

# KÖSTER

## Waterproofing Systems

T 704 / 0421

## KÖSTER KB-Pur 214

### Polyurethane Based, 1 Component Liquid Waterproofing Membrane

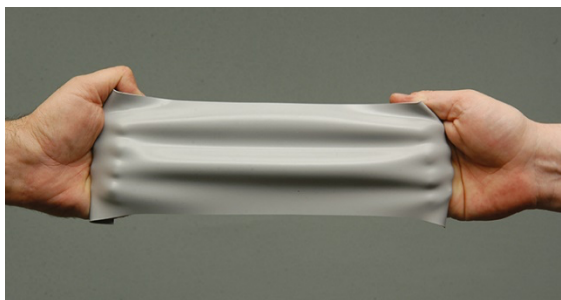
#### **General Information:**

KÖSTER KB-Pur 214 is a one part, polyurethane based, liquid applied waterproofing material. After application the material cures with air moisture to form a seamless, elastic, crack bridging and walkable membrane (resistant to light foot traffic).

Application is done with brush, roller or suitable spray equipment, the application rate is very high and even the most complicated details can be waterproofed easily.

KÖSTER KB-Pur 214 has high adhesion strength to concrete, masonry, render, mortar and many other kinds of substrates. The cured membrane is highly resistant to water contact, outdoor weather conditions, sunlight and abrasion.

Due to high quality pure polyurethane raw materials used in the production of KÖSTER KB-Pur 214 it has excellent thermal resistance and has a service temperature range from -30C to +80C.



#### **Technical Data:**

Tensile Strength (7 days) DIN 53 504 >5,0 – 6,0 N / mm<sup>2</sup>

Elongation (7 days) DIN 53 504 > % 350 - 400

Solid Content % 90

Application Temperature +5°C to +30°C

Density 1,45 g/cm<sup>3</sup>

Curing Time 4 – 7 days

Drying Time (+23°C, % 50 moisture) 12 – 24 hours

Service Temperature -30°C to +80°C

Shore A Hardness 70-75

#### **Fields of Application:**

Waterproofing of roofs, balconies, terraces and verandas (under tiles and screed), external basement foundation walls, wet and damprooms like kitchen and bathrooms. Flashing of chimneys, vent pipes, walls, windows and doors, walkable terraces and balconies with light foot traffic, protection of polyurethane foam insulation

Suitable Substrates: concrete, render, screed, repair mortar, masonry, gas concrete, wood-OSB boards, repair of old bitumen membranes, fiber-cement boards and various metal surfaces.

Note: Specific primer which is suitable for the application substrate should be selected !

#### **Application Procedure:**

##### **Substrate Preparation:**

The substrate has to be dry, sound and solid, free of cement laitance, paint, dust, form oil and other contaminants that might affect the bonding adversely. Suitable tools for surface preparation are wire brushes, high-pressure water jets, sand- and shotblasting. After surface preparation the substrate should be rough with a sandpaper-like texture and open pores.

Floor-wall junctions should be rounded with a fillet (radius=4cm) made from KÖSTER Repamor (cement-based repair mortar).

Movement joints should be waterproofed with KÖSTER Flex Band (dilatation tape) and KÖSTER KB-Fix (epoxy adhesive) or KÖSTER Fugenspachtel FS-H (polysulfide sealant).

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Cracks and surface honeycombs should be chiselled open. Cracks, honeycombs and depressions larger than 5 mm should be filled with KÖSTER Repamor (cement-based repair mortar) and be left for curing for at least 24 hours.

Visible cracks on concrete surfaces must be widened and repaired before application. After widening of the cracks, epoxy primer is applied and then repaired with KÖSTER KB-Pur 214 and KÖSTER Superfleece reinforcement tape (see technical data sheet of KÖSTER Superfleece for details).

Under all conditions the adhesion to concrete surfaces (pull-off strength) must be above 1,5 N/mm<sup>2</sup> and moisture of the concrete must be below 4%.

### Primer Selection Chart :

1. KÖSTER KB-Pox 002 or KÖSTER KB-Pox 008 epoxy primer is used on substrates such as concrete, masonry, render, screed, repair mortar, wood, plywood, OSB board and fiber cement boards.

2. KÖSTER PVC Primer is used as a primer on substrates like PVC waterproofing membranes, PVC door and window profiles and PVC pipes.

3. KÖSTER Metal Primer is used as a primer on substrates like painted sheet metal and roofing panels.

Note: All primers should be tested for suitability on the jobsite before application !

### Primer application on concrete substrate:

KÖSTER KB-Pox 002 or KÖSTER KB-Pox 008 should be used as a primer on concrete substrates and wood/OSB boards.

The primer should be applied with a brush or roller. Very absorbent concrete substrates should be primed twice.

The consumption for the primer coat is approx. 0.30 – 0.50 kg/m<sup>2</sup>.

After the application of the primer wait 8-24 hours before applying the waterproofing material. Do not exceed 24 hours waiting time as this may decrease adhesion to the waterproofing material.

### KÖSTER KB-Pur 214 application:

The material should be conditioned at room temperature for at least 24 hours.

Application is done in min. two coats with a brush, roller or suitable spray equipment.

Between layers wait for 8-24 hours and carefully clean first layer from dust, sand grains, water droplets or other contaminations that might affect the bonding of the second coat adversely.

Floor-wall junction fillets should be waterproofed with KÖSTER KB-Pur 214 embedded in a 20cm wide stripe of fibre mesh (80gr/m<sup>2</sup>) or KÖSTER Superfleece reinforcement tape.

The finished application should be protected from water and rain, outdoor weather conditions and mechanical forces until the coat is dry.

**Under Screed:** If you are using KÖSTER KB-Pur 214 as waterproofing layer under a cement screed, use one layer of PE plastic foil (apr. 0,15 mm thickness) as a separating layer.

**Under Tile:** If you are using KÖSTER KB-Pur 214 as waterproofing layer under ceramic tiles, sprinkle KÖSTER MO 20 sand (apr. 1,0 kg/m<sup>2</sup>) onto the last layer (while fresh) as a key coat for good adhesion to the tile adhesive.

**Under Gravel:** If you are using KÖSTER KB-Pur 214 as waterproofing layer on a terrace with thermal insulation boards (XPS) and a gravel topping use following layers; waterproofing layer + PE plastic foil + XPS boards + non-woven geotextile fabric (200 gr/m<sup>2</sup>) and final layer is gravel stones. It is advisable to put a drainage layer between the XPS boards and the geotextile fabric !

### Consumption:

|                             |                            |
|-----------------------------|----------------------------|
| Total consumption two coats | 1,0-1,50 kg/m <sup>2</sup> |
|-----------------------------|----------------------------|

### Packaging:

|                   |            |
|-------------------|------------|
| KÖSTER KB-Pur 214 | 25 kg pail |
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### Cleaning of Tools:

Clean tools and equipment with KÖSTER Thinner No.1 while still fresh.

### Storage and Shelf Life:

Shelf life is 12 months from the production date if stored in unopened and undamaged packages. Protect from humidity, water, freezing and direct heat sources and store at room temperature.

Production date, lot number and expiry date are printed on the packaging. Store pails upside down to prevent the ingress of moisture. Once pail is opened, use as soon as possible.

### Safety Information:

Contains volatile flammable solvents ! Do not approach with open flame and do not smoke during application. Only work outdoors and in adequately ventilated areas, provide adequate ventilation in indoor areas and consider that long-term solvent odor may occur. Use gloves, goggles and protective clothing. In case of contact with skin, wash with soap and water. In case of contact with eyes, rinse with plenty of water, seek medical advice immediately. Do not swallow, do not use empty packages to store foodstuffs and do not throw them into

fire. For professional use only, keep out of reach of children.

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| <br>2184                                                                                                               |                                                                                                    |
| <b>KÖSTER YAPI KİMYASALLARI İNŞAAT SAN. Ve TİC. A.Ş.</b><br><b>Kocaeli Gebze V GEBKİM Kimya İhtisas OSB, Atatürk</b><br><b>Bulvarı No: 6 Dilovası 41455 KOCAELİ</b><br><br><b>16</b>                     |                                                                                                    |
| <b>2184- CPR – 0197 DOP NO: 064</b><br><b>EN 1504-2:2004</b><br><b>KÖSTER – KB-Pur 214 Flex</b><br><b>Kaplama uygulaması (C)2.2/5.1</b><br>Poliüretan esaslı, gezilebilir teraslar için su yalıtım ürünü |                                                                                                    |
| Su buharı geçirgenliği (EN ISO 7783-1, EN ISO 7783-2)                                                                                                                                                    | Sınıf I                                                                                            |
| Kapiler su emme ve su geçirgenliği (EN 1062-3)                                                                                                                                                           | $w < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0,5}$                                                      |
| Aşınma direnci (EN ISO 5470-1)                                                                                                                                                                           | < 3000 mg                                                                                          |
| Çarpmaya direnç (EN ISO 6272-1)                                                                                                                                                                          | Sınıf III                                                                                          |
| Çekip koparma deneyi yoluyla yapışma dayanımı (EN 1542)                                                                                                                                                  | Trafik yükü olmadan<br>Çatlak kapatma veya<br>esnek sistemler<br>$\geq 0,8 \text{ N/mm}^2 (0,5)^b$ |
| Reaction To Fire (EN 13501-1)<br>Yangına Karşı Tepki                                                                                                                                                     | D                                                                                                  |
| Dangerous Substances<br>Tehlikeli Maddeler                                                                                                                                                               | In accordance with<br>article 5.3<br>Madde 5.3'e uygun                                             |

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