

Product Evaluation

LVR22 | 0519

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-22

Effective Date: May 1, 2019

Re-evaluation Date: May 2023

Product Name: Model SP537DC - Aluminum Louver, Impact Resistant

Manufacturer: Industrial Louvers, Inc.
511 South 7th Street
Delano, Minnesota 55328
(763) 972-2981

General Description:

The louver model SP537DC must be utilized at air intake and exhaust locations or any area requiring missile impact resistance and/or water rejection. The model SP537DC has been tested in accordance with AMCA 540 (enhanced protection level E missile impact); protocols TAS-201 (large missile impact), TAS-202 (uniform static pressure), and TAS-203 (cyclic pressure); and AMCA 500-L for air performance, water performance, and wind driven rain.

Design Drawings:

The Industrial Louvers, Inc. drawing No. RD1089, Sheets 1-12 of 12, dated March 06, 2019, signed, sealed and dated March 13, 2019 by Gustave L. Schmoll, P.E. The stated drawing will be referred to as approved drawings in this report.

Limitations:

Wall Construction: The louvers may be mounted to the following types of wall framing:

- Metal studs (minimum 16 gauge, $F_y = 33$ ksi)
- Concrete minimum compressive strength 4,000 psi.
- Grout filled CMU substrate, minimum 1,500 psi.
- Wood substrate, minimum $G = 0.55$ density.
- Metal stud substrate, minimum 16-gauge, $F_y = 33$ Ksi.
- Structural steel substrate, minimum $F_y = 46$ ksi.

It is the responsibility of the structural engineer of record to verify the capacity of the structure to support the loads imposed by the louvers and ensure the correct steel and concrete thickness.

All fasteners to be corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.

The louver is to be installed in a location where the room behind the louver is designed to drain water penetrating the room and the room will house water proof or water-resistant equipment, components or supplies.

Maximum Width: The maximum width of a louver panel unit is 6'-0". Louver panel units may be placed side by side utilizing mullions to achieve an unlimited overall width.

Maximum Height: The maximum height of a louver panel unit is 12'-10". Louver panel units may be stacked to achieve an opening height. For such conditions, the maximum overall height is a function of design pressure, panel width, and mullion span. Refer to the approved drawings for the maximum allowable height.

Table 1

Model Number	Drawing Number	Sealed, Signature, Sheets
SP537DC	RD1089	Sealed by Gustave L. Schmoll, P. E. Sheets 1-12, of 12 dated March 13, 2019

Table 2

Assembly	Maximum Single Section Width	Maximum Single Section Height	Allowable Design Pressure Rating
1	60"	108"	±120.0 psf
2	60"	135"	±120.0 psf
3	60"	154"	±120.0 psf
4	72"	60"	±100.0 psf
5	72"	Unlimited	±120.0 psf
6	72"	Unlimited	±120.0 psf

Installation:

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.

General:

Blade Support: Refer to the design drawings for requirements on blade support.

Product Identification: Each unit must bear a permanent label containing the manufacturer's name, series number of louvers, and applicable test standards.

Impact Resistant: These louver assemblies satisfy the TDI's criteria for protection from windborne debris. 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 if 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.

Anchorage Method: The aluminum louvers must be installed in accordance with the approved drawings.

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