

RESIDENTIAL
& COMMERCIAL

INDUSTRIAL
& MARINE

ART
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SHIMICOAT
SURFACE SOLUTIONS



Vinyl Flakes

An Application Guide

Applications

Complete surface preparations in accordance to SHIMICOAT procedure. Apply basecoat epoxy and while wet, broadcast flakes full broadcast or partial broadcast (evenly) over the surface and let the flakes to sit on wet surface and embedded into epoxy body. Let it cure, then apply clear topcoat polyurethane. The product is dusty, handle carefully and use dust mask and gloves when broadcasting. SHIMICOAT Flake Floors can be installed in many indoor and outdoor floors:

- Garage floors
- Shops
- Warehouses
- Kitchen
- Laundries
- Offices
- Schools
- Showrooms
- Swimming Pool Surrounding
- Food Processing Plants

Direction

Epoxy Flake Floor

EASY FOUR STEP APPLICATION:

- Surface Preparation
- Basecoat Application
- Full or Partial Flake Broadcast
- Clear Topcoat Application

Flakes can be applied in two finishing types:

Coverage

Full Broadcast/Bodied:	A box of 5Kg/10sqm approximately
Partial Broadcast/Sparse:	A box of 5Kg for a standard 40sqm garage (this may vary depending on your design), approximately

Quantities are best approximate as guide.

Full broadcast application required scraping and removal of excess flakes and over 40% recovery may be achieved. Full broadcast application is recommended for professional installations.

Following is a step-by-step guide to install Epoxy Flake Floor Finishing System using Shimicoat Products and Materials over concrete surface floor.



MATERIALS



CHEMICALS



RESINS



EQUIPMENT

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Products and Materials

1. Epoxy Repair Kit
2. Basecoat Epoxy "Premium Tinted Epoxy in your choice of colour"
3. Flake in your choice of colour and design
 - a. Full/Dense/Bodied Broadcast: 0.5kg/sqm
 - b. Partial/Sparse/Light Broadcast: 100g/sqm or any ratios (personal choice)
4. Ultra Clear Epoxy Topcoat (Indoor), UV Resistant Topcoat (Outdoor)
5. Diluent / Thinner

Tools:

1. Electric mixer or stick for mixing resin
2. Brush and Rollers
3. Extendable Handle / Pole
4. Buckets
5. Epoxy Tray
6. Vacuum or blower to clean up the surface
7. Scraper (ONLY for full broadcast 4.5Kg/10sqm)
8. Spike shoes

Installation:

Surface Preparations:

1. Prepare the floor by concrete grinding and removal of surface materials.
2. Use Epoxy Repair kit as required to fill any cracks, holes or damages on the surface.
3. Ensure the surface is perfectly clean and free of oil and grease. If grinder is unavailable, acid wash and make sure you wash, rinse and flush with detergent to neutralize the surface and remove all acid residue.
4. Vacuum and/or blow out to remove dust from the surface.
5. Tape all around the walls and cover all surfaces that you wish NOT to be epoxy coated.

NOTE: For further information on surface preparation, please refer to our brochure, website or contact Shimicoat technical representative.

Basecoat Application and Flake Broadcast:

1. Mix basecoat epoxy in small portion that you can manage to apply. Premium Tinted Epoxy has a maximum of 40min Pot Life, plan to complete your application within 30 minutes allowing a few minutes for unexpected situations.
2. Ideally, we recommend mix 3Lt of Part A and 1Lt of Part B (4Lt blend) for one or two people working on a small double garage floor.
3. Apply the basecoat epoxy to corners, edges first then the main floor.
4. While still wet, broadcast flake at your desired density, Full Broadcast or Partial Broadcast.
 - a. Full/Dense/Bodied Broadcast: 0.5kg/sqm
 - b. Partial/Sparse/Light Broadcast: 100g/sqm or any ratios (personal choice)
5. Remember wet-edge allowance, always leave a wet skirting (20-30cm) to be flaked with the next area of coating. Avoid coating over Flakes.
6. Let it cure. 2-3 hours for Fast Floor, 8-12 hours for normal curing epoxy.

NOTE: Add Epoxy Diluent or Xylene up to 10% to thin the product, only if required for example in cold days.

Topcoat Application:

1. Test to ensure fully cured by twisting your thumb on flake. It should feel solid and dry with strong bonding of flake to epoxy surface.
2. Test for dryness by twist and turning your thumb over the surface and ensure flakes are attached and boned.
3. Use a garden blower or vacuum to recover excess and unbound Flakes from the surface.
4. Use a floor scrapper on low angle on both direction to achieve smooth finish surface.
5. Use a blower to remove all flakes from floor.
6. Mix your Clear Topcoat Epoxy (Indoor) or Polyurethane (Outdoor) in accordance to label instruction and pour onto the surface.

NOTE: Now you are on the clock, DO NOT waste time, initiate application. You must be prepared for application. One person applies the corners and edges using baby-roller or a brush and another person apply to the main floor. If you are slow, pour the resin on the floor, to slow down the curing process. Apply and roll evenly.

1. The pot life of Ultra Clear Epoxy is 30min, plan your work to be completed well within 30min.
2. Ideally, mix 3Lt at a time.
3. When, you are happy with the topcoat, take the masking tapes off the walls as it will be too hard to take off when cured.
4. Clear the floor, wipe and clean all your tools.
5. Let it cure over-night (16 hours). The floor is cured after 16 hours, trafficable and you can use the floor, however, NO driving or stretching furniture over the floor for one week. Treat it with care, especially during the first few days of curing process.
6. It takes seven days till the Epoxy reaches its optimal hardness and strength. Epoxy gets harder and harder everyday of its life.

Clean Up

Use blower, broom and dustpan or vacuum cleaner to remove excess flakes.

Preparations

Clean and dry surface. Ensure surface to be coated is free of all dirt, grease, oil, paint, curing agents and other contaminants. Removal of Oil Contamination by degreaser and alkaline cleaning pressure wash Acid-wash to enhanced surface porosity and etch the surface. Ensure moisture free surface. Allow to completely dry, run Dry Test. Place a piece of plastic over a small area, tape the edges and leave for 1 hour. Remove plastic, if there is no moisture on either surface, concrete is sufficiently dry. Ideally, always consider surface grinding and removal of loose materials. Grinding is always advisable prior to application of all Shimicoat Epoxy products, to maximize adhesion. For further information, please refer to SHIMICOAT Instruction for "Surface Preparations".

Helpful Hints

- Ensure surface to be coated is dry, moisture can cause blooming and delamination.
- Pot life is approximately 45 minutes, work within 30min to ensure easy flow application.
- Use steady long strokes and avoid overworking the roller or pushing your roller too quickly as this may trap air bubbles in the coating.
- Do not apply if the rain is expected within 24 hours of application.
- New concrete should be allowed to cure fully (at least 28days) before application.
- Keep the pail sealed when not in use. Avoid application on hot surfaces.



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WARNING

Keep out of reach of children
Read Material Safety Data Sheet (MSDS) of the product prior to use.

Storage

The products shall be stored out of direct sunlight and heat at all times. The shelf life of the product is 24 months.

DISCLAIMER

Material Safety Data Sheet, Technical and Environmental Data Sheet can be provided upon request.

The information provided in this document is guidance only and considering the uses of this product are beyond the seller's control, the product is sold without guarantees or warranties. Warranties and guarantees shall be governed by SHIMICOAT Standard Terms of Sale. The purchaser shall make its own tests to determine the suitability for their specific application, and Shimicoat Pty Ltd is taking no responsibility for misuse of the product. The purchaser assumes all risk of use and handling of this product. This product will be happily replaced or credited back if defective. Beyond this, Shimicoat Pty Ltd is not liable for any damages caused by this product or its use.

This information and all further technical advice are based on our present knowledge and experience.

The customer is not released from the obligation to conduct careful inspection and testing of supplied goods.



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