



# Ultrabond ECO<sup>®</sup> 220

## Premium Flooring Adhesive



### DESCRIPTION

Ultrabond ECO 220 is designed specifically for installing most carpet and felt-backed sheet flooring. Its high-solids formulation is perfectly suited for commercial flooring applications where heavy traffic is expected. Ultrabond ECO 220 also exhibits an extended working time, making it ideal for the installation of patterned carpets. Ultrabond ECO 220 may be used in both direct and double glue-down installation methods for carpet.

### FEATURES AND BENEFITS

- High solids for excellent bond and shear strength
- Ample working time for the alignment of patterned carpets
- New lower-odor formula for use in occupied buildings
- CRI Green Label Plus certified

### INDUSTRY STANDARDS AND APPROVALS

- CRI Green Label Plus #GLP84381. Refer to CRI website at [www.carpet-rug.org](http://www.carpet-rug.org) for additional information.
- CRI #104, Standard for Installation Specification of Commercial Carpet
- CRI #105, Standard for Installation of Residential Carpet

<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
IEQ Credit 4.3, Low-Emitting Materials – Flooring Systems	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 carpet with hot-melt (Unibond), urethane unitary, needle-punched, woven, closed-cellular urethane foam, Enhancer, jute, polypropylene (ActionBac), latex-unitary, latex-foam and sponge-rubber carpet backings; and residential mineral fibrous felt-backed vinyl sheet goods
- Interior residential (rental apartments, condominiums, homes)
- Interior light commercial (general office areas, small retail stores)
- Interior commercial (office buildings, hotel rooms and hallways, restaurant dining areas)
- Interior heavy commercial (hotel lobbies, convention centers, airports, department stores)
- Interior institutional (hospitals, schools, universities, libraries, government buildings)

### 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 any cutback adhesive.



- Do not install when the moisture vapor emission rate (MVER) exceeds 5 lbs. per 1,000 sq. ft. (2,27 kg per 92.9 m<sup>2</sup>) per 24 hours, when using the anhydrous calcium chloride test (ASTM F1869).
- Do not install when 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 when the ambient relative humidity is less than 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 MVER according to ASTM F1869.
- Concrete slabs exceeding 5 lbs. (2,27 kg) in MVER should be treated with a moisture vapor reduction product. Refer to Technical Data Sheets at [www.mapei.com](http://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](http://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 porous-backed material over 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.

## Product Performance Properties




Laboratory Tests	Results
Polymer type	Styrene butadiene latex
Percent solids	70% to 75%
VOCs (Rule #1168 of California's SCAQMD)	12 g/L
pH	9 to 10
Viscosity	70,000 to 130,000 cps
Consistency	Buttery
Color	Light tan
Shelf life	2 years
Open time	20 to 30 minutes
Dry time	24 hours
Flash point (Seta flash)	> 212°F (100°C)
Freeze/thaw stability	3 cycles at 10°F (-12°C)
Protect from traffic	24 hours

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
92264000	Pail: 4 U.S. gals. (15,1 L)

## Approximate Product Coverage

Flooring Type	Typical Trowel	Coverage*
Felt-backed vinyl sheet flooring	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)
Smooth-backed carpet	1/8" x 1/8" x 1/16" (3 x 3 x 1,5 mm) 	65 to 85 sq. ft. per U.S. gal. (1,59 to 2,08 m² per L)
Rough-backed carpet and double-stick applications	1/8" x 1/8" x 1/8" (3 x 3 x 3 mm) 	85 to 95 sq. ft. per U.S. gal. (2,08 to 2,33 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® 220**



## RELATED DOCUMENTS

Reference Guide: Surface Preparation Requirements for floor-covering installation systems	RGF0409*
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\* At [www.mapei.com](http://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:



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**For the most current BEST-BACKED™ product data and warranty information, visit [www.mapei.com](http://www.mapei.com).**

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