



CHEM M250 RAPID IS A SPECIAL HYDRAULIC BINDER, WHICH, WHEN MIXED WITH CLEAN AGGREGATES AND WATER, HAS THE PROPERTIES TO HARDEN IN A FEW HOURS AND TO DRY PERFECTLY AT WHATEVER THICKNESS WITHIN 24 HOURS.



PRODUCT DESCRIPTION

Chem M250 is a special hydraulic binder, which, when mixed with clean aggregates and water, has the properties to harden in a few hours and to dry perfectly at whatever thickness within 24 hours. Because of these characteristics and the very high mechanical strength, Chem M250 is the ideal binder for screeds onto which resilient, textile, wood, ceramic or stone floorings must be installed within 24 hours.

FIELD OF APPLICATION

- Preparation of screeds set to light foot traffic after 2-3 hours and totally dry after 24 hours.
- Preparation of screeds ready to receive ceramic tiles and natural stone after only 3-4 hours.
- Patching and repairing screeds in areas subject to continuous traffic.
- Preparation of screeds incorporating under floor heating systems.

SUITABLE SUBSTRATES

- Concrete
- Cement Mortar
- Ceramic Tile and Stone primed with DCI Grip Primer or Beton Contact

LIMITATIONS

- Do not use on substrates subject to rising damp.
- Do not use mixed with other cements, lime, gypsum, etc.
- Do not leave dry-mixed with aggregates.
- Do not mix only with fine sand.
- Do not mix with an insufficient quantity of water.
- Do not leave the mix in the mixer for more than 3-4 minutes.
- Do not mix with an excessive quantity of water.
- Do not add water to a prepared mix and do not remix after it has started to set.
- Do not wet the surface of a screed.
- Do not mix in batching plants and do not transport the mixture by cement mixer lorry.

APPLICATION PROCEDURE

A) Preparation of the substrate

All substrates are suitable as long as they are not subject to rising damp, in which case install a suitable vapour barrier. For non floating screeds from 10 to 35 mm, which have therefore to be anchored, the substrate must be dry, free from cracks, resistant to compressive and tensile strength, free from dust, loose materials, paints, wax, oil, traces of gypsum.

B) Preparing the product

Chem M250 Rapid must be mixed carefully and quickly, with water and graded aggregates 0-8 mm in diameter or with Gravel 0-8, for a maximum of 3-4 minutes, in a mixer or batcher. The mix must be spread and leveled in the shortest time possible and not more than 30 minutes after mixing. Special care must be taken with the quantity of water that must be enough to form a cohesive mass so that tamping gives a flat surface without a cement film. Chem M250 Rapid aggregates and water can be mixed:

- in a drum mixer;
- in an ordinary concrete mixer;
- in a screw mixer;
- manually, with a shovel.

The Chem M250 Rapid mix can be placed using an automatic pressure pump. In any case it is absolutely necessary to strictly follow the instructions regarding the dosage and mixing time.

C) Applying the product

The Chem M250 Rapid mix is placed onto a substrate like any ordinary concrete. A polyethylene sheet must be laid in order to create an easily flowing layer between the Chem M250 Rapid screed and the existing substrate and to prevent any rising damp. If the Chem M250 Rapid screed is crossed by pipes, it is necessary to lay a light metal mesh over the screed as a reinforcement and ensure a minimum thickness of 2.5 cm.

Chem M250 Rapid screeds are prepared using the same methods as those for ordinary cement screeds: preparing leveling strips, spreading the mix and accurately compacting it and then tamping to obtain a better surface finish. Around the perimeter of the area and around the columns etc., it is recommended to insert a 1 cm thick anti-fracture material. If work is interrupted for more than 1 hour, it is necessary to cut the screed perpendicularly and insert pieces of rod into the edge of

the screed. They should be inserted 20-30 cm apart to guarantee perfect bonding and to avoid cracks and differing levels and prepare a suitable bonding slurry.

COVERAGE / CONSUMPTION

Consumption varies depending on the thickness of the screed and the amount of Chem M250 Rapid. For 350-450 kg of Chem M250 Rapid per m³ of aggregates, consumption is 3.5-4.5 kg/m² per cm of thickness.

PACKAGING

Chem M250 Rapid is supplied in:
– 25 kg paper bags

SHELF LIFE-STORAGE

Original sealed bags of this product are guaranteed to be of first quality for 12 months if stored off of the ground in a dry area. The high humidity will reduce the shelf life of the bagged product.

SAFETY INSTRUCTION

CHEM M250 RAPID contains cement that, when in contact with sweat or other body fluid, can cause allergic reactions to those predisposed and irritant alkaline reactions and allergic reactions to those predisposed. It can cause damage to the eyes. Wear protective gloves, goggles, and take the usual precautions for handling chemicals during use. When in case of contact with skin or eyes, wash immediately with plenty of water and seek medical attention.

TECHNICAL DATA

Product identity

Consistency	Fine powder
Color	Grey
Bulk density (kg/m ³)	1600
Dry solids content (%):	100
Standard	EN 13813

Application data (at +23°C and 50% R.H.)

Recommended mixing ratio:	350-450 kg of CHEM M250 RAPID with 1 m ³ aggregates from 0 to 8 mm and 80-160 kg of water, depending on the moisture in the aggregates.
Density of the mix (kg/m ³):	2,200-2,250
Duration of mixing	3-4 minutes
Open time of mix	20-30 minutes
Application temperature range	from +5°C to +35°C
Set to light foot traffic	2-3 hours Ready for use: 24 hours
Ready for levelling	after 4 hours
Waiting time before installation	3 hours for ceramic tiles and stone material 24 hours for resilient coverings and wood
Residual moisture after 24 hours (%):	< 2

FINAL PERFORMANCES

Resistance to acids	fair
Resistance to alkali	excellent
Resistance to oils	excellent
Resistance to solvents	excellent
Temperature when in use	from -30°C to +90°C

Final performances

Compressive strength according to EN 13892-2 (N/mm ²):
- 24 hours: ≥ 45 / - 72 hours: ≥ 47 / - 7 days: ≥ 50 / - 28 days: ≥ 55
Flexural strength according to EN 13892-2 (N/mm ²):
- 24 hours: ≥ 5 / - 72 hours: ≥ 6 / - 7 days: ≥ 7 / - 28 days: ≥ 9
Adhesion to concrete according EN 13892-8 (N/mm ²): > 2.0
Abrasion resistance Taber abrasion test: < 0.5
(H22 disk -500 g - 200 rpm)

WARNING

Danger. Contains Portland Cement: Chromium VI < 2 ppm within the validity period of the product. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. P261 Avoid breathing dust. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF IN CONTACT WITH YOUR SKIN: Wash with plenty of water/... P305 + P351 + P338 IF IN CONTACT WITH YOUR EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor/...



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