

# KÖSTER® Polyflex 2K

2 component, polymer modified bitumen thick film sealant

# **Product Description:**

Turkish product name > KÖSTER Polyflex 2K

KÖSTER Polyflex is a two component, solvent free, polymer modified bitumen thick film sealant for the safe waterproofing of building structures. The coating bridges cracks and protects the building from pressurized water.

KÖSTER Polyflex 2K is radon-proof.



### **Applications:**

For the safe and permanent waterproofing of building walls, foundations, floor plates etc., for the intermediate waterproofing of balconies and terraces. Also suited for the intermediate waterproofing underneath screeds.

#### **Teknik Veriler:**

The temperature of the surface for the application

	+ 5 °C to +30 °C
Ambient temperature for application	on + 5 °C to +30 °C
Mixing time (homogeneous consist	tency) 1 – 3 minute
Density of the mixture	app. 1,09 – 1,10 g/cm <sup>3</sup>
Temperature resistance	app. 70 °C

Elasticity	app. % 75-80
Cure time (20 °C)	min. 3 gün
Radon gas permeability	impermeable
Pot life	app. 30 – 40 minute

#### **Properties:**

**Drying Time** - Will vary according to temperature, humidity, and porosity of surface coated. Under average conditions [20 °C, 50% R.H.], KÖSTER Polyflex 2K is sufficiently dry for application of new layer in 24 - 48 hours.

#### **Instructions:**

**Job Conditions** - Air and surface temperature for application of KÖSTER KBE Flüssigfolie must be +5°C to +30°C and must remain so for a minimum of 24 hours.

**Temporary Protection** - Shall be provided at all times until the material is fully cured.

**Surface Preparation** - The surface should be dry or slightly damp and frost free.

The surface has to be sound and solid, free of laitance, paint, dust, form oil and other contaminants that might affect the bonding adversely. Suitable tools are wire brushes, high-pressure water jets, sand and shot blasting.

Cracks and surface honeycombs should be chiselled open so that application of an even uniform coat can be achieved.

Smaller honeycombs, cracks and depressions should be filled with Köster Repamor THIN and be allowed to dry for 24 hours before commencing.



Cracks, honeycombs and depressions larger than 5 mm should be filled with Köster Repamor and be left for curing for at least 24 hours.

Surface profiles and unevenness up to a depth of max. 5mm are filled with a scraped layer of KÖSTER Polyflex 2K. Scraped layers for levelling the substrate are not considered a waterproofing layer.

**Primer** – It is necessary to prime the substrate, dilute the liquid component of KÖSTER Polyflex 2K with water (10 parts water and 1 part KÖSTER Polyflex 2K liquid component) and apply it with a stiff brush in one rich layer. Work the primer into the surface for positive adhesion. Allow priming layer to cure thoroughly. Then apply the subsequent topcoats.



**Subsequent layers** – Stir powder and liquid components thoroughly (for 3 minutes using a motorized mixer 400rpm and suitable mixing paddle) prior to application. The mixed material must be homogeneous and lump free.

Apply KÖSTER Polyflex 2K with brush, squeegee, trowel or suitable spraying device. Allow every coat to dry completely before applying the next one.

Embed KÖSTER Glass Fibre Mesh into the still fresh first layer, at construction joints, wall-floor connections, cracks and other areas prone to cracking; apply the second coat with brush or roller.

Freshly applied KÖSTER Polyflex 2K threatened by sudden rain, can be protected instantly by spraying KÖSTER BE-Rainproof

onto the materialto ensure a proper drying of the waterproofing film.

Apply at least 2 layers.

Seal expansion joints with KÖSTER Joint Tape and KÖSTER KB-Pox Adhesive.

#### **Feed Throughs and Penetrations:**

Apply KÖSTER Polyflex 2K in a fillet shape around the feed through or penetration and embed KÖSTER Glass Fibre Mesh into it. It is necessary to make sure that the material of the installed parts is compatible with the waterproofing material. The same applies when waterproofing against pressurised water.

# **Protection and Drainage Layer:**

Prior to backfilling, the fully cured coating muest be protected from mechanical damages. We recommend use of our KÖSTER Protection and Drainage Sheet 3-400. Polystrene drainage borads, perimeter insulation etc can be spot bonded. In order to avoid vertical movement during backfilling of the excavation pit, the surface of the protection or drainage board should be covered with a glideing layer of polyethylene. In all cases allow for bonding with KÖSTER Polyflex 2K. Avoid stress at single spots only.

### **Horizontal Layers:**

In case of horizontal waterproofing of floor areas, embed KÖSTER Glass Fiber Mesh into the waterproofing layer in order to ensure a minimum layer thickness. Install gliding layers of polyethylene foil prior to applying the screed.

#### **Consumption:**

Against moisture and unpressurized water  $4.0 \text{ kg}/\text{m}^2$ Against pressurized water  $6.0 \text{ kg}/\text{m}^2$ 

# **Packaging:**

<u>Liquid component</u> 24 kg plastic bucket

Powder component 8 kg bag

Note: components are not sold separately.



### **Cleaning of Tools:**

Clean tools with water while still wet.

#### **Notes:**

- Do not apply below +5°C or if tem peratures below +5°C are expected within 24 hours.
- Do not apply on wet or frozen surfaces
- Do not apply on dusting or weak surfaces. If in doubt, perform adhesion test.

# **Storage:**

Must be stored at  $+5^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$  in tightly sealed containers. Keep out of direct sunlight and protect from freezing.

Shelf Life: 12 months.

# **Caution:**

Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye / face protection. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Material Safety Data Sheet.





# KÖSTER YAPI KİMYASALLARI İNŞAAT SAN. Ve TİC. A.Ş.

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# DOP NO: 056 EN 15814+A2:2015 KÖSTER - POLYFLEX 2K

# Polymer modified bitumen based two component waterproofing product

Polimer modifiye bitüm esaslı çift bileşenli su yalıtım ürünü

Essential characteristics Temel Karakteristikler	Performance Performans
Determination of Watertightness Su geçirimsizlik TS EN 15820	W2A
Crack bridgingability Çatlak Köprüleme EN 15812	CB 2
Reaction to Fire  Yangına tepki TS EN 13501-1	E
Resistance to rain Yağmur direnci EN 15816	R 2
Water resistance Su direnci tayini TS EN 15817	Passed <i>Geçti</i>
Flexibility at low temperature Düşük sıcaklıkta esneklik EN 15813	Passed <i>Geçti</i>
Reduction of layer thickness when fully dried Kuru katman kalınlığının azalması EN 15819	≤50 % (MLV)
Dimensional stability at high temperature Yüksek sıcaklıkta boyutsal kararlılık TS EN 15818	Passed <i>Geçti</i>
Resistance to compression Sıkıştırma direnci EN 15815	C 0

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