

# EPOMALT FAST 100

TWO-COMPONENT, EPOXY CEMENT RESIN FOR QUICK REPAIR AND COATING OF CONCRETE FLOORING AND STRUCTURES EVEN IF THEY ARE OUTDOORS

*Medium thickness version - approx. 0.6 mm per layer*



**EPOMALT FAST 100** is a two-component epoxy cement resin mortar for the renovation and exposed coating of deteriorated industrial concrete flooring. Its special formula ensures exceptional bonding even to damp substrates. **EPOMALT FAST 100** guarantees high resistance to abrasion and chemical attack as well as being impermeable to counterthrust. The epoxy-cement formula makes it also suitable to be used with cold climates, rain, freeze-thaw cycles, de-icing salts and high traffic. **EPOMALT FAST 100** can be left exposed thanks to its excellent physical and mechanical properties and anti-slip effect; it is possible to increase the attractive finish and surface levelling by smoothing using EPOMALT FAST 50, the low-thickness version of the product. The coating realised with EPOMALT FAST 50 can be made even more absorbent and easy to clean by applying WEPOX FINITURA.



HIGH-PERFORMANCE EPOXY CEMENT SKIM COATS

## BENEFITS

**EPOMALT FAST 100** is a two-component epoxy cement resin for coating concrete industrial flooring having the following features:

- ✓ **HIGH ADHESION TO THE SUBSTRATE:** EPOMALT FAST 100 provides superior adhesion to concrete and cement substrates in general.
- ✓ **RESISTANT TO WEAR AND TRAFFIC:** EPOMALT FAST 100 effectively withstands abrasion and rolling and sliding friction, thus resulting also suitable for applications indoor and outdoor areas subject to high traffic.
- ✓ **WATERPROOF AND BREATHABLE:** EPOMALT FAST 100 creates a protective barrier that prevents the ingress of water and aggressive agents but allows water vapour migration.
- ✓ **IT IS NOT ADVERSELY AFFECTED BY DAMP SUBSTRATES:** EPOMALT FAST 100 can also be applied in the presence of moisture, creating a chemical barrier to dampness and salt peter.
- ✓ **DUCTILITY:** EPOMALT FAST 100 epoxy-cement matrix has a fair plastic deformation capacity that ensures an excellent prevention of cracking and flaking phenomena.
- ✓ **CHEMICAL RESISTANCE:** EPOMALT FAST 100 effectively withstands weathering, mineral oils, salts and aggressive solutions.
- ✓ **FAST LAYING:** EPOMALT FAST 100 has a smooth paste consistency and can be easily and quickly applied by spatula.
- ✓ **EXCELLENT ANTI-SLIP FINISH:** EPOMALT FAST 100 provides a good non-slip effect.

## AREAS OF APPLICATION

**EPOMALT FAST 100** is a high-performance epoxy-cement skim coat ideal for repairing industrial flooring such as:

- ✓ concrete outdoor squares with wear layer reconstruction.
- ✓ industrial flooring subject to heavy traffic.
- ✓ flooring exposed to aggressive environments even with damp substrates.
- ✓ restoration of concrete floors subject to surface delamination with thickness up to 2-3 mm.



© Copyright 2012 - All rights reserved - The following specifications provide reliable details about our current best knowledge and know-how. Changes may take place according to the accuracy of the application steps we shall not be held responsible for. For this reason, our warranty only covers the quality and life of the products according to their specifications. This issue invalidates and replaces the previous ones.

## SUBSTRATES PREPARATION

---

### SUBSTRATE REQUIREMENTS

Before apply make sure that the substrate has a minimum pull-off strength of at least 1 MPa, is free of loose parts, water stagnation, and that the substrate moisture content is not above 15%.

### CLEANING

Clean the substrate from oily residues, crumbling parts, powders, oils or other substances that may compromise the substrate adhesion and cause flaking.

### RESTORATION AND LEVELLING

#### *CONCRETE SURFACES OR EXISTING RESIN COATINGS*

Shot peen or level the surface to roughen the substrate until reaching the compact and sound concrete, then aspirate the residues. In the presence of joints, remove any trace of neoprene and seal.

Any hollow, hole or evident unevenness must be restored with PAVIFIX, the two-component shrinkage-compensated epoxy mortar for fast repair of concrete flooring.

#### *NEWLY DESIGNED CONCRETE INDUSTRIAL FLOORING:*

On new or well-preserved concrete substrates, simple sandpaper to remove the non-absorbent surface coat that forms as a result of trowelling.

#### *EXISTING COATING MADE OF CERAMICS, STONEWARE*

The existing tile coating must be in good conditions and well anchored to the substrate. The tile surface shall be roughened by removing the glazed superficial layer through smoothing or shot peening, in order to facilitate the skim coat bonding; then aspirate powders and residues which might affect proper adhesion. Grout lines shall be adequately sealed to restore the substrate evenness. The ceramic coatings which are flaking or however not adequately anchored to the substrate must be completely removed.

#### *SCREED*

The screed must be even, clean, compact and adequately cured; it is recommended to apply the coating on high-strength screed. Excellent performances can be achieved with screeds created with DRACOCEM, the specific hydraulic binder for fast-drying, shrinkage-compensated screeds. The surface must be made absorbent through shot peening and adequately cleaned by aspirating residues and loose parts.

#### *MOIST SUBSTRATES SUBJECT TO RISING DAMP*

If the substrate is subject to important rising damp and salts, it is recommended to apply AQUASTOP T, the chemical barrier to rising damp, with a minimum overall consumption of 2 kg/m<sup>2</sup> (see technical data sheet).

## APPLICATION

### COMPONENTS PREPARATION

Mix component A and B, each in its own container, before joining the two components. Do not use partial quantities: a wrong mixing ratio could cause damage during the hardening process. Add component B to component A and mix for at least 4-5 minutes till getting a well-blended mix. Use a low-speed mechanical stirrer to avoid dragging air into the mix.

### HOW TO USE

Apply by spatula or trowel a first layer of **EPOMALT FAST 100** on the clean support as indicated in the previous paragraph. Once the first coat has hardened, it is recommended to sandpaper the surface in order to eliminate any bumps or material patching. Sandpapering can be carried out manually or with single-brush and using 60-80-grit sandpaper. Apply the second coat after having carefully cleaned and removed dust from the surface. Wait 1÷2 hours, then wet the surface by water and smooth by wet trowel until achieving the desired finish. Sandpaper again to level the surface.

### SAFETY INSTRUCTIONS

- Make sure that the substrate is solid, compact and mechanically resistant.
- The substrate temperature should be between +10° C and +25 °C.
- Do not apply on wood or resilient materials such as pvc, linoleum, etc..
- It is recommended to ventilate the workplace by using forced air in order to accelerate evaporation.
- Use rubber gloves and safety glasses while applying and cleaning tools.
- Avoid contact with skin, eyes, etc.
- If contact occurs, wash with plenty of water and neutral soap.
- Clean the surfaces with neutral detergents.

## PACKAGING AND STORAGE

**EPOMALT FAST 100** is packaged in:

5 kg Pail (A) + 5 kg Pail (B)

If the product is stored properly in its original packaging, indoors in a dry location, it maintains its original features for one year.





## RECOMMENDATIONS FOR HOT CLIMATES

- ▶ Keep **EPOMALT FAST 100** away from sunlight;
- ▶ Do not perform work during the hottest hours of the day;
- ▶ Do not work at temperatures higher than +25°C.



## RECOMMENDATIONS FOR COLD CLIMATES

- ▶ Keep **EPOMALT FAST 100** in a frost-free location;
- ▶ Do not apply at temperatures lower than +5 °C;
- ▶ If possible, start work during the hottest hours of the day.

## PRODUCT FEATURES

	COMPONENT A	COMPONENT B
APPEARANCE	liquid	liquid
 PYCNOMETER DENSITY - UNI EN ISO 2811	1.87 kg/l	1.47 kg/l
PACKAGING	5 kg Pail	5 kg Pail
STORAGE	12 months	12 months

## APPLICATION DATA + 20 °C AND 65% R.H.

MIXING RATIO	comp. A : comp. B = 1:1
APPEARANCE	Fluid paste
DENSITY A+B	approx 1.7 kg/l.
COLOUR OF MIX	Grey
APPLICATION TEMPERATURE RANGE	from +5°C to +25°C
WORKABILITY - POT LIFE	approx. 50 min
WAITING TIME BETWEEN COATS	5-8 hours
WAITING TIME BEFORE LYING NEXT COATING	8-12 hours
TOTAL CURE TIME	5 days
WALKABILITY	approx. 24 hours
NOMINAL CONSUMPTION	approx 1.7 kg/m <sup>2</sup> per mm of thickness
CONSUMPTION PER COAT (RECOMMENDED MINIMUM)	0.9±1 kg/m <sup>2</sup>

## PERFORMANCE CHARACTERISTICS EN 1504-2 (Coating C, PI-MC principles)

PERFORMANCE CHARACTERISTIC	TEST METHOD	MINIMUM REQUIREMENTS	PRODUCT PERFORMANCE
✓CE PERMEABILITY TO CO <sub>2</sub>	UNI EN 1062-6	S <sub>0</sub> >50 m	S <sub>0</sub> >50 m
✓CE PERMEABILITY TO WATER VAPOUR	UNI EN ISO 7783-2	Class I S <sub>0</sub> <5 m Class II 5m ≤S <sub>0</sub> ≤50 m Class III S <sub>0</sub> > 50 m	Class II
✓CE CAPILLARY ABSORPTION	UNI EN 1062-3	w < 0.1 kg/m <sup>2</sup> ·h <sup>0,5</sup>	< 0.1 kg/m <sup>2</sup> ·h <sup>0,5</sup>
✓CE DIRECT TENSILE STRENGTH MC (0.40) according to EN 1766 after 7 days	UNI EN 1542	rigid systems without traffic: ≥ 1.0 (0.7) with traffic: ≥ 2.0 (1.0)	2.6 MPa
OTHER CHARACTERISTICS			
COMPRESSIVE STRENGTH	UNI EN 12190	35 MPa after 7 days	
FLEXURAL STRENGTH	UNI 7219	10 MPa after 7 days	
RESISTANCE TO POSITIVE HYDRAULIC PRESSURE 5 BAR (equal to a 50 m water column)	UNI EN 12390-8	Penetration: none	
SURFACE HARDNESS	DIN 53505	90 shore D	