



Product Evaluation

EC79 | 0915

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-79

Effective Date: September 1, 2015

Reevaluation Date: September 2019

Product Name: Decoplast DDARS Notched Moisture Managed EIFS System

Manufacturer: Greenmaker Industries LLC.
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West Hartford, CT 06110
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Product Description:

The Decoplast DDARS Notched Moisture Managed EIFS system is an exterior insulation and finish system (EIFS) that is used as an exterior wall cladding system on building exteriors. The system is comprised of light gage metal studs, a glass mat gypsum sheathing, a weather resistive barrier coating, a fiberglass mesh, a notched base coat, expanded polystyrene (EPS) foam board, fiberglass reinforcing mesh, a fiberglass reinforcing mesh/basecoat, primer coating, and an acrylic finish coating. The finish is available in various textures, coatings, and colors.

Limitations:

General Installation Requirements:

Use corrosion resistant studs and fasteners. Drive fasteners into the metal studs in the center of the flange of the stud.

Wall Construction: Exterior wall framing and exterior wall construction must be as specified in the assembly 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 Decoplast DDARS EIFS System shall not be used as wall bracing or shear walls.

Adhesive:

- Decoplast Liquid Base Coat/Adhesive must be used as the adhesive for securing the EPS foam boards to the weather resistive barrier coating on the Dens-Glas sheathing. The material is mixed at a ratio of one to one (1:1) by weight with Portland Cement Type 1 or Type 2, with clean potable water added for workability, as needed.
- Adhesive mixture is applied with a notched trowel (3/8 x 3/8 x 1-1/2) to the backside of the Decoplast EPS foam panels.
- As a minimum, the application rate for the Decoplast Liquid Base Coat Adhesive is 60 lb per 250 square feet.

Insulation Boards:

- The EPS board joints must be staggered creating a running bond construction.
- Offset the EPS board joints from the board joints in the Dens-Glass panels.
- EPS insulation board is available in various thicknesses from 1/2" minimum thickness to a 4" maximum thickness.

Reinforcing Mesh:

- Decoplast Fiberglass reinforcing mesh is available in various weights:
 - Detail- 4-1/2 oz/yd²
 - Standard- 4-1/2 oz/yd²
 - High Standard- 6 oz/yd²
 - Intermediate- 10 oz/yd²
 - Armor 15- 15.4 oz/yd²
 - Armor 20- 20 oz/yd²
 - Corner- 7.2 oz/yd²

Finish Coat:

- Decoplast exterior finish coats are available in various colors and textures.

Installation:

Provide light gage steel studs a minimum 3-5/8" x 1-5/8" x 18 gauge, spaced at approximately 16" on center. The studs are attached together with a continuous 2" wide x 18 gauge flat strap steel bridging located at approximately mid height of the studs. A #7 x 7/16" long pan head self-drilling screw secures the flat strap bridging to the 3-5/8" metal studs. The wall height assembly must not exceed the maximum tested span of 8'-0". The stud wall is sheathed with a minimum 5/8" thick Dens Glass gold wall board. The Dens Glass panels are secured to the studs with a #6 x 1-1/4" screws spaced at approximately 8" on center vertically along the studs and 16" on center horizontally. A starter track, or drip edge is used at the bottom of the insulation panel for drainage. All Dens Glass panel joints are sealed with a 4" wide Deco-Shield tape. The tape and the Dens-Glas sheathing face is covered with Decoplast liquid weather resistive barrier coating. The Decoplast liquid is applied with a 3/8" nap roller to the minimum coating thickness specified in the manufacturer's installation instructions. A high-impact fiberglass reinforcing mesh and base coat is applied on the Decoplast liquid. A weather resistive barrier coating of Decoplast weather resistive barrier liquid is applied over the reinforcing mesh with a 3/8" nap roller in accordance with the installation instructions. Apply the Decoplast liquid base coat adhesive to the back face of the EPS foam insulation with a 3/8" x 3/8" x 1-1/2" notched trowel. Application rate of the base coat adhesive is 60 lbs. per 250

square feet of area. The mortar lines of the base coat adhesive must run vertically to create a drainage path. Place the EPS foam insulation boards in a running bond pattern with the long dimension vertical to insure a continuous vertical joint. Rasp sand the exterior face of the EPS panels to prepare the surface for the next coat. Apply Decoplast Liquid Base Coat Mix at the application rate specified in the installation instructions and embed the high impact fiberglass mesh in the Base Coat. Back wrap the edges with Decoplast mesh in accordance with the installation instructions and embed with Liquid base Coat Mix to the sides, top edge, and primary surface. Apply using a smooth trowel. Apply the Liquid Base Coat Mix on surfaces and edges. Back wrap the edges with Decoplast mesh and embed with Liquid Base Coat Mix using a smooth trowel. Apply a White Base Primer with a 3/8" nap roller and allow to dry. Mix the finish coat per the manufacturer's instructions. Apply the finish coat with a smooth metal trowel, next level the finish coat on all surfaces using a smooth plastic trowel.

Assembly No. 1

EIFS- Steel Stud Wall Framing

Design Pressure: ±35 psf

Wall Studs: Minimum 18 gauge 3-5/8" x 1-5/8" light gauge steel studs spaced at 16" on center.

Sheathing: Minimum 5/8" Dens-Glass sheathing complying with ASTM C1177 secured to the light gauge metal studs with No. 6 x 1-1/4" long bugle head screws spaced approximately 8" on center vertically, along the length of the stud and spaced approximately 16" on center along the horizontal.

Substrate Protection: Apply Decoplast Liquid Weather Resistive Barrier over the sheathing resulting in a minimum wet thickness of 30 mils or a minimum dry thickness of 39.4 mils, then embed high impact fiberglass reinforcing mesh with Decoplast liquid basecoat.

Air/Water Resistive Barrier: Apply an additional coating of Decoplast Liquid Weather Resistive Barrier over the high impact layer. The minimum wet thickness must be 30 mils.

Finish: Decoplast exterior textured 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, the IBC, and the Texas Revisions.