

Osmo Rasocem

Osmotic cement based mortar

Product description

OSMO RASOCEM is an anti-shrinkage cement based product with quartz sand, organic and inorganic chemical additives. With the addition of water, a cementitious mortar is obtained that can be applied by brush in very thin layers. It makes the substrate waterproof, making use of the open capillary system with which, an osmotic type of absorption is created.

The special combination of additives and fine granulometry allows OSMO RASOCEM and its active principles to penetrate within the structure utilizing the water of the capillary system as vehicle. Inside the structure an insoluble crystalline sedimentation provokes the occlusion of capillaries thus preventing the passage of water.

Typical applications

The easy application and the high reliability of OSMO RASOCEM make it an outstanding product for the achievement of a rigid superficial waterproofing treatment, suitable for external and internal repairing of old structures or waterproofing of new structures.

The typical applications are:

- civil works: external surface of substrates, foundation walls, sewers, pools;
- industrial works: tanks, basins, channels, reservoirs;
- hydraulic works: dams, penstocks, piezometric towers;
- road works: bridges, viaducts, tunnels.

Packaging, storage, dosage, yield

- OSMO RASOCEM is supplied in bags of 25 kg;
- store bags in a dry and covered place. Once the bag is open, it is advisable to use the whole product, as it is sensitive to humidity, due to its cement content;
- store the sealed bags at a temperature between +5°C and +40°C;
- the layer of OSMO RASOCEM to be applied is dependent upon the waterproofing degree required by the structure:

Packaging table

Type of Exposure	Thickness applied mm	Yield (kg/m ²)
Ground humidity and rain	1	2
Stagnant water (max height : 2 cm)	2	4
Water pressure up to 5 meter height	3	6

Use recommendations

a) Surface preparation

Before applying the product, clean the surface carefully with a metallic brush, sandblasting or water jets under pressure until the substrate is firm and compact.

b) Saturation with water

Clean surface should be "flooded" on with water. Care should be taken to remove any water excess.

c) Mortar preparation

Mix OSMO RASOCEM with water until a doughy cement grout is achieved. Mixing may be carried out in a small concrete mixer or paddle stirrer mounted on a common container.

Best results may be achieved by pouring the product in the requested quantity of water.

Mixing ratio	
Application by	Water per 100 kg of Osmo Rasocem (litre)
brush	26
spatula	22

d) Mortar application

When the surface to be covered is large OSMO RASOCEM may be applied by spatula whereas in the case of minimum coating thickness brush may be used instead.

A two layer application is advisable. Care should be taken not to exceed 1 mm thickness for each layer within a short time (48 hours) or when the surface underneath has not yet hardened. Smoothing with float, if any, should be performed only after the coating setting has started.

Technical characteristics of mortar :

- *Minimum application temperature: +5°C*
- *Working life: 2 hours (+20°C)*
- *Specific weight (fresh mortar): 2.0 g/cc*



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e) Curing

After application, the treated surface should not be exposed to high temperatures or strong ventilation which may quickly dry the coating.

In such circumstances apply a curing compound to avoid water evaporation or provide for appropriate wetting.

f) Special applications

If there were cavities, irregular surfaces or cracks on the substrate apply an EXOCEM type mortar to make the surface even.

Properties

- Deep waterproofing due to the chemical-physical interaction of the product with the capillary system;
- superficial waterproofing due to the coating with the waterproofing cement grout;
- it may be easily and quickly applied by brush or spatula.

Not recommended for

- When it is necessary to apply very thick layers in a single coat;

Surface quality and finish

OSMO RASOCEM is an outstanding product used to waterproof surfaces, yet giving a highly decorative aspect.

OSMO RASOCEM is available also in a white version, called **OSMO RASOCEM BIANCO** : please consult the relevant technical data sheet.

Revision 01/2009. The present edition cancels and replaces all the previous ones. The information contained in the present technical data sheet is based on our knowledge and experience and should therefore not be taken as our guarantee. Neither shall we be responsible for the utilisation of the product since the conditions under which it is used are beyond our control

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