

3-component, self-leveling epoxy flooring

Description	Technical data
<p>DUROFLOOR-CMT is a pourable, self-leveling flooring based on cement and epoxy resins, without solvents. It offers the following advantages:</p> <ul style="list-style-type: none"> • Simplified and affordable application. • High early and final mechanical strengths. • Superior bonding to the substrate. • High vapor permeability. • Exceptional self-leveling capacity. • It does not have a corrosion action. (is safe for the steel reinforcement). 	<p>Chemical basis (A+B): 2-component epoxy resin</p> <p>Chemical basis (C): cementitious powder</p> <p>Color (A+B+C): grey</p> <p>Density A: 1,096 kg/l</p> <p>Density B: 1,025 kg/l</p> <p>Bulk density of C: 1,39 kg/l</p> <p>Bulk density (A+B+C): 2,06 kg/l</p> <p>Mixing ratio (A:B:C): 1 : 2,6 : 16,5 by weight</p>
<p>It is classified as a CT-C50-F10-AR0,5 screed material according to EN 13813.</p>	<p>Pot life: approx. 20 min at +20°C</p>
Fields of application	<p>Minimum hardening temperature: +8°C</p>
<p>DUROFLOOR-CMT is used for:</p> <ul style="list-style-type: none"> • repairing, • smoothing and • leveling 	<p>Water-vapor diffusion coefficient: Sd = 0,75 (EN ISO 7783-1/2)</p>
<p>concrete floors that will be covered with:</p> <ul style="list-style-type: none"> • epoxy floorings (DUROFLOOR) • polyurethane floorings • plastic floorings, • carpet, • wooden parquet etc. 	<p>Walkability: after 15 hours at +23°C</p>
<p>It is also applied when concrete is relatively fresh, in order to create the proper substrate - of at least 2 mm thickness- for the application of epoxy layers, to avoid problems of detachment etc.</p>	<p>Successive layer: after 48 hours at +23°C</p>
<p>Also, it is appropriate as final flooring, at a thickness of up to 3 mm, for smoothing, leveling and increasing surface resistance to mechanical loads.</p>	<p>Final strength: after 28 days at +23°C</p>
	<p>Compressive strength: 60 N/mm² (EN 13892-2)</p>
	<p>Flexural strength: 15 N/mm² (EN 13892-2)</p>
	<p>Wear resistance: 16 µm, AR 0,5 (EN 13892-4, BCA)</p>
	<p>Adhesive strength: >3 N/mm² (breaking point of concrete)</p>
	<p>Elastic modulus: 22 GPa</p>
	<p>Maximum layer thickness: 3 mm</p>

Directions for use

1. Substrate

The surfaces to be treated must be:

- Stable and dry or slightly wet, without standing water.
- Clean, free of materials that prevent bonding, such as dust, loose particles, grease, etc.

Also, the following requirements must be met:

Concrete quality: at least C20/25

Cement screed quality: cement content at least 350 kg/m²

For very absorptive or porous substrates, the surface should be first primed with the water-based epoxy primer EPOXYPRIMER-W, as it is or diluted with 10% of water by weight. The primer is applied by brush or roller in one layer.

Primer consumption: 200-300 g/m².

The application of DUROFLOOR-CMT follows after the primer can be walked on.

(Approximately 6 hours later, depending on the temperature and humidity of the application area).

2. Mixing of DUROFLOOR-CMT

Components A, B, and C are packaged in predetermined mixing proportions.

At first, component A must be stirred well in its container and then should be moved to a clean vessel of approx. 30 l volume.

Subsequently the whole quantity of component B should be added to component A. Mixing of the two components should carry on for approx. 30 seconds, with a low-revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

Finally the component C is added under continuous stirring. Mixing is done with a low-revolution mixer and is carried on until the mixture becomes completely uniform (approx.

for 3 minutes). No water should be added in the mixture.

3. Application procedure

DUROFLOOR-CMT should be applied at a thickness of up to 3 mm by using a notched trowel. Alternatively a large rubber trowel (squeegee) or a metal trowel can be used as well.

In order to release air trapped into the self-leveling layer, the surface must be rolled over with a special spiked roller. This prevents formation of bubbles and helps to achieve a uniform thickness.

Cleaning of tools:

Tools must be cleaned thoroughly with water immediately after use. Hardened material can be only mechanically removed.

Consumption

Approx. 2,1 kg/m²/mm of layer thickness.

Packaging

DUROFLOOR-CMT is available in 25 kg packaging (A+B+C) in the following proportions:

Component A: 1,24 kg.

Component B: 3,23 kg.

Component C: 20,52 kg.

Shelf-life - Storage

Self-life in sealed containers and bags is 12 months, in a cool and dry place.

Remarks

- Working time of epoxy systems decreases when ambient temperature rises.
- The surface of DUROFLOOR-CMT after the application should be protected from moisture for 24 hours. Moisture may whiten the surface or/and make it sticky. It

may also disturb hardening. Faded or sticky layers in parts of the surface should be removed by grinding or milling and laid again.

- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- After hardening, DUROFLOOR-CMT is totally safe for health.
- Before using the material, consult the directions and safety precautions written on the product's label.



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EN 13813 CT-C50-F10-AR0,5

Cementitious screed material for use internally
in buildings

Reaction to fire: F

Release of corrosive substances: CT

Water permeability : NPD

Water vapour permeability: NPD

Compressive strength: C50

Flexural strength: F10

Wear resistance: AR0,5

Sound insulation: NPD

Sound absorption: NPD

Thermal resistance: NPD

Chemical resistance: NPD

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