



EP-TEXTUROCK EPOXY STONE BINDER

Before beginning installation, thoroughly review all product and system information and diligently study the Safety Data Sheets (SDS). Initiate the installation only once you have gained a comprehensive understanding of the product and the system.

Prioritize workplace safety at all times - Personal Protective Equipment (PPE), as specified in the SDS, should be worn and utilized throughout the installation process. Remember, the longevity and performance of the final product hinge on proper surface preparation - the foundation of successful installations.

PRODUCT NAME

EP-TEXTUROCK Epoxy Stone Binder

PRODUCT DESCRIPTION & USE

EP-TEXTUROCK Epoxy Stone Binder is a high-quality, 100% solid epoxy binder, tailored specifically for crafting decorative stone finishes.

Characterized by its initial high-gloss finish, it's versatile enough to tolerate a wide range of environmental conditions, making it suitable for use across varying climates. As a premium epoxy solution, it's ideal for binding stone carpet overlays and permeable stone toppings.

ADVANTAGES & LIMITATIONS

ADVANTAGES

- Offers a transparent, durable and resilient decorative finish
- Can be mixed from 15:1 to 20:1 by weight of aggregate to binder
- Compared to other technologies, this solution offers significant cost-effectiveness

LIMITATIONS

- If the base surface is compromised, exhibiting signs of damage such as crumbling, corrosion, or the presence of efflorescence or if it is potentially contaminated with substances like petrol, oil or asphalt, corrective measures must be taken
- Is not UV stable under prolonged UV exposure. Maintenance due to UV degradation may be inconvenient
- Given the requirement for skilled application techniques, this solution may not be suitable for do-it-yourself (DIY) projects

COLOUR

Transparent coating in cured film.





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APPLICATION & USE

SITE & MATERIAL CONSIDERATIONS

Ensure the surrounding environment and substrate maintain a minimum temperature of 10°C (50°F) during application. Dry weather conditions are recommended for exterior applications. Component A and Component B (Resin and Hardener) should ideally be within the 15-25°C (50-77°F) temperature range before application.

The aggregate used must always be clean and dry, as impurities can significantly impact not only the aesthetic finish but primarily the cohesion and mechanical properties of the final stone carpet. It's advisable to cleanse the aggregate thoroughly, allowing it to properly drain and dry to eliminate impurities.

For applications on vertical surfaces, suitable formwork is essential. To avoid adhesion of the stones to the formwork, it is recommended to apply an appropriate separator, such as wax or oil, to the formwork surface. Plastic foil is not advised for this purpose as it may lead to surface defects upon removal.

SURFACE PREPARATION

Ensure new concrete has been left to cure for at least 28 days. Eliminate any oil or grease residues using an appropriate surface degreaser. Thoroughly remove all curing agents, bond breakers, and foreign impurities.

Mechanically dislodge any laitance or weak and crumbling surfaces, then prepare the substrate through diamond grinding, shot blasting, or water jetting to attain a Concrete Surface Profile (CSP) of 2 or higher.

Make sure to eliminate all dust before applying the material. For more detailed instructions and guidance on surface preparation, refer to the "Alluvius Technical Bulletin SP-1"

MIXING

Combine two parts of Component A with one part of Component B by volume (2:1 v/v) and mix using a slow-speed drill maintaining a speed below 300 RPM for two minutes until a uniform mixture is achieved.

After achieving a homogeneous blend of resin and hardener, transfer the mixture to an appropriate mixing device, such as a concrete mixer or Hippo-style mixer.

At this stage, add the stone and continue mixing for an additional 3-4 minutes, or until the stone is fully saturated with the epoxy mixture. Once the mixing process is complete, relocate the material to a wheelbarrow, making it ready for transport to the designated application area.

- Typical mix design is 5 liters (1.33 gallon) of mixed resin (3.33 liter A to 1.33 liter of B) to 75 kg (165 lbs) of stone.
- Mix design by weight is typically 15:1 to 20:1 stone to binder.

For more detailed instructions, techniques, and guidance on mixing, refer to the "Alluvius Technical Bulletin: Mixing of Multiple Component Alluvius Polymeric Materials".





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APPLICATION

Start by distributing the material evenly over the surface with a gauge rake or steel rake. For a uniform finish, utilize construction trowels for leveling.

For more expansive areas, employ a straight edge to achieve a smooth finish. Treat larger areas with the same dilation procedures used for concrete surfaces.

COVERAGE AND CONSUMPTION RATE

The consumption of the product relies on both the thickness of the pebble layer and the size of the aggregate.

Estimated usage **per square meter** (approximately **10.76 square feet**) including the aggregate:

LAYER THICKNESS	EPOXY RESIN MIX (COMPONENT A) AND HARDENER (COMPONENT B) CONSUMPTION	4-8MM (1/8TH"- 5/16TH") AGGREGATE CONSUMPTION
1 cm (0.39 inches)	800 ml (0.21 gallon)	16 kg (35 lbs)
2 cm (0.79 inches)	1.6 liter (0.42 gallon)	32 kg (70 lbs)
3 cm (1.18 inches)	2.4 liter (0.63 gallon)	48 kg (105 lbs)
4 cm (1.58 inches)	3.2 liter (0.84 gallon)	64 kg (140 lbs)
5 cm (1.96 inches)	4 liter (1.05 gallon)	80 kg (175 lbs)

Alternatively, the following are the consumption rates converted into the Imperial measurement system, designed for coverage over an area of 100 square feet:

LAYER THICKNESS	EPOXY RESIN MIX (COMPONENT A) AND HARDENER (COMPONENT B) CONSUMPTION	1/8TH"- 5/16TH" (4-8MM) AGGREGATE CONSUMPTION
0.5 inches (1.27 cm)	2.45 gallons (9.26 liter)	410 lbs (186 kg)
1 inch (2.54 cm)	4.9 gallons (18.52 liters)	820 lbs (372 kg)
1.5 inches (3.81 cm)	7.35 gallons (27.78 liter)	1230 lbs (558 kg)
2 inches (5.08 cm)	9.8 gallons (37.04 liter)	1640 lbs (744 kg)

**Please note, these figures are approximations and actual consumption may vary depending on specific conditions and the size of the aggregate used.*

The thickness of the recommended pebble layer varies according to the type of area and the anticipated traffic intensity it will encounter. For instance, a residential pool deck might only necessitate a minimum thickness of 1 cm (0.4 inches).

In contrast, residential driveways may require a thickness ranging from 2 to 2.5 cm (0.8-1 inches) considering the increased load.

For commercial areas or high-volume walkways and driveways, a greater thickness might be needed to withstand heavier traffic. Always refer to local guidelines or consult a professional to determine the optimal layer thickness for your specific project.





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RECOATING

For recoating EP-TEXTUROCK, sanding or abrading is not necessary, provided the next layer is applied within a 24-hour timeframe.

However, if this time window for recoating is surpassed, it's essential to sand the previous layer of EP-TEXTUROCK down to a minimum profile of 125 microns (equivalent to a 120# mesh sanding screen).

Ideal topcoats to consider when recoating include aliphatic polyurethanes, polyaspartics, and polysiloxanes. For specific advice tailored to your project, consult the manufacturer.

ENVIRONMENTAL CONDITIONS DURING INSTALLATION

EP-TEXTUROCK should not be applied in situations where the humidity level surpasses 80%. The product is designed for application within a temperature range of 10°C (50°F) to 38°C (100°F).

Please refrain from applying the product to wet substrates or under rainy conditions. Darker coloured aggregates can accelerate curing speed under direct sunlight.

CLEAN UP

Thoroughly clean all tools and materials with solutions or solvents compatible with epoxy coatings, such as benzyl alcohol or xylene where approved.

Rigorously wash hands and any exposed skin with warm water and soap. Any clothing that comes into contact with the product should be promptly removed. Bear in mind that once the product has hardened, it can only be removed mechanically.

PROPERTIES OF MATERIAL

PROPERTY	VALUE
Solids By Volume	100% (+/- 1%)
Solids By Weight	100% (+/- 1%)
Part A Density	1.10 – 1.18 g/cm ³
Part B Density	0.96 – 1.06 g/cm ³
Mix Ratio By Volume	2 Part A to 1 Part B (2:1 v/v)
Mix Ratio By Weight	2 Part A to 1.1 Part B (2.2:1 w/w)
Volatile Organic Compounds (VOC) ASTM D-2369	>10 grams per liter
Pot Life (Ca. @ 25°C)	35 minutes (100 gram mass)
Gelation Time (Ca. @ 25°C)	35 minutes
Dry to Touch Time (Ca. @ 25°C)	6 hours
Recoating Time (Ca. @ 25°C)	10 hours to 24 hours
Open to Light Foot Traffic (Ca. @ 25°C)	24 hours
Open to Heavy Traffic (Ca. @ 25°C)	96 hours
Full Cure (Ca. @ 25°C)	7 days
Combined mix viscosity (Ca. @ 25°C)	900-1200 CPS (at time of mixing)
Adhesion to Dry Concrete	Concrete Failure (1.5 MPa)
Adhesion to Damp Concrete	Concrete Failure (1.5 MPa)
Shore D Hardness ASTM D-2240	70-80





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RESTRICTIONS

- Concrete substrates must be sound and have a minimum compressive strength of 21 MPa, with a minimum surface pull-off strength of 1.5 MPa.
- The substrate must be clean, removed of any standing water and free of all contaminants, e.g., dirt, oil, grease, coatings and surface treatments, etc.
- Humidity should be less than 80% at time of application.
- Substrates with moisture content equal to or greater than 4% will not be over coated without first contacting the manufacture in writing for further instructions.

STORAGE & PACKAGING

Material is to be stored from 10°C (50°F) to 35°C (95°F) and away from direct sunlight. Materials are best used within 24 months of the date of manufacture if kept in original sealed containers.

EP-TEXTUROCK is available in 15 liter (4 gallon), 56.7 liter (15 gallon), 600 liter (159 gallon) and 2835 liter (750 gallon) kits or custom packaged upon request if purchased in volume.

DISPOSAL

Please be aware that product containers will hold residual amounts of product and must be handled with care. Adhere to the warnings detailed on the labels at all times. All containers must be disposed of following federal, state, and local regulations to ensure responsible waste management.

HEALTH & SAFETY PRECAUTIONS

Please consult the Safety Data Sheet (SDS) for comprehensive guidance on handling EP-TEXTUROCK safely.

- EP-TEXTUROCK components A and B are classified as hazardous chemicals
- During the mixing and application process, always wear gloves resistant to chemicals, eye protection, approved respiratory equipment, and protective clothing, as stipulated in the most recent version of the SDS
- Ensure that your workspace is well-ventilated and avoid inhaling any fumes
- EP-TEXTUROCK is known to sensitize skin. If the product comes into contact with your skin, cleanse immediately with warm soapy water and change out of contaminated clothing. If dermatitis symptoms occur, seek immediate medical attention.

ADDITIONAL NOTES

- The specifics provided for working time, cure time, and coverage should not be considered absolute; they are subject to change based on site conditions
- We strive to provide typical values to be used as a reference





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DISCLAIMER

The data provided in this technical document is a culmination of our laboratory testing and practical experience. However, this document does not constitute a guarantee for the product's properties in terms of any legally stipulated warranties.

Should you need further clarification or information to make an appropriate assessment, we encourage you to reach out to us directly.

All Alluvius products are manufactured according to strict specifications, and while we can vouch for the quality of the product itself, we do not control the conditions under which the products are transported, stored, or handled, and we cannot predict or oversee the conditions under which they will be used.

Therefore, we strongly advise each user to study this product data sheet in light of their intended handling and usage of the product and to conduct comprehensive tests before adapting the product for their specific uses.

Please note that we reserve the right to alter the provided data without any prior notice.

