



# ZeraDur™ 111

## 100% Solids Flexible Epoxy Floor Coating

### DESCRIPTION

ZeraDur™ 111 is a two-component, 100% solids, flexible, epoxy coating that provides excellent durability and impact resistance.

### WHERE TO USE

ZeraDur™ 111 is recommended for use in areas with light duty traffic as a coating system or in areas with medium duty traffic as a broadcast system. It can also be mixed with an appropriate trowel grade base aggregate that is used for detailing work and coving. These areas include food processing facilities, freezers and coolers, cold storage areas, dairies, wineries, laboratories, wet and dry process areas, breweries, distilleries and mechanical (boiler rooms).

### BENEFITS

- 100% solids, with very low odour, zero VOC's
- Excellent flexibility and impact resistance
- Good gloss and colour retention
- Excellent bond to concrete
- Superior low temperature performance down to minus 20 C Degree
- Resistant to water and common chemicals
- Superior wear resistance
- Resistant to water spotting
- Approved by the "Canadian Food Inspection Agency" to be used in food processing facilities
- Available in a variety of colours (minimum order is required)

### Handling and Curing Properties @ 23°C (74°F)

Mix Ratio, by volume	2 parts A: 1 part B
Viscosity (Mixed)	1,200 cps
Solids Content	100 %
Mixed Weight (Density)	1.14 kg/litre (9.5 lb./US gal)
Pot Life	30 minutes
Application Temperature	12°C- 30°C (54°F-86°F)
Set Time & Foot Traffic	16 hours
Vehicular Traffic	24 hours
Full Cure and Maximum Resistance	7 days
Hardness (Shore D)	78
Abrasion Resistance	92 mg loss
Taber Abrasion, C-17 Wheel, 1000 cycles	

### SURFACE PREPARATION

ZeraDur™ 111 should be applied over clean, sound, dust free surfaces. For best results, surface should be prepared as follows:

#### Concrete (New):

Shot blasting or equivalent to remove surface laitence, curing compounds or form oils. Concrete should be minimum 28 days old or have 3% or less moisture content. Moisture content can be determined using test method ASTM D4263.

#### Concrete (Old):

Remove oil, grease, dirt and any unsound concrete using a combination of commercial degreasers, 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.

**NOTE:** ZeraDur™ 111 is a self-primed product that requires no primer when the concrete substrate is dry. For damp surfaces, prime with ZeraPrime™ W-30FS in very thin film as adhesion promoter .

### 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.

- Pre-mix component "A" of ZeraDur™ 111 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 colour 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 first coat at 5 mils dry film thickness.
- Apply the second coat in the same manner as the first.
- 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.

**Note: The application of the ZeraDur™ 111 as a broadcast system, is available on the literature “Broadcast Procedures for the ZeraDur™ Floor Coating Systems”.(Contact Zeraus Products Inc.)**

## LIMITATIONS

- Do not apply ZeraDur™ 111 if the substrate and ambient temperatures are below 10°C (50°F)
- 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 or harsh chemicals
- Do not use over existing floor without testing both the intercoat adhesion as well as the adhesion of the existing floor to concrete
- 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 vapour barrier

## COVERAGE

Coating system only:

Prime Coat: (5 mils): 8m<sup>2</sup>/litre (320 ft<sup>2</sup>/U.S. gallon)

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

## PACKAGING

11 litre/2.9 U.S. gal. units

56.7 litre/15 U.S. gal. units

## CLEAN UP

Clean all equipment and installation tools immediately with xylene.

## SAFETY PRECAUTION

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

## STORAGE

Store in a heated warehouse. Do not freeze.

## SHELF LIFE

2 years from the date of manufacture if kept in original unopened containers

## WARRANTY

“The recommendations made and the information herein is the result of accurate laboratory and field tests under controlled conditions. We guarantee that the quality and properties of the materials supplied conform to our standards. Zeraus Products Inc. makes no warranties, expressed or implied, as uses and applications are beyond our control. Zeraus Products Inc. shall not be liable for any injury, loss, or damage (direct or consequential) arising from use or inability to use the products. Before using, the user is urged to pre-test the products in his/her own environment to determine the suitability of the products for their intended use, and the user assumes all risk and liability whatsoever in connection therewith.

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