

Osmocem iTop

Osmotic plastic-deformable two-component waterproofing cement



A two-component osmotic cementitious waterproofing in water dispersion, being a modified polymer that is super adhesive and flexible, resistant to positive and negative thrusts. Application by trowel, brush or roller. Ideal for protective coatings and waterproofing of reinforced concrete and masonry works such as tanks, swimming pools, water pipes, cracked cement plasters or balconies. It is also used for repairs and protective coatings of structures offshore or exposed to sea salt. Suitable for contact with drinking water.

CUSTOMS CODE: 3824 5090

COMPONENTS: Two-components

APPEARANCE: Powder + Liquid

AVAILABLE COLORS: White / Gray

PACKAGING AND DIMENSIONS: Bag 25 kg [A] - Plastic can 8 kg [B] - Kit: 1 Bag 25 kg [A] + 1 Plastic can 8 kg [B]

OBTAINED CERTIFICATIONS AND REGULATIONS



FEATURES AND BENEFITS

Osmocem iTop is characterised by an extreme ease of application, being veritably fool-proof. It permits adherence to supports for mechanical adhesion and osmotic diffusion. It is also effective in conditions of negative hydrostatic thrust (counterthrust) and is applicable as a coating in rooftop gardens and planters due to its resistance to the mechanical action of roots.

FIELDS OF APPLICATION

Waterproofing treatments for underground structures and masonry, swimming pools, tubs, planters, rooftop gardens, ducts, tunnels, pits, bridges, tanks, basements, food containment areas and so on whereby sufficiently porous and absorbent, being free from any water-resistant and/or water-repellent surface treatment, be it chemical (siloxanes, epoxy, polyurethane, etcetera) or natural (waxing). Suitable for both positive and negative hydrostatic thrust conditions, it can also be used for waterproofing terraces and balconies.

ALLOWED SUPPORTS

Plasters - Concrete - Prefabricated concrete - Drywall - Fiber-cement - Bricks - Mixed walls (bricks and stones) - Stone walls - Floor screed - Rock walls

PREPARATION OF SUPPORTS

The application surfaces must be clean, free of dirt, crumbly and inconsistent parts, dust, water-repellent treatments in general, etc., slightly roughened with a suitable preparation method (degree of roughening $> 2\text{mm}$, or ≥ 3 on the ICRI Scale - International Concrete Repair Institute). Particularly dry supports should be slightly moistened with water. It is always advisable to prime the application support with approximately $100\text{-}150\text{ g/m}^2$ of COMPONENT B adhesive latex; in this way, with a simple and quick priming, at least three very effective operations are carried out: a) expulsion of the air from the surface porosity _ pore sealers (with drastic reduction of the well-known blisters that appear on elastic products with low thickness); b) decrease in the absorption of the support (to guarantee adequate maturation of the waterproof smoothing coat); c) increase in adhesion thanks to the deep penetration of the polymeric component. For applications on plasterboard, first apply a coat of Bond Plus as a primer. Do not apply on supports with water leaks or any form of moving water, which must be previously blocked and remedied to prevent the product from washing away during the hardening and setting phase.

MODE OF USE

Mix the powder (component A) with the hydrating solution (component B) using a drill at low-speed or other effective mechanical mixer, gradually adding the powder to the liquid. Continue mixing until reaching a homogeneous and lump-free mixture. After mixing, wait a few minutes then stir again before applying. To further improve the effects of the coating (for example, when waterproofing terraces and balconies), it is advisable to add the Armaglass 160 alkaline-resistant fibreglass reinforcing mesh between one layer and the next, for a consumption of around $3\text{-}4\text{ kg/m}^2$ as a guideline. Do not apply in the presence of direct insolation or when dealing with wet curing and protection. Do not apply to substrates with little to no porosity or those previously coated with water-repellent treatments generally, except whereby following proper roughening by means of bush hammering machines, sanders or equipment suitable for preparatory surface treatment or specific treatment with suitable polymer primers.

APPLICATION METHODS

Finishing trowel - Plastering machine - Brush - Paint roller - Spatula - Sprayer


TOOL CLEANING


Water

KEY FEATURES


 Highlighted product


 Min. recommended thickness: 1.5 mm

 Shelf-life: 12 months

 To be applied in two coats

 Maximum diameter of aggregate: 0.6 mm

 Pot-life: 50-70 min

 Temperature of use: $+5 / +35\text{ }^{\circ}\text{C}$



TECHNICAL SPECIFICATIONS

Compressive strength at 2 days **2.5 N/mm²**

Flexural strength at 2 days > **1.0 N/mm²**

Density **1600 g/l**

A:B

Mixing ratio of the components **3.12:1**

UNI EN 1062-3

Capillary absorption **0.027 kg·h^{0.5}/m²**

UNI EN 1062-3

Coefficient of permeability < **5 mm**

UNI EN ISO 7783-2

Permeability to water vapor **Sd 0.99 (class I)**

Thermal compatibility after cooling shocks - storm cycles **1.8 N/mm²**

Compressive strength after 28 days > **9.0 N/mm²**

Flexural strength after 28 days > **3.0 N/mm²**

UNI EN 1542

2.2 N/mm²

UNI EN 1062-11

Exposure to artificial weathering-2000 hours **no swelling. no cracking. no flakin**

UNI PdR 88:2020

Total recycled content \geq **4.0 %**

UNI EN 162-6

Permeability to CO₂ **Sd 93 m**

DIN 53504

Longitudinal elongation at break **15 %**

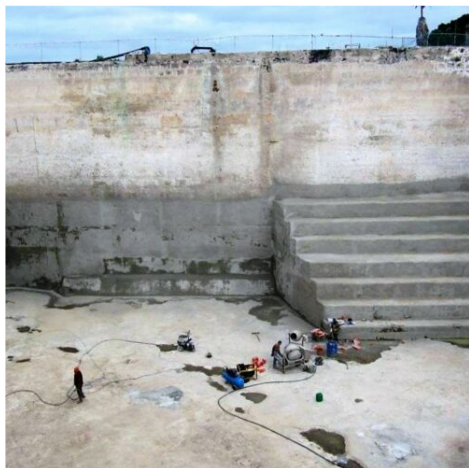
CONSUMPTION

Approximately 1.6 kg/m² of Osmocem iTop for each millimetre of thickness to be made.

STORAGE AND CONSERVATION

Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Protect from humidity.

PHOTO GALLERY



ADDITIONAL CONTENT



WARNINGS AND PRECAUTIONS

The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge. Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

Azichem Srl does not assume any liability arising from inadequate characteristics related to improper use of the product or connected to defects arising from factors or elements unrelated to the quality of the product, including improper storage. Those wishing to utilise the product are required to determine prior to use whether or not the same is suitable for the intended use, assuming all consequent responsibility.

The technical and characteristic details contained in this data sheet shall be updated periodically. For consultation in real time, please visit the website: www.azichem.com. The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

Please note that the user is required to read the latest Safety Data Sheet for this product, containing chemical-physical and toxicological data, risk phrases and other information regarding the safe transport, use and disposal of the product and its packaging. For consultation, please visit: www.azichem.com.

It is forbidden to dispose of the product and/or packaging in the environment.

