

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION

LVR-02

Effective July 1, 2008

*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 shall be subject to reevaluation 3 years after the effective date.*

*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.*

**Model DC-PEAB Aluminum Louvered Penthouse, Impact Resistant, as manufactured by**

**Leader Industries Inc.  
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Nashville, TN 37204  
(615) 256-3500**

will be accepted for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

## PRODUCT DESCRIPTION

**General:** The penthouse louver is an extruded louvered penthouse enclosure. The louver frame and blades are constructed of 0.125" thick, 6063T5 extruded aluminum. The louver blades are positioned at 38° 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 84" x 96" x 82". The penthouse louvers referenced in this report are impact resistant.

The models included in this evaluation are as follows:

## LIMITATIONS

### Design Wind Pressure:

Assembly	Maximum Width (inches)	Maximum Depth (inches)	Maximum Height (inches)	Allowable Design Pressure Rating
DC-PEAB	84	96	82	±100

**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 D 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

### **General Installation Requirements:**

All requirements specified in the International Residential Code (IRC) and the International Building Code (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 consists of a 24" high, 14 gauge galvanized steel with welded corner construction with a 6" flange. The curb has steel angles measuring  $1\frac{1}{2}$ " x  $1\frac{1}{2}$ " x  $\frac{1}{4}$ " thick welded to the curb. On the long side, the angles are located 20" from each end and spaced approximately 20" o.c. thereafter. On the short side, the angles are located 22" from each corner and spaced 20" o.c. thereafter. The penthouse is anchored to a concrete roof deck with  $\frac{1}{4}$ " diameter Tapcon fasteners with sufficient length to have a minimum embedment depth of  $1\frac{1}{2}$ " into the concrete. The Tapcon fasteners are located  $4\frac{1}{2}$ " from each end and spaced approximately 20" o.c. thereafter.

**Note:** The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC).