

DUROFLOOR-CMT

Three-component, self-leveling, solvent-free epoxy flooring

Description

DUROFLOOR-CMT is a flowable, self-leveling flooring based on cement and epoxy resins, without solvents. It offers the following advantages:

- Simple and affordable application.
- High early and final mechanical strength.
- Superior adhesion to the substrate.
- High vapor permeability.
- Exceptional self-leveling capacity.
- No corrosion action (safe for steel reinforcement).

Certified according to EN 13813 and classified as a CT-C50-F10-AR0.5 screed material. CE marked.

Fields of application

DUROFLOOR-CMT is used for:

- repairing,
- smoothing, and
- leveling

concrete floors to be covered with:

- epoxy floorings (DUROFLOOR)
- polyurethane floorings
- plastic floors,
- carpet,
- wooden parquet, etc.

Suitable also as a final flooring at a thickness of up to 3 mm, for smoothing, leveling and increasing surface resistance to mechanical loads.

It is also applied as a temporary moisture barrier (minimum thickness 2 mm) when concrete is relatively fresh or has high moisture content prior to the application of epoxy and polyurethane floor coatings to avoid detachment and osmotic blistering.

Technical data

Chemical base (A+B):	2-component epoxy resin
Chemical base (C):	cementitious powder
Color (A+B+C):	grey

Density A:	1.096 kg/l
Density B:	1.025 kg/l
Bulk density of C:	1.39 kg/l
Bulk density (A+B+C):	2.06 kg/l
Mixing ratio (A:B:C):	1 : 2.6 : 16.5 by weight
Pot life:	≈ 20 min at +20°C
Minimum hardening temperature:	+8°C
Water-vapor diffusion coefficient: (EN ISO 7783-1/2)	Sd = 0.75
Walkability:	after 15 hours at +23°C
Successive layer:	after 48 hours at +23°C
Final strength:	after 28 days at +23°C
Compressive strength: (EN 13892-2)	60 N/mm ²
Flexural strength: (EN 13892-2)	15 N/mm ²
Abrasion resistance: (EN 13892-4, BCA)	16 µm, AR 0.5
Adhesive strength:	> 3 N/mm ² (breaking point of concrete)
Elastic modulus:	22 GPa
Maximum layer thickness:	3 mm

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/m ²

DUROFLOOR-CMT

For very absorbent or porous substrates, the surface should be first primed with the water-based epoxy primer EPOXYPRIMER-500, as it is or diluted 30% with 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 (approx. 6 hours later, depending on jobsite temperature and humidity).

2. Mixing of DUROFLOOR-CMT

Components A, B, and C are packaged in separate containers with prefixed mixing ratio.

First, component A must be stirred well in its container and then moved to a clean container of approx. 30 l volume. Then, the entire contents of component B should be added to component A. Mixing of the two components should continue for approx. 30 seconds, with a low-speed 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, component C is added under continuous stirring. Mixing is done with a low-speed mixer and continues until the mixture becomes completely uniform (for approx. 3 minutes). No water must be added to 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

12 months in sealed containers and bags, 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 recoat time is longer than expected old floors are 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.
- Please consult the directions for safe use and precautions written on the packaging before use.

DUROFLOOR-CMT



ISOMAT S.A.

17th km Thessaloniki – Ag. Athanasios
P.O. BOX 1043, 570 03 Ag Athanasios, Greece

11

DoP No.: DUROFLOOR-CMT/1837-02

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

ISOMAT S.A.

**BUILDING CHEMICALS, MORTARS & PAINTS
HEADQUARTERS – THESSALONIKI, GREECE**

17th km Thessaloniki – Ag. Athanasios Road
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece
T +30 2310 576000

www.isomat.eu e-mail: support@isomat.eu