



# Product Evaluation

LVR04 | 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-04

**Effective Date:** August 1, 2018

**Re-evaluation Date:** August 2022

**Product Name:** Model DC-HWD 550 Aluminum Vertical Louvers, Individual and Muller Units, Impact Resistant

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

## General Description:

This evaluation report 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" on center. The louvers referenced in this report are impact resistant.

## Limitations:

**Design Drawings:** The louvers must be installed in accordance with Aire Technologies, Inc. drawing titled "DC-HWD550 Aluminum Vertical Louver Muller & Single Units - Large Missile Impact," drawing 08-160, sheets 1 thru 11, dated August 23, 2010, Rev. A, dated July 3, 2018, signed, sealed, and dated July 3, 2018 by Luis R. Lomas, PE. The stated drawings are referred to as approved drawings in this evaluation report.

**Louvered 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 must meet the following requirements:

- Pre-cast concrete, cast-in-place concrete (minimum 3,200 psi)
- Wood (minimum Hem-Fir dimension lumber)
- Steel, 16-gauge (0.060" thick) minimum, (welded installation)
- Steel, 14-gauge (0.078" thick) minimum, 5/16" self-tapping screw installation
- Steel, 0.1875" thick, 3/8" machine screw or 3/8" bolt and nut installation

**Design Wind Pressure:**

Assembly	Maximum Overall Width (inches)	Maximum Height (inches)	Allowable Design Pressure Rating (psf)
Single Vertical Louver	48	48	±180
Single Vertical Louver	72	120	±120
Single Vertical Louver	120	60	±120
Multiple Vertical Louver	216	120	±120

**Product Identification:** Each unit must bear a permanent label containing the manufacturer's name, the model number of louver, Missile Level D, and the applicable test standards: TAS 201-94, TAS 202-94, and TAS 203-94.

**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**

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

**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.