



DIAMITE SL EPOXY FLOORING

*Self-Leveling, Heavy-Duty
Industrial Flooring*

1. Product Description

a. **Basic Use:** Diamite SL Epoxy Flooring is an epoxy system used to restore worn and eroded floors to their original condition and protect them from future deterioration. Diamite SL Epoxy Flooring may be applied on any physically sound, clean, and dry substrate including concrete, brick, terrazzo, marble, metal or wood. It may also be used to improve floor tolerances and reduce surface imperfections. It is completely immune to the corrosive action of acids and alkalis in concentrations normally found in contact with floor surfaces.

b. Features/Benefits:

- Contains no volatile solvents permitting interior applications with virtually no fire hazard or toxic odor.
- USDA approved as an acceptable floor resurfacing compound in processing and storage areas for meat and poultry food products.
- 100% solids epoxy system complies with VOC regulations.
- Pourable self-leveling consistency is easy-to-place without requiring special tools or equipment.
- Rapid cure time drastically reduces operational downtime and allows for exposure to light traffic in less than 16 hours at 75°F (21°C).
- Varying application thicknesses save labor installation costs by eliminating the need for workmen to return to the job site for multiple applications.
- Dense surface is easy-to-clean and resists mildew and bacteria growth.
- 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 excellent protection against chemical attack.

c. **Typical Applications:** Food processing plants, bakeries, cafeterias, kitchens, slaughterhouses, supermarkets, penitentiaries, schools, universities, hospitals,

manufacturing plants, chemical processing plants, laboratories, morgues, poultry plants, breweries and bottling plants.

d. **Limitations:** Should not be used outside or where exposure to frequent freezing and thawing is possible. It is not recommended for areas at service temperatures above 140°F (60°C).

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

f. **Color/Appearance:** Diamite SL Epoxy Flooring is available in five standard colors including: black, red, medium gray, concrete-tone gray and clear. Custom colors are available on special request.

2. Packaging

Diamite SL Epoxy Flooring is supplied in units, each containing the proper proportions of liquid components and natural aggregate. Standard packaging information is shown below:

Unit Size	Binder	Activator	Filler Aggregate	Seeding Aggregate	Shipping Wt.
1 gal. (3.8 liter)	1/2 gal. (1.9 liter)	1/2 gal. (1.9 liter)	12 lbs. (5.4 Kg)	18 lbs. (8.2 Kg)	42 lbs. (19.1 Kg)
2 gal. (7.6 liter)	1 gal. (3.8 liter)	1 gal. (3.8 liter)	24 lbs. (10.9 Kg)	36 lbs. (16.3 Kg)	84 lbs. (38.1 Kg)
10 gal. (37.9 liter)	5 gal. (18.9 liter)	5 gal. (18.9 liter)	120 lbs. (54.4 Kg)	180 lbs. (81.6 Kg)	408 lbs. (185.1 Kg)

3. Estimating/Coverage

The recommended coverage rate for each unit is shown below:

Unit Size	Coverage at 1/8 in. (3.2 mm)
1 gal. (3.8 liter)	30 sq. ft. (2.8 sq. m)
2 gal. (7.6 liter)	60 sq. ft. (5.6 sq. m)
10 gal. (37.9 liter)	300 sq. ft. (27.9 sq. m)

For best color uniformity, top coat with Diamite Brushkote, Diamite Brushkote VOC or Diathane of the same color.

4. Technical Data

Resistance to Solvents and Chemicals	
-ACIDS-	
Acetic (Use Diamite AC) -----	NR
Chromic -----	A
Citric 10% -----	A
Hydrochloric 10% -----	A
Hydrochloric Conc. -----	D
Hydrochloric Vapor -----	A
Fatty Acid -----	A
Lactic 10% -----	A
Muriatic -----	A
Nitric Below 5% -----	D
Nitric Above 5% -----	NR
Oleic -----	A
Phosphoric 50% -----	A
Sulphuric 10% -----	A
Sulphuric 50% -----	D
Sulphuric Conc. -----	NR
-ALKALIS-	
Ammonium Hydroxide 20% --	A
Ammonia Vapor -----	A
Calcium Hypochlorite -----	A
Caustic Cleaners -----	A
Sodium Hydroxide 20% -----	A
Sodium Hypochlorite 5% -----	A
-SOLVENTS-	
Acetone -----	NR
Cellosolve -----	NR
Ethyl Alcohol -----	A
Methyl Ethyl Ketone -----	NR
Mineral Spirits -----	A
Toluene -----	A
Xylene -----	A
-PETROLEUM DERIVATIVES-	
Aircraft Hydraulic Fluid -----	A
Brake Fluid -----	A
Fuel Oil -----	A
Gasoline -----	A
Transmission Fluid -----	A
-MISCELLANEOUS-	
Animal Fats -----	A
Calcium Chloride -----	A
Detergent Solutions -----	A
Formaldehyde 37% -----	NR
Glycerine -----	A
Salt Solutions -----	A
Urine -----	A
Vegetable Oil -----	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, free of oil, wax, loose paint, rust, scale, and completely dry. New concrete must thoroughly cure for at least 28 days before starting surface preparation. Base concrete must be mechanically abraded by shotblasting or thoroughly etched with Bitesin. 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 SL Epoxy Flooring must be primed with Diamite Primer 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 SL Epoxy Flooring. Let stand for two minutes and blend again for one additional minute.

d. **Filler Aggregate Mixing:** After the liquid components are thoroughly mixed, add the specially graded filler aggregates into the mixed epoxy liquid. Note: Do not add any aggregate into binder or activator that has not been properly proportioned and mixed.

The Metco Batch Mixer, which utilizes a 5-gal. (18.9 liter) pail, is ideal for efficient mixing of the filler aggregate into the mixed epoxy compound. Use a mortar mixer or large drum and mixing blade for larger batches. Continue blending until all aggregate is completely coated with epoxy.

e. **Epoxy and Filler Application:** After the substrate has been primed, distribute the mixed epoxy compound onto the area to be overlaid. At the normal thickness of about 1/8 in. (3.2 mm), the material may be placed with a Diamite/Lexite spreading tool. Extreme care should be exercised to leave the surface free of ridges and other imperfections.

f. **Optional Non-Slip Application:** After the mixed epoxy levels into place, but before it hardens, sprinkle the seeding aggregate (packaged separately) uniformly. Avoid heavy accumulations of aggregate in one spot. Broadcast it lightly, tossing it up rather than down so that it descends like rain. Continue until an excess of dry aggregate remains standing on the surface.

g. **Cure Time:** Diamite SL Epoxy Flooring will harden in 8 hours at 70°F (21°C) but must be protected from moisture and traffic for at least 18 hours.

h. **Clean Up:** Either DL Solvent or Waterzall Concentrate and warm water may be used for cleaning tools and equipment.

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

6. Availability

Diamite SL Epoxy Flooring is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Custom colors may take up to 8 working days before shipping. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

7. Warranty

Diamite SL 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

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