

KÖSTER KB-Pox[®] Adhesive

- Industry classification "KB-Pox" registered at the German patent office, 395 06 702

2 component, high performance, epoxy adhesive

Features

KÖSTER KB-Pox[®] Adhesive is a 2 component, epoxy based, high performance adhesive. The material is thixotropic, has a paste-like consistency, contains no solvents and has 100 % solids content.

The material develops a high adhesive strength to concrete, mortar, metal, wood and many other building materials. It develops high early strength.

Vertical and over head application is possible.

Technical data

Color	Cured material	grey
Compressive strength	EN 196-1	40.0 N/mm ²
Flexural strength	EN 196-1	26.0 N/mm ²
Bond strength to concrete	N/mm ²	3.70 (rupture in concrete)
Density	g/cm ³	1.80
Mixing ratio	By weight	A:B = 4:1
Pot life	Minutes (23 °C / 1lt)	65 min
Hardening time	Hours	approx. 24
Fully cured in	Days	approx. 7
Application temperature	°C	+5 to +35

Advantages

- The A and B component have contrasting colours which minimizes the possibility of mixing faults.
- It contains no solvents.
- The paste-like, soft consistency is ideal for application on vertical areas and overhead.

Field of application

- Adhesive for KÖSTER Joint Tape
- Bonding of metal profiles to concrete
- Bonding of concrete, stone, metal, wood, GRP and many other building products
- Installation of grout bolts, dowels and pins (vertical and overhead)

Surface preparation

Surfaces must be clean, sound and dry. On damp surfaces, the pull off strength should be tested. Dust, oil, grease, old coatings, laitance, efflorescence, rust, curing compounds, wax, formwork release oil and similar contaminants must be removed prior to application.

Concrete surfaces: If necessary, the substrate has to be sanded or shot blasted to guarantee optimal adhesion of KÖSTER KB-Pox[®] Adhesive.

Metal surfaces: They must be cleaned to SA 2 ½ standard.

Mixing:

Condition KÖSTER KB-Pox[®] Adhesive to room temperature. Premix the A and B components separately. Then add the B component to the A component and mix them until the mixture is uniform in colour. For mixing, use a low speed mechanical mixing device with a suited mixing paddle.

Application

As an adhesive for KÖSTER Joint Tape:

1. KÖSTER KB-Pox[®] Adhesive is applied to the prepared substrate on both sides of the joint so that both sides of the KÖSTER Joint Tape are embedded into the adhesive. The KÖSTER Joint Tape 20 is embedded on a width of at least 40 mm. The KÖSTER Joint Tape 30 is embedded on width of at least 50 mm. The layer thickness of the KÖSTER KB-Pox[®] Adhesive should be approx. 2 mm.

2. The KÖSTER Joint Tape is then immediately embedded into the fresh adhesive and pressed onto the adhesive using a hand roller or a similar suited tool. Make sure that the tape has good contact to the adhesive everywhere.

3. Then, a second layer of KÖSTER KB-Pox[®] Adhesive is applied on top of the KÖSTER Joint Tape so that the edges of the KÖSTER Joint Tape are overcoated. The edges of the KÖSTER Joint Tape 20 are overcoated on a width of at least 40 mm. The edges of the KÖSTER Joint Tape 30 are overcoated on width of at least 50 mm. Also, apply KÖSTER KB-Pox[®] Adhesive so that it covers the substrate next to the tape on a width of at least 20 mm.

As a structural adhesive : Apply the adhesive on both (prepared) substrates and press them together. Apply pressure until fully cured. Do not move or stress until fully cured. Protect it from exposure to water and frost until it is fully cured. Do not apply thicker layers than 3 mm.

As a chemical anchor : Drill holes (depth = 10 – 15 x bolt diameter); clean holes (vacuum or dry pressurized air); fill 2/3 of holes with KÖSTER KB-Pox[®] Adhesive; insert bolts using a rotational movement. Do not stress the bolts until the adhesive has fully cured. Protect it from exposure to water and frost until it is fully cured.

Consumption

As adhesive for KÖSTER Joint Tape 20: 2 kg / m

As adhesive for KÖSTER Joint Tape 30: 2 – 2.5 kg / m

Packaging

5 kg combi package

A component – 4 kg

B component – 1 kg

Mixing ratio is A:B = 4:1 by weight

Cleaning of tools

Fresh epoxy adhesive can be removed with KÖSTER KB-Pox[®] Cleaner. Cured material can only be removed mechanically.

Notes

- Do not apply below +5 °C or if temperatures below +5 °C are expected within the next 24 hours.
- Do not apply the system on wet or frozen surfaces.
- Do not apply the system on dusting or weak surfaces. If in doubt, test the pull off strength.
- Cold temperatures prolong and hot temperatures shorten pot life and curing time of the epoxy adhesive.
- High levels of humidity may prevent proper curing of the epoxy adhesive.
- For application of the system as part of negative side waterproofing, please contact our Technical Service.
- In areas which are stressed by traffic, the system should be covered with protective metal plates.
- Do not add solvents, thinners or additional fillers.
- Do not apply on concrete which is younger than 3 - 4 weeks.
- If in doubt, test the adhesion before the application.

Storage

Store the material dry and cool; in originally sealed packages, it can be stored for 6 months.

Caution

A component – Irritant

B component – Corrosive, hazardous

Safety precautions

Avoid inhaling the vapours and contact with skin. Wear suitable protective clothing, gloves and eye / face protection. Adequate ventilation of the working area is recommended. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When using do not eat, drink, smoke and keep away from sources of ignition. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Material Safety Data Sheet.

Technical guidelines cited

KÖSTER KB-Pox [®] Cleaner	Art.-No.	9.08
KÖSTER Joint Tape 20	Art.-No.	8.10
KÖSTER Joint Tape 30	Art.-No.	8.11

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.