

BEO ISOL UNIVERSAL TECHNICAL SHEET



PRODUCT DESCRIPTION

BEO ISOL UNIVERSAL multi-functional, one-component, environmentally friendly waterproofing coating of medium viscosity, specially designed for moisture protection of any building construction. It can be used on horizontal and vertical surfaces. The waterproofing coating created by BEO ISOL does not lose its properties for more than 20 years under the influence of sunlight, acid rain and harmful chemicals contained in polluted air in industrial areas. After the application of the material, a seamless rubber membrane is formed with a good sticking to any surface.

BEO ISOL UNIVERSAL is based on bitumen emulsion and represents a combination of elastomer and acrylic polymers for the production of high-strength, fast-drying membranes. The material is water-based, solvent-free, non-toxic and environmentally friendly.

BEO ISOL UNIVERSAL is a ready-to-use liquid waterproofing coating that is applied in liquid form then drying forms a flexible elastic membrane that can withstand loads and vibrations without cracking or peeling. The coating has very good adhesion to all substrates. At a temperature of +25°C and 50% relative humidity, BEO ISOL UNIVERSAL completely dry in 24 hours. Drying time increases with fall temperature and increasing humidity. The operating temperature range of fully dried material is -45°C to +80°C.

SCOPE OF APPLICATION

BEO ISOL UNIVERSAL is foreseen:

- for waterproofing all building constructions, such as foundations, roofs, bricks, silicate blocks, wooden structures, OSB boards, sandwich panels, etc.;
- for the repair of all roof coverings, both horizontal and vertical surfaces;
- for outdoor and indoor waterproofing - toilets, bathrooms, showers, swimming pools, balconies, terraces, etc.
- for sealing the points of attachment of all air ducts on the roof, technological equipment, superstructure and drainage funnels, as well as for sealing the joints and joints of other bright lanterns;
- it is used as a sealant in the production of roof and wall sandwich panels;
- used for waterproofing of complex geometric constructions.

After complete drying, the treated surface can be the basis for gluing ceramic and other types of finishing tiles using traditional tile adhesives.

STORAGE

The product is stored in its original, unopened and undamaged package, in dry conditions. The temperature of the air during storage must be between +5 °C and +30 °C

EXPIRY DATE

12 months after opening original packaging

PACKAGING

7 kg and 15 kg plastic buckets

INFORMATION ON THE APPLICATION OF BEO ISOL UNIVERSAL

Air temperature	+5 °C min. / +35 °C max.
Relative air humidity	80 % r.h. max.
Substrate temperature	+5 °C min. / +30 °C max
Substrate humidity	The substrate must be free of stagnant water and visibly dry (> 7%)
Wait time before applying second layer	Depending on the layer thickness and weather conditions ~24 hours at a temperature of +20 °C
Dry to touch	Depending on the layer thickness and weather conditions ~6 hours at a temperature of +20 °C

Drying time Total drying / hardening time: ~3 days at a temperature of +20 °C. After complete hardening, the product can be exposed to temporary pedestrian traffic. It is shown approximately time and will be affected by layer thickness and changes in weather conditions

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TECHNICAL CHARACTERISTICS OF THE COATING (TEST REPORT NO. UIV-183/23)

Nominal tensile strength, MPa	0,43
Tensile elongation, %	980
Adhesion strength with the base, MPa	>0,4
Water absorption by weight within 24 hours, %	0,1
Persistence in the cold	Does not crack when bending -20°C
Stability in heat	No blisters, slips or leaks identified on +90°C

RESISTANCE TO AGGRESSIVE MEDIA

Acidity

Nominal tensile strength, MPa	0,58
Reduction in nominal tensile strength, %	NO
Tensile elongation, %	986
Reduction in tensile elongation, %	NO

Alkalinity

Nominal tensile strength, MPa	0,45
Reduction in nominal tensile strength, %	NO
Tensile elongation, %	1000
Reduction in tensile elongation, %	NO

PHYSICAL CHARACTERISTICS

Appearance	Homogeneous viscous mastic, black color
pH value	10-11
Relative viscosity by viscometer with nozzle diameter 8 mm, s	126
Mass fraction of non-volatile substances (dry residue)	>60%

INSTRUCTIONS FOR USE

- Clean and dry the surface on which the previous coating is applied
- Before application, mix the product to obtain a uniform texture, do not dilute using solvent or water
- First layer (the procedure applies to all substrates)
 1. Apply the product evenly over the surface using a brush or a short-haired roller, necessary quantity depending on the type of substrate up to <2kg per m².
 2. Go over the surface in two directions at right angles
 3. The coating must be continuous, without pores and the required thickness of the final layer
 4. Protect the product from heavy rain or showers until it dries
- In the case of large cracks on the treated surface, use tape-mesh.
- Depending on the thickness of the layer and the weather conditions, apply a second layer after ~24 hours (repeat the application procedure as for the first layer)
- The time of full polymerization of the product, depending on weather conditions, is ~24h to ~72h after application

CLEANING OF TOOLS / EQUIPMENT

Clean all tools and material application equipment with water immediately after use.

IMPORTANT NOTES

- All technical data listed are based on laboratory tests.
- BEO ISOL UNIVERSAL do not apply when it rains
- The substrate must be adequately prepared (no water, no other contaminants such as oil, dirt, grease, the substrate must be CLEAN)
- For large tears - cracks, it is recommended to use a mesh