

KOSTER KD SYSTEM

Negative Side Waterproofing Against Active Leaks

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Features:

This environmentally friendly system safely seals pressurized water from the negative side as well as active leaks. It is resistant to salts and other substances in the ground water.

The system consists of 3 products:

KOSTER KD 1 Base:

Fast curing cementitious sealing slurry with excellent resistance to aggressive ground water and high water pressure.

KOSTER KD 2 Blitz Powder:

Highly reactive fast setting cementitious product. With application of the dry powder, active water leaks are sealed within a few seconds.

KOSTER KD 3 Sealer:

Silicate-water based liquid. The active ingredients penetrate deeply into the substrate and react to form an insoluble compound. The pores are permanently sealed through the crystallization process.

Technical Data:

KOSTER KD 1 Base:

Density	13.35 lbs/gal
Compressive Strength (7 days)	1885 psi
Flexural Strength (7 days)	500 psi
Setting Time (68°F, 65% rH)	approx. 15 min.

KOSTER KD 2 Blitz:

Setting Time (when sealing active leaks)	20 sec.
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KOSTER KD 3 Sealer:

Density	10 lbs/gal
Reaction time (68°F, 65% rH)	2-3 hours
KOSTER KD-System	
Waterproof (pressurized water)	102 psi (negative side)

Use:

For the waterproofing of basements from the inside, waterproofing manholes, as well as for all other waterproofing against pressurized or non-pressurized water from the positive or negative side.

KOSTER KD 2 Blitz may also be used for face sealing / closing of cracks prior to the use of injection resins.

Substrate:

The substrate must be sound and solid, free of oil and paint as well as free of loose particles. Screeds, plaster, and similar products must be removed down to the solid base building material. (masonry/concrete). Masonry joints must be raked out ~3/4 in (2 cm) deep.

Dry substrates must be wetted thoroughly prior to the application of the materials. Fill holes and open joints with KOSTER Repair Mortar or with the KOSTER Waterstop.

On CMU or on softer vertically perforated brick, a sound plaster made of KOSTER Repair Mortar must be applied.

Unsuitable substrates are:

- Lime-containing plasters,
- Paint coatings,
- Gypsum-containing building materials.

Application:

The three system components of the KOSTER KD-System are applied according to the instructions below in case of area waterproofing against pressurized water from the negative side. If active leaks must be waterproofed, the flow of water must be stopped first by using the KOSTER KD 2 Blitz.

Stopping Active Leaks:

Depending on the intensity of the active leak, a sufficient amount of the dry powder is applied by hand directly to the active leak (without mixing with water). In the event of small active leaks, the powder is rubbed firmly onto the surface until the leakage is stopped.



Active Leaks

Stopped

Within Seconds

If a stronger water leak must be stopped, a larger amount of powder is formed into a firm "ball"-shape. This is done by pressing a larger amount of powder

together slowly with one's hands to form a firm snowball sized "ball". This ball is then pressed onto the leakage by hand. Ensure to use the palm of your hand to convey pressure onto the powder and therefore onto the leak. After pressing the powder a few seconds onto the leakage, the flow of the water is permanently stopped. It is recommended to wear smooth surface rubber gloves for this application.

Surface Sealing:

After stopping the active leaks, the area may be waterproofed:

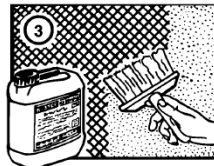


Mix as much KOSTER KD 1 Base as can be applied within 10 minutes with water into a spreadable slurry. Apply the slurry onto the substrate using a firm masonry brush.

Then immediately rub the KOSTER KD2 powder into the fresh, moist slurry by hand until the surface is dry



Without waiting, brush on the KD 3 Sealer liquid with a clean brush.



Immediately afterwards and again after approx. 30 minutes, repeat step 1, (application of KOSTER KD 1 Base)



The maximum total thickness must be less than 4 mm. (160 mils)

Application of the next layer on walls:

A layer of plaster key (splatter coat) made of KOSTER Restoration Plaster Key (50% area coverage) may be applied at the earliest after 24 hours. After another 24 hours, KOSTER Restoration Plasters may be applied.

Application of the next layer on floors:

Prior to installing screeds, apply a cementitious bonding bridge by mixing KOSTER SB Bonding Emulsion with water 1:2 and with a cement/sand mixture (1:2) into a slurry which is then applied onto the floor using a firm brush.

Sealing joints, cracks, and penetrations

Elastic sealing: (with KOSTER Joint Sealant FS)

1. Prior to the application of the waterproofing, cut grooves into the masonry/concrete along the course of cracks and connections, etc. Width and depth

should be approx. 1.2 inches (3 cm) or more in areas where high water pressure is expected.

2. While applying the area waterproofing, the KOSTER KD System is applied into the grooves which were cut to open cracks and connections.

3. After a minimum of 24 hours after the application of the KOSTER KD System, the sides of the joints are primed with the KOSTER FS Primer. Bonding to 3 flanks must be avoided. (Cover the back-flank with tape.)

4. Fill the joints after approx. 3 hours curing time with KOSTER Joint Sealant FS-V completely.

Plastic Sealing:

Sealing using KOSTER KB-Flex 200 Sealing Paste:

1. Proceed in the same way as with elastic joint sealing, except with a joint depth of 3.9 inches (10 cm).

2. Proceed in the same way as with elastic joint sealing.

3. After a minimum of 24 hours after the application of the KOSTER KD System, the prepared areas are filled with KOSTER KB-Flex 200 up to approx. 1/2 inches (10 mm) below the surface of the wall.

4. Then level off the sealed crack flush with KOSTER KB-Fix 5.

Cleaning of tools:

Clean tools immediately after use with water

Packaging:

KD 1 Base: 33 lb pail

KD2 Blitz: 33 lb pail

KD 3 Sealer: 2.64 gal

System Package:	KD 1 Base	2.2 lb pail
	KD 2 Blitz	2.2 lb pail
	KD 3 Sealer	0.11 gallon bottle

Coverage:

KD 1 Base: 0.3-0.5 lb/ft²

KD 2 Blitz: 0.2-0.4 lb/ft²

KD 3 Sealer: 100 ft²/gal

Warranty:

KOSTER warrants that its product shall be in accordance with the specifications published in the current revision of the products data sheet. KOSTER covenants that in the event any of its products fail to meet their published specifications, KOSTER shall replace those products proved to be defective. KOSTER shall not be responsible for any incidental or consequential damages due to the breach of its warranties. Notwithstanding the foregoing, KOSTER's sole liability hereunder shall not exceed the cost of the defective product originally purchased. EXCEPT AS SET FORTH ABOVE, KOSTER MAKES NO OTHER WARRANTIES EXPRESS OR IMPLIED AND MAKES NO WARRANTY AS TO THE MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The user must determine if the product is suited for the intended use and the user must bear the risks and liabilities associated with it.