

KÖSTER Bikuplan® KSK SY 15

Technical guideline / Article Number **10.321**
Issued: 01st of Mai 2005 Draft

- Industry classification "Bikuplan" registered at the German patent office, 3955 6699
- Official certification reports of the MPA Hannover

Cold self-adhesive synthetic / bitumen sealing membrane for application in accordance with DIN 18195 applicable above + 5 °C

Features

KÖSTER Bikuplan® KSK SY 15 consists of a highly tear resistant, 2-layer cross-laminated, polyethylene foil with a plastic bitumen / rubber adhesive- and sealing-compound. It is cold applied and therefore no hot air or propane gas welding is required. Due to its high ductility, it can also be easily applied to difficult details. The sealing membrane is highly flexible, immediately waterproof, resistant to driving rain and crack bridging.

Seam connection is done by simply pressing the material on with a roller. KÖSTER Bikuplan® KSK SY 15 is radon- and methane-proof.

Technical data

Thickness	1.5 mm
Elongation at break of the bitumen compound	approx. 1.200 %
Retraction	> 80 %
Breaking load lengthwise	56 N / 5 cm
Breaking load across	50 N / 5 cm
Cold bending property (r = 15 mm)	- 10 °C
Bonding (180 ° pull-off)	36 N / cm
Resistance to water pressure	Waterproof to 4 bar for 24 hours
Resistance to water vapour diffusion	approx. 22000
Fire protection classification	B 2

Field of application

KÖSTER Bikuplan® KSK SY 15 is suited for waterproofing horizontal and vertical surfaces of structures and/or structural members according to DIN 18195 such as e. g. foundation plates, wet rooms, basement floors, balconies, terraces etc.

KÖSTER Bikuplan® KSK SY 15 is also suited for waterproofing polystyrene elements.

Substrate preparation

The substrate has to be clean, dry, even and without edges or voids. It should be mineral, polystyrene or wooden. In case of basement walls made of masonry, the joints have to be closed

flush. A thin coat of KÖSTER KBE Liquid Foil is applied to the substrate (Consumption: approx. 250 – 500 g / m²). The priming layer must dry completely. Apply the membrane on the same day.

In case of strongly absorbent substrates (e. g. porous concrete), a second priming coat is necessary.

In the junction from the horizontal to the vertical waterproofing and on protrusions of the foundation, fillets with a leg length of 4 – 6 cm should be installed using a cement mortar, e. g. KÖSTER Repair Mortar, and be allowed to cure fully (min. waiting time: 24 hours).

Application

For cutting membranes, always use a sharp knife. To avoid getting the knife stuck, wet the blade repeatedly. Avoid cutting the material when it has been exposed to heat or direct sunlight. Remove the backing paper after cutting the membrane.

Cutting membranes to length is facilitated by laying a piece of wood on top of the membrane along the course of the cut as a cutting support. Do not apply KÖSTER Bikuplan® KSK SY 15 at temperatures below + 5 °C.

Horizontal waterproofing

On top of the fillet, a approx. 30 cm wide stripe is applied as corner reinforcement. Then apply the vertical and the horizontal layers on top of the stripe. Roll out membranes or pre-cut pieces, remove approx. 30 – 50 cm of the backing paper at the beginning of the membrane and press the exposed adhesive layer onto the substrate beginning from the middle. Avoid air-enclosures and wrinkles. Pull the backing paper through from under the roll and pull it off while unrolling the membrane. Firmly press on applied membranes especially in the overlapping- and edge-areas (e. g. with a hand roller). Overlap the next membrane in the overlapping area for approx. 10 cm. On overlappings, press the membranes on to each other especially thoroughly. Connections to metal are carried out using a stripe of KÖSTER Bikuplan® Fix-Tape 120 ALU. All inside or corners are equipped with a fillet profile.

Cover garage roofs after waterproofing with levelling felt and apply a screed or round gravel 16 / 32, 5 cm thick on top of that

Vertical waterproofing of basement walls

1. All interior and exterior corners are reinforced by applying pre-cut membrane pieces, about 30 cm wide. Remove the protective paper just before applying the membrane to the surface.

2. The sealing of protruding external corners (e. g. corner-protrusion of the foundation) is done using specially cut pieces of membrane; at first a triangle and then a square are cut and then bonded to the corner so that a double sealing layer is created.

3. Now, membranes having previously been cut to pieces about 1 m long, are stuck onto the substrate in the wall / floor junction covering approx. half of the side of the foundation and overlapping the edge of the next membrane by approx. 10 cm. 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.

4. Seal wall surfaces beginning from the base to the lower waterproofing layer from top down with membranes cut to the required length. The membranes should be cut long enough so that they overlap 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 membranes must be firmly pressed together using a roller. Remove the separating foil from the self-adhesive edge before applying the next membrane.

5. In order to avoid the infiltration of water, cover all ends of the waterproofing layers, meaning e. g. the ends of the membranes on the side of the foundation, in the upper base area as well as around feed-throughs and other junctions and endings with undiluted KÖSTER KBE Liquid Film. Mechanically fix the upper end of the membranes with large headed zinc coated nails (5 pieces / m) or with a fixing profile. In case of rough substrates and in case of e. g. porous concrete, a second coat must be applied after the first coat has fully dried. At feed-throughs, embed KÖSTER Glass Fibre Mesh into the KÖSTER KBE Liquid Film.

6. Protect the KÖSTER Bikuplan® KSK SY 15 with polystyrene drainage boards from the backfill.

Vertical areas, to which KÖSTER Bikuplan® KSK SY 15 was applied, must be covered with soil immediately after full cure of the KÖSTER KBE Liquid Film. Horizontal areas must be covered and pressed on within two weeks of their application.

Special field of application

KÖSTER Bikuplan® KSK SY 15 is radon- and methane-proof. The previously stated application directions are suited also for carrying out radon- and methane-proof sealing layers.

Cleaning of tools

Clean sticky cutting tools with KÖSTER Bitumen Remover.

Trading units

Rolls à 21 m², width: 1.05 m, length 20.00 m

Storage

Rolls must not be exposed to low temperatures and direct sunlight. Store rolls standing upright. Protect from pressure and moisture.

Technical guidelines cited

KÖSTER KBE Liquid Film	Art. No. 1.13
KÖSTER Repair Mortar	Art. No. 5.030
KÖSTER Bikuplan® Fix-Tape 10 ALU	Art. No. 7.30
KÖSTER Bitumen Remover	Art. No. 9.03
KÖSTER Glass Fibre Mesh	Art. No. 11.01

The accurate and thereby effective and successful installation 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 installation. These guidelines replace all previous ones.