

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

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

NOTICE OF ACCEPTANCE (NOA)

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 CW WL Plastic Sectional Garage Door up to 10'-0" Wide APPROVAL DOCUMENT: Drawing No. 11-TKO-0001, titled "Fiberglass Dock Doors CW WL Overhead Garage Door", sheet 1 through 7 of 7, dated 04/14/2011, with last revision dated 10/09/2012, 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 approval 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 # 11-1215.02 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.

MIAMI-DADE COUNTY
APPROVED

12/12/2012

NOA No 12-1019.12 Expiration Date: September 15, 2016 Approval Date: December 20, 2012

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. 11-TKO-0001, titled "Fiberglass Dock Doors CW WL Overhead Garage Door", sheet 1 through 7 of 7, dated 04/14/2011, with last revision dated 10/09/2012, 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.

- 3. Test report on Accelerated Weathering using Xenon Arc Light Apparatus for 4500 hours, per ASTM G155-04 and on Tensile Test per ASTM D638 of FRP composite panels, prepared by Architectural Testing, Inc., Test Report No. A3696.01-106-18, dated 05/04/2011, signed and sealed by Joseph A. Reed, P.E.
- 4. Test report on Self-ignition Temperature per ASTM D1929-96(2000)e1 of various plastic and fiberglass door components, prepared by Architectural Testing, Inc., Test Report No. 95487.01-106-31, dated 11/04/2009, signed and sealed by Joseph A. Reed, P.E.
- 5. Test report on Smoke Density Rating per ASTM D2843-99(2004) of different types of plastics, prepared by Architectural Testing, Inc., Test Report No. **92103.01-106-18**, dated 05/04/2011, signed and sealed by Joseph A. Reed, P.E.
- 6. Test report on Smoke Density Rating per ASTM D2843-99(2004) of vinyl and seals, prepared by Architectural Testing, Inc., Test Report No. **95487.02-106-31**, dated 11/04/2009, signed and sealed by Joseph A. Reed, P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No 12-1019.12

Expiration Date: September 15, 2016 Approval Date: December 20, 2012

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.
- 8. Test report on Rate of Burn per ASTM D635-06 of vinyl and seals, prepared by Architectural Testing, Inc., Test Report No. **95487.03-106-31**, dated 11/04/2009, signed and sealed by Joseph A. Reed, P.E.

C. CALCULATIONS "Submitted under NOA # 11-0513.04"

1. 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"

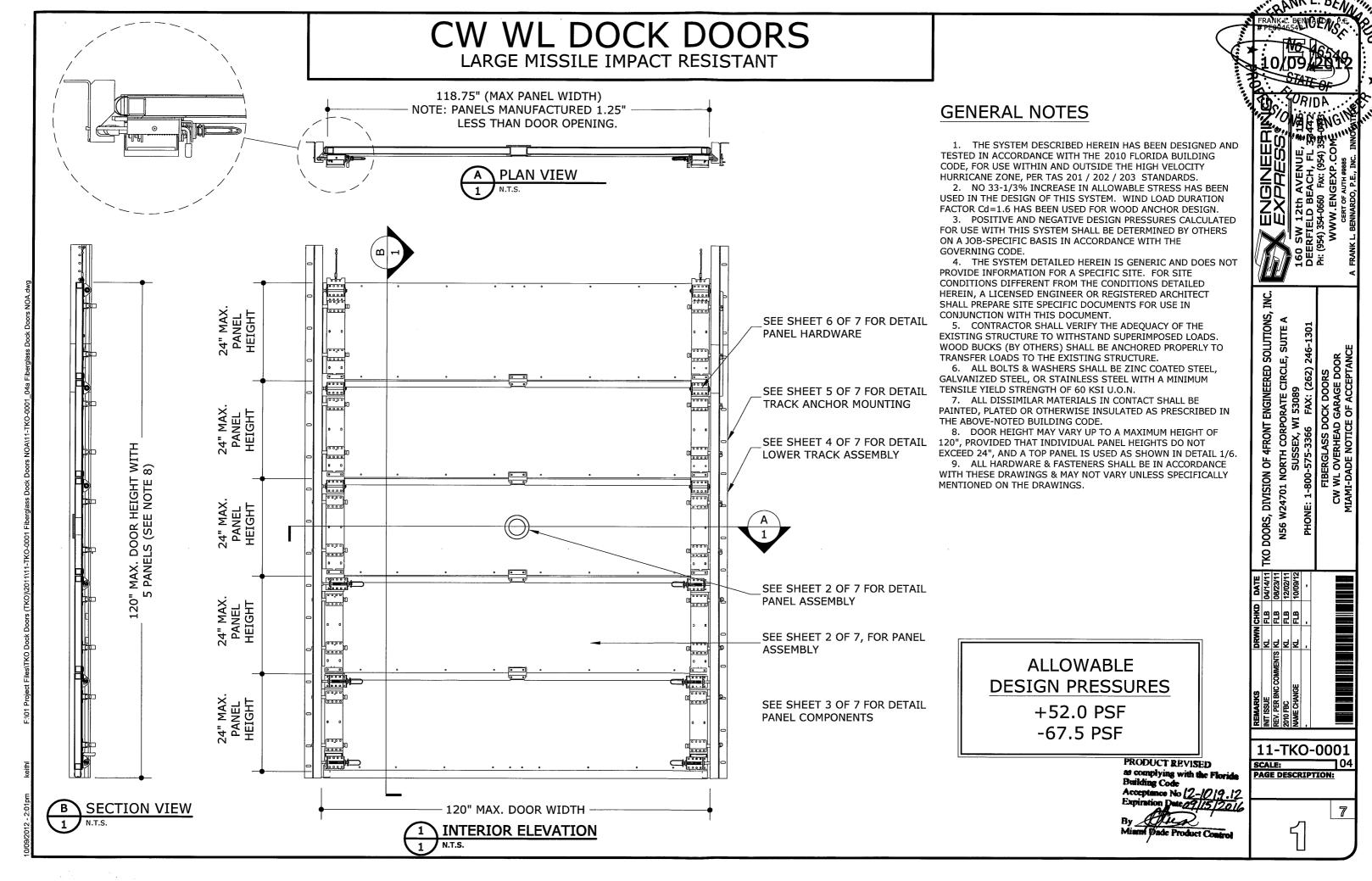
1. Test report on Self-Ignition Temperature per ASTM D1929-96(2000), Flame Spread Index and Smoke Developed Index per ASTM D84-10b of RayLite EPS foam insulation, prepared by Architectural Testing, Inc., Test Report No. **B1755.01-122-18**, dated 08/17/2011, signed and sealed by Michael D. Stremmel, P.E.

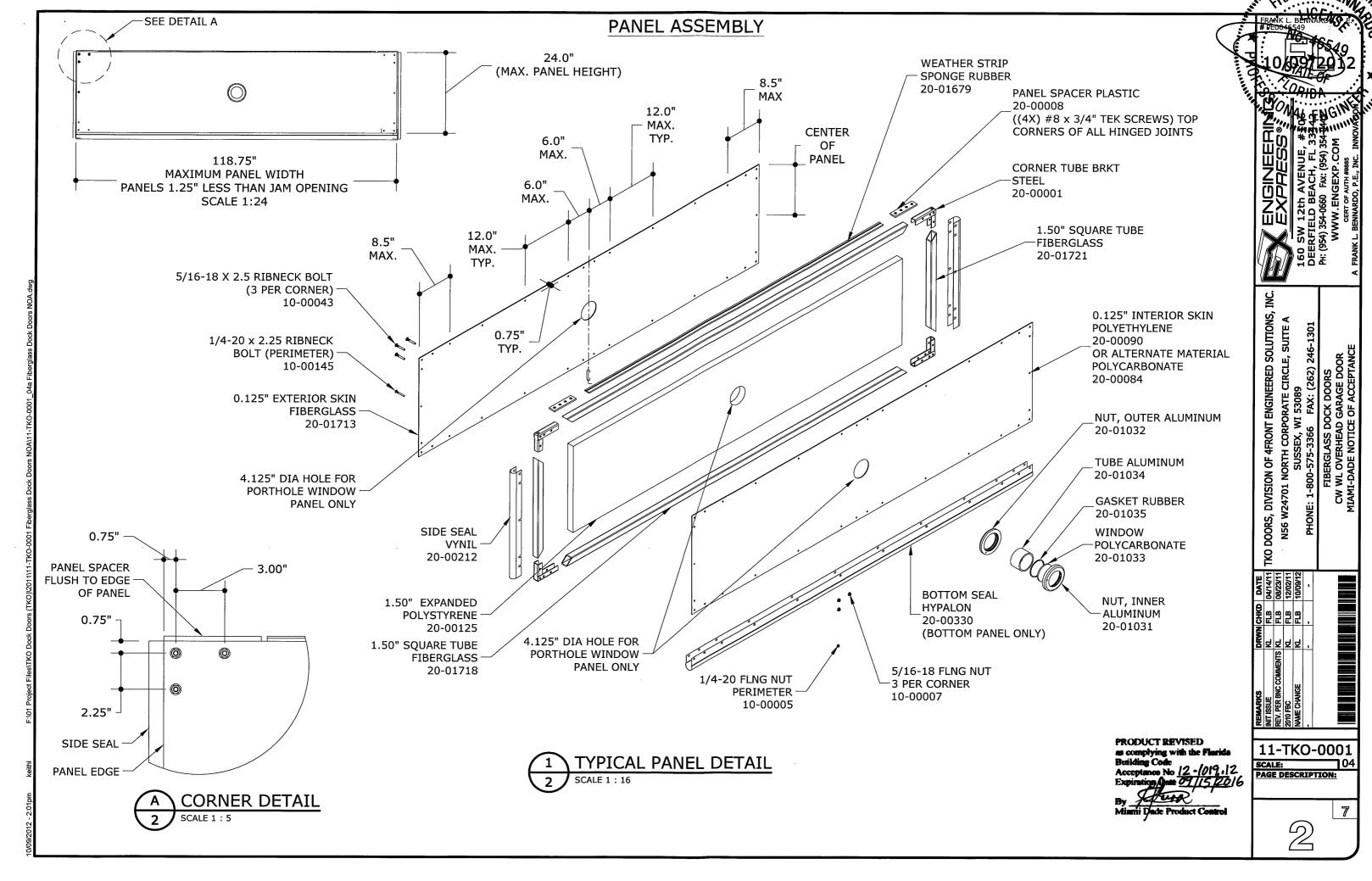
F. STATEMENTS "Submitted under NOA # 11-1215.02"

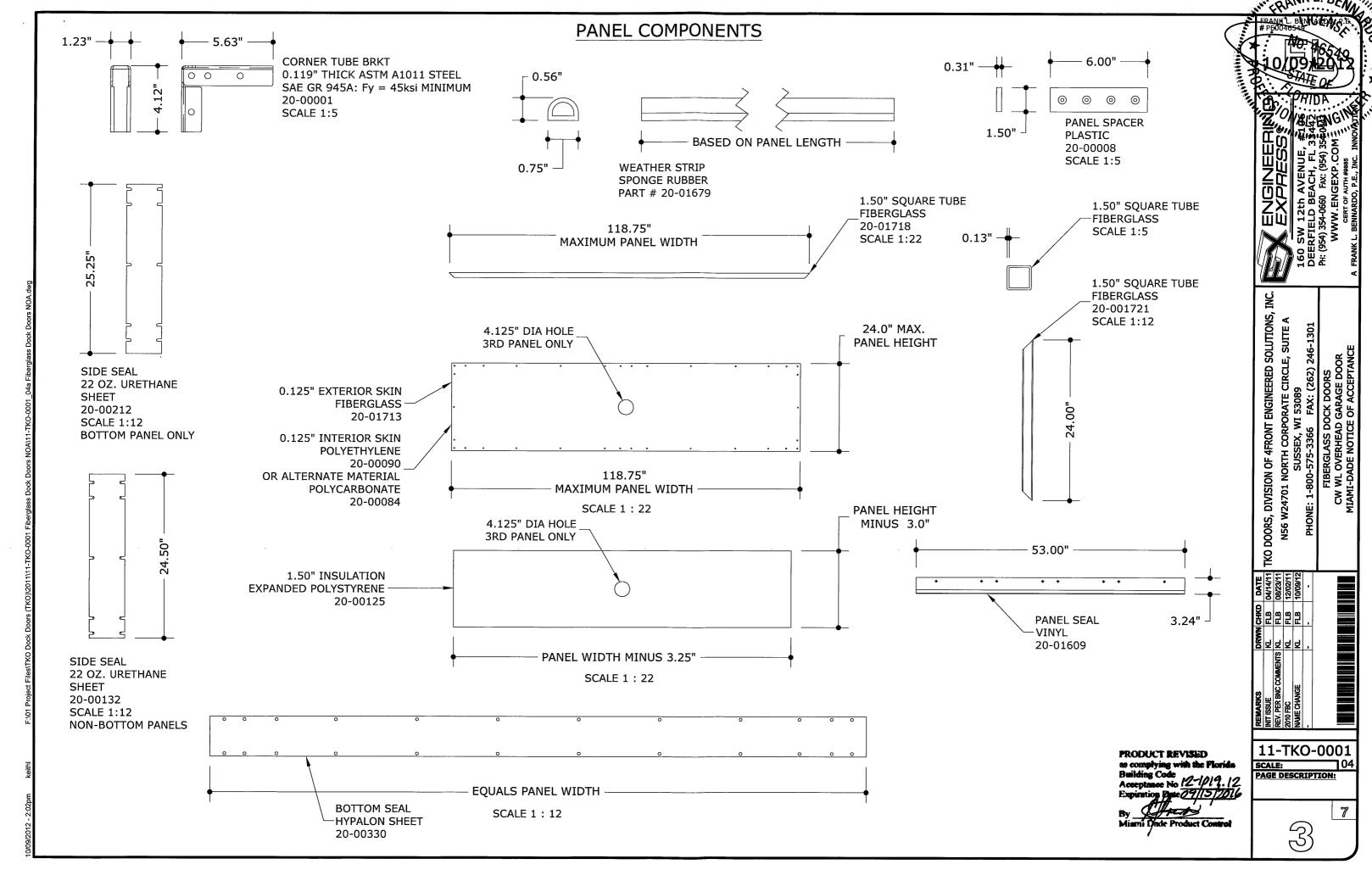
- 1. Statement letter of code conformance with 2010 FBC, issued by Engineering Express, dated 12/02/2011, signed and sealed by Frank L. Bennardo, P.E.
- 2. Statement letter of no financial interest issued by Engineering Express, dated 12/02/2011, signed and sealed by Frank L. Bennardo, P.E.

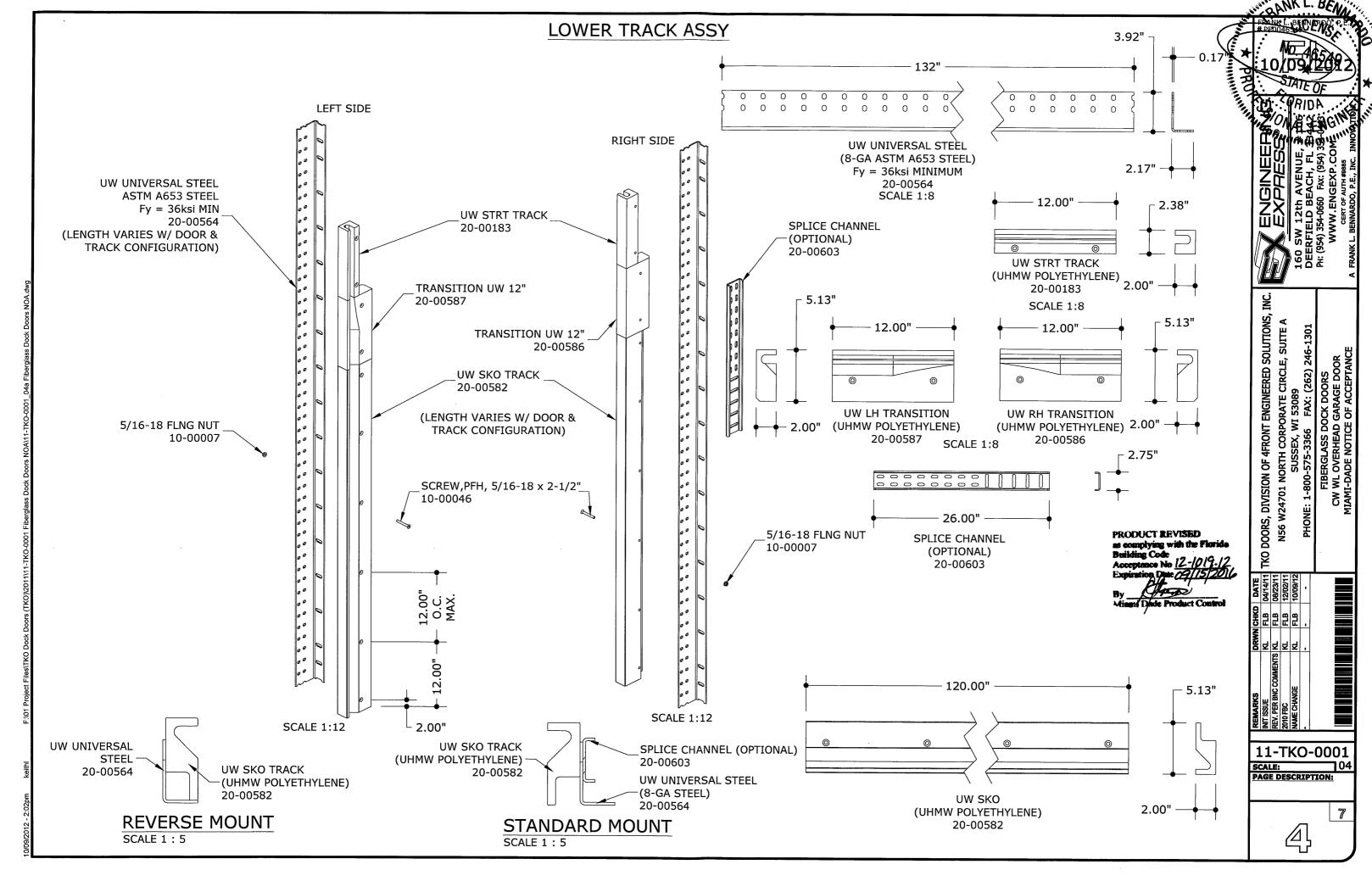
Carlos M. Utrera, P.E. Product Control Examiner NOA No 12-1019.12

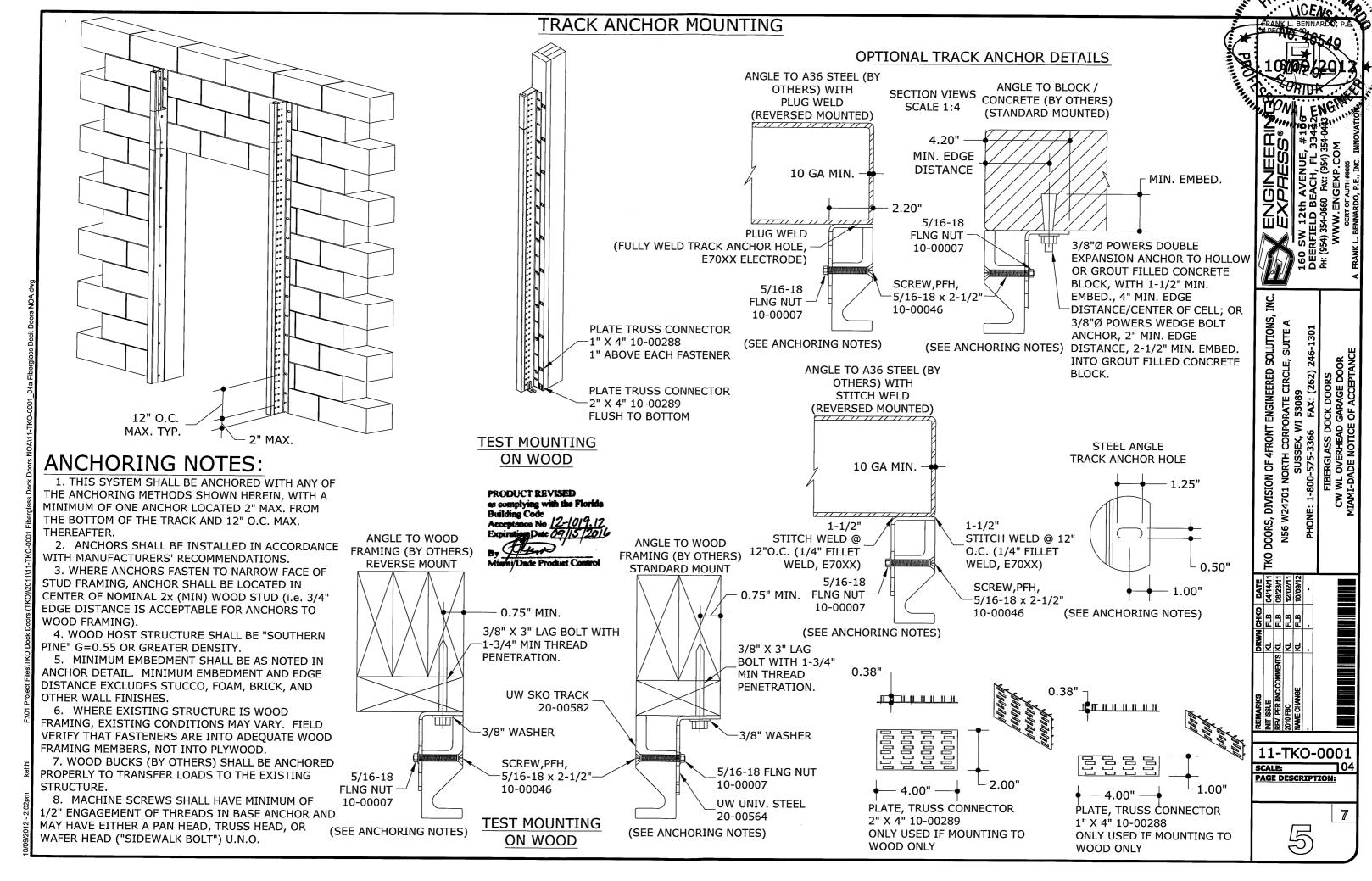
Expiration Date: September 15, 2016 Approval Date: December 20, 2012

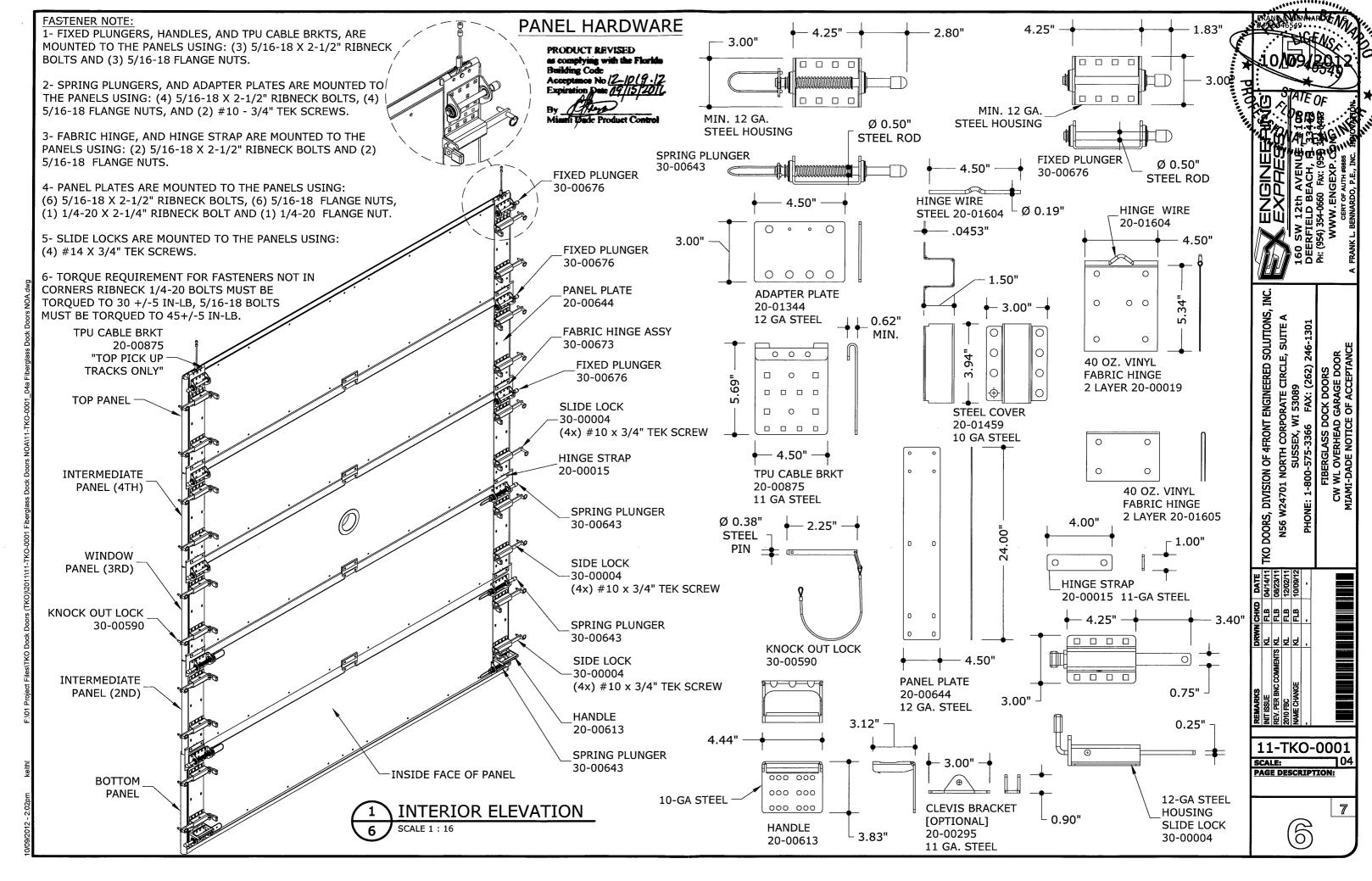












Part Number	Item Description	Manufacturer/Notes	Location
Panel Components			
20-00090	0.125" interior skin	Extruded Polyethylene sheet	Front face of all panels
20-00084	0.125" interior skin	Polycarbonate sheet	Front face of all panels (alternative material)
20-01713	0.125" exterior skin	Pultruded Fiberglass sheet [†]	Back face of all panels
20-00125	1-1/2" insulation	11b. density E.P.S. sheet	Inside core of all panels
20-01718	1-1/2" SQ x 0.125" wall tube [horizontal]	Pultruded Fiberglass tube	Top/bottom of all panel frames
20-01721	1-1/2" SQ x 0.125" wall tube [vertical]	Pultruded Fiberglass tube	Sides of all panels frames
20-00001	Corner tube bracket	0.119 steel	Corners of all panel frames
20-00008	Panel spacer	HMPE plastic	Top corners of all panels forming panel joint
20-01679	"D" profile weather stripping	Sponge rubber	Top of all panels forming panel joint
20-00132	Panel Side seal	22 oz. Vinyl	Sides of all non- bottom panel frames
20-00212	Bottom Panel Side seal	22 oz. Vinyl	Sides of all bottom panel frames
20-00330	Bottom seal	35 oz. Hypalon	Bottom panel
Panel Hardware			
30-00676	FIXED plunger assembly	TKO Doors (steel)	1 at each upper corner of 3rd panel & above
20-01459	Plunger Covers	TKO Doors (steel)	1 each per plunger
30-00589	4" Porthole Assembly	TKO Doors	1 in center of 3rd panel
20-00644	Panel Plate	Galv 12-ga steel	Sides of all panels
30-00673	Fabric Hinge Assembly	40 oz. Vinyl polyester (2 layer)	Top corners of all panels forming panel joint
20-01605	Fabric Center hinge	40 oz. Vinyl polyester (2 layer)	Top center of all panels forming panel joint
20-00015	Hinge strap	TKO Doors (steel)	1 each for corner hinges 2 each for center hinges
20-01604	Hinge Wire	TKO Doors (steel)	1 each per corner hinges 30-00673
30-00643	SPRING plunger assembly	TKO Doors (steel) [6 per door]	1 at each upper/lower corner of bottom panel & 1 at each upper corner on 2nd panel
20-01344	Plate, Adapter	Galv. 12 ga. Steel	Under each Spring Plunger 30-00643 except where handles 20-00613 are located
30-00004	Slide lock assembly	TKO Doors (steel) [4 per panel]	2 each on each end centered on panel
30-00590	Knock Out Lock, Windload	TKO Doors (steel)	1 per slide lock. (out hole of engaged lock)
20-00613	Handle	TKO Doors (steel)	Lower corners of bottom panel &
20-00875	TPU cable bracket (optional)	TKO Doors (steel)	Top corners of top panel
20-00295	Bracket, Clevis [optional]	TKO Doors[steel]	Cable Attachment Point [varies]
20-01609	Panel seal	40 oz. Vinyl polyester	Between all panels forming panel joint (2 per)
Track Hardware			
20-00582	UW SKO track (length varies with door size)	UHMWPE*	Lower track
20-00586	UW 12" transition, R.H.	UHMWPE*	Lower track
20-00587	UW 12" transition, L.H.	UHMWPE*	Lower track
20-00183	UW strt track (length varies with door size)	UHMWPE*	Upper track
20-00603	Splice Channel (optional based on upper track)	Galv 8-ga steel	Lower track
20-00564	UW universal steel (length varies with door size)	Galv 8-ga steel	Lower track
Fasteners			
10-00043	5/16-18 x 2-1/2" ribneck bolt	****	4 per panel corner (12 per panel)
10-00007	5/16-18 flange nut	****	4 per panel corner (12 per panel)
10-00145	1/4-20 x 2-1/4" ribneck bolt	****	1 per vertical panel edge (centered) & min 12" O.C. per horizontal edge
10-00065	1/4 Washer	****	1 per vertical panel edge (centered) & min 12" O.C. per horizontal edge
10-00005	1/4-20 flange nut	****	1 per vertical panel edge (centered) & min 12" O.C. per horizontal edge
10-00061	#8 x 3/4" tek screw	****	2 per panel spacer
10-00062	#14 x 3/4" tek screw	****	4 per slide lock assembly, 2 per Spring Plungers where applicable
10-00046	5/16-18 X 2-1/2" PFH screw	****	Min 12" O.C. per track length
10-00007	5/16-18 flange nut	****	Min 12" O.C. per track length
10-00288	Plate, Truss, Connector 1" x 4"	****	1" above each fastener in lower track
10-00289	Plate, Truss, Connector 2" x 4"	****	Aligned with the bottom edge of lower track mounting surface
MANUFACTURED BY BEDFORD REINFORCED PLASTICS, INC.			

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No [2-10] 9.12
Expiration Date 09/15/2016

11-TKO-0001 SCALE: PAGE DESCRIPTION:

TKO DOORS, DIVISION OF 4FRONT ENGINEERED SOLUTIONS, INC.
N56 W24701 NORTH CORPORATE CIRCLE, SUITE A
SUSSEX, WI 53089

^{*}ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE