

KIT INCLUDES

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

OTHER SUPPLIES NEEDED (NOT INCLUDED)



PAINT BRUSH



5 MM PAINT ROLLER



GRINDER/
SANDER



PROTECTIVE
EQUIPMENT



VACUUM



MOISTURE METER



EXOMIXER® PADDLE/
MIXING DRILL



THERMOMETER

COMPATIBLE OPTIONS (NOT INCLUDED)

- Decorative coloured flakes
- Oven-dried quartz sand

FLOOR PREPARATION

1 New Concrete: 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.

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.

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 contaminate across the entire surface.

2 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 (see picture) 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.



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.

3 Perform concrete moisture level testing using a moisture meter or a plastic sheet.

Moisture Meter: The concrete 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.



Plastic Sheet: Duct tape a 45 cm x 45 cm (18" x 18") polyethylene sheet directly to the prepared concrete surface.

Wait a minimum of 24 hours. If there is visible condensation under the plastic sheet or darkening of the concrete, 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.

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 possibility for improper cure such as wet spots, poor adhesion, or other surface defects.

MIXING

1 Only mix product once the floor has been completely prepared and the moisture content has been determined as acceptable. Mechanically pre-mix components Part A (resin) and Part B (hardener) separately to ensure product uniformity. 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 between 45 to 55 minutes at 25 °C (77 °F) on the floor.

NOTE: After 30 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 Pour the Part B (hardener) into the Part A (resin) according to the mixing ratio A:B = 2:1 by volume. This kit includes pre-measured packaging ensuring the perfect mixing ratio when mixing a full kit. Mix the combined components for at least three (3) minutes, using a low-speed drill (300 - 450 rpm) and Exomixer® style paint paddle to minimize entrapping air bubbles. During mixing, scrape the walls and bottom of the mixing container with a trowel to obtain a homogeneous mixture. If not mixed thoroughly, coating may not cure to full properties and be left with wet spots.

APPLICATION

1 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. 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. 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 - 50 mm (1" - 2") wide ribbon of coating on to 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 8 mil thickness, a coverage rate of approximately 18.5 m² (200 ft²) per kit. Back roll using light pressure on the roller to ensure an even, smooth coating. Avoid creating puddles, ridges, and roller marks.

NOTE: It's important to 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 45 minutes the product will start to harden. The surface will become tack-free after 8 hours if applied at 20 °C (68 °F).

3 If broadcasting the wet coating with decorative colour flakes or traction improving aggregates, split your total surface into smaller application sections of approximately 1.2 x 1.2 m (4" x 4") in size and broadcast flakes or aggregates as you proceed across the floor.

4 Second Coat: If applying a second coat, at 20 °C (68 °F), it can be applied between a minimum of 8 hours and a maximum of 24 hours after the first coat (see CURING chart for other temperatures). If the maximum time between coats has past, 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.

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 a 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

- Product is intended for indoor use only, not suitable for exterior slab.
- 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.
- Protect all surfaces outside the application area, as hardened coating can only be removed by mechanical means.
- Mask, gloves, and safety glasses should be worn throughout preparation, mixing, application and clean up.
- Use only high-quality brushes and lint free rollers to limit loose, detached brush hairs and roller fiber 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 CTM Coatings. 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. CTM Coatings assumes no legal responsibility for the results obtained in such cases. CTM Coatings assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages.