

ENGINEERING EXPRESS® (EX) PRODUCT EVALUATION REPORT

August 18, 2023

Application Number: FL #19731.1
EX Project Number: 23-61594

Product Manufacturer: Miami Tech, Inc.

Manufacturer Address: 3611 NW 74th St
Miami, FL 33147

Product Name: Aluminum Tie-Down Clips, 1" Wide
Product Description: Aluminum Tie-Down Clip System (For Use with Mechanical Units at Roof or Grade)

Scope of Evaluation:

This Product Evaluation Report is being issued in accordance with the requirements of the Florida Department of Community Affairs (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 the Florida Building Code 8th Edition (2023) and is, for the purpose intended, at least equivalent to that required by the Code. Re-evaluation of this product shall be required following pertinent Florida Building Code modifications or revisions.

Substantiating Data:

- **PRODUCT EVALUATION DOCUMENTS**

Drawing #23-61594 titled "Mechanical Unit Aluminum Tie-Down Clip: At Grade and Roof-Top Mounted Applications", sheets 1-6, prepared by Engineering Express, signed & sealed by Frank L. Bennardo, P.E. are an integral part of this Evaluation Report.

- **TEST REPORTS**

Ultimate test loading structural performance has been tested in accordance with Florida Building Code - 104.11 and 1707.1 per test report(s) #15-6206 by Fenestration Testing Laboratory, Inc. Signed and Sealed by Idalmis Ortega, P.E.

- **STRUCTURAL ENGINEERING CALCULATIONS**

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

1. Minimum Allowable Unit Width
2. Maximum Allowable Unit Height
3. Maximum Allowable Unit Surface Area
4. Clip Configuration and Anchor Spacing
5. Anchor Capacity for Various Substrates
6. Maximum allowable roof-top heights for various installation wind speeds

No 33% increase in allowable stress has been used in the design of this product.

Miami Tech, Inc. –Aluminum Tie Down Clips, 1” Wide

Impact Resistance:

Not applicable to this product.

Wind Load Resistance

This product has been designed to resist wind loads as indicated in the design schedule(s) on the Product Evaluation Document (i.e. engineering drawing).

Installation

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

The product components shall be of the material specified in the Product Evaluation Document (i.e. engineering drawing).

Limitations & Conditions of Use:

Use of this product shall be in strict accordance with the Product Evaluation Document (i.e. engineering drawing) as noted herein.

All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in this product’s respective anchor schedule. Host structure conditions which are not accounted for in this 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.

This product has been designed for use within and outside of the High Velocity Hurricane Zone (HVHZ).

Respectfully,

Frank Bennardo, PE
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