



DIAMITE AC EPOXY FLOORING

*Acetic Acid Resistant
Heavy-Duty Industrial Flooring*

1. Product Description

a. **Basic Use:** Diamite AC Epoxy Flooring is an epoxy system specifically formulated for resistance to acetic acid. It is also highly resistant to sulfuric, hydrochloric and other corrosive acids as well as most alkalis in concentrations normally found in contact with floor surfaces. Diamite AC Epoxy Flooring is used on any physically sound, clean and dry substrate including concrete, brick, terrazzo, marble, metal or wood. It may be used as a chemical-resistant grout for joints between quarry or ceramic tile when mixed with silica aggregate.

b. **Features/Benefits:**

- Versatile formulation allows for use as a coating or may be combined with silica aggregate for use as a total floor overlayment.
- VOC compliant formulation contains no volatile solvents, permitting interior applications with virtually no fire hazard or toxic odor.
- USDA approved as an acceptable floor resurfacing compound in food processing and storage areas.
- May be applied from a featheredge to several inches thick, allowing for total floor patching and resurfacing.
- Rapid cure time permits drastically reduced operational downtime and allows for exposure to traffic in less than 30 hours at 70°F (21°C).
- Mortar consistency for forming coves and curbs without slumping even when applied vertically.
- Epoxy and natural aggregate system is highly resistant to impact. Does not chip, flake or peel when exposed to heavy traffic.
- Produces a seamless and slip-resistant flooring surface while offering protection against chemicals.
- Easy clean-up with soap and water.

c. **Typical Facilities:** Food processing plants, kitchens, dyeing plants, pickling processes, juice plants, slaughter houses, supermarkets, manufacturing plants, chemical processing plants, laboratories, morgues, breweries and bottling plants.

d. **Limitations:** Diamite AC Epoxy Flooring should not be used outside without a top coat application of Diathane. Diamite AC Epoxy Flooring is not recommended for areas at temperatures above 140°F (60°C).

e. **Composition:** Diamite AC Epoxy Flooring is a multi-component system consisting of 100% solids epoxy with prepackaged and specially graded natural aggregate.

f. **Color/Appearance:** The standard colors for Diamite AC Epoxy Flooring are black, olive green and dark red. For other colors, consult your local dealer or factory representative.

2. Packaging

Diamite AC Epoxy Flooring is supplied in three standard units, each containing the proper proportions of liquid components. For a coating system, the liquid components only are applied by themselves. For overlayment systems, a natural aggregate is included at the rate of 75 lbs. (34 Kg) for each 1.5 gals. (5.7 liter) of epoxy liquids. Standard packaging information is shown below:

<i>Unit Size</i>	<i>Binder</i>	<i>Activator</i>	<i>Aggregate</i>	<i>Shipping Wt.</i>
<i>1.5 gal. (5.7 liter)</i>	<i>1 gal. (3.8 liter)</i>	<i>1/2 gal. (1.9 liter)</i>	<i>75 lbs. (34.0 Kg)</i>	<i>90 lbs. (40.8 Kg)</i>
<i>3 gal. (11.4 liter)</i>	<i>2 gal. (7.6 liter)</i>	<i>1 gal. (3.8 liter)</i>	<i>150 lbs. (68.0 Kg)</i>	<i>180 lbs. (81.6 Kg)</i>
<i>15 gal. (56.8 liter)</i>	<i>10 gal. (37.9 liter)</i>	<i>5 gal. (18.9 liter)</i>	<i>750 lbs. (340.2 Kg)</i>	<i>900 lbs. (408.2 Kg)</i>

3. Estimating/Coverage

The following is the recommended coverage rate for each unit.

<i>Unit Size</i>	<i>Coating System Coverage</i>	<i>Overlayment System Coverage at 1/4 in. (6.4 mm)</i>
<i>1.5 gal. (5.7 liter)</i>	<i>150 sq. ft. (13.9 sq. m)</i>	<i>36 sq. ft. (3.3 sq. m)</i>
<i>3 gal. (11.4 liter)</i>	<i>300 sq. ft. (27.9 sq. m)</i>	<i>72 sq. ft. (6.7 sq. m)</i>
<i>15 gal. (56.8 liter)</i>	<i>1500 sq. ft. (139 sq. m)</i>	<i>360 sq. ft. (33.4 sq. m)</i>

4. Technical Data

Resistance to Solvents and Chemicals

-ACIDS-	-SOLVENTS-
Acetic 50% -----A	Acetone -----NR
Acetic Glacial -----D	Cellosolve -----NR
Chromic -----A	Ethyl Alcohol -----A
Citric 10% -----A	Methyl Ethyl Ketone -----NR
Hydrochloric 10% -----A	Mineral Spirits -----A
Hydrochloric Conc. -----D	Toluene -----A
Hydrochloric Vapor -----A	Xylene -----A
Fatty Acid -----A	-PETROLEUM DERIVATIVES-
Lactic 10% -----A	Aircraft Hydraulic Fluid -----A
Muriatic -----A	Brake Fluid -----A
Nitric Below 10% -----D	Fuel Oil -----A
Nitric Above 10% -----NR	Gasoline -----A
Oleic -----A	Transmission Fluid -----A
Phosphoric 50% -----A	-MISCELLANEOUS-
Sulphuric 10% -----A	Animal Fats -----A
Sulphuric 70% -----A	Calcium Chloride -----A
Sulphuric Conc. -----NR	Detergent Solutions -----A
-ALKALIS-	Formaldehyde 37% -----NR
Ammonium Hydroxide 20% --A	Ethylene Glycol -----NR
Calcium Hypochlorite -----A	Salt Solutions -----A
Caustic Cleaners -----A	Urine -----A
Sodium Hydroxide 20% -----A	Vegetable Oil -----A
Sodium Hypochlorite 5% -----A	Water -----A

Key: A-Unaffected, D-Discolored; Not Attacked, NR-Not Recommended

5. Directions for Use

a. **Preparation:** The surface to be treated must be physically sound, thoroughly clean, textured, free of oil, wax, curing compounds, loose paint, rust, scale, and completely dry. New concrete must be thoroughly cured for at least 28 days before starting surface preparation. Base concrete must be acid-etched with Bitesin or mechanically abraded by shot-blasting. All acid-etched concrete surfaces must be rinsed and neutralized with potable water and allowed to completely dry.

b. **Priming:** All concrete to receive Diamite AC Epoxy Flooring must be primed with neat Diamite AC Epoxy Flooring and allowed to dry tack free.

c. **Mixing:** Thorough blending of all components is essential. Use a power drill with a Metco Jiffy mixing paddle. First, mix the binder separately; then, mix the activator separately. Next, add the mixed activator to the mixed binder and thoroughly blend for at least two minutes at revolution speeds that will not entrap air bubbles into the freshly mixed Diamite AC Epoxy Flooring. Let stand for two minutes and blend again for two additional minutes.

d. **Coating Application:** After the substrate has been primed, distribute the mixed coating onto the substrate with a Lexite/Diamite Spreader Tool or by rolling with a short nap or foam-rubber type paint roller to insure uniformity. The rolling operation should proceed in one direction with slow, even strokes. Avoid short,

quick, back-and-forth strokes such as are commonly employed in paint rolling techniques.

e. **Aggregate Mixing for Overlays:** After the liquid components are thoroughly mixed, add the specially graded aggregates into the mixed epoxy liquid at the rate of 75 lbs. (34.0 Kg) of aggregate for each 1.5 gals. (5.7 liter) of liquid epoxy. Note: Do not add any aggregate into binder or activator that has not been properly proportioned and mixed. For mixing, use a 1/2-in. power drill with a Metco Jiffy Mixer or a paddle type mortar mixer.

f. **Mortar Application:** After the substrate has been primed, distribute the mixed epoxy mortar onto the area to be overlaid. At the normal thickness of about 1/4 in. (6.4 mm) the mortar may be placed with a trowel or float. For thicker applications, it is good practice to use screed bars or rails for a uniform finished surface free of high and low areas. Extreme care should be exercised to leave the surface free of trowel marks, ridges and other imperfections. As the mortar gradually sets, a power trowel may be used to increase smoothness and surface density.

g. **Cure Time:** Diamite AC Epoxy Flooring will harden in 12 hours at 70°F (21°C), but should be protected from moisture and traffic for at least 2 days. The floor is then ready for service.

h. **Clean-up:** Waterzall Concentrate and water may be used for cleaning tools and equipment.

i. **Maintenance:** Diamite AC Epoxy Flooring surfaces should be cleaned with a Waterzall Concentrate and water solution. Waterzall Concentrate may also be used at full strength to remove built-up deposits and stains. Diamite AC Epoxy Flooring may be reapplied to itself.

6. Availability

Diamite AC Epoxy Flooring is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

7. Warranty

Diamite AC Epoxy Flooring is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



Metalcrete Industries

4133 Payne Avenue • Cleveland, Ohio 44103
440-526-5600 • 800-526-5602 • FAX 440-526-5601