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since 1962

WATERPROOFING ACCESSORIES

ESHAHYDROBENT

Expanding Bentonite Waterstop



GENERAL DESCRIPTION

ESHAHYDROBENT is expanding waterstop, based on bentonite and butyl rubber, intended for prevention of water filtration through technological joints in concrete or reinforced concrete constructions, by expansion and sealing of the joints.

USES

ESHAHYDROBENT is intended for:

Avoiding filtration of liquids through construction joints in constructive concrete and reinforced concrete.

- Sealing openings in structures around pipelines
- e.g. water supply and sewerage pipelines.
- Sealing joints between precast concrete elements e.g. concrete pipes, concrete channels, culverts and manholes, etc.
- Sealing tunnels segments.

To ensure efficient functioning of the strip, it must have a dense, continuous contact to the surrounding concrete over its entire surface.

ESHAHYDROBENT is not intended for use in open joints, such as concrete pavements. **ESHAHYDROBENT** is made of non toxic materials, which makes it suitable for use in storage and transportation both waste water and drinking water.

ESHAHYDROBENT is not recommended for saline water.

ADVANTAGES

- Active protection against filtration and leakage by increasing of the volume of the strip over 400% in comparison its original volume.
- High ability for deformation and compensating deformations in the constructions.
- Graduated swelling and prevention of the construction from occurrence of dangerous stresses.

FEATURES / ADVANTAGES

- ▶ Prevention of water filtration through construction joints.
- ▶ Easy installation.
- ▶ Ideal for sealing expansion joints on roofs, parking lots, toll stations
- ▶ High durability.

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- Durability - retains its original shape after repeated swelling and shrinking.
- Good chemical resistance.
- Easy installation.
- Works in a wide temperature range: temperature of the base from -15°C to +50°C
- Economic efficiency compared to traditional PVC Waterstops
- Application on moist surfaces.
- Application at new and existing structures.
- Reliability, cannot be expelled or washed out from the construction joint by action of hydrostatic pressure, unlike ordinary bentonite.
- Environment friendly – based on non toxic products

APPLICATION METHOD

ESHAHYDROBENT use is simple, fast and safe, with no connections and welds (welding), as in traditional PVC waterstops. To ensure the efficient functioning of the waterstop strip **ESHAHYDROBENT**, it is necessary to comply with certain rules of technology – substrate preparation, attachment, ensuring a minimum concrete cover, splice. etc. Ensure that concrete covering between joint edge and waterstop must be at least 80 mm.

Substrate Preparation

Places where **ESHAHYDROBENT** will be applied must be dry, smooth and cleaned of dust, stains, oils and other contaminants. Irregularities greater than 5mm are removed by mechanical means. In the presence of voids and caverns, they are filled with non shrink cement – sand mortar or other suitable material

Application of the product

After substrate preparation waterstop must be fixed by appropriate adhesive or steel nails, placed in approximately 30 cm (if needed). The strip should fit tightly to the concrete surface for its entire length. This way design position of **ESHAHYDROBENT** will be maintained during the casting of the concrete mix. **ESHAHYDROBENT** has to be applied in the middle of the concrete section. Usually, installation of the strip takes place in parallel with the shuttering. The splice longwise of the strip is achieved by butt joint or overlapping about 5 cm, taking care to fixing against displacement.

PACKAGING

ESHAHYDROBENT is packed in boxes of 30m (6 rolls of 5 m). Pallets of 900 l.m.

SHELF LIFE

2 years from the date of manufacture, if the conditions of storage are kept. In practice, protected from moisture **HYDROBENT** can be stored for an unlimited period of time.

NORMS/CERTIFICATION

Conforms with: EN 14188-2 (TYPE M-sl-D)
& FS-S-SS-200D.

For all available certificates and certifications please contact Esha Sales Department

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STORAGE

ESHAHYDROBENT should be stored in dry & ventilated rooms, such as boxes are stacked on wooden pallets. Packages should be protected from moisture and mechanical damage

PRECAUTIONS

ESHAHYDROBENT **bentonite waterstop** should be protected from damages and/or water absorption before and/or during the application to avoid **effectiveness** reduction.

Emergency phone: 112

For professional use only.

Today, Esha is the No. 1 producer of bituminous waterproofing membranes in Greece, while also offering more than 500 codes of specialized products (emulsions and solutions for surface protection and waterproofing, joint sealing materials, acrylic, epoxy, polyurethane, polysulfide materials, modified bituminous for road construction (elastomers, plastomers, with recycled tires), asphalt emulsions for road construction, bituminous bridge waterproofing materials, polyurethane thermal insulation boards, etc.).



See the products
and their applications
on our new website
www.esha.gr

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SPECIFICATIONS

Properties (Mix A+B)		Nominal Value	Standard
Color		Black	Visual
Density	g/cm ²	1,5 ± 0,1	ISO 2728
Dimensions	mm	19/25 - 15/20 - 10/20	ISO 4648
Elongation at break	%	45	ISO 37
Swelling (in water)	%	≥ 400	ASTM D 545
Water absorption	%	≥ 150	ASTM D 545
Resistance In Alkaline Medium	---	Resistant	CRD C 572
Flexibility at low T		No cracking during bending up to 180° at 0°C	EN 12814-1 Annex A

Tolerances in the nominal values are in accordance with respective standards. Producer reserves the right to modify the properties of his products.

The information contained in this leaflet is, to the best of our knowledge, true and reliable and is supported by the present state of our knowledge. According to the care taken and the method of application, upon which we have no influence, the values are subject to divergence. Therefore for best results, prior to use, an application test should be made by the user under his own processing conditions.

We guarantee our products qualities and performance up to the moment of delivery to the client. We do not have any control over construction process using ESHAHYDROBENT. This sheet is based on our knowledge and our best practices. Our technical team is always available for consultation and advice.

Directions given on or in the packages or containers will always prevail.