

BUILDING AND NEIGHBORHOOD COMPLIANCE DEPARTMENT (BNC) BOARD AND CODE ADMINISTRATION DIVISION

# NOTICE OF ACCEPTANCE (NOA)

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/building

Imperial Brown, Inc. 198 SE 223th Avenue Gresham, OR 97030

#### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Section and accepted by the Board of Rules and Appeals (BORA) 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. BORA 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 High Velocity Hurricane Zone of the Florida Building Code.

#### **DESCRIPTION:** Walk-In Cooler / Freezer

**APPROVAL DOCUMENT:** Drawing No. NOA-2019, titled "Walk-In Cooler / Freezer", sheets 1 through 5 of 5, prepared by Tamarack Grove Engineering, dated September 08, 2023, signed and sealed by Brian J. Sielaff, P.E., on September 08, 2023, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the 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, Salisbury, NC and the 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 NOA #21-0318.01 and consists of this page 1, evidence submitted pages E-1, E-2 & E-3 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.



Hey A. M.M. 11/23/2023

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## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

# 1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 03-0410.05

#### A. DRAWINGS

1. Drawing No. 04-075, titled "Walk-In Cooler / Freezer", sheets 1 through 5 of 5, prepared by Thornton Tomasetti Group, signed and sealed by John W. Knezevich, P.E., dated February 22, 2005, last revision #1 dated April 27, 2005.

## B. TESTS

1. Test report on Large Missile Impact Test, Cyclic Load Test and Uniform Static air Pressure Test, Axial Load Test, and Racking load Test on Metal Sheathed Urethane Foam Filled Modular Panel Walk-in Coolers / Freezers, prepared by Construction Testing Corporation, Report No.04-019, dated December 17, 2004, signed and sealed by Yamil G. Kuri, P.E.

## C. CALCULATIONS

- 1. Calculation titled "Walk-in Cooler / Freezer", dated March 01, 2005, pages 1 through 10 of 10, prepared by Thornton Tomasetti Group, signed and sealed by John W. Knezevich, P.E.
- 2. Revised calculation titled "Walk-in Cooler / Freezer", dated April 27, 2005, 6 pages, prepared by Thornton Tomasetti Group, signed and sealed by John W. Knezevich, P.E.

## D. QUALITY ASSURANCE

1. By Miami-Dade County Building Code Compliance Office.

## E. MATERIAL CERTIFICATIONS

- 1. Mill Certified Test Report issued by GalvTech, dated 12/19/2002, with the Chemical analysis and Mechanical Properties for (0.025") G-60 Steel conforming to ASTM A-653.
- 2. Mill Certified Test Report issued by Alcoa Mill Products, dated 12/16/2002, with the Chemical composition and Mechanical Properties for 0.030" thick 3105-H154 Aluminum Alloy.
- 3. Tensile Test Report No. CTL #1239, prepared by Certified Testing Laboratories, dated 12/17/2004, signed and sealed by Ramesh Patel, P.E.
- 4. Tensile Test Report No. CTL #1237, prepared by Certified Testing Laboratories, dated 12/17/2004, signed and sealed by Ramesh Patel, P.E.

## 2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 05-1103.01

## A. DRAWINGS

- 1. Drawing No. 04-075, titled "Walk-In Cooler / Freezer", sheets 1 through 5 of 5, prepared by Thornton Tomasetti Group, signed and sealed by John W. Knezevich, P.E., dated February 22, 2005, last revision #2 dated August 29, 2005.
- B. TESTS

1. None.

Helmy A. Makar, P.E., M.S. Product Control Section Supervisor NOA No 23-0913.11 Expiration Date: 03/03/2026 Approval Date: 11/23/2023

#### **Imperial Brown, Inc.**

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. None.

- **D. QUALITY ASSURANCE** 1. By Miami-Dade County Building Code Compliance Office.
- E. MATERIAL CERTIFICATIONS
  - 1. None.

#### 3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 10-1213.01 A. DRAWINGS

1. Drawing No. WAB-10-01, titled "Walk-In Cooler / Freezer", sheets 1 through 5 of 5, prepared by Knezevich Consulting, LLC, dated September 30, 2010, signed and sealed by J. W. Knezevich, P.E., on December 07, 2010.

#### B. TESTS

1. None.

#### C. CALCULATIONS

1. Revised calculation titled "Walk-in Cooler / Freezer", dated September 30, 2010, 22 pages, prepared by Knezevich Consulting, LLC, signed and sealed by John W. Knezevich, P.E., on December 07, 2010.

#### D. QUALITY ASSURANCE

1. By Miami-Dade County Building and Neighborhood Compliance Department.

- E. MATERIAL CERTIFICATIONS
  - None.

## 4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 16-0406.01

#### A. DRAWINGS

- 1. Drawing No. NOA-2019, titled "Walk-In Cooler / Freezer", sheets 1 through 5 of 5, prepared by Tamarack Grove Engineering, dated October 18, 2019, signed and sealed by Brian J. Sielaff, P.E., on October 18, 2019.
- **B. TESTS**

1.

- 1. None.
- C. CALCULATIONS
  - 1. None.

#### **D. QUALITY ASSURANCE**

1. By Miami-Dade County Department of Regulatory and Economic Resources.

Helmy A. Makar, P.E., M.S. Product Control Section Supervisor NOA No 23-0913.11 Expiration Date: 03/03/2026 Approval Date: 11/23/2023

#### Imperial Brown, Inc.

#### **NOTICE OF ACCEPTANCE:** EVIDENCE SUBMITTED

#### E. MATERIAL CERTIFICATIONS

1. None.

#### 5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 21-0318.01

#### A. DRAWINGS

1. Drawing No. NOA-2019, titled "Walk-In Cooler / Freezer", sheets 1 through 5 of 5, prepared by Tamarack Grove Engineering, dated June 21, 2021, signed and sealed by Brian J. Sielaff, P.E., on June 21, 2021.

#### B. TESTS

1. None.

C. CALCULATIONS

1. None.

- D. QUALITY ASSURANCE
  - 1. By Miami-Dade County Department of Regulatory and Economic Resources.
- E. MATERIAL CERTIFICATIONS 1. None.

#### 6. NEW EVIDENCE SUBMITTED

#### A. DRAWINGS

1. Drawing No. NOA-2019, titled "Walk-In Cooler / Freezer", sheets 1 through 5 of 5, prepared by Tamarack Grove Engineering, dated September 08, 2023, signed and sealed by Brian J. Sielaff, P.E., on September 08, 2023.

## B. TESTS

- 1. None.
- C. CALCULATIONS 1. None.
- **D. QUALITY ASSURANCE** 1. By Miami-Dade County Department of Regulatory and Economic Resources.
- E. MATERIAL CERTIFICATIONS 1. None.

#### F. STATEMENTS

1. FBC, 2023 Edition Compliance Letter issued by Tamarack Grove Engineering, dated September 08, 2023, signed and sealed by Brian J. Sielaff, P.E.

Helmy A. Makar, P.E., M.S. Product Control Section Supervisor NOA No 23-0913.11 Expiration Date: 03/03/2026 Approval Date: 11/23/2023

#### GENERAL NOTES

- 1. These structural product evaluation documents represent a walk-in cooler/freezer system analyzed and tested in accordance with the Florida Building Code [ 2020 and 2023 edition.
- 2. These documents are applicable in high wind hurricane zones.
- 3. Design Load: A) ROOF:
  - 3.50 PSF Dead Load: Panel Type RP A.1)
  - 30.00 PSF A.2) Live Load:
  - Maximum weight of mechanical equipment is 330 punds per condensing unit. Space units A.3) at least 48" o/c.
  - B) WALLS: Dead Load: Panel Type WP 2.60 PSF A.1)

Live Load:

- C) FLOORS: A.2)
  - 5.00 PSF A.1) Dead Load: Floor Panel

Insulated Floor 250.00 PSF Limit live load to the capacity of the concrete slab. Floorless

- Wind loads shall be determined in accordance with locally adopted version of the building D) code following any local jurisdiction amendments based on the site specific conditions. See TABLE 3 on Sheet 2 for allowable wind loads used in the design of these documents.
- 4. These product evaluation documents are generic. They address the structural and material properties, but do not include information for site-specific applications of this walk-in cooler/freezer system.
- 5. These product evaluation documents shall not be applied by the contractor on a specific site without the involvement of an architect or engineer of record.
- The architect/engineer of record shall verify that the site specific wind load requirements A) are within the criteria used to develop these documents.
- The architect/engineer of record shall verify that the foundation design is adequate to B) resist the foundation loads identified in Table 1.
- 6. Any modifications or additions to these product evaluation documents will void the product evaluation documents.
- 7. When the site conditions deviate from these product evaluation documents, the building official shall require that a one time site specific approval be applied for and secured from the Miami-Dada County Product Control Division.
- 8. All bolts shall be 304 stainless steel complying with ASTM F593A Condition A minimum tensile strength of 75 ksi.
- 9. All screws shall be electro-galvanized steel or 300 series stainless steel with minimum tensile strength of 75 ksi. Stainless steel screws shall be used when exposed to the weather.
- 10. All concrete anchors shall be specified on the drawings. Embedment lengths noted on the drawings shall not include finish material.
- 11. Dissimilar metals in contact with each other shall be protected in accordance with the locally adopted version of the building code following any local jurisdiction amendments.
- 12. All allowable stress increase is not used in the design of the cooler/freezer unit, nor its attachments.

#### RIGID URETHANE FOAM SANDWICH PANEL SPECIFICATIONS

- 1. Wall and roof composite sandwich panels are comprised of aluminum or steel facings with poured urethane plastic cores. Thickness and material of facings shall be as shown on the drawings.
- 2. Aluminum facings shall be 3003-H14 alloy with minimum Fy=23.2 KSI for interior and exterior use.
- 3. Steel facings used on wall panels shall comply with ATSM A 653 CQ with a minimum Fy=31.0 KSI, minimum thickness of 0.0235" and G90 coating.
- 4. Minimum density of urethane panel core shall be 2.0 PCF.
- 5. Urethane foam core shall have a flame spread rating of no more than 75 and shall have a smoke-developed rating of no more than 450 in accordance with FBC 2603.3.
- 6. Metal skin shall be adhered to foam with Helmitin adhesive 4012RD air spraved onto metal skins at a rate of 0.117 ounces per square foot.
- 7. For specific requirements of walk-in coolers see FBC 2603.4.1.2 and 2603.4.1.3.



















TAE	BLE 1
Roof Panel Max.	imum Span 11'-7"
Foundation Load Designation	Net Wind Forces
Pv	- 285 lb/ft
P <sub>H</sub>	± 200 lb/ft
Pr, Pc	± 795 lb/ft

TABLE 2	
Unit Width (W) Ft - In	Minimum Number of 46" Panels on Ext. Wall
Less than 7'-0"	4
Greater than 7'-0 up to 9'-0"	5
Greater than 9'-0" up to 10'-9"	6
Greater than 10'-9" up to 11'-7"	7

	TABLE 3	
Al	lowable Wind Loads (PS	SF)
Panel Type	Roof	Walls
Max. Pnl Lenght	11'-7"	7'-11"
Negative	- 41.6* / -62.4**	-45.0
Positive	+ 16.3	+45.0

\* Typical Roof panel with single channel reinforcement, refer to detail RP in sheet 1.

\*\* End panel with double channel reinforcement. refer to detail RP in sheet 1.





- TABLE 1 NOTES

   1. Net wind forces represent the reactions from working stress wind loads assuming
  maximum roof panel spans and maximum wall panel lengths.
- 2. Py represents the vertical wind reaction.
- 3. PH represents the horizontal wind reaction.
- 4.  $P_\tau$  and  $P_\circ$  represent the overturning moment occurring at each panel assumed as a 24" couple with forces in opposite directions.

#### TABLE 2 NOTES

1. This table specifies the minimum number of panels required on the front wall of the unit to establish the lateral load resistance necessary for a given roof span.

#### TABLE 3 NOTES

Allowable wind loads shown represent the maximum ASD components uniform wind loads for the panel span.

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- 2. Site specific wind loads determined in accordance with GENERAL NOTES 3.D and 5.A shall be less than or equal to these loads. For non-uniform loads, moment and shears due to the site specific loads shall be less than the moments and shears from the allowable loads
- 3. Allowable wind loads are based on a factor of safety of 1.5 for all wall panels and 2.0 for all roof panels in accordance with TAS 202 and the HVHZ provisions of the FBC.







