



ICC Premiscelati

ELASTOFLEX MONO

**SINGLE-COMPONENT FIBER-REINFORCED
WATERPROOFING AND ANTI-CARBONATION
MORTAR WITH HIGH ELASTICITY**



Description:

ELASTOFLEX MONO is a liquid elastic waterproofing mortar, designed for the waterproofing of terraces, balconies, swimming pools, and, in general, for containing water under positive pressure.

According to the EN 14891 standard, **ELASTOFLEX MONO** is a "Liquid applied waterproofing membrane for use under ceramic tiling for the installation of floors and wall coverings bonded with C2 adhesives according to EN 12004".

By mixing **ELASTOFLEX MONO** with water, a highly fluid mortar is obtained, which can be easily applied with an American trowel, brush, or spray on cementitious screeds and renders, reinforced concrete, cast or precast concrete, existing ceramic, marble or wooden floors, gypsum or wooden panels, ferrous surfaces, etc.

Application fields:

- Waterproofing of domestic environments such as bathrooms, showers, kitchens, etc.
- Waterproofing of balconies and terraces, even without removing the old underlying flooring (provided they are clean and well anchored).
- Waterproofing of swimming pools, water containment tanks, basins, etc.
- Protection of concrete (especially when the cover thickness is inadequate) from carbonation and salt attacks caused, for example, by saltwater (sulfate attacks).
- Protection of surfaces, castings, and structures against underground or buried conditions.
- Waterproofing under positive pressure in general.
- Smoothing of cracked renders or concretes.

Preparazione dei sottofondi:

Check for any rising dampness from the screed or walls; only after blocking any rising dampness and waiting for the substrates to dry (humidity below 4%), can the application proceed.

The substrates must be cured: under normal conditions, they require one week of curing for every centimeter of substrate thickness. For structural concrete, at least three months of curing are required, while for rapid screeds, follow the manufacturer's instructions.

Any cracks in the screeds or structural cracks must be properly sealed with a two-component pourable epoxy sealant. Slightly "dusty" surfaces must be pre-treated with the appropriate **ICC GRIP** consolidating primer.

Especially in hot weather, absorbent or hot surfaces should be moistened with clean water; this allows for better hydration of the cement and longer working times. In case of abnormal absorption, it is advisable to treat the substrate with a coat of **ICC GRIP** primer. Ceramic surfaces must be well bonded to the substrate, clean, and degreased. Any traces of release agents must be removed.

In waterproofing applications (especially containment tanks and swimming pools), corners (wall-floor and wall-wall) and expansion joints must be covered with a specific synthetic waterproof tape; before starting the application operations, the tape must be glued to the substrate using the same **ELASTOFLEX MONO**. The same procedure must also be followed in the presence of drains, drains, technical connections, etc.

Preparation of mortar:

ELASTOFLEX MONO is mixed using a low-speed mixer equipped with a whisk with approximately 4.5 ÷ 5 liters of clean water per 20 kg bag of product.

Pour about 2/3 of the necessary water into the bucket, add the powder and mix until a creamy, homogeneous, and lump-free mixture is obtained; then add the remaining water and complete the mixing.

Allow the mixture to mature for about 5 minutes. Briefly remix the mortar and start the application. The obtained mortar can be used for approximately 2 hours*.

Application:

Spread the obtained mortar on the substrate using a smooth steel trowel such as an "American" trowel or with a brush or spray, depending on the size of the surface to be treated.

Press the product onto the substrate to improve adhesion, applying thicknesses of 1.5 or a maximum of 2 mm per coat. Apply and then "embed" with the steel trowel a specific alkali-resistant fiberglass mesh (4 x 4 mm mesh) overlapping the adjacent sheets by about 5 cm.

After waiting for approximately 3 hours* and once hardened, apply a second coat of **ELASTOFLEX MONO**, trowel and smooth again with the American trowel.

Consumption:

Approximately 1.1 kg/m² for every millimeter of thickness applied.

TECHNICAL DATA

Consistency	Grey powder
Maximum grain size	< 0,4 mm
Bulk density (powder)	1,1 gr/cm ³ approx.
Bulk density (fresh mortar)	1750 kg/m ³ approx.
Mixing water per 25 kg bag	4,5 – 5 lt
Working time	approx. 2 hours*
Allowed application temperatures	from +5°C to +30°C
Thickness applicable for a single coat	1 ÷ 2 mm
Minimum total thickness:	3 mm
Maximum total thickness applicable:	4 mm
Second coat can be applied	after 3 ÷ 24 h* from the first
Wait for ceramic installation	after approx. 7 days*
Wait for filling tanks	after at least 21 days*

FINAL PERFORMANCE

Initial tensile adhesion	≥ 1 N/mm ²
Tensile adhesion after thermal aging	≥ 1 N/mm ²
Tensile adhesion after contact with water	≥ 0,5 N/mm ²
Tensile adhesion after contact with alkaline water	≥ 0,5 N/mm ²
Tensile adhesion after freeze-thaw cycles	≥ 0,5 N/mm ²
Tensile adhesion after contact with chlorinated water	≥ 0,5 N/mm ²
Crack bridging capacity	≥ 1 mm
Water impermeability	No penetration after 7 days at 1,5 bar

*Data expressed at (23±2)°C and (50±5)% relative humidity. Lower temperatures lengthen maturation and hardening times.

Cleaning of Equipment:

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

Hygiene and safety:

EUH 208 Contains cement. May cause an allergic reaction. The Portland cement contained in the product can cause skin irritation and serious 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:

ELASTOFLEX MONO is supplied in 20 kg bags on wooden pallets weighing 1200 kg each.

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. Content of Cr VI is less than 2 ppm. The properly stored product should be used within 6 months from the packaging date stamped on the bag.

Capitolato specifications:

Supply and installation of elastic waterproofing mortar, fiber-reinforced, cement-based, modified with synthetic polymers such as **ELASTOFLEX MONO** by **ICC INDUSTRIA CALCE CASERTANA Srl**. The product must be applied with a trowel, brush, or spray on sound and properly prepared surfaces (see Technical Data Sheet), reinforced with alkali-resistant fiberglass mesh, and subsequently tiled.

Warnings:

Do not add cement, lime, sand, or water. Do not apply under direct sunlight. Do not apply on frozen substrates or at ambient temperatures below +5°C or above +30°C. Protect the applied mortar from rain or washouts and from freezing for at least 2 days. Protect from rapid drying due to wind or direct sunlight by covering with plastic sheets. Do not apply on lightweight substrates or on immature and unseasoned substrates. Do not apply directly on bitumen or bituminous membranes. Respect the recommended thicknesses. In the summer season, do not leave the bags exposed to sunlight. In swimming pools, **ELASTOFLEX MONO** cannot be left exposed.

PRODUCT FOR EXCLUSIVE PROFESSIONAL USE

All data and information provided in this technical datasheet, although resulting from laboratory tests and our direct application experiences, are purely indicative due to the infinite variables related to site conditions. Therefore, before applying the product, the user must determine if it is suitable for their intended use, considering the specific hygrothermal and application conditions at the time of use, and assume full responsibility. We do not accept liability for damage to persons or property resulting from improper use of the product.