TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective May 1, 2011
LVR-04

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 April 2015.

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-HWD 550 Aluminum Vertical Louvers, **Individual and Mulled Units**, **Impact Resistant**, as manufactured by

Leader Industries Inc.
P.O. Box 40913
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: This product evaluation is for individual and mulled DC-HWD 550 aluminum vertical louvers. The louvers are fixed louvered panels. The louvers and blades are constructed of 0.080" thick, 6063-T5 extruded aluminum. The louver blades are 5" in depth and are spaced 2" o.c.

LIMITATIONS

Design Drawings: The louvers shall be installed in accordance with Leader Industries, Inc. DC-HWD550 Aluminum Vertical Louver Mulled and Single Units Drawing No. 08-01060, Sheets 1–11 of 11, dated August 23, 2010, with each sheet signed, sealed, and dated by Luis R. Lomas, P.E. on October 8, 2010. The stated drawings will be referred to as approved drawings in this report. A copy of the approved drawings shall be available at the job site.

Louver Configurations: The louvers may be installed as a single span unit or as multi-span assemblies with the use of mullions.

Mounting Conditions: The louvers may be wall mounted to wood, concrete, or steel. Refer to the approved drawings for the mounting conditions.

Wall Construction: The substrates shall meet the following requirements:

- Pre-cast concrete, cast-in-place concrete (minimum 3,200 psi)
- Wood (minimum Hem-Fir dimension lumber)
- Steel, 16 gauge (welded installation)
- Steel 14 gauge (0.078" thick) minimum, 5/16" self-tapping screw installation
- Steel 0.1875 thick minimum, 3/8" machine screw or 3/8" bolt and nut installation

Product Identification: Each unit must bear a permanent label containing the manufacturer's name, type of shutter, Missile Level D and applicable standards: ASTM E 1886, ASTM E 1996 and ASTM E 330.

Design Wind Pressure:

Assembly	Maximum Overall Width (inches)	Maximum Overall Height (inches)	Allowable Design Pressure Rating
Single Vertical Louver	48	48	±180
Single Vertical Louver	72	120	±120
Single Vertical Louver	120	72	±120
Mulled Vertical Louver	216	120	±120

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: The louvers shall be anchored to the structure in accordance with the approved drawings. Anchorage of the louvers to concrete, wood framing, or steel shall follow the mounting details on the approved drawings and the fasteners specified in the mounting details. Anchorage of the louvers to the mullions and the anchorage of the mullions to the structure shall be as specified on the approved drawings. Minimum edge distances and minimum embedment depths for all fasteners that penetrate into the structure shall be as specified on the design drawings.

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).