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RESICEM 700 CASTABLE MONO-COMPONENT MORTAR WITH SHRINKAGE REDUCING ADMIXTURES

Cement, quartz inert, polymer added, fibre-reinforced castable pre-packaged mortar. It features high mechanical resistance and it hardens with shrinkage reducing admixtures. Resistant to sulphates.

Areas of use

- Structural reinforcement screeds carried out with different thicknesses through casting within formwork;
- Execution of bases for tanks, machines, assembly lines through under-plate casting;
- Log bolt anchorage;
- Filling of connections between concrete structures;
- Mending of concrete floors;

Description

RESICEM 700 is a pre-mixture, i.e. a ready to use mortar that can be prepared by simply adding water and that has the following features:

- Easy workability;
- Changeable consistency;
- Fast hardening;
- High mechanical characteristics;
- Shrinkage reducing admixtures;
- Resistant to freeze/defreeze cycles;

How to use

Preparation of the support

The support must be healthy, clean, oil and fat stain-free, perfectly washed and wet up to saturation: remove possible excess water using compressed air.

Preparation of the product

Mix at low speed to avoid air inlet.

We recommend first pouring $\frac{3}{4}$ required water in the mixer and add RESICEM 700 when shaking. Mix for 3 – 5 minutes, then add the remaining water.

In case of layers with high thickness and fillings of great volume, it is possible to add selected very fine, perfectly washed and dried gravel to the mixture with particle size of maximum 6 - 8 mm and with a weight ratio, with RESICEM 700, not above 30%. Obviously these variations result in a change of the mechanical features shown, so we recommend carrying out some preliminary tests before full application.

Application

Cast the product in the volume to be filled; in case of big volumes you may use a pump for mortars.

Notes

Mechanical characteristics may changes based on the amount of water used. Minimum recommended application temperature, referred to the environment, the support and the product, must not be below +5°C. It is also necessary to keep the mortar surface damp for at least 24 hours after installation.

Mechanical characteristics

Physical state	Powder
colour	Cement grey
Compression strength	
after 24 hours	25 N/mm ²
after 3 days	35 N/mm ²
after 7 days	50 N/mm ²
after 28 days	60 N/mm ²
Bending strength after 28 days	8 N/mm ²
Elastic modulus	30000 N/mm ²
Adhesion to concrete after 28 days with direct	>2.5 N/mm ²
traction	
Thermal expansion factor	12 x 10 ^{−6} ℃ ^{−1}
Density	2.1 kg/dm ³
RESICEM 700 + WATER mixture ratio	100 + 15

Mortar packaged with approx 3.8 It of water for 25 kg of powder at +20 $^{\circ}$ C and 65% r.h., 4 x 4 x 16 cm specimen.

Times of use

Apply RESICEM 700 within 30 minutes from mixture; the product starts setting after approx. 6 hours. The product can be walked on after 18 hours and can be subject to mechanical stress after 3 days; full hardening occurs after 28 days.

Consumption

With a 25 kg bag, use from 3.8 to 4 lt of water; approx. 13 lt of mortar can be obtained (yield of a bag). Consumption for 1 cm thickness is approx. 19 kg/m².

Packaging and storage

Available in 25 kg packages.

The product remains unaltered for at least six months if stored in a dry and sheltered place and in its original containers.

Cleaning of tools and health precautions

To clean tools use water.

The product is not dangerous: wearing gloves and glasses to protect hands and eyes is enough. In case of contact with the skin, rinse immediately with water and neutral soap; in case of contact with eyes, rinse immediately with running water for 10/15 minutes, then seek medical advice.

Do not rinse with solvents.

The information supplied in this sheet is the result of the best practical and laboratory experiences of RESIMIX, which guarantees its products when used according to the instructions supplied. It is nonetheless up to the customer to ensure the product is suitable for the intended use. The manufacturer declines any responsibility for incorrect use or uses beyond his control. RESIMIX reserves the right to make changes to the data. For any request, please contact the RESIMIX Technical Assistance Office.