

KÖSTER Bikuplan® KSK AW 15

Technical guideline / Article number **10.311**

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Cold self-adhesive bitumen membrane with HDPE-top foil (moisture barrier type A, ground water barrier type T)

Features

KÖSTER Bikuplan® KSK AW 15 consists of a highly tear resistant, 2-layer cross-laminated, polyethylene backing with a flexible bitumen / rubber sealing mass. It is cold applied and therefore no hot air or propane gas welding is required. The membrane is highly flexible, immediately waterproof, resistant to driving rain and crack bridging. KÖSTER Bikuplan® KSK AW 15 can also be applied to cold substrates allowing waterproofing work to be carried out even at temperatures below 0°C.

Resistance against artificial aging according to DIN EN 1296 and 1928, procedure. B (test pressure 60 kPa)	passed
Resistance against chemicals according to DIN EN 1847 and 1928 procedure B (Test pressure 60 kPa)	
- 10 % NaCl	passed
- Lime milk	passed
- 6 % Sulfuric acid	passed
Resistance to water vapour diffusion μ	< 130,000
Resistance to continued tearing lengthwise / crosswise according to DIN EN 12310-1	150 N \pm 10 N
Cold bending properties according to DIN EN 1109	\leq - 30°C
Resistance of the joint seams to shearing according to DIN EN 12317-1	130 \pm 10 N / 50 mm

 1349  Abdichtungssysteme KÖSTER BAUCHEMIE AG Dieselstraße 3 - 10 26607 Aurich 07 1349-CPD-033	
EN 13909 KÖSTER Bikuplan KSK AW 15 Kaltselbstklebende Bitumenbahn mit HDPE-Trägerfolie Feuchtigkeitsperme (Typ A) und Grundwassersperre (Typ T)	
Brandverhalten Zugfestigkeit längs/quer Reissdehnung längs/quer Wasserdichtheit Prüfdruck 60kPa Weiterreißwiderstand längs/quer Scherwiderstand der Fugenähte Kaltbiegeverhalten Dauerhaft Widerstand gegen statische Belastung	Rollenlänge: 20 m Breite: 1,05 m Effektive Dicke: 1,5 mm Klasse E 250 \pm 50 N/50 mm 200 \pm 50 % Bestanden 150 \pm 50 N 130 \pm 30 N/50 mm \leq -30 °C Bestanden Bestanden 20 kg

Field of application

KÖSTER Bikuplan® KSK AW 15 is ideal for waterproofing horizontal and vertical surfaces of structures and/or structural members in accordance with DIN 18195. It can be used to seal basement walls, underground parking lots, retaining walls, garage roofs, balconies, terraces etc. By enclosing a structure, e. g. a basement, from all sides and the bottom, a closed tank is built. The material can be used inside and outside and can be applied to all substrates. The material is suited as a barrier against rising damp and also as a barrier under screed against water vapour rising from the ground.

Substrate preparation

The substrate has to be clean, sound, even and as dry as possible or slightly damp, ice-free, without edges, ridges, nests or voids. Joints must be closed flush. Substrates containing a lot of moisture, visible as a moisture film and/or as a strong dark colouration of the surface, have to be treated at least 2 days prior to application of the membrane with KÖSTER NB 1 Grey against moisture penetrating from the backside of the substrate (consumption: approx.: 2 kg / m²). Voids must be closed beforehand e. g. with KÖSTER Repair Mortar. Mineral substrates at temperatures above +5°C have to be primed with undiluted KÖSTER KBE Liquid Film, well covering on the whole surface on which the membrane will be applied to (Consumption: 400 – 500 g / m²). In case of temperatures of below +5°C, the surface must be primed with KÖSTER KSK Primer SP (Consumption: approx. 250 g / m²).

Technical data

Thickness according to DIN EN 1849-12	1,5 mm
Length according to DIN EN 1848-12	20 m
Width according to DIN EN 1848-21	1.05 m
Straightness according to DIN EN 1848-1	\leq 20 mm / 10 m
Flammability according to DIN EN 13501-1	Class E
Tensile strength according to DIN EN 12311-1	250 \pm 50 N / 50 mm
Elongation at break according to DIN EN 12311-1	> 150 %
Waterproof 60 kPa according to DIN EN 1928	passed
Resistant to static loads DIN EN 12730 procedure B	> 20 kg

At the transition from the vertical to the horizontal waterproofing and on foundation protrusions, a fillet with a leg length of 4 – 6 cm made of KÖSTER Repair Mortar has to be applied and allowed to cure fully prior to application of the primer (min. curing time 24 hours). Alternatively, the fillet can be created using KÖSTER Bikuplan® Triangular Ribbon. In this case, the fillet area is primed with KÖSTER KBE Liquid Film and after an airing time of approx. 45 minutes, the KÖSTER Bikuplan® Triangular Ribbon is stuck into place.

Application

1. The applied primer must have dried fully. The adhesion is sufficient if the membrane can only be removed from the substrate by use of force. A preliminary test is recommended. Do not apply the membrane when condensate is forming on the surface of the primer e. g. in the morning hours.
2. Cutting the membrane to size is facilitated by placing a piece of wood or a metal straight edge on the membrane as a backbrace to cut against. The membrane is rolled out, cut to the desired size and rolled up again.
3. All interior and exterior corners are reinforced with pre-cut membrane pieces, about 30 cm wide. Remove the protective paper just before applying the membrane to the surface.
4. The sealing of protruding external corners (e. g. corner-protrusion of the foundation) is done with specially cut pieces, which are put into place so that the sealing layers are doubled.
5. Now the membrane, having previously been cut into pieces about 1 m long, is stuck onto the substrate in the wall /floor junction covering approx. half of the foundation protrusion and overlapping the next membrane approx. 10 cm on the side. Apply the membrane from bottom to top. Remove the protective paper just before applying the membrane to the surface. Before applying the next piece of membrane, remove the separating foil from the self-adhesive edge on the already applied membrane.
6. Waterproof wall surfaces beginning from just above ground level and continue to connect the waterproofing to the horizontal base slab waterproofing. Work from top down having previously cut the membranes to the required length. The membranes should be cut long enough so that the membrane overlaps the lower waterproofing by about 15 cm. Apply the membrane by removing the protective paper and pressing the membrane onto the substrate, overlapping the edge of the previous membrane by 10 cm. All overlapping areas of the membrane must be firmly pressed together using a roller. Remove the separating foil from the self-adhesive edge before applying the next membrane.
7. In order to avoid the infiltration of water, cover all ends of the membranes on the foundation protrusion, in the upper base area as well as around tubular feedthroughs and other junctions and ends, in case of temperatures of above +5°C with undiluted KÖSTER KBE

Liquid Film. In case of temperatures below +5°C, apply KÖSTER BS 1 Bitumen Paste to the areas specified above.

Mechanically fix the upper end of the membranes with large headed zinc coated nails (5 pieces/m) or with a fixing strip. At tubular feedthroughs, the KÖSTER Glass Fibre Mesh should be embedded into the KÖSTER KBE Liquid Film / KÖSTER BS 1 Bitumen Paste.

8. Protect the KÖSTER Bikuplan® KSK AW 15 against the backfill with suitable polystyrene drainage boards or use the DELTA Geo-Drain-Quattro Protection and Drainage Sheet.
9. Areas to which KÖSTER Bikuplan® KSK AW 15 was applied must be covered with soil immediately after the materials which were used for edge sealing (KÖSTER KBE Liquid Film / KÖSTER BS 1 Bitumen Paste) have fully dried. Horizontal areas must be protected from exposure to sunlight and must be covered and loaded within two weeks.

Cleaning of tools

Clean sticky and dirty cutting tools with KÖSTER Bitumen Remover.

Packaging

Rolls à 21 m² (width: 1.05 m; length 20.00 m)

Storage

Rolls must not be exposed to direct sunlight; they should be protected from extreme heat and extreme cold; store them standing upright; protect them from pressure and moisture.

Technical guidelines cited

KÖSTER BS 1 Bitumen Paste	Art. No.	1.10
KÖSTER KBE Liquid Film	Art. No.	1.13
KÖSTER NB 1 Grey	Art. No.	3.021
KÖSTER Repair Mortar	Art. No.	5.030
KÖSTER KSK Primer SP	Art. No.	7.30
KÖSTER Bitumen Remover	Art. No.	9.03
DELTA Geo-Drain-Quattro Protection and Drainage Sheet DMS006		
KÖSTER Bikuplan® Triangular Ribbon	Art. No.	10.39

The accurate and thereby effective and successful application of our products is not subject to our control. The guarantee can therefore only be applied to the quality of our products within the scope of our terms and conditions, not, however, for their effective and successful application. These guidelines replace all previous ones.