MAPEI

GEV-EMICODE EC 1 PLUS very low emission

Topcem Pronto

Fast Track Ready

CE EN 13813

HIGH THERMAL CONDUCTIVITY λ=2.0 W/mK EN 12664

CT CEMENTITIOUS SCREEDS C30-F6 $A1_{FL}$ MAPEI IN COMPLIANCE WITH EUROPEAN STANDARDS EN 13813

Ready-to-use, normal setting, quick-drying mortar with high thermal conductivity

CLASSIFICATION ACCORDING TO EN 13813

Screeds prepared with **Topcem Pronto** in accordance with the specifications described in this technical data sheet are classified as CT - C30 - F6 - $A1_{FL}$ in compliance with the European standard EN 13813.

WHERE TO USE

For forming unbonded and bonded screeds on new and existing slabs in interiors and exteriors prior to installing wood, PVC, linoleum, ceramic tile, natural stone, carpet or other floor coverings in areas where fast-drying screeds are required in order to lay floorings in a short time.

Some application examples

- Forming heated screeds without the need for plasticizers.
- Forming screeds that are set for foot traffic in 12 hours and completely dry in 4 days, for installing wood parquet and resilient flooring such as rubber, PVC, linoleum, etc.
- Screeds that are ready to receive ceramic tiles after 24 hours and natural stone flooring after 2 days.
- Repairing screeds in areas where it is required to lay floorings in a short time (e.g. supermarkets, shops, residences, offices, etc.).

TECHNICAL CHARACTERISTICS

Topcem Pronto is a pre-blended ready-to-use mortar with normal setting and controlled shrinkage based on a special hydraulic binder and graded aggregates.

Topcem Pronto is characterized by high thermal conductivity (λ = 2 W/mK), which makes it particularly suitable for laying heated screeds.

Topcem Pronto is extremely easy to use: just mix with water. This prevents mistakes from being made in adding the correct amount of binder and properly graded aggregate, which could compromise the final performance characteristics of the screed when cured.

Topcem Pronto is the ideal solution where good quality graded aggregate is hard to find or for job sites such as those in city centres where the logistics involved in mixing conventional binders can be difficult.

Topcem Pronto is workable for the same length of time as conventional cement based mortars but cures much faster.

RECOMMENDATIONS

- Do not use **Topcem Pronto** on substrates subject to rising damp (place a vapour barrier in between).
- Do not mix **Topcem Pronto** with other binders (e.g. **Mapecem**, **Topcem**, cement, lime, gypsum, etc.) or aggregates.
- Mix **Topcem Pronto** with the correct amount of water.
- Do not add water to **Topcem Pronto** mix once it has begun to set.
- Do not wet the surface of **Topcem Pronto** screed.
- When there are waterproofing systems made from prefabricated flexible membranes present (such as a bitumen membrane), the isolating layer placed between the floor slab and the screed must be made

Topcem Pronto

from material permeable to water vapour (e.g. PP geotextile or low density non-woven fabric).

APPLICATION PROCEDURE

Preparing the substrate

Topcem Pronto can be used on any substrate as long as it is not subject to rising damp. If so, use a waterproof membrane. For screeds from 10 to 35 mm thick, that require anchoring, the substrate must be dry, without cracks, free of dust and loose particles, varnish, wax, oil, and gypsum residues.

Preparing the mix

Topcem Pronto can be mixed in:
- rotating mixers;
- normal job site mixers;
- centrifugal mixers;
- automatic pressure pumps.

Mix one 20 kg bag of **Topcem Pronto** with 1.4 l of water for at least five minutes. Never vary the amount of water because this will weaken the mortar's final performance.

The mix should have a semi-dry consistency. Tamp and float the mix until a dense, smooth surface is obtained without bleeding.

UNBONDED SCREEDS (35 to 60 mm thick)

The **Topcem Pronto** mix must be laid on an isolating layer, made up of a polyethylene sheet barrier, or similar, to allow for movement between the screed and the existing substrate. In case of rising damp use a waterproof membrane to form a vapour barrier underneath the screed.

Areas of **Topcem Pronto** screeds containing pipes must be reinforced with light steel reinforcement (such as a hexagonal mesh).

Spread the **Topcem Pronto** mix just like any other cement based screed mix: use screed guides, then spread the mix and tamp thoroughly before floating to obtain a better surface finish.

Place isolating material (such as cardboard, polystyrene foam, cork, etc.) approx. 1 cm thick around the sides of the area and around columns before casting.

If work is interrupted, place steel rods 20 to 30 cm long and 3 to 6 mm in diameter, spaced 20 to 30 cm apart, into the screed (which has been cut perpendicular to the substrate) to ensure a perfect connection between the new and the old pours and to prevent uneven joins and cracks.

The Topcem Pronto mix is usually workable for a greater length of time than a conventional screed mix. Ambient temperatures may influence the setting and drying times.

BONDED SCREEDS (from 10 to 40 mm thick)

Thin screeds must be laid directly in contact with the substrate, which may be cementitious material or made up of an old ceramic or stone floor.
For other substrates, consult the MAPEI Technical Services Department.

Once the substrate has been prepared sufficiently, and immediately before spreading on the **Topcem Pronto** mix, prepare bonding slurry with **Planicrete** according to the ratio in the table below. Apply a continuous, even 2-3 mm layer using a large flat brush, a scrubbing brush or a trowel.
To get perfect adhesion, spread **Topcem Pronto** on the slurry while it is still fresh (fresh on fresh technique).
If the floor is subjected to high mechanical stresses, the construction joint must be made by replacing the **Planicrete** cementitious bonding slurry with **Eporip**.
Spread on **Topcem Pronto** using the same method described above.

Mixing ratio for Planicrete cementitious slurry

Planicrete:	1 part by weight;
Water:	1 part by weight;
Topcem:	3 parts by weight.

MEASURING HUMIDITY CONTENT

Normal electric hygrometers give values that are not reliable for **Topcem Pronto** screeds. It is therefore absolutely necessary that a carbide hygrometer is used to measure the level of residual humidity; this instrument shows the absolute value of humidity by weight.

CONSUMPTION

18-20 kg/m^2 per cm of thickness, depending on compaction.

Cleaning

Clean tools with water.

PACKAGING

Topcem Pronto is available in 20 kg bags and 1000 kg big-bag.

STORAGE

Topcem Pronto is stable for at least 12 months when stored in a dry place.

SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION

Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no

PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation

TECHNICAL DATA (typical values) In compliance with:	– European EN 13813 CT-C30-F6-$A1_{FL}$
PRODUCT IDENTITY	
Consistency:	powder
Colour:	grey
Bulk density (kg/m^3):	1,500
Dry solids content (%):	100
EMICODE:	EC1 Plus - very low emission
APPLICATION DATA (at +23 °C - 50% R.H.)	
Mix ratio:	1.4 l of water per 20 kg of **Topcem Pronto**
Density of the mix (kg/m^3):	2,100 depending on compaction
Mixing time:	5 to 10 mins
Workability of the mix:	60 mins
Application temperature range:	from +5 °C to +35 °C
Set to light foot traffic:	after 12 hours
Waiting time before application of levelling compounds:	from 1 to 4 days, depending on the type of flooring to be laid
FINAL PERFORMANCE	
Thermal conductivity in compliance with EN 12664:	λ = 2.008 W/mK
Resistance to moisture:	excellent
Resistance to ageing:	excellent
Resistance to solvents and oils:	excellent
Resistance to acids and alkalis:	poor
Resistance to temperature:	from -30 °C to +90 °C
Flexibility:	no

Compressive and flexural strength, and resistance to residual moisture	Compressive strength (N/mm^2)	Flexural strength (N/mm^2)	Residual moisture (%)
– after 1 day:	> 8	> 3	< 3.5
– after 4 days:	> 15	> 4	< 2.0
– after 7 days:	> 22	> 5	–
– after 28 days:	> 30	> 6	–

Notes: the samples used for the strength tests are prepared according to EN 13892-1 standards by following a manual procedure so that the mortar becomes as compact as possible.

Topcem Pronto

after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.no

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation.
The most up-to-date TDS can be downloaded from our website www.mapei.no

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

GEV-EMICODE EC 1 PLUS very low emission

This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.

All relevant references for the product are available upon request and from www.mapei.no

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