250 Performance Epoxy

Technical Data Sheet

CRP 250 Performance Epoxy is a two-component general purpose epoxy primer, coating, and slurry / mortar binder for broadcast and hand-troweled or power-troweled systems. It is a low viscosity, low odor, 100% solids thermosetting epoxy. It is a general-purpose epoxy requiring upgraded topcoats and finish coats for superior color stability as well as chemical and abrasion resistance, upgraded topcoats include 410 80% Polyaspartic, 415 90% Polyaspartic, 430 98% CRU. It is VOC Compliant in all states and provinces in North America. 250 Performance Epoxy is a two-component general purpose epoxy primer, coating, and slurry / mortar binder for broadcast and hand-troweled or power-troweled systems.

Typical Uses

- Aircraft Hangars & Maintenance Floors
- Automotive Show Room and Repair Areas
- Commercial Bakeries and Kitchens
- Hospital and Health Care Facility Floors
- Laboratories and Research Floors
- Manufacturing and Warehouse Floors
- School & Universities
- Pharmaceutical Floors

Benefits

- Complies with USDA, FDA, Food Safety Modernization Act.
- Slip Resistance (ADA)
- LEED® requirements.
- VOC and EPA Compliant, and low odor during installation. Cures to an inert finish.
- Strong and Tough Floor
- Strong Chemical and Abrasion Resistance
- Designed for new floors and for resurfacing old floors

Physical Properties

VOC	- <5 g/l
Solids Content	- 100%
Volumetric Mix Ratio	- 2A:1B
Coverage Rate	See below
Application Temp	- 50°-90°F
Potlife	- 20 minutes
Dry Time	- 5-12 hours
Recoat Window	- 12-24 hours
Full Cure	- 7 days
Packaging	- 3 gal kit & 15 gal kit

Mechanical Properties

Tensile Strength	- 2,500 p.s.i.
Elongation	- 20%
Adhesion to Concrete	- >400 p.s.i.
Water Absorption	- 0.1%
Shore D Hardness	- 67-72

Shelf Life

- 1 year from Date of Manufacture provided unopened

Storage

- Store in a dry environment at room temperature and out of direct sunlight.

Limitations

- Higher temperatures will result in shortened working times and faster drying time.
- Color may vary due to batch-to-batch variation, always “box” different batches to avoid it.
- May amber with UV Exposure
- Use 210 Performance Moisture Block when MVT exceeds 3 lbs. or 80% RH
- Will not bridge cracking
- Do not thin

Coverage Rate

Primer: 200 Ft2 / Gal @ 8 mils

Build Coat: 100 Ft2 / Gal @ 16 mils

Topcoat: 160 Ft2 / Gal @ 10 mils

Working Time

20 Minutes @ 75°F Warmer ambient, product and surface temperatures will shorten potlife and working time.

Application Equipment

Protective Clothing - Jiffy Mixing Paddle - Slow Speed Drill - 18”x3/8” Nap Roller Cover - 8-12 Mil Notched Squeegee - 15-20 Mil Notched Squeegee - 4” Chip Brush - Spike Shoes

Surface Diagnostics

Concrete must be structurally sound and free of all contaminants and bond breakers. Test concrete compressive strength using a Rebound Hammer to ensure substrate has compressive strength of 3500 psi or higher. Perform a PH test using concrete PH test strips or meter to ensure substrate PH is between 9-12. Perform Moisture Test using either Calcium Chloride per ASTM F1869 or In-Situ Relative Humidity Probe per ASTM F2170 to ensure substrate has Moisture Vapor Emission Rate of 3 lbs or less and Relative Humidity of 80% or less. If Moisture Vapor Emission Rate is above 3 lbs. but below 25 lbs. and relative humidity is above 80% but below 99% then apply 250 Performance Moisture Block Primer first at 16 mils or 100 Sq. Ft. Per Gallon with a 16 - 20 Mil Notched Squeegee.

Surface Preparation

Use Mohs scratch test to determine concrete hardness for proper diamond bond selection. Concrete should be mechanically profiled and prepared to produce a Concrete Surface Profile (CSP) level between #2 & #4 per ICRI Guideline no. 310.2R.

Surface Repair

All depressions, divots and cracks should be profiled and free of dust and contaminants. Repair cracks to reduce the ability to see the defect through the coating.

Temperature Evaluation

Ambient and substrate temps should be above 50°F and a minimum of 5°F above Dew Point. Product temps should be between 70-80°F. Relative Humidity should not exceed 85%.

Mixing

Pre-Mix A-Component in its respective container using Jiffy mixer and drill at slow speeds for 1 minute until pigment is uniform. *If using multiple batches, it is best to box all A-Components together then separate back into individual containers to ensure even pigmentation.* Pre-Mix B-Component in its respective container using clean Jiffy mixer and drill at slow speeds for 30 seconds or until thoroughly homogeneous. Transfer A-component and B-component at a mix rate of 2A:1B by volume into a clean 5-gal bucket and mix for 2-3 minutes being sure to scrape sides of the bucket with a stir stick ensuring both components are thoroughly blended.

Application Steps

Cut-in stem walls using a 4” chip brush. Do not work edges more than 10 minutes ahead of main body of the floor.
Epoxy sets up quicker in mass, mixed material should not be left sitting in bucket for periods of time
Pour a band of mixed material across the surface roughly 4-6” wide. Use 8-12 or 15-20 mil notched squeegee to gauge material across surface depending on desired application
Back roll the surface with 18” x 3/8” nap roller by walking into the wet material wearing spike shoes and roll the surface wall to wall with overlap perpendicular to your first pass
Allow coating to dry. Light Foot Traffic – 24 Hours Item Placement – 36 Hours Vehicular – 72 Hours

Slip Resistance

Skid-Resistance – Field (in situ) Wet Dynamic Coefficient of Friction (DCOF), ANSI A326.3.

Disposal

Dispose of empty packaging and other waste in accordance with federal, state, provinces and local regulations.

Maintenance

Inspect the installed floor by spot cleaning and spot repairing the damaged or cracked areas. To prolong life of the flooring system, a daily maintenance program is highly recommended to ensure the floor is safe for its intended purposes.

Clean-up

Clean-up mixing station, tools, and equipment as required. Use acetone, a VOC exempt solvent, for cleaning up. Observe all legal, and health, and safety precautions when handling or storing solvents and materials, particularly in confined spaces. Make sure the working areas are well ventilated at all times during placement and curing time.

Technical Support

For questions, contact a Concrete Restoration Products Representative. 855-846-8277