



# ZeraSeal™ E-100

## Commercial-Grade 100% Solids Epoxy Floor Coating

### DESCRIPTION

ZeraSeal™ E-100 is a two-component, 100% solids epoxy floor coating. Available in clear and medium grey, it provides an aesthetically pleasing durable finish.

### WHERE TO USE

ZeraSeal™ E-100 is recommended for a wide variety of residential, and commercial applications including institutional buildings, garage floors, warehouse facilities, storage areas, recreational complexes, studios, auto body and workshops, etc.

### BENEFITS

- 100% solids, solvent-free , zero VOC's
- Attractive high gloss finish
- Excellent bond to concrete
- Good wear resistance
- Excellent water spotting resistance
- Does not support growth of bacteria or fungus

### HANDLING PROPERTIES @ 23°C (74°F)

Mix Ratio, by volume .....	2 parts A: 1 part B
Viscosity (Mixed) .....	900 cps
Solids Content .....	100 %
Mixed Weight (Density .....	1.2 kg/L (10 lb./US gal)
Pot Life (working time).....	40 minutes
Thin Film Set Time .....	16 hours
Foot Traffic (re-coat time).....	16 hours
Light Vehicular Traffic .....	24 hours
Full Cure and Maximum Resistance .....	7 days
Hardness (Shore D) .....	80

### SURFACE PREPARATION

ZeraSeal™ E-100 should be applied over clean, sound, dust free surfaces. For best results, surface should be prepared as follows.

#### Existing Epoxy Floor:

Make sure the floor is clean and free from oil or grease. The floor must be sanded with 80-100 grits to provide profile for adhesion. Ensure that the existing floor is sound and adhered well to the concrete. Epoxy coating would not adhere to alkyd or oil based coated floors.

#### Concrete (New):

Shot blast or equivalent to remove surface laitance, curing

compounds or form oils. Concrete should be minimum 28 days old and have 3% or less moisture content. Moisture content can be determined using the test method ASTM D4263.

#### Concrete (Old):

Remove oil, grease, dirt and any unsound concrete using a combination of commercial de-greasers, alkaline wash, shot blasting or diamond grinding. A combination of acid-etching and power wash can also be used. Cracks and surface defects should be repaired prior to the application of coating.

#### Steel:

Remove greases, oils and contaminants from surfaces and sandblast to white metals. Prime using ZeraPrime™ 100FS or ZeraPrime™ 95DS.

### AREA PREPARATION

For optimal performance, both the coating and substrate should be maintained at 18 to 30° C (68 to 86°F) for 24 hours prior to beginning work. The same temperature range should be maintained during mixing, application, and cure.

Application in direct sunlight and rising surface temperatures may result in blistering of materials due to expansion of entrapped air or moisture in the substrate. Concrete that has been in direct sunlight must be shaded 24 hours prior to application and remain shaded until after the initial set.

### APPLICATION

The mixing equipment used to mix the coating must be clean and free of any contaminants that may be present in the equipment from previously used products.

ZeraSeal™ E-100 is self-priming coating to be applied in a two-coat application. The primer MUST be dry and firm before applying the second coat to prevent film defects (e.g. fish eyes).

- Pre-mix component “A” of ZeraSeal™ E-100 first to eliminate the possibility of settlement. Pour all of the liquid from Part B into a Part A container.
- Mix thoroughly using a slow speed ½ inch drill motor

with “jiffy” type blade for two minutes (minimum). Scrape the sides of the container and continue mixing until the color is uniform.

- Immediately pour all mixed coating onto the edges of prepared floor and spread the material evenly with a flat squeegee. Using a lint free 6 mm nap roller back roll the applied material to provide an even coat. Care should be taken not to over-roll the material as air may become entrapped in the coating.
- Apply the second coat in the same manner as the first (a notched squeegee may be used in the second coat to produce a thicker film).
- If a non-slip sanded surface is required, a properly graded, dry, contaminant free grit should be broadcast on the surface of the top coat and back roll to encapsulate the aggregate onto the coating.
- Allow to cure thoroughly overnight (16 hours) before exposing to foot or light duty traffic. It requires 24 hours for vehicular traffic and 7 days for full service. Keep water & detergent away from the floor until fully cured.

## LIMITATIONS

- Do not apply ZeraSeal™ E-100 if the substrate and ambient temperatures are below 10°C (50°F).
- Do not apply the topcoat less than 10 mils as an orange peel finish may appear due to insufficient material to self-level.
- Do not leave mixed material (Part A & B together) in the container for an extended amount of time; it will harden and warm up and smoke.
- Not recommended for areas subjected to steam cleaning, harsh chemicals or heavy impact.
- Do not use over existing floor without testing both the inter-coat adhesion as well as the adhesion of the existing floor to concrete.
- Never apply the topcoat over tacky or partially wet primer.
- Not recommended as a water-proofing coating in suspended boiler rooms or commercial parking garages.
- Do not apply in areas where the humidity is greater than 85%.
- May discolor under direct constant exposure to UV, and due to some chemical exposures.
- Do not use on slab-on-grade without vapor barrier.

## COVERAGE

Total of 15 mil dry film thickness:

Prime Coat: (5 mils): 8m<sup>2</sup>/litre (300 f<sup>2</sup>/U.S. gallon)

Second Coat: (10 mils): 4 m<sup>2</sup>/litre (160 f<sup>2</sup>/U.S. gallon)

## PACKAGING

11.34 litre (3U.S. gal) units

## CLEAN UP

Clean all equipment and installation tools immediately after use with xylene.

## SAFETY PRECAUTION

Consult Material Safety Data Sheet (MSDS) for specific instructions.

## STORAGE

Store in a heated warehouse. Do not freeze.

## SHELF LIFE

One year from the date of manufacture if kept in original unopened containers under normal heated warehouse conditions.

## WARRANTY

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