

# MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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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, 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. 26-26611, titled "Fiberglass Dock Doors CW WL Overhead Garage Door", sheet 1 through 8 of 8, dated 04/14/2011, with last revision dated 07/31/2020, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E., bearing the Miami-Dade County Product Control renewal 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 NOA # 20-0901.12 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.

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The submitted documentation was reviewed by Carlos M. Utrera, P.E.

MIAMI-DADE COUNTY
APPROVED

NOA No 21-0823.04 Expiration Date: September 15, 2026 Approval Date: September 30, 2021

Page 1

- 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.

- 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 21-0823.04

Expiration Date: September 15, 2026 Approval Date: September 30, 2021

### 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 # 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"

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 # 15-0916.07"

- 1. Statement letter of code conformance with the 5<sup>th</sup> 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 21-0823.04

Expiration Date: September 15, 2026 Approval Date: September 30, 2021

#### 2. Evidence submitted under NOA # 16-0725.02

#### 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. OUALITY ASSURANCE

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

#### E. MATERIAL CERTIFICATIONS

1. None.

#### F. STATEMENTS

- 1. Statement letter of code conformance with the 6<sup>th</sup> edition (2017) FBC issued by Engineering Express, dated 03/29/2018, signed and sealed by Frank L. Bennardo, P.E.
- 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 21-0823.04

Expiration Date: September 15, 2026 Approval Date: September 30, 2021

- 3. Evidence submitted under NOA # 20-0901.12
- A. DRAWINGS
  - 1. Drawing No. 26-26611, titled "Fiberglass Dock Doors CW WL Overhead Garage Door", sheet 1 through 8 of 8, dated 04/14/2011, with last revision dated 07/31/2020, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.
- B. TESTS
  - 1. None.
- C. CALCULATIONS
  - 1. None.
- D. QUALITY ASSURANCE
  - 1. Miami-Dade Department of Regulatory and Economic Resources (RER)
- E. MATERIAL CERTIFICATIONS
  - 1. None.
- F. STATEMENTS
  - 1. Statement letter of code conformance with the 7<sup>th</sup> edition (2020) FBC issued by Engineering Express, dated 08/04/2020, signed and sealed by Frank L. Bennardo, P.E.
  - 2. Statement letter of no financial interest issued by Engineering Express, dated 08/04/2020, signed and sealed by Frank L. Bennardo, P.E.

Carlos M. Utrera, P.E. Product Control Examiner

NOA No 21-0823.04 Expiration Date: September 15, 2026 Approval Date: September 30, 2021

INTERIOR ELEVATION

20-0901.12

21-0823.04

1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE SEVENTH EDITION (2020), FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE, PER TAS 201 / 202 / 203//////

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

5. 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.

GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 KSI U.O.N.

PAINTED, PLATED OR OTHERWISE INSULATED.

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.

# **ALLOWABLE DESIGN PRESSURES**

+52.0 PSF

+52.0 PSF

-67.5 PSF

#### VISIT ECALC.IO/26611

FOR SITE SPECIFIC DEVIATIONS & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THIS QR CODE

VISIT ENGINEERINGEXPRESS.COM/STORE FOR ADDITIONAL PLANS, REPORTS & RESOURCES



**GENERAL NOTES** 

FRANK BENNARDO, PE PE# 0046549 CA# 9885

08/11/2020

INC.

SUITE A

DIVISION OF 4FRONT ENGINEERED SOLUTIONS,

DOORS, [

N56

6. ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL,

7. ALL DISSIMILAR MATERIALS IN CONTACT SHALL BE

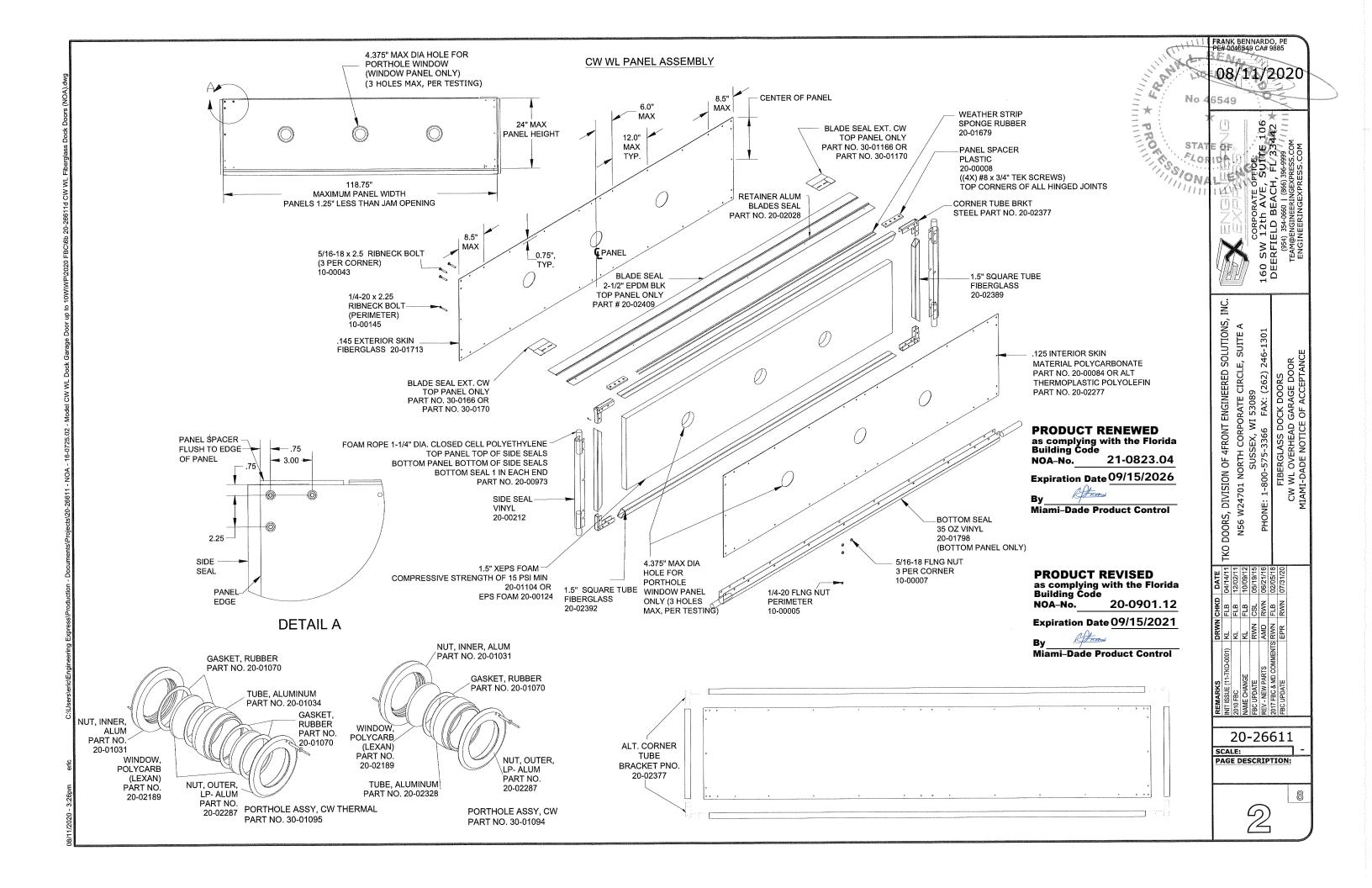
9. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.

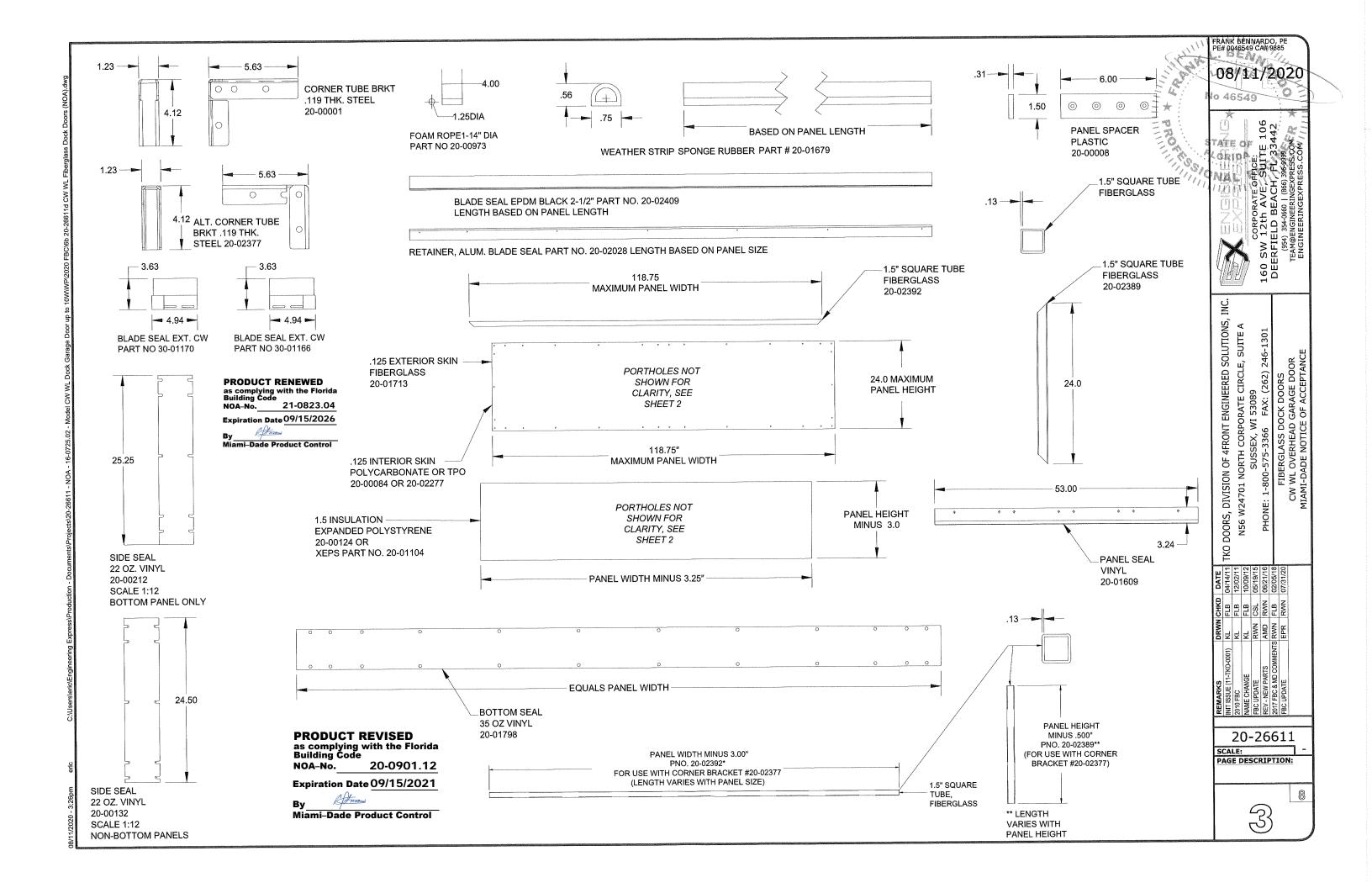
WITH STEEL TRACK (SHEET 4)

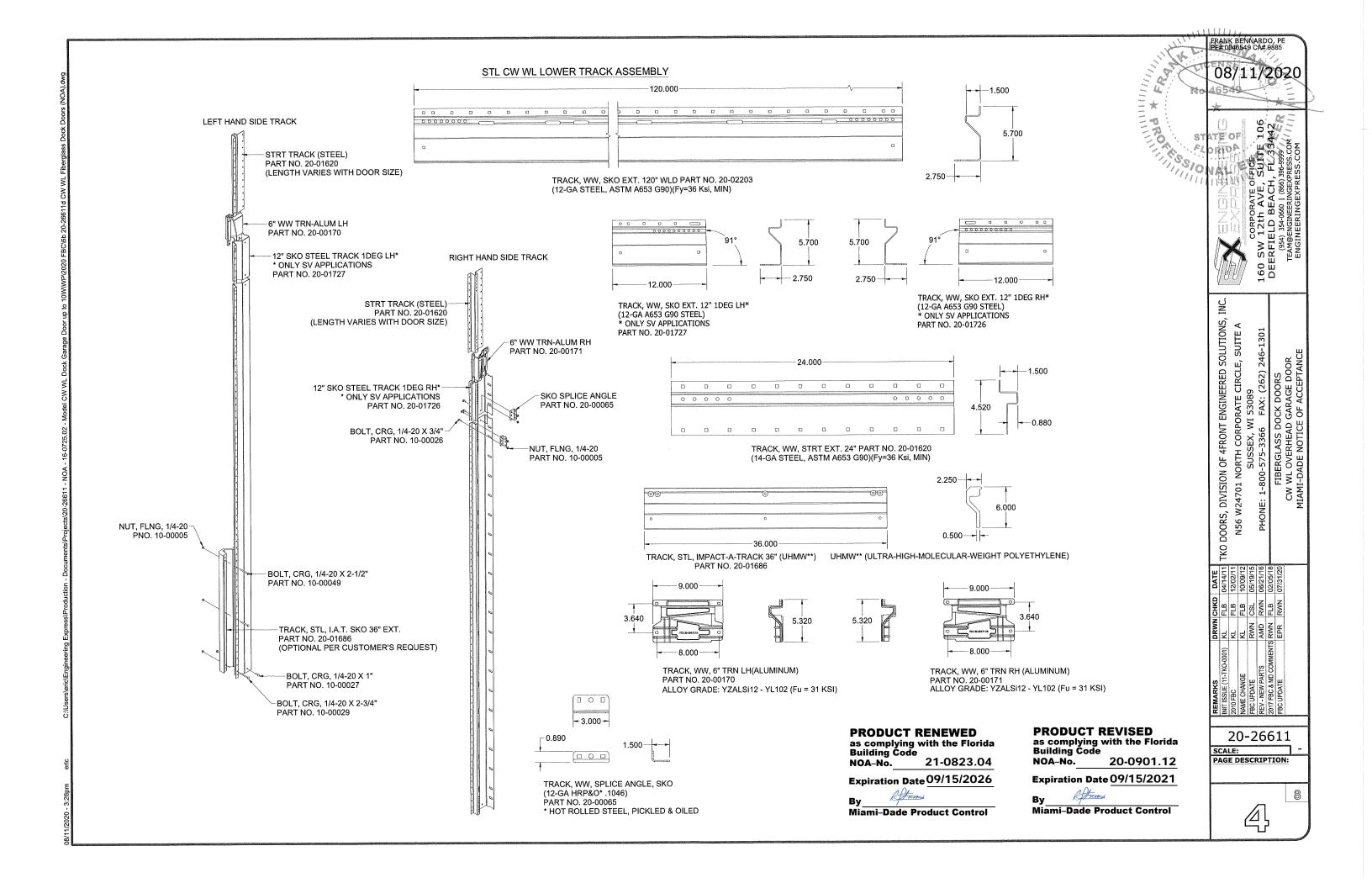
-60.0 PSF

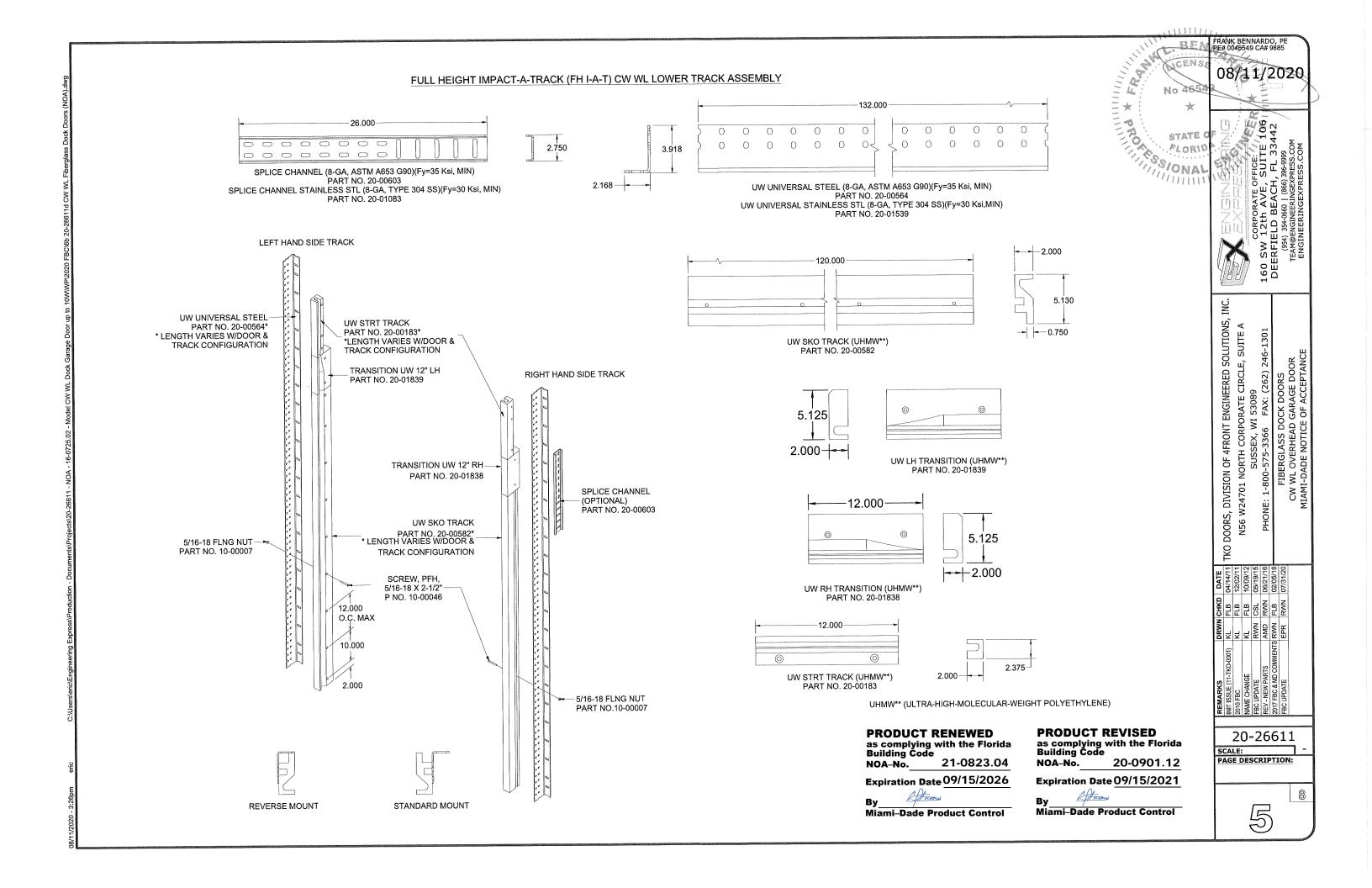
WITH FH I-A-T TRACK (SHEET 5)

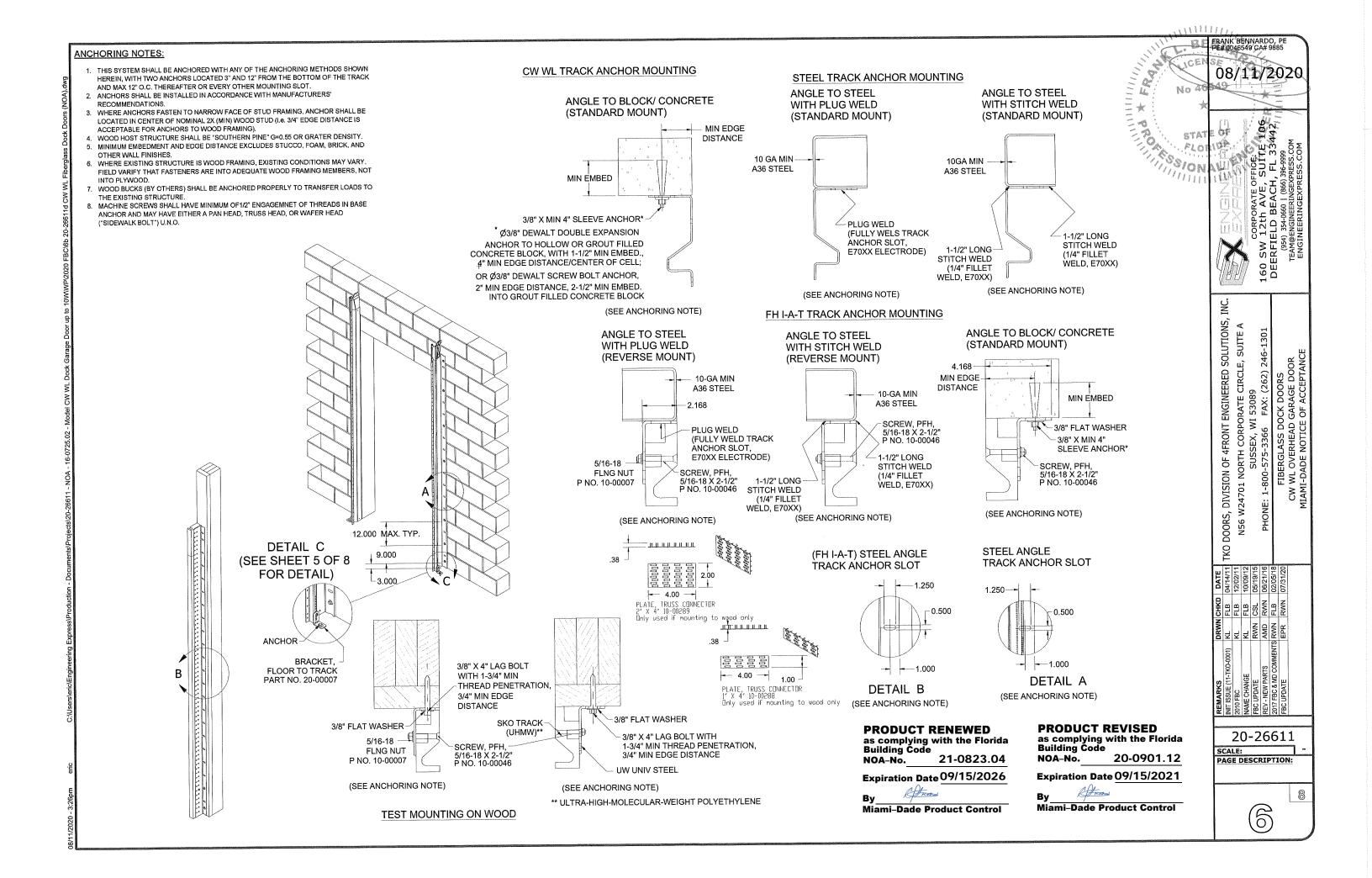
20-26611

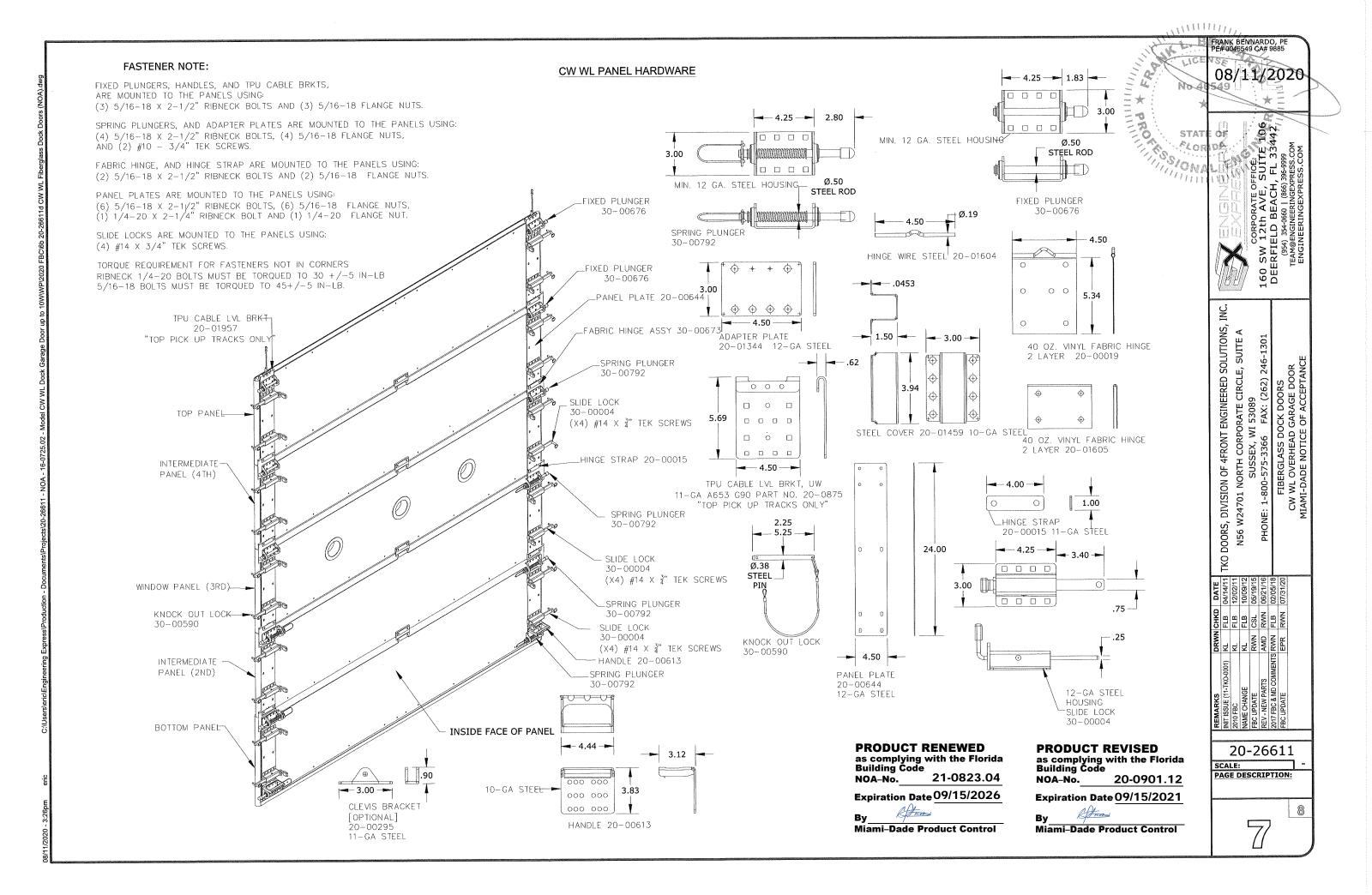












Part Number	Item Description	Manufactur er/Notes	Location
Panel Components	<u> </u>		
20-00084	0.118" interior skin	Polycarbonate sheet	Front face of all panels
20-01713	0.125" exterior skin	Pultruded Fiberglass sheet	Back face of all panels
20-00124	1-1/2" insulation	1lb. density E.P.S. sheet	Inside core of all panels
20-02392	1-1/2" SQ x 0.125" wall tube (horizontal)	Pultruded Fibergalss tube	Top/bottom of all panel frames
20-02389	1-1/2" SQ x 0.125" wall tube (vertical)	Pultruded Fibergalss tube	Sídes of all panels frames
20-02377	Comer 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
20-01798	Bottom seal	35 oz. Vinyl	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
30-01094/95	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 comer hinges 2 each for center hinges
20-01604	Hinge Wire	TKO Doors (steel)	1 each per corner hinges 30-00673
30-00792	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 Phinger 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	L		
20-00582	UW SKO track (length varies with door size)	UHMWPE	Lower track
20-01838	UW 12" transition, R.H.	UHMWPE	Lower track
20-01839	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	非特殊非常	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	海绵涂水安	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

PROTEIN

PRODUCT REVISED as complying with the Florida
Building Code
NOA-No. 20-0901.12

Expiration Date 09/15/2021

Stren By Miami-Dade Product Control

PRODUCT RENEWED as complying with the Florida
Building Code
NOA-No. 21-0823.04

Expiration Date 09/15/2026 Atum

By Miami-Dade Product Control

08/11/2020

TKO DOORS, DIVISION OF 4FRONT ENGINEERED SOLUTIONS, INC.
NS6 W24701 NORTH CORPORATE CIRCLE, SUITE A
SUSSEX, WI 53089
PHONE: 1-800-575-3366 FAX: (262) 246-1301

20-26611

SCALE: PAGE DESCRIPTION:

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