



ICC Premiscelati

ELASTOFLEX BICOMPONENTE

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



Description:

ELASTOFLEX BICOMPONENTE is a liquid elastic waterproofing product used for waterproofing terraces, balconies, pools, and other areas with positive or slight negative water pressure. According to EN 14891, **ELASTOFLEX BICOMPONENTE** is a "Liquid-applied waterproofing product to be used under ceramic tiles for the installation of floors and walls bonded with C2 adhesives according to EN 12004." By mixing **ELASTOFLEX BICOMPONENTE** powder with the associated liquid additive (Component B), a very smooth and easily applicable mortar is obtained, which can be applied with an American trowel, brush, or spray on cement screeds, cementitious renders, reinforced concrete, cast or prefabricated concrete, existing ceramic, marble or wooden flooring, 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 underlying old flooring (provided it is clean and well anchored).
- Waterproofing of 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, structures, and artifacts against backfill or underground exposure.
- Waterproofing for positive pressure in general.
- Smoothing of cracked renders or concrete.

Preparation of substrates:

Check that there is no rising dampness from the screed or walls; only after blocking any rising dampness and waiting for the substrates to dry (moisture content below 4%), can you proceed with the application.

The substrates must be seasoned: under normal conditions, they require one week of maturation for each centimeter of substrate thickness. For structural concrete, at least three months of maturation 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 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 adhered to the substrate, clean, and degreased. Any traces of release agents must be removed.

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

Preparation of mortar:

ELASTOFLEX BICOMPONENTE is prepared using a low-speed mixer equipped with a whisk by mixing 3 parts of Component A powder with 1 part of Component B liquid (1 bag of 25 kg of Component A with an 8.33 kg container of Component B).

Pour about 2/3 of the liquid additive (Component B) into the bucket, add the powder (Component A), and mix, being careful not to incorporate air bubbles, until a creamy, homogeneous, and lump-free mixture is obtained; at this point, add the missing liquid additive and complete the mixing. Let the mixture mature for about 5 minutes. Briefly remix the mortar and start the application. The obtained mortar can be used for about 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 single coat.

Spread and then "embed" with the steel trowel a special alkali-resistant fiberglass mesh (4 x 4 mm mesh), overlapping adjacent sheets by about 5 cm. After waiting for about 3 hours* and once hardened, apply a second coat of **ELASTOFLEX BICOMPONENT**, trowel and smooth it with the American trowel.

Consumption:

Approximately 1.7 kg/m² for each millimeter of thickness applied.

TECHNICAL DATA

Consistency	Grey powder
Maximum particle size	< 0,5 mm
Bulk density (powder)	1,35 gr/cm ³ approx.
Bulk density (fresh mortar)	1750 kg/m ³ approx.
Mixing ratio	Component A : Component B = 3:1
Working time	approx. 2 hours*
Allowed application temperatures	from +5°C to +30°C
Applicable thickness per single coat	1,5 ÷ 2 mm
Minimum total thickness	3 mm
Maximum applicable total thickness	4 mm
Second coat application	after 3 ÷ 24 h* from the first
Waiting time for tile installation	after approx. 7 days*
Waiting time 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	≥ 1 N/mm ²
Tensile adhesion after contact with alkaline water	≥ 1 N/mm ²
Tensile adhesion after freeze-thaw cycles:	≥ 1 N/mm ²
Tensile adhesion after contact with chlorinated water	≥ 1 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 extend maturation and hardening times.

Equipment cleaning:

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

Hygiene and safety:

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

Packaging:

Component A (powder) is supplied in 25 kg bags each.

Component B (liquid) is supplied in 8.33 kg plastic containers.

Storage:

Store Component A (powder 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 below 2 ppm. Component A, when properly stored, must be used within 6 months from the packaging date stamped on the bag.

Component B is composed of a synthetic latex in aqueous dispersion and therefore is sensitive to freezing. Store Component B away from freezing, sunlight, and heat sources. When properly stored, Component B has a shelf life of at least 12 months.

Capitolato specification:

Supply and installation of a two-component, fiber-reinforced, cement-based elastic waterproofing mortar, modified with synthetic resin in aqueous dispersion such as **ELASTOFLEX BICOMPONENT** by **ICC INDUSTRIA CALCE CASERTANA Srl**. The product should 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 then 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 freezing for at least 48 hours. Protect from rapid drying due to wind or direct sunlight using 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 bags and containers exposed to the sun. In swimming pools, **ELASTOFLEX BICOMPONENTE** cannot be left exposed.

PRODUCT FOR PROFESSIONAL USE ONLY

All data and information provided in this technical data sheet, although resulting from laboratory tests performed and our direct application experiences, due to the infinite variables related to site conditions, are to 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 assumes full responsibility. We are not liable for any damage to people or property resulting from improper use of the product.