



KÖSTER KSK ALU 15

Technical Data Sheet W 815 096 AL

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Cold self adhesive synthetic / bitumen sealing membrane laminated with a reinforced aluminium foil

Features

KÖSTER KSK ALU 15 is cold applied and therefore no hot air or propane gas welding is required for application. Due to its high ductility it can easily be applied to difficult details. The top side of the membrane is laminated with an aluminium foil. The membrane is a vapor barrier, waterproof, weather-, and UV resistant. The self adhesive compound on the bottom side of the membrane is protected by a removable foil. It is not necessary to place a layer of gravel on top of the membrane after application. The membrane is resistant to frost and de-icing salts.

Advantages:

- Cold applied, self-adhesive.
- No hot air or propane gas welding is required.
- Immediate waterproofing effect.
- Uniform waterproofing layer.
- Highly flexible due to rubber-bitumen basis.
- Crack-bridging.
- Age resistant.
- UV Resistant.
- Vapor tight.
- Can be applied to all mineral substrates as well as plastic and metal.
- High seam resistance against water pressure and water vapor.
- No need for use of external adhesive or mastics to ensure lap bonding or substrate adhesion.
- Factory applied adhesive on the overlap areas improves security.
- Less time needed for installation as product is ready to use.
- Reduced material and labor costs on site.

Technical Data

Thickness	approx. 1.5 mm
Weight approx.	2.0 kg / m ²
Protective layer	Aluminium /PET laminate
Application temperature	min. + 12 °C to + 35 °C (avoid application on condensation)
Softening temperature of the elastomeric / bitumen self adhesive compound	+ 110 °C
Cold bending property (r = 15 mm, 3 sec)	- 10 °C
Breaking load lengthwise	approx. 35 N / 5 cm
Breaking load across	approx. 35 N / 5 cm
Elongation at break of the adhesive compound	approx. 1200 %
Bonding (180 ° pull-off)	36 N / cm
Resistance to water pressure	Waterproof to 4 bar for 24 hours
Colour of the surface	Aluminium coloured

Fields of Application

KÖSTER KSK ALU 15 is suitable for waterproofing weather-exposed areas such as garage roofs, balconies, and the like. KÖSTER KSK ALU 15 can be applied in new construction as well as for repairs.

Main Fields of Application:

- Balconies
- Terraces
- Vertical retaining walls
- Foundations
- Structural members
- All underground structures

Substrate

The substrate has to be clean, dry, even, and without sharp corners, ridges, gaps, or voids. It can be mineral, polystyrene, or wooden. In case of basement walls made of masonry, the joints have to be closed flush. As a primer a thin coat of KÖSTER KBE Liquid Foil is applied to the substrate (Consumption: approx. 250 – 500 g / m²). The priming layer must be allowed to dry completely. Apply the membrane on the same day.

In case of strongly absorbent substrates, (e. g. porous concrete), a second primer coat may be necessary.

At wall / floor, wall / wall junctions and on offset foundations, fillets with a leg length of 4 – 6 cm must be installed using a cement mortar such as KÖSTER Repair Mortar. It must be fully cured before the KÖSTER KSK ALU 15 membranes are installed, (min. waiting time: 24 hours).

Roof penetrations such as storm drains and stack vents as well as bordering vertical areas should be primed up to a height of 20 cm. Vertical connections such as walls, chimneys or the like have to be mechanically fixed using edge profiles or metal hole strips which have to be sealed from the topside using a suited joint sealing compound in order to avoid water penetrating behind the membrane.

Application

When cutting membranes always use a sharp knife. To avoid having the knife stick to the membrane 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 or straight edge on top of the membrane along the course of the cut as a guide and cutting support. Do not apply KÖSTER KSK ALU 15 at temperatures below + 12 °C.

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Horizontal waterproofing

On top of the fillet, an approximately 30 cm wide strip is applied as corner reinforcement. Apply the vertical and horizontal layers on top of the strip. Roll out membranes or pre-cut pieces in a length of approx. 50 – 80 cm, 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 trapping air and creating creases. Pull the backing paper through from under the roll and pull it off while unrolling the membrane. Firmly press the applied membranes onto the substrate. Use the KÖSTER Rubber Hand Roller on the overlaps and edge areas. Overlap the membranes a minimum of 5 cm, national and local guidelines may vary. Connections to metal are achieved using a strip of KÖSTER Fix-Tape 10 ALU. All inside corners are to receive a fillet.

Vertical waterproofing

1. All interior and exterior corners are reinforced by applying pre-cut membrane pieces approximately 30 cm wide. Remove the backing paper just before applying the membrane to the surface.
2. For waterproofing especially demanding internal and external corners use specially cut pieces of membrane. Refer to the KÖSTER KSK application guidelines on the packaging for details.
3. Waterproof wall surfaces beginning approx. 30 cm above ground level, proceeding downwards to the wall floor junction and on to the side of the foundation. Pre-cut the membrane to the required length. Apply the membrane by removing the protective paper and pressing the membrane onto the substrate. Overlap the edge of the previously applied membrane by a minimum of 5 cm. All overlapping areas of the membranes must be firmly pressed together using a KÖSTER Rubber Hand Roller. Remove the backing paper from the self-adhesive edge before applying the next membrane.
4. In order to avoid water infiltration behind the membrane, seal all exposed edges of the waterproofing layers as well as around pipe penetrations and other junctions and endings with KÖSTER KBE Liquid Film. Mechanically fix the upper ends of the membranes with large headed zinc coated nails, (5 pieces / m), or with a fixing profile. In case of rough substrates or porous concrete, a second coat may be needed after the first coat has fully dried. Embed KÖSTER Glass Fiber Mesh into the KÖSTER KBE Liquid Film around pipe penetrations.
5. Protect the KÖSTER KSK ALU 15 with KÖSTER Protection and Drainage Sheet 3-400 against damage due to backfilling. A layer of XPS Insulation (minimum 30 mm) also provides protection against backfill. The construction pit should be backfilled immediately after full cure of the KÖSTER KBE Liquid Film.

Application Procedure

New construction:

It is necessary to prepare the substrate correctly to achieve the guaranteed durability. Edges must be rounded with appropriate tools and the surface of the walls must be intensively cleaned of any adhesion-inhibiting substances.

Surface roughness must be levelled according to depth. Level surfaces (i.e. voids and any irregularities, blowholes, or breakouts) with KÖSTER Repair Mortar Plus or KÖSTER Repair Mortar with the addition of a maximum of 30% KÖSTER SB Bonding Emulsion added to the mixing water.

Install fillets made from KÖSTER Repair Mortar Plus at the wall / floor junctions and respectively blinding layer / floor or at inside corners, (rounded fillets with leg length of 4- 6 cm). Alternatively KÖSTER Deuxan 2C can be used (with leg length of 2 cm). Moving joints must

be sealed with KÖSTER Joint Tape 20 / 30 using KÖSTER KB-Pox as adhesive. Prime the surface with KÖSTER KBE Liquid Film. Apply an undiluted thin layer of primer over walls exterior surfaces including fillets and foundation. Alternatively KÖSTER KSK Primer BL can be used. An adhesion check is required to check if the substrate has reached the required adhesion level.

Restoration:

Clean the surface following proper methods to clear any adhesion-reducing substances. Seal the surface of the substrate with a coat of KÖSTER Polysil TG 500. Imperfections in old bituminous surfaces must be smoothed with KÖSTER BS Bitumen paste. Prime the bituminous substrate completely with KÖSTER Bitumen Primer and allow adequate drying time. Alternatively KÖSTER KBE Liquid Film or KÖSTER KSK Primer BL can be used as primer. An adhesion check is required to check if the substrate has reached the required adhesion level.

Cleaning

Clean cutting tools with KÖSTER Universal Cleaner.

Packaging

W 815 096 AL 1.5 mm x 0.96 m x 20 m, 19.2 m² roll

Storage

- Store rolls standing upright. Do not place pallets on top of each other.
- Protect from pressure and moisture.
- Do not remove the roll from its package until the moment of application.
- Do not expose rolls to low temperatures or direct sunlight.
- Avoid keeping the product outside for long periods when the external temperature is higher than + 28°C.
- Do not leave the roll outside overnight. If possible use the entire product which has been removed from its original packaging in the same day.
- Do not apply on dirty, wet, dusty or humid surfaces.
- Do not apply when the weather is cold or humid and/or when the substrate is humid (the temperature of the areas in which the various materials are in contact should be at least + 12 °C).

Safety

Observe all governmental, state, and local safety regulations when installing the material.

Related products

KÖSTER KB-Pox IN	Prod. code IN 231
KÖSTER Joint Tape 20	Prod. code J 820 020
KÖSTER Joint Tape 30	Prod. code J 830 020
KÖSTER Polysil TG 500	Prod. code M 111
KÖSTER KSK ALU Strong	Prod. code R 817 105 AS
KÖSTER Leister Hand Pressure Roller 40 mm	Prod. code RT 998 001
KÖSTER KSK Primer BL	Prod. code W 120 015

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KÖSTER KBE Liquid Film	Prod. code W 245
KÖSTER Glass Fiber Mesh	Prod. code W 411
KÖSTER BS 1 Bitumen Paste	Prod. code W 501 005
KÖSTER Repair Mortar	Prod. code W 530 025
KÖSTER Repair Mortar Plus	Prod. code W 532 025
KÖSTER SB Bonding Emulsion	Prod. code W 710
KÖSTER Fix-Tape 10 ALU	Prod. code W 810 AL
KÖSTER Butyl Fix-Tape Fleece	Prod. code W 815 015 F
KÖSTER KSK SY 15	Prod. code W 815 105
KÖSTER SD Protection and Drainage Sheet 3-400	Prod. code W 901 030
KÖSTER SD Protection and Drainage Sheet 3-250	Prod. code W 903 030
KÖSTER Roofing Nails	Prod. code W 981 001
KÖSTER Universal Cleaner	Prod. code X 910 010

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Technical Data	Product Name: KÖSTER KSK ALU 15
Material Class	Cold self-adhesive membrane
Temperature range for application	+ 12°C to + 35°C
Layers	1 + primer
Color	Aluminum coloured surface
Solvent-Free	Yes
Mode of application	Hand application
Waiting time until backfilling	No waiting time (protection is required)
Simplicity of application	+++
Substrate	
Masonry	+++
Cementitious plaster	+++
Concrete	+++
Polystyrene	++
Old Bitumen membranes / coatings	++
Plaster	+++
Concrete or ceramic bricks	+++
Screeds	+++
Old ceramic substrates	+++
Gypsum	Should be removed
Moisture condition of surface	Dry
Performance	
Waterproofing against max. load condition	Pressurized Water
Time until rainproof	Immediately
Chemical resistance	Good
Permeability to vapor diffusion	Very low
UV-resistance	Yes
Crack bridging	+++

Lower+ Medium++ High+++

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