## **BITUMINOUS EMULSIONS**





# BITUMINOUS ELASTIC TWO-COMPONENT WATERPROOFING PASTE

### **GENERAL DESCRIPTION**

**ESHAFLEX 2K-EL** is an elastic bituminous two-component paste for the waterproofing of construction concrete elements.

**ESHAFLEX 2K-EL** consists of a liquid component (A) which is an elastic bituminous emulsion based on purified bitumen reinforced with synthetic latex resins and additives and a second component (B) based on hydraulically setting special cement powder reinforced with special cellulose fibers.

#### **ESHAFLEX 2K-EL** is free from solvents and asbestos.

Upon curing, **ESHAFLEX 2K-EL** produces a seamless and joint-free membrane, which is watertight, flexible and slightly elastic, thereby making the surface absolutely impervious to water.

#### **TYPICAL APPLICATION**

**ESHAFLEX 2K-EL** is suitable for permanent, flexible and reliable waterproofing of vertical and horizontal concrete surfaces. It provides excellent waterproofing properties against pressurized and non-pressurized water, moisture etc.

**ESHAFLEX 2K-EL** is a universal waterproofing system having a diversified range of application, such as:

- Foundations and basements, foundations slabs
- Basement garages, cellar rooms
- Underground structures
- Sewage treatment plants
- Aerated concrete, plaster and screeds
- For bonding of insulation boards (polystyrene, polyurethane) on waterproofed surfaces

### **APPLICATION METHOD**

#### **SURFACE PREPARATION**

Surfaces should be regular, free form oil, dust, loose and foreign matter. The substrate to be waterproofed with **ESHAFLEX 2K-EL** must be primed prior to applying the waterproofing layer. **ESHAFLEX 2K-EL** A-component, diluted 10:1 with water is used as primer and is applied by brush.

#### **APPLICATION**

**ESHAFLEX 2K-EL** is supplied in two component system consisting of a liquid component (A) and a powder component (B). The mix ratio is 1:1 by weight (liquid: powder). The powder component (B) is to be added slowly to the liquid component (A) -**not vice versa**— and mixed with an electrical stirrer with stirring paddle until it becomes homogenous, lump-free, paste—like compound. The final paste is applied by a smoothening trowel. One or two layers may be applied depending on requirements (see consumption). Reinforcing open mesh massonry glass mat is recomended between concequtive layers.

### **CONSUMPTION**

The consumption depends on the requirements according to the following cases, as described below:

#### 1. Situation - Soil moisture

After the preparation and the priming of the surface, a single layer of **ESHAFLEX 2K-EL** is applied by trowel with a consumption of  $3 \text{ kg/m}^2$ .

#### 2. Situation - Non-pressurized water

After the preparation and the priming of the surface, two layers of **ESHAFLEX 2K-EL** are applied by trowel with total consumption of  $5-6 \text{ kg/m}^2$  approx.

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#### 3. Situation - Permanently pressurized water

After the preparation and the priming of the surface, two layers of **ESHAFLEX 2K-EL** are applied by trowel. Between them, an impregnated layer a glass mat  $(160 \text{gr/m}^2)$  with a rectagular mesh opening of 5x5 mm is used. The consumption is  $3 \text{ kg/m}^2$  per layer.

It is prefferable to avoid direct sunlight on the area that a fresh **ESHAFLEX 2K-EL** waterproofing system has been applied, eliminating this way the possibility of blistering and sagging of thick wet layers.

#### **TECHNICAL CHARACTERISTICS**

PROPERTIES	UNIT	NOMINAL VALUE	TEST METHOD
Туре		Two component reaction compound	
Base		Elastomeric bituminous emulsion and hydrauli- cally setting special powder component, free from solvents and asbestos fibres	
Color		Black	Observation
Specific gravity	gr/cm³	1,25	
Mixing ratio	w/w	1:1	
Pot life	min	appox. 60 (25 ℃)	
Application temperature	°C	10-35	
Substrate		Dry or slightly moist	
Resistance properties		Resistant to numerous salt solutions, weak acids	
Softening Point	°C	approx. 90	ASTM D-36
Curing time (depending on temperature, air humidity, substrate conditions)	days	1-3	

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

## **PRECAUTIONS**

In case of skin contact, wash with soap and plenty of water. Wear protective clothes, gloves and eyeglasses during application.

#### STORAGE

At least for one year in sealed pails or drums. Keep in dry and protected environment. Avoid frost.

## **PACKING**

**ESHAFLEX 2K-EL (A)**: In pails of 18 kg **ESHAFLEX 2K-EL (B)**: In plastic bags/pails of 18kg

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.

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