# POLY FLOOR EP T-5000

Chemical & Abrasion Resistant Heavy Duty Epoxy Resin Mortar Screed

## PRODUCT DESCRIPTION

POLY FLOOR EP T-5000 is three component, solvent-free, floor screeds based on epoxy resins.

It is formulated to be applied by trowel to concrete substrate in a thickness up to 5mm.

It provides a durable, on-skid chemical & abrasion resistant with high mechanical strength flooring capable of with standing the heaviest loading and wear. It is supplied in coloured pre weighted pack, Resin component (A), Curing Agent Component (B) and Aggregate Component (C).

# **TYPICAL APPLICATIONS**

POLY FLOOR EP T-5000 is used to provide a high strength, durable, chemical, impact and abrasion' resistance thin section floor screed in the following locations:

- Abattoirs, Warehouse.
- Storerooms and Battery rooms.
- Breweries, Chemical. Processing areas.
- Photographic darkrooms.
- Loading bays and ramps.
- Food processing areas.
- Soft drink factories.
- Oil refineries.
- Cold rooms and stores.
- Dairies and Kitchens.
- Detergent manufacturing areas.
- Canteens and Bottling rooms.

## PRODUCT FEATURES

- Solvent- free
- Odorless epoxy.
- Chemical resistant.
- Durable.
- Non shrinkage.
- High mechanical strength.
- Easy to mix and to apply.
- Impact and abrasion resistance.
- Non-skid finishes.
- Formulated to be suitable for Middle East conditions.

## **PROPERTIES**

#### Colours

Grey, sage green, buff, special colours are available on request.

#### Pot Life

50 minutes @ 20°C 40 minutes @ 30°C.

#### **Initial Hardness**

16 hours @ 20°C

#### **Final Cure**

7 days @ 20°C

## **Specific Gravity**

2.10 +/- 0.05 (Mixed Material)

## **Working Temperature**

+ 5°C (minimum)

## **Mechanical Properties**

Typical results are shown:

## Compressive Strength

71 N/mm2 (ASTM C-579)

## Flexural Strength

17 N/mm2 (ASTM C-293)

Tensile Strength 9 N/mm2 (ASTM 0-638)

## **Bond Strength to concrete**

3 N/mm<sup>2</sup> (ASTM C-882)

concrete failure

## Abrasion Resistance

**POLY FLOOR EP T-5000** improves the Abrasion Resistance of concrete by over 200%

(ASTM 0-570)

#### Water Absorption

0.1 %

**Chemical Resistance** 

It can resist the following

Chemicals @ 35°C

Sulphuric acid 50 % solution Hydrochloric 50 % solution Phosphoric acid acid 50 % solution Nitric acid 25 %

50 % solution solution Sodium Hydroxide

Citric Acid 10 %

Xylene, Acetone, diesel, Oil, white spirit, skydrol, Bleach.

For more details or specific reagents, ask for **POLYCOO** Technical Support.

## **GUIDE FOR APPLICATION**

### Preparation

All surfaces shall be sound, clean, dry and free from oil, grease & Loosely adhering particles. The age of the new concrete should be 21 days at least.

#### **Priming**

All surfaces to be covered with **POLY FLOOR EP T-5000** should be primed by POLYPRIM EP epoxy resin primer (see its separate data sheet). Mix the primer components (A and B) well and apply the primer using stiff brush or roller in a thin continuous film to the clean & dry -prepared surface. Avoid over application and puling.

Apply POLY FLOOR EP T-5000 while the primer coat is still tacky

## Cleaning

Clean all tools and equipment immediately after use with SOLVENT.

### Mixing

POLY FLOOR EP T-5000 should be mixed using mechanical mixer.

Do not attempt to split the pack

Mix components A+B together first. Place component C into the mixed resin components (A+B) slowly until a thorough mixing is completed (till uniform colour is achieved). Use the mixed materials within the specified pot life

## **Application**

The mixed material is laid (in a thickness of 5mm) in one application while the primer is still tacky. The mixed material is raked to the required thickness and tamped with a wooden float, or leveled with a screeding bar, to ensure full compacting.

Final finish trowel by steel float to achieve the recommend finish.

## **Packaging**

It is supplied in pre-weighted 40 kg containing the three components (A, B and C).

### Coverage

This will depend on the end use. Approximately 40 kg pack will cover 4.0 m2 at 5 mm thickness

If severe chemical spillage is encountered and doubts exist regarding the non-porosity of the flooring, a sealer coat should be applied over the cured floor. For the suitable over coating, refer to **POLYCOO** Technical Support.

### **Storage**

**POLY FLOOR EP T-5000** should be kept in a dry place.

## **Shelf Life**

One year when unopened and stored correctly.

## **Health and Safety.**

- Epoxy Resins contain irritants, especially to the skin, eyes.
- Persons handling these materials should use appropriate protective clothing, including rubber or plastic gloves
- If the epoxy resin came in contact with the skin, it should be removed immediately with a dry cloth or paper towel, and the areas of contact washed thoroughly with soap and water

## **GUARUNTEE / WARRANTY**

We warrant our products to be of good quality and manufactured to rigid standards. This warranty is in lieu of any and all other warranties expressed or implied.

This data sheet is published for information only. It is believed to be correct but no liability is accepted for it or the suitability of the product for any particular purpose.

**POLYCOO** services is free and the company dose not accept liability for any loss arising from it.

## **TECHNICAL SERVICES**

For any further technical advice and recommendation for the use of all **POLYCOO** products, please consult the nearest **POLYCOO** technical office.



Under technical collaboration with

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