

## TECHNICAL SHEET 20.01.02-EN



# HYDROSOL Elastik

## Elastic watertight compound

### 1. Description, Application

HYDROSOL Elastik is an industrially prepared compound intended for the preparation of elastic waterproofing compound for watertight protection of vertical and horizontal surfaces of water reservoirs, elements of sewage systems and similar facilities, for watertight protection of surfaces in bathrooms - where the interior walls of dry prefabricated buildings are usually made of gypsum cardboards, on balconies, terraces, in swimming pools prior to the installation of ceramic tiles, as well as for the protection of parts of buildings built into the ground – tunnels, culverts, supporting and pillar walls, concrete fences and similar against intrusion of soil damp and water. It complies with requirements for buildings intended for extraction, storage, and preparation of drinking water (Article 33 of the Slovenian Rules on drinking water). As far as monolithic concrete walls are concerned, it assures quality watertight protection for positive and negative water pressure (insulation coat can be on either side of the wall). However, in the case of walls made of concrete or brick boards, it only assures quality watertight protection for the positive water pressure (insulation coat on the “water side” of the wall applied on at least 10 mm thick cement render finish). HYDROSOL Elastik also has a low radon permeability; therefore, it is also useful as an anti-radon protection of buildings. The permeability coefficient for radon (D) was verified according to method K124 / 02/95 at the University of Prague - "CZECH TECHNICAL UNIVERSITY IN PRAGUE – Faculty of Civil Engineering".

### 2. Technical data

Packaging	18 kg
Density (ready-to-use compound) (T=20°C, RH=65%)	~1.3 kg/dm <sup>3</sup>
Open time (ready-to-use mortar compound)	~1,5 h
Maximum Total Thickness	~5 mm
Addition of water	~32 %
Average consumption	~1.5 kg/m <sup>2</sup> /mm
Initial tensile adhesion strength (EN 14891)	1,5 N/mm <sup>2</sup>
Tensile adhesion strength after water contact (EN 14891)	0,7 N/mm <sup>2</sup>

Tensile adhesion strength after heat ageing (EN 14891)	1,6 N/mm <sup>2</sup>
Tensile adhesion strength after freeze-thaw cycles (EN 14891)	0,8 N/mm <sup>2</sup>
Tensile adhesion strength after contact with lime water (EN 14891)	0,9 N/mm <sup>2</sup>
Tensile adhesion strength after contact with chlorinated water (EN 14891)	0,6 N/mm <sup>2</sup>
Resistance to positive water pressure (EN 14891)	No water penetration at coat thickness of 3 mm
Resistance to negative water pressure (EN 14891)	No water penetration at coat thickness of 3 mm

### 3. Installation Conditions

The temperature of the air and the wall surface should be between +5 °C and +30 °C and the relative air humidity should be below 80 %. Protect façade surfaces from sun, wind and rainfall using protective scaffold nettings; however, do not conduct any work in rain, fog, or strong wind ( $\geq 30$  km/h) despite such protection. In conditions of quick drying, treat the processed surfaces with moistening,

### 4. Surface Preparation

Substrate should be solid and clean – without dust and other non-adhered or badly-adhered particles, remains of panelling oils and other filth. Suitable substrates include all at least a month-old fine coarse concrete substrates and also at least a month old fine cement and solid – i.e. heavily reinforced with cement - lime-cement render finishes. Suitably roughen the substrates that are too smooth (shot blasting, brushing, rough polishing). The substrate may be moist, but not soaking. The application of watertight coats may begin only after the subsiding processes of buildings have finished since excess deformations of the substrate, movements, cracks and the similar might be a source of irreparable damage.

### 5. Preparation of Compound for Application

Pour the content of a bag into a suitable quantity of water (for the application with a brush: 330 to 380 ml/kg (33% - 38%) of dry compound; for the application with a masonry smoothing trowel: 270 to 300 ml/kg (27% - 30%) of dry compound). Stir well with an electric mixer to obtain a homogenous compound without any lumps. Wait for 10 minutes for the compound to swell. Then stir it well again. If necessary, add little water.

In normal conditions ( $T = +20$  °C, relative air humidity = 65 %), the prepared mortar compound can be used for 1.5 hours.

### 6. Application of Compound

Apply the mortar compound in three coats. Always apply the first coat with a masonry brush. Apply the second and the third coats with a stainless-steel masonry smoothing trowel, but they can also be applied with a masonry brush. The second and third coat are applied to the dry bottom coat, the drying time in normal conditions ( $T = +20$  °C, rel. air hum. = 65 %) is 12 to 24 hours. Apply the compound into each following coat “square-on” the previous coat. The compound prepared with more water can be poured on horizontal surfaces and spread evenly over the surface with a brush or trowel. Third - the levelling coat should be no more than 1 mm thick, and the total thickness of the coatings should not exceed 5 mm. Larger, especially external surfaces are reinforced with vinyl-covered glass fibre mesh (weight/grammage: at least 160 g / m<sup>2</sup>; windows: about 4 mm x 4 mm), which is immersed in the second coat. Special elastic sealing cords and collars are installed in the joints of vertical and horizontal surfaces, in pipe and other breaches, which are also imprinted into the second coat of waterproofing compound.

Surfaces laden with foot traffic are suitably protected against wear and tear and mechanical damages with suitable tile lining which is laid directly onto the waterproofing coat (always use elastic adhesives, e.g. AKRINOL Elastic and AKRINOL Flex).

In normal conditions ( $T = +20$  °C, relative air humidity = 65 %), resistance of freshly processed surfaces to damage caused by precipitation (washing away of the application) is achieved in 24 hours at the latest.

Thoroughly clean the tools with water immediately after use.

## 7. Storage, Transportation Conditions and Durability

During transportation, protect the product against moistening. Store in dry and airy places!

Shelf life when stored in an originally sealed and undamaged packaging: at least 12 months.

## 8. Other Information

Technical instructions contained in this brochure are provided based on JUB's experience and are given as a guideline to achieve the optimum results. JUB cannot accept any responsibility for damage caused by incorrect selection of a product, incorrect use or unprofessional work.

Safety measures: Follow the instructions on the safety data sheet of the product.

This technical sheet supplements and replaces all preceding editions. JUB reserves the right to change and supplement data in the future.

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