



ICC Premiscelati

ICC OSMOTIC

**OSMOTIC CEMENT MORTAR FOR
WATERPROOFING AND PROTECTION OF
MASONRY AND CONCRETE SURFACES.**



Description:

ICC OSMOTIC is a one-component osmotic waterproofing mortar for the protection of masonry and concrete surfaces from water. It provides high waterproofing in both positive and negative pressure (counterpressure).

ICC OSMOTIC is certified in accordance with **EN 1504-2** as a coating (**C**) for the protection of concrete surfaces by controlling moisture (**MC**) and increasing resistivity (**IR**).

Application fields:

ICC OSMOTIC is used for waterproofing damp areas in general, particularly:

- Tanks and reservoirs for drinking water
- External and internal basement walls
- Pools
- Elevator shafts
- Service tunnels
- Foundation walls
- Concrete irrigation channels

Preparation of substrates:

Before applying the product, it is necessary to eliminate any source of water ingress by sealing leaks and treating seeping surfaces with appropriate quick-setting products. The substrates must be continuous and perfectly clean; remove loose parts and wash away dirt, efflorescence, oil residues, and form release agents using pressure washing. Non-homogeneous concrete areas and any cracks should be treated and/or repaired with shrinkage-compensating cementitious mortar. Before application, the substrates should be thoroughly wetted with water until refusal, then remove any surface water stagnation by drying with a sponge or using compressed air jets.

Preparation of mixture:

ICC OSMOTIC is mixed using a low-speed mechanical stirrer with a whisk, with approximately 22-24% clean water (5.5 - 6 liters per 25 kg). In a clean bucket containing the necessary water, pour the powder and mix thoroughly until a smooth, homogeneous, and lump-free mixture is obtained. Wait for about 3 minutes, briefly remix, and start the application. The mortar obtained can be used for approximately 1 hour.

Application:

ICC OSMOTIC can be applied with a brush, trowel, or spray. Hand application requires 2-3 successive coats to be applied in opposite directions. Even for trowel applications, it is recommended to still apply the first coat with a brush. It is recommended to penetrate the product very well into the substrate, waiting between layers for the previous one to be sufficiently dry, generally 4-6 hours depending on the temperature and absorbency of the substrate. To ensure perfect adhesion between layers, it is advisable not to exceed 24 hours. For very large surfaces, spray application with a plastering machine is recommended: the product must be pre-mixed according to the instructions above and then fed into the plastering machine and applied; in this case, usually 2 coats are sufficient.

Consumption:

Approximately 1.2-1.5 kg/m² for every mm of thickness.

TECHNICAL DATA

Appearance:	Grey powder
Maximum grain size:	0,4 mm
Bulk density (powder):	1,3 gr/cm ³ approx.
Solid residue:	100%
Mixing water:	22÷24% (5,5 ÷ 6 lt per 25 kg bag)
Mixture bulk density:	approx. 1800 kg/m ³
Working time:	approx. 1 h*
Applicable thickness per single coat:	1 ÷ 1,5 mm
Maximum total applicable thickness:	4 mm
Application of the second coat:	after 5 hours and not exceeding 24 h*
Put into operation:	after at least 7 days*
Allowed application temperatures:	from +5°C to +35 °C

FINAL PERFORMANCE

Flexural strength at 28 days (EN 12190):	≥ 6 N/mm ²
Compressive strength at 28 days (EN 12190):	≥ 22 N/mm ²
Adhesion to the substrate:	≥ 2 N/mm ²
Water impermeability (EN 1062-3):	< 0,1 kg/m ² · h ^{0,5}
Water vapor permeability:	Class I
Operating temperatures:	-30° ÷ +90°C
Resistance to aging:	Excellent

*Data expressed at (20±2)°C and (65±5)% relative humidity. Lower temperatures extend maturation and hardening times.

Cleaning of equipment:

Wash hands and equipment with plenty of clean water before the product sets; afterwards, mechanical means should be used.

Hygiene and safety:

EUH 208 Contains cement. May cause an allergic reaction. The Portland cement contained in the product can cause skin irritation and severe eye damage. Do not breathe in dust, ventilate the area during mixing, and protect yourself adequately with gloves, protective clothing, and goggles. Before use, read the instructions on the packaging carefully and consult the Safety Data Sheet.

Packaging:

ICC OSMOTIC is supplied in 25 kg bags on wooden pallets weighing 1500 kg.

Storage:

Store the product in intact original packaging in cool and dry areas. Do not disperse the powders. Product compliant with DM 10/05/2004. Cr VI content less than 2 ppm. The properly stored product must be used within 6 months from the packaging date stamped on the bag.

Capitolato specifications:

Waterproofing treatment for concrete surfaces not subject to structural movements, through the application of osmotic cementitious mortar, waterproof, ready to use (such as **ICC OSMOTIC** by **Industria Calce Casertana Srl**). The product must be certified in accordance with EN 1504-2 as a coating (C), according to MC and IR principles, for the protection of the concrete surface. The application must be done in multiple layers, with cross-hand application, on a clean and water-saturated substrate.

Warnings:

Always follow the instructions dictated by current regulations. Do not add cement, sand, or other foreign materials and respect the recommended mixing ratios. Do not apply under direct sunlight, on frozen substrates, or at ambient temperatures below +5°C or above 35°C. Do not apply directly on bitumen or bituminous membranes. Do not use on panels (plasterboard, fiber cement, wood chipboard, etc.) or surfaces with plastic or painted coatings. Do not use on surfaces subject to dynamic stresses or structural movements. Protect the applied mortar for at least 5 days from rain or washouts, frost, or rapid drying due to wind or direct sunlight. The product is not suitable for solving condensation problems.

PRODUCT FOR EXCLUSIVE PROFESSIONAL USE

All data and information provided on this technical data sheet, although resulting from laboratory tests performed and our direct application experiences, due to the infinite variables related to site conditions, should be considered purely indicative in any case. Therefore, before applying the product, the user is required to determine if it is suitable for the intended use, in the specific hygrothermal and application conditions expected at the time of use, and in any case, they assume full responsibility. We are not responsible for any damage to people or property resulting from improper use of the product.