



# Product Evaluation

LVR03 | 0818

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:** LVR-03

**Effective Date:** April 1, 2018

**Re-evaluation Date:** August 2022

**Product Name:** Model DC-PHB Aluminum Louvered Penthouse, Impact Resistant

**Manufacturer:** Aire Technologies, Inc.  
1502 Industrial Drive  
Monongahela, PA 15063  
(866) 421-2473

**General Description:**

The penthouse louver is an extruded louvered penthouse enclosure. The louver frame and blades are constructed of 0.080" thick, 6063-T5 extruded aluminum. The louver blades are positioned at 36 degree angles and are mechanically fastened and welded to jambs on the backside of the blades. Penthouse louvers are available in a minimum throat size of 12" x 12" x 12" and a maximum throat size of 88" x 100" x 84". The penthouse louvers referenced in this report are impact resistant.

**Limitations:**

**Design Wind Pressure:**

Assembly	Maximum Width (inches)	Maximum Depth (inches)	Maximum Height (inches)	Allowable Design Pressure Rating (psf)
DC-PHB	88	100	84	±85

**Product Identification:** Each unit must bear a permanent label containing the manufacturer’s name, the model number of louver, and the applicable test standards.

**Impact Resistance:** These louver assemblies satisfy the Texas Department of Insurance’s criteria for protection from windborne debris in both the Inland I zone and the Seaward zone. The louver assemblies passed an impact standard equivalent to Missile Level E specified in ASTM E 1996-04. The louvers may be

installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded. These louver assemblies will not need to be protected with an impact protective system.

**Acceptance of Smaller Assemblies:** Louver assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

#### **Installation Instructions**

All requirements specified in the IRC and the IBC must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

#### **Anchorage Method:**

The penthouse louver requires a factory approved supplied curb for mounting. The curb is constructed of 14-gauge galvanized steel and is 103-1/4" long x 91-1/4" wide x 36" tall with a 6" flange. The curb has galvanized steel angles measuring 1-1/2" x 1-1/2" x 3/16" thick welded to the curb. On the long side, the angles are located 20" from each end and spaced approximately 21" on center thereafter. On the short side, the angles are located 24" from each corner and spaced 20" on center thereafter. The penthouse is anchored to a concrete roof deck with 1/4" diameter Tapcon fasteners with sufficient length to have a minimum embedment depth of 1-1/2" into the concrete. The Tapcon fasteners are located 4-1/2" from each end and spaced approximately 20" on center thereafter.

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