflow (Infiltration and Exfiltration) Rate, per ASTM E283-04 of a Cruiser Weight (CW) 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. Útrera, P.E.
Product Control Examiner
NOA No 16-0725.02
Expiration Date: September 15, 2021
Approval Date: May 24, 2018
CW 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
   2008 EDITION (082), FOR USE WITHIN AND OUTSIDE THE HIGH
   VELOCITY HURRICANE ZONE, PER TAS 201 / 202 / 203
   STANDARDS.

2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED
   IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION
   FACTOR CU=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.

3. POSITIVE AND NEGATIVE DESIGN PressURES CALCULATED
   FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS
   ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE
   GOVERNING CODE.

4. THE SYSTEM DESCRIBED 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.

5. CONTRACTOR SHALL VERIFY THE ADEQUACY OF THE
   EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS
   WOOD BUCKS (IF OTHERS) SHALL BE ANCHORED PROPERLY TO
   TRANSFER LOADS TO THE EXISTING STRUCTURE.

6. ALL BOLTS & WASHERS SHALL BE ZINC-COATED STEEL
   GALVANIZED STEEL OR STAINLESS STEEL WITH A MINIMUM
   TENSILE STRENGTH OF 60 KSI.

7. ALL DISCREPANCIES IN MATERIALS OF SIMILAR IN
   CONTACT SHALL BE PAMERED, PLATED OR OTHERWISE INDICATED.

8. DOOR HEIGHT MAY VARY UP TO A MAXIMUM HEIGHT OF
   120", PROVIDED THAT INDIVIDUAL PANEL HEIGHTS DO NOT
   EXCEED 24", AND A TOP PANEL IS USED AS SHOWN IN DETAIL 1/6.

9. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE
   WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY
   MENTIONED ON THE DRAWINGS.

ALLOWABLE
DESIGN PRESSURES

WITH-STEEL TRACK (SHEET 4)
+52.0 PSF
-60.0 PSF

WITH-FA.7 TRACK (SHEET 5)
+52.0 PSF
-67.5 PSF

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No.
16-0725.02
Expiry Date 09/15/2021
By
Miami-Dade Product Control
FASTENER NOTE:
FIXED PLUGGERS, HANDLES, AND TPU CABLE SPRING ASSEMBLY ARE MOUNTED TO THE PANELS USING:
(8) 5/16-18 X 2-1/2" REINFORCEMENT BOLTS AND (10) 5/16-18 FLANGE NUTS
SPRING PLUGGERS AND ADAPTER PLATES ARE MOUNTED TO THE PANELS USING:
(4) 5/16-18 x 2-1/2" REINFORCEMENT BOLTS, (4) 5/16-18 FLANGE NUTS, AND (2) #10 - 3/4" TEK SCREWS.
FABRIC HINGE, AND HINGE STRAP ARE MOUNTED TO THE PANELS USING:
(3) 5/16-18 X 2-1/2" REINFORCEMENT BOLTS, AND (5) 5/16-18 FLANGE NUTS.
PANEL PLATES ARE MOUNTED TO THE PANELS USING:
(8) 5/16-18 X 2-1/2" REINFORCEMENT BOLTS, (6) 5/16-18 FLANGE NUTS,
(1) 1/4-20 X 3/4" REINFORCEMENT BOLT AND (5) 1/4-20 FLANGE NUT.
SLIDE LOCKS ARE MOUNTED TO THE PANELS USING:
(4) #14 X 3/4" TEK SCREWS.
TORQUE REQUIREMENT FOR FASTENERS NOT IN CORNERS.
REINFORCEMENT BOLTS MUST BE TORQUED TO 30-45 IN-LB.
5/16-18 BOLTS MUST BE TORQUED TO 45-55 IN-LB.
## MATERIALS LIST:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Item Description</th>
<th>Manufacturer/Notes</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-60344</td>
<td>0.114&quot;* interior skin</td>
<td>Polyurethane sheet</td>
<td>Front face of all panels</td>
</tr>
<tr>
<td>20-61713</td>
<td>0.125&quot;* exterior skin</td>
<td>Palmetted Fiberglass sheet</td>
<td>Back face of all panels</td>
</tr>
<tr>
<td>20-60314</td>
<td>1/2&quot; insulation</td>
<td>1/2&quot; density E.P. &amp; sheet</td>
<td>Inside core of all panels</td>
</tr>
<tr>
<td>20-61718</td>
<td>1-1/2&quot; W x 0.125&quot; wall tube (horizontal)</td>
<td>Palmetted Fiberglass tube</td>
<td>Top bottom of all panel frames</td>
</tr>
<tr>
<td>20-61721</td>
<td>1-1/2&quot; W x 0.125&quot; wall tube (vertical)</td>
<td>Palmetted Fiberglass tube</td>
<td>Sides of all panel frames</td>
</tr>
<tr>
<td>20-60001</td>
<td>Corner tie bracket</td>
<td>0.119 steel</td>
<td>Corners of all panel frames</td>
</tr>
<tr>
<td>20-60003</td>
<td>Panel spacer</td>
<td>PMPS plastic</td>
<td>Top corners of all panels forming panel joint</td>
</tr>
<tr>
<td>20-61879</td>
<td>&quot;D&quot; profile weather stripping</td>
<td>Sponge rubber</td>
<td>Top of all panels forming panel joint</td>
</tr>
<tr>
<td>20-60312</td>
<td>Panel Side seal</td>
<td>22 oz. Vinyl</td>
<td>Sides of all non-bottom panel frame</td>
</tr>
<tr>
<td>20-60312</td>
<td>Bottom Panel Side seal</td>
<td>22 oz. Vinyl</td>
<td>Sides of all bottom panel frames</td>
</tr>
<tr>
<td>20-61798</td>
<td>Bottom seal</td>
<td>35 oz. Vinyl</td>
<td>Bottom panel</td>
</tr>
</tbody>
</table>

### Panel Hardware

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Item Description</th>
<th>Manufacturer/Notes</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-60676</td>
<td>FIXED plunger assembly</td>
<td>TKO Doors (steel)</td>
<td>1 at each upper corner of 1st panel &amp; above</td>
</tr>
<tr>
<td>20-61459</td>
<td>Plunger Covers</td>
<td>TKO Doors (steel)</td>
<td>1 each per plunger</td>
</tr>
<tr>
<td>30-609495</td>
<td>4&quot; Portico Assembly</td>
<td>TKO Doors</td>
<td>1 in center of 3rd panel</td>
</tr>
<tr>
<td>20-60444</td>
<td>Panel Plate</td>
<td>Gbb. 13 ga steel</td>
<td>Sides of all panels</td>
</tr>
<tr>
<td>30-60737</td>
<td>Fabric Hinge Assembly</td>
<td>40 oz. Vinyl polytetrafluoroethylene (2 layers)</td>
<td>Top corners of all panels forming panel joint</td>
</tr>
<tr>
<td>20-61659</td>
<td>Fabric Center hinge</td>
<td>TKO Doors (steel)</td>
<td>Top center of all panels forming panel joint</td>
</tr>
<tr>
<td>20-60015</td>
<td>Hinge strip</td>
<td>TKO Doors (steel)</td>
<td>1 each for corner hinges 2 each for center hinges</td>
</tr>
<tr>
<td>20-61004</td>
<td>Hinge Wire</td>
<td>TKO Doors (steel)</td>
<td>1 each for corner hinges 30-00033</td>
</tr>
<tr>
<td>30-62922</td>
<td>SPRING plunger assembly</td>
<td>TKO Doors (steel)</td>
<td>1 at each upper/lower corner of bottom panel &amp; 1 at each upper corner on 2nd panel</td>
</tr>
<tr>
<td>20-61344</td>
<td>Plate &amp; Adapter</td>
<td>Galv. 12 ga Steel</td>
<td>Under each spring plunger 30-60845 except where handles 20-60113 are located</td>
</tr>
<tr>
<td>30-60004</td>
<td>Side lock assembly</td>
<td>TKO Doors (steel)</td>
<td>2 each on each side centered on panel</td>
</tr>
<tr>
<td>20-60599</td>
<td>Knock Out Lock, Woodford</td>
<td>TKO Doors (steel)</td>
<td>1 per side lock, (out hole of requested lock)</td>
</tr>
<tr>
<td>20-60613</td>
<td>Handle</td>
<td>TKO Doors (steel)</td>
<td>Lower center of bottom panel</td>
</tr>
<tr>
<td>20-61677</td>
<td>TPC cable bracket (optional)</td>
<td>TKO Door (steel)</td>
<td>Top corners of top panel</td>
</tr>
<tr>
<td>20-60285</td>
<td>Bracket, Cover (optional)</td>
<td>TKO Door (steel)</td>
<td>Cable Attachment Point (aluminum)</td>
</tr>
<tr>
<td>30-60499</td>
<td>Panel seal</td>
<td>40 oz. Vinyl polytetrafluoroethylene</td>
<td>Between all panels forming panel joint (2 per)</td>
</tr>
</tbody>
</table>

### Track Hardware

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Item Description</th>
<th>Manufacturer/Notes</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-60882</td>
<td>UW SRO track (length varies with door size)</td>
<td>USM/WRPE</td>
<td>Lowerr轨</td>
</tr>
<tr>
<td>20-61383</td>
<td>UW 12&quot; transition, RH</td>
<td>USM/WRPE</td>
<td>Lowerr轨</td>
</tr>
<tr>
<td>20-61389</td>
<td>UW 12&quot; transition, LH</td>
<td>USM/WRPE</td>
<td>Lowerr轨</td>
</tr>
<tr>
<td>20-60183</td>
<td>UW wet track (length varies with door size)</td>
<td>USM/WRPE</td>
<td>Upper轨</td>
</tr>
<tr>
<td>20-60002</td>
<td>Splice Channel (optional based on upper track)</td>
<td>Galv 9 ga steel</td>
<td>Lowerr轨</td>
</tr>
<tr>
<td>20-60954</td>
<td>UW universal steel (length varies with door size)</td>
<td>Galv 9 ga steel</td>
<td>Lowerr轨</td>
</tr>
</tbody>
</table>

### Fasteners

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Item Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-60043</td>
<td>5/16-18 x 2-1/2&quot; slotted bolt</td>
<td>4 per panel corner (12 per panel)</td>
</tr>
<tr>
<td>10-60007</td>
<td>5/16-18 flange nut</td>
<td>4 per panel corner (12 per panel)</td>
</tr>
<tr>
<td>10-60145</td>
<td>1/4-20 x 2-1/2&quot; slotted bolt</td>
<td>1 per vertical panel edge (centered) &amp; min 12&quot; C.O.C. per horizontal edge</td>
</tr>
<tr>
<td>10-60055</td>
<td>1/4 Washer</td>
<td>1 per vertical panel edge (centered) &amp; min 12&quot; C.O.C. per horizontal edge</td>
</tr>
<tr>
<td>10-60005</td>
<td>1/4-20 flange nut</td>
<td>1 per vertical panel edge (centered) &amp; min 12&quot; C.O.C. per horizontal edge</td>
</tr>
<tr>
<td>10-60061</td>
<td>#8 x 3/4&quot; Tek screw</td>
<td>2 per panel spacer</td>
</tr>
<tr>
<td>10-60062</td>
<td>4/8 x 3-1/4&quot; Tek screw</td>
<td>4 per slide lock assembly, 2 per Spring Plungers where applicable</td>
</tr>
<tr>
<td>10-60846</td>
<td>5/16-18 X 2-1/2&quot; PHH screw</td>
<td>Min 12&quot; C.O.C. per track length</td>
</tr>
<tr>
<td>10-60077</td>
<td>5/16-18 flange nut</td>
<td>Min 12&quot; C.O.C. per track length</td>
</tr>
<tr>
<td>10-60288</td>
<td>Plate, Trans, Connector 1&quot; x 4&quot;</td>
<td>1&quot; above each facemount in lower track</td>
</tr>
<tr>
<td>10-60289</td>
<td>Plate, Trans, Connector 2&quot; x 4&quot;</td>
<td>Aligned with the butt edge of lower track mounting surface</td>
</tr>
</tbody>
</table>

*ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE*