

Noncementitious Adhesives for EPS

Description

ADEPS is a factory-mixed, noncementitious, water-based acrylic copolymer. ADEPS is colored blue for product identification.

Uses

ADEPS is used to adhere expanded polystyrene (EPS) insulation board to acceptable substrates. As a component of Dryvit EIF systems, ADEPS should not be used to adhere insulation board where Backstop® NT™ has been applied to the sheathing.

Coverage

160 ft² (15 m²) per pail

Packaging

60 lb (27 kg) pail

Properties

Working Time - The adhesive must not be allowed to form a skin prior to installation on the wall.

Drying Time - Drying time depends upon the air temperature, relative humidity and the porosity of the substrate. Under average drying conditions [70 °F (21 °C), 55% R.H.], ADEPS sets within 24 hours and achieves full cure in approximately seven days. Protect work from rain for at least 48 hours.

Testing Information

For individual test data on this product's properties, refer to the chart included with this document.

Application Procedure

FOR COMPLETE APPLICATION INSTRUCTIONS, REFER TO THE APPROPRIATE DRYVIT SYSTEM APPLICATION INSTRUCTIONS.

Job Conditions - Air and substrate temperature for application of ADEPS must be 45 °F (7 °C) or higher and must remain so for a minimum of 48 hours.

Temporary Protection - Shall be provided until the adhesive, base coat, finish and installation of permanent flashings, sealants, etc. are completed to protect the wall from inclement weather and other sources of damage.

Acceptable Substrates:

- Exterior grade gypsum sheathing meeting ASTM C 1396 (formerly C 79) requirements for water-resistant core or Type X core
- Exterior sheathing having a water-resistant core with fiberglass mat facers meeting ASTM C 1177
- Exterior fiber reinforced cement or calcium silicate boards
- APA Exterior or Exposure 1 Rated Plywood, Grade C-D or better, nominal 1/2 in (12.7 mm), minimum, installed with the C face out.
- APA Exposure 1 Rated OSB, nominal 1/2 in (12.7 mm) minimum.
- Unglazed brick, cement plaster, concrete or masonry

Surface Preparation:

- Surfaces must be above 45 °F (7 °C) and must be clean, dry, structurally sound and free of paint, grease or oil.
- American Plywood Association guidelines must be followed to ensure proper installation of the wood-based sheathings.
- The substrate shall be flat within 1/4 in (6.4 mm) in 4 ft (1.2 m) radius.

Mixing - Mix the ADEPS to a smooth, homogeneous consistency using a "Twister" paddle or equivalent mixing blade, powered by a 1/2 in (12.7 mm) drill, at 450-500 rpm. Do not add water or other additives.

Application - All exposed edges of the insulation board must be wrapped with Detail Mesh® and embedded in Primus®, Primus® DM,

Genesis®, Genesis® DM, Rapidry™ DM 35-50 or Rapidry™ DM 50-75.

Apply the adhesive so that the ribbons run vertically when the insulation board is placed on the wall.

The following stainless steel trowels are recommended for application of ADEPS adhesive:

1. 1/4 in (6 mm) V-notched trowel
2. 3/16 in x 3/16 in x 5/8 in (4.8 mm x 4.8 mm x 15.9 mm) rounded notches (Wind-lock Corp. Product No. T-N31658 or equal)
3. Big U trowel with 3/8 in x 1/2 in (9.5 mm x 12.7 mm) notches spaced 1 1/2 in (38 mm) apart.

NOTE: This trowel deposits more material and will require extended drying time.

Apply the adhesive mixture to the back side of the insulation board. Hold the trowel at a 45° angle, applying firm pressure to the insulation board in order to scrape the excess adhesive from between the adhesive beads. The coated insulation board should be immediately pressed onto the surface of the substrate and slid into place. Apply firm pressure to the entire surface to ensure complete contact between the coated insulation board and the substrate and ensure that the board edges abut tightly and that there is not any ADEPS between the boards. Temporary fasteners may be used, especially where contours exist to ensure adequate contact between the coated insulation board and the substrate during the drying period. Care should be taken when removing the fasteners to avoid damage to the insulation board. Once the insulation board has been installed, wait a minimum of 24 hours before working on the surface. **NOTE: ADEPS is not recommended for bonding insulation board to insulation board.**

ADEPS

DS407

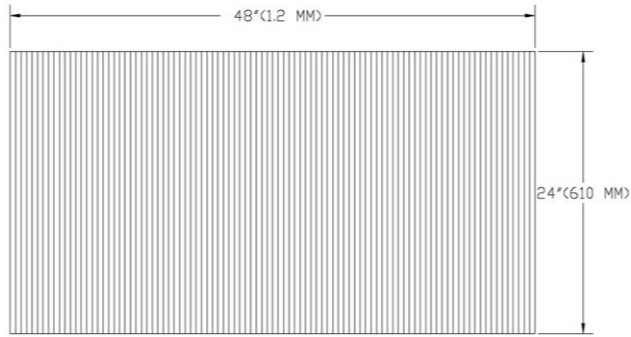
Clean Up - Clean tools with water while ADEPS is still wet.

Storage

ADEPS must be stored at a minimum of 45 °F (7 °C) and a maximum of 100 °F (38 °C) in tightly sealed containers protected from weather and out of direct sunlight.

Cautions and Limitations

- Avoid applying ADEPS in direct sunlight. Always work on the shady side of the wall or protect the area with appropriate shading material.



Notches Positioned Vertically

Technical and Field Services

Available on request.

Testing			
Test	Test Method	Criteria	Results
Surface Burning Characteristics	ASTM E 84	ICC and ANSI/EIMA 99-A-2001 Flame Spread <25 Smoke Developed <450	Passed
Water Vapor Transmission	ASTM E 96 Procedure B	ICC: Vapor Permeable No ANSI/EIMA Criteria	Vapor Permeable
Freeze-Thaw Resistance	ASTM E 2485 (formerly EIMA 101.01)	ANSI/EIMA 99-A-2001 60 cycles: No deleterious effects ¹	60 cycles: No deleterious effects ¹
	ASTM E 2485/ICC-ES Proc; ICC ES (AC219*)	No deleterious effects ¹ after 10 cycles	Passed – No deleterious effects ¹ after 10 cycles
Tensile Bond ²	ASTM C 297/E 2134 (formerly EIMA 101.03)	ICC and ANSI/EIMA 99-A-2001: Minimum 15 psi (104 kPa) – substrate or insulation failure	>15 psi (104 kPa)
1. No cracking, checking, rusting, crazing, erosion, blistering, peeling, or delamination when viewed under 5x magnification. 2. Sample consists of 1" EPS adhered to various substrates. * AC219 – Acceptance Criteria for EIFS			

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