



Product Evaluation

SHU225 | 0217

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: SHU-225

Effective Date: February 1, 2017

Re-evaluation Date: February 2021

Product Name: Heroal RS 53 RC 3 Slat Engaged Roll-Up Shutters

Manufacturer: Heroal-Johann Henkenjohann GmbH & Co. KG
Osterwieher Str. 80
33415 Verl (Germany)
(888) 437-6257

General Description:

The roll-up shutters are manufactured of extruded aluminum and are assembled using extruded aluminum interlocking slats. The interlocking slats are manufactured of 304 Series stainless steel with a high density elastolid D 8220/109 Polyolkomponente foam plastic core. The interlocking slats have dimensions of 2.01" x 0.54" x 0.020". The bottom slat is manufactured of aluminum alloy and has dimensions of 2.11" x 0.55" x 0.047". Consecutive single spans are connected by mullions to increase the overall width of the shutter assembly.

Design Drawings:

- "Heroal RS 53 RC 3 Slat Engaged Roll-Up Shutter," manufactured by heroal-Johann Henkenjohann GmbH & Co. KG; Drawing No. 16-112; Rev. 1, Sheets 1–19 of 19, dated September 20, 2016; Rev. 2, sheets 1, 4, 9, 14, 15, 18, and 19, dated December 22, 2016; drawing signed, sealed, and dated December 22, 2016 by Walter A. Tillit, P.E.. The stated drawings will be referred to as approved drawings in this report.

Limitations:

Configurations:

- Single Units (No Mullions)
- Consecutive Units (With Mullions)

Mounting Conditions (Single Units):

- Wall Mount
- Inside Wall Mount
- Build-out Mount

Mounting Conditions (Consecutive Units with Mullions):

- Face Mount
- Inside Mount

Wall Construction: The roll-up shutters may be mounted to the following types of wall framing:

- Pre-cast concrete, cast-in-place concrete (minimum compressive strength required specified in drawings)
- Grout-filled concrete masonry units (CMU)
- Wood (minimum Southern Yellow Pine dimension lumber, S.G. = 0.55).

Allowable Design Pressure: The allowable design pressure is a function of slat span, mounting condition, anchor spacing, substrate, mullion size, and mullion spacing. The maximum allowable design pressure is +/-92.0 psf. Refer to the approved drawings for the allowable design pressure for a specific installation condition.

Maximum Slat Span: The maximum allowable slat span is 10'-0". Refer to the approved drawings for allowable slat spans for specific configurations.

Maximum Shutter Height: The maximum allowable shutter height is 10'-0". The allowable shutter height may be less for shutter configurations with mullions. Refer to the approved drawings for allowable shutter heights for specific shutter configurations.

Mullion Spacing: The mullion spacing must be such that the maximum slat span for a given design load is not exceeded. The maximum allowable mullion span is 10'-0". Refer to the approved drawings for allowable mullion spans for specific shutter configurations.

Minimum Separation from Glass: The minimum glazing separation from glass is specified on the approved drawings.

Product Identification: The roll-up shutter assemblies must have a manufacturer-produced label that indicates the manufacturer: "Heroal-Johann Henkenjohann GmbH & Co. KG", the name of the product: "Heroal RS 53 RC 3 Slat Engaged Roll-Up Shutter", the missile Level: Missile Level D, and compliance with ASTM E 330-02, ASTM E 1886-04, and ASTM E 1996-04.

Impact Resistance: This roll-up shutter assembly satisfies the Texas Department of Insurance's criteria for protection from windborne debris in both the **Inland I zone** and the **Seaward zone**. The assembly passed Missile Level D specified in ASTM E 1996. The assembly may be installed at any height on the structure as long as the design pressure rating for the assembly is not exceeded.

Installation:

General Installation Requirements: The roll-up shutters must be installed in accordance with the manufacturer's installation instructions, the approved drawings, and this product evaluation report. Copies of the approved drawings must be available on the jobsite during inspection of the shutter assembly.

Anchorage: The roll-up shutters must be anchored to the structure in accordance with the approved drawings. Anchorage of the roll-up shutters to concrete, grout-filled concrete masonry units (CMU), and wood wall framing must follow the mounting conditions and fastener options 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.