

**EPOFLOOR COAT****Two Component, Solvent-Free, Modified Epoxy Resin Based, Self Spreading Floor Coating****AREA OF USE**

It's used on all kinds of floor requiring chemical and mechanical resistance as final layer coating.

It's the ideal coating material for production areas (including facilities where hygienic processes such as food, beverage, pharmaceutical, etc.), cold storages, recreational facilities, schools, hospitals, shopping centers, sport halls, hotels, areas having pedestrian and high vehicle traffic.

Thanks to colour flakes (chips) colored by sprinkling on coating, floors having all kind of decorative appearance can be obtained.

**PROPERTIES**

A high rate of filling may enter it.

It has high chemical and mechanical resistance.

Easy to apply.

It's fluid.

It's economic.

Liquid impermeable.

Bright final layer coating is obtained.

Slip resistant surface can be obtained.

Volatile organic material (VOC solvent) free.

**APPLICATION****SURFACE PREPARATION**

Concrete sub-surfaces may be free from all foreign materials such as clean, dry and all kinds of dirt, oil, grease, coating and surface treatments. In addition, should also have strong and sufficient compressive strength (minimum 25 N/mm<sup>2</sup>), the tensile strength should also be at least 1,5 N/mm<sup>2</sup>.

Concrete sub-surfaces should be prepared by using abrasive equipments and by removing cement slurry in order to obtain open porous structure. Weak concrete parts should be removed from surface, bird's eye gaps and holes should be completely closed. Sub-surface repairs, filling the gaps and leveling the surface are made by the mortar obtaining by mixture of 0,1 mm- 0,3 mm silica sand and EPOFLOOR PRIMEL plaster.

Concrete and screed surfaces should be primed and leveled in order to obtain a smooth surface. Heights on the surface should be leveled by abrading. All dust and loose particles should be removed from the surface preferably by brush and/or vacuum cleaner.

## **APPLICATION CONDITIONS**

Surface moisture content must be less than 4%.

Test method: CM measurement or Stove-drying method (moisture meter)

Relative humidity must not exceed 80%.

Care should be taken to dew and condensation.

Dew and water vapor condensation damage the coating on untreated or new treaded floor, cause bubbles to form. To prevent this, temperature of the surface and uncured floor must be at least 3 °C more than dew point.

Surface Temperature: Minimum +10 °C, maximum +30 °C

Ambient Temperature: Minimum +10 °C, maximum +30 °C

Material Temperature: Minimum +10 °C, maximum +30 °C

## **PREPARATION AND APPLICATION OF MORTAR**

Before mixing, A component should be mixed mechanically. After B component is poured into A component, until obtaining a homogeneous mixture, it's stirred for 2-3 min. by a mixer with 300-400 rpm. Then by 0,1-0,4 mm silica sand and if necessary other fillings are added and until obtaining a homogeneous mixture, it's stirred again about 2-3 min. In order to make sure that the mixture is fully prepared, materials are transferred into another container and stirred again for 1 minute. In order to minimize air entrainment, over stirring must be avoided.

Placing Coating: EPOFLOOR COAT is poured on the surface and spread evenly by scraped trowel. Then the surface is flatten and entrained air is removed by spiked roller. Spiked roller application should be performed after 15 minute (at + 20 °C). In case of late performed, roller traces may be left on the surface.

As Floor Paint: EPOFLOOR COAT can be applied as paint by short pile roller. In order to prevent roller trace and removing gaps, roller application should be performed in the transverse direction.

Final Coat Thin Coating: Final coatings are spreaded by rabble, then can be passed over (in transverse direction) by short pile roller.

## **SYSTEM STRUCTURE**

Protection of Concrete Floor (Dye Application): Application by roller

Primer: 1 coat x EPOFLOOR PRİMEL

Dyeing: 2 coats x EPOFLOOR COAT

Self Spreading System (1,5 mm – 2,5 mm): Application by trowel

Primer: 1 coat x EPOFLOOR PRİMEL

Coating Layet: EPOFLOOR COAT (2 kg/m<sup>2</sup> – 3,5 kg/m<sup>2</sup>)

## **CONSUMPTION**

Protection of Concrete Floor (Application by Dye)

Primer: EPOFLOOR PRİMEL 0,3 kg/m<sup>2</sup> – 0,5 kg/m<sup>2</sup>

Dye: 2 coats x EPOFLOOR COAT 0,3 kg/m<sup>2</sup> – 0,5 kg/m<sup>2</sup> Apply for each coat.

Self Spreading System (1,5 mm – 2,5 mm):

Primer: 1 coat x EPOFLOOR PRİMEL 0,3 kg/m<sup>2</sup> – 0,5 kg/m<sup>2</sup>

Coating Layer: EPOFLOOR COAT 2 kg/m<sup>2</sup> – 3,5 kg/m<sup>2</sup>

Multi Layer Coating (Multi Layer Screed) 4 mm:

Primer: EPOFLOOR PRİMEL 0,3 kg/m<sup>2</sup> – 0,5 kg/m<sup>2</sup>

Base Coating: EPOFLOOR COAT + silica sand (0,1 mm – 0,4 mm, 1:1 mixture) 2,8 kg/m<sup>2</sup>

Sandblasting: Silica sand (0.4 mm - 0.7 mm) is sprinkled on the surface.

Final Layer Coating: 1 coat COAT EPOFLO x 0.8 kg / m<sup>2</sup>

These values are theoretical and don't include additional material requirement depending on surface porosity, surface profile, differences in level and wastage.

Consumption: About 2,8 kg/m<sup>2</sup> for 2 mm thickness.

**TECHNICAL DATA**

Density	1,4 gr/cm <sup>3</sup>
Percent of Total Solids	% 100
Thinning	Unthinned
Compressive Strength	~ 60 N/mm <sup>2</sup> (28 day / 23 °C)
Flexural Tensile Strength	~ 30 N/mm <sup>2</sup> (28 day / 23 °C)
Bond Strength	> 1,5 N/mm <sup>2</sup> (by breaking off the concrete)
Shore D Hardness	~ 84 (7 day / 23 °C)
Recommended Thickness	1,5 mm – 2,5 mm
Taber Abrasion Test (1 kg, CS 10, 1000 d)	~ 80 mg

**CURING DETAILS**

Humidity (N. O.) and Temperature	Pedestrian traffic	Light traffic	Full curing
N.O. % 60 +10 °C	16 hours	3 days	10 days
N.O. % 60 +20 °C	13 hours	2 days	7 days
N.O. % 60 +30 °C	10 days	1 day	5 days

**CHEMICAL RESISTANCE**

**Resistant to:** Gasoline, beer, cyclohexane, diesel oil, ethanol 10%, ethylene glycol, glycerin, milk, sodium chloride solution 3-30%, sodium hydroxide 10%, olive oil, paraffin, petrol, castor oil, silicone oil, turpentine, water and soap.

**Partially Resistant to:** Butanol, methylisobutylketone, perchlorethylene and xylene. Color change may appear with the effect of chemicals. This study has been carried out at room temperature. High temperatures and / or mixtures of chemicals may affect the chemical resistance.

## **STORAGE AND PACKAGING**

- It's offered in 17 kg sets. (Component A: 14 kg bucket, Component B: 3 kg bucket).
- Shipped on pallets upon request.
- Under proper storage conditions, shelf life is 12 months from date of production.
- Opened packages should be tightly closed, stored under proper storage conditions and consumed within 1 week.
- It should be stored in unopened original packaging, in cool and dry environment, without exposed frost and direct sun light.

## **WARNINGS**

- Do not allow ponding when applying primer.
- New applied product must be protected from damp, condensation and water for at least 24 hours.
- During application, work clothings appropriate for occupational health and safety rules.
- If swallowed, consult a doctor immediately.
- Food and drink should not be brought to the application areas.
- Store out of the reach of children.
- Do not exceed the specified instructions and applications.
- Ask for product safety data sheet for more information.
- Please consult us for your technical questions related to all other application requirements.

## **CERTIFICATE OF CONFORMITY**



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The above data were obtained in the laboratory. For more information, please consult our Technical Department.

Entegre reserves the right to change the above information.

Entegre is not responsible for any failure due to misapplication.