

Microcem White / Grey

Waterproofing osmotic cement

The product:

Microcem is a pre-mixed powder, ready to use, to mix only with water, composed of cement binders with a particular stability, specific chemical additives and granulometrically selected inert. When the mix is done, we obtain a grout that, applied with a brush in a thin and continuous layer, is able to achieve an effective waterproof to the water thrust, even negative.

This is because of the extraordinary clinging of the grout to the support and to the saturation of the capillaries and micro lesions of the structure due to the chemical reagents action in the product that are absorbed for osmosis in the capillary reticulum and that there they combine with hydrated lime.

Application Fields

Microcem is used for rigid waterproofing of underground locals, basements, elevator pits, foundations and manufactures water containment (basins, gutters, tanks, swimming pools, etc.) with water thrust both positive and negative.

Advantages

- Inorganic
- Long lasting in time
- Permeable to water steam
- Double waterproof, structural and superficial

Suitable supports

- New and old concrete
- Cement plasters

Application:

Preparation of the supports :

The interested surfaces have to be sane, clean from dust, oils and free of degraded parts or in process of detachment. It is advisable a wash with waterjet. Eventual irregularities, they have to be regularized or repaired with mortar of the line PRO like PROMALT or PRORIP.

The exposed reinforcing metals must be previously treated with FERMALT. In the horizontal and vertical angles run a triangular shelled connections between the walls of at least 10 cm using fibre reinforced mortars with a high mechanical resistance like PROMALT e PRORIP.

All restore operations must be done at least 24 hours prior the application of the slurry.

Thoroughly soak the area to be treated prior product's application.

Mortar preparation

Mix the contents of a bag of 25 Kg with 6,25 – 6,75 lt of clean water with a drill (300/400 turns/minute) and a whisk for 2-3 minutes up to obtain a honey strokes consistency slurry.



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In case of applying it on particularly smooth surfaces, or as a first hand, use 1 lt of MICROMALT instead of 1 litre of water for the mix.

Application

After mixing, wait 10 minutes, remix and then apply MICROCEM in 2 crossed hands with a distance of about 6-8 hours one from the other, using a flat brush.

If it is scheduled a future application of a plaster, do a fresh render with a cement mortar like MICROLAT. The slurry MICROCEM can't be applied on steaming walls or with running water. Stop eventual water infiltration with MICROBLOC.

Technical data:

• Microcem	White / Grey powder
• Specific weight fresh concrete	about 1,950 kg/m ³
• Packaging	25 Kg bag
• Average consumption for mm of thickness	1,5 – 1,6 Kg/m ²
• Water for mix	25-27%
• Resistance to bending after 28 days	3,5 N/mm ²
• Resistance to compression after 28 days	22 N/mm ²
• Life time of the mix	about 40 minutes
• Maximum inert diameter	0,6 mm
• Mixing time	2-3 minutes
• Maximum thickness	2 mm
• Usage temperature	+ 5° / + 35° C
• Storage	12 months if kept in a dry place in its original package

Mechanical resistances: the chemical resistances shown on the list above, were drawn from samples 4 x 4 x 16 cm, packed in the laboratory with the 26% of water and let aged at 20°C and 90% UR.

Please note: All the above data are referring to laboratory tests carried out with a constant humidity and temperature. They may change in function of the building sites temperature.

Please note:

- Prevent water leakage for the first 24 hours of application
- Do not apply on frozen supports or with the chance of freezing in the subsequent 24 hours
- Do not apply on heated supports, in full sun or in presence of a strong wind
- Do not add water to the already mixed product
- It is advisable to keep the surface humid for 2 days after application
- In case of an internal water of basins or tanks the filling up may be done only upon maturity of the waterproof MICROCEM white / grey, and anyway not before 3 weeks from the application
- The structure in concrete must be adapted to the water push.