

EPOXY FLOOR COATING

BONSAL EPOXY FLOOR COATING is a high build two component epoxy resin coating.

ADVANTAGES

- **Hard wearing** — durable, low maintenance costs.
- **High resistance** to a wide range of industrial chemicals.
- **Hygienic** — impervious finish provides easily cleaned surface.
- **Solvent free** – no odour during application.
- **Attractive** — available in a range of colours to improve the working environment.
- **Slip resistant** - different textures available to suit conditions.

USES

- › Coating for use on cementitious substrates such as concrete or cement screeds for both indoor and outdoor use
- › Primer
- › Floor coating
- › Top coat

PROPERTIES

Epoxy 2-component reactive plastic material.
Resistant to long term exposure to high temperatures and changes in temperatures of up to +50 °C.
Solvent-free, pigmented.
Balanced shore-hardness, ensuring excellent surface hardness.
Highly impermeable to chlorides.
Good flow properties.
Weatherproof, abrasion-proof, sealing.
The binding agent might cause colours to slightly change over time if exposed to UV radiation.
Self-levelling, high covering capacity (EH120).
Top seal for resin coatings and gritted floors (EH130).
Coating for concrete and screed surfaces (EH130).
Unfilled (EH130).

SUBSTRATE PREPARATION

Concrete substrates must be prepared by, e.g. shot-blasting, milling etc., to make sure that they are ready for the coating, slightly roughened, free from dirt and any other objects that might prevent adhesion. The aggregate particles must be exposed. The dew point temperature has to be observed. The substrate must have an average tear strength $\geq 1.5 \text{ N/mm}^2$. The substrate has to be protected against rising damp before priming.

MIXING THE PRIMER

The components resin (A) and hardener (B) are supplied at adjusted mixing ratios (with the exception of resin and hardener supplied in barrels). Empty all of the hardener into the resin. Thoroughly mix the two components with a mechanical agitator with a speed of no more than 400 rpm until the mixture has been homogeneously blended (approx. 5 minutes). Transfer the mixture into a clean container and carefully mix again. The temperature of both of these components should be at least +8 °C. components should be at least +8 °C.

APPLYING THE PRIMER

The primer should be applied using, e.g. a rubber scraper, and evenly distributed on the concrete substrate. If required, cover the fresh primer with fire-dried siliceous sand (aggregate: 0.1-0.4 mm) straight after application (requires approx. 1.0 kg/m²). If the surface is very uneven, the primer can be mixed with 35-45 % quartz sand (0.1-0.4 mm). This mixture is then applied using a scraper. Remove all loose sand before applying the coating.

MIXING THE EPOXY COATING

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than 400 rpm until the mixture has been homogeneously blended (approx. 5 minutes). Transfer the mixture into a clean container and carefully mix again. The temperature of the two components should be at least 15 °C when mixing.

APPLYING THE EPOXY COATING

EH120: (d = 1-2 mm): Apply evenly using a hard rubber toothed blade or trowel and, after a short waiting time (approx. 10 minutes) use a spiked roller to remove bubbles. **Self-levelling mortar** (d = 3–5 mm): Mix EH120 and 0.5 - 1.0 GT fire-dried quartz sand (0.1–0.4 mm) and apply at a minimum layer thickness of 3 mm (when M = 1:1) using a trowel or scraper. Spreading with quartz sand for the anti-slip classes 11-13 with fire-dried quartz sand in excess. **EH130:** apply evenly with a medium floor roller.

CURING

The curing behavior of reactive plastic material is affected in particular by the ambient and substrate temperature. Low temperatures slow the chemical reactions and thus prolong the time required for application, until the surface is ready for

the second coat, until being able to walk on, and the floor's total curing time; as well as increasing the amount of material required due to the higher viscosity. High temperatures accelerate the chemical reactions, thus correspondingly diminishing the above times. In order for the reactive plastic material to fully cure, the mean temperature of the substrate must always be higher than the minimum temperature. When used outdoors, it must be ensured that the material is protected from moisture for a sufficient period of time after application, since premature exposure to moisture can cause the surface to turn white and/or sticky, which can significantly impact on the adhesion of the next coating and might mean that the layer might have to be removed again using e.g. sandblasting. The existing material underneath this layer will cure without any problems.

CLEANING

Carefully clean all tools with **EHCLEANER AND THINNER** immediately after use and when not using them for longer periods of time.

TYPE			EH120	EH130
Colour		RAL*	7032	7032
Mixing ratio		Ratio by weight	5:1 pigmented	5:1 pigmented
		Volume	n. d.	3.1:1
Density (23 °C/50 % rel. air humidity)		kg/m ³	1,400	1,500
Viscosity approx.	at 10 °C	mPa · s	4,500–5,500	2,500–3,000
	at 20 °C	mPa · s	2,000–2,500	1,800
Processing time approx.	at 10 °C	min	45–50	60
	at 20 °C	min	35–40	45
	at 30 °C	min	20–25	30
recoatable	at 10 °C	nach h	15–30	15–30
	at 20 °C	nach h	10–20	10–20
fully cured (100%)	at 20 °C	nach d	7	7
Minimum substrate temperature for application		°C	+10	+10
Material consumption approx.	Top coat	kg/m ²	n. d.	350–800**
	Coating	kg/(m ² · mm)	1.40	n. d.
	Self-levelling mortar	kg/(m ² · mm)	1.65	n. d.
Solid		%	100	100
Layer thickness		mm	1–5	n. d.
Adhesive pull strength		N/mm ²	Concrete failure	Concrete failure
Packaging		kg container	12	12

* Other RAL colours are available on request ** depending on substrate properties
n. d. = not determined

**PHYSIOLOGICAL BEHAVIOUR/
SAFETY MEASURES**

The products are physiologically harmless after curing.

Always wear protective goggles and nitrile impregnated cotton gloves during application.

DATASHEET VALIDITY

Bonsal makes modifications to its product datasheets on a continuous basis. Check the datasheet update section to ensure you have the latest version.

LIMITED WARRANTY Bonsal supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. Bonsal does not warrant or guarantees the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to Bonsal in writing within five working days of being detected. Bonsal makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied. Bonsal shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.



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