



METALPOXY SL FLOORING

Self-Leveling, Metallic Aggregate Heavy Duty, Epoxy Repair Mortar

1. Product Description

a. **Basic Use:** Metalpoxy SL Flooring is a self-leveling epoxy and metallic aggregate system used to protect horizontal surfaces against the most severe abrasion and impact. Metalpoxy SL Flooring is usually applied to concrete substrates in need of repair due to excessive wear, gouging and impact, and floor areas subjected to steel wheel traffic. It is completely immune to the corrosive action of acids and alkalis in concentrations normally found in contact with floor surfaces.

b. Features/Benefits:

- Pourable self-leveling consistency is easy-to-place without requiring special tools or equipment.
- Epoxy and metallic aggregate system is highly resistant to impact. Does not chip, flake or peel when exposed to heavy traffic.
- Versatile product formulation permits use as total floor overlay or may be used for small floor or joint repairs.
- Rapid high early age strengths allow floor to be placed into service one day after application, when applied at 70°F (21°C).
- Combination of metallic aggregate in an epoxy matrix provides one of the most durable and cost effective floor repair systems.
- Excellent adhesive properties permit bonding to most commonly found substrates.
- Formulation of 100% epoxy solids and specially graded and processed metallic aggregate is in total compliance with VOC regulations.
- May be applied from a feather edge to several inches thick allowing for repair or patching to total floor resurfacing.
- Contains no volatile solvents, permitting interior application with virtually no fire hazard or toxic odor.
- Easy clean up with soap and water.

c. **Typical Applications:** Solid waste transfer and processing plants, loading docks, steel processing mills, towveyor lines, heavy equipment maintenance areas, manufacturing plants, automotive and truck plants, and railroad maintenance facilities.

d. **Limitations:** Metalpoxy SL Flooring should not be used where exposure to frequent freezing and thawing is possible as well as areas at temperatures above 140° F (60°C).

e. **Composition:** Metalpoxy SL Flooring is a multi-component system consisting of 100% solids epoxy and specially graded and selected metallic aggregate.

f. **Color/Appearance:** Metalpoxy SL Flooring is available in five standard colors including: black, red, medium gray, concrete-tone gray and clear

2. Packaging

Metalpoxy SL Flooring is packaged in three standard units as 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)	15 lbs. (6.8 Kg)	25 lbs. (11.3 Kg)	50 lbs. (22.7 Kg)
2 gal. (7.6 liter)	1 gal. (3.8 liter)	1 gal. (3.8 liter)	30 lbs. (13.6 Kg)	50 lbs. (22.7 Kg)	100 lbs. (45.4 Kg)
10 gal. (37.9 liter)	5 gal. (18.9 liter)	5 gal. (18.9 liter)	150 lbs. (68.0 Kg)	250 lbs. (113.4 Kg)	500 lbs. (227.0 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)

4. Technical Data

a. **Compressive Strength:** ASTM C 109 , 2 in. (50 mm) cubes.

Age	Strength
12 hours	2,500 psi (17.2 MPa)
18 hours	4,000 psi (27.6 MPa)
1 day	10,000 psi (69.0 MPa)
3 days	11,000 psi (79.3 MPa)
7 days	12,500 psi (75.9 MPa)
28 days	13,000 psi (89.7 MPa)

Above strengths are based on laboratory conditions at 72°F (22°C).

b. Abrasion Resistance: ASTM C 779 Procedure A.

<i>Duration</i>	<i>Depth</i>
<i>30 minutes</i>	<i>0.007 in. (1.78 mm)</i>
<i>60 minutes</i>	<i>0.012 in. (3.05 mm)</i>

c. Bond Strength: ASTM C 882; 2,400 psi (16.5 MPa).

5. Directions for Use

a. Preparation: The surface to be patched or overlaid must be physically and structurally sound, thoroughly clean, free of oil, curing compounds or other deleterious materials that may prevent adhesion. New concrete must be thoroughly cured for at least 28 days before starting surface preparation. New concrete should be finished to at least a rough broom texture. Old or existing concrete should be mechanically roughened or abraded by shot-blasting or scabbling equipment. An exposed aggregate surface is required for good bonding. All loose particles must be removed by vacuuming or flushing with compressed air and water.

b. Priming: All concrete surfaces must be primed with Diamite Primer or Metco Hi-Mod LV Epoxy. Mix and apply material in accordance with printed instructions.

c. Liquid Mixing: Thorough blending of all components is essential. The mixing ratio is 1 part binder to 1 part activator. 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.

d. Metallic Aggregate and Liquid Mixing: After the binder and activator are completely mixed, add the metallic **filler aggregate** to the epoxy liquids at the rate of **15 lbs.** (6.8 Kg) of filler for each **gallon** (3.8 liter) of mixed liquid epoxy and blend until all the aggregate is thoroughly coated. The Metco Batch Mixer, which utilizes a 5-gal. (18.9 liter) pail, is ideal for efficient mixing of the metallic aggregate into the mixed epoxy/metallic compound in small units. For larger units or batches, utilize a high powered mortar mixer with an extremely strong drive mechanism. Properly mixed Metalpoxy SL Flooring will be at a pancake batter type consistency.

e. Application: After the substrate has been primed, (Note: Do not apply over hardened primer) distribute the mixed epoxy mortar onto the area to be overlaid. The epoxy/metallic mortar may be placed with a trowel or float. For larger areas the epoxy/metallic compound may be placed with a Diamite spreading tool. Extreme care should be exercised to leave the surface free of ridges and other imperfections.

f. Seeding Non-Slip Application: After the mixed epoxy levels into place, but before it hardens, broadcast the metallic **seeding aggregate** at the rate of **25 lbs.** (11.3 Kg) of seeding aggregate for each **gallon** (3.8 liter) of mixed liquid epoxy. 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: Metalpoxy SL Flooring will harden in 8 hours at 70°F (21°C) but must be protected from moisture and traffic for at least 18 hours. The floor is then ready for service.

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

i. Maintenance: Metalpoxy SL 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. Metalpoxy SL Flooring may be reapplied to itself.

6. Availability

Metalpoxy SL 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

Metalpoxy SL 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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