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# **Product Evaluation**

EC79 | 0222

**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:** February 1, 2022

**Re-evaluation Date:** February 2026

Product Name: Decoplast DDARS Notched Moisture Managed EIFS System

Manufacturer: Greenmaker Industries LLC.

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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 gauge 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 wall 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 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 Decoplast DDARS EIFS System must not be used as wall bracing or shear walls.

### Adhesive:

- Decoplast Liquid Base Coat/Adhesive or Decoplast Premium Dry Base Coat/Adhesive must be
  used as the adhesive for securing the EPS foam boards to the substrate. The Decoplast Liquid
  Base Coat/Adhesive 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. Decoplast
  Premium Dry Base Coat/Adhesive is mixed with water.
- 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.

#### **Insulation Boards:**

- The EPS board joints must be staggered creating a running bond pattern that is offset a minimum of 6".
- Offset the EPS board joints from the sheathing board joints a minimum of 8".
- EPS insulation board is available in various thicknesses from 3/4" minimum thickness to a 4" maximum thickness.

## **Base Coat:**

Decoplast Liquid Base Coat/Adhesive or Decoplast Premium Dry Base Coat/Adhesive must be
used as the base coat. Decoplast Liquid Base Coat/Adhesive is mixed in a one-to-one ratio by
weight with Portland cement and water added to adjust workability. Decoplast Premium Dry
Base Coat/Adhesive is mixed with water.

# **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
  - o Intermediate- 10 oz/yd<sup>2</sup>
  - o Armor 15- 15.4 oz/yd<sup>2</sup>
  - o Armor 20- 20 oz/yd<sup>2</sup>
  - o Corner- 7.2 oz/yd<sup>2</sup>

On the exterior side of the EPS insulation board, Standard, High Standard and Intermediate must be overlapped at edges a minimum of 2-1/2" Armor 15 and Armor 20 must be butted. After

embedding Armor 15 or Armor 20 in the base coat mixture a second layer of base coat must be applied and Standard, High Standard or Intermediate must be installed.

#### **Finish Coat:**

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

### Installation:

Secure the EIFS to minimum 3-5/8" x 1-5/8" x 18-gauge steel wall studs, spaced a maximum of 16" on center. The wall studs are attached together with a continuous 2" wide x 18-gauge flat strap steel bridging located at approximately mid height of the wall studs. A #7 x 7/16" long pan head self-drilling screw secures the flat strap bridging to the wall studs. The wall height assembly must not exceed 8'-0". The wall studs are sheathed with a minimum 5/8" thick DensGlass gold wall board. The DensGlass panels are secured to the wall studs with a #6 x 1-1/4" screws spaced 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 DensGlass panel joints are sealed with 4" wide Deco-Shield tape. The tape and the DensGlass sheathing face are 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 are 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 Coast 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. 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 10 mils, then embed high impact fiberglass reinforcing mesh with Decoplast liquid basecoat.

**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 and the IBC.