



UNE MARQUE SIKA  
A SIKA BRAND

## INSTALLATION STEPS



**CTM GARAGE  
EPOXY KIT**

# CTM Garage Epoxy Kit

## KIT INCLUDES

- 3 L Resin (part A)
- 1.5 L Hardener (part B)
- Instruction sheet

## COMPATIBLE OPTIONS (not included)

- 500 mL (16.9 oz) CTM Colour Pod
- 10 LB CTM Decorative Vinyl Flakes: 6 mm (1/4 in)

## OTHER SUPPLIES NEEDED (NOT INCLUDED)



PAINT  
BRUSH



5 MM PAINT ROLLER



GRINDER/  
SANDER



PROTECTIVE EQUIPMENT



VACUUM



MOISTURE METER



EXOMIXER® PADDLE/  
MIXING DRILL



THERMOMETER

## FLOOR PREPARATION

### 1 CLEAN

#### A - Concrete Substrate

Before applying CTM Garage Epoxy Kit, the concrete substrate will need to be clean and very dry, free from laitance, dirt, grease, oil, and any other forms of surface contamination that will prevent good adhesion. Ensure the surface has been swept and vacuumed clean, free of any dust, dirt or weak unbonded concrete. Oil and grease stains can be removed using commercially available concrete degreaser following the manufacturer's printed instructions.

## B - Existing Coating

When over-coating existing coatings, compatibility and adhesion testing is recommended, and existing coating must be acknowledged to determine the adhesion and performance of all subsequently applied materials. When over-coating an existing coating, the entire surface must be sanded to remove all gloss. Sweep and vacuum up all dust from the sanding process to achieve a clean dust free surface.

**NOTE:** Oil and grease stains must be removed prior to sanding to prevent spreading the contaminant across the entire surface.

**IMPORTANT:** If water is used to rinse the surface clean, allow ample time for the concrete to fully dry before proceeding with additional mechanical surface preparation and general coating application. A new concrete slab should cure preferably for a minimum of 90 days to allow the concrete substrate to sufficiently air dry and shrinkage to take place before epoxy coating application.

## 2 TEST

### A - Concrete Moisture Meter

The concrete moisture must be equal to or less than 4 % parts by weight when measured by Tramex® CME Concrete moisture meter at the time of application of the first coat.

OR

### A - Plastic Sheet Method

Duct tape a 45 cm x 45 cm (18 in x 18 in) polyethylene sheet directly to the prepared concrete surface.

Wait a minimum of 24 hours. If there is visible condensation or darkening of the concrete under the plastic sheet, there is too much moisture and the surface cannot be coated. A dehumidifier can be used to remove moisture from the environment above the floor to help dry out the concrete surface faster. Retest concrete substrate to confirm acceptability after 24 hours.

### B - Environment

Ensure the coating is being applied at ambient temperatures between 10 °C (50 °F) and 30 °C (86 °F) with a maximum relative humidity of 80 %. If application environment is out of this range, there is a possibility for improper cure such as wet spots, poor adhesion, or other surface defects.

## 3 PREPARE

### A - Cracks repair

Any cracks or holes should be repaired using a crack filler prior to epoxy application. Once the crack filler has cured, sand over the surface to ensure a smooth transition level with the surrounding substrate. Sweep and vacuum up all dust from your floor again.

### B - Mechanical preparation

Mechanically prepare all concrete floor surfaces using sanding or grinding equipment that can be typically rented at your local hardware stores.

**IMPORTANT:** Surface preparation must achieve an open surface profile equivalent to ICRI - CSP 3 similar in texture to a fine sandpaper. A smooth, poorly prepared concrete will prevent the epoxy from penetrating the substrate to achieving maximum adhesion that may result in peeling in-service.

### C - Entry Preparation

If your garage floor extends out past the garage door you will want to tape off a straight transition line where the garage door seal meets the floor. Remember that you will need to remove the tape after approximately 45 minutes, before the epoxy sets.

# RESIN PREPARATION

## 1 PREMIX

Only mix product once the floor has been completely prepared and the moisture content has been determined as acceptable. **Mechanically premix components Part A (resin) and Part B (hardener) separately** to ensure product uniformity.

**IMPORTANT:** If using more than one kit, do not open and mix both kits together at the same time, as the mixed coating has a limited pot life of approximately 45 minutes at 25 °C (77 °F) on the floor.

**NOTE:** After approximately 45 minutes in the mixing pail, the product will start to gel and be unusable. Once product has been mixed, it is important to apply the product immediately

## 2 MIXING

### A - Clear and Factory Pretint option:

Premix each component separately. This kit includes pre-measured units to ensure a perfect ratio when mixing a complete set. **Empty Component B (Hardener) in the correct mix ratio to Component A (Resin)**. Mix the combined components for at least **three (3) minutes**, using a low-speed drill (300 - 450 rpm) to minimize entrapping air. Use an Exomixer® or Jiffy type mixing paddle (recommended model) suited to the volume of the mixing container. During the mixing operation, **scrape down the sides and bottom of the container** with a flat or straight edge trowel at least once, to ensure complete mixing. When completely mixed, product should be uniform in colour and consistency. Mix only that quantity which can be used within its pot life.

### B - CTM Colour Pod option

Premix each component separately, including the CTM Colour Pod to ensure product uniformity. For all colours, **add one (1) 500 mL (16.9 oz) CTM Colour Pod for every 3 L (0.8 US gal) of Component A (Resin)** and mix at low speed (300 - 450 rpm) **for three (3) minutes** until a uniform colour is achieved using a drill fitted with an Exomixer® or Jiffy type paddle. Be careful not to introduce any air bubbles during the mixing process. This kit includes pre-measured units to ensure a perfect ratio when mixing a complete set. **Empty Component B (Hardener) in the correct mix ratio to Component A (Resin)** and mix for additional three (3) minutes. Be careful not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, **scrape down the sides and bottom of the container** with a flat or straight edge trowel at least once to ensure complete mixing. When completely mixed, product should be uniform in colour and consistency. Mix only that quantity which can be used within its pot life.

**NOTE:** When using brighter colours, additional coats may be required. Using more colour additive than recommended will result in extended cure times and reduced chemical and abrasion resistance.

# APPLICATION

## 1 EDGES

After material is thoroughly mixed, start applying in the corner furthest away from the exit of the room. Using a paint brush, apply coating to the edges of the area.

**IMPORTANT:** Work quickly as you will have approximately a 45-minute working time (pot life) at 25 °C (77 °F) under ideal conditions. Working time will shorten if the temperatures are warmer than ideal and lengthen if it is cooler.

## 2 FIRST COAT

Pour out a 25 to 50 mm (1 in to 2 in) wide ribbon of coating on the concrete substrate along the back border of the floor section to be coated. Using a 5 mm lint-free nap roller, spread the coating out evenly to achieve 0.20 mm (8 mil) thickness, a coverage rate of approximately 18.5 m<sup>2</sup> (200 ft<sup>2</sup>) per kit. Back roll using light pressure on the roller to ensure an even, smooth coating. Avoid creating puddles, ridges, and roller marks. If a full or partial broadcast of the wet coating (binder) with CTM Decorative Vinyl Flakes has been selected, split your total surface into smaller application sections of approximately 1.2 m x 1.2 m (4 ft x 4 ft) in size and broadcast the flakes as you proceed across the floor.

**NOTE:** If a partial broadcast of the wet coating with CTM Decorative Vinyl Flakes has been selected, apply factory pre-tinted or CTM Colour Pod pigmented coating as the first coat.

**IMPORTANT:** Keep a wet edge going at all times. If you do not get the next batch down in time, it will create an overlap of one section onto the other that may be visible in the finished coating. After approximately 45 minutes the product will start to harden..

### A - Solid colours or Colour pods

If using the regular kit or the kit coloured with the CTM colour pods and without the use of any flakes, you can skip to the section 3 - Second Coat or directly to the curing instructions.

### B - Partial Broadcast option

**Broadcast in a manner so that the flakes fall vertically into the binder** at the partial broadcast rate (see chart below). This method will provide a random, spread-out flakes appearance that does not completely cover the wet-coloured epoxy coating. Flakes will have approximately 25 mm (1 in) spacing between individual flakes.

Allow broadcast system to cure sufficiently to be able to resist foot traffic and light mechanical abrasion without damaging the surface. Remove unbonded or vertically oriented flakes from the surface by sweeping, followed by vacuuming, until surface is free of all loose particles and dust.

**IMPORTANT:** Do not reapply (broadcast) the flakes after the first pass, as the resin will have begun to harden and this may create air bubbles in the resin.

OR

## B - Full Broadcast option

**Broadcast in a manner so that the flakes fall vertically into the binder** at the full broadcast rate (see chart below), this will provide a completed application, resulting in dry broadcast flakes covering the entire surface. Allow broadcast system to cure sufficiently to be able to resist foot traffic without damaging the surface. Remove excess flakes from the surface by sweeping, followed by vacuuming, until surface is free of all loose particles and dust.

**NOTE:** When necessary, lightly sand with 100 grit disks to remove imperfections, after sweeping up the flakes and before vacuuming.

**IMPORTANT:** When doing a full broadcast, make sure to apply a Second Coat. Please refer to the section 3 - Second Coat

Depending on the quantity of CTM Decorative Vinyl Flakes used, a Partial or Full Broadcast final appearance can be achieved using the following approximate coverage rates:

COVERAGE RATE BY AREA	QUANTITY	COVERAGE RATE
PARTIAL BROADCAST	4.53 KG (10 lb)	23 m <sup>2</sup> (250 ft <sup>2</sup> )
FULL BROADCAST	4.53 KG (10 lb)	4.6 m <sup>2</sup> (50 ft <sup>2</sup> )

## 3 SECOND COAT

If applying a second coat, wait a **MINIMUM** of 8 hours and a maximum of 24 hours after the first coat at 20 °C (68 °F) (see CURING chart for other temperatures). If the maximum time between coats has passed, the surface must be sanded to remove all gloss. Sweep and vacuum up all dust from the sanding process to achieve a clean dust-free surface. Proceed with the application of the second coat using the same application technique as your first coat.

**IMPORTANT:** If using CTM Decorative Vinyl Flakes in a full broadcast, apply the second coat of **clear epoxy** as a topcoat to seal the flakes surface.

## CURING

At 20 °C (68 °F), it is recommended to allow a **MINIMUM of 24 hours** of curing prior to pedestrian foot traffic. Allow a minimum of 72 hours before light vehicular traffic. Full chemical resistance is achieved after 7 days.

**NOTE:** Freshly applied coating should be protected from dampness, condensation, and water contact for at least 72 hours to prevent white stains and/or loss of gloss.

SUBSTRATE TEMPERATURE	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)
RECOAT TIME (MIN/MAX)	16 / 48 Hours	8 / 24 Hours	6 / 24 Hours
FOOT TRAFFIC	30 Hours	24 Hours	16 Hours
LIGHT TRAFFIC	5 Days	3 Days	2 Days
FULL CURE & CHEMICAL RESISTANCE	10 Days	7 Days	5 Days

# CLEAN UP

Clean all tools and equipment using a xylene type product (not included). Once product has hardened it can only be removed by mechanical means.

# LIMITATIONS

- Mask, gloves, and safety glasses should be worn throughout preparation, mixing, application and clean up.
- Product is intended for indoor use only, not suitable for exterior exposure.
- Protect all surfaces outside the application area, as hardened coating can only be removed by mechanical means.
- Oil stains left on concrete will result in surface tension separation, poor adhesion, black spots, and/or wet, uncured patches.
- Do not apply coating in direct sunlight or rising temperature, as this will cause concrete to off-gas leading to bubbles and pinholes.
- Use only high-quality brushes and lint-free rollers to limit loose, detached brush hairs and roller fibre surface defects.
- It is not recommended to hand-mix the coating material with a stir stick.
- A mechanical mixer with a drill and Exomixer® or Jiffy style paddle is recommended.
- Surface will discolour in areas exposed to regular ultraviolet light.
- Unopened product is intended to be used within 12 months of purchasing.
- Keep kit away from extreme cold, heat, moisture, sunlight, and fire hazards.

# LEGAL DISCLAIMER

The information and recommendations contained in this document are based on reliable test results according to Sika Canada. The data mentioned are specific to the material indicated. If used in combination with other materials, the results may be different. It is the responsibility of the user to validate the information therein and to test the product before using it. Sika Canada assumes no legal responsibility for the results obtained in such cases. Sika Canada assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages.



For more information  
about the CTM Garage Epoxy Kit,  
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