We are there for you – worldwide.

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KÖSTER
Waterproofing Systems

KÖSTER

The Green Pages | **Edition 2025/2026**

KÖSTER
Waterproofing Systems

Complete product range

The Green Pages

Edition 2025/2026

MADE IN GERMANY

Editorial

Since the foundation of KÖSTER BAUCHEMIE, 40 years ago, the statement of Johann Köster that KÖSTER waterproofing products are developed to protect building structures and the environment, has been at the forefront of our mission.

Now, more than ever, it is even more fundamental to consider the impact of our company's decisions on the environment.

The company's mission to develop and produce high-quality waterproofing systems with respect for the environment directly relates to the concept of "built to last", present in every product we manufacture.

By offering superior quality products, KÖSTER BAUCHEMIE aims to increase the lifespan of building structures and therefore reduce the need for premature replacement. This has an evident impact on the global use of resources, such as energy and building materials.

With our research, we continue to develop solutions to offer our customers the most efficient and durable systems, to effectively protect the buildings from water damage.

In the new edition of the Green Pages, we have completely revamped and updated our systems with new graphics, new descriptions, and introduced new products. This upgrade is intended to facilitate a fast recognition of the required system and to help our customers to identify all the products that compose each system.

At the same time, we also updated our webpage so that the new content of the catalog can be found online.

With best regards from Aurich,

Hugo Torres

The fastest way to your waterproofing products – the KÖSTER distribution channel

A one-stop-shop for product guidance and delivery service

KÖSTER systems and products stand out due to their exceptionally easy and user-friendly application. Nonetheless, technical solutions require technical explanations. That's why we offer comprehensive trainings and technical consultation in order to ensure appropriate application. Our distribution network is based on a worldwide system of experienced technical consultants who serve as your first contact for technical questions and the delivery of our products – if required, even directly to your construction site.

How to reach your contact person

If you are not yet a KÖSTER customer, please contact our international department for more information – everything necessary will be arranged immediately. Alternatively, all relevant information and contact details of the technical consultant in charge of your area are available on the internet:

info@koster.eu

www.koster.eu

Terms and conditions of business, supply and payment, as of July 2014

I. General

The following terms and conditions of supply and payment apply to the entire business relationship with our customers. The purchaser accepts them as binding on them in respect of the current contract and also for all future transactions. Any alternative agreement requires our written confirmation. The purchaser asserts no purchase terms of their own. They also do not become part of the contractual terms and conditions by consequence of our non-communication or supply.

II. Quotation and supply

1. Our quotations are non-binding.

2. If we are prevented by a hindrance from fulfilling the contract on time by procurement, manufacturing or supply failures – on our part or on the part of our suppliers – e.g. due to an energy shortage, traffic disruption, strike action or lockout, the supply period is extended accordingly. The purchaser can only withdraw from the contract if, on expiry of the extended term, they set us a final deadline in writing. Withdrawal can only be made if we have not fulfilled within the final deadline and withdrawal is notified in written form.
3. If our fulfillment of the contract is made partially or completely impossible for the reasons stated in paragraph 2, we are released from our supply obligation.
4. We will inform the purchaser immediately of the hindrance under paragraph 2 and the impossibility under paragraph 3.
5. Compensation claims by the purchaser arising from delay or non-fulfillment are excluded, to the extent that malicious intent or gross negligence on our part is not proven.
6. If the purchaser is in default of payment in respect of an earlier supply, we are entitled to withhold supplies without obligation to compensate for any loss caused.
7. We are entitled to make part supply.

III. Prices

1. Invoices are raised at prices applicable at the date of the supply, if no special agreement has been made in this regard. If, in the case of a forward order or a make-and-hold order, only a part of the agreed quantity is accepted during the agreed period, we are entitled, at our discretion, either to invoice the supplied amount at the price applicable to that lot-size or to supply the quantity not called upon and raise an invoice.

2. If, in exceptional circumstances, we agree to a return of goods, we will invoice 20% of the net goods value to cover our costs. Generally, we do not accept the return of non-standard supplies.

IV. Payment

1. Our invoices fall due for payment immediately after receipt of the invoice. However, we reserve the right, in individual cases, to agree to other payment terms at the time the contract is entered into. Default arises immediately after receipt of the invoice. In this regard, the invoice is deemed to be received three days after the date of the invoice, unless the recipient proves a later date of receipt.

2. In the case of default of payment on the part of the purchaser, we are entitled to charge default interest after the occurrence of default in accordance with generally agreed terms of business. A charge of EUR 15.00 per payment reminder is raised after the occurrence of default.
3. We reserve the right to decide on the acceptance of cheques and bills of exchange on a case-by-case basis. They are only accepted on account of payment. The credit is made under the normal reservations. For bills of exchange, we charge the normal bank discount and collection charges. We do not undertake any guarantee for the correct timing of encashment or remonstration.
4. In circumstances where a bill of exchange or cheque is not cashed on time or circumstances arise regarding the purchaser, which, in our view, no longer warrant the granting of credit, we can determine the whole amount due to us as falling due immediately – even if bills of exchange or cheques have been provided in respect of it.
5. Only persons with our written power of collection are entitled to receive payments with the issue of one of our receipt forms.
6. The purchaser can only assert a right of retention, if it relates to the same contractual relationship. The purchaser is only entitled to an offset if we have recognized the opposing amount due or it has been legally recognized.
7. If the purchaser gets into default with an invoice, and the value of this invoice reaches a significant amount for the business relationship, all receivables of this business relationship fall due immediately independent of any acceptation of bills of exchange. We are furthermore entitled to demand prepayment before any future delivery.
8. If the default is not dispelled within an acceptable final deadline, we are entitled to withdraw from the contract or to demand compensation due to non-fulfillment. This applies in particular to agreed but not delivered follow-up business. In circumstances where information arises regarding the purchaser, which in our view, no longer warrant the granting of credit, we are entitled, apart from before made agreements, to demand prepayment or payment on delivery of the material. The purchaser is entitled to provide security for bills receivable.

V. Retention of title

1. The goods remain our property until the payment of all, including future, amounts due to us arising as a result of our business relationship with the purchaser. This also includes conditional amounts receivable.

2. In the case of a processing or a combining of the goods subject to reservation of title with other items not belonging to us, we are entitled to a co-ownership share in the new item in the amount of the sales price invoiced to the purchaser including value added tax or other sales taxes. The purchaser holds the item in custody for us free of charge.
3. The purchaser may sell the goods subject to retention of title as part of orderly business activities, but only under terms of immediate payment or reservation of title; they are not entitled to provide other entitlements, in particular, the granting of security or a pledge.

4. The purchaser assigns to us the amount from his receivable with all ancillary rights from the onward sale of the goods subject to retention of title that corresponds with our invoice price inclusive of value added tax or other sales taxes.

5. Where the receivables of the purchaser from the onward sale are received into a current account, the purchaser also assigns herewith his receivable from their customer from the current account. The assignment is made at the amount that we invoiced to them for the goods resold subject to retention of title inclusive of value added tax or other sales taxes.
6. Subject to revocation, the purchaser is entitled to collect the receivables assigned to us. The assignment or pledging of these receivables is only permitted with our written agreement. Where circumstances arise in relation to the purchaser, which in our view, no longer warrant the granting of credit, at our request, the purchaser is to inform the debtors in writing of the assignment, to provide us with all information and make available and send us documentation. For this purpose, the purchaser is to grant us access, where necessary, to their documents in this respect.
7. In the case of the existence of the circumstances stated in para. 6, sentence 3, the purchaser must grant us access to the goods subject to the reservation of title still in their possession, to send us an accurate list of the goods, to separate the goods and release them to us.

8. If the value of this security exceeds the amount of our receivables by more than 20%, we will release the security to that extent, at the request of the purchaser and our discretion.

9. The purchaser is to inform us immediately in writing of the access of third parties to the goods subject to retention of title or the receivables assigned to us and to support us in intervention in every way.

10. The purchaser bears all of the costs for the fulfillment of the aforementioned cooperation obligations in the pursuit of all rights from the retention of title as well as all costs incurred in the preservation and storage of the goods.

VI. Packaging and dispatch

1. Packaging follows normal commercial practices relevant to the goods. Special packaging and replacement packaging is charged at cost price. Supply is made by forward freight from the factory.

VII. Transfer of risk

1. Risk is transferred to the purchaser as soon as the goods leave our factory or warehouse. All supplies, including any returns, travel at the risk of the purchaser.

2. Our supplies are not insured against damage whilst in transport.

VIII. Responsibility for defects and compensation

1. The goods are supplied in the quality and finish as is normal for us at the time of the supply.

2. Our supplies are to be checked for correctness on receipt. Under or incorrect supplies as well as any defects can only be objected to within 14 days following receipt. Delayed notification of defects does not bring about any entitlement against us. This also applies in respect of non-evident defects, if the purchaser is a merchant.
3. Advice from our employees does not release the purchaser from their own examination of the product with regard to its suitability for its intended purpose and from the observation of the processing requirements of the manufacturer. In addition, technical application advice from our employees, processing instructions, consumption quantities etc., are only general guidelines and do not give rise to a contractual legal relationship or an additional obligation from the purchase contract. No liability arises from such activities. Consumption quantities in our technical leaflets are average values based on experience. Over or under consumption on specific objects do not initiate any rights or claims.
4. The guarantee obligation lapses if changes to the goods supplied have been carried out by the other party or if the purchaser does not immediately comply with our request for the return of the goods subject to complaint. It also lapses if the complete settlement of our invoices does not take place within the contractual or agreed period of credit.
5. If the goods supplied by us are faulty and we are notified within the time limit, we will replace the faulty goods without charge. In the absence of a replacement supply, the purchaser canwithdraw from the contract. In the case of a complaint on the grounds of quality, a sample is to be submitted for examination, as appropriate.
6. Our guarantee obligation ends with the term as per law of the country to which the product is sold, at maximum five years. Longer guarantee periods are only binding if they have been confirmed by us in writing. In the case of any such extended guarantee, only the entitlement to the replacement of defective materials exists and not the refunding of costs of consequential damage, labor and handling or other compensation claims. To the extent that we grant the recognition of a defect – after the expiry of the guarantee under sentence 1 – we have the discretion of making an additional supply of the same, defect free materials at no cost or refunding the purchase price paid at the time, excluding ancillary costs such as freight.
7. Our liability is unimited in cases of damages arising from injury to life, body or health and in all cases of damages caused intentionally or by gross negligence. Similarly our liability is unlimited for damages due to fraudulent concealment of a defect, for defects after having been given a guarantee, for damages covered under the German Product Liability Act (Produkthaftungsgesetz) and in all other cases established by law.
8. Claims for defects do not exist upon negligible difference to the agreed condition, upon negligible nuisance of usability, upon natural abrasion or damages which were caused after the transfer of risk due to faulty or negligent handling, inappropriate stocking or transport or which arise from particular outer influences which are not preconditioned by the contract. If the purchaser or a third party carry out any inappropriate modifications no claims arise hence nor for any subsequent consequences.

9. Contribution claims of the purchaser against the supplier do only exist insofar as the purchaser has not made any agreements with their customer that exceed legal defect claims.

10. All other claims, including compensation claims, by the purchaser against us on the grounds of the supply of defective goods are excluded. Nonetheless, should, on any grounds, a recovery of damages come into consideration, the purchase price of the consumed quantity applies as the maximum amount of the claim.

IX. Other compensation claims

All other claims for compensation by the purchaser against us – irrespective of legal grounds – are excluded, to the extent that malicious intent or gross negligence on our part is not proven.

X. Validity

Should any of these individual clauses – irrespective of the cause – not be operable, the validity of the remaining clauses is not affected as a result.

XI. Place of jurisdiction

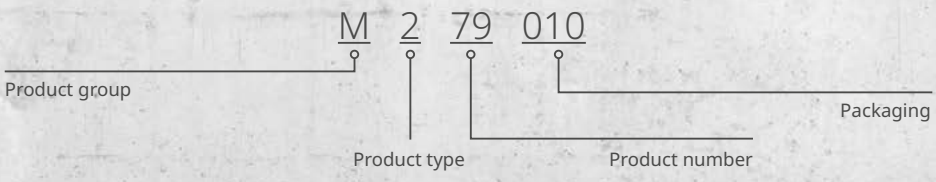
The place of jurisdiction for all disputes arising in connection with the contractual relationship – including withdrawal – is Aurich, Germany.

Content

Fields of application for KÖSTER waterproofing

The article number system explained in brief:

KÖSTER Crisin 76



Article numbers are sorted according to field of application. As a result, product groups include complete systems for the respective field of application. For example, the product group “IN” (injection) not only includes injection resins but also associated injection packers, injection pumps, spare parts and tools. This makes finding products easy. For instance, the first section, waterproofing, distinguished by a capital “W”, features all waterproofing products followed by fields of application in waterproofing such as external/ internal basement waterproofing and the waterproofing of tanks and pipes. The article numbers have the following structure:

M 279 010 (KÖSTER Crisin 76)
The M stands for “Masonry” and represents the field of application restoration of masonry, restoration plasters, horizontal barriers and anti-mold systems.

M 279 010 (KÖSTER Crisin 76)
The first number (in the example “2”) indicates the type of product:

1. Primers / substrate preparation
2. Main products: Coating / paint / injection material
3. Finish / sealer
4. Broadcast / reinforcement
5. Mortars / sealing pastes
6. Plaster / Anti-mold boards
7. Additives
8. Waterproofing membranes
9. Tools / accessories

M 279 010 (KÖSTER Crisin 76)
The following two numbers (in the example “79”) indicate the product number in each category.

M 279 010 (KÖSTER Crisin 76)
The last three numbers indicate the delivery form. For example, “010” means 10 l, or 10 kg, respectively.

An additional letter at the end indicates a further specification. For example, W 210 008 B (KÖSTER 21 B component).

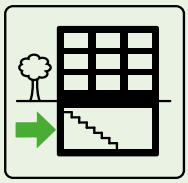
In the case of roofing membranes, the article number is completely comprised from the product description:
The article number for the roofing membrane KÖSTER TPO 1.8 – 2.10m is RT 818 210 (Roofing TPO / “8” = waterproofing membrane / 18 = 1.8 / 210 = 2.10 m width). The standard color is light grey. Other colors are indicated by an additional letter (for example: RT 818 210 W stands for white).

W

Waterproofing systems

Basement, tank, and area waterproofing

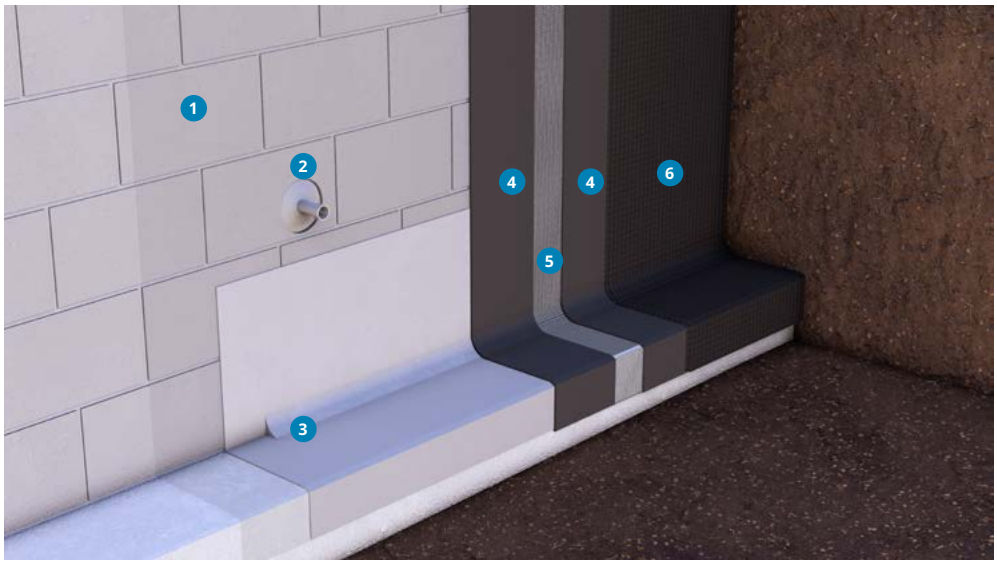
External basement waterproofing



Wet basements cannot be fully used and might endanger the building substance. We offer different methods for making basements permanently waterproof: From the outside with polymer-modified thick film sealants, mineral sealing slurries or a cold self-adhesive waterproofing membrane – whereby the entire external wall area is treated and thus protected from water penetration. In repair cases, the external waterproofing can be installed even from the inside of the basement. This method is called "curtain injection".

External basement waterproofing with bitumen based waterproofing systems

1. **Primer**
   KÖSTER Polysil TG 500
2. **Waterproofing pipe penetrations**
   KÖSTER KB-Flex 200
3. **Installing fillets**
   KÖSTER WP Mortar
4. **Waterproofing layer**
   KÖSTER Deuxan 2C
5. **Reinforcement**
   KÖSTER Glass Fiber Mesh
6. **Protection of the waterproofing layer**
   KÖSTER SD Protection and Drainage Sheet 3-250



The use of bituminous products belongs to the standard solutions for the positive side waterproofing of basements. The systems are applied in a paste-like form and are therefore seamless. They are easy and safe to use and have crack bridging properties. On clean, solid, stable, gypsum free mineral substrates KÖSTER Polysil TG 500 is applied as a primer. This immobilizes salts present in the substrate and the substrate is solidified. When preparing to waterproof on top of old bituminous coatings KÖSTER Bitumen Primer is used.

Pipe and cable penetrations are sealed with the permanently plastic putty KÖSTER KB-Flex 200 and protected by a layer of KÖSTER KB-Fix 5. Alternatively, these areas can be connected with a fillet of the respective thick film sealant or fitted with flanges.

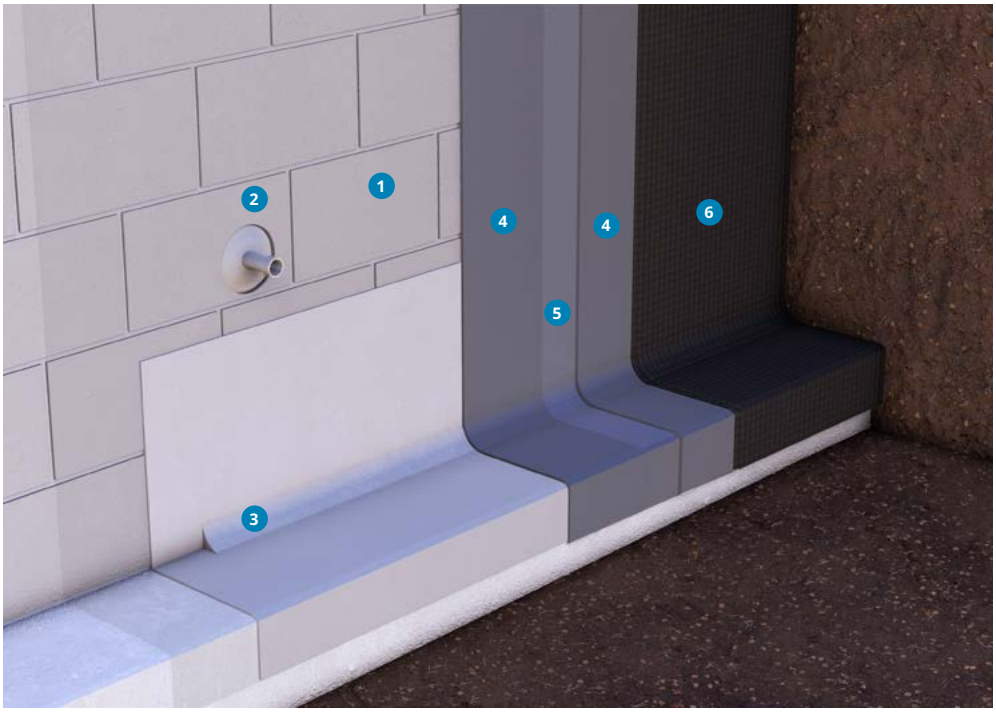
To protect against water creeping behind the lower waterproofing connections, KÖSTER NB 1 Grey mixed with KÖSTER NB 1 Flex is applied first. To prevent stresses in the waterproofing, rounded fillets are installed in the wall / floor junctions.

The actual area waterproofing is achieved using KÖSTER Deuxan 2C in two layers applied by trowel or spray equipment. For greater ease of manual application use KÖSTER Bikuthan 2C. The inclusion of KÖSTER Glass Fiber Mesh is recommended in all thick film sealants and all applications. This allows for a better control of the coating thickness and safely absorbs movement in the building.

Before backfilling, the positive side waterproofing is to be protected from mechanical damages and settling with KÖSTER SD Protection and Drainage Sheet.

Always adhere to the specifications in the respective Technical Guidelines.

External basement waterproofing with mineral based waterproofing systems



1 **Primer**
KÖSTER Polysil TG 500

2 **Waterproofing pipe penetrations**
KÖSTER KB-Flex 200

3 **Installing fillets**
KÖSTER WP Mortar

4 **Waterproofing layer**
KÖSTER NB 4000

5 **Reinforcement**
KÖSTER Glass Fiber Mesh

6 **Protection of the waterproofing layer**
KÖSTER SD Protection and Drainage Sheet 3-250

Mineral sealing slurries are especially robust waterproofing systems with extremely good adhesion to mineral surfaces. They are not affected by moist surfaces and become an integral part of the building structure on which they were applied. Mineral sealing slurries are paste-like and are applied seamlessly to the building element being waterproofed. They are easy and safe to apply and can be installed as rigid or crack bridging systems.

On clean, solid, stable, gypsum free mineral substrates KÖSTER Polysil TG 500 is applied as a primer. This immobilizes salts present in the substrate and the substrate is solidified.

Pipe penetrations are waterproofed using KÖSTER KB-Flex 200 and sealed with KÖSTER KB-Fix 5. Alternatively, these areas are to be attached to the waterproofing using proper sleeves or flanges.

The actual area waterproofing is achieved using KÖSTER NB 4000 in two layers. The installation of KÖSTER Glass Fiber Mesh is recommended between the KÖSTER NB 4000 layers to achieve an especially reinforced waterproofing layer. In areas especially in danger of water creeping behind the waterproofing such as wall-floor junctions, a substrate preparation with KÖSTER NB 1 Grey mixed with KÖSTER NB 1 Flex is applied. To avoid stresses in the elastic waterproofing, rounded fillets made of KÖSTER Repair Mortar Plus are installed in interior corners.

Before backfilling, the waterproofing is protected from mechanical damages and settling with KÖSTER SD Protection and Drainage Sheet.

Always adhere to the specifications in the respective Technical Guidelines.

External basement waterproofing with cold self-adhesive waterproofing membranes

1 Joint sealing
KÖSTER Quellband

3 Installing fillets
KÖSTER WP Mortar

4 Primer
KÖSTER KBE Liquid Film

5 Waterproofing layer
KÖSTER KSK SY 15

6 Protection of the waterproofing layer
KÖSTER SD Protection and Drainage Sheet 3-250

7 Waterproofing membrane ending
KÖSTER KBE Liquid Film

Fast, clean, and easy: Exterior basement waterproofing with KÖSTER KSK cold applied, self adhesive waterproofing membranes. No drying time, instantly watertight, with a tight control of consumption. Apply a primer coat of KÖSTER KBE Liquid Film on clean, solid substrates. Pipe penetrations are sealed using flanges cut to size from KÖSTER KSK Membranes. In areas especially in danger of water creeping behind the waterproofing such as wall-floor junctions, a substrate preparation with KÖSTER NB 1 Grey mixed with KÖSTER NB 1 Flex is applied. To avoid stresses in the elastic waterproofing, rounded fillets made of KÖSTER Repair Mortar Plus are installed in interior corners.

The actual area waterproofing is generally done with KÖSTER KSK SY 15. It is applied crease free to the substrate. The membranes are overlapped 8 cm. Details, corners and connections are made according to the directions on the packaging and according to the Technical Guidelines, and these areas are covered with KÖSTER KBE Liquid Film. On vertical areas the top edge is mechanically fastened and these fasteners are also coated with KÖSTER KBE Liquid Film. Before backfilling the waterproofing is protected from mechanical damage and settling with KÖSTER SD Protection and Drainage Sheet.

Always adhere to the specifications in the respective Technical Guidelines.

External basement waterproofing with thermoplastic waterproofing membranes

1 **Waterproofing membrane**
KÖSTER TPO 1.5 Pro UG S

2 **Protection of the waterproofing layer**
KÖSTER SD Protection and Drainage Sheet 3-250

3 **Wall connection**
KÖSTER Wall connection profile

4 **Joint Sealing**
KÖSTER MS Joint Sealant

KÖSTER Thermoplastic Membranes are applicable for a wide variety of substrates and fields of application. As foundation waterproofing, they excel by their speed of application, durability, instant waterproofing effect, and can be backfilled immediately.

KÖSTER Membranes consist of thermoplastic polyolefin, produced in Germany with the highest quality compounds and standards. KÖSTER Membranes conform to DIN EN 13967:2012 and are rated as Type T moisture barriers. They provide high elongation and are highly tear resistant so that even large cracks are bridged securely.

KÖSTER Membranes are free of PVC as well as plasticizers and are age and root resistant. As they can withstand high mechanical influences and stresses, they are the perfect protection for underground structures.

To ensure a watertight installation and long service life, the KÖSTER membrane seams are welded homogeneously with hot air, using a special hot air welding machine. A signal layer shows any mechanical damage that can be repaired quickly and easily.

Before backfilling the waterproofing is protected from mechanical damage and settling with KÖSTER SD Protection and Drainage Sheet.

Always adhere to the specifications in the respective Technical Data Sheets.

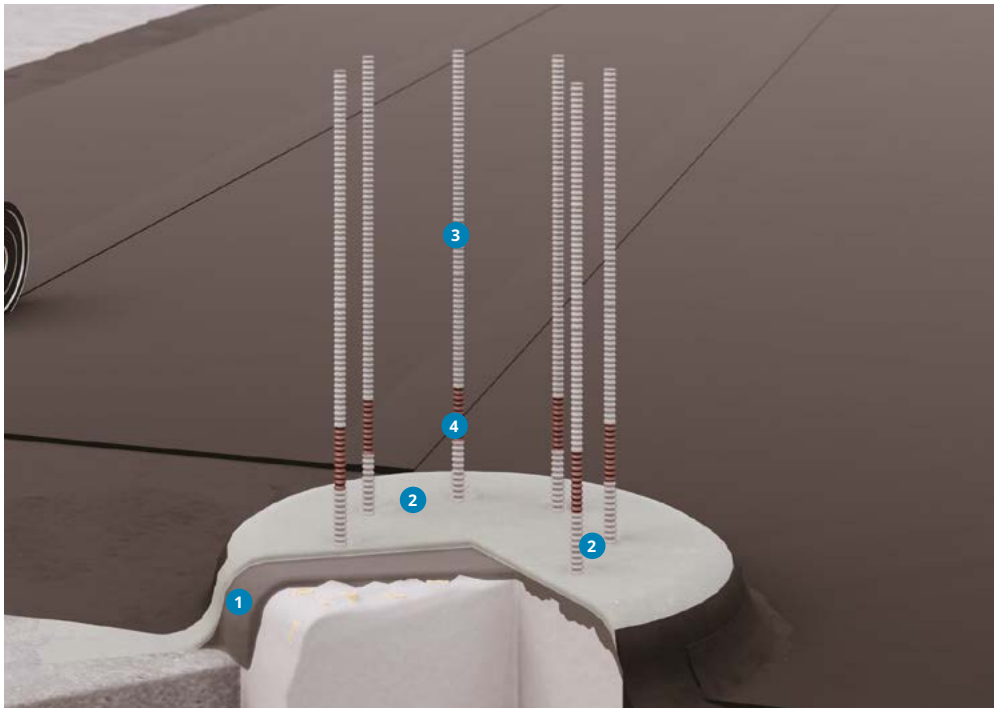
Waterproofing of pile heads

1 Reprofiling
KÖSTER Repair Mortar R4

2 Waterproofing of pile heads
KÖSTER NB 1 Grey

3 Corrosion protection
KÖSTER Z1

4 Corrosion protection
KÖSTER Z2



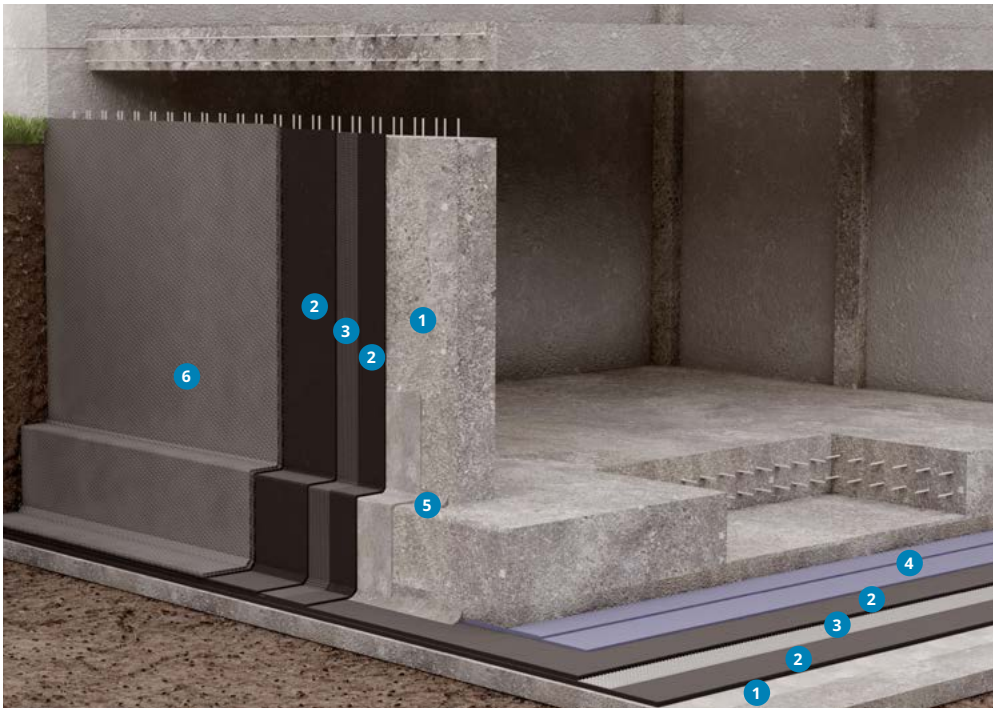
Damage to existing buildings is often caused by leaking pile foundation heads. Water can enter the building through the construction joints or make its way along the reinforcement. The waterproofing of pile heads has to withstand the weight of the whole building and needs to be easily connected to the area waterproofing.

All non-load bearing materials, laitance, and protuberances have to be removed from the surface of the pile head. The mineral corrosion protection materials KÖSTER Z1 and Z2 are applied to the exposed reinforcement. These special polymer modified slurries are respectively grey and red to allow for a visual control of the application.

The surface is then rounded and re-profiled with KÖSTER Repair Mortar R4. This re-profiling also includes the installation of a fillet adjacent to the pile head. The pile head and fillet are then waterproofed with KÖSTER NB 1 Grey, generously bringing the KÖSTER NB 1 Grey up the reinforcement and onto the area around the pile head, at least 20 cm.

Alternative to KÖSTER Deuxan 2C, the waterproofing layer can be made with KÖSTER KSK SY 15. KÖSTER KBE Liquid Film is used as a primer on the entire surface as well as on all overlaps around the pile head. The gliding layer for this system consists of only one layer of PE Foil.

Waterproofing under the foundation plate



1 **Primer**
KÖSTER Polysil TG 500

2 **Waterproofing layer**
KÖSTER NB 4000
Alternative:
KOSTER KSK SY 15
KÖSTER TPO 1.5 Pro UG S

3 **Embedded mesh**
KÖSTER Glass Fiber Mesh

4 **Gliding Layer**
Customary PE-foil

5 **Fillet**
KÖSTER WP Mortar

6 **Protection of the waterproofing layer**
KÖSTER SD
Protection and Drainage
Sheet 3-250

A complete waterproofing system in new construction includes waterproofing the floor slab. Compared to the application on top of the concrete slab, the installation of the waterproofing layer underneath the foundation plate keeps the foundation dry and the concrete provides a better thermal insulation. KÖSTER provides a wide range of different solutions for completing the waterproofing under the foundation plates with total security. If the choice is for a liquid application solution, it is necessary to first apply the primer KÖSTER Polysil TG 500 to lock any existing salts in the substrate and provide a better bond between the waterproofing and the substrate. For the liquid option, the choice can be the use of the PMBC system KÖSTER Deuxan 2C (applied in two layers with KÖSTER Glass Fiber Mesh reinforcement) or the novelty hybrid coating KÖSTER NB 4000 that allows the works to carry on even at extremely low temperatures.

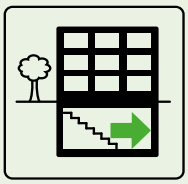
For the pre-fabricated membranes, KÖSTER offers the 1.5 mm self-adhesive rubber-bitumen laminated membranes with 2 different top layers (HDPE or Aluminium Foil) called KÖSTER KSK SY 15. These types of membranes are cold applied, and are extremely easy and fast application, creating an immediate waterproofing effect.

Along with the pre-fabricated membranes, KÖSTER also offers the extremely resistant TPO Pro UG S membranes for mechanical fastening or loose-laying, that are mechanically fastened and/or loose-laid.

The overlaps on these membranes are welded using hot air devices, guaranteeing a complete and secure waterproofing seal.

Always adhere to the specifications in the respective Technical Guidelines.

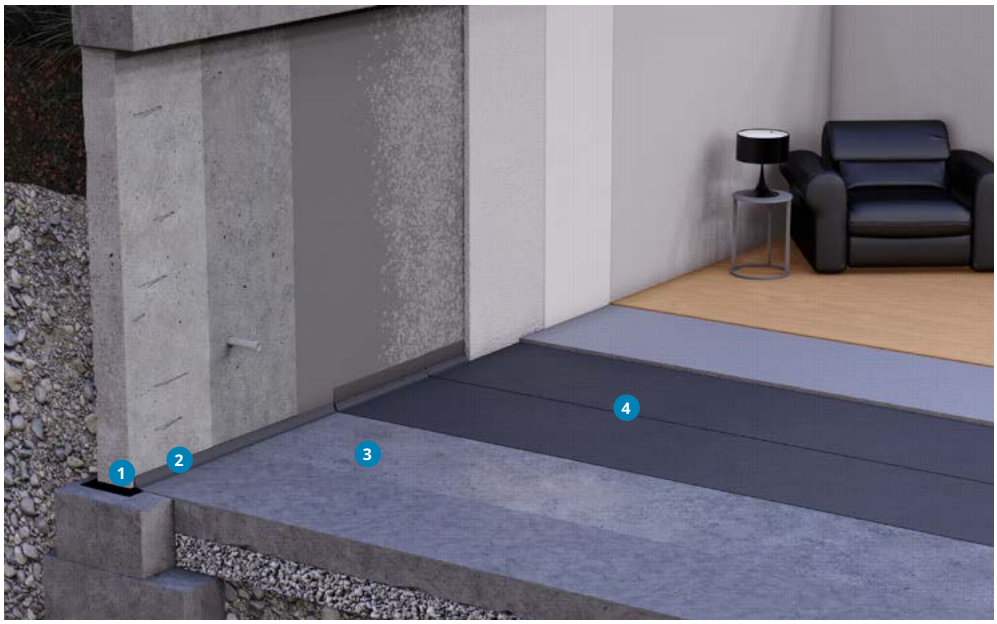
Internal basement waterproofing



In a repair situation, the basement can be waterproofed from the inside without excavating the soil around the building. This means that the basement is permanently waterproofed without the necessity of doing any earthworks. This type of waterproofing is possible with the KÖSTER systems even when the wall has active leakages.

Internal basement waterproofing on foundation plate with mineral systems

1. Horizontal barriers for walls
   KÖSTER NB 4000
2. Installing fillets
   KÖSTER WP Mortar
3. Primer
   KÖSTER Polysil TG 500
4. Waterproofing layer
   KÖSTER NB 4000



Mineral waterproofing systems have the advantage of excellent bonding properties of the waterproofing material to mineral substrates, the bond between the individual waterproofing layers is excellent too. The longevity of such systems is ideally the lifetime of the building.

To avoid moisture rising through the wall due to capillary action, it is necessary to install a horizontal barrier beneath the wall made from KÖSTER NB 1 Grey (mixed with KÖSTER NB 1 Flex) or the crack bridging material KÖSTER NB Elastic.

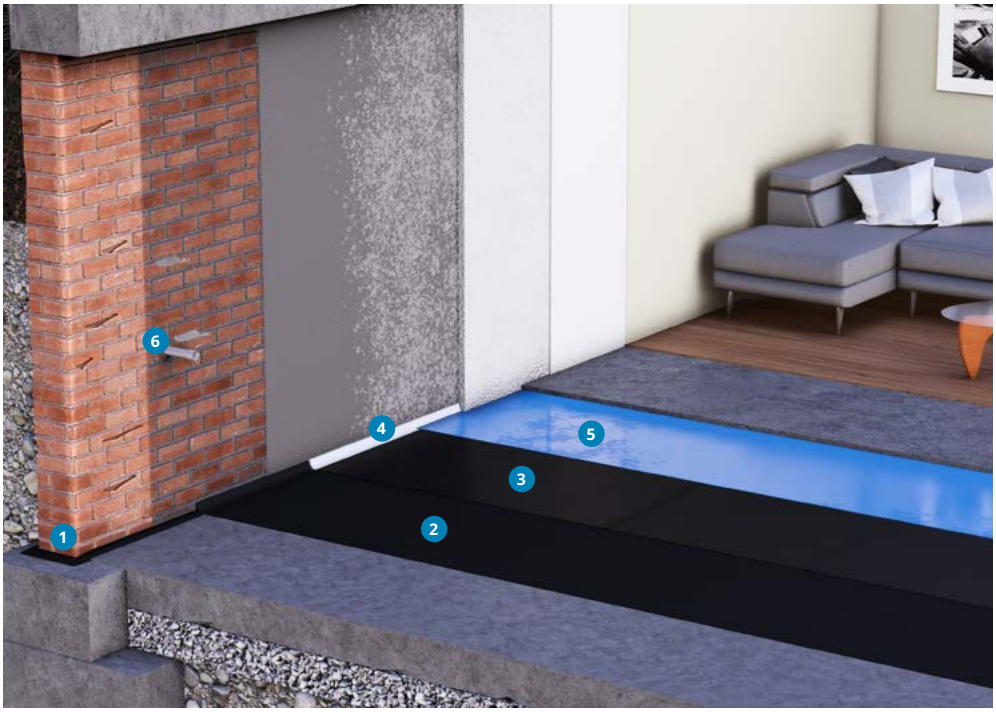
To harden the substrate the bottom slab is primed with KÖSTER Polysil TG 500. At the wall floor junction a fillet made from KÖSTER Repair Mortar Plus is installed to prevent stresses in the subsequent waterproofing layers.

The area waterproofing is normally achieved with KÖSTER NB 1 Grey mixed with KÖSTER NB 1 Flex. In case of pressurized water, the waterproofing needs to be done with the KÖSTER KD System.

Alternatively, the crack bridging waterproofing products KÖSTER NB Elastic Grey or KÖSTER NB 4000 can be used to waterproof the floor slab.

Always adhere to the specifications in the respective Technical Guidelines.

Internal basement waterproofing on the foundation plate with cold-adhesive waterproofing membranes



1. Horizontal barriers for walls
   KÖSTER Fix-Tape 15 SY
2. Primer
   KÖSTER KSK Primer BL
3. Waterproofing Layer
   KÖSTER KSK SY 15
4. Edge Waterproofing
   KÖSTER Butyl Fix-Tape Fleece
5. Protection layer (PE foil)
6. Waterproofing pipe penetrations
   KÖSTER KB-Flex 200

Fast, easy application without long waiting times: Waterproofing of the floor slab with KÖSTER KSK cold applied, self adhesive waterproofing membranes.

To avoid rising moisture, it is necessary to install a horizontal barrier underneath the wall with KÖSTER Fix-Tape 15 SY. The priming is done with solvent free materials such as KÖSTER KSK Primer BL or KÖSTER KBE Liquid Film, or KÖSTER Bitumen Primer. As a standard the primed surface of the floor slab is waterproofed with the cold applied, self adhesive waterproofing membrane KÖSTER KSK SY 15. Overlap the joints 8 cm. The waterproofing layer is carried up the wall and secured with the KÖSTER Butyl Fix-Tape Fleece.

The applied KÖSTER KSK Membranes have to be protected from mechanical damage as work continues. Before pouring the screed, a gliding layer of customary PE-Foil is applied.

Always adhere to the specifications in the respective Technical Guidelines.

Internal basement waterproofing in case of flowing water and in case of ground moisture, non-pressurized, and pressurized water

1 **Stopping active leakages**
KÖSTER KD 2 Blitz Powder

2 **Primer**
KÖSTER Polysil TG 500

3 **Levelling the surface**
KÖSTER WP Mortar

4 **Installing fillets**
KÖSTER WP Mortar

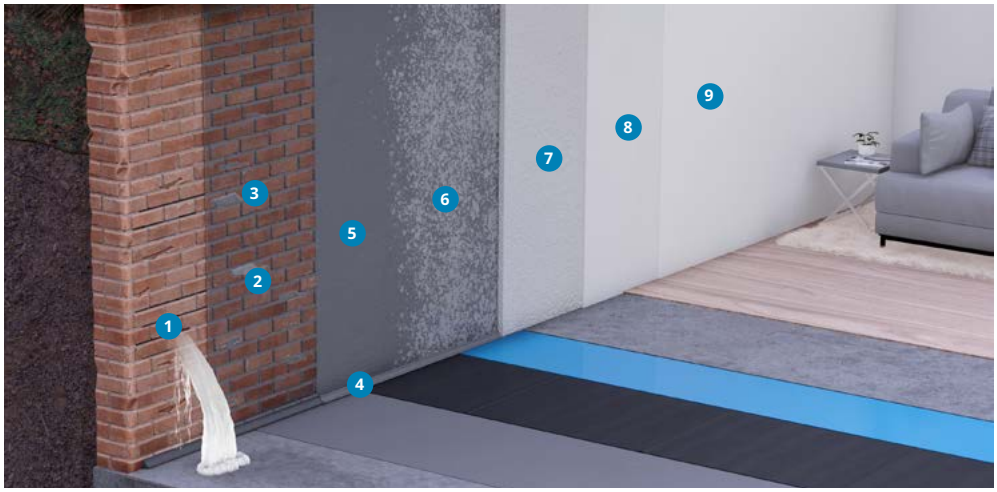
5 **Waterproofing layer**
KÖSTER KD System

6 **Plaster key**
KÖSTER Restoration Plaster Key

7 **Plaster**
KÖSTER Restoration Plaster White

8 **Fine Finish**
KÖSTER Fine Plaster

9 **Paint**
KÖSTER Renovation Paint White



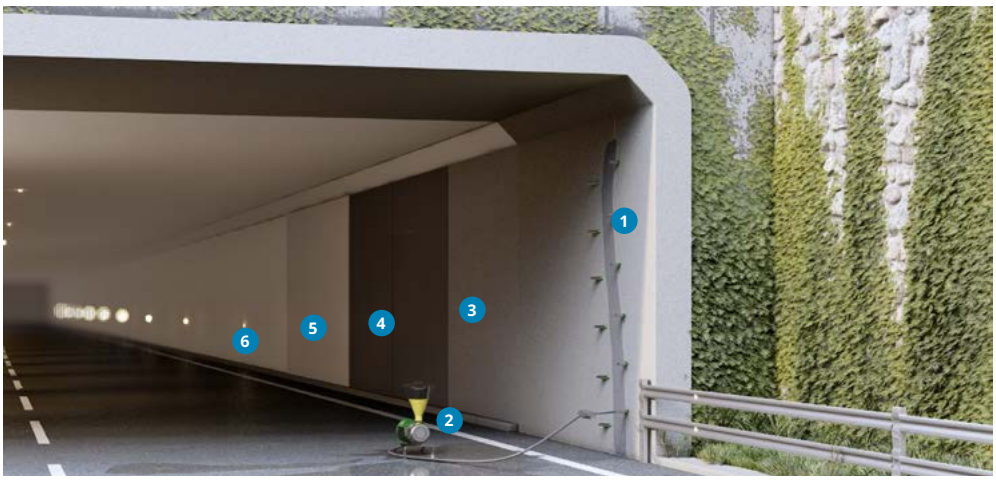
Retro-active waterproofing in existing buildings needs to be done with mineral based waterproofing systems. They have excellent bonding characteristics to mineral surfaces and won't detach from wet and moist substrates. A very difficult situation: The basement waterproofing has to be done from the inside but the water is actively entering the building. Often the only solution is the KÖSTER KD-System. KÖSTER KD 2 Blitz Powder is applied directly by hand to the active leakage. The powder reacts within seconds and forms a waterproof mortar. The material is applied to substrates that have to be sound, solid, and free of bond-inhibiting agents. Older plaster coats must be removed; the joints raked out and all loose particles removed. Generally, the substrate is primed by prewetting. Repairs and the installation of the fillet at the wall/floor junction are done with KÖSTER Repair Mortar Plus.

KÖSTER KD 1 Base is applied as the waterproofing layer and is brushed onto the substrate. KÖSTER KD 2 Blitz Powder is rubbed onto the still wet surface, immediately creating a dry waterproofed layer. To harden and strengthen this layer, the third part of the system, KÖSTER KD 3 Sealer, is applied. To waterproof the basement completely, another two layers of KÖSTER KD 1 Base are applied over the first.

Pipe penetrations are waterproofed with KÖSTER KB-Flex 200 sealing paste and plugged with KÖSTER KB-Fix 5. In the case of damage to basement walls caused by moisture, generally, a KÖSTER Restoration Plaster should be applied. KÖSTER Restoration Plasters help to dry out the wall and absorb remaining salts. They don't contain lime or gypsum, are open to water vapor diffusion, and create a healthy, comfortable room climate. Before the application of the main plaster coat, a plaster key made from KÖSTER Restoration Plaster Key or the chosen KÖSTER Restoration Plaster mixed with KÖSTER SB-Bonding Emulsion is applied to provide a larger surface area and ensure an optimal bond to the substrate. KÖSTER Restoration Plasters are available in different varieties. KÖSTER Restoration Plaster White is often used in older buildings without subsequent painting. KÖSTER Fine Plaster creates a smooth surface and can be applied to meet architectural goals. KÖSTER Restoration Plasters can only be painted over with breathable paints such as KÖSTER Renovation Paint White.

Always adhere to the specifications in the respective Technical Data Sheets.

Tunnel waterproofing and restoration



1 **Crack injection**
KÖSTER 2 IN 1

2 **Pump**
KÖSTER 1C Injection Pump

3 **Primer**
KÖSTER Polysil TG 500

4 **Waterproofing layer**
KÖSTER NB 1 Grey

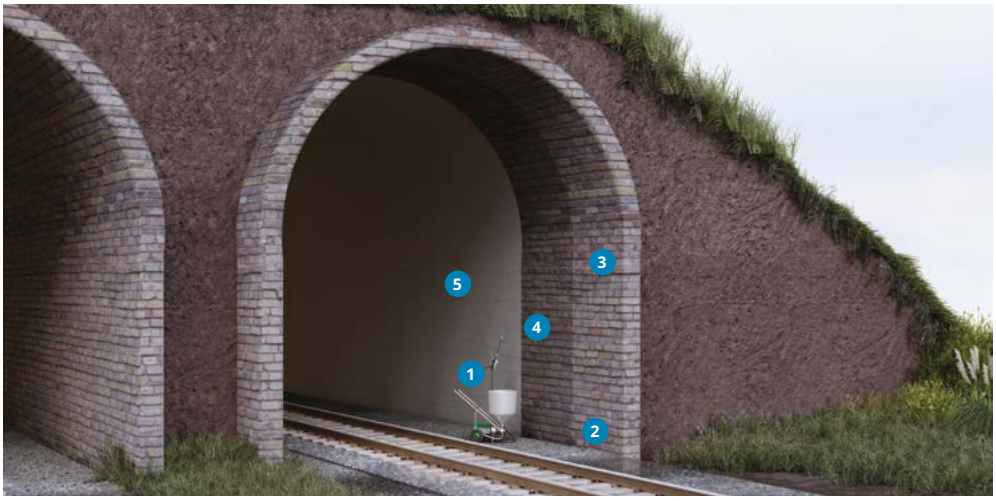
5 **Surface levelling**
KÖSTER C-Coat

6 **Paint**
KÖSTER Renovation Paint White

The method for waterproofing tunnels and reinstate its proper surface condition with KÖSTER products is based on a combination of negative side waterproofing and surface restoration systems.

Flowing water is stopped by injecting the water reactive elastic PU-injection resin KÖSTER 2 IN 1. Small leakages which are being penetrated by water as well as water droplet formations can be sealed with KÖSTER KD 2 Blitz Powder. To waterproof the entire surface from the negative side KÖSTER NB 1 Grey is applied to the prepared substrate. This is followed by a layer of the polymer modified levelling mortar KÖSTER C-Coat to create a uniform appearance. Finally, the system can be covered with a finishing touch of KÖSTER Acrylic Paint.

Always adhere to the specifications in the respective Technical Guidelines. Also observe the local guidelines and standards.



1 **Pump**
KÖSTER Peristaltic Pump

2 **Flowing Water**
KÖSTER KD 2 Blitz Powder

3 **Primer**
KÖSTER Polysil TG 500

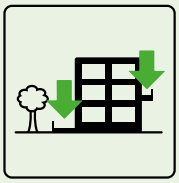
4 **Surface levelling**
KÖSTER WP Mortar

5 **Negative side waterproofing**
KÖSTER NB 1 Grey

Several waterproofing systems can be applied to the negative pressure inner side. KÖSTER KD 2 Blitz Powder and KÖSTER Waterstop can be used to stop small leaks.

Joints can be repaired with KÖSTER Repair Mortar or KÖSTER WP Mortar, and KÖSTER NB 1 Grey is to be applied on surfaces as negative side waterproofing.

Waterproofing balconies and terraces



This field poses the highest demands on waterproofing. It must be able to resist the weather, be waterproof and provide a certain structural stability. Also, outside the movements of the construction members are usually comparably large, so that it is necessary to use waterproofing systems with high crack bridging capabilities.

Waterproofing of balconies and terraces with mineral based waterproofing systems

1. **Concrete repair**
   KÖSTER Betomor Multi A
2. **Primer**
   KÖSTER Polysil TG 500
3. **Waterproofing Layer**
   KÖSTER NB 4000
   Alternative:
   KÖSTER NB Elastic Grey
4. **Reinforcement**
   KÖSTER Glass Fiber Mesh
5. **Tile Adhesive**
   KÖSTER BD Flexible Tile Adhesive
6. **Tiles**

The mineral waterproofing of balconies and terraces is carried out with crack-bridging systems such as KÖSTER NB 4000, KÖSTER NB Elastic Grey, or KÖSTER 21. These waterproofing materials can be walked on and covered with tiles, and they also adhere excellently to damp substrates.

The concrete surface must be mechanically cleaned. In addition, the reinforcing steel must be thoroughly cleaned of corrosion by sandblasting. Before the waterproofing is installed, the concrete is repaired with KÖSTER Betomor Multi A or with KÖSTER Z 1 and Z 2 and KÖSTER Repair Mortar R4.

After priming with KÖSTER Polysil TG 500, the installation of fillets on rising components and for leveling the surfaces can be carried out with KÖSTER Repair Mortar. KÖSTER SL Protect is recommended as a self-leveling surface equalizer.

KÖSTER Flex Fabric is embedded into the fresh first waterproofing layer in the wall-floor transition and in all areas at risk of cracking. The full-surface reinforcement is achieved by embedding KÖSTER Glass Fiber Mesh into the fresh first waterproofing layer.

The final installation of tiles and slabs can be carried out with the flexible adhesive KÖSTER BD Flexible Tile Adhesive.

For balcony waterproofing, the building regulations applicable in the respective countries must be observed.

The specifications in the Technical Data Sheets apply.

Waterproofing of balconies and terraces with TPO membranes

1 Concrete Repair
KÖSTER Betomor Multi A

2 Separation layer

3 Waterproofing Layer
KÖSTER TPO

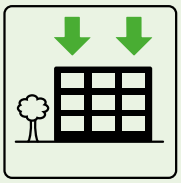
4 Terrace covering on pedestals

An easy method for waterproofing balconies and terraces is using the KÖSTER TPO waterproofing membranes loose-laid.

After the concrete substrate is renovated KÖSTER TPO can be installed with a additional fleece protection layer or directly on an isolation without any primer. For waterproofing the area KÖSTER TPO is loose-laid. With a width of up to 2.1 m, a very fast application is possible.

If the waterproofing is applied vertically onto a wall, the waterproofing membrane is mechanically fixed in transition. For every single possible detail in balconies and terraces KÖSTER TPO has the right accessory in the product range.

Waterproofing of small flat and sloped roofs



Flatly sloped roofs or smaller pitched roofs must be protected or strengthened against the effects of the weather. The mineral flat roof coating is ideal for a simple and safe revision and refreshment of the existing waterproofing. It is easy to process and offers high-quality, long-lasting protection.

Roof waterproofing with mineral based liquid membrane

1. Concrete Repair
   KÖSTER Betomor Multi A
2. Primer
   KÖSTER Polysil TG 500
3. Installing fillets
   KÖSTER WP Mortar
4. Waterproofing wall / floor junctions
   KÖSTER Superfleece
5. Waterproofing layer
   KÖSTER 21
6. Reinforcement
   KÖSTER Flex Fabric

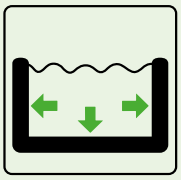
Damaged roofs and structures may require multiple products for proper protection. Substrate preparation is a key factor for a durable renovation. It must provide a sound basis for the area waterproofing. The waterproofing system should have multiple advantages, such as being liquid applied and therefore seamless. It should also have crack-bridging capabilities. KÖSTER 21 is a 2 component, solvent-free, liquid applied, elastic, crack bridging waterproofing material with excellent adhesion to dry and moist substrates that meets all these requirements. It is liquid applied and therefore seamless, which greatly eases application to complicated architectural details. Due to its UV stability it is suitable for indoor and outdoor use.

The white color reflects sunlight and reduces building surface temperatures. The fast curing coating is highly flexible, resistant to occasional foot traffic, aging, hydrolysis, UV-rays, frost, and salt.

KÖSTER 21 seals up to 2 bar against synthetic oils and aliphatic hydrocarbons with high boiling points . KÖSTER 21 does not contain volatile organic compounds (VOC content = 0), is free of polyurethanes, isocyanates, and bitumen.

Always adhere to the specifications in the respective Technical Guidelines.

Waterproofing potable water tanks



Waterproofing for drinking water storage structures and tanks must not only remain watertight for many years, but must also meet all sanitary requirements. The system used should be free of development of micro-organisms on the surface and at the same time, allow an easy and periodical cleaning method, with non-harmful substances.

Waterproofing water tanks with TPO membranes

1 Substructure

2 KÖSTER TPO Membrane
KÖSTER TPO Aqua 1.5

KÖSTER TPO Aqua is a homogeneous thermoplastic polyolefin waterproofing membrane for drinking water structures. KÖSTER TPO Aqua complies with the hygienic requirements for potable water surroundings according to the German DVGW Worksheet W 270 and the KTW guideline.

The membrane is mechanically fastened, which leads to low preparation requirements on the substrate. The substrate must be as smooth as possible and free of edges, depressions, and other defects that can mechanically damage the membrane. Edges must be ground and depressions and holes filled and leveled with KÖSTER Repair Mortar. Soil substrates must be excavated down to a solid layer and mechanically compacted. In interior corners on concrete, masonry, or other mineral substrates and structures, install a fillet made of KÖSTER Repair Mortar Plus on the wall-floor-junction approx. 24 hours prior to the application. For extra mechanical protection of the membrane, a geotextile mat (approx. 300 g / m^2) can be installed on the bottom of the reservoir before installing the KÖSTER TPO Aqua.

Overlaps are connected by hot air welding, which creates a homogeneous, durable connection.

For large areas, the Leister Automatic Welder Varimat V2 hot air machine is used. Details and non-accessible areas are welded with the Leister Hot-Air Hand Tool with a 40 mm nozzle.

Details such as terminations, penetrations, and flashings are job-site specific and require special care.

Always adhere to the specifications in the respective Technical Guidelines.

Waterproofing water tanks with 1 component crystalizing mineral coat

1 Concrete Repair
KÖSTER Repair Mortar R4

2 Primer
KÖSTER Polysil TG 500

3 Installing fillets
KÖSTER WP Mortar

4 Waterproofing layer
KÖSTER NB 1 Grey

Waterproofing tanks with mineral based products has a long history of successful applications. Various design requirements such as water-tightness, durability, mechanical and chemical resistance must be considered, as well as certification for use in drinking water environments. The KÖSTER NB 1 System for these types of constructions meets and exceeds all of these requirements.

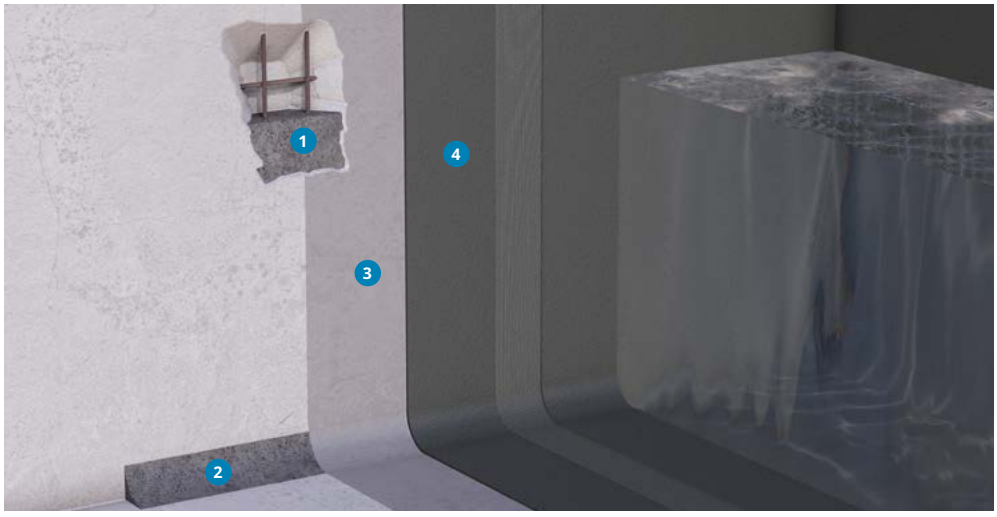
Waterproofing water tanks with 2 component elastic mineral coat (except for potable water tanks)

1 Concrete Repair
KÖSTER Repair Mortar R4

2 Installing fillets
KÖSTER WP Mortar

3 Primer
KÖSTER Polysil TG 500

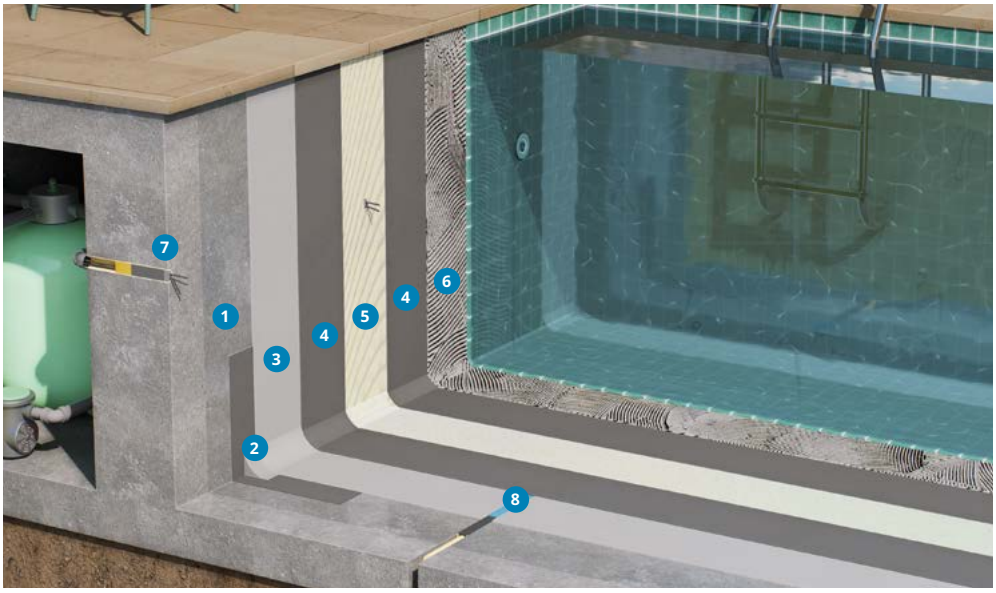
4 Waterproofing layer
KÖSTER NB 4000



Often water tanks have special requirements on the waterproofing system, such as being elastic with crack-bridging capabilities. Other factors may be pollutants in the water, as is common with skimmer tanks. For such areas, a system with KÖSTER NB 4000 is exactly the right choice. KÖSTER NB 4000 can be used for sprinkler tanks, rainwater retention basins, water tanks, etc.

Always adhere to the specifications in the respective Technical Guidelines.

Waterproofing swimming pools



1. **Primer**
   KÖSTER Polysil TG 500
2. **Fillet**
   KÖSTER WP Mortar
3. **Negative side waterproofing**
   KÖSTER NB 1 Grey
4. **Positive side waterproofing**
   KÖSTER NB 4000
5. **Reinforcement**
   KÖSTER Glass Fiber Mesh
6. **Tile adhesive**
   KÖSTER BD Flexible Tile Adhesive
7. **Penetrations**
   KÖSTER KB-Flex 200
8. **Joint sealing**
   KÖSTER Joint Sealant FS

Waterproofing swimming pools has unique requirements. Not only must it provide a suitable substrate for subsequent liners, it has to resist both positive and negative side water pressure. It should also have crack-bridging capabilities as these structures tend to settle greatly. The KÖSTER system designed and implemented for waterproofing swimming pools has a long track record of success.

The system is applied to substrates that are sound and solid as well as free from bond inhibiting agents. As primer, KÖSTER Polysil TG 500 is used. It hardens the substrate and reduces the mobility of salts. The installation of a fillet at the wall/floor junction is done with KÖSTER WP Mortar to prevent stresses in the subsequent waterproofing layers.

The negative side waterproofing is achieved with KÖSTER NB 1 Grey. In case of pressurized water, the waterproofing needs to be done with the KÖSTER KD System.

The positive side waterproofing is carried out with crack bridging systems like KÖSTER NB Elastic Grey or KÖSTER NB 4000. These waterproofing materials are resistant to foot traffic and can be covered with tiles. They also have the ability to create an excellent bond to damp substrates. The installation of KÖSTER Glass Fiber Mesh is recommended between the first and second layer of the waterproofing system to enhance the movement resistance.

The tiling can then be performed with the single component and flexible adhesive KÖSTER BD Flexible Tile Adhesive.

Pipe penetrations are waterproofed using KÖSTER KB-Flex 200 and sealed with KÖSTER KB-Fix 5. Joints are sealed with KÖSTER Joint Sealant FS.

Always adhere to the specifications in the respective Technical Data Sheets.

Waterproofing of pipes, manholes and sewage systems

1 Stopping active leakages
KÖSTER KD 2 Blitz Powder

2 Repair
KÖSTER Repair Mortar NC

3 Waterproofing
KÖSTER NB 1 Grey
Alternative
KÖSTER NB 1 Flex

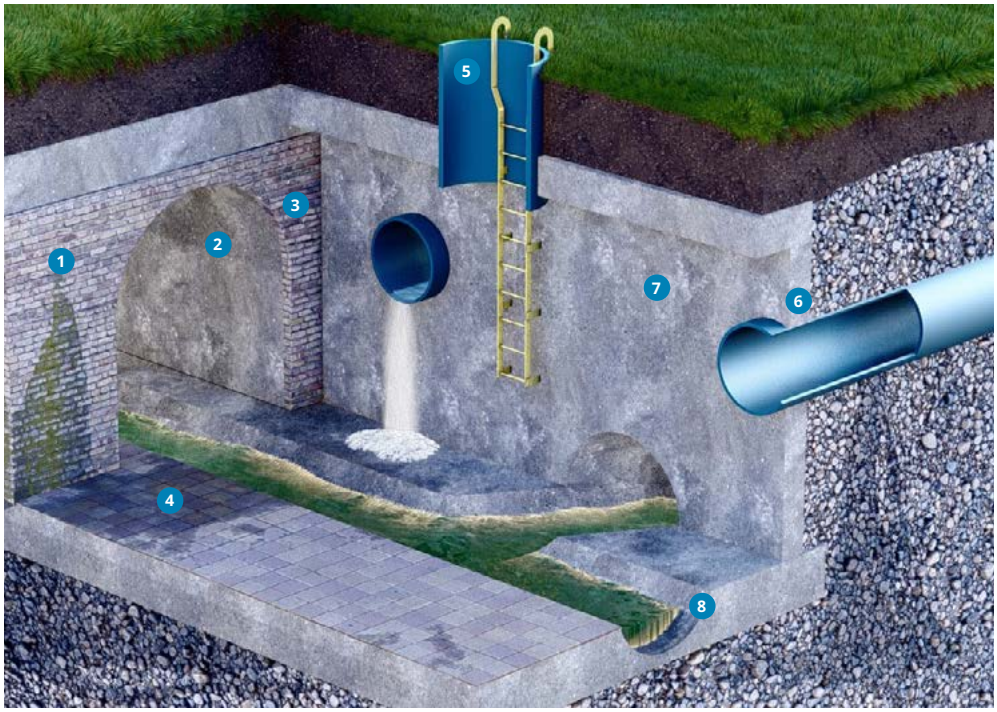
4 Acid protection
KÖSTER PSM

5 Waterproofing shafts
KÖSTER Sewer
and Shaft Mortar

6 Waterproofing pipe couplings
KÖSTER Injection Gel G4

7 Crack injection
KÖSTER 2 IN 1

8 Heavy duty surface protection
KÖSTER Sewer
and Shaft Mortar



Waterproofing tanks and pipes in sewage systems represent always a challenge due to the multiple substrate conditions, different construction materials, as well as demands on each of elements. Active leakages can be stopped within a few seconds simply by using the dry powder KÖSTER KD 2 Blitz Powder or alternatively the plugging mortar KÖSTER Waterstop.

For the substrate preparation, all contaminants and separating substances have to be removed from the surface. After that, the surface has to be levelled and reprofiled with KÖSTER Repair Mortar NC or KÖSTER Repair Mortar R4.

Large areas are waterproofed with the mineral based, sulfate resistant waterproofing system KÖSTER NB 1.

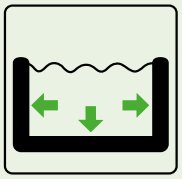
Floor and wall areas that are subject to acid attack caused by condensation of the gases, can be protected with the three-component, highly chemical resistant, silicate and polymer-based special mineral mortar KÖSTER PSM. The sealant KÖSTER PSM 2S + serves as protection against thermal and chemical stresses.

The quick restoration of the concrete elements is accomplished with the water tight, fast curing and fast setting restoration mortar KÖSTER Sewer and Shaft Mortar; allowing a fast reopening of the sewage system. KÖSTER Sewer and Shaft Mortar develops a high compressive strength, is fiber reinforced, very easy to apply and workable even under flowing water. It is also approved for drinking water applications.

Voids and even gaps between the elements can be securely sealed within its smallest pores with the extremely low viscosity acrylic gel KÖSTER Injection Gel G4. Crack injections can be carried out with the KÖSTER 2 IN 1.

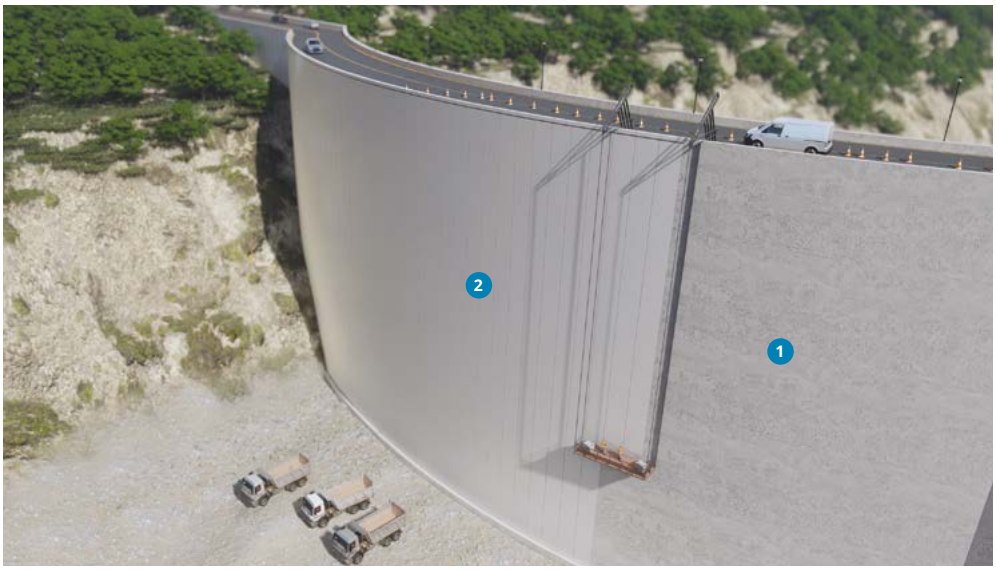
Always adhere to the specifications in the respective Technical Guidelines.

Dams and Canals



A hydraulic structure is a man-made structure submerged or partially submerged which disrupts the natural flow of water in order to use it for other purposes, such as energy production, storage and even protection (against flooding). These structures are commonly known as dams.
Other types of man-made structures that deal with big quantities of water are canals and artificial lakes, that are mostly used for storage and irrigation purposes for agriculture and drinking water transport, but also for hydropower production.

Waterproofing dams



1 Substrate

2 Waterproofing layer
KÖSTER TPO Aqua 2.5 Geo

The watertightness in concrete structures is provided by the concrete itself but due to the concrete's characteristics, the likelihood of developing cracks and other leaking pathologies requires the waterproofing treatment of the upstream side. On the other hand, the masonry structures are even more critical in developing leakages and requiring an effective waterproofing system.

The KÖSTER TPO Aqua 2.5 Geo is an extremely robust TPO membrane made with the highest quality polymers and special additives that provide a very flexible but at the same time, very strong membrane. Our membrane features a 2,5 mm homogenous PE base TPO with a bottom section with factory embedded 500 g polyester fleece geotextile, for extra protection of the membrane against irregularities and protuberances that with the water pressure and weight, could contribute to damage the integrity of the membrane.

This special membrane allows the fastest waterproofing application method available, both for new structures and old structures that require a renovation. It is simply applied with mechanical fixation to the structure, without the necessity of any kind of surface preparation or removal of any old coatings that might exist, and allows a high stability in steep slopes and durability against atmospheric agents.

The use of our KÖSTER TPO Aqua 2.5 Geo, reduces almost to zero the negative effect of cracks, substrate erosion and growing weeds on the concrete or masonry surface.

This special membrane is a truly environmentally responsible product, totally free of plasticizers and other volatile compounds and will help save millions of cubic meters of water, with total security and respect for the environment.

Waterproofing canals

1 Substructure

2 Waterproofing layer
KÖSTER TPO Aqua 2.5 Geo

Leaks and cracks in sewer structures lead to water loss, which is prevented by efficient waterproofing.

The KÖSTER TPO Aqua 2.5 Geo is an extremely robust TPO membrane made with the highest quality polymers and special additives that provide a very flexible but at the same time, very strong membrane. Our membrane features a 2,5 mm homogenous PE base TPO with a bottom section with factory embedded 500 g polyester fleece geotextile, for extra protection of the membrane against irregularities and protuberances that with the water pressure and weight, could contribute to damage the integrity of the membrane.

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KÖSTER
Bitumen Primer
10 l bucket
(W 110 010)

Solvent containing dust-binding bitumen primer. Suitable for KÖSTER KSK cold applied self adhesive waterproofing membranes and polymer modified bitumen thick film sealants. Suitable as bonding agent for old bitumen.

Consumption: Approx. 150 – 200 ml/m²

KÖSTER
Primer BL
15 kg bucket
(W 120 015)

Solvent-free primer for the application of KÖSTER KSK waterproofing membranes and KÖSTER Polymer Modified Bitumen Coatings above +5 °C. Strongly adhesive, based on emulsified bitumen with a high synthetic content.

Consumption: Approx. 150 – 300 g / m²

KÖSTER
Bikuthan 2C
28 l hobbock;
liquid component 25 l;
powder component 3.75 kg
(W 250 028)

Solvent-free, crack-bridging, stable, two-component, polymer modified bitumen thick film sealant with polystyrene light fillers in accordance with DIN EN 18533. Approved by the building authorities. For waterproofing construction members in ground contact such as basements.

Consumption: Approx. 4 – 5 l / m²

KÖSTER
Deuxan 2C

Two-component, compression-resistant, elastic, polymer modified, fibrated bitumen thick film sealant (PMBC) for the secure waterproofing of buildings in accordance with DIN 18533, such as basements. Resistant to pressurized water, approved by the building authorities. Radonproof.


External basement waterproofing


Floor slab waterproofing


Waterproofing against Radon


Can be spray applied

Article No.:
W 252 032

Consumption:
Approx. 4 - 6 kg / m²

Packaging:
32 kg hobbock;
liquid component 24 kg,
powder component 8 kg

KÖSTER
KBE Liquid Film

6 kg bucket
(W 245 006)
24 kg bucket
(W 245 024)

Solvent-free, highly elastic bitumen / rubber based sealing compound. For high quality external waterproofing of construction members in ground contact, such as basements. Also suitable for waterproofing under protective screed, crack bridging waterproofing of concrete floors, flat roofs and façades. Elongation: > 900 %.

Consumption: Waterproofing: Approx. 1.0 kg / m² / mm per coat; Primer: Approx. 200 g / m² in one coat mixed 1:1 with water; Seam sealing: Approx. 1.0 kg / m² / mm layer thickness.

KÖSTER
MS-Flexfolie

2 x 4 kg tubular bags
(W 200 008)
25 kg bucket
(W 200 025)

KÖSTER MS-Flexfolie is a single component, solvent free, highly elastic, crack bridging waterproofing material based on MS Polymer technology. KÖSTER MS-Flexfolie does not contain isocyanates, is quickly resistant to rain as well as occasional foot traffic, aging, hydrolysis, UV-rays, salts, and frost.

Consumption: Approx. 1.5 – 2.5 kg / m²

KÖSTER
NB Elastic Grey

33 kg: powder - 25 kg bag, liquid - carton (2 x 4 kg foil bags)
(W 233 033)

For abrasion resistant waterproofing of concrete and masonry structures which are in danger of cracking. KÖSTER NB Elastic Grey is a 2-component system, bridges cracks up to 2 mm and is resistant to pressurized water. It is suitable for the waterproofing of balconies, terraces and crack bridging waterproofing of concrete elements, also under tiles. Radonproof.

Consumption: Approx. 3.4 - 5.1 kg/m²

KÖSTER
21

A multi purpose waterproofing, 2 component, solvent-free, liquid applied, elastic and crack bridging material. Due to its UV stability it is suitable for indoor and outdoor use. The white color reflects sunlight and reduces building surface temperatures. The fast curing coating is highly flexible, resistant to occasional foot traffic, aging, hydrolysis, UV-rays, frost, and salt.


Liquid roof waterproofing


Waterproofing balconies / terrace


Waterproofing on bitumen


Foundation waterproofing

Article No.:
W 210 020

Consumption:
Approx. 2.2 – 2.6 kg / m²

Packaging:
20 kg Combipackage;
1 x 8 kg Powder;
2 x 6 kg Liquid

KÖSTER KD System

7.5 kg KÖSTER KD1;
7.5 kg KÖSTER KD2;
3 kg KÖSTER KD3;
KÖSTER Brush for liquids;
KÖSTER Brush for slurries
(W 219 018)

System package for the negative side waterproofing of mineral surfaces against pressurized water such as in internal basement waterproofing. The KÖSTER KD System stops flowing water and forms a permanent waterproofing layer on masonry and concrete. All components of the KÖSTER KD System combined in one package.

Consumption: KÖSTER KD 1 Base: approx. 1.5 - 2.5 kg / m²; KÖSTER KD 2 Blitz Powder: approx. 1.0 - 2.0 kg / m²; KÖSTER KD 3 Sealer: approx. 0.5 kg / m²

KÖSTER KD 1 Base

7.5 kg bucket
(W 211 007)
15 kg bucket
(W 211 015)

Fast setting, mineral sealing slurry with high resistance against aggressive ground moisture and pressurized water. Used in combination with KÖSTER KD 2 Blitz Powder and KÖSTER KD 3 Sealer for the negative side waterproofing of mineral surfaces such as in internal basement waterproofing.

Consumption: Approx. 1.5 – 2.5 kg / m²

KÖSTER KD 3 Sealer

6 kg jerrycan
(W 313 006)
12 kg jerrycan
(W 313 012)

Low viscosity silicifying liquid. The active ingredients penetrate deeply into the substrate and form water insoluble compounds. The pores are plugged and permanently waterproofed through continuing crystalization. Used in combination with KÖSTER KD 1 Base and KÖSTER KD 2 Blitz Powder for the negative side waterproofing of mineral surfaces such as for internal basement waterproofing.

Consumption: Approx. 0.5 kg/m²

KÖSTER KD 2 Blitz Powder

Highly reactive powder with an extremely short setting time. Active leakages and weeping water can be stopped within a few seconds simply by using the dry powder. Used in combination with KÖSTER KD 1 Base and KÖSTER KD 3 Sealer for the negative side waterproofing of mineral surfaces such as for internal basement waterproofing.


Active leaks...


...stopped...


...in seconds!

Article No.:
W 512 007
W 512 015

Consumption:
Approx. 1 - 2 kg / m²

Packaging:
7.5 kg bucket
15 kg bucket

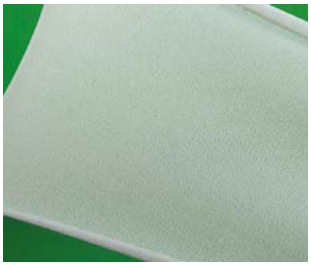
KÖSTER Flex Fabric

50 m roll
(W 450 100)

Highly flexible, tear-resistant fabric for the reinforcement of thin-layer waterproofing, especially in areas prone to cracking, penetrations or wall / floor connections. Finely woven, synthetic.

Particularly suitable for: KÖSTER Dachflex, KBE Liquid Film, KÖSTER BD 50 and KÖSTER NB Elastic Grey, KÖSTER NB Elastic White, KÖSTER 21.

1 m x 50 m, 50 m².



KÖSTER Glass Fiber Mesh

33 cm x 100 m, 100 m roll
(W 411 033)
100 cm x 100 m, 100 m² roll
(W 411 100)

Highly tear resistant mesh for the reinforcement of waterproofing layers especially in the case of pressurized water, areas in danger of cracking as well as connections, wall / floor junctions and fillets. Resistant to dislocation, alkalis, plasticizer-free.

Particularly suitable for: KÖSTER KBE Liquid Film, KÖSTER Bikuthan 2C, KÖSTER Deuxan 2C, KÖSTER BD 50, KÖSTER NB 4000, KÖSTER NB Elastic, KÖSTER 21.

KÖSTER Superfleece

50 m roll, width 10 cm
(W 412 010)
50 m roll, width 30 cm
(W 412 030)

High strength polyester nonwoven reinforcement fabric for liquid waterproofing products such as KÖSTER MS-Flexfolie, KÖSTER KBE Liquid Film, and KÖSTER BD 50. To reinforce waterproofing in corners and other areas prone to cracking and to connect to gutters, gullies, and similar custom details. 10 cm and 30 cm wide, 50 m roll.

Consumption: 1 m per linear m

radonproof

KÖSTER NB 4000

A polymer modified mineral coating for waterproofing building structures inside and outside. It is resistant to rain soon after its application and can be exposed to pressurized water after 24 hours of curing time. KÖSTER NB 4000 is elastic and crack bridging and suitable for waterproofing in areas such as basements, foundation slabs, masonry, and the repair of defective waterproofing layers.


External basement waterproofing


Moist substrates


Precast concrete production


Base waterproofing

Article No.:
W 236 025

Consumption:
Approx. 2.4 - 4.8 kg / m²

Packaging:
25 kg combipackage;
2 x 7.2 kg powder component,
2 x 5.3 kg liquid component

KÖSTER
Repair Mortar
25 kg bag
(W 530 025)

Hydrophobic, pressurized water resistant mortar with special bonding agents suitable for fillets, repairs and as a barrier-plaster. When mixed with KÖSTER SB Bonding Emulsion it becomes a PCC Mortar.

Consumption: Approx. 1.8 kg / l void

KÖSTER
Repair Mortar Plus
25 kg bag
(W 532 025)

Slightly expanding, hydrophobic, fast setting repair mortar which is resistant to pressurized water. When mixed with KÖSTER SB Bonding Emulsion it becomes a PCC Mortar.

Consumption: Approx. 1.8 kg / l void; approx. 2.5 kg per meter of fillet

KÖSTER
WP Mortar
25 kg bag
(W 534 025)

Watertight, trowel applicable, fast setting mineral mortar for reprofiling surfaces and resistant to pressurized water when applied in a layer thickness of 4 mm. It cures quickly and is characterized by high pressure and abrasion resistance, high chemical resistance, and resistant against salts in the substrate.

Consumption: Approx. 1.8 kg / l void, 18 kg / m² per cm layer thickness

KÖSTER
Waterstop
15 kg bucket
(W 540 015)

Fast setting, slightly expanding plug and repair mortar. A strong-bond between existing substrate and the mortar is achieved. Suitable to permanently plug active water leakages.

Consumption: Approx. 2 kg / l void

KÖSTER
NB1 Grey

Watertight mineral waterproofing with subsequently crystallizing agents. Suitable for positive side and negative side waterproofing. Possesses excellent pressure and abrasion resistance, as well as chemical and sulphate resistance. Approved for potable water. For area waterproofing in new construction and restoration, e.g. waterproofing of basements and tanks.


Internal basement waterproofing


Civil engineering or urban planning


Infrastructure


Water tanks

Article No.:
W 221 025

Consumption:
Approx. 2 - 4 kg / m²

Packaging:
25 kg bag

KÖSTER
NB 1 Flex
9 kg jerrycan
(W 721 009)

Ready-mixed liquid for KÖSTER NB sealing slurries. The latex based dispersion KÖSTER NB 1 Flex has a plastifying effect, improves the adhesion to the substrate and prevents the premature drying out of the fresh slurry.

Consumption: Approx. 9 kg for 25 kg NB 1 Grey

KÖSTER
NB 4000 Spray Additive
250 g bottle
(W 736 250)

Liquid additive for KÖSTER NB 4000 for improving sprayability as well as other application characteristics.

Consumption: max. 1 bottle of 250 g per 25 kg KÖSTER NB 4000

KÖSTER
SB Bonding Emulsion
5 kg jerrycan
(W 710 005)
10 kg jerrycan
(W 710 010)

Multi-purpose liquid plasticizing dispersion for use with all cement based mortars, plasters and sealing slurries. Solvent free, plasticizer and filler free. The product provides a plastifying effect, increases the elasticity and reduces the water absorption of mineral systems. It is waterproof after full cure. Typical field of application: as an additive for waterproofing with NB 1 Grey.

Consumption: Replaces 5 – 33 % of mixing water

KÖSTER
Butyl Fix-Tape Fleece
10 m roll
(W 815 015 F)

Cold applied self-adhesive tape for sealing the upper edges of KÖSTER KSK sealing membranes. KÖSTER Butyl Fix-Tape Fleece can be plastered over.

KÖSTER Butyl Fix-Tape Fleece is 1.5 mm thick with a separating backing paper on the bottom side. The material is highly tear resistant, immediately waterproof and can be plastered over due to its fleece-laminated upper side.

1.5 mm x 150 mm.

KÖSTER
Fix-Tape 15 SY
20 m roll
(W 815 020)

Cold applied self adhesive rubber / bitumen based waterproofing tape for sealing facade areas and windproofing window connections. Applicable between +5 °C and +30 °C. Highly flexible, crack bridging, immediately water and rainproof. Double laminated with a highly tear resistant polyethylene foil. Material thickness 1.5 mm, available in 200 mm width.

KÖSTER
KSK SY 15
1.5 mm x 1.05 m x 20 m,
21 m² roll
(W 815 105)

Cold applied self-adhesive rubber / bitumen waterproofing membrane according to the DIN EN 18533. Suitable for application from +5 °C to +30 °C. Fields of application include basements, foundation plates, balconies, terraces or on polystyrene elements.

KÖSTER KSK SY 15 membranes do not require hot air or propane gas welding for application. It is highly flexible, immediately waterproof, crack bridging and resistant to driving rain. Suitable for application even on cold substrates. Radonproof. With a double laminated, highly tear-resistant polyethylene foil on top. 1 roll = 21 m²

KÖSTER
TPO Aqua 1.5
1.5 mm x 1.50 m x 20 m, 30 sqm roll
(W 815 150 U W A)

Waterproofing membrane for drinking water structures. KÖSTER TPO Aqua complies with hygienic requirements for potable water surroundings according to the German DVGW Worksheet W 270 and the KTW guideline. The TPO based membrane is highly tear resistant and provides very high flexibility, so that even large cracks are securely bridged. The membrane is installed by mechanical fastening, requiring little or no substrate preparation. For uses in Drinking water reservoirs, tanks, water retention structures, fish ponds, etc.

KÖSTER
TPO Aqua 2.5 Geo
roll
(RT 825 210 F)

Special homogeneous geomembrane for hydraulic works such as dams, canals and artificial lakes. This 2.5 mm FPO/TPO-PE highly UV resistance membrane is highly tear resistant and provides very high flexibility. The back-side with the 500 g polyester insures an outstanding dimension stability and impact resistance.

KÖSTER
SD Protection and Drainage Sheet 3-250
roll
(W 903 030)

Black HD-PE based notched protection board which combines 3 functions in one product: (1) mechanical protection of the waterproofing layer (e.g. when backfilling the construction pit) according to DIN 18533, (2) decoupling of the waterproofing layer from any ground movement, (3) the hollow core leads seepage and backwater safely to the drainage. 2 m x 15 m, 30 m².

KÖSTER
Brush for Liquids
piece
(W 912 001)

Special brush for the application of liquid materials, e.g. KÖSTER Dachflex, KÖSTER KD 3 Sealer, etc.

Good to know: Waterproofing against Radon

The European Guideline regarding radiation protection stipulates that a reference level of 300 Bq / m³ air caused by the noble gas Radon must not be exceeded. Increased concentration of radioactivity can entail severe health issues. Therefore, proofing buildings against Radon is an important measure to ensure respective protection. Products like **KÖSTER NB 4000**, **KÖSTER Deuxan 2C**, and **KÖSTER KSK SY 15** prevent the noble gas to diffuse through the soil into the structure, where it would negatively affect the air. Restoration measures with these products will meet the specifications made by law and prevent health risks.

KÖSTER
Brush for slurries
piece
(W 913 001)

Special brush with waved bristles for the application of materials with a paste-like consistency, e. g. KÖSTER NB Sealing Slurries, KÖSTER KD 1 Base, etc.

KÖSTER
Peristaltic Pump
piece
(W 978 001)

Electrical pump for spraying liquid and pasty, mineral-, water-, or bitumen based materials such as 1 and 2 component polymer modified bitumen thick film sealants, elastic and rigid waterproofing slurries, liquid membranes, and mortars.

KÖSTER
Roofing Nails
piece
(W 981 001)

For mechanically fixing cold applied self-adhesive waterproofing membranes, 3.1 x 50 mm.

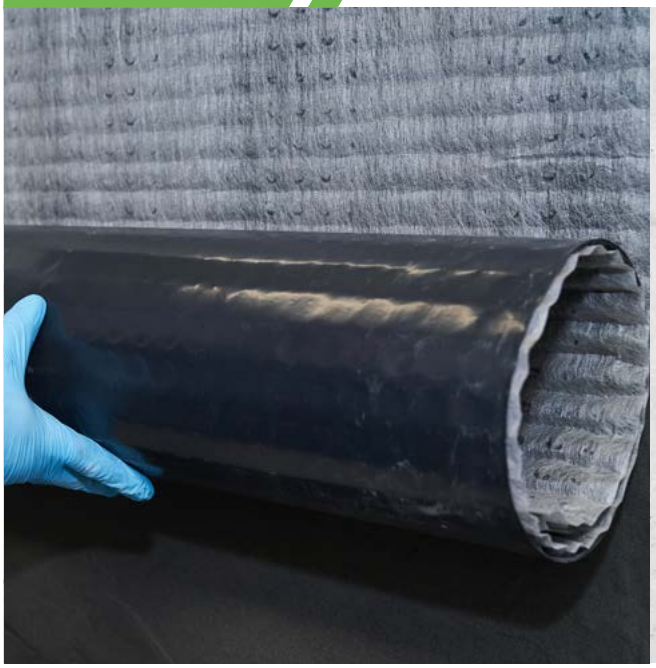
KÖSTER
SD Edge Profile
piece
(W 970 001)

Finishing profile for protection and drainage sheets (black, l: 2 m, height: approx. 65 mm, perforated).

KÖSTER
SD Fixing Element
100 pieces
(W 971 001)

Steel nails and mounting heads for the fixing of protection and drainage sheets.

Good to know: Protecting the waterproofing layer



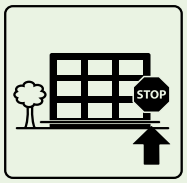
Backfilling of the construction pit and settlement of the ground over time are frequent sources of damage to the waterproofing layer. Usually the material used to backfill the construction pit does not consist of clean sand but contains coarse aggregates. During backfilling, these aggregates can be pushed into the waterproofing layer and damage it. As a result, the installation of a protective layer is essential. Protective layers ideally combine three functions: mechanical protection, drainage, and a decoupling or gliding layer. The KÖSTER SD Sheet 3-250 consists of three layers. The mechanical protection is provided by the main layer, a HDPE dimple sheet. Facing the soil, a fleece is attached to the dimples of the dimple sheet in order to maintain the drainage function. The third layer on the backside of the dimple sheet facing the waterproofing layer is a LDPE foil. This gliding layer between dimple sheet and waterproofing layer prevents damages due to backfilling or settling of the ground.

M

Restoration of masonry

Restoration plasters, horizontal barriers, anti-mold systems

Horizontal barriers for restoration walls



Rising moisture in masonry over a longer period of time can lead to considerable damages. An indication of these damages is salt efflorescence, flaking plaster, moist wallpaper and the formation of mold which can be harmful. KÖSTER horizontal barriers stop rising moisture in new construction and existing buildings to protect the valuable building substance.

Horizontal barriers with pressureless injection system KÖSTER Crisin 76

1. Accessories
   KÖSTER Capillary Rods
2. Accessories
   KÖSTER Suction Angle
3. Cross section waterproofing
   KÖSTER Crisin 76
4. Primer
   KÖSTER Polysil TG 500
5. Levelling
   KÖSTER WP Mortar
6. Waterproofing layer
   KÖSTER NB 1 Grey
   KÖSTER NB 1 Flex
7. Plaster key
   KÖSTER Restoration Plaster Key
8. Plaster
   KÖSTER Restoration Plasters
9. Fine plaster
   KÖSTER Fine Plaster
10. Paint
    KÖSTER Renovation Paint White

Rising (or "wicking") moisture is among the most frequently encountered causes of damage in masonry walls. The results are clearly identifiable through the spalling of plaster, damaged joints and bricks, and also through salt efflorescence and algae growth. Damage from rising moisture can be avoided by the installation of a horizontal barrier.

The most successful KÖSTER system to install a horizontal barrier in existing walls is the KÖSTER Suction Angle System with KÖSTER Crisin 76. KÖSTER Crisin 76 is a very thin fluid resin which penetrates into the smallest capillaries in the building material, stops the capillary action permanently and creates a hydrophobizing effect within the structure.

Boreholes are drilled regularly spaced depending on the wall thickness. KÖSTER Crisin 76 is injected without pressure into the wall via the KÖSTER Suction Angle and the KÖSTER Capillary Rod which acts as a wick. The pressureless system uses the same capillary action which is the cause for rising damp. Thereby, rising moisture is stopped with the aid of its cause. The big advantage of the KÖSTER Capillary Rod is that it doesn't waste material in cracks or voids. Only where the rod touches the wall of the borehole will the material be released.

In some cases, such as in less moist walls, KÖSTER Mautrol Liquid Sealant can also be applied. Before the application an analysis of the moisture content and the salt content must be carried out.

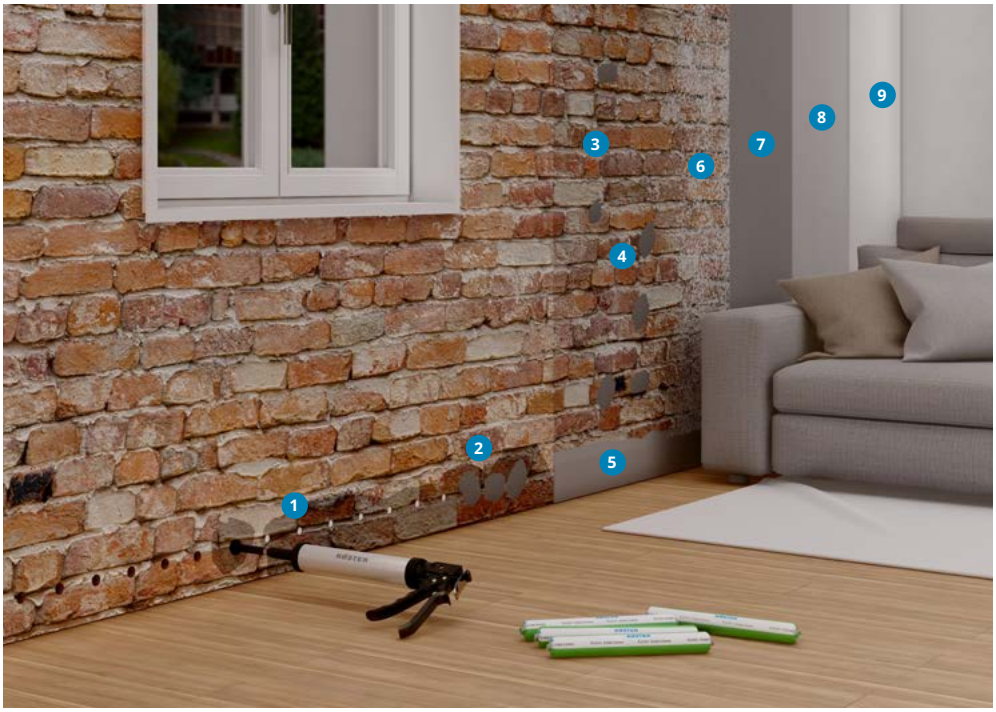
After priming the surface with KÖSTER Polysil TG 500 and leveling it using KÖSTER Repair Mortar Plus, two coats of KÖSTER NB 1 Grey are applied crosswise to the negative side as a waterproofing layer.

KÖSTER Restoration Plasters are available in different varieties (grey, white, fast and light). KÖSTER Restoration Plaster White is often used in older buildings without subsequent painting. KÖSTER Fine Plaster creates a smooth decorative surface and can be applied when desired to meet architectural goals. KÖSTER Restoration Plasters can only be painted over with breathable (open to vapor diffusion) paint such as KÖSTER Renovation Paint White.

Always adhere to the specifications in the respective Technical Guidelines.

> In cases where damage is caused by rising moisture, the old plaster has to be removed from the wall. After the installation of the horizontal barrier, the application of KÖSTER Restoration Plaster is required. KÖSTER Restoration Plaster allows the masonry to dry without damage. KÖSTER Restoration Plasters are open to vapor diffusion and are hydrophobic. Salts remaining in the wall are absorbed by the KÖSTER Restoration Plasters so that salt doesn't effloresce to the surface and doesn't cause damage to the plaster or paint.

Horizontal barriers with pressureless injection system KÖSTER Crisin Cream



1 Cross section waterproofing
KÖSTER Crisin Cream

2 Closing holes
KÖSTER KB-Fix 5

3 Primer
KÖSTER Polysil TG 500

4 Levelling
KÖSTER Repair Mortar

5 Waterproofing layer
KÖSTER NB 1 Grey

6 Plaster key
KÖSTER Restoration Plaster Key

7 Plaster
KÖSTER Restoration Plasters

8 Fine plaster
KÖSTER Fine Plaster

9 Paint
KÖSTER Renovation Paint White

Rising (or "wicking") moisture is among the most frequently encountered causes of damage in masonry walls. The results are clearly identifiable through the spalling of plaster, damaged joints and bricks, and also through salt efflorescence and algae growth. Damage from rising moisture can be avoided by the installation of a horizontal barrier.

KÖSTER Crisin Cream is a very thin resin which penetrates into the smallest capillaries in the building material, stops the capillary action permanently and creates a hydrophobizing effect. KÖSTER Crisin Cream can be applied from inside and/or from the outside of the building. It is suitable in cases of high degrees of moisture penetration (95% +/- 5% saturation) and with all degrees of salt contamination.

In cases where damage is caused by rising moisture, the old plaster has to be removed from the wall. After the installation of the horizontal barrier, the application of KÖSTER Restoration Plaster is required. The KÖSTER Restoration Plaster allows the masonry to dry without damage.

KÖSTER Restoration Plasters are open to vapor diffusion and are hydrophobic. Salts remaining in the wall are absorbed by the KÖSTER Restoration Plasters so that salt doesn't effloresce to the surface and doesn't cause damage to the plaster or paint.

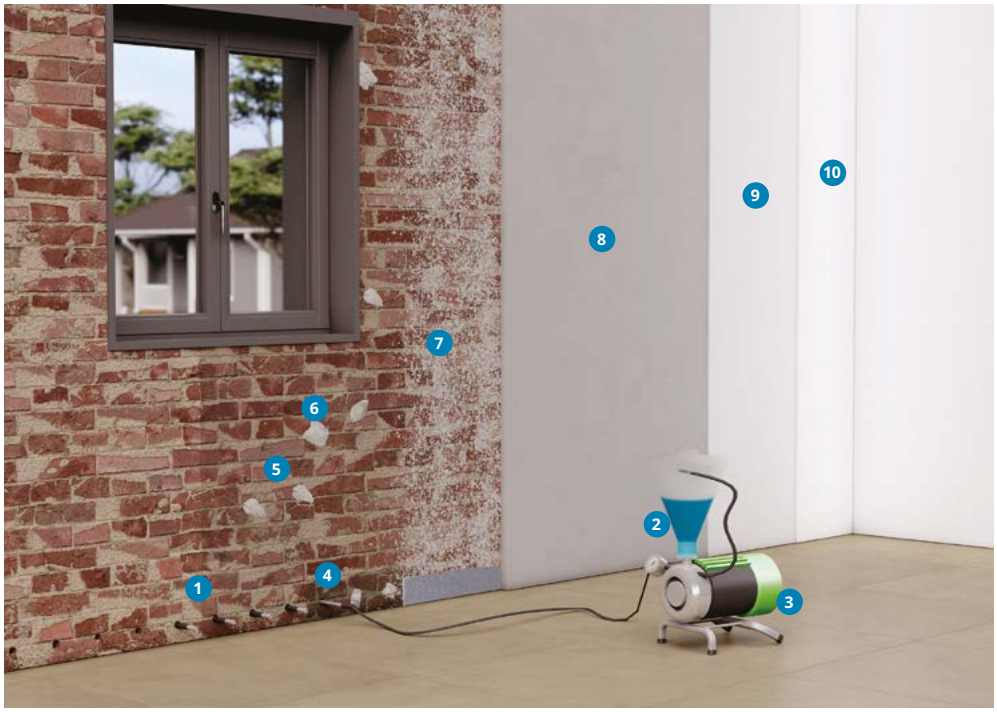
After priming the surface with KÖSTER Polysil TG 500 and leveling it using KÖSTER Repair Mortar Plus, two coats of KÖSTER NB 1 Grey are applied crosswise to the negative side as a waterproofing layer.

KÖSTER Restoration Plasters are available in different varieties (grey, white, fast and light). KÖSTER Restoration Plaster White is often used in older buildings without subsequent painting. KÖSTER Fine Plaster creates a smooth decorative surface and can be applied when desired to meet architectural goals. KÖSTER Restoration Plasters can only be painted over with breathable (open to vapor diffusion) paint such as KÖSTER Renovation Paint White.

Always adhere to the specifications in the respective Technical Guidelines.

Horizontal barriers with pressure injection for voidless masonry

1. **Installing the packers**
   KÖSTER Superpacker 10 mm x 85 mm CH
2. **Installing the horizontal barrier via injection**
   KÖSTER Mautrol Flex 2C
3. **Pump**
   KÖSTER 1C Injection Pump
4. **Closing holes**
   KÖSTER KB-Fix 5
5. **Primer**
   KÖSTER Polysil TG 500
6. **Levelling**
   KÖSTER Repair Mortar
7. **Plaster key**
   KÖSTER Restoration Plaster Key
8. **Plaster**
   KÖSTER Restoration Plasters
9. **Fine plaster**
   KÖSTER Fine Plaster
10. **Paint**
    KÖSTER Renovation Paint White



Fast and effective: The installation of a horizontal barrier via pressurized injection. When it is possible to ensure that the wall is free of cracks or voids, the horizontal barrier can be installed with a pressurized injection system. Cracks and voids which become apparent during the drilling process can be filled. After filling, the borehole is re-drilled and the injection process can proceed.

Suitable injection liquids for this kind of application are KÖSTER Mautrol 2C and KÖSTER Mautrol Flex 2C. Two component materials have a faster setting time, which causes a quicker blockage of the capillaries. The injection can be carried out with the electrical 1C injection pump KÖSTER 1C Injection Pump.

In cases where damage is caused by rising moisture, the old plaster has to be removed from the wall. After the installation of the horizontal barrier, the application of KÖSTER Restoration Plaster is required. The KÖSTER Restoration Plaster allows the masonry to dry without damage. KÖSTER Restoration plasters are open to vapor diffusion and are hydrophobic. Salts remaining in the wall are absorbed by the KÖSTER Restoration Plasters so that salt doesn't effloresce to the surface and doesn't cause damage to the plaster or paint.

KÖSTER Restoration Plasters are available in different varieties (grey, white, fast and light). KÖSTER Restoration Plaster White is often used in older buildings without subsequent painting. KÖSTER Fine Plaster creates a smooth decorative surface and can be applied when desired to meet architectural goals. KÖSTER Restoration Plasters can only be painted over with breathable (open to vapor diffusion) paint such as KÖSTER Renovation Paint White.

Always adhere to the specifications in the respective Technical Guidelines.

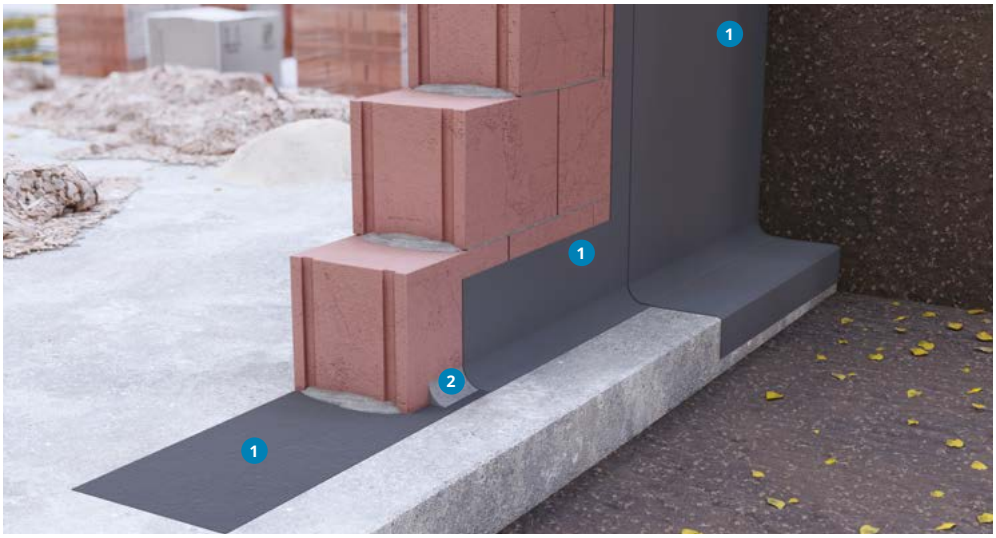
Horizontal barriers with self adhesive tape (New Construction)

1 Horizontal barriers for walls
KÖSTER KSK SY 15

A horizontal waterproofing beneath walls in new construction is required to avoid rising moisture due to capillary action in masonry or concrete. For this application many KÖSTER products can be used. KÖSTER Fix-Tape 15 SY is a self adhesive waterproofing tape which is easy and fast to apply.

Always adhere to the specifications in the respective Technical Guidelines.

Horizontal barriers with mineral systems (New Construction)

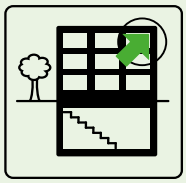


1 Horizontal barriers for Waterproofing Layer
KÖSTER NB 4000

2 Installing fillets
KÖSTER WP Mortar

Horizontal Barriers are required to stop long-term damage caused by rising damp, salts, and efflorescence. Compared to post-installed systems, damp proof courses in new construction are economical and effective. Not only do these materials have to be waterproof, but they have to resist the pressure of the building. KÖSTER provides both elastic and rigid waterproofing products for this field of application.

Systems against possible mold growth



Mold in living areas caused by moisture penetration and thermal bridges results in extensive health damage because the mold releases its spores into the air which is then inhaled by the inhabitants. A special Anti Mold System – which functions on a purely physical basis and which is free of fungicidal toxins provides a permanent protection because mold can not grow on this coating.

Restoration of masonry with restoration plasters

1 **Primer**
KÖSTER Polysil TG 500

2 **Levelling**
KÖSTER Repair Mortar

3 **Plaster key**
KÖSTER Restoration Plaster Key

4 **Plaster**
KÖSTER Restoration Plasters

5 **Fine plaster**
KÖSTER Fine Plaster

6 **Paint**
KÖSTER Renovation Paint White

When masonry is just slightly moist, often a restoration with KÖSTER Restoration Plasters is enough to dry the wall and stop damage from occurring. In this case, the old plaster has to be removed from the wall and the joints raked out. All loose particles have to be removed to provide a stable and absorptive, openpored surface. Priming with KÖSTER Polysil TG 500 optimally prepares the masonry for the application of KÖSTER Restoration Plaster. KÖSTER Polysil TG 500 hardens the substrate as well as reduces the mobility of salts. Masonry repairs are carried out with KÖSTER Repair Mortar.

Before the application of the main plaster coat, KÖSTER Restoration Plaster Key is applied to provide a larger surface area and to ensure an optimal bond to the substrate. The KÖSTER Restoration Plaster allows the masonry to dry without damage.

KÖSTER Restoration Plasters are open to vapor diffusion and are hydrophobic. Salts remaining in the wall are absorbed by the KÖSTER Restoration Plasters so that salt doesn't effloresce to the surface and doesn't cause damage to the plaster or paint.

KÖSTER Restoration Plasters are available in different varieties (grey, white, fast and light). KÖSTER Restoration Plaster White is often used in older buildings without subsequent painting. KÖSTER Fine Plaster creates a smooth decorative surface and can be applied when desired to meet architectural goals. KÖSTER Restoration Plasters can only be painted over with breathable (open to vapor diffusion) paint such as KÖSTER Renovation Paint White.

Always adhere to the specifications in the respective Technical Guidelines.

Improve indoor climate with KÖSTER Thermal Restoration Plaster

1 **Primer**
KÖSTER Polysil TG 500

2 **Levelling**
KÖSTER Repair Mortar

3 **Plaster key**
KÖSTER Restoration Plaster Key

4 **Plaster**
KÖSTER Thermal Restoration Plaster

5 **Reinforcement**
KÖSTER Glass Fiber Mesh

6 **Optional surface treatment**
KÖSTER Hydrosilicate Adhesive SK

7 **Paint**
KÖSTER Renovation Paint White

For the repair of masonry damaged by moisture and salt, particularly following the installation of a horizontal barrier, the application of KÖSTER Thermal Restoration Plaster is highly recommended. This is effective for all levels of moisture and salt content within the masonry. Additionally, it enhances the insulation value of the masonry and serves as a preventative measure against mold growth. The use of approx. 50% high-quality renewable raw materials make this plaster ecologically sustainable in several aspects.

Before commencing repair work, loose material and salt efflorescence must be mechanically removed. The substrate should then be primed with KÖSTER Polysil TG 500, which hardens the substrate and reduces the mobility of salts. Masonry repairs are carried out with KÖSTER Repair Mortar. Before the application of the plaster coat, KÖSTER Restoration Plaster Key is applied to increase the surface area and to ensure an optimal bond to the substrate.

KÖSTER Thermal Restoration Plaster is applied in a layer thickness of up to 3 cm. Immediately afterward, KÖSTER Glass Fiber Mesh is embedded into the surface. After a minimum of 60 minutes, the second layer of KÖSTER Thermal Restoration Plaster is applied in a layer thickness of max. 2 cm. For surface smoothing in interior areas, KÖSTER Hydrosilicate Adhesive SK can be applied in a layer thickness of up to 2 mm. KÖSTER Thermal Restoration Plaster can only be painted over with breathable (open to vapor diffusion) paint such as KÖSTER Renovation Paint White. In case of deviating layer build-up, please contact our Technical Service.

Hydrosilicate system for mold remediation and prevention on interior surfaces

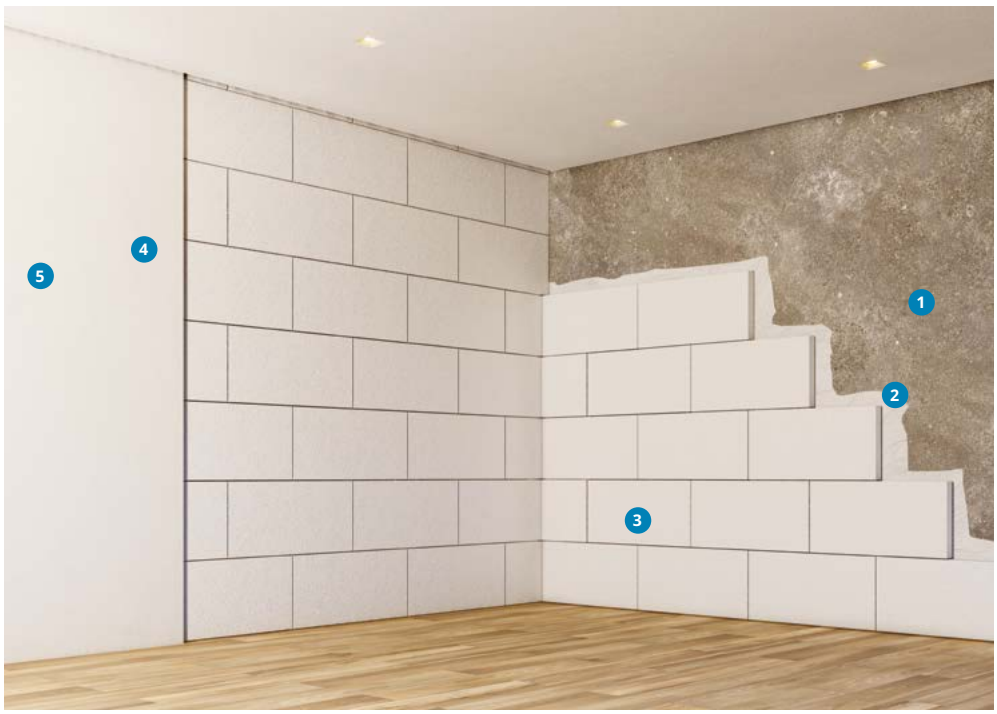
1 **Surface preparation**
KÖSTER Polysil TG 500

2 **Adhesive**
KÖSTER Hydrosilicate Adhesive SK

3 **Boards**
KÖSTER Hydrosilicate Board

4 **Fine plaster**
KÖSTER Hydrosilicate Adhesive SK

5 **Paint**
KÖSTER Renovation Paint White



Due to health reasons alone, living and storage spaces should be free of mold. The KÖSTER Hydrosilicate Board System fights mold without the use of toxins. Based on a pure physical functionality, KÖSTER Hydrosilicate Boards stops mold in its tracks. Due to its thermal insulating effect, it acts as a moisture control, helps reduce the formation of condensation, and provides a pleasant living environment. The presence of high alkalinity and a permanent dry surface prevent the undesirable growth of mold.

Old wall coverings and bond inhibiting substances such as wallpaper, gypsum residues, paint or insulation must be completely removed. Absorbent substrates are primed with KÖSTER Polysil TG 500. Irregularities and holes in the surface smaller than 5 mm can be levelled with KÖSTER Hydrosilicate Adhesive SK. Larger surface defects can be repaired using KÖSTER Repair Mortar mixed with 20 % KÖSTER SB Bonding Emulsion added to the mixing water.

Apply the system only after the substrate leveling has completely cured. For gluing, KÖSTER Hydrosilicate Adhesive SK is fully and completely applied to the substrate. The KÖSTER Hydrosilicate Boards are cut to the desired size using a hand saw and are pressed to the wall. After the board has been installed, a bead of KÖSTER Hydrosilicate Adhesive SK is applied along edges of the board to make sure that the joints are fully filled. Subsequently, the whole area is plastered with a layer of KÖSTER Hydrosilicate Adhesive SK.

All successive paints must be open to vapor diffusion, such as KÖSTER Renovation Paint White. Always adhere to the specifications in the respective Technical Data Sheets.

KÖSTER Hydrosilicate Adhesive SK

20 kg bag
(M 170 020)

A single component mortar for the gluing of KÖSTER Hydrosilicate Boards. KÖSTER Hydrosilicate Adhesive SK is also used for gluing the butted boards and as a spackle / plaster for the installed boards.

Consumption: Approx. 3 kg / m² (depending on the substrate); Approx. 1.7 kg / m² as spackle per mm layer thickness

KÖSTER Restoration Plaster Key

25 kg bag
(M 154 025)

Fast, coarse plaster key with polymer additives for the substrate preparation of KÖSTER Restoration Plasters. Very good bonding also on very moist and highly salt burdened substrates.

Consumption: Approx. 2 - 3 kg / m²

KÖSTER Crisin Cream

12 x 600 ml tubular bags
(M 278 600)

Injection cream based on resin / silane against rising damp (wicking moisture). KÖSTER Crisin Cream is resistant against any moisture / salt content.

Consumption: 12 cm wall thickness: approx. 140 ml / m; 36 cm wall thickness: approx. 510 ml / m

KÖSTER Polysil TG 500

A primer for mineral substrates before waterproofing with cementitious waterproofing slurries. In case of masonry restoration the product is used during substrate preparation for restoration plaster systems in order to harden the substrate and immobilize salts.

KÖSTER Polysil TG 500 is a low viscous, substrate solidifying, hydrophobizing combination product on a polymer / silicate basis for the protection of mineral substrates. On salt containing and moist substrates, it causes a reduction of the pore volume and thereby prevents the renewed formation of salt efflorescence.


Masonry primer


Concrete primer


Prevents salt efflorescence


Strengthens substrate

Article No.:
M 111

Consumption:
Approx. 0.1 – 0.25 kg/m²
depending on substrate,
strongly absorbent substrates
may require more

Packaging:
1 kg bottle (M 110 001)
10 kg Jerrycan (M 110 010)

KÖSTER
Mautrol 2C

Combi package
Comp. A 36 kg jerrycan
Comp. B 3.5 kg jerrycan
(M 261 039)

Combi package
Comp. A 240 kg drum
Comp. B 22 kg jerrycan
(M 261 262)

Can be applied in strongly moisture penetrated construction members for waterproofing against rising damp (wicking moisture) without previous drying. The material is applied by pressurized injection. Together with KÖSTER Restoration Plasters, it is suitable for the restoration of masonry.

KÖSTER Mautrol 2C is a two-component, solvent-free, low viscous injection fluid by siliconates and esters and has a strengthening and solidifying effect on masonry.

Consumption: Approx. 0.15 kg / m per cm wall thickness

KÖSTER
Mautrol Flex 2C

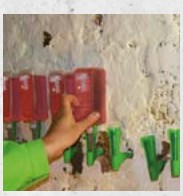
20 kg combipackaging
Comp. A 10 kg jerrycan
Comp. B 10 kg jerrycan
(M 262 020)

2-component, solvent-free, acrylic based injection liquid against rising damp (wicking moisture). Suitable for application even in very damp construction members without prior drying.

Consumption: Approx. 0.2 kg / m per cm wall thickness

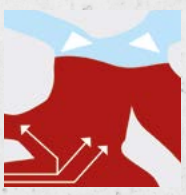
KÖSTER
Crisin 76

Very low viscosity synthetic resin for waterproofing against rising damp (wicking moisture) even in case of high moisture and salt contents in the masonry. Due to its very low density and its surface tension which is considerably lower than that of water, KÖSTER Crisin 76 displaces water from the capillaries. After full cure, KÖSTER Crisin 76 remains elastic and does not rot. Density: 0.91 g/cm³, viscosity 15 mPa·s. KÖSTER Crisin 76 is resistant to all aggressive media which are usually encountered in masonry such as acids, alkalis and salts, during application as well as after full cure. Together with KÖSTER Restoration Plasters it is suitable for the restoration of masonry.


Simple installation


Also for thick walls


Successful over 25 years


Very low density

Article No.:
M 279

Consumption:
Guide value: 0.04 l / m per cm wall thickness

Packaging:
5 l Jerrycan (M 279 005)
10 l Jerrycan (M 279 010)
30 l Jerrycan (M 279 030)
200 ml cartridge (M 279 200)

KÖSTER
Mautrol Liquid Sealant

12 kg jerrycan
(M 241 012)

Very thin fluid, deeply penetrating silicifying concentrate for waterproofing against rising damp (wicking moisture) in masonry. It reacts to water insoluble and water-repelling compounds which also have a solidifying and strengthening effect on the building material. Together with KÖSTER NB 1 Grey and KÖSTER Restoration Plasters it is suitable for the restoration of masonry.

Consumption: Approx. 0.1 kg / m per cm wall thickness per m wall

KÖSTER
Fine Plaster

25 kg bag
(M 655 025)

Finely textured thin layer plaster for smooth decorative surfaces on Restoration Plasters and mineral based substrates. It can be applied in layer thicknesses from 2 – 5 mm and is felt-floatable. KÖSTER Fine Plaster is hydrophobic, water, weather, and frost resistant. The surface is finely structured, closed, and can be finished with paint or wallpaper.

Consumption: 1.4 kg / m^2 per mm layer thickness

KÖSTER
Hydrosilicate Board

12 pcs. (2.74 m^2)
per package
(600 x 380 x 50 mm)
(M 670 050)

Hydrophobic, fiber free, breathable, mineral based boards for the renovation of mold infested mineral based interior building materials. KÖSTER Hydrosilicate boards have a high resistance to aging, are insulative and non-flammable. KÖSTER Hydrosilicate boards are free of synthetic additives, regulate moisture, reduce condensate formation, and promote a healthy indoor climate.

Consumption: 4.38 Boards / m^2

KÖSTER
Restoration Spackle

25 kg bag
(M 656 025)

Light gray fine plaster, area and spot spackle and reinforcement mortar.

Consumption: 1.4 kg / m^2 / per mm layer thickness

KÖSTER
Restoration Plaster Grey

25 kg bag
(M 661 025)

Diffusion-open, salt-resistant restoration plaster. It can be applied manually or by machine. Very high porosity and hydrophobic properties. Prevents or reduces the formation of condensate. Free of light fillers. CE-Certification according to DIN EN 998-1.

Consumption: Approx. 12 kg / m^2 per cm layer thickness

KÖSTER
Restoration Plaster
Grey/Light

20 kg bag
(M 666 020)

Grey, light, salt-resistant restoration plaster for the repair of moisture and salt burdened substrates with very good pumpability. Due to its porosity and hydrophobicity it allows the masonry to dry and desalinate while protecting the substrate from damage caused by salt crystallization.

Consumption: Approx. 8 kg / m² per cm layer thickness

KÖSTER
Restoration Plaster
White/Fast

25 kg bag
(M 663 025)

White, fast setting restoration plaster. Diffusion-open, high compressive strength, water-repellent and ready for smoothing after 30 – 60 minutes. Prevents or reduces the formation of condensate. Free of light fillers. It is mainly used for small area waterproofing and restoration projects where a fast succession of work steps is necessary. CE-Certification according to DIN EN 998-1.

Consumption: Approx. 12 kg / m² per cm layer thickness

KÖSTER
Restoration Plaster
White/Light

20 kg bag
(M 664 020)

White, water-repellent, hydrophobic, salt resistant restoration plaster open to water vapor diffusion with a low specific gravity, high porosity, and good pumpability. Prevents or reduces the formation of condensate. CE-Certification according to DIN EN 998-1.

Consumption: Approx. 8 kg / m² per cm layer thickness

KÖSTER
Thermal Restoration
Plaster

12.5 kg bag
(M 673 012)

KÖSTER Thermal Restoration Plaster is a purely mineral insulative plaster with good thermal insulation properties. It can also be used instead of restoration plaster and helps prevent condensation and the formation of mold.

Consumption: Approx. 5 kg/m² per cm layer thickness

KÖSTER
Restoration Plaster White

Diffusion-open, salt-resistant, high compressive strength, white restoration plaster with very high porosity and hydrophobicity. It prevents or reduces the formation of condensate. It can be applied manually or by machine.


Suitable for historical objects


On damp masonry


On salt burdened substrates


For external use as well

Article No.:
M 662 025

Consumption:
Approx. 12 kg / m²; per cm layer thickness

Packaging:
25 kg bag

KÖSTER
Capillary Rods

length: 45 cm
(M 963 045)

length: 90 cm
(M 963 090)

For targeted installation of horizontal barriers against rising damp (wicking moisture) with the KÖSTER Suction Angle System.

The patented KÖSTER Capillary Rod releases the injection liquid evenly and directly to the masonry, effectively bridging cracks and voids. No material is wasted in cavities.

KÖSTER
Suction Angle

piece
(M 930 001)

Plastic angle for the pressureless and material saving installation of horizontal barriers against rising damp (wicking moisture) with the KÖSTER Suction Angle System. Re-usable.

KÖSTER
Drill Hole Cleaner

piece
(M 933 001)

For cleaning drill holes before inserting the KÖSTER Capillary Rods.

KÖSTER
Extension tube for Crisin Cream installation

piece
(M 932 100)

Extension tube for the installation of KÖSTER Crisin Cream.

Length: 400 mm

KÖSTER
Installation Tool for Capillary Rods

piece
(M 931 001)

Assembly tool for an easy and fast installation of KÖSTER Capillary Rods.

Good to know: Salt in masonry

Without a functioning horizontal barrier, water containing various salts can be transported into and through a wall through capillary action. These can have different sources such as de-icing salt, fertilizer, or even from the brick itself. When the salt containing water evaporates in the surface area of the wall, the salt remains in the wall or on its surface, leading to an increase of salt concentration. The salt crystallizes on the surface or in the pores of the building material. This process is characterized by directed growth, an increase in volume and high strength of the crystals. When salt crystals form in the pores of a building material over a longer period of time, a high crystallization pressure builds up. This eventually leads to the destruction of the pore.

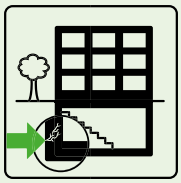
Once this process has proceeded far enough, the surface of the constrution material becomes brittle and starts to fall off. We recommend KÖSTER Crisin 76, KÖSTER Polysil TG 500 and KÖSTER Restoration Plasters as the ideal system components to protect and repair masonry from salt damage.

IN

Injection systems

Crack injection, crack repair and special injection systems

Crack injection and hose injection



Cracks in the building substance are structurally weak points. Additionally, penetrating water may cause damage and may reduce the usage and lifetime of the building. An elastic sealing or structural-bonding of the crack is required. In order to achieve this, the crack is filled over its entire course with a polyurethane or epoxy injection resin via pressure injection.

Elastic and structural crack injection by pressure injection on dry or wet cracks

Elastic crack sealing

1 Installing the packers
KÖSTER Injection Packers

2 Injection material
KÖSTER 2 IN 1

3 Pump
KÖSTER
1C Injection Pump

Rigid, structural crack injection

4 Installing the packers
KÖSTER Lamella packer

5 Injection material
KÖSTER Micro Grout 1C

6 Pump
KÖSTER Loka Handpump

Dry and wet cracks can be sealed permanently with KÖSTER injection materials. KÖSTER 2 IN 1 is the standard material for waterproofing cracks. The material forms a foam when it comes in contact with water displaces it from the crack. After stopping the water ingress, a second injection using the same material permanently and elastically waterproofs the crack.

KÖSTER KB Pox IN is a low viscous epoxy injection resin that can be used for structural re-bonding in dry or wet cracks.

KÖSTER Micro Grout 1C is a mineral injection material which is ideal to fill voids and cracks of medium width. The material has excellent adhesion properties even to damp substrates. It also possesses a very high compressive strength after curing.

The injection materials are injected into the crack using so-called “packers” with the KÖSTER Loka Handpump (KÖSTER Micro Grout 1C) or the KÖSTER 1K injection pump (KÖSTER PU resins and KÖSTER KB-Pox IN). Depending on the application, different packers are available. KÖSTER Impact Packers are installed very quickly and are recommended for low to medium pressure.

The KÖSTER Superpackers are used for all applications injecting from low to high pressure. KÖSTER One-Day-Site Packers have an extra one-way return valve. The bottom portion of the packer prevents the injection material from flowing back out of the wall, so that the upper part of the packer can be removed directly after injection and the borehole stays pressure sealed. The drill hole can be sealed immediately after the injection works.

Always adhere to the specifications in the respective Technical Guidelines.

Pressure injection of water bearing cracks

1 **Installing the packers**
KÖSTER Injection Packers

2 **Injection Resin**
KÖSTER 2 IN 1
Alternative:
KÖSTER IN 8

3 **Pump**
KÖSTER 1C Injection Pump

KÖSTER 2 IN 1 is a broadly applicable solvent-free PU injection resin for dry and water bearing cracks. The specialty: KÖSTER 2 IN 1 forms an elastic foam when coming into contact with water which pushes the water out of the crack. If no water is present, the material forms an elastic solid body resin and permanently seals the crack.

Alternatively, KÖSTER IN 8 reacts only when in contact with water and spontaneously forms a compact, viscoplastic, waterproof polyurethane foam with a volume expansion of up to 30 times, which allows movements of the structure while maintaining a watertight system

All KÖSTER injection resins are installed with the KÖSTER 1C Injection Pump via injection valves called “Packers” into the crack. Depending on the application, different packers are available.

KÖSTER Impact Packers are installed very quickly and are recommended for low to medium pressure.

KÖSTER Packers and KÖSTER Superpackers are used for all applications from low to high pressure.

KÖSTER One-Day-Site Packers have an extra valve so that the upper part of the packer can be removed directly after injection and the hole plugged. The borehole stays pressure sealed.

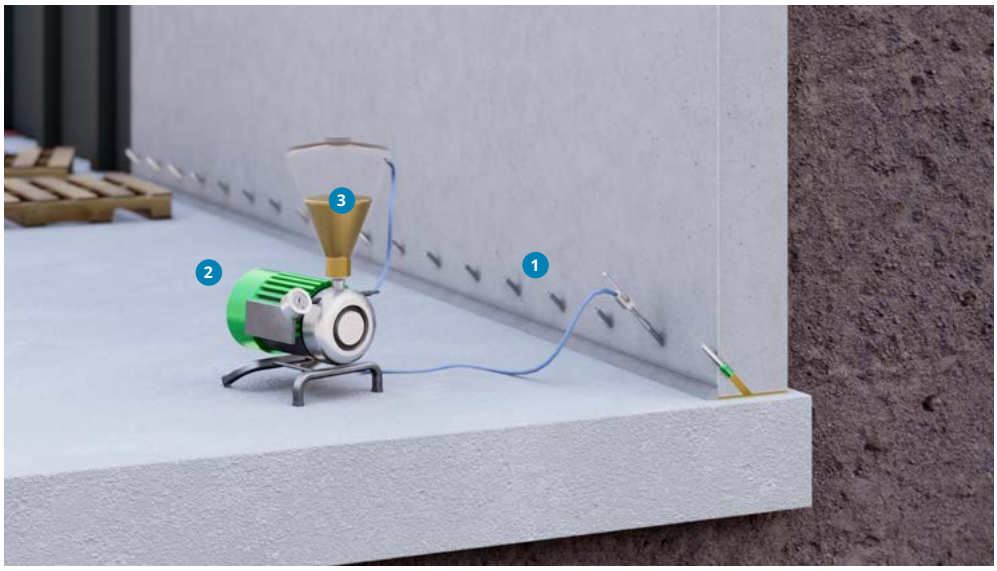
Always adhere to the specifications in the respective Technical Guidelines.

Waterproofing of construction joints in the wall/floor junction

1 Installing the packers
KÖSTER Injection Packers

2 Pump
KÖSTER 1C Injection Pump

3 Injection Resin
KÖSTER 2 IN 1
Alternative:
KÖSTER IN 5



For retroactive waterproofing of the wall-floor junction, the boreholes have to be drilled transecting the construction joint. The borehole should be drilled approximately into the middle of the construction joint.

In case of flowing water or when it is not certain if the crack is dry or wet, KÖSTER 2 IN 1 is injected. KÖSTER 2 IN 1 is a unique CE certified product, which in dry cracks forms a solid body resin, in wet cracks a water replacing foam. This saves time and logistics on the construction site. It is injected twice, 10 – 20 minutes apart, to ensure that the joint is permanently and elastically sealed.

Alternatively, KÖSTER IN 2 is a solvent-free, 2 component polyurethane injection resin which stays permanently elastic, allowing a permanent joint sealing even in case of movement of the structure.

All KÖSTER injection resins are installed with the KÖSTER 1C Injection Pump via injection valves called “Packers” into the cracks or joints. Depending on the application, different packers are available.

The KÖSTER Superpackers are used for all applications injecting from low to high pressure. KÖSTER One-Day-Site Packers have an extra one-way return valve. The bottom portion of the packer prevents the injection material from flowing back out of the wall, so that the upper part of the packer can be removed directly after injection and the borehole stays pressure sealed. The drill hole can be sealed immediately after the injection works.

Always adhere to the specifications in the respective Technical Guidelines.

Waterproofing of construction joints via an injection hose

1. Injection hose
2. Injection Resin
   KÖSTER IN 5
3. Pump
   KÖSTER 1C Injection Pump

Construction joints, especially in wall-wall and wall-floor junction, when installed underneath ground level, always need particular attention when it comes to waterproofing.

Defects in this area are not uncommon. Before pouring the concrete for the wall, injection hoses are installed in the construction joint. These hoses are usually perforated or slotted. After the concrete has cured, an elastically curing resin is pressure injected into the injection hose. The joint is now permanently elastically sealed and waterproofed.

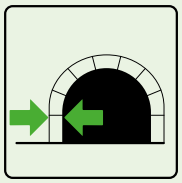
For the application via injection hose, KÖSTER IN 5 is the product of choice.

KÖSTER IN 5 is an EN 1504-5 certified resin with a low viscosity and an outstandingly long pot life, suitable for the injection into dry and moist cracks or joints. These two aspects are very important for the application so the product has enough time to enter the small and fine voids and doesn't start to react during the injection.

All KÖSTER injection resins are installed with the KÖSTER 1C Injection Pump either through packers, or in the case of injection hoses, through special units placed on the walls.

Always adhere to the specifications in the respective Technical Guidelines.

Acrylic gel injections



Acrylic gels are predominantly distinguished by their extremely low initial viscosity (similar to water), allowing the deepest penetration in the pore structure among all other injection materials. They are typically used for building waterproofing through curtain, masonry, and void injection. Tunnel waterproofing requires specialized waterproofing materials which can vary depending on the type of tunnel elements and construction methods involved. Special parameters such as abnormally high water pressure and infrastructure conditions must be taken into consideration during restoration planning. Acrylic gels used for building waterproofing are characterized, even in the fully reacted state, by having considerable amounts of water (hydrophilic capabilities), which is physically bound in the polymer network. The binding is sufficient that the water cannot be driven out even by high pressure.

Tubbing Tunnel Construction

1. Injection needle
2. Curtain injection
   KÖSTER Injection Gel G4
3. Gel pump
   KÖSTER Acrylic Gel Pump

Tunnels consisting of tubbing elements which are built with a tunneling shield or Tunnel Boring Machine (TBM), represent the most advanced method used in tunnel construction. However, despite heavy reinforcement, cracks can appear on the concrete surface due to high pressure from hydraulic stresses on the tubbing elements. In order to prevent moisture damage due to water penetration and subsequent corrosion of the reinforcement, these cracks are sealed with standardized injection methods. Depending on the loads and construction element, crack-bridging or structural rebonding resins are to be used.

Another common problem in tunnel construction is the partial failure of the outer seal and consequent leakage through the tubbing element joints. Very often curtain injection behind the tubbing element is the chosen method of repair. In order to protect the integrity of the concrete elements, special injection needles are placed through the joints, and the acrylic gel KÖSTER Injection Gel G4 is injected. The injection material solidifies the adjacent layers of earth and waterproofs the building component from the backside. Voids between the soil and the tubbing elements are also filled with the waterproofing gel and the outer seal is therefore restored.

Masonry Tunnel Construction

1 **Area injection**
KÖSTER Injection Gel G4

2 **Injection packer**
KÖSTER Injecton Packers

3 **Injection pump**
KÖSTER Acrylic Gel Pump

4 **Void filling**
KÖSTER Injection Gel G4

Similar to standard masonry structures, masonry tunnels built with natural stone or brick can also be injected. Boreholes are drilled in a grid horizontally and vertically with every second-row offset and the KÖSTER Superpackers are inserted into the drill holes. In most cases, it is necessary to install an injection barrier, for example with KÖSTER Injection Barrier, in order to prevent the loss of injection material due to uncontrolled outflow.

KÖSTER Injection Gel G4 is injected in multiple phases until a pressure resistance is achieved. Afterwards, the packer holes are filled with KÖSTER KB-Fix 5. The goal is to waterproof the water bearing areas in the building element in order to later apply negative side waterproofing. For a decorative and functional surface design, KÖSTER Restoration Plasters can be applied over the KÖSTER Injection Barrier.

Hollow spaces behind masonry components require special attention. Here air-filled joints as well as large voids which are more or less filled with water-saturated material (such as earth, sand, gravel, or rubble) can be found. In many cases, it is important to ensure that no structural bonding with the surrounding rock layers takes place. The KÖSTER Injection Gel G4 can also be used to fill voids and create an elastic waterproof body. In the case that too much material is lost through openings or large gaps behind the wall, the faster reaction of KÖSTER Injection Gel S4 may be preferred.

Joint Sealing in Tunnel Constructions

1. Pump
   KÖSTER Acrylic Gel Pump
2. Special rubber sealing system
3. Injection needle
4. Joint sealant
   KÖSTER Injection Gel S4
5. Joint protection
   KÖSTER MS Joint Sealant

The complex construction of tunnels entails great challenges for the waterproofing system. Even with the highest application standards, there could be special situations or extraordinary occurrences that could cause leaks inside the tunnels. These leaks are mostly located along the joints of the tubbing elements, and if not treated in time, could cause severe damages to the structural integrity of the tunnel.

The KÖSTER Injection Gel S4 with the B+ component is a specially designed acrylic gel for the injection of joints, providing an outstanding elasticity, a higher adhesion to the flanks, and a reduced drying tendency when in contact with moving air currents.

The adjustable reaction time acrylic gel is injected inside the joint using injection needles, inserted through a special rubber sealing system placed in the joint. To avoid material loses on the back and prevent the material from running down the drainage system, a backing rod is inserted to create a defined injection area.

When the injection is completed, the special rubber sealing system can be removed and the gel protected with the highly elastic, low modulus sealant KÖSTER MS Joint Sealant.

Always adhere to the specifications in the respective Technical Guidelines.

Injection of expansion joints

1 Injection packer
KÖSTER Injecton Packers

2 Joint waterproofing
KÖSTER Injection Gel S4

The injection of joints represents a fairly quick method and minimally invasive way to repair failing waterproofing systems.

Hidden expansion joints, for example in an underground parking garage above a support beam, usually require a small number of injection packers. The placement of these packers is determined so that existing waterstops are preferably not perforated. This is particularly important for existing internal or external sealing bands. In the case of overhead expansion joints (dilation joints), boreholes should be ideally drilled towards the top third of the joint. In cases of floor expansion joints, boreholes should be ideally drilled towards the lower third of the joint.

KÖSTER Superpackers are inserted into the boreholes. At overhead joints, a polymer, cementitious or mechanical barrier may be necessary to seal the joint before injection, in order to avoid losses of material.

The KÖSTER Injection Gel S4 with the KÖSTER B+ component is a specially designed acrylic gel for the injection of joints, providing a higher flank adhesion, enhanced elasticity and a reduced drying tendency when in contact with air currents.

By injecting the joint with the elastic acrylic gel KÖSTER Injection Gel S4/B+, it is not necessary to excavate underground parking garages or other underground building components. Moreover, since a low number of packers is sufficient in most cases, the drilling effort is reduced and time and costs are saved.

Always adhere to the specifications in the respective Technical Guidelines

External basement waterproofing with curtain injection

1 Pump
KÖSTER Acrylic Gel Pump

2 Injection packers
KÖSTER Injection Packers

3 Waterproofing layer
KÖSTER Injection Gel G4

Exterior basement waterproofing from inside the building? In the case of renovation, it is not always possible to expose the exterior walls through excavation. For example, where the area to be excavated is built upon, traffic concerns impede the excavation, or the economic cost of excavation is deemed too high. You would first think of an internal (negative side) basement waterproofing, but in some cases, such as in historical buildings or buildings with special architectural requirements, this may not be desirable.

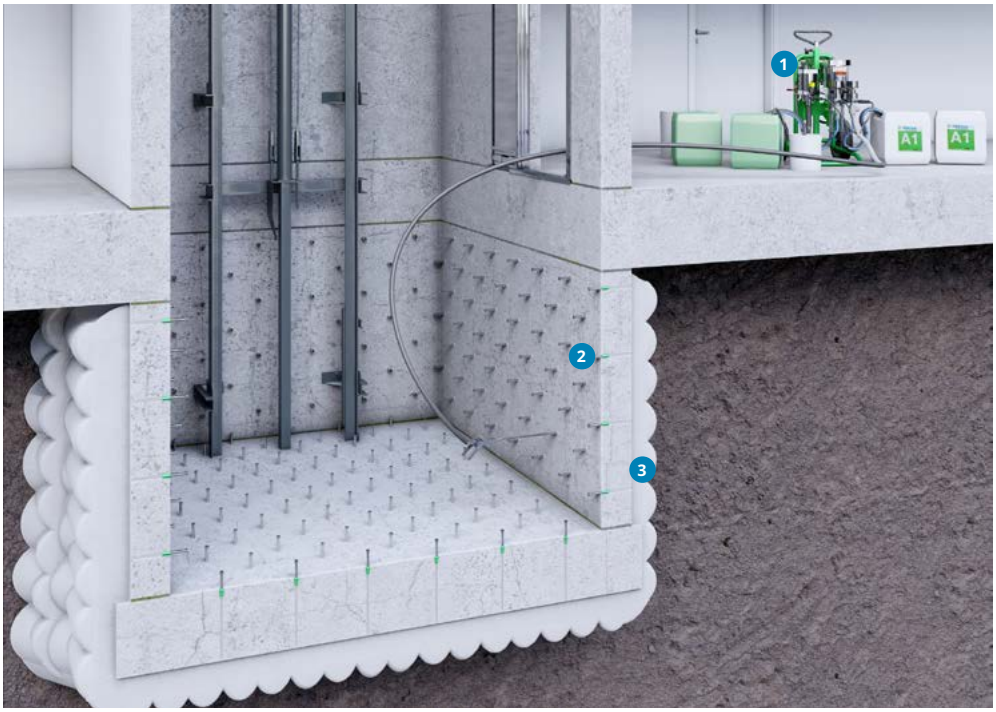
In these cases, a curtain injection with KÖSTER Injection Gel G4 is possible: The resin is injected through the wall from the inside to the outside. Water present behind the wall does not represent a challenge for the KÖSTER injection gels since they do not react with it, but instead it is bound in its matrix, resulting in a waterproof elastic solid body.

The injection is carried out with a special two-component pump, KÖSTER Acrylic Gel Pump, and through special KÖSTER injection packers.

Taking advantage of the extremely low viscosity of the gel, injection into difficult soil conditions like fine sand, silt and some clays is possible.

Always adhere to the specifications in the respective Technical Guidelines

Vertical and horizontal curtain injection



1 Pump
KÖSTER Acrylic Gel Pump

2 Injection packers
KÖSTER Superpacker

3 Waterproofing layer
KÖSTER Injection Gel G4

The subsequent waterproofing of building components which are not accessible due to neighboring construction or other considerations (such as tunnels, underground parking garages, elevator shafts, or concrete base slabs), is commonly carried out through the waterproofing method referred to as curtain injection. The graphic above shows an elevator shaft being subsequently waterproofed through horizontal curtain injection (underneath the concrete base slab) and through vertical curtain injection (through the walls).

A quadratic, surface-centered grid of standard packers has been drilled into the building component. KÖSTER Injection Gel G4 is injected in numerous phases through the drill holes, resulting in hemispherical areas of waterproofing on the positive (outer) side of the wall, separating the building component from ground water. For this particular field of application, KÖSTER Injection Gel G4 has received a general construction approval from the Deutschen Institut für Bautechnik (German Institute for Structural Engineering). In the case that too much material is lost through openings or large gaps behind the wall, the faster reaction of KÖSTER Injection Gel S4 may be preferred.

Curtain injection of building components with perforated bricks, bricks with finger holes, aerated concrete blocks, or double-wall constructions require firstly a void injection to fill the gaps and then the use of special gel packers. These long packers can bridge cavities within the wall and discharge the injection material into the ground on the outer side of the building component.

Always adhere to the specifications in the respective Technical Guidelines.

Masonry injection

1 **Pump**
KÖSTER Acrylic Gel Pump

2 **Injection Barrier**
KÖSTER Injection Barrier

3 **Injection packers**
KÖSTER Injection Packers

4 **Waterproofing layer**
KÖSTER Injection Gel G4

5 **Filling the boreholes**
KÖSTER KB-Fix 5

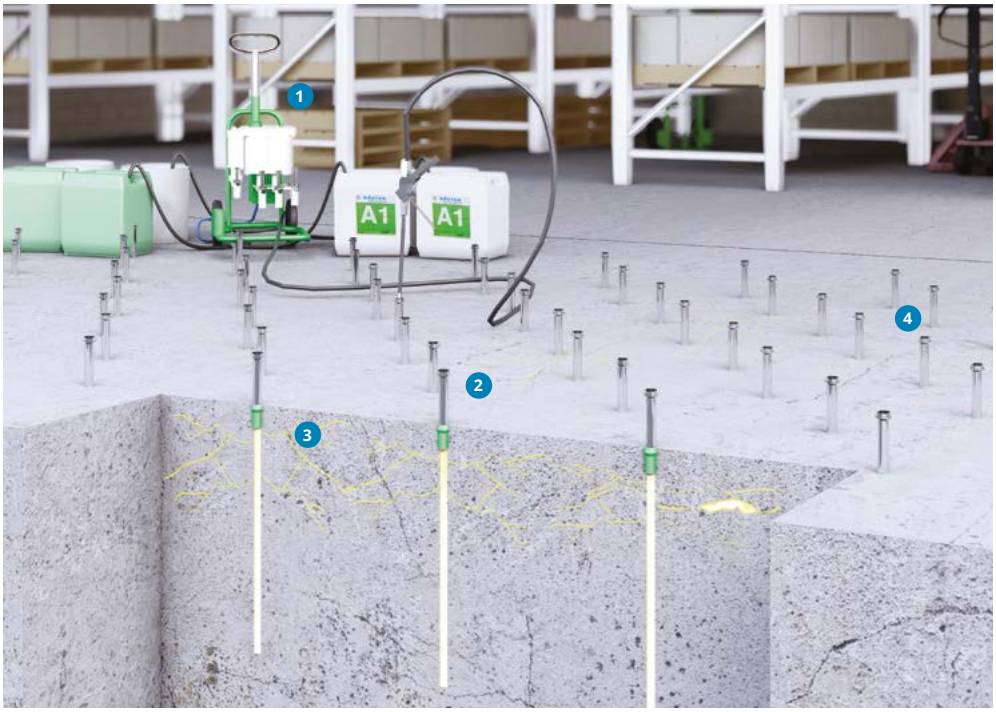
Vertical masonry injection (also known as area injection) is a standard method for the subsequent waterproofing of brick building elements in which excavation is not economical or possible. Boreholes are drilled horizontally on the inside of the building component and angularly at wall-floor connections and wall corners. The drilling depths are determined according to the wall thickness and can amount to approx. 2/3 of the wall thickness. The drill holes must be drilled in such a way that at least one vertical joint is crossed. The holes are drilled in a grid horizontally and vertically with every second row offset. Packers are spaced according to the masonry type at hand. The diameter of the drill holes depends on the chosen packers.

KÖSTER Superpackers are inserted into the drill holes. In most cases, it is necessary to install an injection barrier, for example with KÖSTER Injection Barrier, in order to prevent the loss of injection material due to uncontrolled outflow. In cases of exposed masonry where the appearance must be maintained (such as in historical vaults), KÖSTER Repair Mortar NC can be used for touch ups where needed, without significantly altering the appearance of the masonry instead of installing a complete injection barrier.

KÖSTER Injection Gel G4 is injected in multiple phases until a pressure resistance is achieved. Afterwards, the packer holes are filled with KÖSTER KB-Fix 5. For a decorative and functional surface design, KÖSTER Restoration Plasters can be applied over the KÖSTER Injection Barrier.

Always adhere to the specifications in the respective Technical Guidelines.

Concrete injection



1 **Pump**
KÖSTER Acrylic Gel Pump

2 **Injection packers**
KÖSTER One-Day-Site

3 **Waterproofing layer**
KÖSTER Injection Gel G4

4 **Filling the boreholes**
KÖSTER KB-Fix 5

Concrete structures exposed to extreme conditions, like intense heat, are subject to higher damaged in its micro structure, which can result in a higher porosity and cracking. Old concrete may have also lost some of its integrity due to external influences, or possible prolonged water filtrations. Bad concreting or poor vibration can as well be causes of unwanted honeycombs or cracks on the surface. All these situations required an intelligent system with the capacity to fill the finest cracks and voids and stop water filtrations through the structure.

Although concrete injection is not the most commonly injection performed, it belongs to the fields of applications of the acrylic gels. Once again, the low viscosity of the material and the safe curing without affecting the steel reinforcement, make concrete injection a specialized field of application for the KÖSTER Injection Gels.

KÖSTER Injection Gel G4 is an extremely low viscosity acrylic gel can intelligently follow the paths of water ingress, and after curing, seals filtrations effectively from the source. The structure is drilled in a specified pattern, depending on the dimensions and conditions, and KÖSTER Superpackers are inserted into the drill holes. The KÖSTER Injection Gel G4 is injected in one or multiple phases until a pressure resistance is achieved. Afterwards the packer holes can be filled with KÖSTER KB-Fix 5.

Always adhere to the specifications in the respective Technical Guidelines.

Soil stabilization

1 Pump
KÖSTER Acrylic Gel Pump

2 Injection lances

3 Injection and stabilization layer
KÖSTER Injection Gel G4

By changes in the ground water level or the presence of water currents within the soil structure, the fine substance from the underground can be washed out, creating voids in the soil.

These voids can reduce the integrity of the soil structure until it collapses. Evidence of this phenomena is usually seen through the settlement of the structures, or in worst cases, through the formation of cavities or hollow chambers in the ground.

To reduce the loss of the fines from the underground, a soil stabilization must be performed. This stabilization is carried out with the injection of KÖSTER Injection Gel G4 through special injection lances.

The low viscosity of the gel allows a deep penetration and distribution of the material between the grain's matrix, binding the soil and water into an elastic gel-soil body. The result is a more stable, waterproofed soil composition without the risk of washing out of fines.

Soil stabilization with acrylic gels can be performed for example underneath house or building footings to prevent settlement from loss of fine from the ground and allow further construction, through walls to stabilize material behind and conduct structural repairs or drainage replacements, or inside dikes to enhanced the filled material and reduce water filtrations, among others. All applications required specific planning and must be considered individually for the most suitable procedure.

Always adhere to the specifications in the respective Technical Guidelines.

KÖSTER IN 2

1 kg combipackage
(IN 220 001)

8 kg combipackage
(IN 220 008)

40 kg combipackage
(IN 220 040)

Elastic PU injection resin. For permenantly waterproofing cracks and joints. It is designed to withstand continuous contraction and expansion and is therefore ideal for the repair of moving cracks. Also suitable for slightly damp cracks. Viscosity approx. 200 mPa.s.

Fields of application: KÖSTER IN 2 is used in cases where future movements of the building structure can not be excluded.

Consumption: Approx. 1.1 kg / l void

KÖSTER IN 5

10 kg combipackage
(IN 250 010)

2-component elastic PU injection resin, specially suitable for hose injection. For permanently and elastically sealing dry, moist and waterbearing cracks and joints in concrete. Very low viscosity (at +25 °C approx. 70 mPa · s). Mixing ratio 1:1 by volume. Fields of application: pressurized injection, waterproofing of fine cracks, hose injection or for solidifying porous building structures. CE-Certification according to DIN EN 1504-5.

Consumption: Approx. 1.1 kg / l void

KÖSTER 2 IN 1

Broadly applicable solvent-free PU injection resin for dry and water bearing cracks. The specialty: KÖSTER 2 IN 1 forms an elastic foam when coming into contact with water which pushes the water out of the crack. If no water is present the material forms an elastic solid body resin and permanently seals the crack.

Fields of application: Waterproofing of water bearing and permanently sealing dry cracks in masonry and concrete. Tested according to EN 1504.


For water bearing cracks


Forms foam in wet cracks


For dry cracks


Forms resin in dry cracks

Article No.:
IN 201

Consumption:
Approx. 0.1 kg / l void (foam),
approx. 1.1 kg / l void (solid resin)

Packaging:
1kg combipackage (IN 201 001)
5 kg combipackage (IN 201 005)
20 kg combipackage (IN 201 020)

KÖSTER
Injection Gel S4

20 kg component A1
(IN 294 020 A1)
1 kg component A2
(IN 294 001 A2)
0,4 kg component B
(IN 294 400 B)
18 kg component B+
(IN 294 018 B+)

Reaction time adjustable acrylic gel for curtain injection and dilatation joint waterproofing. Due to the low viscosity it can be injected into very fine pored structures using a multi-stage injection technique fitted to the reaction-time curve of the material. Can be used with the B + component to add higher flank adhesion to concrete surfaces dilation joint waterproofing. Yields after reaction time a viscoelastic product that is very suitable for moving joints. Can take up water after reaction.

Consumption: Depends on the field of application

KÖSTER
Micro Grout 1C

24 kg bag
(IN 295 024)

Injection grout for the restoration of structural strength in cracks or voids in masonry and concrete. KÖSTER Micro Grout 1C possesses a high compressive strength, is shrink free, and does not show sedimentation during its pot life. Fields of application include crack injection also in overhead areas, filling of voids, as well as the grouting of masonry anchors.

Consumption: Approx. 1.6 kg / l void

KÖSTER
PUR Gel

2.5 kg jerrycan
(IN 285 002)

25 kg jerrycan
(IN 285 025)

210 kg drum
(IN 285 210)

Water activated polyurethane gel for area injections as well as for waterproofing expansion and dilation joints. KÖSTER PUR Gel reacts with water and can bind up to ten times its own weight in water. Oakum soaked in KÖSTER PUR Gel can be an elegant method for solving difficult active water ingress problems in pipes, joints, and cavities. It is often used where large amounts of free water must be bound.

Consumption: Depends on the field of application.

KÖSTER
KB-Pox IN

Solvent free, 2 component low viscous epoxy injection resin for crack injection. Due to its high rate of penetration into porous substrates and its excellent adhesion to concrete, stone, masonry and metal, KÖSTER KB-Pox IN permanently seals and bridges cracks and as well as joints and restores structural integrity. The material does not contain any fillers or softeners and thereby sedimentation is avoided.

Fields of application: Suitable for the restoration of structural bonding in cracks and joints. Without pre-injection KÖSTER KB-Pox IN can be used for filling and closing dry, damp and wet cracks, joints and voids. Tested according to EN 1504.

Penetrates into very fine cracks

Suitable for moist cracks

Suitable for wet cracks

Crack stitching

Article No.:
IN 231

Consumption:
Approx. 1 kg / l void

Packaging:
11 kg combipackage (IN 231 001)
6 kg combipackage (IN 231 006)

KÖSTER
Injection Barrier

25 kg bag
(IN 501 025)

Mortar for full area injection barrier when injecting KÖSTER Injection Gel G4. Mixed with KÖSTER Mortar Boost.

Consumption: Approx. 1.8 kg / mm / m^2

KÖSTER
PUR Gel Pump

piece
(IN 928 001)

Electrical 2C injection pump with stageless adjustable mixing ratio (gel : water). Operating pressure is approx. 30 bar.
The maximum delivery rate is approx. 2.5 l / min.

KÖSTER
Ball Valve

piece
(IN 929 003)

Ball valve with grip head for the KÖSTER 1C Injection Pump.

KÖSTER
Cleaning Brush

piece
(IN 959 001)

Conical round brush for cleaning voids at cable and pathway penetrations.

KÖSTER
Injection Gel G4

Low viscosity acrylic gel for curtain injection as well as area injection of masonry and concrete. Water based, elastic gel with a very low starting viscosity after initial mixing. It is capable of binding water during gelation. The swelling ability after full curing allows a 40% uptake of additional water into the gel structure. Due to the low starting viscosity, it can be injected into fine substrate pores. KÖSTER Injection Gel G4 is drinking water and non-toxic ground water interaction certified.


Masonry injection


Curtain injection


Injection equipment


Specialized applications

Article No.:
IN 290 021

Consumption:
Depends on the field of application

Packaging:
Component A1: 20 kg;
Component A2: 1 kg;
Component B: 0.4 kg

KÖSTER
Coarse Sieve

piece
(IN 929 006)

Coarse sieve for the material hopper of the KÖSTER 1C Injection Pump.

KÖSTER
Cutting Device for Gel Packers

piece
(IN 936 001)

Cutting device for reducing the length of KÖSTER Gel Packer Extension Pipes as well as KÖSTER Capillary Rods.

KÖSTER
Drive in aid for Impact Packer 12

piece
(IN 907 001)

Plastic cylinder for installing impact packers.

KÖSTER
Drive in aid for Lamella Packer

piece
(IN 911 001)

Plastic cylinder for installing KÖSTER Lamella Packer.

KÖSTER
1C Injection Pump

Electrical 1C injection pump for injecting of cracks and voids. It is suitable for the injection of all KÖSTER injection materials (foams and resins). Operating pressure can be adjusted from 0 - 200 bar. The maximum delivery rate is approx. 2.2 l / min.

0–200 bar adjustable pressure

Suitable for foams

Suitable for resins

6 l container capacity

Article No.:
IN 929 001

Packaging:
Piece

KÖSTER
Drive-in Aid for Gel Packers

piece
(IN 935 001)

Drive-in aid for KÖSTER Gel Packers.

KÖSTER
Fine Sieve

piece
(IN 929 007)

Fine sieve for the material hopper of the KÖSTER 1C Injection Pump.

KÖSTER
Gel Hose for KÖSTER PUR Gel Pump

piece
(IN 928 003)

Material hose for the KÖSTER PUR Gel Pump.

Length: 5 m

KÖSTER
Gel Packer (Base)

piece
(IN 931 001)

Impact packers for gel injection using pan-head fitting and non-return valves. With connection threads for an extension pipe. 18 mm x 115 mm.

KÖSTER
IN 8

Viscoplastic, one component water activated PU injection foam. Reacts immediately upon contact with water and forms a compact, viscoelastic, waterproof polyurethane foam which is able to follow crack movements. Volume expansion up to 30 times. Free of solvents and fillers, resistant to acid and hydrolysis.

Fields of application: Single-step waterproofing of water bearing cracks in masonry and concrete without subsequent injection of solid body resin

30-fold increase in volume

KÖSTER IN 8

Article No.:
IN 271 005

Packaging:
5 kg jerrycan

Consumption:
Approx. 0.1 kg/l void

KÖSTER
Gel Packer (End piece)
piece
(IN 932 001)

Patented end piece for gel packers with four sideways facing outlets for curtain injection (German patent 599 10 808.8, European patent No. 0 980 935). With connection threads for the KÖSTER Gel Packer Extension Pipe.

KÖSTER
Gel Packer extension pipe 800 mm
piece
(IN 933 001)

Extension pipe for KÖSTER Gel Packers.

Length: 800 mm.

KÖSTER
Gel Packer Screwcap
piece
(IN 937 001)

Screwcap for KÖSTER Gel Packers, plastic material.

KÖSTER
Drill bit SDS Plus 13 x 250 mm
piece
(IN 938 001)

The 13 mm drill bit is required for the installation of KÖSTER Superpackers, KÖSTER One-day Site Packers, and KÖSTER Masonry Packers. It fits in all SDS Plus chucks.

KÖSTER
Grip Head
piece
(IN 953 005)

With 4 jaws for cone-head fittings.

KÖSTER
Hand Pump with manometer
piece
(IN 953 002)

For small injection projects or areas which are difficult to access. Operating pressure 10 bar max., output approx. 2 – 3 cm^3 per pass.

KÖSTER
Hand Pump without manometer
piece
(IN 953 001)

For small injection projects or areas which are difficult to access. Operating pressure 10 bar max., output approx. 2 – 3 cm^3 per pass.

KÖSTER
Injection Gun
piece
(IN 929 016)

One-handed adjustable high-pressure injection gun for KÖSTER Acrylic Gel Pump and KÖSTER 1C Injection Pump. This alternative method to a classic ball valve application is easy to use and is designed for a pressure of up to 250 bar.

KÖSTER
Injection Hose

piece
(IN 929 002)

Injection hose for the KÖSTER 1C Injection Pump.

Length: 5 m

KÖSTER
Impact Packer
12 mm x 70 mm

piece
(IN 903 001)

Plastic packer with cone-head fitting and non-return valve for low-pressure injection used in horizontal barriers with KÖSTER Mautrol 2C or KÖSTER Mautrol Flex 2C.

KÖSTER
Resin Stirrer 100 mm

piece
(IN 988 001)

Special mixer for resins. Reduces air enclosures entrainment. Replaceable stirring disc. Shaft 12 mm Ø for chuck

Large version: hex head, stirrer diameter: 11 mm, stirrer length: approx. 48 cm, diameter stirring disc: 10 cm

KÖSTER
Resin Stirrer 75 mm

piece
(IN 989 001)

Replacement disc 75 mm
(IN 989 002)

Special mixer for resins. Reduces air enclosures entrainment. Replaceable stirring disc. Shaft 12 mm Ø for chuck.

Small version: hex head, stirrer diameter: 9 mm, stirrer length: approx. 28 cm, diameter stirring disc: 7.5 cm

KÖSTER
Injection Whip for
Gel Pumps

piece
(IN 928 006)

For KÖSTER Acrylic Gel Pump and KÖSTER PUR Gel Pump, length 250 mm.

KÖSTER
Injection Whip for
Hand Pump

piece
(IN 953 003)

Injection whip for KÖSTER hand pumps.

Available length: 300 mm. Threaded connection M10 outside

KÖSTER
Lamella Impact
Packer

piece
(IN 909 001)

A modular impact packer for the injection of grouts, gel, and injection resins. Depending on the application it can be expanded with a slip-on non-return valve. Drillhole diameter 18 mm. Patented.

KÖSTER
Lamella Impact Packer Adapter

piece
(IN 908 001)

Adapter for connecting KÖSTER Lamella Impact Packers.

KÖSTER
Loka Handpump

piece
(IN 952 001)

Manual membrane pump for the pumping and injection of grouts.

KÖSTER
Manometer

piece
(IN 929 004)

Manometer for the KÖSTER 1C Injection Pump.

KÖSTER
Manometer for KÖSTER PUR Gel Pump

piece
(IN 928 004)

Manometer for the KÖSTER PUR Gel Pump.

KÖSTER
Material Hopper

piece
(IN 929 005)

6 l material hopper with sieve for the KÖSTER 1C Injection Pump.

KÖSTER
Material Hose

piece
(IN 930 002)

High pressure material hose for KÖSTER Acrylic Gel Pump.

Length: 2 m

KÖSTER
Mix head for KÖSTER PUR Gel Pump

piece
(IN 928 005)

Mixing head for the KÖSTER PUR Gel Pump.

KÖSTER
One-Day-Site Packer 13 mm x 120 mm CH

piece
(IN 919 001)

The KÖSTER ONE-DAY-SITE Packer allows injection work to be completed in one day.

The screw packer for pressure injection has a firmly mounted cone-head fitting and two non-return valves. Immediately after injecting, that part of the port which protrudes from the wall can be unscrewed and removed. The central part of the port stays in the wall sealing the borehole so that no injection material can flow out of the borehole even under high pressure. The borehole can then be closed immediately after injection.

KÖSTER
One-Day-Site Packer 13 mm x 120 mm PH

piece
(IN 922 001)

The KÖSTER ONE-DAY-SITE Packer allows injection work to be completed in one day.

The screw packer for pressure injection has a firmly mounted pan-head fitting and two non-return valves. Immediately after injecting, that part of the port which protrudes from the wall can be unscrewed and removed. The central part of the port stays in the wall sealing the borehole so that no injection material can flow out of the borehole even under high pressure. The borehole can then be closed immediately after injection.

KÖSTER
One-Day-Site Packer 13 mm x 90 mm CH

piece
(IN 918 001)

The KÖSTER ONE-DAY-SITE Packer allows injection work to be completed in one day.

The screw packer for pressure injection has a firmly mounted cone-head fitting and two non-return valves. Immediately after injecting, that part of the port which protrudes from the wall can be unscrewed and removed. The central part of the port stays in the wall sealing the borehole so that no injection material can flow out of the borehole even under high pressure. The borehole can then be closed immediately after injection.

KÖSTER
One-Day-Site Packer 13 mm x 90 mm PH

piece
(IN 921 001)

The KÖSTER ONE-DAY-SITE Packer allows injection work to be completed in one day.

The screw packer for pressure injection has a firmly mounted pan-head fitting and two non-return valves. Immediately after injecting, that part of the port which protrudes from the wall can be unscrewed and removed. The central part of the port stays in the wall sealing the borehole so that no injection material can flow out of the borehole even under high pressure. The borehole can then be closed immediately after injection.

KÖSTER
Packer
13 mm x 130 mm CH

piece
(IN 913 002)

The KÖSTER Packer is particularly suitable for pressure injections.

The arrangement of the split packer rubbers results in excellent contact pressure in the borehole. The surface of the clamping rubber easily digs into the borehole, adapts to the borehole wall and thus increases its tightness. It has a firmly mounted cone-head fitting for pressure injection and is galvanized.

KÖSTER
PUR Cleaner

1 l bottle
(IN 900 001)

10 l jerrycan
(IN 900 010)

Cleaning agent for the removal of fresh polyurethane. Suitable for cleaning tools, e. g. the KÖSTER 1C Injection Pump after injecting KÖSTER Injection Resins. Based on special solvents.

Consumption: as needed

KÖSTER
Slide Coupling for pan-head fitting

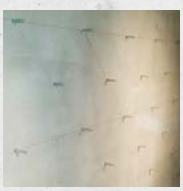
piece
(IN 928 007)

KÖSTER slide coupling for pan-head fitting.

KÖSTER
Acrylic Gel Pump

Pneumatic pump made of stainless steel for the application of KÖSTER Injection Gel G4 & S4. Mixing ratio 1:1 Capacity: Max. 11 l per minute. Working pressure:


Curtain injection


Surface injection


Water-bearing joints


Adjustable mixing ratio

Article No.:
IN 930 001

Packaging:
Piece

KÖSTER
Superpacker
10 mm x 115 mm CH

piece
(IN 913 001)

The KÖSTER Superpacker is suitable for pressure injections as it provides a very high contact pressure to the borehole due to the cone-shaped center of the tightening mechanism. Four fins and two ridges on the rubber gasket prevent rotation during tightening and optimize the fixation in the borehole.

KÖSTER
Superpacker
10 mm x 85 mm CH

piece
(IN 912 001)

The KÖSTER Superpacker is suitable for pressure injections as it provides a very high contact pressure to the borehole due to the cone-shaped center of the tightening mechanism. Four fins and two ridges on the rubber gasket prevent rotation during tightening and optimize the fixation in the borehole.

KÖSTER
Superpacker
13 mm x 130 mm CH

piece
(IN 915 001)

The KÖSTER Superpacker is suitable for pressure injections as it provides a very high contact pressure to the borehole due to the cone-shaped center of the tightening mechanism. Four fins and two ridges on the rubber gasket prevent rotation during tightening and optimize the fixation in the borehole.

KÖSTER
Swivel Joint

piece
(IN 928 008)

Connection between injection whip and slide coupling.

Length: 30 mm

KÖSTER
Water Hose for
KÖSTER PUR Gel Pump

piece
(IN 928 002)

Water Hose for KÖSTER PUR Gel Pump.

Length: 5 m

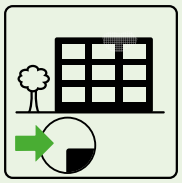
Whether a tunnel or basement, public or private, KÖSTER offers a complete portfolio of injection systems to best protect against moisture damage.

C

Concrete Repair and Protection

Special mortars, concrete and mortar additives

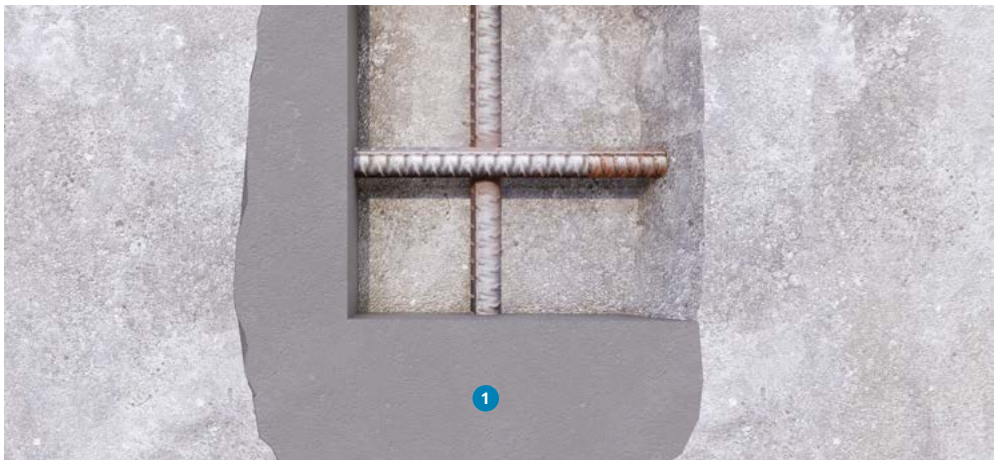
Concrete Repair Systems



Damages to construction members made of concrete require treatment in order to restore the original characteristics. Exposed steel reinforcement must also be protected from corrosion. The original structure is restored using mineral products, that recover not only the functionality of the structures, but also protect them from further corrosion and the carbonation process.

Small Areas

1 Concrete Repair
KÖSTER Betomor Multi A



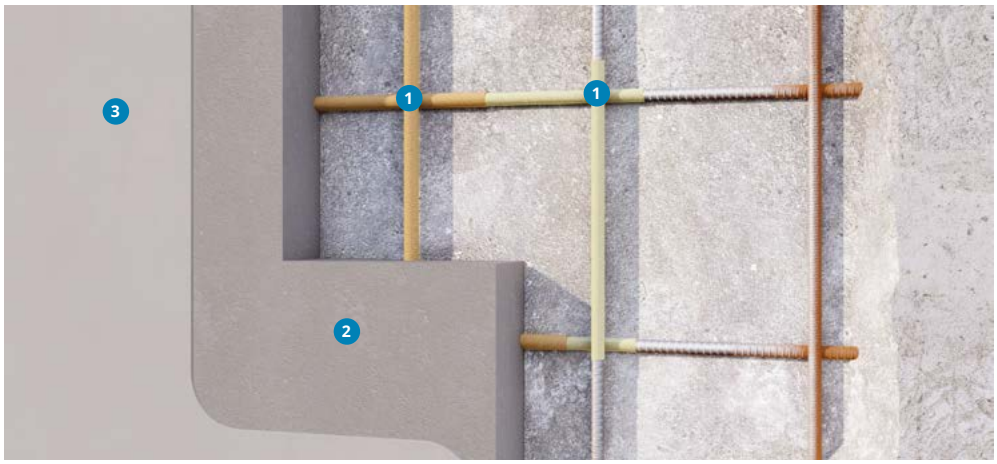
Concrete replacement and repair is a wide-ranging field of application. Besides "green" building materials, KÖSTER provides intelligent products. While some companies require three different products for such repairs, (corrosion protection, coarse filler, and finish coat) KÖSTER Betomor Multi-A combines all of these products into one intelligent, simple to use system.

Large Areas

1 Corrosion protection (reinforcement)
KÖSTER Z 1
KÖSTER Z 2

2 Concrete repair
KÖSTER Repair Mortar R4

3 Surface levelling and smoothing
KÖSTER C-Coat



Repairing and replacing concrete over large areas has requirements on ease of application, re-alkalizing the reinforcement, and replacing the concrete cover with water and chemical resistant specialty mortars. Certification for structural approval according to the DIN EN 1504 is also a common requirement. Therefore, KÖSTER provides systems to meet all of these demands.

Large Areas (spray application)

1 Corrosion protection (reinforcement)
KÖSTER Z 1
KÖSTER Z 2

2 Concrete repair
KÖSTER Repair Mortar NC

Besides requirements on durability, chemical and mechanical resistance, water-tightness, certifications, re-alkalization of the structural environment, protection and regaining coverage of the reinforcement, ease of application is a major influence on the choice of material. Thereby, the possibility of spray application may be a key factor in material selection. KÖSTER Repair Mortar NC is a fiber reinforced PCC mortar for large area concrete replacement and is sprayable with the proper equipment.

Rough Surface renovation

1 Rough concrete

2 Surface levelling and smoothing
KÖSTER C-Coat

Often there are considerations besides the structural repair and remediation of structures. Aesthetics play an important role in building renovation. It is often not desirable to easily visually tell that a structure has been repaired. KÖSTER C-Coat is a thin skimming mortar that provides an optically appealing, concrete-like surface.

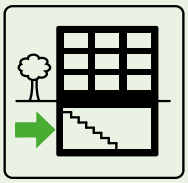
High early strength mortar systems (1h)

1 Concrete repair
KÖSTER Turbo Mortar F
KÖSTER Turbo Mortar M

Different areas of application have requirements on how long a building site can be closed down. Very often it is desirable to open an area to traffic as soon as possible. Generally, the requirement for this is a minimum compressive strength of 20 N / mm². KÖSTER Turbo Mortars reach this in approximately one hour. Despite this high early strength these products have an exceptionally low shrinkage and high resistance to freeze/thaw damage. The consistency of the mortars canbe regulated for vertical or horizontal application.

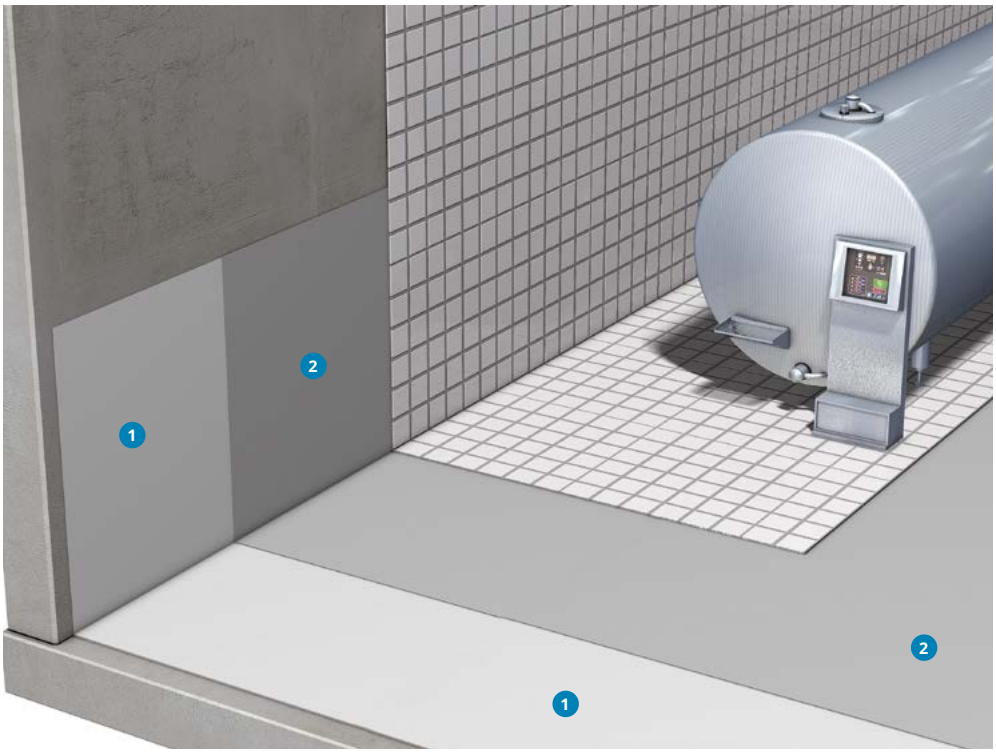
The KÖSTER Turbo Mortars are suitable for all interior and exterior concrete repairs. KÖSTER Turbo Mortar F is a repair, concrete replacement, and reprofiling mortar with an exceptional strength development, applicable in layer thickness of up to 20 mm. KÖSTER Turbo Mortar M is a fiber reinforced repair, concrete replacement, and re-profiling mortar with high chemical and mechanical resistance, applicable in layer thickness from 3 mm to 50 mm.

Concrete Protection Systems



Concrete structures are subjected to a wide variety of damaging influences, both mechanical and chemical. Chemicals can directly attack the concrete matrix or dissolve in water and so enter the concrete and induce damage. To keep the structure safe, KÖSTER manufactures a wide variety of materials for the waterproofing and chemical protection of concrete. From hydrophobizing agents, to coatings for concrete and steel, and paints, KÖSTER can provide the proper solution for every problem.

Heavy duty corrosion protection for concrete



1 Waterproofing layer
KÖSTER NB 1 Grey

2 Heavy duty surface protection
KÖSTER PSM

For the protection of concrete surfaces against acids, the first step is to coat the surface with the negative side waterproofing KÖSTER NB 1 Grey. KÖSTER NB 1 Grey possesses excellent pressure and abrasion resistance, as well as chemical and sulphate resistance. This waterproofing layer protects the mineral substrate from degradation caused by harmful substances.

The acid protection itself is made with the three-component, highly chemical resistant, silicate and polymer-based special mineral mortar KÖSTER PSM. KÖSTER PSM is applied on horizontal and vertical areas which require very high acid resistance in the range of pH 0 – 8.

Surfaces made from KÖSTER PSM can be directly sealed with KÖSTER PSM 2S + after 4 hours without further mechanical surface treatment. KÖSTER PSM 2S + is a transparent, one-component, solvent-free sealant for mineral surfaces, which is characterized by a particularly high thermal and chemical resistance.

Always adhere to the specifications in the respective Technical Guidelines.

Heavy duty acid & corrosion protection for chimneys

1 Reprofiling
KÖSTER Repair Mortar NC

2 Surface protection
KÖSTER NB 1 Grey

3 Area protection
KÖSTER PSM

4 Surface protection
KÖSTER PSM 2S+

5 Surface levelling and smoothing
KÖSTER C-Coat

6 Paint
KÖSTER Renovation Paint White

One example of the need for heavy duty corrosion protection against acidic fumes and condensate, is the coating of industrial chimneys made of concrete or masonry.

For the restoration of concrete or masonry structures, the substrate is to be mechanically cleaned until a solid, unburdened substrate is achieved. The surface is primed with KÖSTER Polysil TG 500, which hardens the substrate and immobilizes salts. Reprofiling is done with KÖSTER Repair Mortar NC or the class R4 mortar KÖSTER Repair Mortar R4.

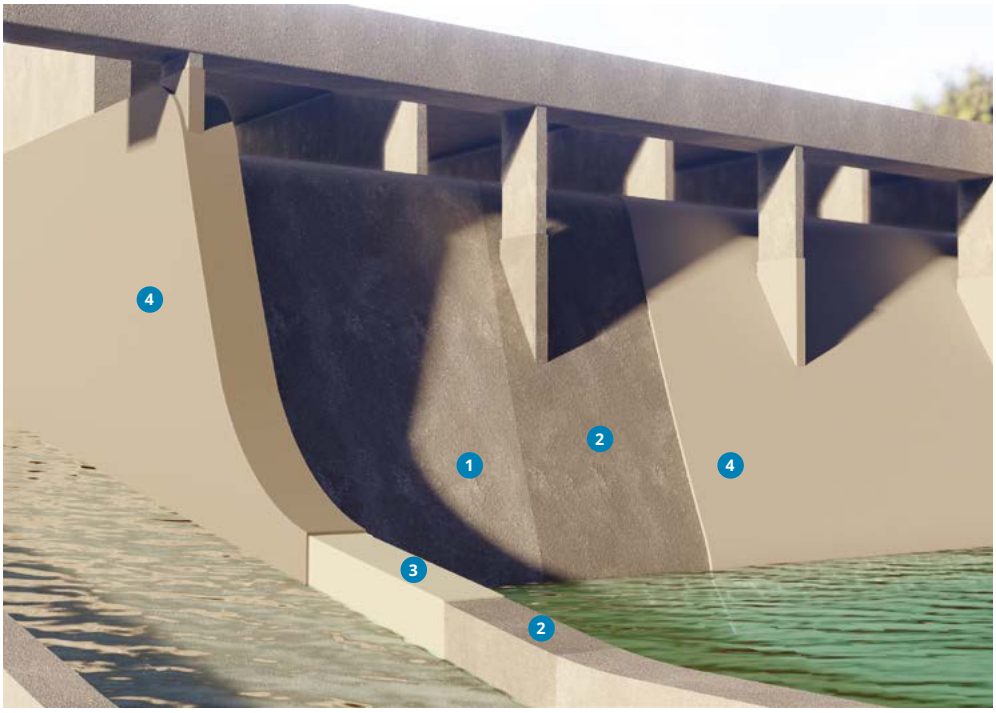
The surface is then roughened in order to achieve a strong mechanical bond to the surface and protected with the three-component, highly chemical resistant, silicate and polymer-based special mineral mortar KÖSTER PSM. KÖSTER PSM is applied on horizontal and vertical areas which require very high acid resistance in the range of pH 0 – 8.

Surfaces made from KÖSTER PSM can be directly sealed with KÖSTER PSM 2S + after 4 hours without further mechanical surface treatment. KÖSTER PSM 2S + is a transparent, one-component, solvent-free sealant for mineral surfaces, which is characterized by a particularly high thermal and chemical resistance.

Exterior surfaces can also be repaired with KÖSTER Repair Mortar NC and smooth with the polymer modified levelling mortar KÖSTER C-Coat. The decorative appearance can be achieved with KÖSTER Renovation Paint White.

Always adhere to the specifications in the respective Technical Guidelines.

Concrete protection of dams and spillways



1 Substrate

2 Primer
KÖSTER Polysil TG 500

3 Surface protection
KÖSTER Repair Mortar R4

4 Waterproofing layer
KÖSTER NB 1 Grey
Alternative:
KÖSTER NB 1 Flex

Massive water structures such as dams and spillways are constantly under high stresses due to strong water currents, which can cause damages to the concrete elements. Therefore, the concrete surfaces must be protected to reduce the loss of concrete coverage, and avoid water ingress in the structure that could trigger rebar corrosion and further carbonation.

Before installing a waterproofing and protection system, the concrete surfaces must be properly cleaned and prepared. Cracks in the concrete must be treated accordingly with a KÖSTER injection resin. Afterwards, the surface is primed with the deeply penetrating primer KÖSTER Polysil TG 500.

Water channels and tanks can be safely waterproofed with the mineral waterproofing with subsequently crystallizing agents KÖSTER NB 1 Grey. KÖSTER NB 1 Grey possesses excellent pressure and abrasion resistance, as well as chemical and sulphate resistance. It is also approved by the building authorities and tested in accordance with the potable water guidelines.

The surface protection and repair are carried out with the class R4 concrete repair mortar KÖSTER Repair Mortar R4. The material has been tested and approved according to EN 1504-3 and is distinguished by its high chemical and mechanical resistance. KÖSTER Repair Mortar R4 is suitable for statically relevant concrete repair and restoration measures, capable of being applied in a layer thickness of up to 50 mm, providing an outstanding protection layer for concrete.

Always adhere to the specifications in the respective Technical Guidelines.

Waterproofing Sewers and Shafts

1 **Primer**
KÖSTER Polysil TG 500

2 **Levelling the substrate**
KÖSTER Sewer
and Shaft Mortar

3 **Surface protection against abrasion and chemicals**
KÖSTER Sewer
and Shaft Mortar

Resistance to mechanical and chemical stresses often play an important role in sewage pipes and shafts. Surface protection must be able to withstand high and low pH values, as well as abrasive wear in order ensure a long service life.

For this purpose, KÖSTER Sewer and Shaft Mortar was developed. After a thorough surface preparation (e.g. by high-pressure water) has led to a stable substrate and efflorescence has been removed, KÖSTER Polysil TG 500 can be applied as a primer.

Afterwards, KÖSTER Sewer and Shaft Mortar is applied in a layer thickness of 4-30 mm. KÖSTER Sewer and Shaft Mortar is a fiber reinforced, water tight, fast curing and fast setting restoration mortar that develops a high compressive strength, as well as an excellent chemical resistance. Due to its consistency and curing properties, it can be applied below the waterline even under flowing water.

Always adhere to the specifications in the respective Technical Guidelines.

KÖSTER Mortar Tight

KÖSTER Mortar Tight makes it possible to produce waterproofing renders, screeds, or simple slurries by using only sand, cement, and water on site. It increases the impermeability of mortars against ground moisture, hydrostatic pressure, and driving rain and promotes self-healing of microcracks through crystallization.

KÖSTER Z 1

1 kg can
(C 155 001)

KÖSTER Z 1 is a polymer modified special slurry for the mineral corrosion protection of steel reinforcement.

Consumption: Approx. 800 g / m² (per coat)

KÖSTER Z 2

1 kg can
(C 255 001)

KÖSTER Z2 is a polymer modified special slurry for the mineral corrosion protection of steel reinforcement. KÖSTER Z2 is pigmented red and allows a visual control of the application.

Consumption: Approx. 800 g / m² (per coat)

KÖSTER PSM

30.75 kg combipackage: powder component: 24 kg bag, silicate component: 5.5 kg jerrycan, polymer component: 1.25 kg jerrycan
(C 280 030)

Three-component, highly chemical resistant, silicate and polymer-based special mineral mortar for waterproofing horizontal and vertical areas which require very high acid resistance in the range of pH 0 – 8. Suitable for dry substrates, easy to apply.

Consumption: Approx. 1.9 kg / m² per mm layer thickness

KÖSTER PSM 2S+

10 kg jerrycan
(C 380 010)

One-component, chemically and thermally resistant coating for mineral surfaces in power plant construction

Consumption: Approx. 50 g / m²

KÖSTER Betomor Multi A

Shrink-free, fast curing multi purpose mortar for concrete restoration. In particular suitable for the protection of exposed reinforcement steel: It unites corrosion protection, coarse mortar, fine filler and bonding bridge in one product. For any layer thicknesses.


Corrosion protection (coating)


Coarse mortar


Fine filler


Balcony restoration

Article No.:
C 500

Consumption:
Approx. 1.3 kg / l void;
or approx. 1,3 kg / m² per mm layer thickness

Packaging:
15 kg bucket (C 500 015)
25 kg bag (C 500 025)

KÖSTER
C-Coat

25 kg bag
(C 510 025)

For the repair and maintenance of concrete surfaces. Waterproof and tension free after full cure. Synthetically modified, waterproof fine filler for the smoothing of concrete surfaces.

Consumption: Approx. 1.7 kg / m² per mm layer thickness

KÖSTER
KB-Fix 5

7.5 kg bucket
(C 515 007)
15 kg bucket
(C 515 015)

Waterproof, weatherproof, fast curing mortar with high compressive strength (sets after approx. 5 minutes) for fast installations as well as for small repairs of masonry and concrete. Free of soda and chlorides.

Consumption: Approx. 1.8 kg / l void

KÖSTER
BDM Liquid

1000 kg
(C 731 000)
30 kg jerrycan
(C 731 030)

Crystallizing, chloride free sealing agent for the integral waterproofing of concrete elements. KÖSTER BDM Liquid combines all three important characteristics for integral waterproofing. It crystallizes, blocks capillaries and makes the concrete waterrepellent. This reduces the water absorbency of the concrete, increases its compressive strength and resistance against chemical attack. It is free of corrosive ingredients and is non-sensitive to mechanical damage to the surface.

Consumption: 2 % (mass) of cement weight

KÖSTER
BDM Powder

KÖSTER BDM Powder combines all three essential characteristics for integral waterproofing. It crystallizes, blocks capillaries, and makes the concrete water repellent. This reduces the water absorbency of the concrete, increases its compressive strength and resistance against chemical attack. It is free of corrosive ingredients and is non-sensitive to mechanical damage to the surface.


Tunnel systems


Precast concrete


Collection and storage tanks


Foundations

Article No.:
C 732 015

Consumption:
0.75 – 1,5 % (mass) of cement weight

Packaging:
15 kg bag

KÖSTER
Sewer and Shaft Mortar

25 kg bag
(C 590 025)

Water tight, fast curing and fast setting restoration mortar specially designed for sewers and shafts. KÖSTER Sewer and Shaft Mortar develops a high compressive strength, is fiber reinforced, very easy to apply and workable even under flowing water. Approved for drinking water applications.

Consumption: Approx. 1.8 kg / l void as repair mortar; approx. 18 kg / m^2; per cm layer thickness

KÖSTER
Turbo Mortar F

25 kg bag
(C 516 025)

KÖSTER Turbo Mortar F is a repair, concrete replacement, and re-profiling mortar with an exceptional strength development: the mortar can be mechanically stressed already after 60 minutes. The consistency can be regulated for vertical or horizontal application. A distinguishing feature of KÖSTER Turbo Mortar F is its low shrinkage.

Consumption: Approx. 1.9 kg / l void

KÖSTER
Turbo Mortar M

25 kg bag
(C 517 025)

KÖSTER Turbo Mortar M is a fiber reinforced repair, concrete replacement, and re-profiling mortar with high chemical and mechanical resistance. KÖSTER Turbo Mortar M can be mechanically stressed after 60 minutes. The consistency can be regulated for vertical or horizontal application. A distinguishing feature of KÖSTER Turbo Mortar M is its low shrinkage.

Consumption: Approx. 1.9 kg / l void

KÖSTER
Repair Mortar NC

25 kg bag
(C 535 025)

Suitable for large reprofiling and repair works, has excellent workability characteristics and adhesion to old and new mineral building substrates. KÖSTER Repair Mortar NC is characterized by high chemical and mechanical resistance and compressive strength. Fiber reinforced. Also suitable as substrate preparation for corrosion protection with KÖSTER PSM, e. g. in industrial chimneys, sewer systems, or other concrete structures which are exposed to low pH environments.

Consumption: Approx. 1.9 kg / l void as repair mortar; approx. 19 kg / m^2; per cm of layer thickness of the plaster

KÖSTER
Repair Mortar R4

25 kg bag
(C 536 025

KÖSTER Repair Mortar R4 is a class R4 concrete repair mortar with excellent adhesion on old and new mineral substrates. KÖSTER Repair Mortar R4 is distinguished by its high chemical and mechanical resistance and can be used for surface preparation in connection with heavy-duty corrosion protection such as KÖSTER PSM. KÖSTER Repair Mortar R4 is tested and approved according to EN 1504-3

Consumption: Approx. 1.9 kg / l void

KÖSTER
Mortar Accelerator

750 g can
(C 792 750)

Accelerator for Portland cement based mortars. Accelerates the hardening of mortars, for example for work in low temperatures.

Consumption: 1 – 5 % (mass) of cement weight

KÖSTER Mortar Boost

10 kg jerrycan
(C 791 010)

Synthetic liquid for KÖSTER Turbo Mortar systems and other cementitious mortars or concrete. KÖSTER Mortar Boost is free of solvents, plasticizers and fillers. The material increases the density, the compressive and bending strength, and reduces water absorption. Due to the synthetic additive, cured mortars and plasters become considerably more resistant to frost, salts and other aggressive substances.

Consumption: For cementitious bonding bridges: approx. 200 g / m². As a mortar additive approx. 0.2 kg per liter of mortar.

KÖSTER Turbo Binding Agent

25 kg bag
(C 716 025)

KÖSTER Turbo Binding Agent is a special cement based on calcium sulfoaluminate clinker. Mortars made with KÖSTER Turbo Binding Agent develop a very high early strength and in the process exhibit very low shrinkage. They can be quickly worked over and have an early loading capacity. During production approximately 30% less CO2 is released as compared to a pure portland cement.

Consumption: Approx. 1.9 kg / l void

KÖSTER Turbo Retarding Agent

25 g bag
(C 718 025)

Additive for the KÖSTER Turbo System. For slowing the setting time of KÖSTER Turbo Mortars to meet individual jobsite requirements.

Consumption: One pack per 25 kg KÖSTER Turbo F / M

KÖSTER Turbo Super Plasticizer

65 g bag
(C 717 065)

Additive for the KÖSTER Turbo System. For the adjustment of the mortar consistency of the KÖSTER Turbo System to individual requirements on the construction site.

Consumption: One pack per 25 kg KÖSTER Turbo F / M

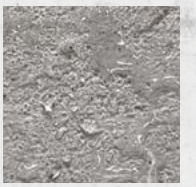
KÖSTER Mortar Tight

KÖSTER Mortar Tight is an additive for the creation of waterproofing render, screed, or simple sealing slurry on the construction site using sand, cement, and water. KÖSTER Mortar Tight replaces a portion of the mixing water. It improves the density of the mortar structure, develops water-repellent (hydrophobic) features and promotes the self-healing of micro-cracks through crystallization.


For creating a waterproof screed


As a waterproof mortar or render


As a simple slurry


Beading effect

Article No.:
C 788 010

Consumption:
For waterproofing basements against pressurized water 1 kg per 10 l water

Packaging:
10 kg jerrycan

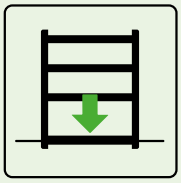
Present in the biggest projects world-wide, we manufacture special high performance coatings for the most defying environments.

SL

Self leveling underlayments

Self leveling mineral underlayments, floor patching materials, corresponding primers

Self leveling underlayments

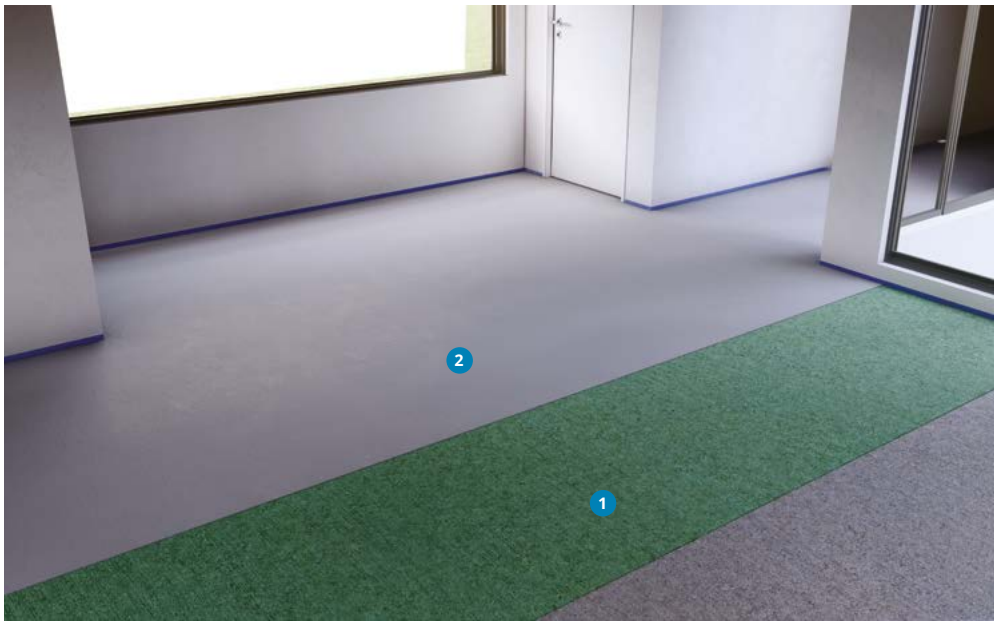


Whether installing flooring systems and coatings in new or existing buildings, substrates generally must first be levelled. The goal is to provide a level and highly resilient surface suitable for a broad variety of flooring systems.

Fast-setting self-leveling underlayment on mineral and non-absorbent substrates

1 Primer
KÖSTER VAP I 06

2 Floor coating
KÖSTER SL Premium



Whether installing flooring systems and coatings in new or existing buildings, substrates generally must first be levelled. The goal is to provide a level and highly resilient surface suitable for a broad variety of flooring systems.

In order to achieve excellent bonding to the following underlayment, the prepared mineral substrate is primed with KÖSTER SL Primer. KÖSTER SL Primer works as a bonding agent to provide a homogeneous absorbency and to bind residual dust. KÖSTER SL Primer cures rapidly and is quickly recoatable.

The leveling is then carried out with KÖSTER SL Premium in one working step in layer thicknesses between 2 and 15 mm; in depressions up to 30 mm. KÖSTER SL Premium is a high quality, self-leveling underlayment for the repair of concrete and existing coated floors. The material is characterized by a high compressive strength and cures with almost no shrinkage, thus preventing cracking. Due to its excellent flowability, KÖSTER SL Premium is very easy and safe to work with.

Additionally, KÖSTER SL Premium is suitable for non-absorbent substrates, e. g. on floors that have been protected with KÖSTER VAP I 2000 for moisture control, on existing epoxy coatings or even tiles. As a bonding agent, KÖSTER VAP I 06 Primer is used. KÖSTER SL Premium allows for an early use after application: After 3-4 hours foot traffic is allowed, tiles can be installed after 5 hours, and after 24 hours curing time the material is even trafficable with soft tires.

Always adhere to the specifications in the respective Technical Guidelines.

Self-leveling underlayment on wooden substrates

1 Primer
KÖSTER VAP I 06

2 Floor coating
KÖSTER SL Flex

Hardwood floors are often found in older buildings and present a difficult substrate for additional flooring surfaces during renovation. KÖSTER SL Flex is a mineral based underlayment for application to a wide variety of substrates including concrete floors, screeds, asphalt, steel, tile, or wooden floors. The material is flexible enough to accommodate the movements of the wooden surface as well as high localized pressure resulting from furniture or dropped items.

Before installation, the substrate has to be free of dust and bonding inhibiting substances. When applying over tongue and groove wooden floors, cleaning agent and care product residues such as wax must be completely removed, if necessary, sanded off. Painted areas must be sanded and subsequently vacuumed. Floor boards must be firmly attached to the joists with screws. Open or wide joints between the boards, defects, and hollows have to be filled with an acrylic jointing compound.

The prepared wooden surface is then primed with the single component water-based bonding agent KÖSTER VAP I 06 Primer. KÖSTER SL Flex stabilizes the substrate due to its high flexural strength. As a result, the substrate warps and bends less, allowing for the installation of rigid flooring materials such as tile.

Always adhere to the specifications in the respective Technical Guidelines.

Highly flowable floor levelling for the subsequent installation of various floor coverings

1 Primer
KÖSTER SL Primer

2 Floor coating
KÖSTER SL

3 Floor covering

The KÖSTER self-leveling floor system provides a comprehensive solution for creating a durable and perfectly smooth substrate, ready for the installation of the final flooring. The process begins with the application of KÖSTER SL Primer- a transparent, low-viscosity primer with a slightly sticky surface. This primer reduces the absorbency of mineral surfaces such as concrete and screed, equalizing differential absorbency rates and minimizing bubbling when applying self-leveling products. It is solvent, plasticizer, filler-free, water-resistant, and remains effective even after curing. For non-porous substrates, KÖSTER VAP I 06 Primer is used. This water-based, one-component bonding agent dries quickly, creates an excellent bond, and is both water and alkali-resistant.

Next, KÖSTER SL, a high-quality, fast-setting mineral underlayment is applied. This product hardens tension-free to create a smooth, level surface within hours, ready to receive subsequent flooring systems. It is easy to mix, pour, and spread, and is self-leveling and highly flow-able during application. KÖSTER SL can cover areas from 5 to 15 mm in thickness, and can be feathered out to 2 mm. It hardens crack-free with a high compressive strength and excellent adhesion to the substrate. Following the self-leveling application, a vapor barrier or footfall sound insulation is installed to ensure a flawless and durable surface before the final installation of wooden or laminate flooring, resulting in a flawless and durable finish.

Always adhere to the specifications of the respective Technical Data Sheets.

Levelling for floor areas exposed to moisture

1. Concrete
2. Shot blasted concrete
3. Vapor barrier coating
   KÖSTER VAP I 2000
4. Primer
   KÖSTER VAP I 06
5. Self leveling underlayment
   KÖSTER SL Premium
6. Floor covering

For a comprehensive waterproofing solution on concrete substrates prone to moisture infiltration, the system begins with thorough preparation by shot blasting. Following this, KÖSTER VAP I 2000 is applied, a vapor barrier primer designed specifically for non-waterproofed interior concrete floors. This advanced material effectively reduces Moisture Vapor Emission Rates (MVER) and alkalinity, ensuring a suitable environment for various types of flooring systems. Once the KÖSTER VAP I 2000 has cured, the KÖSTER VAP I 06 Primer is applied, which prepares the surface for the subsequent installation of KÖSTER SL Premium. This water-based, single-component primer is versatile and suitable for both absorbent and non-absorbent substrates. Finally, KÖSTER SL Premium is applied, a high-quality, fast-setting underlayment that cures tension-free, delivering a smooth, leveled surface ready for the installation of various flooring systems. KÖSTER SL Premium can be applied in thicknesses ranging from 5 to 15 mm, accommodates various substrate conditions, and is capable of feathering out to 2 mm and filling depressions up to 30 mm. Once cured, it provides a robust, multifunctional leveling layer, ready to support the installation of tiles and other finishes, ensuring a durable and resilient flooring solution.

Flexible floor levelling on elastic waterproofing with KÖSTER NB 4000

1. Concrete Slab
2. Primer
   KÖSTER Polysil TG 500
3. Rigid waterproofing layer
   KÖSTER NB 1 Grey
   Alternative:
   KÖSTER NB 1 Flex
4. Flexible waterproofing layer
   KÖSTER NB 4000
5. Self leveling underlayment
   KÖSTER SL Flex
6. Floor coating
   KÖSTER CT 215 Universal Floor

The waterproofing system for a self-leveling floor begins with the surface preparation of the concrete substrate. Initially, the prepared substrate is primed with KÖSTER Polysil TG 500, which hardens the substrate and reduces the mobility of salts. Once primed and cured, a two-layer application of KÖSTER NB 1 Grey waterproofing slurry follows, (2 x 1.5 kg/m^2). It provides a watertight, crystallizing mineral waterproofing suitable for both positive and negative side applications. It is known for its high pressure, abrasion, and chemical resistance. After this, a two-layer waterproofing of KÖSTER NB 4000 (2 x 1.2 kg/m^2) is applied, offering elastic, crack-bridging protection that withstands pressurized water after 24 hours and is ideal for various structures including basements and foundations. Optionally, the system is topped with KÖSTER SL Flex, a high-quality, fast-setting, self-leveling underlayment that forms a smooth, high-strength surface suitable for various finishes such as carpet or tiles, and even over-floor heating systems. In this case, KÖSTER SL Flex is designed for application in thicknesses more than 8 mm and a maximum of 15 mm. KÖSTER CT 215 Universal Floor can be used as a final flooring. KÖSTER CT 215 Universal Floor is a solvent-free, water-based epoxy resin, designed to prime and coat concrete surfaces offering not only protection, but also a silky matte finish that enhances aesthetics while ensuring easy maintenance, offering a durable, easy-care, and vapor-permeable finish. Always adhere to the specifications in the respective Technical Data Sheets. For detailed installation guidelines, consult the latest System Data Sheet.

Floor levelling with KÖSTER SL Premium on rigid negative side waterproofing

1 Concrete slab

2 Primer
KÖSTER Polysil TG 500

3 Rigid waterproofing layer
KÖSTER NB 1 Grey
Alternative:
KÖSTER NB 1 Flex

4 Floor coating
KÖSTER SL Premium

5 Tile adhesive
KÖSTER BD Flexible Tile Adhesive

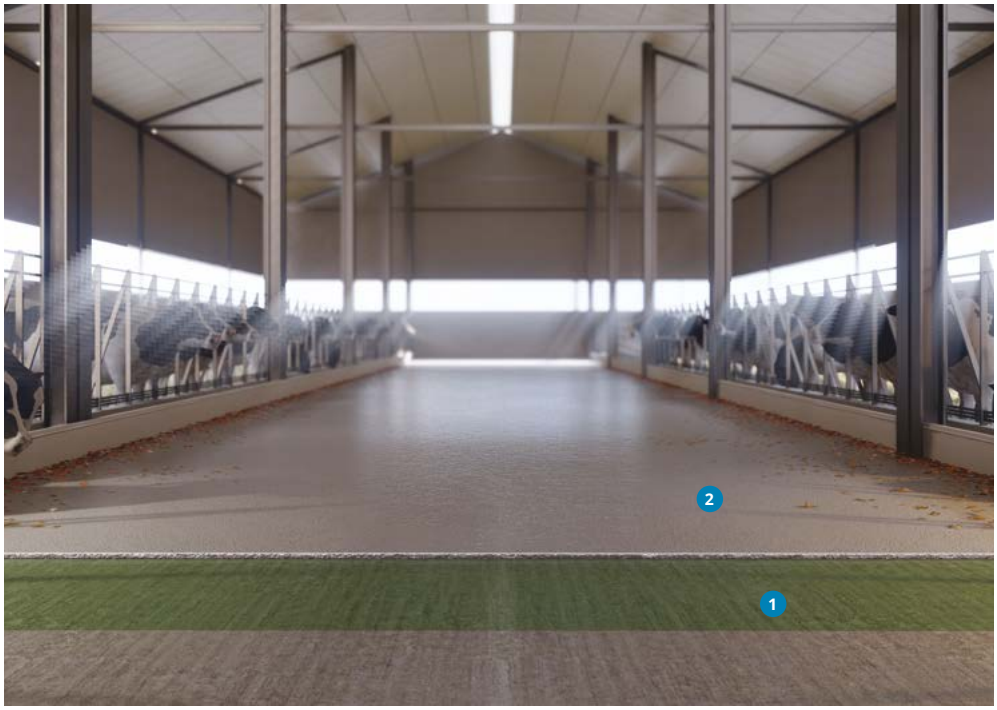
SL

The self-leveling floor system begins with the preparation of the concrete substrate, ensuring a smooth and clean surface. The substrate is then primed with KÖSTER Polysil TG 500, which hardens the substrate and reduces the mobility of salts. Following the priming process, KÖSTER NB 1 Grey slurry is applied in two layers crosswise for an optimal waterproofing. This cementitious waterproofing solution, fortified with crystallizing agents, offers exceptional resistance to pressure, abrasion, and chemical elements, making it suitable for both positive and negative side waterproofing applications. Once the waterproofing layer is completed, KÖSTER SL Premium self-leveling underlayment is poured, creating a flawlessly smooth and level surface that's ready to receive various flooring systems. This high-quality, fast-setting compound creates a smooth, tension free, level surface within hours. It accommodates thicknesses ranging from 5 to 15 mm and can be feathered out to 2 mm with suitable tools, making it ideal for uneven concrete, providing a durable foundation for subsequent flooring systems such as tile.

Self-leveling protective floor with high chemical resistance

1 Primer
KÖSTER SL Primer

2 Floor coating
KÖSTER SL Protect



Protecting exterior surfaces can also be achieved by installing a KÖSTER self-leveling underlayment. In order to achieve excellent bonding to the following underlayment, the prepared mineral substrate is primed with KÖSTER SL Primer. KÖSTER SL Primer works as a bonding agent to provide a homogeneous absorbency and to bind residual dust. KÖSTER SL Primer cures rapidly and is quickly recoatable.

KÖSTER SL Protect is an early loadable, mineral based self-leveling underlayment which provides high resistance to chemical and mechanical stresses. It can be used as a directly trafficable layer over uneven or coarse concrete and cementitious screeds. Due to its high chemical resistance, it is used to protect against light and medium corrosion and serves as a slowly reacting sacrificial layer in areas of high chemical stress.

KÖSTER SL Protect is further used for fast repairs and protection in agricultural, industrial, workshop, production facilities, commercial, and private use buildings. KÖSTER SL Protect is self-leveling from 5 mm to 30 mm and can be feathered out to 2 mm with suitable tools.

Always adhere to the specifications in the respective Technical Guidelines.

KÖSTER SL Primer

5 kg jerrycan
(SL 189 005)

A transparent curing, low viscosity primer with a slightly sticky surface. KÖSTER SL Primer reduces the absorbency of mineral surfaces such as concrete and screed and equalizes differential absorbency rates in the substrate. It reduces the bubbling effect when working with KÖSTER self leveling floor products. KÖSTER SL Primer is solvent, plasticizer, and filler free, water resistant, it will not be washed or rained away after curing.

Consumption: Approx. 50 – 150 g / m², dependent on substrate characteristics

KÖSTER VAP I 06

1 kg bottle
(SL 131 001)

9.5 kg jerrycan
(SL 131 009)

Ideal and necessary for priming cured KÖSTER VAP I Systems for the subsequent installation of all cementitious self-leveling underlayments. KÖSTER VAP I 06 Primer is a unique, water based, single component material for priming absorbent and non-absorbent substrates. Suitable as a primer under terrazzo, marble, and ceramic tiles.

Consumption: Approx. 50 – 100 g / m² depending on substrate characteristics

KÖSTER SL

25 kg bag
(SL 281 025)

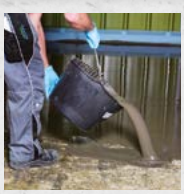
A high quality, fast setting mineral underlayment that hardens tension free to a smooth, level surface ready to receive subsequent flooring systems. It hardens within hours to a smooth, strong, and multifunctional leveling layer. KÖSTER SL is easy to mix and spread, is pour- and pumpable, and is self leveling and highly flowable during application. KÖSTER SL can be used for area covering from 5 to 25 mm, be feathered out to 2 mm, and can fill depressions up to 25 mm. KÖSTER SL hardens crack free and has a high surface strength and a very good adhesion to the substrate.

Consumption: Approx. 1.5 kg powder / m² / mm layer thickness

KÖSTER SL Premium

KÖSTER SL Premium is a high quality, fast setting underlayment that hardens tension free and provides a smooth, leveled surface ready to receive subsequent flooring systems. It hardens within hours to a smooth, strong, and multifunctional leveling layer. It may be applied onto a variety of substrates. KÖSTER SL Premium can be applied in layer thicknesses between 5 and 15 mm, can be feathered out to 2 mm, and installed in depressions up to 30 mm.

Primer:
KÖSTER SL Primer or
KÖSTER VAP I 06



Easy application

Very robust

Coating after
24 hours

Article No.:
SL 280 025

Consumption:
Approx. 1.5 kg / m² /mm layer thickness

Packaging:
25 kg bag

KÖSTER
SL Flex

25 kg bag
(SL 284 025)

KÖSTER SL Flex is a high quality, fast setting, mineral based underlayment with excellent bonding characteristics also on smooth and dense substrates. KÖSTER SL Flex is applicable to a wide variety of substrates (especially wooden substrates) and hardens hydraulically and tension free within a few hours. It hardens to a level, high strength surface that allows for a change in building use, such as carpet or tiles on top of old wooden floors. KÖSTER SL Flex is easy to mix and install, is pump- and pourable, and during its pot life has a low viscosity and is self-leveling. KÖSTER SL Flex can be applied in layer thicknesses between 2 and 15 mm, and in depressions up to 30 mm. It hardens quickly and crack free with up to 90 % reduced shrinkage.

Consumption: approx. 1.6 kg powder / m^2 per mm layer thickness

KÖSTER
SL Protect

25 kg bag
(SL 286 025)

KÖSTER SL Protect is a mineral based self-leveling underlayment with high resistance to chemical and mechanical stresses. It is an early loadable, directly useable leveling layer over uneven or coarse concrete and cementitious screeds. Due to its high chemical resistance it is used to protect against light and medium corrosion and serves as a slowly reacting sacrificial layer in areas of high chemical stress. KÖSTER SL Protect is further used for fast repairs and protection in agricultural, industrial, business, workshop, production facilities, and private use buildings.

Consumption: Approx. 1.9 kg / m^2 per mm layer thickness

KÖSTER
Swellable Grout

25 kg bag
(SL 252 025)

KÖSTER Swellable Grout is a fine-grained, normal setting grout mortar, formulated with a moderately expanding component. It provides a good flow spread, is pourable, and has a pot life of at least 45 mins. KÖSTER Swellable Grout is resistant to de-icing and other harmful salts as well as oils and lubricants.

Consumption: Approx. 1.9 kg / l void

KÖSTER
VGM Fast

25 kg bag
(SL 251 025)

Fast curing grout mortar with high final compressive and flexural strength and very high slump flow for all construction and repair applications. Ready to receive traffic after 3 hours. Fields of application include road surfaces, warehouse ramps, man holes, or as a grout for installations and achor holes.

Consumption: Approx. 1.9 kg / l void

KÖSTER
SL Flow Test Board

piece
(SL 900 001))

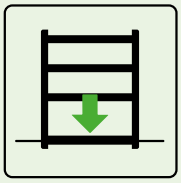
Flow test board for self levelling mortars (test cylinder included)

CT

Coatings

Floor and corrosion protection coatings, moisture control systems

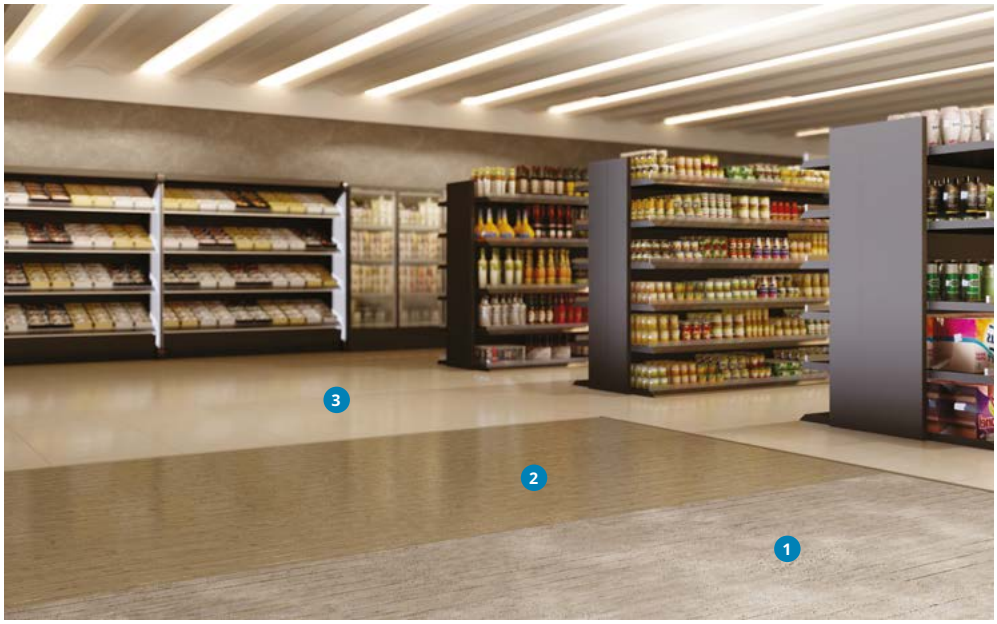
Floor coatings



Floor coatings, for example on garages, industrial floors or canteen kitchens usually demand high standards on their resistance, as well as their visual appearance. These floors can be permanently protected against mechanical damage and the penetration of liquids with colored protective coatings.

Moisture Mitigation System

1. Moist concrete with high alkalinity
2. Vapour barrier
   KÖSTER VAP I 2000
3. Floor coating
   KÖSTER LF-VL

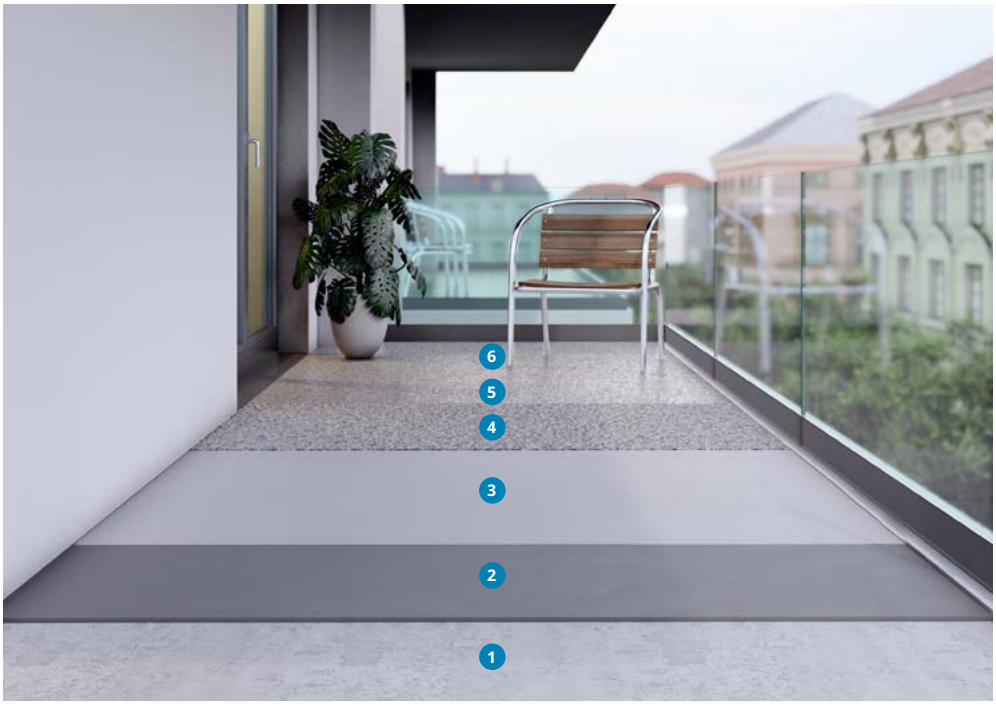


Moisture penetration through concrete slabs can cause severe problems for subsequent flooring systems. High concentrations of moisture and alkalinity (levels determined through testing) can lead to the deterioration of flooring adhesives and delamination of coatings by osmotic action. Even with relatively low moisture emissions (MVER), elevated alkalinity can compromise even the toughest flooring system adhesives. To avoid this problem, the concrete slab should be primed with a material that will tightly bond to the concrete under these very adverse conditions.

KÖSTER VAP I 2000 is a special material which fulfils all of these functions; it has very low permeance ASTM E96 wet: .04-.09, excellent bonding characteristics and is resistant to sustained high alkalinity (pH of 14). The KÖSTER VAP I 2000 vapor reduction system is applied to shot blasted, solid concrete substrates that are free of bond inhibiting substances. After curing, a covering layer (i.e. KÖSTER LF-VL) or any other type of final flooring may be applied. If an underlayment is required use KÖSTER SL Premium together with KÖSTER VAP I 06 Primer on top of the moisture mitigation system.

Always adhere to the specifications in the respective Technical Guidelines.

Floor coatings for balconies, terraces, commercial and private areas



1 Substrate

2 Levelling
KÖSTER SL Protect

3 Floor coating
KÖSTER CT 227 1C Silane

4 Decorative layer
KÖSTER Color-Chips

5 Broadcast fixation
KÖSTER CT 327 1C Sealer

6 Protection
KÖSTER Top Coat 1C Matte

Floor coatings in exterior application on balconies and terraces, as well as in commercial and private areas, require a special system that provides adequate protection and offer the necessary safety for the users. KÖSTER satisfies all these requirements with the universally applicable KÖSTER CT 227 1C Silane system.

KÖSTER CT 227 1C Silane is a one component, pigmented, open to vapor diffusion, environmentally friendly, crack-bridging, elastic and easy-to-use sealant with very good covering capacity for indoor and outdoor use on mineral substrates, such as e.g., concrete, cement screed, mineral plaster and on stable old coatings.

The system is resistant to medium chemical and mechanical loads, UV and weather resistant and it can be applied in a wide variety of application compositions in private and commercial areas.

The versatility of the coating is given by the use of its system components: KÖSTER CT 227 1C Silane is the ready-to-use main coating system. KÖSTER Flex Fabric is a highly flexible, tear-resistant plastic fabric for use in indoor and outdoor areas at risk of tearing. KÖSTER CT 327 1C Sealer is a one-component, crack-bridging, open to vapor diffusion, UV and weather-stable, solvent-free transparent sealant. Due to their good UV and chemical resistance, KÖSTER Color Chips are suitable for surface designs. KÖSTER Top Coat 1C Matte is a transparent, easy-to-clean, matt sealant for the finish look.

Always adhere to the specifications in the respective Technical Guidelines. For detailed installation guidelines, consult the latest System Data sheet.

Floor coatings which are exposed to moderate stresses

1 Substrate

2 Primer
KÖSTER CT 215
Universal Floor

3 Floor coating
KÖSTER CT 215
Universal Floor

4 Decorative layer
KÖSTER Color-Chips

5 Protection
KÖSTER TS transparent

6 Surface protection (wall)
KÖSTER Renovation Paint
White

The KÖSTER Universal Floor System is an easy to apply coating and sealing system for mineral substrates for light to moderate mechanical and chemical stresses in commercial and private real estate. Light stresses are e.g., when used in a storage room. Medium stresses arise e.g., when loaded with forklifts or pallet trucks, driving in private garages or the effects of de-icing salt from vehicles.

As a water-based epoxy resin, KÖSTER CT 215 Universal Floor is also suitable for coating damp substrates. In cases where moisture can be trapped behind the coating, such as non-waterproofed floor slabs or balconies, KÖSTER VAP I 2000 should be applied to protect against moisture and water vapor transmission. The epoxy resin KÖSTER CT 215 Universal Floor is applied to the prepared substrate as primer, as well as a leveling flow coat. With the incorporation of KÖSTER Filler fine, layer thicknesses of up to 2 mm can be achieved.

Through the use of KÖSTER Color Chips in contrast and rejection broadcast and the incorporation of KÖSTER Anti-Slip Granules 20, a wide variety of individual surface structures and designs can be achieved. When applied outside, the KÖSTER CT 215 Universal Floor must be fully broadcasted to rejection and sealed. By medium stresses, the two-component sealant KÖSTER TS Transparent must be used.

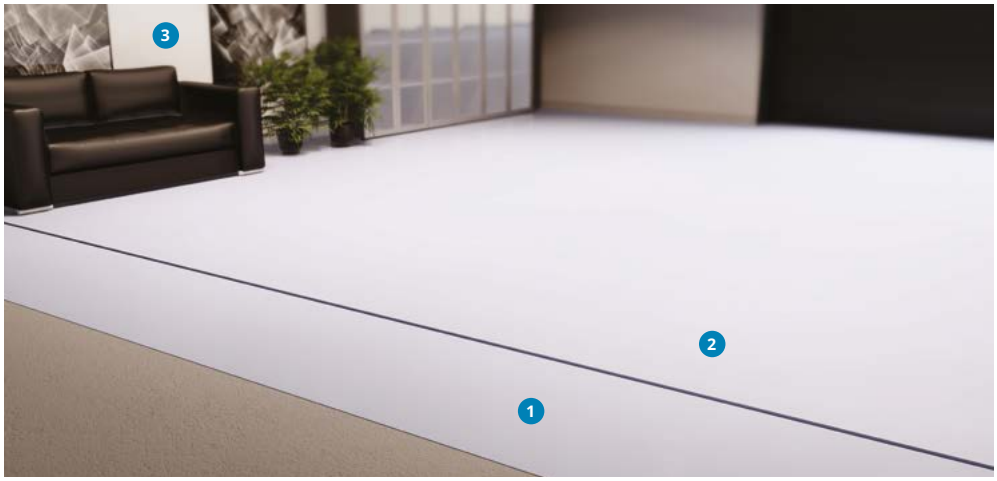
Surface protection for the walls can be easily achieved with KÖSTER Renovation Paint White.

Always adhere to the specifications in the respective Technical Guidelines. For detailed installation guidelines, consult the latest System Data sheet.

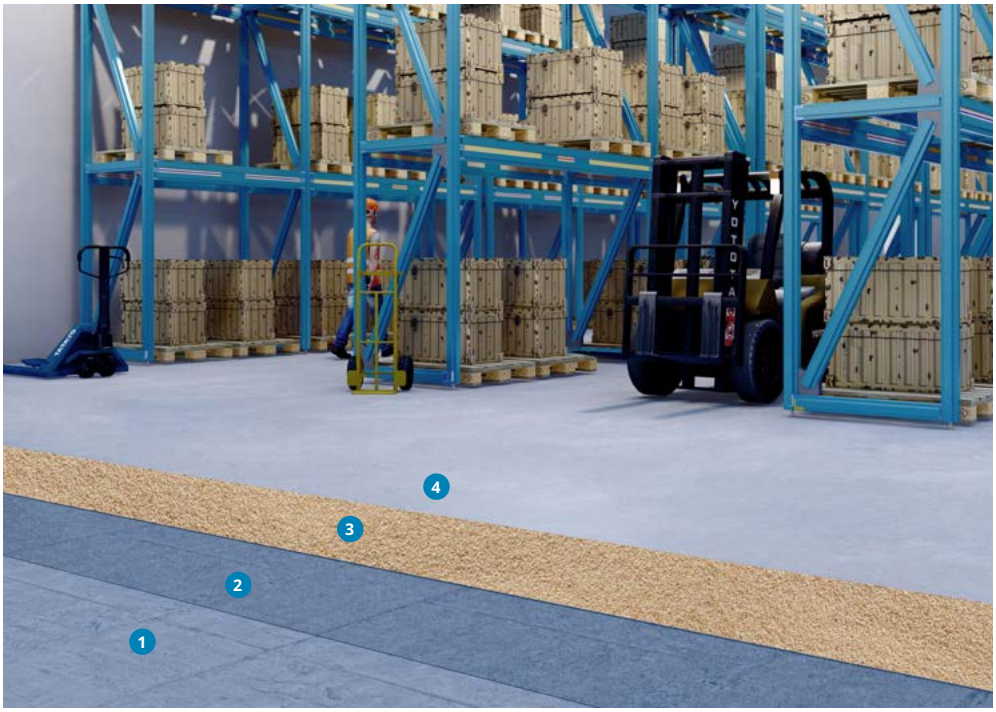
1 Primer
KÖSTER CT 215
Universal Floor

2 Floor coating
KÖSTER CT 215
Universal Floor

3 Surface protection (wall)
KÖSTER Renovation
Paint White



Floor coatings which are exposed to heavy stresses



1 Substrate

2 Primer
KÖSTER CT 121

3 Slip resistance (optional)
Quartz Sand

4 Floor coating
KÖSTER LF-VL

Floors in industry and production facilities are subjected to a multitude of stresses, especially mechanical stresses through forklift traffic, machines, or shocks through falling objects.

Concrete floors subjected to such stresses are covered with the industrial floor coating KÖSTER LF-VL.

KÖSTER LF-VL is a solvent free, self-leveling and pigmented floor covering for industrial uses with a high abrasion resistance.

The substrate must be prepared, dry, clean, and freed of all bond inhibiting substances. It is then primed with KÖSTER CT 121 or when moisture is present in or below the slab with KÖSTER VAP I 2000; and broadcasted with quartz sand.

The top layer can also be adjusted for various slip resistance classifications by broadcasting it with kiln dried silica sand or various top coats. The application of KÖSTER LF-VL, can then follow as a thin layer to create a slip resistance or in various millimeter. The complete system can be installed with low emission materials according to the AgBB guidelines and can therefore, be installed in critical interiors such as schools or hospitals.

Always adhere to the specifications in the respective Technical Guidelines.

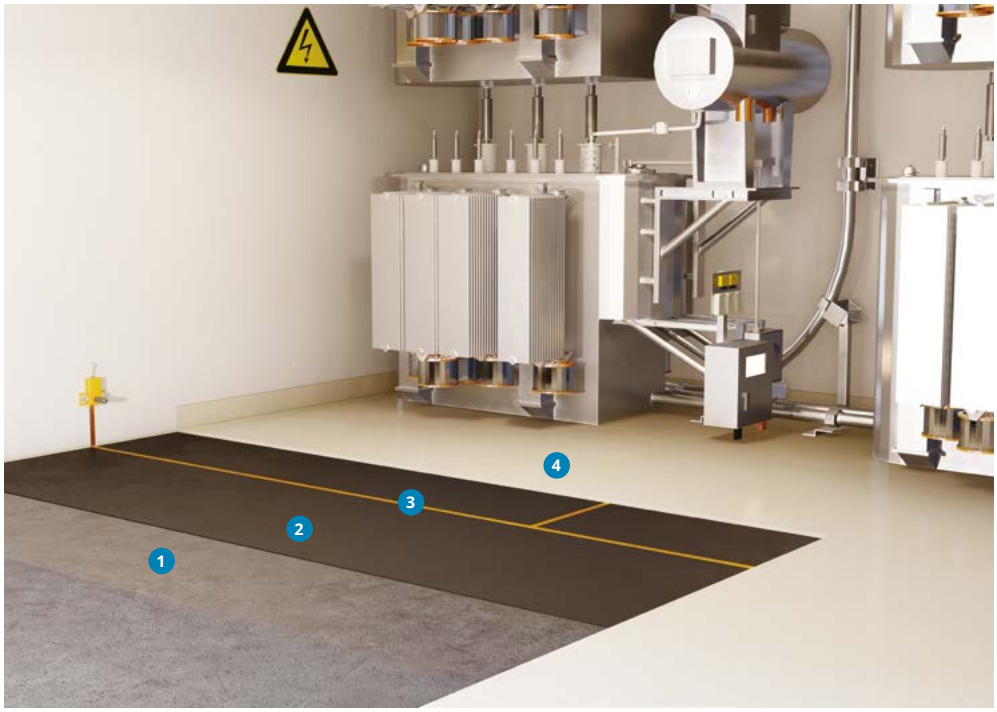
ESD Flooring System (electrostatic discharge)

1 Primer
KÖSTER CT 121

2 Conductive Coating
KÖSTER ESD 175

3 Ground
KÖSTER ESD 476

4 Top Coat
KÖSTER ESD 275



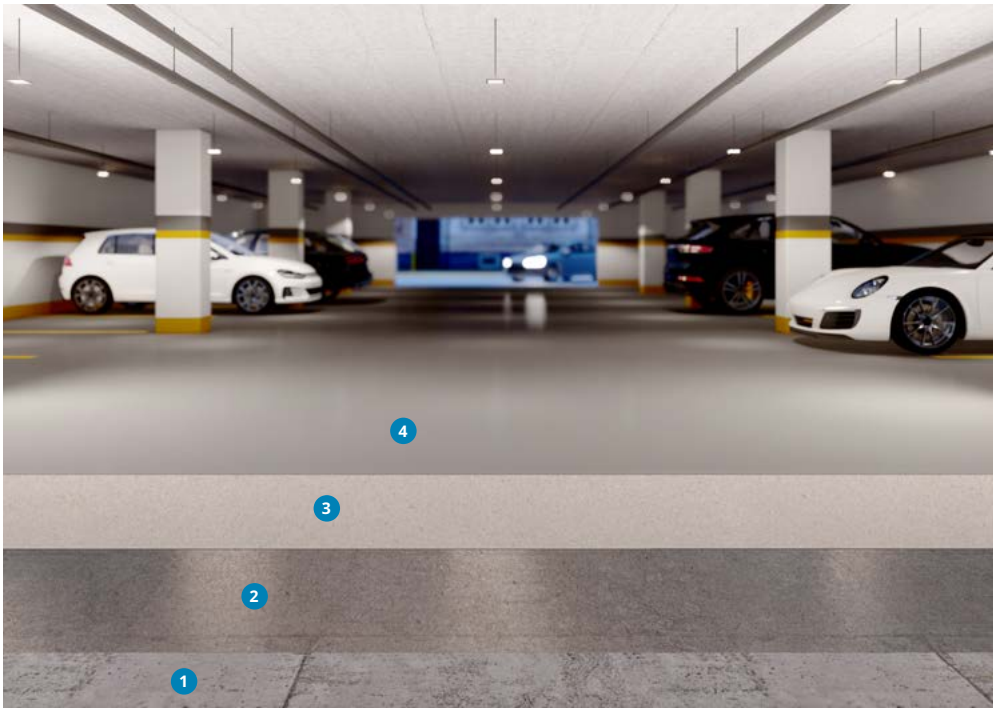
In areas where electronics are manufactured or in areas that can be electrostatically charged by people or machines, the floor must have a sufficiently high electrostatic dissipation to eliminate the risk of damage. For these environments, ESD protection areas are required, (ESD : Electrostatic Discharge) where special ESD coatings are installed.

The KÖSTER ESD System has a structure that provides maximum protection against unwanted electrical charges. The product system consists of the conductive layer KÖSTER ESD 175, which is a solvent free epoxy resin dispersion that is simply applied with a roller. After only two hours, it is cured and can be connected to the building grounding with the adhesive copper tape KÖSTER ESD 476.

Afterwards, the solvent free, self-levelling coating KÖSTER ESD 275 is applied as the top coat. After cure it not only protects the concrete from chemical and mechanical stresses, it also maintains the high electrostatic dissipation required for an ESD protected area. The KÖSTER ESD System has been tested according to the DIN EN 61340-4 by the KIWA Polymer Institute Ltd. The excellent test results allow the KÖSTER ESD System to be used in rooms with very high requirements.

Always adhere to the specifications in the respective Technical Guidelines.

Parking garages and trafficked surfaces with high mechanical stresses with the KÖSTER OS 8 System



1 Substrate

2 Primer
KÖSTER CT 121
Quartz Sand 0.06 - 0.36 mm

3 Broadcast
Quartz Sand 0.4 - 0.8 mm

4 Top Coat
KÖSTER CT 221

CT

Parking garages and trafficked areas have especially high requirements on coatings. The KÖSTER OS 8 System is a highly resistant, easy to apply solution.

Surface preparation is critical and should result in a clean, dry surface free of all bond-inhibiting materials. KÖSTER CT 121 mixed with Quartz Sand 0.06 – 0.36 mm (1:1) is used as a primer and applied with a standard trowel. Immediately afterwards, the primed surface is broadcasted with Quartz Sand 0.4 – 0.8 mm. Through the broadcast with quartz sand, the mechanical resistance is increased and a higher slip resistance is achieved.

After excess Quartz Sand has been removed, the top coat consisting of the solvent-free KÖSTER CT 221 is applied. The KÖSTER OS 8 system has been tested according to the DIN EN 1504-2 guideline and fulfills the supplementary standard DIN V 18026.

Always adhere to the specifications in the respective Technical Guidelines.

Heavy chemical and mechanical protection with KÖSTER CT 228

1 Substrate

2 Cleaned Substrate

3 Primer
KÖSTER CT 121

4 Rigid waterproofing layer
KÖSTER CT 228 Flex

KÖSTER CT 228 Flex is an advanced epoxy coating designed for protecting concrete and steel surfaces. When applying to vertical surfaces it is mixed with 6% KÖSTER KB-Pox Thickening Agent. It is ideal for use in industrial and agricultural settings, such as wastewater treatment and biogas plants, and is also highly effective for safeguarding heavily loaded industrial floors. When higher slip resistance beyond R9 is necessary, KÖSTER CT 228 Flex can be textured with kiln-dried broadcast materials or used as a scratch coat by incorporating kiln-dried fillers. Additionally, it serves as a chemically and mechanically resilient top sealer for epoxy resin compounds or as a top coat for thick-layer surface protection in high-traffic areas.

For concrete substrates the surface must be dry, clean, and free from loose particles. Preparation involves mechanical methods such as shot blasting or grinding, followed by vacuuming to ensure a dust-free surface. Any significant surface roughness can be treated with a scratch coat primer or an epoxy resin screed, using products such as KÖSTER CT 121 or KÖSTER leveling compounds (e.g. KÖSTER SL Protect, KÖSTER SL Premium, or KÖSTER SL Flex). Cracks in the concrete should be sealed with KÖSTER KB-Pox IN and broadcast with kiln dried quartz sand as needed. For wall areas, sandblasting is recommended to achieve a rough, clean surface. A single layer of KÖSTER CT 228 Flex is applied.

For steel substrates the surfaces must be dry, clean, and free of oil and grease. Preparation should meet DIN ISO 12944-4 standards, with blasting to at least SA 2 ½ purity and a mean roughness of at least 50 µm, or manually with a steel brush to SA 3. Weld beads and seams must be removed, and edges smoothed by grinding. Optionally revisions can be made with KÖSTER CT 228 Flex, again incorporating 6% KÖSTER KB-Pox Thickening Agent. Finally, all dust and residues must be thoroughly removed to ensure a clean surface ready for coating. Two layers of KÖSTER CT 228 Flex are applied to ensure optimal protection.

Hygienic protective coating for the food production industry

1 Substrate

2 Floor coating and underlayment
KÖSTER UC 100

3 Top coat
KÖSTER UC 300
(also used as a primer)

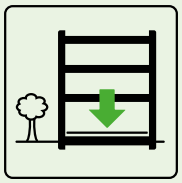
CT

KÖSTER UC combines properties of mineral floor leveling materials (leveling and repair of mineral substrates) and reactive resin coatings (protection against penetrating substances and damage as well as decorative design) in one product. It is based on a polymer binder (polyurethane) and mineral fillers. KÖSTER UC Systems can therefore be used in a wide variety of fields of application with high demands on the coating, such as in the food production industry (production, kitchens), as well as in chemical and pharmaceutical industries. KÖSTER UC can be installed in new construction projects (retail) and in the renovation of production areas which must be quickly open to traffic.

In order to ensure a successful application, the substrate must be properly prepared by shotblasting. The three-part KÖSTER UC System is made up of: KÖSTER UC 100, a self-leveling urethane cement flooring system for layer thicknesses between 3 and 9 mm; and KÖSTER UC 300, a very thin-layer urethane cement flooring system, which can be used as a primer or top coat, depending on the circumstances. Additionally, KÖSTER UC Pigment Paste can be used to color any of the KÖSTER UC flooring system to meet decorative requirements.

Always adhere to the specifications in the respective Technical Guidelines.

Corrosion protection



Corrosion protection is of primary concern, particularly in the industry and agriculture sectors, where there is a variety of areas with increased requirements; for example, such as high resistance against acids and alkalis.
In order to guarantee a long service life floor in production areas, warehouses or surfaces in tanks, they must all be protected with long-term solutions. KÖSTER provides systems for the effective protection of mineral substrates as well as steel surfaces.

Corrosion protection of steel

1 Corrosion protection
KÖSTER Corrosion Protection

2 Corrosion protection (crack bridging)
KÖSTER CT 228 Flex

The corrosion protection of steel can easily be accomplished with a two-layer coating of KÖSTER Corrosion Protection, applied by brush or roller. KÖSTER Corrosion Protection is a 2 component, solvent free, epoxy based protective coating with excellent adhesion to steel and concrete. It can be used as a surface protection in facilities which are exposed to elevated chemical and mechanical stresses such as agricultural plants, sewage treatment plants or tanks.

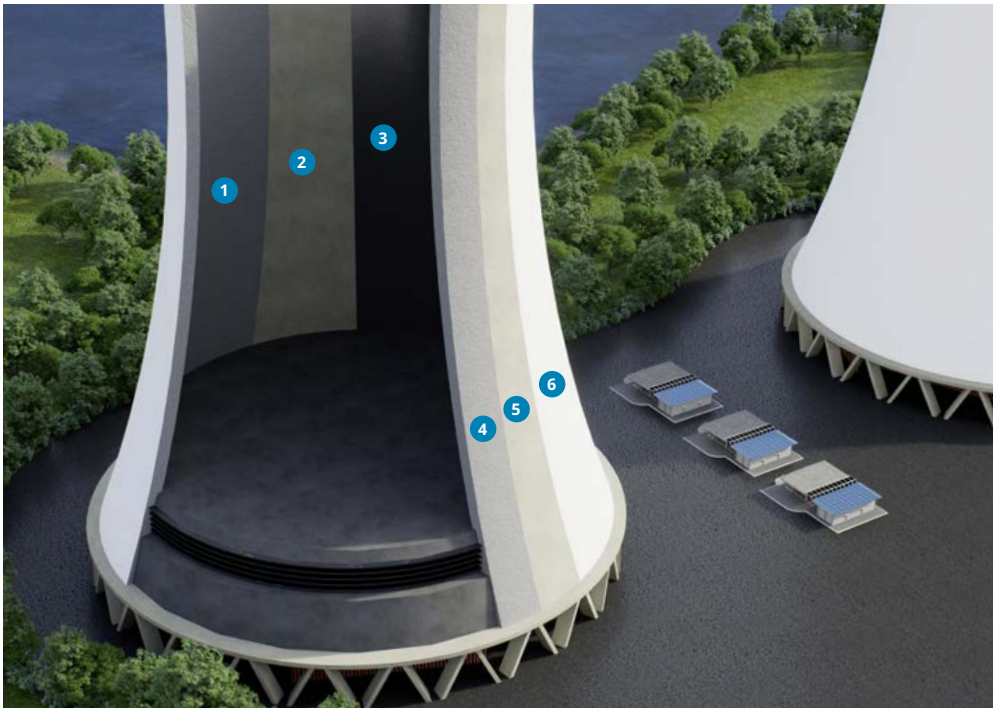
The substrate must be dry, solid, and free of loose particles and bond inhibiting substances such as oil and grease. Steel surfaces must be prepared according to DIN EN ISO 12944-4 (min. Sa 2 ½, average roughness RY5 min. 50 µm)

KÖSTER Corrosion Protection serves also as a primer for steel structures in hydraulic steel construction which require a crack bridging, flexible coating, like KÖSTER CT 228 Flex.

KÖSTER CT 228 Flex is a two-component epoxy resin product which, due to its tough elastic properties, can be used for the mechanical and chemical surface protection of concrete and steel structures. The material is characterized by its high surface hardness and is able to bridge cracks forming in the ground.

Always adhere to the specifications in the respective Technical Guidelines. Because corrosion protection on steel requires experience and should be analyzed case by case, please contact our technical consultants for further instructions.

Protection system for cooling towers



1 Gritblasted concrete

2 Waterproofing layer
KÖSTER NB 1 Grey

3 Protection of the Waterproofing layer
KÖSTER TG 500 2C

4 Gritblasted concrete

5 Waterproofing layer
KÖSTER NB 1 Grey
Alternative:
KÖSTER NB 1 Flex

6 Painting
KÖSTER Acrylic Paint

CT

A cooling tower is subjected to both chemical and mechanical stresses. The protection system must therefore be designed accordingly.

A natural draft cooling tower is a shell with a particular geometry that draws air upward without any electrical support. Given the size of the construction, it is easy to understand that a single part of it can be subjected to multiple exposition classes and therefore the highest protection standards have to be chosen to meet with optimum results.

KÖSTER has researched and developed a special protection system for the last 2 decades and since then has been present in some of the world's biggest cooling tower constructions. A perfect combination of surface preparation systems and protective coatings, insure a long life cycle for this demanding type of construction.

KÖSTER CT 121

1 kg combipackage;
(CT 121 001)
6 kg combipackage;
(CT 121 006)
25 kg combipackage;
(CT 121 025)

KÖSTER CT 121 is a solvent-free primer used for priming of mineral surfaces before the application of KÖSTER CT 221. It is a part of the the KÖSTER OS 8 System.

Consumption: 240 – 800 g / m² (depending on field of application)

KÖSTER CT 327 1C Sealer

5 kg Bucket
(CT 327 005)

One-component, flexible, UV and weather-resistant, solvent-free, transparent glossy top sealer.

Consumption: Approx. 0.1 – 0.2 kg / m² per layer (min. 2 layers)

KÖSTER ESD 175

8 kg combipackage
(CT 175 008)

KÖSTER ESD 175 is a water based epoxy dispersion for priming floors to be coated with KÖSTER ESD 275. The KÖSTER ESD System creates an ESD protected area according to the norms DIN EN 61340 and DIN EN 61340-1, supplementary sheet.

Consumption: Approx. 100 g / m²

KÖSTER TG 500 2C

13.5 kg combipackage
(CT 117 013)

Low viscosity epoxy sealant for waterproofing cooling towers, bridge decks, and other civil engineering structures. Due to the good heat resistance of the cured KÖSTER TG 500 2C, asphalt can be installed directly onto the fully cured coating. It is resistant to high mechanical stresses. Fields of application include waterproofing of civil engineering stuctures and corrosion protection of concete exposed to moderate chemical stresses

Consumption: Approx. 0.2 kg / m²

KÖSTER Top Coat 1C Matte

5 kg bucket
(CT 325 005)

Matte, one-component aqueous PU sealant for broadcast or smooth coatings. KÖSTER Top Coat 1C Matte is characterized by high abrasion resistance, chemical resistance, and UV resistance. Due to its rapid curing, the coating can be trafficked after just 24 hours.

Consumption: Approx. 150 g / m² per layer

KÖSTER CT 227 1C Silane

10 kg bucket
(CT 227 010)

Universally applicable, environmentally friendly, elastic flooring sealant with very good covering capacity. Very good adhesion to all mineral based surfaces.
Resistant to medium mechanical loads. UV and weather resistant.

Consumption: 400 – 800 g/m²

KÖSTER Corrosion Protection

7 kg combipackage
(CT 283 007)

KÖSTER Corrosion Protection is a 2 component, solvent free, epoxy based protective coating with excellent adhesion to steel and concrete. It can be used as a surface protection in facilities which are exposed to elevated chemical and mechanical stresses such as agricultural plants, sewage treatment plants or tanks.

Consumption: Approx. 680 g / m² (Stainless steel, 2 layer application, 0.5 mm layer thickness) or approx. 130 g / m² (100 µm) as primer for KÖSTER CT 228 Flex. Consumption on concrete 1.3 kg / m² / mm. Actual consumption depending on surface roughness. Maximum 2 mm layer

KÖSTER CT 215 Universal Floor

3 kg
(CT 215 003)

10 kg
(CT 215 010)

Special universal coating that combines a colored primer, coating and sealing system for light to medium mechanical loads in the same product. The system is open to water vapor diffusion, therefore suitable for damp surfaces. This special epoxy can also be filled with a special filler to achieve higher layer thicknesses in self-leveling flooring system. Tested slip resistance. Available in many colors (4 standard colors: Stone grey (ca. RAL 7030), Light grey (ca. RAL 7035), Pepple grey (ca. RAL 7032), Basalt grey (ca. RAL 7012), others on request from 10 kg). Layer thicknesses of 0.2 – 2.0 mm

Consumption: Depending on the application:
Approx. 0.2 - 0.3 kg / m² or up to 1.0 kg / m² / mm

KÖSTER CT 221

25 kg combipackage
(CT 221 025)

KÖSTER CT 221 is a rigid, highly mechanically resistant and chemically resistant top coat which is used to protect concrete not at risk of cracking.
Along with KÖSTER CT 121 the coating conforms to a protective coating in accordance with DIN 1504-2, DIN V 18026 and DIN EN 13813 (“OS 8”).

Consumption: 1.5 kg / m² per mm layer thickness

KÖSTER CT 225 Bridge Deck Coating

20 kg metal pail combipackage
(CT 225 020)

Priming and coating epoxy resin for concrete road sections, bridge decks, and civil engineering structures for overworking with mastic asphalt according to ZTV-ING (part 7)

Consumption: Primer: Approx. 400 to 500 g / m² depending on porosity of the substrate. Top coat: Approx. 500 g / m² per layer.

KÖSTER LF-VL

26.8 kg combipackage
(CT 271 026)

Decorative coating for industrial floors. It is a solvent free, self-leveling product with high abrasion resistance. The color is pebble grey on the basis of RAL 7032, other colors are available on request.

Consumption: 2.6 kg / m² (2 mm total layer thickness)

KÖSTER ESD 275

11.43 kg combipackage;
Component A 10 kg;
Component B 1.43 kg
(CT 275 010)

KÖSTER ESD 275 is a rigid, solvent free, self leveling surface coating for floor areas which are to be protected by an ESD zone. The KÖSTER ESD System creates an ESD protected floor for areas that have to be protected from static discharge such as electronic areas, in the automobile industry, and laboratories, and areas that have to be protected against mechanical and chemical stresses. The KÖSTER ESD System fulfils the norms DIN EN 61340 parts 1 and 5, and is therefore also qualified as personal grounding protection.

Consumption: 1.5 kg / m^2 / mm layer thickness

KÖSTER CT 228 Flex

6 kg combipackage
(CT 228 006)

2-component, viscoplastic, brushable, rollable and sprayable epoxy resin with tough elastic properties, used for heavy-duty corrosion protection of concrete and steel surfaces.

For industrial plants and agricultural structures such as wastewater treatment plants, biogas plants and similar.

Consumption: Concrete: min. 1.2 kg / m^2 per mm layer thickness; Steel: 650 g / m^2 (500 µm)

KÖSTER UC 100

26.1 kg combipackage:
Component A 4.9 kg;
Component B 4.2 kg;
Component C 17 kg
(CT 251 026))

Self-leveling floor coating with high chemical resistance and high abrasion resistance. Food safe and resistant against temperature shocks. Three component polyurethane cement floor coating. KÖSTER UC 100 is applied in a layer thickness between 3 and 9 mm.

Consumption: 1.53 kg / m^2 per mm layer thickness

KÖSTER UC 300

10 kg combipackage:
Component A 4.45 kg;
Component B 3.70 kg;
Component C 1.85 kg
(CT 253 010)

Primer and top coat in one product. KÖSTER UC 300 is solvent free and ready to use. When mixed with KÖSTER UC Pigment Paste, it can be used as a decorative top coating for KÖSTER UC 100.

Consumption: 600 – 800 g / m^2 (depending on surface roughness)

KÖSTER VAP I 2000 UFS

2.95 kg combipackage
(CT 234 002)

10 kg combipackage
(CT 234 010)

Ultra fast setting vapor barrier for priming unsealed interior concrete floors under vapor tight flooring. Curing time 2 – 3 hours. The material reduces Moisture Vapor Emission Rates (MVER) and alkalinity to levels acceptable for most resilient or epoxy flooring systems as well as other vapor tight floorings such as sheet vinyl, VCT, rubber, wood, ceramic,sports, solid backed carpeting, epoxy, ESD and almost all other types of finished flooring.

Consumption: Approx. 500 g / m^2

KÖSTER TS transparent

1 kg combipackage
(CT 320 001)

6 kg combipackage
(CT 320 006)

Glossy surface sealant for concrete or for broadcasted coatings such as, KÖSTER UC 100, KÖSTER LF-VL and the KÖSTER CT 215 Universal Floor.

KÖSTER TS transparent distinguishes itself through high chemical, mechanical, and ultraviolet resistance. Due to its fast curing time the surface can be opened for traffic after 24 hours.

Consumption: Approx. 0.1 – 0.2 kg / m²

KÖSTER Anti-Slip Granulate 20

200 g
(CT 411 200)

KÖSTER Anti-Slip Granulate 20 is a chemical resistant polymer granulate, which increases slip resistance of water-based and solvent free top coatings. Varying the dosage will alter the grade of slip resistance.

Consumption: 2 – 2.5 %, depending on required anti-slip category (see System Data Sheet)

CT

KÖSTER Color-Chips

5 kg white, light grey, grey
(CT 429 001)

5 kg black, grey
(CT 429 002)

5 kg black, grey, blue
(CT 429 003)

UV and chemically resistant decorative colored chips for broadcasting into the surface of KÖSTER LF-VL, KÖSTER EM-VS, and for use with the KÖSTER CT 215 Universal Floor. 2 mm, light grey, other colors on request.

Consumption: Minimum 50 g / m² as a decorative, non-covering surface decoration. Approx. 300 g / m² when broadcasting to rejection.

KÖSTER Vap I 2000

Vapor barrier for priming unsealed interior concrete floors under vapor tight flooring. The material reduces Moisture Vapor Emission Rates (MVER) and alkalinity to levels acceptable for most resilient or epoxy flooring systems as well as other vapor tight floorings such as sheet vinyl, VCT, rubber, wood, ceramic,sports, solid backed carpeting, epoxy, ESD and almost all other types of finished flooring. It is used on vapor tight flooring systems e.g. in gyms, industrial halls or hospitals and schools.


For unsealed concrete floors


Prevents osmotic blistering


Applicable to concrete after 7 days


Recoatable after 12 hrs.

Article No.:
CT 230

Consumption:
Approx. 450 g / m²

Packaging:
2.95 kg combipackage
(CT 230 002)

10.13 kg combipackage
(CT 230 010)

25.32 kg combipackage
(CT 230 025)

KÖSTER
ESD 475

0.6 mm x 9 mm, 25 m roll
(CT 475 025)

Self adhesive, conductive acrylic adhesive, 0.08 mm total thickness, 9 mm wide, and 25 m long.

KÖSTER
ESD 476

piece
(CT 476 001)

Ground connection for the KÖSTER ESD System with 1m adhesive copper tape

Quartz Sand

25 kg bag
(CT 481 025 to CT 488 025)

Kiln dried quartz sand available in different granular sizes:
0.06 - 0.36 mm
0.18 - 0.50 mm
0.20 - 0.80 mm
0.40 - 0.80 mm
0.35 - 1.50 mm
0.70 - 1.20 mm
1.00 - 2.00 mm
2.00 - 3.00 mm

KÖSTER
UC Pigment Paste

310 ml / 450 g cartridge
(CT 451 450)

Pigment paste for coloring KÖSTER UC floor coatings. Provides a very high coverage, even in low amounts. Other colors available on request.

Consumption: One cartridge per KÖSTER UC kit

KÖSTER
Filler Fine

20 kg bag (CT 710 020)

KÖSTER Filler Fine is a special, solvent free, mineral filler, which can be added into water-based and solvent free reaction resin systems during the application. It improves the floor coating's resistance against mechanical stresses, particularly with high layer thicknesses.

Consumption: Depending on application; bulk density: 1.31 g / m^3

KÖSTER
KB-Pox Thickening Agent

1 kg bucket (CT 764 001)

8 kg bag (CT 764 008)

KÖSTER Thickening Agent increases the viscosity of KÖSTER epoxy resins and stabilizes them on sloped and vertical surfaces.

Consumption: 1 – 6 %, depending on the application

Flat Squeegee, hardness: medium

piece (CT 922 001)

One-piece Flat Squeegee, red, 60 cm, made entirely of plastic, handle holder with thread, conical rubber, rubber hardness: medium

Flat Squeegee, hardness: soft

piece (CT 921 001)

One-piece Flat Squeegee, blue, 60 cm, made entirely of plastic, handle holder with thread, conical rubber, rubber hardness: soft

KÖSTER Gauging rake

piece (CT 915 001)

For the even installation of e.g. KÖSTER SL Products in the desired layer thickness of 5 - 30 mm. Continuously adjustable, changeable steel sheet and gliding vats made of hardened steel.

Width: 80 cm.

KÖSTER Resin Roller 150 mm

piece (CT 917 001)

piece (cover only) (CT 917 002)

Short nap roller for applying thin coatings and sealers.

Good to know: Substrate preparation

Concrete substrates to receive KÖSTER VAP I 2000 systems must be clean, absorbent, free of dust, oil and grease. Surfaces must be free of adhesives, coatings, curing compounds, concrete sealers, efflorescence, and other materials or contaminants that may act as a bond breaker. The surface must be roughened by sand or ideally by shot blasting to an ICRI Concrete Surface Profile (CSP) 3 to 4. Grinding is permitted only in areas inaccessible to shot blasting or for edging purposes. Upon completion of the shot blasting and grinding, the concrete slab must be vacuumed free of all dust, dirt and debris prior to the installation of KÖSTER VAP I 2000 systems. Do not use sweeping compounds as they may contain oil.

KÖSTER
Resin Roller 250 mm

piece
(CT 916 001)

piece (cover only)
(CT 916 002)

Short nap roller for applying thin coatings and sealers.

KÖSTER
Screed Anchor
6 mm x 70 mm

100 pieces
(CT 910 100)

Screed anchor (6 mm x 70 mm) for force transmitting filling of cracks in screed substrate.

KÖSTER
Squeegee

Complete set
(CT 918 001 to CT 918 003)

Blade only
(CT 919 001 to CT 919 003))

For the application of resin based primers. Complete set. Replacement blades available.

Complete set with 2 mm, 5 mm or 8 mm teeth and replacement blades only (2 mm; 5 mm and 8 mm

KÖSTER
Spike Shoes

piece
(CT 923 001)

Spike Shoes, size 44 – 48 with 20 mm pointed steel nails

KÖSTER
Spiked Roller

piece
(CT 914 001)

For de-airing floor coatings.

Width: 50 cm.

KÖSTER
Short scraper for toothed blades

piece
(CT 931 001)

Aluminium, 28 cm

To accomodate a 28 cm toothed blade

(delivery without blade)

KÖSTER
Scraper holder

piece
(CT 927 001)

Scraper holder with aluminium handle holder for toothed blades, 56 cm wide, rust free

To accomodate two 28 cm toothed blades

(Delivery without blades)

KÖSTER
Spiked Roller
piece
(CT 929 001)

Spiked roller, 50 cm wide

Nickel coated metal spikes, spike length 30 mm, spike width 0.4 mm

(Delivery without holder)

KÖSTER
Paint roller handle for spiked roller
piece
(CT 930 001)

Paint roller handle for spiked roller, accepts 50 cm wide spiked roller / de-airing rollers

Overhanging arm length: 7 cm

(Delivery without spiked roller)

CT

KÖSTER
Toothed blade 28 cm S2.66
piece
(CT 924 001)

Tooth blade S2.66

H = 6.6, L=8.2, S=0.5

Layer thickness: 1.3 to 3.0 mm

Average layer thickness approx. 2.0 mm

KÖSTER
Toothed blade 28 cm S2
piece
(CT 925 001)

Tooth blade S2

H=7.7, L=8.2, S=0.2

Layer thickness: 1.5 to 3.5 mm

Average layer thickness approx. 2.3 mm

KÖSTER
Toothed blade 28 cm S4
piece
(CT 926 001)

Tooth blade S4

H=5.1, L=10.3, S=0.2

Layer thickness: 1.0 to 2.3 mm

Average layer thickness approx. 1.6 mm

KÖSTER
Toothed blade 28 cm S6
piece
(CT 932 001)

Tooth blade S6

H=3.4, L=4.2, S=0.2

Layer thickness: 0.7 to 1.5 mm

Average layer thickness approx. 1.0 mm

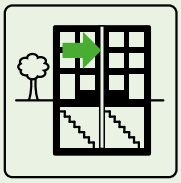
Constant dripping wears the stone away. We manufacture modern waterproofing systems that protect nature while defying its forces.

J

Joint waterproofing

Joint sealants, tapes & cable penetration sealant

Joint sealing



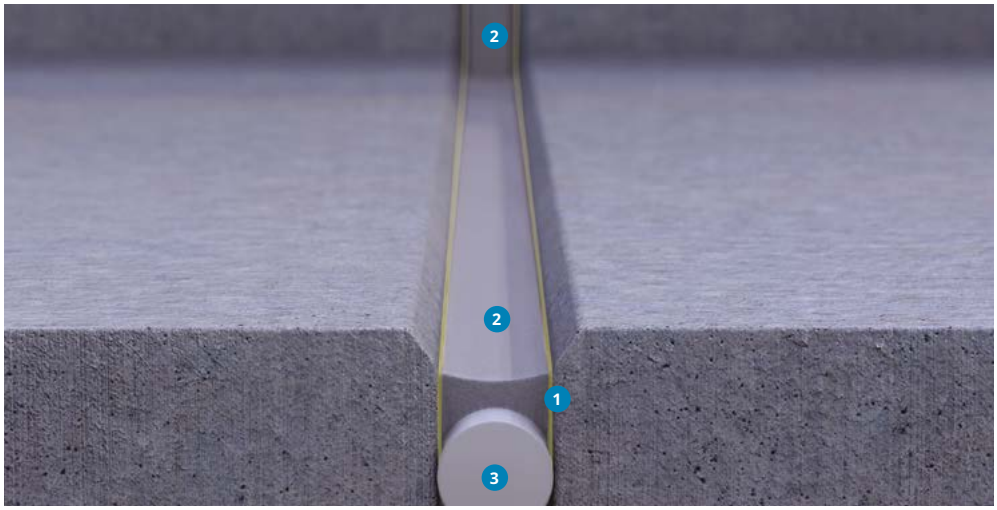
Joints in construction members are necessary to accommodate movements between them. Sealing these joints safely, means to seal them permanently elastic, form stable and UV-resistant. This allows for future movements of the construction members without causing damages.

Joint sealing on mineral and metal surfaces with joint sealants based in polysulphide

1 Primer
KÖSTER FS Primer 2C

2 Vertical joints
KÖSTER Joint Sealant FS-V

3 Horizontal Joints
KÖSTER Joint Sealant FS-H



Joints are usually exposed to thermal or other movements and must therefore be elastically sealed. The decisive factor for joint sealing is not only the durability of the joint material, but also that it adheres permanently to the flanks. The substrate must be load-bearing, clean, free of separating substances, loose components, and dry.

To prevent the tensile stresses in the joint filler from becoming too high, a sealant must be installed in such a way that it only adheres to the two joint flanks and can expand well in the transverse direction.

For this purpose, a commercially available backing rod, for example, is placed in the joint before the joint filler is installed. In order to keep the tensile stresses low, the sealant is not applied in a thick layer, but in the appropriate ratio depending on the joint width.

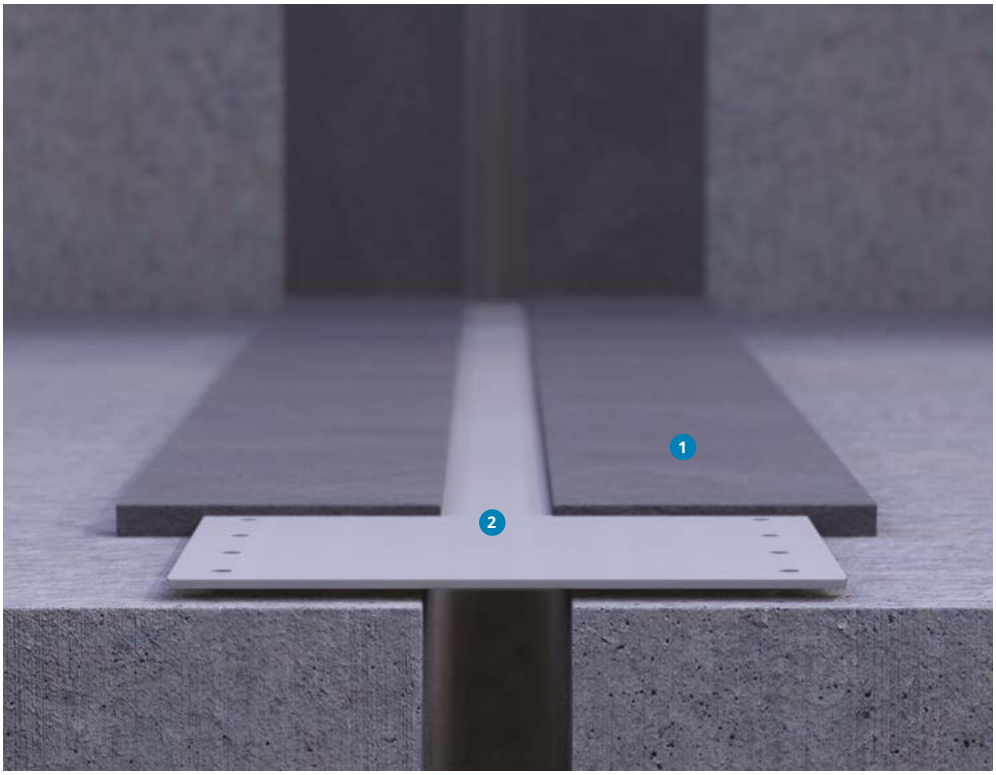
KÖSTER MS Joint Sealant is a highly elastic, one-component, UV-resistant joint sealant with MS polymer technology. It adheres to numerous surfaces without a primer, and is solvent, silicone, water, bitumen, and isocyanate free. It is used for all types of joints in building construction such as concrete and masonry, sealing of aluminum composite panels, window frames, or natural stone facades.

For higher requirements such as solvent, root, and seawater resistance, a primer with the fast-drying, colorless, solvent-free, 2-component adhesion promoter and consolidator KÖSTER FS Primer 2K is necessary.

KÖSTER Joint Sealant FS is a viscoplastic polysulphide based joint sealant that is resilient, UV-resistant, and very durable. KÖSTER Joint Sealant FS is also resistant to a variety of aggressive substances.

KÖSTER Joint Sealant is available as FS-H for horizontal joints and FS-V for vertical joints. The specifications in the Technical Data Sheets apply in each case.

Joint sealing on dilatation joints and other moving joints



1 Primer
KÖSTER KB-Pox Adhesive

2 Joint sealing
KÖSTER Joint Tape

Movement joints must be waterproofed durably, elastically, form stable, and UV resistant. A joint waterproofing must allow for movement in the construction without causing damage to the construction itself. Movement joints up to a width of 35 mm can be waterproofed with KÖSTER Joint Sealant FS. For wider joints, such as expansion and dilation joints, KÖSTER Joint Tapes are used.

The KÖSTER Joint Tape is a thermoplastic tape for waterproofing expansion joints. It comes in widths of 20 cm (for 12 cm wide joints) and 30 cm (for up to 20 cm wide joints). The KÖSTER Joint Tape 20 and KÖSTER Joint Tape 30 are UV stable; highly elastic and can resist extreme joint movements.

The KÖSTER Joint Tape System consists of the KÖSTER Joint Tapes and KÖSTER KB-Pox Adhesive, a 2 component, epoxy based high performance adhesive.

Firstly, the KÖSTER KB-Pox Adhesive is applied onto the stable and prepared substrate. As a general rule, the substrate must be cleaned or removed down to a solid and stable base material, then leveled and primed if necessary. The substrate must be clean, solid, dry, and free from adhesion inhibiting materials, such as waxes, oils, and old coatings.

Then, the KÖSTER Joint Tape is bonded to both flanks of the joint with the first layer of adhesive, making sure that the tape has a good contact to the adhesive. Afterwards, the KÖSTER Joint Tape is embedded into a second coat of KÖSTER KB-Pox Adhesive.

Always adhere to the specifications in the respective Technical Guidelines

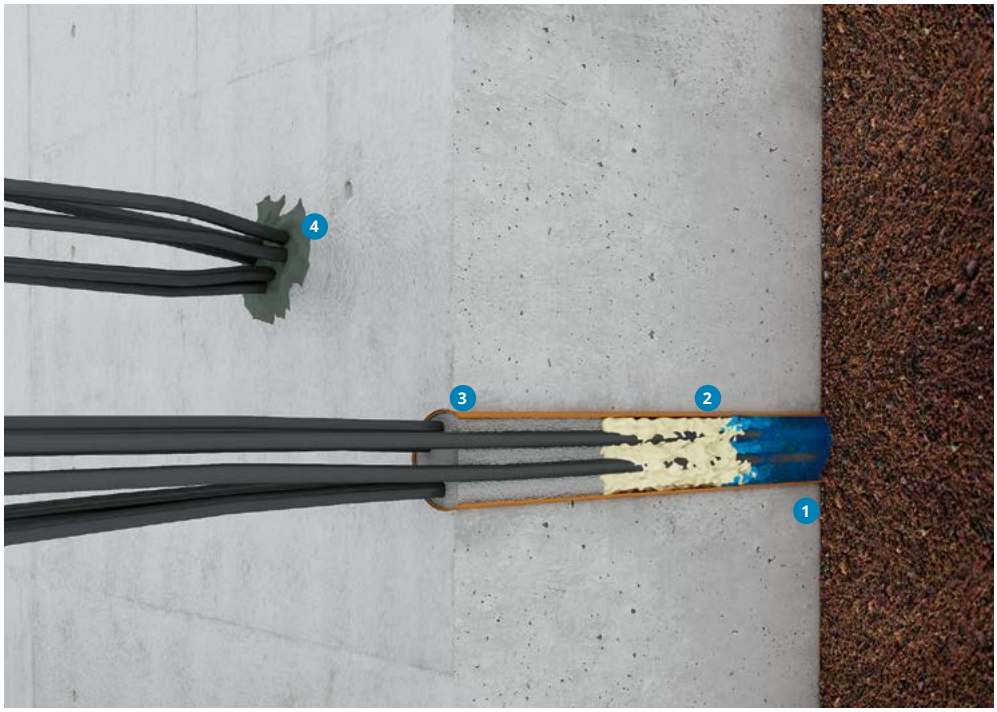
Waterproofing of cable and pipe penetrations

1 Penetration

2 Backing

3 Waterproofing
KÖSTER KB-Flex 200

4 Protection layer
KÖSTER KB-Fix 5



Cable and pipe penetrations such as electrical, water and data cables, must be permanently and securely waterproofed against penetrating water. Typically, rigid mortars or foams are used, which prevent the installation of other cables.

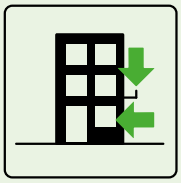
Using KÖSTER KB-Flex 200, a permanently plastic material, is a robust and easy way to waterproof against penetrating water, while allowing the installation of further cables at a later stage. The material accommodates cable movements, does not tear, and is permanently resistant against common substances found in soil and groundwater.

Before applying the material, the substrate must be clean and free of loose particles. The substrate can be dry, moist or wet. In cases of pressurized water, a backing is installed in the penetration at a depth corresponding to the installation depth (1.5:1 / Length : Thickness) using a common PU foam. During the installation of the sealing compound, it is important to make sure that is is installed free from voids. Finally, the sealing compound is recessed approx. 1 cm from the wall surface, and smoothed with a metal spatula. As a protection layer and to hold the pipe / cable centered, the exposed material is covered with KÖSTER KB-Fix 5.

KÖSTER KB-Flex 200 has good adhesion to all commonly used building materials such as concrete, masonry, mortar, plaster, brick, and all other mineral construction materials, as well as ceramic, PVC, polyethylene and polypropylene. A primer is not necessary.

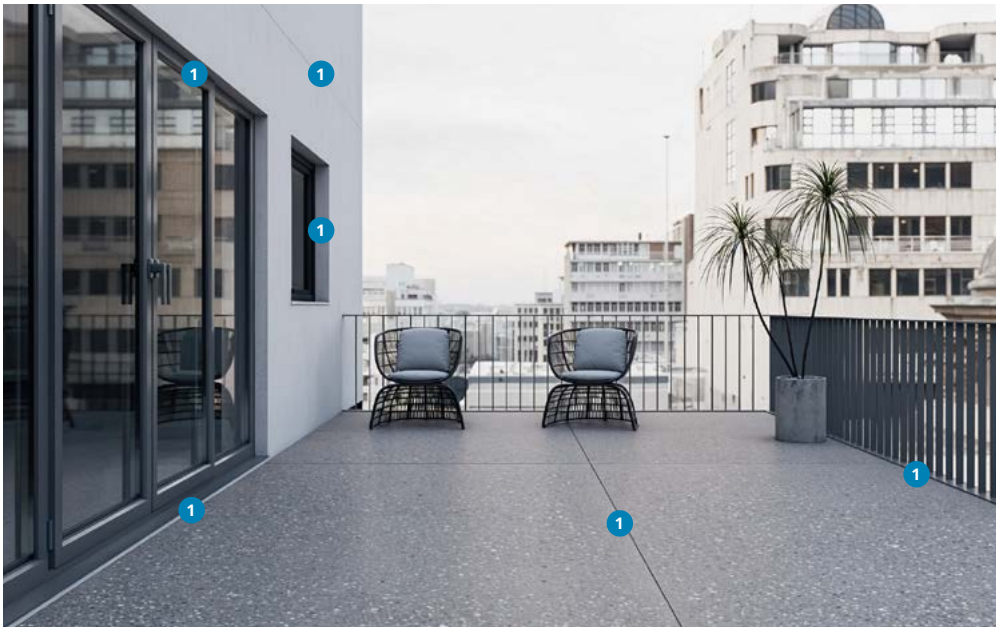
Always adhere to the specifications in the respective Technical Guidelines.

Joint sealing of construction and structual joints based on MS polymers



Joints in building components allow for movement and settlement, preventing cracks and damage. They absorb structural movements and create secure connections. Flexible, waterproof seals thus ensure the durability and functionality of the structure.

Joint sealing building components



1 Joint sealing
KÖSTER MS Joint Sealant

J

Joints in building components, especially at connections and areas with expected movement in interior and exterior applications, must be securely and permanently sealed against moisture. The ideal solution for this is KÖSTER MS Joint Sealant. KÖSTER MS Joint Sealant is an elastic, solvent-free sealing compound based on MS polymers. It features excellent adhesion to a wide range of substrates, including concrete, wood, metal, and various plastics. The sealant is solvent-free, low-odor, and environmentally friendly, making it ideal for indoor use and sensitive areas. Additionally, it can be painted over and has outstanding weather and UV resistance.

Unlike other materials in this category, it does not form bubbles upon contact with moisture and is less prone to dirt accumulation. KÖSTER MS Joint Sealant combines the positive properties of silicone and polyurethane sealants without their characteristic weaknesses.

The substrate must be clean, dry, and free of loose particles, oil, grease, and other contaminants. KÖSTER MS Joint Sealant can be applied directly from the cartridge using a hand press. The application temperature should be between +5 °C and +40 °C.

After application, the joint should be smoothed with a suitable tool, such as a joint smoother, to achieve a clean surface. The sealant cures by reacting with ambient humidity. Depending on environmental conditions, the joint will be surface-dry within a few hours and fully elastic after complete curing.

KÖSTER MS Joint Sealant

Dense and flexible joints are crucial for long-term building quality. KÖSTER MS Joint Sealant is the ideal solution for durable and flexible sealing. Whether for interior or exterior applications, this high-quality sealant provides reliable protection and adapts to various requirements. Easy to apply, versatile, and long-lasting – for joints that deliver on their promise!

KÖSTER
FS Primer 2C

200 g combi package
(J 139 200)

KÖSTER FS Primer 2C is a fast curing, transparent, solvent free two component bonding agent. It is used as a primer for the subsequent application of KÖSTER Joint Sealant FS-H and FS-V.

Consumption: Approx. 10 – 20 g / m

KÖSTER
KB-Pox Adhesive

5 kg combipackage
(J 120 005)

High performance adhesive specially designed for fastening KÖSTER Joint Tapes to mineral, wooden and metal substrates. KÖSTER KB-Pox Adhesive develops a high adhesive strength to concrete, mortar, metal, wood and many other building materials. It develops high early strength. Vertical and overhead application is possible.

Consumption: For KÖSTER Joint Tape 20: 1 kg / m, for KÖSTER Joint Tape 30: 1.5 kg / m

J

KÖSTER
PU Primer 120

250 ml can (J 138 250))

One component PU primer for non-porous surfaces. Primer for KÖSTER MS-Flexfolie and KÖSTER PU-Flex 25.

Consumption: 30 – 50 ml / m^2

KÖSTER
MS Joint Sealant

KÖSTER MS Joint Sealant is a highly elastic, one-component joint sealant with MS polymer technology. It adheres to numerous surfaces and is solvent-, silicone-, water-, bitumen- and isocyanate-free. It is used for all types of joints in building construction such as concrete and masonry, sealing of aluminum composite panels, window frames, or natural stone facades.

Waterproofing expansion joints in screed

Concrete and masonry joints

Window perimeter / frames

Underwater application

Article No.:
J 236 600

Consumption:
Approx. 1.50 kg / lt void

Packaging:
900 g in 600 ml foilbags

KÖSTER Joint Sealant FS-H

4 kg combipackage
(black J 232 004)
(grey J 234 004)

Self leveling joint sealant with excellent resistance against mechanical stresses and a high resistance against water, sea water, salt solutions, petroleum and mineral oils. It is rot and root resistant. The rubbery-elastic material based on polysulfides is 2-component, elastic and pourable.

Fields of application include permanently elastic waterproofing of horizontal joints in below grade construction such as foundations, sewage treatment plants, garages, tunnels, etc.

Consumption: Approx. 1.6 kg / l void

KÖSTER Joint Sealant FS-V

4 kg combipackage
(black J 231 004)
(grey J 233 004)

Formstable joint sealant with excellent resistance against mechanical stresses and a high resistance against water, sea water, salt solutions, petroleum and mineral oils. It is rot and root resistant. The rubber-elastic material based on polysulfides is 2-component, elastic and stable.

Fields of application include permanently elastic waterproofing of vertical joints in below grade construction such as foundations, sewage treatment plants, garages, tunnels, etc.

Consumption: Approx. 1.6 kg / l void

KÖSTER Quellband

6 x 5 per box
(J 270 005)

KÖSTER Quellband is a sodium-bentonite based water swellable joint tape with an alkalinity activated surface coating which stops premature swelling of the tape on the building site.

Consumption: 1 m / m

KÖSTER KB-Flex 200

Sealing compound for pipe and cable penetrations, even in the case of pressurized water. KÖSTER KB-Flex 200 is a 1-component, permanently plastic material and can be directly applied from the cartridge gun – even in the case of flowing water.


Cable penetration


Pipe penetration


Swimming pool installations


Against flowing water

Article No.:
J 250 531

Consumption:
1.6 kg / l void

Packaging:
530 ml / 850 g tubular bags

KÖSTER
Joint Tape 20

20 m roll
(J 820 020)

Thermoplastic tape for sealing expansion and dilatation joints (up to 12 cm) and broad, irregular cracks. KÖSTER Joint Tape 20 is UV resistant, highly elastic and can withstand extreme movements in the joint.

The joint tape system consists of KÖSTER Joint Tape and KÖSTER KB-Pox® Adhesive, a high performance adhesive for fastening the joint tape to mineral substrates. 1 mm x 200 mm.

Consumption: Approx. 1 kg of KB-Pox Adhesive per m Joint Tape 20

KÖSTER
Joint Tape 30

20 m roll
(J 830 020)

Thermoplastic tape for sealing expansion and dilatation joints (up to 20 cm) and broad, irregular cracks. KÖSTER Joint Tape 30 is UV resistant, highly elastic and can withstand extreme movements in the joint.

The joint tape system consists of KÖSTER Joint Tape and KÖSTER KB-Pox® Adhesive, a high performance adhesive for fastening the joint tape to mineral substrates. 1 mm x 300 mm.

Consumption: Approx. 1.5 kg of KB-Pox Adhesive per m Joint Tape 30

J

KÖSTER
Caulking Gun

piece
(J 989 001)

Cartridge gun for standard 310 ml cartridges and tubular bags up to 400 ml content., e. g. for KÖSTER Crisin Cream.

KÖSTER
Connecting Hose and Nozzle for Caulking Gun

set
(J 982 001)

Accessories for the application of KÖSTER KB-Flex 200 Sealing compound with a flexible hose and 45° bend.

KÖSTER
Special Caulking Gun

piece
(J 981 001)

Caulking gun for the application of KÖSTER KB-Flex 200 (530 ml tubular bag).

KÖSTER
Special Caulking Gun without extensions

piece
(J 983 001)

Caulking gun for tubular bags (e. g. KÖSTER Crisin Cream and KÖSTER PU-Flex 25).

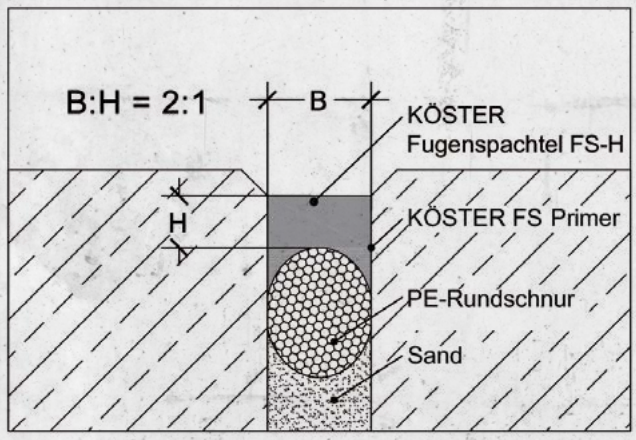
20 kg component A1:
(IN 294 020 A1)
1 kg component A2:
(IN 294 001 A2)
0,4 kg component B:
(IN 294 400 B)
18 kg component B+:
(IN 294 018 B+)

KÖSTER
Injection Gel S4

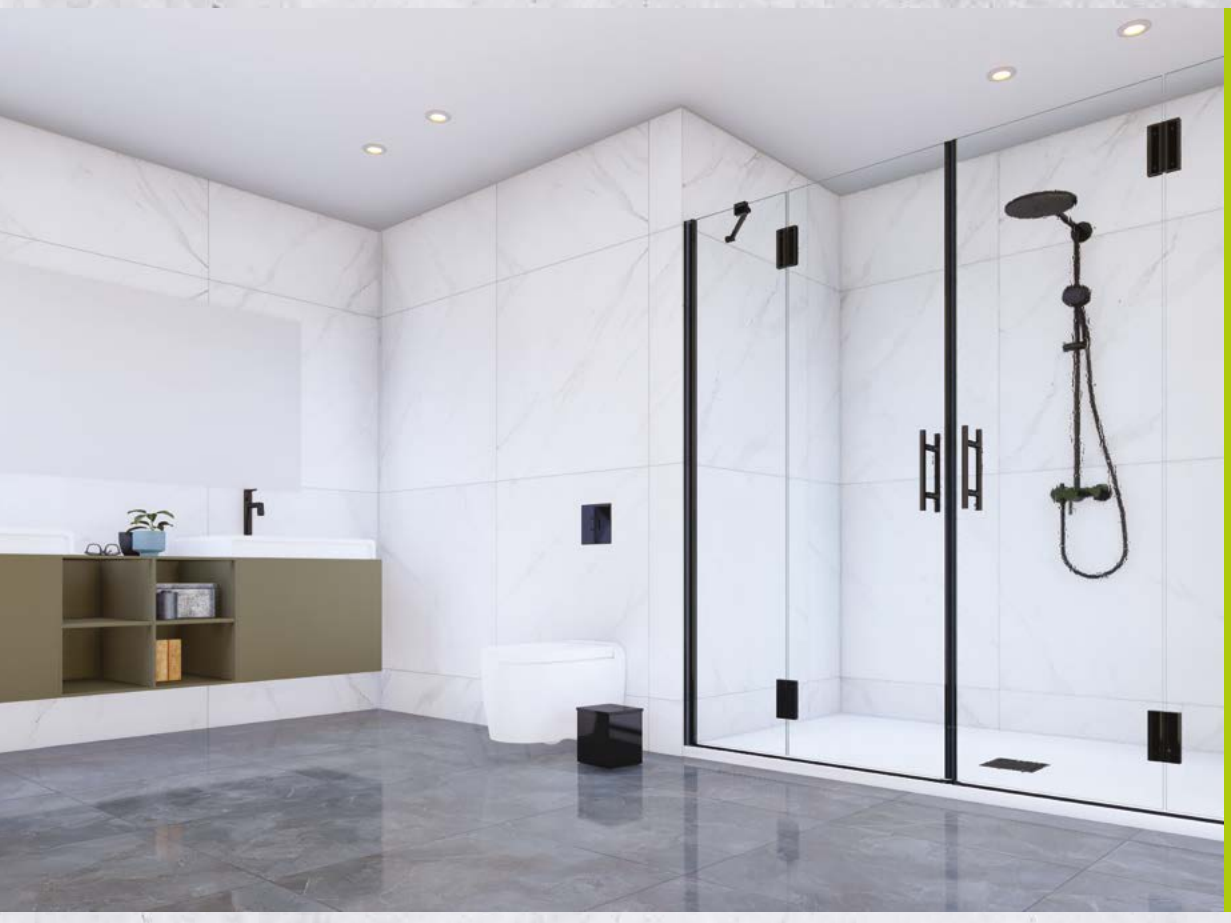
Reaction time adjustable acrylic gel for curtain injection and dilatation joint waterproofing. Due to the low viscosity it can be injected into very fine pored structures using a multi-stage injection technique fitted to the reaction-time curve of the material. Can be used with the B + component to add higher flank adhesion to concrete surfaces dilation joint waterproofing. Yields after reaction time a viscoelastic product that is very suitable for moving joints. Can take up water after reaction.

Consumption: Depends on the field of application

Good to know: Joint filling application technique



In order to reduce mechanical effects on the joint sealing, the edges on the joint flanks are first chamfered at a 45 ° angle as a preparatory measure. The bevel should be at least 10 mm wide. In order to avoid damage to the joint sealant through movements in different directions, contact is only ever made with two joint flanks. For this purpose, a backfill material, e.g. installed a commercially available PE round cord. The joint filler is installed with a width / height ratio of approx. 2:1 (dimensioning and consumption in the technical data sheet at www.koester.eu). The adjacent components can be masked for clean processing. Absorbent substrates are primed twice, non-absorbent substrates once with KÖSTER FS Primer 2C. The joint is filled approx. 30 minutes after applying KÖSTER FS Primer 2C. The grout is ssuperficially smoothed with a e.g. spatula. The tape should be removed before the joint filler hardens.



B

Bathroom and wet rooms

Wet room waterproofing

In these sensitive parts of the building, moisture can lead to severe damage to the entire building. Discoloration and tiles which are falling off the substrate are the first visible signs of such damages. Such rooms are waterproofed completely, in order to protect the substance of the structure. The entire wall and floor areas are seamlessly waterproofed. Seamlessly waterproofed with a system able to bridge possible cracks.

Wet room waterproofing with liquid synthetics

1 **Primer**
KÖSTER BD 50 Primer

2 **Waterproofing corners and wall floor junctions**
KÖSTER BD Flex Tape K 120

3 **Waterproofing outside corners**
KÖSTER BD Outside Corner

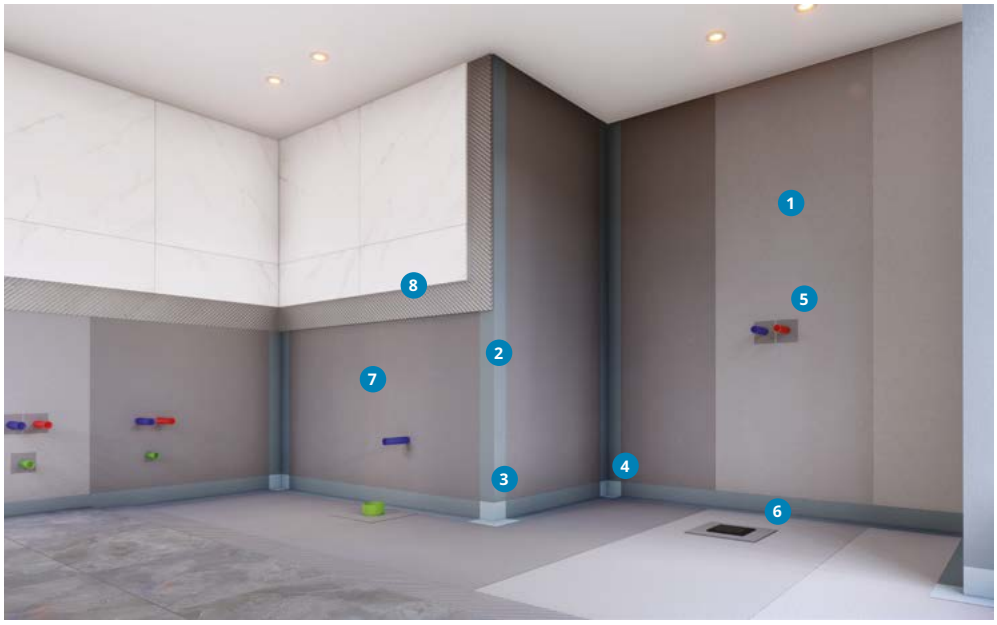
4 **Waterproofing inside corners**
KÖSTER BD Inside Corner

5 **Waterproofing wall penetrations**
KÖSTER BD Wall Sleeve

6 **Waterproofing floor drains**
KÖSTER BD Floor Sleeve

7 **Waterproofing layer**
KÖSTER BD 50

8 **Tile adhesive**
KÖSTER BD Flexible Tile Adhesive



A complete and robust waterproofing is a crucial prerequisite for the long-term usability of damp and wet rooms. Most tiles are inherently waterproof, but many grouting materials are not. For this reason, it is very important to keep the substrate dry and damage-free with the help of a waterproofing layer under the tiles.

Only a few building elements are so constantly exposed to water as kitchens and bathrooms. In these cases, a professional and crack bridging waterproofing material is required. Furthermore, it must be stable enough so that tiles can be applied on top of it.

The KÖSTER BD-System is a complete system for waterproofing kitchens, bathrooms and wet rooms underneath tiles. The dry and stable substrate is primed with KÖSTER BD 50 Primer and then waterproofed with the ready-to-use, solvent free, highly flexible sealing compound KÖSTER BD 50.

For the reinforcement of details and pipe penetrations in the construction, KÖSTER Superfleece is cut to shape and installed at corners and connections. Prefabricated interior and exterior corners, as well as wall and floor sleeves (KÖSTER BD Inside Corner, KÖSTER BD Outside Corner, KÖSTER BD Wall Sleeve and the KÖSTER BD Floor Sleeve) are also available.

The KÖSTER Superfleece or the KÖSTER BD Flex-Tape K 120 is embedded at wall/wall, wall/floor transitions and at joints. In areas where a reinforcement is embedded, movements won't cause damage to the waterproofing material.

Always adhere to the specifications in the respective Technical Guidelines.

KÖSTER
BD 50 Primer

5 kg jerrycan
(B 190 005)

Special primer for the KÖSTER BD System on dry or absorbent substrates. Penetrates deeply into the substrate creating an excellent bonding bridge for the subsequent waterproofing.

Consumption: Approx. 50 – 150 g / m²; depending on the substrate

KÖSTER
BD 50

10 kg bucket
(B 290 010)

KÖSTER BD 50 is a ready-for-use, solvent-free and easy to apply sealing compound for waterproofing surfaces under tile and coverings in damp and wet rooms. Once applied to the substrate, it cures to a highly flexible, waterproof synthetic foil which is highly elastic and crack bridging. Fields of application include under tiles in showers, bathrooms, kitchens, car washes, etc.

Consumption: Up to: 1.2 kg / m²

B

KÖSTER
BD 50 Contrast

500 g
(B 490 500)

Liquid contrast agent for coloring KÖSTER BD 50 before applying the second layer. Visual inspection will be simplified through color differentiation of the second waterproofing layer.

Consumption: Approx. 100 g / 10 kg KÖSTER BD 50

KÖSTER
BD Flexible Tile Adhesive

25 kg bag
(B 540 025)

Single component, mineral flexible adhesive for all mineral building materials in construction. In combination with the KÖSTER BD System suitable for waterproofing wet rooms.

Consumption: Approx. 1.7 kg / m²; per mm layer thickness

KÖSTER
BD Flex Tape K 120

10 m roll
(B 931 010)

50 m roll
(B 931 050)

Joint sealing tape for the secure bridging of joints, wall / floor junctions and in areas prone to cracking. Specially designed for the KÖSTER BD System. An elastomer strip with protruding mesh for the secure integration into the area waterproofing.

The KÖSTER BD System is a DIN EN 14891 certified system for the waterproofing of wetrooms e. g. under ceramic tile. 0.6 mm x 120 mm.

KÖSTER
BD Floor Sleeve

piece
(B 935 001)

Ready to use, elastic moulded part for the waterproofing of floor drains in the KÖSTER BD System. Made of NBR-rubber with a protruding mesh for the secure integration into the area waterproofing.

KÖSTER
BD Inside Corner

piece
(B 932 001)

Ready to use, elastic moulded part for the waterproofing of inside corners in the KÖSTER BD System. Made of NBR-rubber with protruding mesh for the secure integration into the area waterproofing.

KÖSTER
BD Outside Corner

piece
(B 933 001)

Ready to use, elastic moulded part for the waterproofing of outside corners in the KÖSTER BD System. Made of NBR-rubber with an protruding mesh for the secure integration into the area waterproofing.

KÖSTER
BD Wall Sleeve

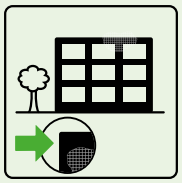
piece
(B 934 001)

Ready to use, elastic moulded part for the waterproofing of pipe penetrations in the KÖSTER BD System. Made of NBR-rubber with an protruding mesh for the secure integration into the area waterproofing.

P

Façade protection and special paints

Façade protection



Climatic influences and the resulting penetration of moisture into the substrate often lead to damages to the façade. In order to protect façades made of mineral building materials, impregnations are used to make the surface water repellent. These hydrophobic agents penetrate deeply into the substrate, and dry without leaving residues, so that the visual appearance of the façade is not affected by the impregnation.

Protecting façades made of mineral building materials

1 Surface protection
KÖSTER Façade Cream
Alternative:
KÖSTER Siloxan

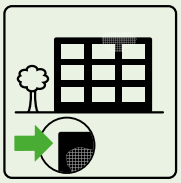
KÖSTER façade protection systems prevent masonry and concrete from liquid water ingress (rain or splash water, condensate), but at the same time, water vapor is still able to escape from the façade. That way, long term moisture damage can be avoided.

KÖSTER Façade Cream is a solvent-free pasty hydrophobization material. It is applied as a film using a roller or brush and penetrates deep into mineral substrates.

KÖSTER Siloxan in contrast, is a hydrophobization liquid and can therefore, be sprayed onto the façade or alternatively brush applied.

Always adhere to the specifications in the respective Technical Guidelines.

Protecting concrete surfaces on bridges and aqueous environments



Exterior concrete structures such as bridges, highways, supporting walls, stadium columns, etc., are exposed to environmental conditions such as driving rain, contaminants and salts, that when dissolved in water, may enter the structure and cause deterioration of the concrete substance. A hydrophobization of the structure will reduce the water intake, protecting the structure from corrosion and prolonging its lifespan.

Protecting concrete surfaces on bridges and aqueous environments

1 Surface protection
KÖSTER Iperlan

The hydrophobization of structures is an important factor in protecting them from damage; thereby, increasing their lifespan. Corrosive contaminants and salts enter the structure and penetrate into the concrete when dissolved in water. By limiting the water uptake of structures, they can be protected from corrosive damage.

KÖSTER Iperlan is a highly effective hydrophobizing impregnation agent for concrete in civil engineering constructions, such as bridge heads, supporting walls, beams, as well as all exposed construction members, among others. It is used to reduce the penetration of substances harmful to concrete, such as chlorides or other aqueous media. Due to a combination of its composition and active ingredients, the material penetrates deep into the concrete structure and therefore, helps protect the reinforcement steel. KÖSTER Iperlan is a class II impregnation agent with an average penetration depth of approximately 2 cm.

The substrate must be dry, free of laitance, oils and fats. New concrete must cure for at least 28 days before application. The material can be applied with the KÖSTER Peristaltic Pump, other suitable spraying equipment, or with a brush.

Always adhere to the specifications in the respective Technical Guidelines.

KÖSTER
Façade Cream

5 l bucket
(P 200 005)

15 l bucket
(P 200 015)

Protection of mineral building structures and façades from water and driving rain. Solvent free, colorless after curing, water repellent, diffusion open hydrophobization cream for brick, clinker, natural stone and mineral plasters.

Consumption: Approx. 0.1 - 0.25 l / m^2 depending on the surface.

KÖSTER
Iperlan

25 l hobbock
(P 241 025)

Highly effective hydrophobizing impregnation agent for concrete in civil engineering construction.

Consumption: Approx. 500 to 600 ml/m^2 depending on porosity of the substrate.

KÖSTER
Renovation Paint
White

10 l bucket
(P 260 010)

Ideal for use on restoration plasters. Diffusion open, matt silicone resin paint with a special water repelling effect.

Consumption: Approx. 0.2 l/m^2 per coat

KÖSTER
Siloxan

10 l jerrycan
(P 240 010)

Façade hydrophobization for the protection of mineral building materials from water and driving rain. Sprayable, colorless after curing and open to water vapor diffusion.

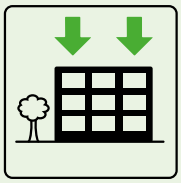
Consumption: 0.2 - 1.0 l / m^2, depends on absorbency of the surface.

R

Roofing

Roofing membranes, roof waterproofing

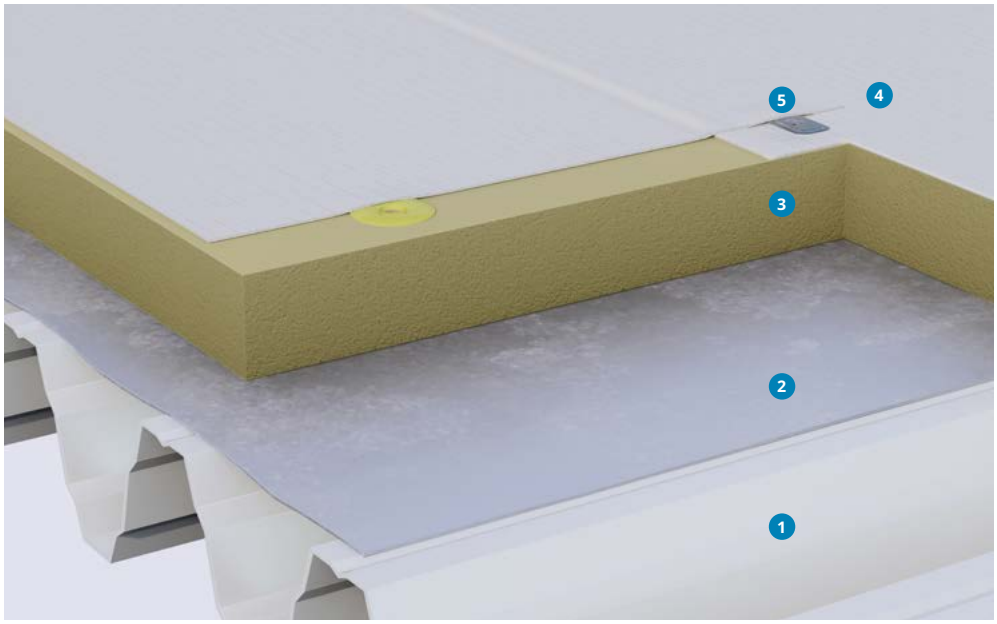
Roof waterproofing with membranes



Roofs are the most stressed part of a building. The roofing membrane is exposed to a diversity of agents that accelerate the degradation of the material. Sunlight, UV radiation, wind, pollution, snow and frost, temperature fluctuations, hail and lightning storms are only a few of the big list of influences that the membrane is exposed on a flat roof. Also the huge diversity of equipments (AC, chimneys, etc) that are normally installed on flat roofs, can easily promote the premature aging of the materials and reduce its lifespan.
Therefore, the roofing membranes need to be highly resistant and have a lasting life protecting the roof without interfering with the environment.

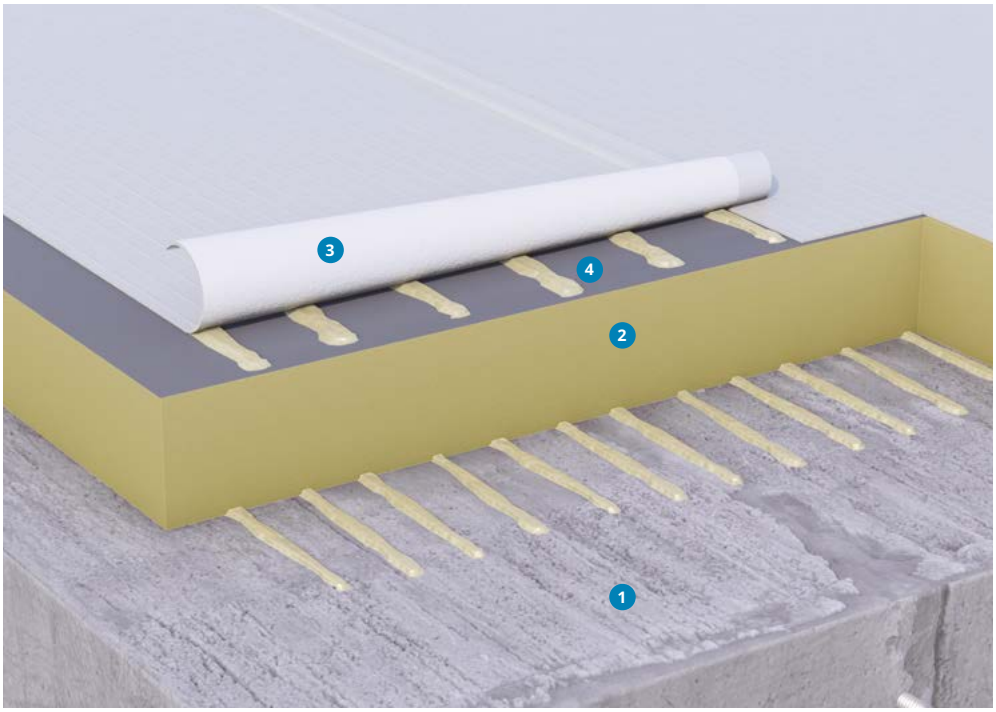
Roof waterproofing with mechanically fastened membranes

1. Substructure
2. Vapor Barrier
   Vapor Barrier FR
3. Insulation
4. KÖSTER TPO Membrane
   KÖSTER TPO 1.2/1.5/1.8/2.0
   KÖSTER TPO Pro 1.2/1.5/1.8
   KÖSTER TPO FR 1.5/1.8/2.0
5. Mechanical fasteners



The most common method of installing TPO membranes is through mechanical fastening. The membrane is mechanically fastened to the roof structure, which can consist of either wooden sheathing, trapezoidal sheets, or a concrete slab. The membrane is generally fastened through the thermal insulation, which requires special fasteners. Overlapping the membranes prevents the penetration of water into the installation. Due to its great compatibility with various materials such as bitumen, the KÖSTER TPO Membrane is suitable for use in the renovation of roof waterproofing systems as well. For instance, the KÖSTER TPO Membrane can be directly fastened to the substructure without having to remove the old waterproofing system, as long as the substrate is intact and structural aspects do not indicate otherwise. Mechanical fastening allows for a quick installation and provides a high resistance to wind loads without placing an additional load upon the waterproofing system. Thus, the roof structure is comparatively light in weight. Furthermore, mechanical fastening guarantees that the membrane will not slip, even on pitched roofs. Mechanical fastening even makes a green roof on a pitched roof possible.

Roof waterproofing with bonded membranes



1 Substructure

2 Insulation

3 KÖSTER TPO Membrane
KÖSTER TPO 1.5 F
KÖSTER TPO 2.0 F

4 Adhesive
KÖSTER PUR
Membrane Adhesive

Full surface adhesion to the substrate offers a time-saving installation. The KÖSTER TPO Membrane features a special fleece coating on one side, which increases the bonding of the KÖSTER PUR Membrane Adhesive or the KÖSTER 2K PUR Membrane Adhesive. This results in a high adhesive strength and creates a perfect bond to the substrate. It is important that the substrate is suitable for a good adhesive bond. If necessary, an adhesive bridge can be applied. In addition, a wind load calculation must be carried out prior to the adhesion of the membrane in order to provide information about the amount of adhesive required and the alignment of the welding seams. The KÖSTER PUR Membrane Adhesive is applied in strips to the substrate, before unrolling the fleece-back coated KÖSTER TPO Membrane. The membrane is then firmly pressed onto the substrate using a cylinder in the same width of the membrane. This enables the adhesive to be spread evenly and help achieve uniformity of the bond. When distributing the adhesive care must be taken to ensure that no adhesive on the welding edges is spread.

Roof waterproofing with loose-laid membranes

1 Substructure

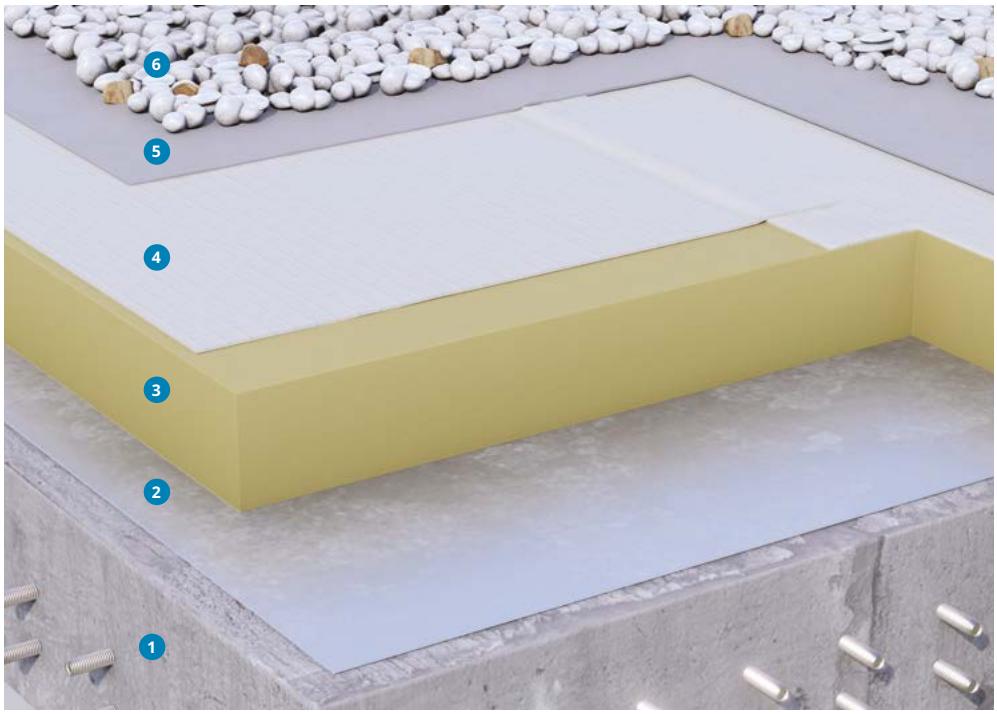
2 Vapor Barrier
Vapor Barrier FR

3 Insulation

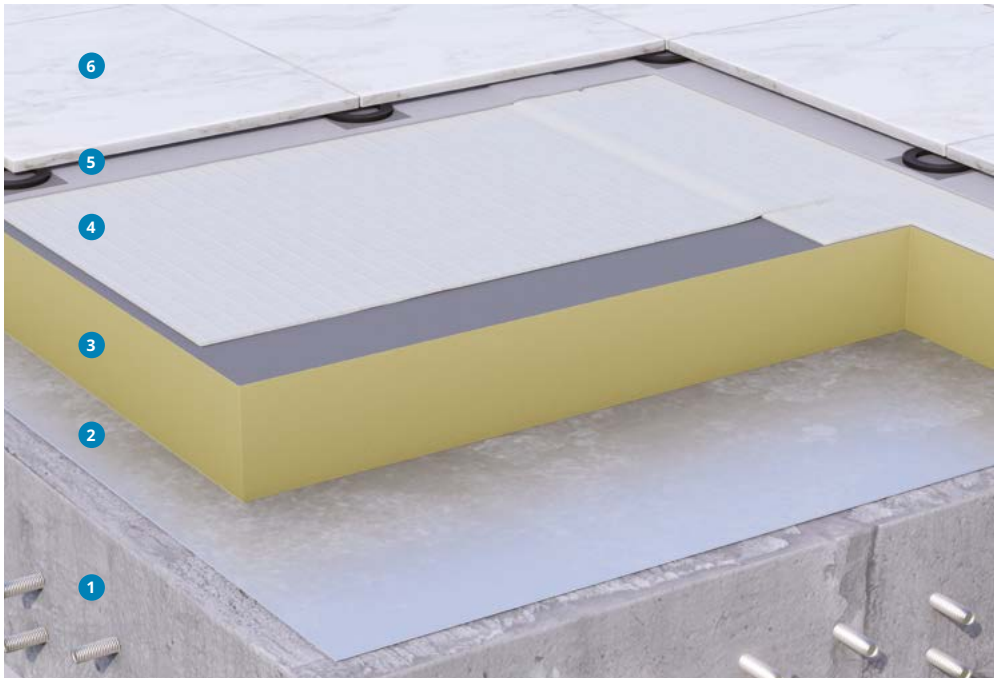
4 KÖSTER TPO Membrane
KÖSTER TPO 1.2/1.5/1.8/2.0
KÖSTER TPO Pro 1.2/1.5/1.8
KÖSTER TPO FR 1.5/1.8/2.0

5 Protection Layer

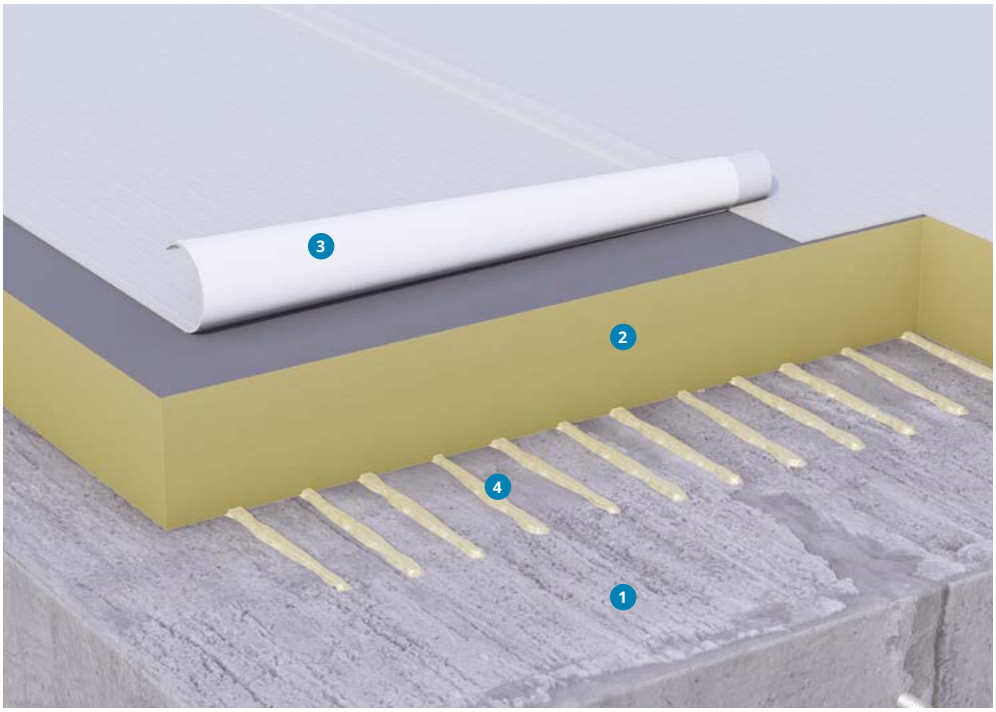
6 Ballast System



A quick and secure way to install KÖSTER TPO Membranes is through loose laying with ballast over the membrane. Ballast can consist of either gravel, paving slabs, or even green roofs. Ballast helps protect the roofing membrane against wind loads and can accommodate a wide range of architectural styles. The main advantage of this installation method is that the roofing membrane does not need to be mechanically fastened to the substrate. Due to the weight of the ballast, higher loads must be taken into consideration in the roof load calculation.



Roof waterproofing with self-adhered membranes



1 Substructure

2 Insulation

3 KÖSTER TPO Membrane
KÖSTER TPO 1.5 SK (FR)
KÖSTER TPO 2.0 SK (FR)

4 Adhesive
KÖSTER PUR
Membrane Adhesive

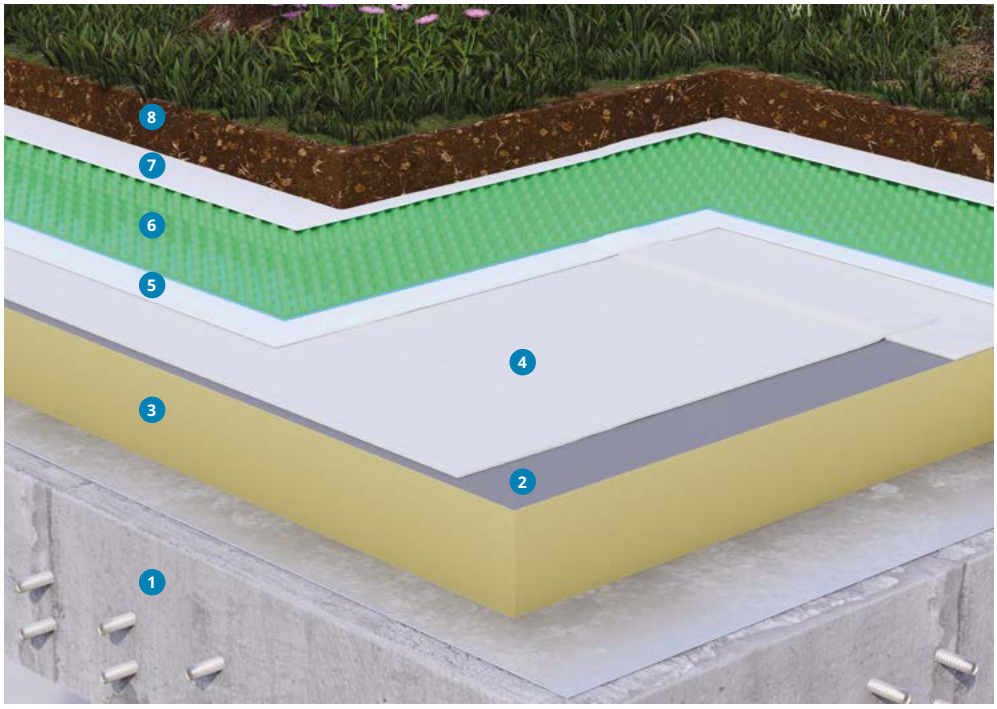
The fastest way to install a roofing membrane is by using a self-adhered system with the KÖSTER TPO SK (FR) membranes. The adhesive layer guarantees immediate, long-term adhesion and provides maximum protection against wind suction forces. The overlaps are sealed in the same way as the other KÖSTER TPO membranes, using a hot air gun or automatic machine.

This special membrane can be installed directly over a wide range of substrates including different types of insulation materials (suitable directly over EPS insulation) and even concrete substrates and old membranes (please adhere to the technical documentation for details), using the special primer KÖSTER TPO SK Primer.

The KÖSTER TPO SK (FR) Roofing Membranes are classified as Broof (t1) and meet the requirements for “hard roofs“ in accordance with DIN 4102-7.

Roof waterproofing on green roofs

1. Substructure
2. Vapor Barrier
   Vapor Barrier FR
3. Insulation
4. KÖSTER TPO Membrane
   KÖSTER TPO 1.8/2.0
5. Protection Layer
6. Drainage Sheet
   KÖSTER SD 3-250
7. Protection Layer
8. Ground / Greenery / Landscaping

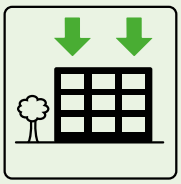


The benefits of a green roof are diversified and can go from the simple, but effective protection of the membrane itself, to the insulation advantages to the building and structure.

Green roofs can represent real opportunities for significant social, economic, and environmental benefits, particularly in cities.

The real benefits can go from the simple efficiency of retaining a part of the rain water, the moderation of urban heat effect, the improvement of air quality, to act as a fire retarding agent, noise reduction by absorbing decibels, and many others. These are only a few of examples of the reasons to choose Green Roofs.

Flat roof waterproofing with liquid resin



Concrete roofs are often difficult to waterproof with membranes due to numerous penetrations and complex geometry. KÖSTER has developed several liquid applied elastic waterproofing systems for roofs based on different types of technologies from the mineral base material to the MS polymer technology. Any of the options available are directly applied onto the prepared concrete substrate by roller, brush or spraying.

Roof waterproofing with MS polymer liquid membrane

1 Concrete Repair
KÖSTER Betomor Multi A

2 Primer
KÖSTER CT 121

3 Installing fillets
KÖSTER WP Mortar

4 Waterproofing wall / floor junctions
KÖSTER Superfleece

5 Waterproofing layer
KÖSTER MS-Flexfolie

R

For every job, the proper KÖSTER material can be used in combination to provide a complete system for the renovation of leaking roof structures or in new construction.

KÖSTER offers a state-of-the-art MS Polymer waterproofing material with numerous advantages compared to other liquid membranes available. This special product is a convenient ready to use material (1 component) for a seamless waterproofing coat with simple application and a thixotropic consistency for slope and vertical areas. The KÖSTER MS-Flexfolie adheres to multiple substrates, has an extraordinary UV resistance as proven by the acceleration tests results, and maintains its properties on temperatures between - 30 C to + 80 C. For a demanding waterproofing job, this special product offers > 500% elasticity and it is free of solvents or any other harmful substances.

Always adhere to the specifications in the respective Technical Guidelines

Waterproofing of sloped non accessible roofs

1 **Concrete Repair**
KÖSTER Betomor Multi A

2 **Primer**
KÖSTER Polysil TG 500

3 **Installing fillets**
KÖSTER WP Mortar

4 **Waterproofing wall / floor junctions**
KÖSTER Superfleece

5 **Waterproofing layer**
KÖSTER Dachflex

6 **Reinforcement**
KÖSTER Flex Fabric

Damaged roofs and structures may require multiple products for proper protection. Substrate preparation is a key factor for a durable renovation. It must provide a sound basis for the area waterproofing. The waterproofing system waterproofing should have multiple advantages, such as being liquid applied and therefore seamless. It should also have crack-bridging capabilities. KÖSTER Dachflex is a one-component polymeric waterproofing material that meets all these demands, and provides an easy to apply, durable and reliable waterproofing solution.

KÖSTER Dachflex is a solvent free, fast drying, breathable waterproofing liquid membrane based on styrene acrylic dispersions. After full cure it forms a watertight, seamless elastic coat with water vapor permeability and UV reflectance properties, resistant to weathering, frost, and de-icing salts.

KÖSTER Dachflex can be used for new construction or the repair of flat roofs, balconies and terraces under tiles, mineral based facades, as well as facade crack repair system.

Always adhere to the specifications in the respective Technical Guidelines.

KÖSTER MS-Flexfolie

2 x 4 kg tubular bags
(W 200 008)

25 kg bucket
(W 200 025)

KÖSTER MS-Flexfolie is a single component, solvent free, highly elastic, crack bridging waterproofing material based on MS Polymer technology. KÖSTER MS-Flexfolie does not contain isocyanates, is quickly resistant to rain as well as occasional foot traffic, aging, hydrolysis, UV-rays, salts, and frost.

Consumption: Approx. 1.5 – 2.5 kg / m²

CE

KÖSTER Dachflex

20 kg bucket
(R 260 020)

Liquid applied, 1 component synthetic waterproofing for roofs. KÖSTER Dachflex is a foil like coating, waterproof, and water vapor permeable. The material is highly elastic, quick drying, pasty, solvent-free and is also suitable for the repair of leaky flat roofs.

Consumption: Approx. 0.75 – 1.0 kg / m² per coat; 1.5 to 2.0 kg / m² total consumption

R

Good to know: Installation methods


Full surface adhesion


Mechanical fastening


Under ballast / green roofs


Complex geometries

Our KÖSTER TPO membranes provide the perfect conditions for a top certification for residential and commercial buildings as well as industrial buildings regarding the aspect of sustainable construction. Accordingly, KÖSTER is a member of the Institut für Bauen und Umwelt (IBU). From IBU, KÖSTER receives Environmental Product Declarations (EPD) for the KÖSTER TPO membranes. These EPD contain all required data for an evaluation by certified companies such as DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen), Leed (Leadership in Energy and Environmental Design), and Breeam (Building Research Establishment Environmental Asses Methodology). With consistent positive evaluations for the extensive lifecycle, lack of plasticizers and ex recyclability the material regularly gains Gold ratings (or even higher, with the DGNB) for buildings.

Institut Bauen und Umwelt eV

THIRD-PARTY VERIFIED EPD ISO 14025 and EN 15804 Institut Bauen und Umwelt eV

UV

In addition to our KÖSTER TPO roofing membranes, we provide a wide range of system accessories. This includes among others molded parts for corners and penetrations, connection sleeves, composite sheets and maintenance mats as well as accessories for drainage and ventilation.

KÖSTER
Contact Adhesive

4.5 kg bucket
(RT 102 004))

KÖSTER Contact Adhesive is a ready to use, one-component contact adhesive for details and connections with non-fleece backed KÖSTER TPO Membranes to non-TPO substrates.

Consumption: Approx. 175 – 250 g / m² per side

KÖSTER
2C PUR Membrane Adhesive

1.5 l cartridge
(RT 104 001)

Two component, low viscosity adhesive for bonding fleece backed KÖSTER TPO roofing membranes.

KÖSTER
PUR Membrane Adhesive

6.5 kg jerrycan
(RT 101 065)

KÖSTER PUR Membrane Adhesive is a ready to use, one component, solvent free polyurethane for strip and full surface adhesion of KÖSTER fleece backed TPO membranes.

Consumption: Approx. 160 – 320 g / m²

KÖSTER
TPO Cleaner

2.5 l jerrycan
(RT 105 002)

Cleaner for KÖSTER TPO – Roofing Membranes

Consumption: Approx. 0.01 – 0.03 l per m

KÖSTER
TPO Cleaning Tissue

450 sheets per roll
(RT 105 003)

For cleaning TPO waterproofing membranes.

KÖSTER
TPO SK Primer

12 l jerrycan
(RT 103 012)

Solvent based resin primer for the application of KÖSTER TPO SK (FR) Membranes.

Consumption: Approx. 200 – 400 g / m²

KÖSTER TPO

KÖSTER TPO is a hot-air-welded plastic roofing and waterproofing membrane made of thermoplastic polyolefins (FPO / TPO) based on Polyethylene with centrally embedded glass fleece reinforcement. KÖSTER TPO roofing membranes are mechanically fastened to waterproof roofs with direct weathering and are used under load (e.g. gravel, green roofs).

KÖSTER TPO waterproofing membranes can be used in building waterproofing in accordance with EN 18531-18535.

TPO 1.2
1.2 mm thick x 30 m long
(RT 812 150)

TPO 1.5
1.5 mm thick x 20 m long
(RT 815 025 to RT 815 150)

TPO 1.8
1.8 mm thick x 20 m long
(RT 818 025 to RT 818 210)

TPO 2.0
2.0 mm thick x 20 m long
(RT 820 025 to RT 820 210)

KÖSTER TPO Pro

KÖSTER TPO Pro is a hot-air-welded roofing and waterproofing membrane made of thermoplastic polyolefins (FPO/ TPO) based on Polyethylene with centrally embedded glass fleece reinforcement.
KÖSTER TPO Pro is produced with a special blend of polymer that offers a high degree of sustainability, economy, and durability and thus supports a modern, resource-conserving building culture.
Available in white with an SRI > 95.
These membranes can be applied with different application methods such as mechanical fastening and loose-laid under ballast (e.g. gravel).
KÖSTER TPO Pro waterproofing membranes can be used in building waterproofing in accordance with EN 18531-18535.

TPO Pro 1.2
1.2 mm x 1.50 m x 30 m
(RT 812 150 Pro W)

TPO Pro 1.5
1.5 mm x 1.50 m x 20 m
(RT 815 150 Pro W)

TPO Pro 1.8
1.8 mm x 1.50 m x 20 m
(RT 818 150 Pro W)

KÖSTER TPO FR

KÖSTER TPO FR is a hot-air-welded roofing and waterproofing membrane made of thermoplastic polyolefins (FPO/ TPO) based on Polyethylene with centrally embedded glass fleece reinforcement. KÖSTER TPO FR membranes are classified as Broof(t2) and Broof(t3) and are available in white with an SRI > 85.

The KÖSTER TPO FR membranes and can be applied with different application methods such as mechanical fastening and loose-laid under ballast (e.g. gravel).

TPO FR 1.5
1.5 mm x 1.50 m x 20 m
(RT 815 150 FR W)

TPO FR 1.8
1.8 mm x 1.50 m x 20 m
(RT 818 150 FR W)

TPO FR 2.0
2.0 mm x 1.50 m x 20 m
(RT 820 150 FR W)

KÖSTER TPO F

TPO 1.5 F
1.5 mm thick x 20 m long
(RT 815 052 F to RT 815 150 F)

TPO 2.0 F
2.0 mm thick x 20 m long
(RT 820 052 F to RT 820 150 F)

KÖSTER TPO F is a hot-air-welded roofing and waterproofing membrane made of thermoplastic polyolefins (FPO/ TPO) based on Polyethylene with centrally embedded glass fleece reinforcement and a bottom section with an embedded polyester fleece specially designed for application with adhesives directly to the substrate. The KÖSTER TPO F membranes can equally be installed using other methods such as mechanical fastening and loose-laid under ballast (e.g. gravel, green roofs).

KÖSTER TPO F waterproofing membranes can be used in building waterproofing in accordance with EN 18531-18535.

KÖSTER TPO SK

TPO 1.5 SK
1.5 mm x 1.05 m x 20 m
(RT 815 105 SK FR)

TPO 2.0 SK
2.0 mm x 1.05 m x 20 m
(RT 820 105 SK FR)

KÖSTER TPO F is a hot-air-welded roofing and waterproofing membrane made of thermoplastic polyolefins (FPO/ TPO) based on Polyethylene with centrally embedded glass fleece reinforcement and special polyester fleece with a self-adhesive layer on the bottom. Direct adhesion to EPS is possible.

KÖSTER TPO SK roofing and waterproofing membranes are used for waterproofing roofs exposed to direct weathering, self-adhesive and under ballast (e.g. gravel, green roofs).

KÖSTER TPO SK waterproofing membranes can be used in building waterproofing in accordance with EN 18531-18535.

KÖSTER TPO U

TPO 2.0 U
2.0 mm x 0.525 m x 20 m
(RT 820 052 U)

KÖSTER TPO U is a homogeneous TPO membrane made from the same high-quality polymers and raw materials and are used specifically for the production of details on the construction site, such as drainage, ventilation flanges, and corner reinforcements.

KÖSTER External Corner light grey 90 degrees

piece
(RT 901 001)

For the professional creation of external corners, 90°, length of edge 100 mm

KÖSTER Internal Corner light grey 90 degrees

piece
(RT 902 001)

For the professional creation of internal corners, 90°, length of edge 100 mm.

KÖSTER
TPO External Corner white 90 degrees

piece
(RT 901 001 W)

For the professional creation of external corners, 90°, length of edge 100 mm

KÖSTER
TPO Internal Corner white 90 degrees

piece
(RT 902 001 W)

For the professional creation of internal corners, 90°, length of edge 100 mm

KÖSTER
Emergency Overflow 100*110*490 mm

piece
(RT 918 011)

Emergency overflow PE, light gray, round DN 100, external diameter 110 mm, pipe length 490 mm

KÖSTER
Emergency Overflow 120*60*300 mm

piece
(RT 918 001 B)

Emergency overflow, black.

KÖSTER
Emergency Overflow 300*80*300 mm

piece
(RT 918 003 B)

Emergency overflow, black.

KÖSTER
Attica Spout 120*60*300 mm

piece
(RT 917 001 B)

Rectangular attica spout, black.

KÖSTER
Water Spout DN 100

piece
(RT 917 011)

Water spout PE, round, DN 100 light grey, external diameter 110 mm, pipe length 480 mm.

R

KÖSTER
Water Spout DN 70

piece
(RT 917 010)

Water spount PE, round, DN 70 light grey, external diameter 75 mm, pipe length 480 mm.

KÖSTER
Base for Sanitary Vent DN 100

piece
(RT 915 024)

Sanitary Vent Base for insulated roofs DN 100

KÖSTER
Sanitary Vent DN 100

piece
(RT 915 023)

Sanitary fan with KÖSTER TPO flange for pipes and room ventilation of flat and sloped, used and unused roof surface

KÖSTER
Pipe Flashing 10/300 light grey

piece
(RT 905 001)

For the safe waterproofing of lightning protection cables and other cable penetrations, includes shrink tubing, inner diameter 10 mm, height 300 mm.

KÖSTER
Pipe Flashing 20/300 light grey

piece
(RT 905 002)

For the safe waterproofing of lightning protection cables and other cable penetrations, includes shrink tubing, inner diameter 20 mm, height 300 mm.

KÖSTER
Pipe Flashing 30/300 light grey

piece
(RT 905 005)

For the safe waterproofing of lightning protection cables and other cable penetrations, includes shrink tubing, inner diameter 30 mm, height 300 mm.

KÖSTER
Pipe Flashing 40/300 light grey

piece
(RT 905 003)

For the safe waterproofing of cable penetrations, includes shrink tubing, inner diameter 40 mm, height 300 mm.

KÖSTER
Pipe Flashing 50/300 light grey

piece
(RT 905 006)

For the safe waterproofing of lightning protection cables and other cable penetrations, includes shrink tubing, inner diameter 50 mm, height 300 mm.

KÖSTER
Roof Drain without Leaf Trap NW 100 light grey

piece
(RT 915 002)

TPO roof drain, NW 100, light grey.

KÖSTER
Galvanized leaf trap, NW 100

piece
(RT 915 009)

Leaf trap for roof drain NW 100.

KÖSTER
Roof Vent with Cap NW 100

piece
(RT 916 002)

Roof vent light grey, NW 100 with light grey cap.

KÖSTER
Roof Vent with Cap NW 70

piece
(RT 916 001)

Roof vent light grey, NW 70 with light grey cap.

KÖSTER
TPO Metal Composite Coil light grey

1 m x 30 m, 30 m² roll
(RT 910 030)

As gutter flashing, coping, or drip edge with one-sided weld-able TPO coating. 1 m x 30 m coil.

R

KÖSTER
Metal Composite Sheet

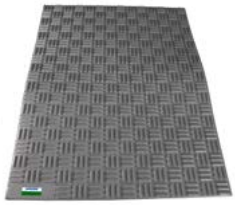
piece
(light grey RT 910 002)
(slate grey RT 910 002 SG)
(white RT 910 002 W)

One-sided TPO coated zinc plated metal sheet used to fabricate metal drip edges and other roofing edge profiles.

KÖSTER
Maintenance Walkway Mat

piece
(RT 925 001)

For creating safe protective walkways on flat roofs. Weldable with KÖSTER TPO roofing membranes.



KÖSTER
Vapor Barrier according to DIN 18234

1580 mm x 50 m, 79 m² roll
(RT 920 075 C)

Self adhesive hardwearing aluminium vapor barrier with low fire load according to the DIN 18234. KÖSTER Vapor Barrier FR has a very high Sd value of > 1500 m, making it practically vapor tight. It is characterized by a simple and fast installation and high perforation resistance. The self-adhesive backing is covered with a protective foil.

KÖSTER
Walkway Membrane grey

1 m x 10 mm, 10 m roll
(RT 927 010)

For creating foot access paths on flat roofs, hot air weldable with KÖSTER TPO Membranes (w: 1000 mm; l: 10 m)..

KÖSTER
Bar for membrane fastening

piece
(RT 919 004)

Width/ Height/Length in mm: 30/1,25/2400;
holes: 7+15 mm, (Bundle = 10 piece)

KÖSTER
Wall connection profile 60 mm

piece
(RT 919 003)

Finishing profile, aluminium, length 3 m, perforated.

KÖSTER
Edge for wall connection profile 60 mm

piece
(RT 919 001)

Edge for wall connection profile made in PVC. Adaptable for corners and terminations for the aluminum profile.

KÖSTER Kehlfix for membranes 55mm wide

piece
(RT 997 001)

Hand tool for supporting and shaping fillets, corners and details.

KÖSTER
Hand press for KÖSTER 2C PUR Membrane Adhesive

piece
(RT 999 001)

Electrically operated lance / pistol for applying the KÖSTER 2C PUR Membrane Adhesive.

KÖSTER
Weld Seam Tester

piece
(RT 929 001)

Weld seam tester for testing and inspection of seams on KÖSTER TPO Roofing Membranes.

Hand Pressure Roller 40 mm LT
Hand Pressure Roller 40 mm HR

piece
(RT 998 001)
(RT 998 002)

Silicone, ball bearing, one arm pressure roller.

Wide Slot Nozzel 40 mm LT
Wide Slot Nozzel 40 mm HR

piece
(RT 995 001)
(RT 995 002)

Additional nozzle for hot-air hand tool.

R

Automatic Welder 230 Volt LT
Automatic Welder 230 Volt HR

piece
(RT 991 001)
(RT 991 002)

Automatic welder 230 Volt 3680 Watt, 40 mm welding nozzle, brushless blower motor, includes storage case

Pic. similar

Automatic Welder 400 Volt LT
Automatic Welder 400 Volt HR

piece
(RT 990 001)
(RT 990 002)

Automatic welder 400 Volt 5700 Watts, 40 mm includes storage case

Pic. similar

Manual Welder 230 Volt LT
Manual Welder 230 Volt HR

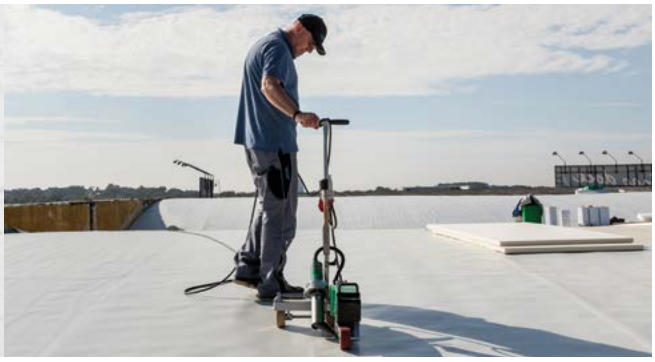
piece
(RT 992 001)
(RT 992 002)

Triac AT, 230 Volt, 1600 Watts, wide slot nozzel 2 mm x 40 mm

Pic. similar

Good to know: TPO Roofing Membranes

KÖSTER TPO Roofing Membranes can be installed by mechanical fastening, loose laying, or full surface adhesion on flat or green roofs. They stand out due to their excellent application and outstanding mechanical properties as well as through their durability and sustainability. KÖSTER produces thermoplastic polyolefine (TPO). The standard color of KÖSTER TPO Membranes is light grey, but we are taking the approach due to their solar reflectance to have more and more white membranes.



X

Accessories

KÖSTER
Diagnosis Case

piece
(X 919 001)

The KÖSTER Diagnosis case allows for the on site testing of common salts (chlorides, nitrates, sulfates). The case contains all necessary tools for taking samples and sample preparation as well as for the execution of the analysis including a small digital hand scale. Also included with the case are work instructions, a notepad, and a pen for documentation.

KÖSTER
Drill Stirrer

piece
(X 911 001)

Special stirrer for mixing 2-component polymer modified bitumen thick film sealants, e.g. KÖSTER NB 4000, KÖSTER Deuxan 2C and KÖSTER Bikuthan 2C. Round connector Ø 12 mm for chuck.

KÖSTER
Ring Spanner

piece
(X 916 001)

For easy opening and closing of 10 l and 30 l jerrycans.

KÖSTER
Spatula

width: 20 mm, piece
(X 986 001)

width: 50 mm, piece
(X 987 001)

For the application of KÖSTER KB-Flex 200 Sealing Paste, etc.

KÖSTER
Universal Cleaner

10 l jerrycan
(X 910 010)

Solvent free cleaning agent for bituminous materials and epoxy resins.

Consumption: as needed

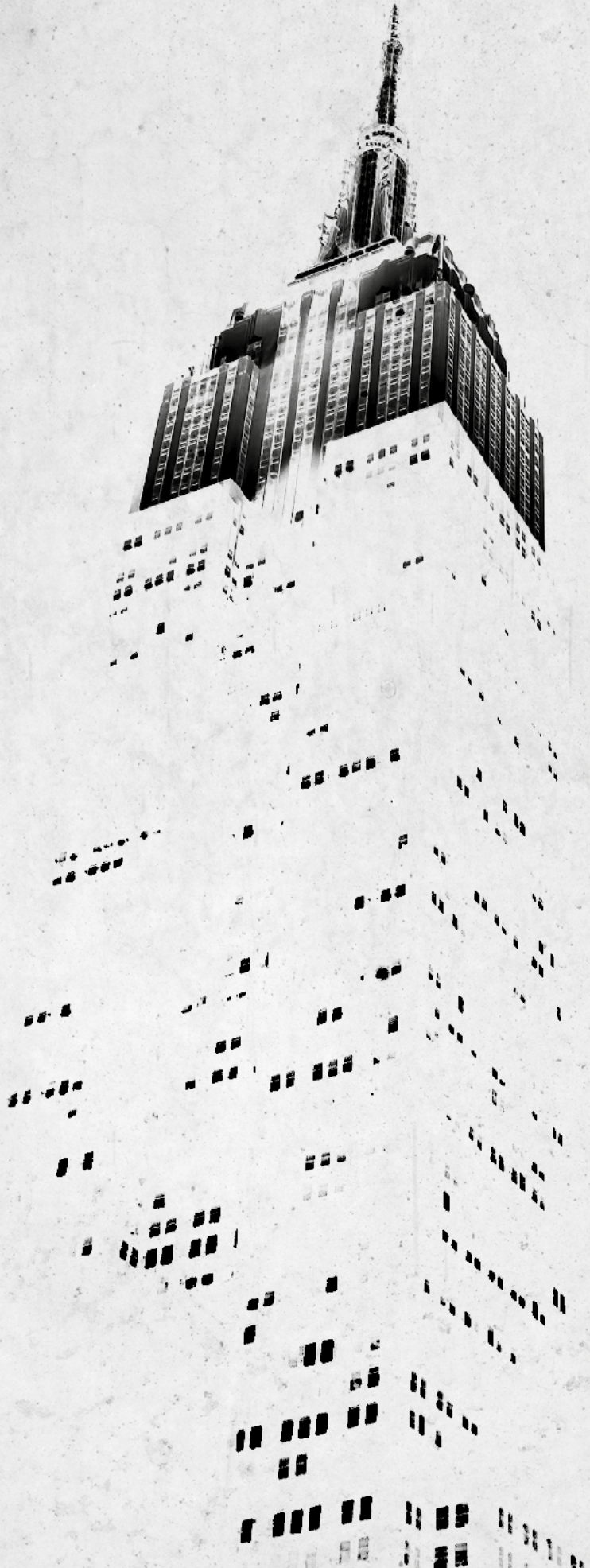
KÖSTER TPO Pro

White can be green

Since 1982 we have been developing and producing sustainable waterproofing solutions of excellent quality and performance. With the KÖSTER TPO Pro we developed the first roofing membrane that is based on recycled near-to-prime material.

KÖSTER

Waterproofing solutions from basement to roof



We have been developing and producing waterproofing systems since 1982 that protect and preserve valuable building structures, meeting with the highest standards all along the way. In short, where water is a problem, we are there with a solution for the owners, engineers, architects, and all our clients.