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# **Product Evaluation**

MEC02 | 1021

**Engineering Services Program** 

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** MEC-02 **Effective Date:** October 1, 2021

**Re-evaluation Date:** October 2025

Product Name: Solution XT Rooftop Air Handling Units, Impact Resistant

Manufacturer: York/Johnson Controls, Inc.

100 JCI Way York, PA 17406 (717) 815-4218

York/Johnson Controls, Inc.

77 Academy Dr.

Hattiesburg, MS 39401

(601) 544-8911

### **General Description:**

This evaluation report is for Solution XT rooftop air handling units.

#### **Assembly 1:**

Roof panels, floor panels, and wall panels are 2" thick, double wall construction with foam insulation. Exterior roof, floor, and wall panel construction is minimum 20-gauge galvanized steel. Construction of the interior liner is minimum 20-gauge for the roof, floor, and wall panels. The access doors are 2" thick, double wall construction, minimum 20-gauge galvanized steel, with insulation in the interior.

### **Assembly 2:**

Roof panels, floor panels and wall panels are 2" thick double wall construction with foam insulation. Exterior roof and floor panel construction is minimum 18-gauge galvanized steel. Exterior wall panel construction is minimum 16-gauge galvanized steel. Construct of the interior liner is minimum 18-gauge for the roof and floor panels and minimum 16-gauge for the wall panels. The access doors are 2" thick, double wall construction, minimum 20-gauge galvanized steel, with insulation in the interior.

#### **Limitations:**

Construct and install the rooftop air handling units in accordance with the following design drawings:

## **Assembly 1:**

 Drawing No. 13-05 sheets 1 through 16; titled "Solution XT Rooftop Air Handling Unit," dated November 19, 2013; Revision A dated June 23, 2021; signed and sealed by Jalal Farooq, P.E. on July 6, 2021.

## **Assembly 2:**

 Drawing No. 13-06 sheets 1 through 17; titled "Solution XT Rooftop Air Handling Unit," dated November 19, 2013; Revision A dated June 23, 2021; signed and sealed by Jalal Farooq, P.E. on July 6, 2021.

#### **Allowable Dimensions:**

## **Assembly 1:**

Maximum Length: 48'-0" Maximum Height: 6'-6" Maximum Width: 7'-6"

### **Assembly 2:**

Maximum Length: 48'-0" Maximum Height: 11'-0" Maximum Width: 11'-3-1/8"

Refer to the design drawing referenced in this evaluation report for specific dimensions.

**Hardware:** Hardware requirements for the access doors is specified on the approved drawings.

### **Design Pressures:**

### **Assembly 1:**

Roof and wall panels: +65 / -65 psf

# **Assembly 2:**

Wall panels: +65 / -65 psf

Roof panels:

Width less than or equal to 7'-6": +65 / -65 psf Width greater than 7'-6": +48.7 / -48.7 psf

**Impact Resistance:** The assemblies have been tested for windborne debris resistance. The assemblies passed the equivalent of Missile Level D specified in ASTM E 1996-14a.

#### Installation:

Attachment of the air handling units to a roof curb and to the host structure to prevent uplift, sliding, and overturning is not part of this evaluation report. A Texas licensed engineer must design the attachment of the air handling units to a roof curb and to the host structure. The structural integrity of the host structure to support the air handling units must be evaluated by the Texas licensed engineer.

Interior mounted mechanical equipment is outside the scope of this evaluation report. Refer to the General Notes in the approved drawings for more information.

**Note:** Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.