



Ultrabond ECO[®] 290

Professional Felt-Backed Vinyl Sheet Flooring Adhesive



DESCRIPTION

Ultrabond ECO 290 is formulated with an advanced acrylic polymer technology. This adhesive offers an excellent open time that allows for the positioning of felt-backed vinyl sheet flooring. *Ultrabond ECO 290* is designed for commercial or residential installations and is nonstaining. With easy trowelability, a light color, zero calculated volatile organic compounds (VOCs) and strong final bond strength, *Ultrabond ECO 290* is the perfect choice for felt-backed sheet-flooring installations in residential applications as well as schools, commercial buildings, hospitals and institutions.

FEATURES AND BENEFITS

- Acrylic latex-based for superior bond strength and durability
- Light in color and will not stain flooring
- Extended working time for easy placement of felt-backed flooring

INDUSTRY STANDARDS AND APPROVALS

<u>LEED (Version 3.0) Points Contribution</u>	<u>LEED Points</u>
MR Credit 5, Regional Materials*	Up to 2 points
IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants	1 point

* Using this MAPEI product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.

WHERE TO USE

- For the installation of mineral or felt-backed sheet vinyl
- Interior residential (rental apartments, condominiums, homes)
- Interior light commercial (general office areas, hotel rooms, small retail stores)
- Interior commercial (office buildings, hotel hallways, restaurants, cafeterias)

LIMITATIONS

- Do not install over any substrates containing asbestos.
- For interior installations only
- Do not use to install nonporous floor coverings over nonporous surfaces.
- Do not use to install solid vinyl flooring products.
- Do not use to install vinyl-backed carpet products.
- Do not apply over cutback adhesive residues.
- Do not install when the moisture vapor emission rate (MVER) exceeds 3 lbs. per 1,000 sq. ft. (1,36 kg per 92,9 m²) per 24 hours, when using the anhydrous calcium chloride test (ASTM F1869).
- Do not install when the relative humidity of concrete slabs exceeds 75% (ASTM F2170).
- Use only when the substrate temperature is between 50°F and 90°F (10°C and 32°C), and the ambient relative humidity is below 65%.



SUITABLE SUBSTRATES

- Exterior-grade plywood, Group 1, CC type
- Other approved wood underlayments (per manufacturer recommendations)
- Concrete and properly prepared cement terrazzo
- Cement-based self-leveling underlayments and patching compounds
- Embossing levelers applied over existing, properly prepared and fully bonded ceramic tile and sheet vinyl
- A single layer of properly prepared, fully bonded vinyl composition tile (VCT)
- Properly prepared and primed gypsum underlayments that meet the ASTM F2419 requirements for compressive strength

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

SURFACE PREPARATION

- All substrates must be structurally sound, dry, solid and stable.
- Substrate should be clean and free of dust, dirt, oil, grease, paint, curing agents, concrete sealers, loosely bonded toppings, loose particles, old adhesive residues, and any other substance or condition that may prevent or reduce adhesion. All surfaces must be level, even, flat and smooth.
- Concrete and cement-based underlayments and patches must be fully cured and free of any hydrostatic and/or moisture problems.
- Use anhydrous calcium chloride tests to determine MVERs according to ASTM F1869.
- Concrete slabs exceeding 3 lbs. (1,36 kg) in MVER should be treated with a moisture vapor reduction product. Refer to Technical Data Sheets at www.mapei.com for information on this type of product.
- Refer to MAPEI's "Surface Preparation Requirements" document for floor-covering installation systems at www.mapei.com.

MIXING

- Ready to use; no mixing necessary

Note: Choose all appropriate safety equipment before use. Refer to MSDS for more information.

PRODUCT APPLICATION

1. Read all installation instructions thoroughly before installation.
2. Select the appropriate notched trowel (see "Approximate Product Coverage" section)
3. Spread adhesive evenly over the subfloor, keeping the trowel at a 45° angle to the subfloor.

4. For porous substrates, install the flooring material into the adhesive while it is still wet. For nonporous substrates, allow 20 minutes of drying time for the adhesive to build tack before placing flooring material.
5. Install flooring.
6. Periodically confirm adhesive transfer to the backing by lifting the flooring material.
7. Roll the flooring with the recommended-weight roller across the width and length of the flooring surface.

CLEANUP

1. Promptly clean any adhesive smudges from the flooring material's surface with water while the adhesive is still fresh/wet.
2. Clean tools with water while the adhesive is still fresh/wet.
3. Use mineral spirits once dried. Use caution with mineral spirits, which may be harmful to some materials.

PROTECTION

- Protect from light traffic for at least 24 hours. Protect from heavy traffic for at least 48 hours.

Product Performance Properties

Laboratory Tests	Results
Polymer type	Acrylic polymers
Percent solids	66% to 71%
VOCs (Rule #1168 of California's SCAQMD)	< 50 g/L
pH	7.4 to 8.4
Viscosity	180,000 to 260,000 cps
Consistency	Buttery
Color	White
Shelf life	2 years
Open time	20 to 40 minutes
Dry time	24 hours
Flash point (Seta flash)	> 212°F (100°C)
Freeze/thaw stability	5 cycles

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.

Packaging

Product Code	Size
Canada, 1002101	Pail: 1 U.S. qt. (946 mL)
Canada, 1002104	Pail: 1 U.S. gal. (3,79 L)
92964	Pail: 4 U.S. gals. (15,1 L)

Approximate Product Coverage

Flooring Type	Typical Trowel	Coverage*
Smooth-backed vinyl products	1/32" x 1/16" x 1/32" (1 x 1,5 x 1 mm) 	185 to 245 sq. ft. per U.S. gal. (4,53 to 6,0 m² per L)
Rough-backed vinyl products	1/16" x 1/16" x 1/16" (1,5 x 1,5 x 1,5 mm) 	125 to 185 sq. ft. per U.S. gal. (3,06 to 4,53 m² per L)

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

Ultrabond ECO® 290



RELATED DOCUMENTS

Reference Guide: Surface Preparation Requirements for floor-covering installation systems	RGF0409*
---	----------

* At www.mapei.com.

Refer to MAPEI's Material Safety Data Sheet (MSDS) for specific data related to VOCs, health and safety, and handling of product.

STATEMENT OF RESPONSIBILITY

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

We proudly support the following industry organizations:



MAPEI Headquarters of the Americas
1144 East Newport Center Drive
Deerfield Beach, Florida 33442
Phone: 1-888-US-MAPEI
(1-888-876-2734)

Technical Services
1-800-992-6273 (U.S. and Puerto Rico)
1-800-361-9309 (Canada)

Customer Service
1-800-42-MAPEI (1-800-426-2734)

For the most current BEST-BACKED™ product data and warranty information, visit www.mapei.com.

Edition Date: March 3, 2010
PR866 290D_C10Evp © 2010 MAPEI Corporation.
All Rights Reserved. Printed in the USA.