

# ENGINEERING EXPRESS<sup>®</sup> (EX) Product Evaluation Report

October 24, 2024

Application Number:	FL 47101.1
EX Project Number:	24-74117
Product Manufacturer: Manufacturer Address:	Refricenter of Miami, Inc. 7101 NW 43rd Street Miami, FL 33166, USA

Product Name & Description: TGM and Classic Inverter Mini-Split System

## Scope of Evaluation:

This Product Evaluation Report is being issued in accordance with the requirements of the Florida Department of Business and Professional Regulation (Florida Building Commission) Rule Chapter 61G20-3.005, F.A.C., for statewide acceptance per Method 2 (b). The product noted above has been tested and/or evaluated as summarized herein to show compliance with standard ASCE 7-22 (ASD) and the Florida Building Code Eighth Edition (2023) and is, for the purpose intended, at least equivalent to that required by the Standard and Code. Re-evaluation of this product shall be required following pertinent Florida Building Code or ASCE Standard modifications or revisions.

## Substantiating Data:

#### • PRODUCT EVALUATION DOCUMENTS

EX Performance Evaluation document # 24-74117 titled "TGM and Classic Inverter Mini-Split System", prepared by Engineering Express, Inc., signed & sealed by Richard Neet, P.E. is an integral part of this Evaluation Report.

#### <u>STRUCTURAL ENGINEERING CALCULATIONS</u>

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria (per FBC 8<sup>th</sup> Ed. 2023 Section 104.11.1):

- 1. Max. allowable (ASD) lateral & uplift wind pressures
- 2. Max. allowable sliding forces, uplift forces, & overturning moments
- 3. Tie-down configuration and anchor capacity for various host substrates (host by others).
- 4. Unit panel wind pressure connection integrity

## Impact Resistance:

Impact Resistance has not been demonstrated.



### Wind Load Resistance:

This product has been designed to resist wind loads as indicated on its respective Performance Evaluation document (i.e. engineering document).

### Installation:

The product listed above shall be installed in strict compliance with the Performance Evaluation document (i.e. engineering document), along with all components noted therein.

The product components shall be of the material specified in the Performance Evaluation document (i.e. engineering document).

## Limitations & Conditions of Use:

Use of each product shall be in strict accordance with its respective Performance Evaluation document (i.e. engineering document) as noted herein.

All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in each product's respective anchor schedule. Host structure conditions which are not accounted for in each product's respective anchor schedule shall be designed for on a site-specific basis by a registered professional engineer.

All components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times. Any alteration to the respective Performance Evaluation document will invalidate it. This product has been designed for use inside and outside of the High Velocity Hurricane Zone (HVHZ & NON-HVHZ).

Respectfully,

Richard Neet, P.E. **ENGINEERING** *EXPRESS*<sup>®</sup> #PE86488 | Cert. Auth. 9885

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