

## Product Evaluation

LVR10 | 0221

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-10

**Effective Date:** February 1, 2021

**Re-evaluation Date:** February 2025

**Product Name:** Models EME420MD, EME520MD, ELF6375DXD Louvers, Impact Resistant

**Manufacturer:** Ruskin  
Air & Sound Control  
3900 Doctor Greaves Road  
Grandview, MO 64030  
(816) 761-7476

### General Description:

**Model No. ELF6375DXD:** The ELF6375DXD is a 6" hurricane impact resistant stationary louver with a high performing frame and blade system designed to collect and remove water, providing excellent water penetration performance. With optional control damper, the louver meets HVWDR requirements specified in AMCA550. The louver is comprised of a single section or multiple ship sections. The minimum section size is 12" wide x 12" tall. The maximum section size is 87.875" wide x 119.75" tall. The wall thickness of the box frame is 0.080" and is constructed from 6063-T5 Extruded Aluminum. The head frame is 6.0" wide x 4.087" tall x 0.080" thick (wall). The jamb frame is 6.0" wide x 1.0" tall x 0.080" thick (wall). The sill frame is 6.0" wide x 0.125" thick (wall). The 6063-T5 Aluminum louver blades are 5.88" wide x 5.964" tall x 0.080" thick. Two (2) snap-on Blade Braces are located on each blade and are 5.041" wide x 4.313" tall x 0.080" thick.

**Model No. EME420MD:** The EME420MD is a 4" deep hurricane impact resistant louver with mechanically fastened construction and extruded aluminum double drainable horizontal blades designed to protect air intake and exhaust openings in exterior walls in severe weather conditions.

With optional control damper, the louver meets HVWDR requirements specified in AMCA550. The louver is composed of a single section or multiple ship sections. The minimum single section size is 12" wide x 12" tall. The maximum single section size is 87.9375" x 144". The louver jamb frame is a 4" deep x 0.080" thick extruded aluminum box frame. The louver head frame and sill frame are 4" deep x 0.080" thick. The frame contains horizontal extruded aluminum blades, 4" wide x 0.063" thick, which are spaced at 1-5/8" and attached to each end of the jamb frame with two (2) No. 8-18 x 3/4" HWH screws with No. 10 neoprene washers.

**Model No. EME520MD:** The EME520MD is a 5" deep hurricane impact resistant louver with mechanically fastened construction and extruded aluminum double drainable horizontal blades designed to protect air intake and exhaust openings in exterior walls in severe weather conditions. With optional control damper, the louver meets HVWDR requirements specified in AMCA550. The louver is composed of a single section or multiple ship sections. The minimum single section size is 12" wide x 12" tall. The maximum single section size is 87.9375" x 144". The frame is constructed from 6063-T5 aluminum alloy. The upper frame corners are welded, and the lower frame corners are fastened with two (2) No. 10 x 3/4" hex head sheet metal screws and a washer. The sill frame is 1.207" x 5". The jamb frames are 1.09" x 5". The dimensions of the top louver frame is 4.835" x 3.306" and the dimensions of the remaining louver blades is 4.835" x 2.306". The louvers are constructed from solid extrusions where the wall thicknesses vary by part.

**Limitations:**

**Design Drawings:** The louvers must be installed in accordance with one of the following Ruskin Air & Control drawings below:

**ELF6375DXD:** Install in accordance with drawing No. 60-022375-00B; sheets 1 thru 12; dated March 23, 2012; Revision A; dated September 25, 2020; signed and sealed by Melissa Massar, P.E. on December 22, 2020.

**EME420MD:** Install in accordance with drawing No. 60-022379-00B; sheets 1 thru 10; dated May 12, 2012; Revision A; dated September 16, 2020; signed and sealed by Melissa Massar, P.E. on December 22, 2020.

**EME520MD:** Install in accordance with drawing No. 60-022376-00B; sheets 1 thru 11; dated October 10, 2014; Revision A; dated September 10, 2020; signed and sealed by Melissa Massar, P.E. on December 22, 2020.

**Design Pressure Rating:** The design pressure rating for each model louver is listed in Table 1:

**Table 1: Design Wind Pressure**

Assembly	Maximum Single Section Width	Maximum Single Section Height	Allowable Design Pressure Rating (psf)
ELF6375DXD	87-7/8"	119-3/4"	± 148
EME420MD	87-15/16"	144"	± 120
EME520MD	87-15/16"	144"	± 120

**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 (RUSKIN Co.); the drawing number; the product model number; the design pressure rating; the test standards (TAS 201-94, TAS 202-94, TAS 203-94); and the missile level rating (Large Missile Rated).

**Impact Resistance:** These louver assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris. The louver assemblies passed an impact standard equivalent to Missile Level D specified in ASTM E 1996-14a. 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.

**Acceptance of Larger Assemblies:** Multiple louvers may be placed side-by-side (i.e., the width is unlimited). The maximum height for the louvers is the same as the Maximum Single Section Height specified in Table 1.

**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.

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

**Note:** Keep the manufacturer's installation instructions and the approved drawings referenced in this evaluation report available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.