

Mastertop 295

Iron aggregate thin-set concrete floor re-surfacing system

Description

The System

Mastertop 295 is used in combination with Rheomix 111, to provide a system for thin-set (recommended minimum would be 10 mm) toppings to concrete floors. A wet to dry epoxy (Concresive 1414 or 2200), bonding system is used to ensure that the high strength topping remains firmly attached to the underlying concrete, regardless of type of traffic to which it is subjected .

The Product

Mastertop 295 is a cementitious, iron aggregate, and chemical blend for production of the topping mortar and Rheomix 111 is a modifier emulsion, which is, under certain conditions, added to the mixing water. Mastertop 295 is shrinkage compensated to reduce the bond-line stresses and minimize shrinkage cracking.

Preparation

The concrete floor surface must be prepared to expose a clean, sound matrix which is free of laitance, oil, dust or loose particles which may interfere with bonding. Mechanical surface preparation is required, usually in the form of mechanical scabbling / scarifying.

Epoxy Bonding

Recommended

Mix and apply Concresive 1414 or Concresive 2200 epoxy bonding agent in accordance with the recommended procedure contained in the data sheets.

Mixing Instructions

The Mastertop 295 is batched by adding approximately 3 litres of gauging liquid to each 25 kg bag of the powder. The gauging liquid shall consist of the following proportions:

	Rheomix 111 : Water
Thin Repair mortars (± 10mm)	1:3
Thick Surfacing (± 10 - 20mm)	1:5

Above thickness of 20mm the use of Rheomix 111 is not recommended or required.

Machine mixing is best but a board or wheelbarrow may be used for hand mixing. The mix should be semi/self- leveling in consistency.

Placing

Place lats or strip forms to establish desired finished level. Using a stiff brush or rubber squeegee, spread the bond coat evenly over the floor surface and scrub this well to fill all cavities. The spread rate should not be more than 4 square meters per 2 Litre kits of Concresive 1414 / Concresive 2200. Whilst the bond coat is still wet, place the topping mix and compact to fill voids and expel air. Straight-edge to the required levels. Proper wetting- out of the topping mix to the bond coat is essential for good long- term bond success.

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Floating

Wood float the surface to ensure complete elimination of pinholes, to expel entrapped air and eliminate surface bubbles. Floating with the wood float flat on the surface draws out air and consolidates the topping mix. Protect the surface against early drying through exposure to wind or sun. Keep surface covered with thin (150 micron) plastic sheeting at all times when the surface is not being worked. When the topping has set sufficiently to commence steel floating, float, initially keeping the blade flat onto the surface and use circular movements. When the surface has further tightened by setting, final finishing may commence. Each time a float or trowel is removed from the surface- wipe it clean, otherwise semi-set paste will become sticky and difficult to remove. To avoid trowel drag (fine cracks due to semi set material being pulled by the trowel), await proper set before attempting to finish and wipe the trowel blade with a 1:3 Rheomix 111/water solution to stop sticking.

Power Floating

Despite its thin section placement, carefully controlled, Mastertop 295 may be power floated and machine finished. To avoid stripping of the overlay mortar from the substrate, care must be taken to allow sufficient set to take place to accommodate the weight and movement of a light weight power float machine.

Protection and Curing

Protect the finished work against wind and sun and allow curing overnight. First thing the next day apply a liberal coat of Masterkure 181 curing compound, and allow drying. The floor should be allowed to cure for at least 3 days before exposure to light traffic use, and 7 days before full use.

Stress Relief Joints

Follow normal industry practice as regards panel sizes and shrinkage stress relief. The system is low shrinkage, high strength, but large panels will need stress relief joints. (follow C&CI recommended practice).

Estimating Data

10mm thick	36kg/m ²
13mm thick	48kg/m ²
25mm thick	96kg/m ²

Packaging

25 kilogram polylined bags.

Shelf Life

9 months correctly stored.

Storage

Store under cover, out of direct sunlight and protect from extremes of temperatures.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Construction Chemicals SA's Technical Services Department.



The Chemical Company

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Safety precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

Note

For professional use only

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF Construction Chemicals SA representative. BASF Construction Chemicals SA reserves the right to have the true cause of any difficulty determined by accepted test methods.

Quality and care

All products originating from BASF Construction Chemicals' SA facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001:2000.

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As all BASF's technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.

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