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Universal Carpet Tile Adhesive



DESCRIPTION

Ultrabond ECO 811 is a high-performance, acrylic latex adhesive designed to provide an aggressive tack for installing all types of carpet tile. *Ultrabond ECO 811* provides a secure, releasable adhesive base for standard PVC-backed carpet tile as well as for non-PVC-, polyolefin-, felt- and bituminous-backed carpet tile. It can also be used to bond fiberglass-reinforced vinyl sheet flooring.

FEATURES AND BENEFITS

- Unique formulation provides aggressive tack for all carpet tile types.
- Permanent or releasable installation system applications
- High-moisture-resistant

INDUSTRY STANDARDS AND APPROVALS

• Living Building Challenge (LBC) Red List Free: This product has been verified per the most current Red List on the LBC's Website.

WHERE TO USE

- For the installation of all types of carpet tile and carpet underlayment used in releasable double glue-down carpet applications (underlayment-to-floor only)
- · For the installation of fiberglass-reinforced vinyl sheet flooring

LIMITATIONS

- Do not install over any substrates containing asbestos.
- For interior installations only

- Do not install when the moisture vapor emission rate (MVER) exceeds 10 lbs. per 1,000 sq. ft. (4.54 kg per 92.9 m²) per 24 hours, when using the anhydrous calcium chloride test (ASTM F1869).
- Do not install when the relative humidity (RH) of the concrete slab exceeds 99% (ASTM F2170).
- Do not install in areas with known hydrostatic moisture problems.
- Do not install if the pH of the concrete slab exceeds 11.
- Use only when the substrate temperature is between 50°F and 90°F (10°C and 32°C), and when the ambient RH is between 20% and 80%.
- Do not install unless the temperature of the prepared concrete slab is at least 5 degrees Fahrenheit (2.8 degrees Celsius) above the dew point to avoid condensation.

Note: High-moisture-resistance capabilities do not apply to wet or semi-wet adhesive installations. In those cases, moisture limits revert back to 5 lbs. (2.27 kg) and 80% relative humidity (RH).

SUITABLE SUBSTRATES

- Exterior-grade plywood, Group 1, CC type
- Other approved wood underlayments (per manufacturer recommendations)
- Concrete (at least 28 days old) installed according to ASTM F710-18
- Cement terrazzo

- Cement-based, self-leveling underlayments and patching compounds
- Embossing levelers applied over existing and fully bonded ceramic tile and sheet vinyl



- A single layer of fully bonded vinyl composition tile (VCT)
- Properly primed gypsum underlayments that meet the ASTM F2419 requirements for compressive strength
- Properly installed MAPEI moisture barriers

Consult MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

SURFACE PREPARATION

- All substrates must be properly prepared, structurally sound, dry, solid and stable.
- The substrate should be clean and free of dust, dirt, oil, grease, paint, curing agents, concrete sealers, loosely bonded toppings, loose particles, and any other substance or condition that may prevent or reduce adhesion. All surfaces must be level, even, flat and smooth.
- See the "Surface preparation requirements for resilient/ carpet adhesives" reference guide in the Floor Covering Installation Systems section of MAPEI's Website.

MIXING

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details.

Ready to use; no mixing is necessary.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

- 1. Spread adhesive evenly over the subfloor, keeping the trowel at a 45-degree angle to the subfloor.
- For releasable carpet tile installations, allow Ultrabond ECO 811 to dry so that it no longer transfers to the touch and the ridges are clear. For permanent installations over dry (5 lbs. or 2.27 kg MVER and 80% RH), porous substrates, place flooring into wet or semi-wet adhesive.
- 3. Install flooring per the flooring manufacturer's written instructions.
- 4. Periodically confirm the adhesive transfer to the backing by lifting the flooring material.
- 5. Roll the flooring with the recommended-weight roller across the width and length of the flooring surface.

Note: For fiberglass-reinforced vinyl sheet flooring, spread adhesive evenly over the subfloor using a 1/4" (6 mm) nap paint roller. For permanent installations, install flooring into wet adhesive as long as the substrate is dry and porous. For releasable applications and for the installation of fiberglassreinforced vinyl sheet flooring, allow adhesive to dry to its tacky phase.

CLEANUP

 Promptly clean any adhesive smudges from the flooring material's surface with water while the adhesive is still fresh/wet.

- Clean tools with water while the adhesive is still fresh/wet.
- If the adhesive has dried, clean with mineral spirits. Use caution with mineral spirits, which may be harmful to some materials.

PROTECTION

• Protect from light traffic for 12 hours, and from heavy traffic for 24 hours.



Product Performance Properties

Laboratory Tests	Results
Solids content	40% to 60%
Polymer type	Acrylic polymer
рН	6 to 9
VOCs (Rule #1168 of California's SCAQMD)	< 40 g per L
VOCs (Section 01350 of California's CDPH)	Passed
Density	8.3 lbs. per U.S. gal. (1.0 g per mL)
Flash point (Tag, closed cup) – ASTM D56	> 212°F (100°C)

Shelf Life and Product Characteristics before mixing

Shelf life	2 years when stored in original, unopened packaging at 73°F (23°C)
Consistency	Creamy
Color	Light green

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

Application Properties at 73°F (23°C) and 50% RH

Over Porous Substrates	Flash Time [†]	Working Time ⁺⁺
Smooth-backed carpet tile and fiberglass-reinforced vinyl sheet flooring	0 (permanent bond); 30 minutes or until dry (pressure-sensitive)	15 minutes (permanent bond); 8 hours (pressure-sensitive)
Rough-backed carpet tile and carpet underlayment to substrate	0 (permanent bond); 30 minutes or until dry (pressure-sensitive)	15 minutes (permanent bond); 8 hours (pressure-sensitive)
Over Nonporous Substrates	Flash Time ⁺	Working Time ⁺⁺
Smooth-backed carpet tile and fiberglass-reinforced vinyl sheet flooring	30 minutes or until dry (pressure-sensitive)	8 hours (pressure-sensitive)

⁺ Flash time is the recommended amount of time for a freshly applied adhesive to remain exposed to the air before the installation of a floor covering.

⁺⁺ Working time is the maximum amount of time that an adhesive can remain exposed to the air and still effectively bond to the floor covering.

Flash time and working time may vary based on temperature, humidity, substrate porosity, trowel size and jobsite conditions.

Approximate Coverage*

Flooring Type	Typical Trowel	Coverage
Smooth-backed flooring products		185 to 245 sq. ft. (17.2 to 22.8 m²) per 1 U.S. gal. (3.79 L)
	1/32" x 1/16" x 1/32" (1 x 1.5 x 1 mm), U-notch	740 to 980 sq. ft. (68.7 to 91.0 m²) per 4 U.S. gals. (15.1 L)
		925 to 1,225 sq. ft. (85.9 to 114 m²) per 5 U.S. gals. (18.9 L)
Rough-backed flooring products and carpet underlayment to substrate		125 to 185 sq. ft. (11.6 to 17.2 m²) per 1 U.S. gal. (3.79 L)
	1/16" x 1/16" x 1/16" (1.5 x 1.5 x 1.5 mm), square-notch	500 to 740 sq. ft. (46.5 to 68.7 m²) per 4 U.S. gals. (15.1 L)
		625 to 925 sq. ft. (58.1 to 85.9 m²) per 5 U.S. gals. (18.9 L)

* Trowel dimensions are depth/width/space. Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions, type of trowel used and setting practices.







Packaging

Size Pail: 1 U.S. gal. (3.79 L) Pail: 4 U.S. gals. (15.1 L) Pail: 5 U.S. gals. (18.9 L), Canada only





RELATED DOCUMENTS

Reference guide: "Surface preparation requirements for resilient/carpet adhesives" for floor-covering installation systems*

* At www.mapei.com

Refer to the SDS for specific data related to health and safety as well as product handling.

For information on MAPEI's commitment to sustainability and transparency, as well as how MAPEI products may contribute to green building standards and certification systems, contact sustainability_USA@mapei.com (USA) or sustainability-durabilite@mapei.com (Canada).

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