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Product Evaluation

EC143 | 0722

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: EC-143 **Effective Date:** July 1, 2022

Re-evaluation Date: July 2023

Product Name: Senergy® Senerflex® Channeled Adhesive CI Design Exterior Insulation and

Finish System

Manufacturer: Master Builders Solutions

889 Valley Park Dr Shakopee, MN 55379

800-589-1336

General Description:

The Senergy® Senerflex® Channeled Adhesive CI Design is a water-drainage Class PB exterior insulation and finish system (EIFS) that is used as an exterior wall finish on buildings. The wall system is comprised of an air/water-resistive barrier, adhesive, EPS insulation board, reinforced base coat, and a 100 percent acrylic polymer finish. The finish is available in different colors and textures.

Limitations:

Wall Construction: Exterior wall framing and exterior wall construction must be as specified in the assemblies listed in this evaluation report.

Design Wind Pressures: The design wind pressures must be as specified in the assemblies listed in this evaluation report.

Lateral Resistance: The Senergy® Senerflex® Channeled Adhesive CI Design wall system must not be used as wall bracing or as shearwalls.

Air/Water-Resistive Barrier

Senershield-R, -RS or -VB must be used as the air/water-resistive barrier.

Adhesive

Senerflex® Base Coat – Alpha Base or Alpha Dry Base.

Insulation Boards:

The EPS boards size is limited to 2' x 4'. The required minimum thickness must be as specified in the assemblies in this evaluation report.

Insulation boards must be picture framed around corners of penetrations.

Stagger joints in a running bond pattern offset a minimum of 6".

Offset from sheathing joints by a minimum of 8".

Channels in the insulation boards and/or channels of adhesive on the back of the insulation boards must run in vertical patterns.

Base Coat:

Senerflex® Base Coat – Alpha Base or Alpha Dry Base

Reinforcing Mesh:

- Various weights
 - o Flexquard 4 − 4.2 oz/yd²
 - o Intermediate 6 − 5.6 oz/yd²
 - o Intermediate 12 − 11 oz/yd²
 - \circ Strong 15 15 oz/yd²
 - \circ Hi Impact 20 20 oz/yd²
- Strong 15 / Hi-Impact 20 mesh must not overlap. Butt edges together. After the Strong 15 / Hi-Impact 20 mesh are embedded in the base coat, a second layer of Flexguard 4 reinforcing mesh / Intermediate 6 / Intermediate 12 must cover that layer.
- Inside and the outside corners must be lapped from both sides a minimum of 8" (double layer at corner).

Finish:

Senergy® finish is available in various colors and textures

Installation:

General Installation Requirements: IRC and IBC requirements must be satisfied, and the manufacturer's installation instructions followed, unless otherwise specified by this product evaluation report.

Installation: Installation must be in accordance with the following assemblies (components listed in each assembly are from the inside out):

Assembly No. 1

EIFS - Metal Stud Framing

Design Pressure: -60.0 psf

Wall Studs: Minimum 16-gauge 6" x 1-5/8" steel studs spaced a maximum of 16" on center **Sheathing:** Minimum 5/8" gypsum complying with ASTM C1177, attached with 1-1/4" No. 6 Bugle head screws spaced 6" on center around the perimeter and in the field.

Sheathing Protection: Apply Senergy® base coat over sheathing and embed Hi Impact 20 reinforcing mesh.

Air/water Resistive Barrier: Senershield-R, -RS or -VB applied over reinforced sheathing.

Insulation: Minimum 1" thick EPS adhesively applied over air/water-resistive barrier with Senerflex® base coat using a 1/2" x 1/2" x 2" notched trowel.

Base Coat: Senerflex base coat

Reinforcing Mesh: Flexquard 4 reinforcing mesh embedded in Senerflex® base coat.

Finish: Senergy® finish.

Assembly No. 2

EIFS – Metal Stud Framing

Design Pressure: -60.0 psf

Wall Studs: Minimum 16-gauge 6" \times 1-5/8" steel studs spaced a maximum of 16" on center **Sheathing:** Minimum 5/8" gypsum complying with ASTM C1177, attached with 1-1/4" No. 6 Bugle head screws spaced 6" on center around the perimeter and in the field.

Air/water Resistive Barrier: Senershield-R, -RS or -VB applied over sheathing.

Insulation: Minimum 1" thick EPS adhesively applied over air/water-resistive barrier with Senerflex® base coat using a 1/2" x 1/2" x 2" notched trowel.

Base Coat: Senerflex® base coat.

Reinforcing Mesh: Flexquard 4 reinforcing mesh embedded in Senerflex® base coat.

Finish: Senergy® finish.

Assembly No. 3

EIFS – CMU or Concrete Design Pressure: -90.0 psf

Wall Construction: Concrete or CMU minimum 8" x 8" x 16" hollow block complying with ASTM

C90

Air/water Resistive Barrier: Senershield-R, -RS or -VB applied over concrete or CMU

Insulation: Minimum 1" thick EPS adhesively applied over air/water-resistive barrier with

Senerflex® base coat using a 1/2" x 1/2" x 2" notched trowel.

Base Coat: Senerflex base coat

Reinforcing Mesh: Flexguard 4 reinforcing mesh embedded in Senerflex® base coat.

Finish: Senergy® finish

Note: Keep the manufacturer's installation instructions available on the job site during the

installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.