



Product Evaluation

FR041 | 0914

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: FR-41 **Effective Date:** September 1, 2014
Re-evaluation Date: September 2018

Product Name: Extruded Aluminum Columns with Hurricane Bracket System

Manufacturer: AFCO Industries, Inc.
3400 Roy Street
Alexandria, LA 71307
(318) 448-1651

Acceptable for exterior commercial and residential applications in designated catastrophe zones along the Texas Gulf Coast when installed in accordance with the manufacturer’s installation instructions and this product evaluation.

Product Description:

AFCO Industries Extruded Aluminum Columns with Hurricane Bracket System are produced in several types. The types of extruded columns addressed in this evaluation are the 6" round Fluted, 8" round Fluted, 6" square Fluted, 8" square Fluted, 6" square Craftsman, and 8" square Wellington. The hurricane brackets systems are an integral part of the system and are supplied with the columns. There is a unique bracket system for each column specified in this evaluation.

Limitations:

This evaluation provides the allowable uplift loads for the AFCO Extruded Aluminum Columns with Hurricane Bracket System. It is the responsibility of a TDI appointed engineer to design the connection of the column to the beam and the connection of the column to the foundation. Applicable loads shall be in accordance with ASCE 7 and the International Building Code (IBC) and with the American Society of Civil Engineers (ASCE-7-10) and with codes in effect at the project location. This product evaluation provides an ultimate load values for the Extruded Aluminum Columns and the hurricane bracket systems identified in this identified. The specific limitations associated with the column and bracket system:

- The evaluation only addresses allowable loads uplift on columns identified.

- The site specific wind loads shall be determined by the TDI appointed engineer based on the codes in use.
- Only vertical loading is addressed.
- The connection of the columns to the beam and foundation shall be designed by a TDI appointed engineer.
- The compressive strength of the concrete foundation must be determined.
- No wave action from water incursion exists.
- The bracket system associated with the specified column shall be used.

Installation:

Bracket Assembly to Column:

- The bracket system was fabricated for the different types of columns and installed on the top and bottom (two (2) at the top and two (2) at the bottom).
- Place outside plate(s) flush with the end of column and clamp to column shaft to prevent movement.
- Drill 1/4" hole, then position inside plate and mount full assembly with bolts, washers, and nuts provided; make certain nuts are oriented to the inside of column and tighten with wrench.
- One (1) extra pair of brackets may be needed at the corner of a structure because of the overhead beam turning, or you could move the bracket to the adjacent stave to make the turn.
- Repeat this process on the opposite side and on the other end of the column.

Allowable Uplift & Bracket System

Column	Allowable Load (psf)	Bracket System
6" Round	1933	AHB00602
8" Round	2167	AHB00802
6" square Craftsman	2877	AHB00101
8" Wellington	2933	AHB00101
6" Fluted	2216	AHB00601
8" Fluted	2484	AHB00801

Note: Install the column and bracket system in accordance with the manufacturer's installation instructions and this product evaluation. The manufacturer's installation instructions shall be on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.