

Waterproofing Systems

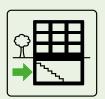
# KÖSTER System overview

Edition 2024

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#### **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 mineral** based waterproofing systems



- 1 Primer KÖSTER Polysil TG 500
- 2 Waterproofing pipe penetrations KÖSTER KB-Flex 200
- 3 Preparing wall/floor junctions KÖSTER NB 1 Grey
- 4 Installing fillets KÖSTER Repair Mortar Plus
- **5** Waterproofing layer KÖSTER NB 4000
- 6 Reinforcement KÖSTER Glass Fiber Mesh
- **7** Protection of the waterproofing layer KÖSTER SD Protection and Drainage Sheet 3-400

#### External basement waterproofing with cold selfadhesive waterproofing membranes



- 1 Joint sealing KÖSTER Quellband
- 2 Wall/floor junction KÖSTER NB 1 Grey
- 3 Installing fillets KÖSTER Repair Mortar Plus
- 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 3-400
- Waterproofing membrane KÖSTER KBE Liquid Film

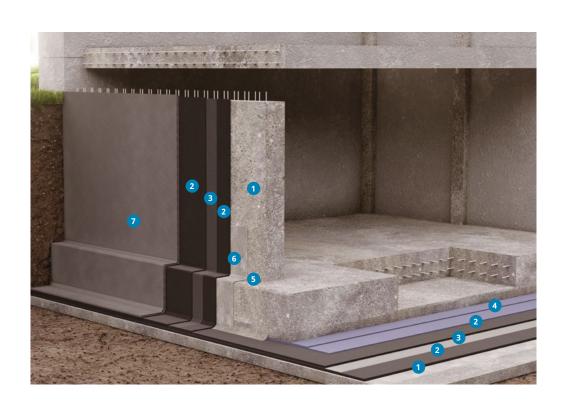
# External basement waterproofing with thermoplastic waterproofing membranes

- 1 Waterproofing membrane KÖSTER ECB 1.5 U S KÖSTER ECB 2.0 U S
- 2 Protection of the waterproofing layer KÖSTER SD Protection and Drainage Sheet 3-400

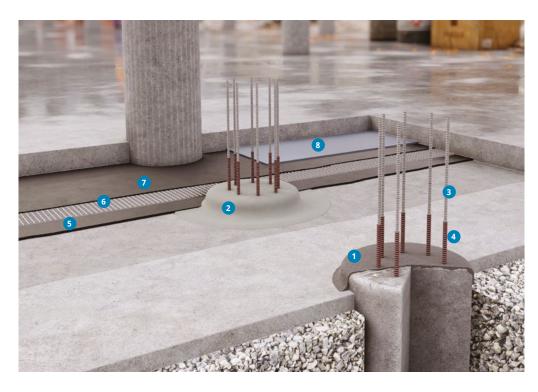


#### Waterproofing under the foundation plate

- 1 Primer KÖSTER Polysil TG 500
- 2 Waterproofing layer
  KÖSTER Deuxan 2C
  KOSTER NB 4000
  KOSTER KSK SY 15
  KOSTER KSK ALU 15
  KOSTER ECB 1.5 U S
  KOSTER ECB 2.0 U S
- 3 Embedded mesh KÖSTER Glass Fiber Mesh
- 4 Gliding Layer
  Customary PE-foil
- 5 Fillet
  KÖSTER WP Mortar
- 6 Waterproofing layer KÖSTER NB 1 Grey
- 7 Protection of the waterproofing layer KÖSTER SD Protection and Drainage Sheet 3-400

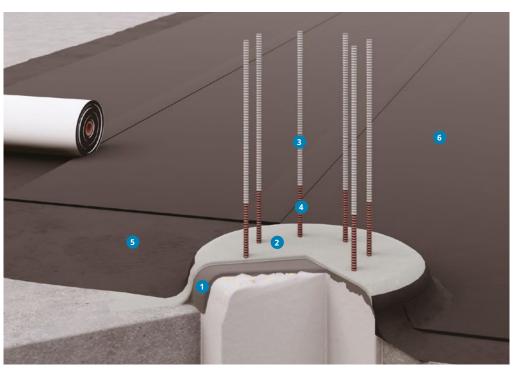


# Waterproofing of pile heads with bitumen based liquid systems



- 1 Reprofiling KÖSTER Repair Mortar R4
- 2 Waterproofing of pile heads
  - KÖSTER NB 1 Grey
- 3 Corrosion protection KÖSTER Z 1
- 4 Corrosion protection KÖSTER Z 2
- 5 Waterproofing layer KÖSTER Deuxan 2C
- 6 Embedded Mesh KÖSTER Glass Fiber Mesh
- 7 Waterproofing layer KÖSTER Deuxan 2C
- **8** Gliding Layer

#### Waterproofing of pile heads with cold applied self-adhesive membranes



- 1 Reprofiling KÖSTER Repair Mortar R4
- 2 Reprofiling KÖSTER NB 1 Grey
- 3 Corrosion protection KÖSTER Z 1
- 4 Corrosion protection KÖSTER Z 2
- 5 Primer KÖSTER KBE Liquid Film
- 6 Waterproofing Layer KÖSTER KSK SY 15

# **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 sort of earthwork. This type of waterproofing is possible with the KÖSTER systems even when the wall has active leakages.

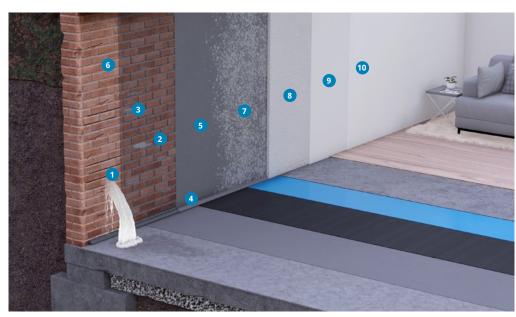
# Internal basement waterproofing on the foundation plate with cold-adhesive waterproofing membranes

- Horizontal barriers for walls
  - KÖSTER Fix-Tape 15 SY
- 2 Primer
  KÖSTER KSK Primer BL
- 3 Waterproofing Layer KÖSTER KSK SY 15
- Sealing of the Waterproofing Layer KÖSTER Butyl Fix-Tape Fleece
- 5 Protection layer (PE foil)



- 1 Stopping active leakages KÖSTER KD 2 Blitz Powder
- 2 Primer: Water
- 3 Levelling the surface KÖSTER Repair Mortar Plus
- 4 Installing fillets
  KÖSTER Repair Mortar Plus
- 5 Waterproofing layer KÖSTER KD System
- 6 Waterproofing pipe penetrations KÖSTER KB-Fix 5 KÖSTER KB-Flex 200
- **7 Plaster key**KÖSTER Restoration
  Plaster Key
- 8 Plaster
  KÖSTER Restoration
  Plaster White
- 9 Fine Finish
  KÖSTER Fine Plaster
- Paint KÖSTER Silicone Paint White

# Internal basement waterproofing in case of flowing water



#### 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 capabi-

# Waterproofing of balconies and terraces with mineral based waterproofing systems



- 1 Concrete repair KÖSTER Betomor Multi A KÖSTER Repair Mortar R4
- KÖSTER Polysil TG 500
- 3 Levelling underlayment KÖSTER SL Premium KÖSTER SL Protect KÖSTER Repair Mortar
- 4 Waterproofing Layers KÖSTER NB 4000 KÖSTER NB Elastic Grey KÖSTER 21
- 5 Reinforcement KÖSTER Flex Fabric KÖSTER Glass Fiber Mesh
- 6 Tile Adhesive KÖSTER BD Flexible Tile Adhesive
- 7 Waterproofing wall / floor junctions KÖSTER Flex Fabric

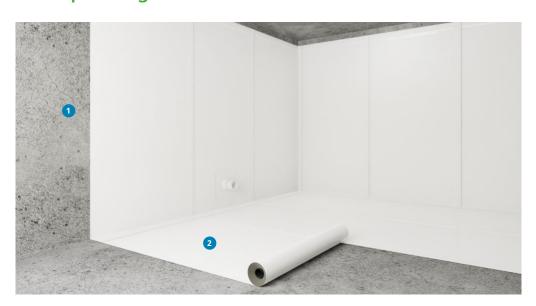
#### Waterproofing potable water tanks



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

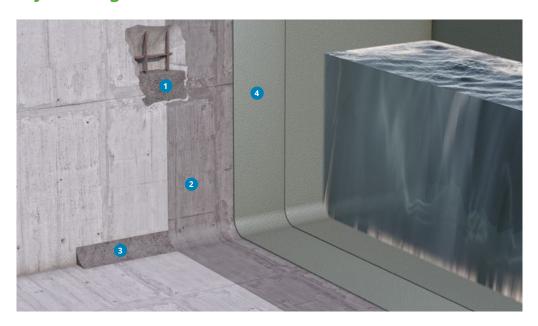
 Substructure
 KÖSTER TPO Membrane KÖSTER TPO Aqua 1.5



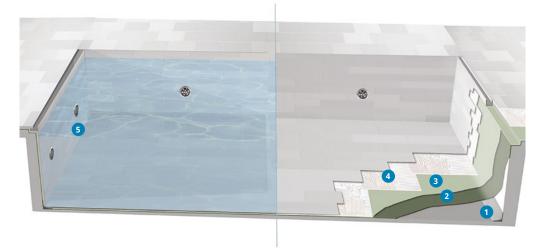
# Waterproofing water tanks with 1 component crystalizing mineral coat

- Concrete Repair
   KÖSTER Repair Mortar R4

   Primer
- KÖSTER Polysil TG 500
- 3 Installing fillets KÖSTER Repair Mortar Plus
- **4 Waterproofing layer** KÖSTER NB 1 Grey



### Waterproofing swimming pools



- 1 Fillet KÖSTER WP Mortar
- 2 Negative side waterproofing KÖSTER NB 1 Grey
- 3 Positive side waterproofing KÖSTER NB Elastic Grey KÖSTER NB 4000
- 4 Tile adhesive KÖSTER BD Flexible Tile Adhesive
- 5 Penetrations KÖSTER KB-Flex 200

### Waterproofing of pipes, manholes and sewage areas



- 1 Stopping active leakages KÖSTER KD 2 Blitz Powder KÖSTER Waterstop
- 2 Waterproofing sewers KÖSTER NB 1 Grey KÖSTER Repair Mortar NC KÖSTER Repair Mortar R4
- 3 Waterproofing masonry KÖSTER NB 1 Grey
- 4 Acid protection KÖSTER PSM KÖSTER PSM 2S+
- 5 Waterproofing shafts KÖSTER Sewer and Shaft Mortar
- 6 Waterproofing pipe couplings KÖSTER Injection Gel G4 7 Crack injection
- KÖSTER Injection Gel G4 KÖSTER 2 IN 1
- 8 Heavy duty surface protection KÖSTER Sewer and Shaft Mortar

#### Car Parking and Bridge Deck Waterproofing System



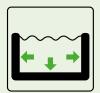
Car Parking as well as bridge deck Waterproofing demand high standards on the materials, not only during their installation and resilience to hot bitumen on asphalt roads, but also on the durability when exposed to harsh environmental conditions and dynamic loads. A suitable system must therefore, be able to withstand high temperatures, provide adequate bond and create a flexible and reliable waterproofing barrier.

#### **Car Parking Waterproofing System**

- 1 Substrate
- 2 Primer KÖSTER CT 225 Bridge Deck Coating
- 3 Hot Bitumen
- 4 KÖSTER ECB Membrane KÖSTER ECB 2F



#### **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.

#### **Dams and Canals**



1 Substrate 2 Waterproofing layer TPO Aqua 2.5 Geo

#### 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.

- 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 Repair Mortar Plus
- 6 Plaster key

  KÖSTER Restoration

  Plaster Key
- Plaster KÖSTER Restoration Plaster Grey KÖSTER Restoration Plaster Grey/Light
- 8 Fine plaster KÖSTER Fine Plaster
- KÖSTER Silicone Paint White

# Horizontal barriers with pressureless injection system KÖSTER Crisin 76



# Horizontal barriers with pressureless injection system KÖSTER Crisin Cream



#### 1 Boreholes

2 Cross section waterproofing KÖSTER Crisin Cream

- 3 Closing holes KÖSTER KB-Fix 5
- 4 Primer KÖSTER Polysil TG 500
- **5 Levelling** KÖSTER Repair Mortar
- 6 Plaster key
  KÖSTER Restoration
  Plaster Key
- **7 Plaster**KÖSTER Restoration
  Plaster White
- 8 Fine plaster
  KÖSTER Fine Plaster
- 9 Paint KÖSTER Silicone Paint White

#### **Restoration plasters**



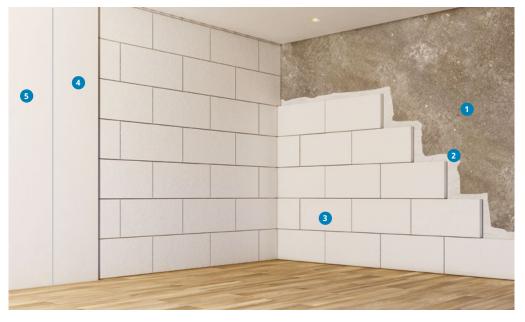
Mold in living areas caused by moisture penetration and thermal bridges results in extensive health damage because the mold releases its spores into the air which is then inhaled by the inhabitants. A special Anti Mold System – which functions on a purely physical basis and which is free of fungicidal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

#### Restoration of masonry with restoration plasters



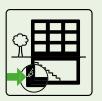
- 1 Primer KÖSTER Polysil TG 500
- 2 Levelling KÖSTER Repair Mortar
- 3 Plaster key KÖSTER Restoration Plaster Key
- 4 Plaster KÖSTER Restoration Plaster White
- 5 Fine plaster KÖSTER Fine Plaster
- 6 Paint KÖSTER Silicone Paint White

### 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 KÖSTER Hydrosilicate Tapered Board
- 4 Fine plaster KÖSTER Hydrosilicate Adhesive SK
- Paint KÖSTER Silicone Paint White

#### 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

- 1 Installing the packers KÖSTER Packer 13 mm x 130 mm CH
- 2 Injection Resin KÖSTER 2 IN 1 Alternative: KÖSTER KB-Pox IN
- 3 Pump KÖSTER 1C Injection Pump



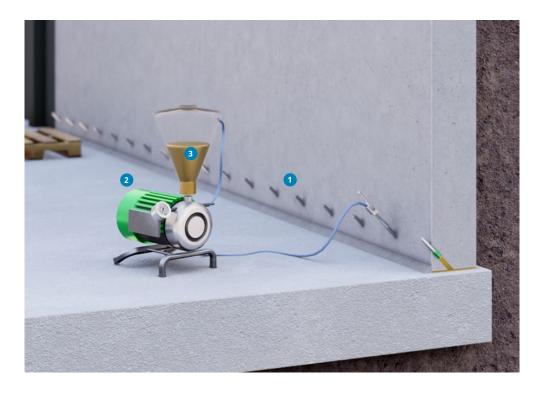
# Pressure injection of water bearing cracks

- 1 Installing the packers
  KÖSTER Packer
  13 mm x 130 mm CH
- 2 Injection Resin KÖSTER 2 IN 1 KÖSTER IN 8
- **3 Pump**KÖSTER 1C Injection Pump





# Waterproofing of construction joints in the wall/floor junction



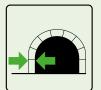
- 1 Installing the packers KÖSTER Packer 13 mm x 130 mm CH
- 2 Pump KÖSTER 1C Injection Pump
- 3 Injection Resin KÖSTER 2 IN 1 Alternative: KÖSTER IN 2

# Waterproofing of construction joints via an injection hose



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

#### **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 KÖSTER Injection Gel S4
- 3 Gel pump KÖSTER Acrylic Gel Pump



# **Masonry Tunnel Construction**

- 1 Area injection KÖSTER Injection Barrier KÖSTER Injection Gel G4 KÖSTER Mortar Boost
- 2 Injection packer KÖSTER Superpacker 10 mm x 85 mm CH
- 3 Injection pump KÖSTER Acrylic Gel Pump
- 4 Void filling KÖSTER Injection Gel G4 KÖSTER Injection Gel S4

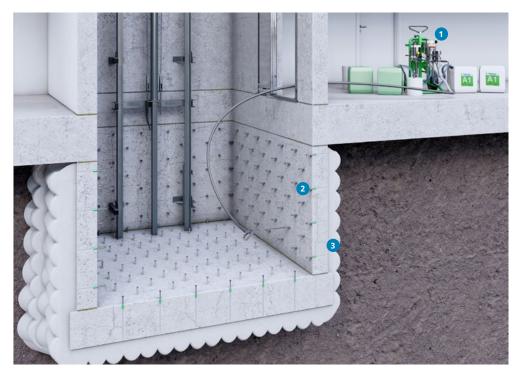


# **External basement waterproofing with** curtain injection



- 1 Pump KÖSTER Acrylic Gel Pump
- 2 Injection packers KÖSTER Lamella Impact Packer KÖSTER Packer 13 mm x 130 mm CH
- 3 Waterproofing layer KÖSTER Injection Gel G4 KÖSTER Injection Gel S4

# Vertical and horizontal curtain injection



- 1 Pump KÖSTER Acrylic Gel Pump
- 2 Injection packers KÖSTER Superpacker 13 mm x 130 mm
- 3 Waterproofing layer KÖSTER Injection Gel G4 KÖSTER Injection Gel S4

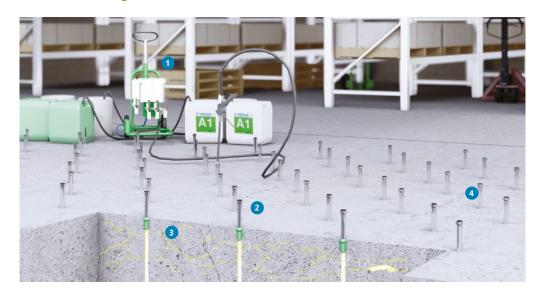
# **Masonry injection**

- 1 Pump KÖSTER Acrylic Gel Pump
- 2 Injection Barrier KÖSTER Injection Barrier
- 3 Injection packers KÖSTER Superpacker 13 mm x 130 mm
- **4 Waterproofing layer** KÖSTER Injection Gel G4
- 5 Filling the boreholes
  KÖSTER KB-Fix 5



# **Concrete injection**

- 1 Pump KÖSTER Acrylic Gel Pump
- 2 Injection packers KÖSTER Superpacker 13 mm x 130 mm CH
- **3 Waterproofing layer** KÖSTER Injection Gel G4
- 4 Filling the boreholes KÖSTER KB-Fix 5



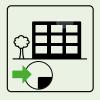
#### Soil stabilization

- 1 Pump KÖSTER Acrylic Gel Pump
- 2 Injection lances
- 3 Injection and stabilization layer

KÖSTER Injection Gel G4



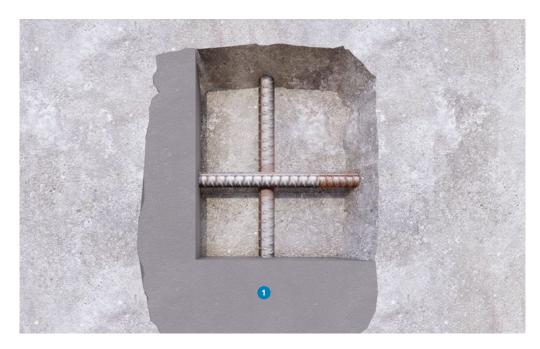
#### **Concrete Repair Systems**



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

#### **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

# **Rough Surface renovation**

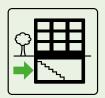
- Rough concrete
   Surface levelling and smoothing
   KÖSTER C-Coat

# High early strength mortar systems (1h)

1 Concrete repair KÖSTER Turbo Mortar F KÖSTER Turbo Mortar M

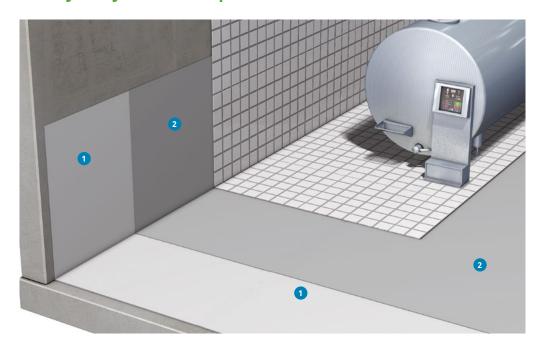


#### **Concrete Protection Systems**



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 KÖSTER PSM 2S+

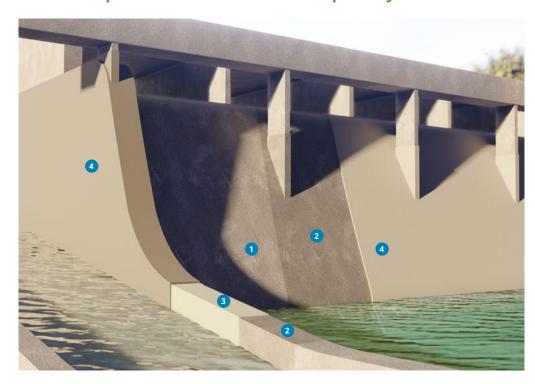
#### Heavy duty acid & corrosion protection for chimneys



- 1 Reprofiling KÖSTER Repair Mortar NC KÖSTER Repair Mortar R4
- 2 Surface protection KÖSTER PSM
- 3 Surface protection KÖSTER PSM 2S+
- 4 Surface levelling and smoothing
  KÖSTER C-Coat
- G Paint
  - KÖSTER Silicone Paint White

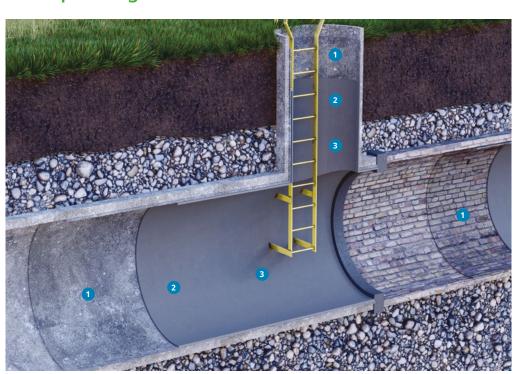
# Concrete protection of dams and spillways

- 1 Substrate
- 2 Primer KÖSTER Polysil TG 500
- 3 Waterproofing layer KÖSTER NB 1 Grey
- 4 Surface protection KÖSTER Repair Mortar R4

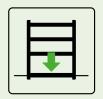


# **Waterproofing Sewers and Shafts**

- 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



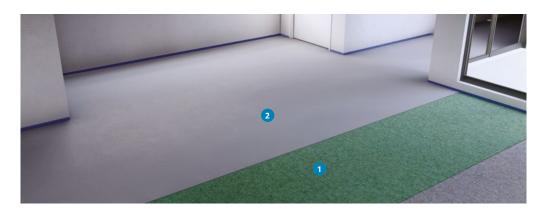
### Self leveling underlayments



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

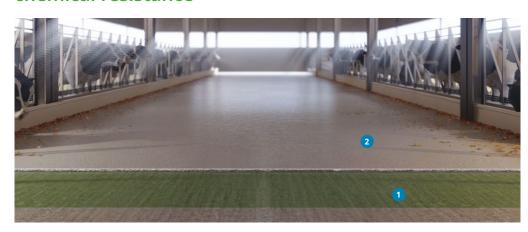
- 1 Primer KÖSTER VAP I 06
- 2 Floor coating KÖSTER SL Premium



### Self-leveling underlayment on wooden substrates



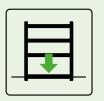
# Self-leveling protective floor with high chemical resistance



- 1 Primer KÖSTER VAP I 06
- 2 Floor coating KÖSTER SL Flex

- 1 Primer KÖSTER SL Primer
- 2 Floor coating KÖSTER SL Protect

#### **Floor coatings**



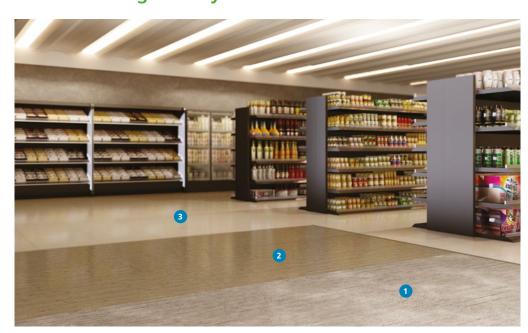
Floor coatings, for example on garages, industrial floors or canteen kitchens usually demand high standards on their resistance, as well as their visual appearance. These floors can be permanently protected against mechanical damage and the penetration of liquids with colored protective coatings.

#### **Moisture Mitigation System**

- 1 Moist concrete with high alkalinity
- **2 Vapour barrier** KÖSTER VAP I 2000 KÖSTER VAP I 2000 UFS
- 3 Floor coating

  KÖSTER LF-VL

  KÖSTER PS Flex



# Floor coatings for balconies, terraces, commercial and private areas



KÖSTER CT 327 1C Sealer

6 Protection

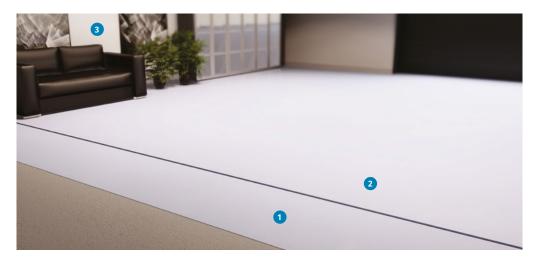
KÖSTER Anti-Slip

Granulate 20

KÖSTER Top Coat 1C Matte



#### Floor coatings which are exposed to moderate stresses

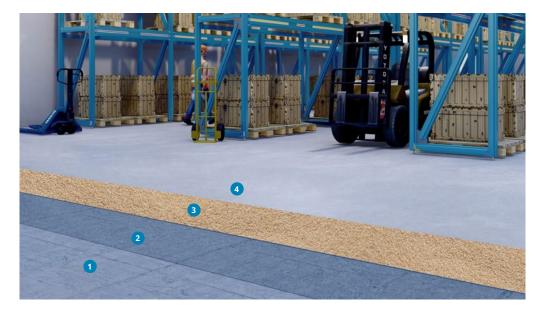


- 1 Primer KÖSTER CT 215 Universal Floor
- 2 Floor coating KÖSTER CT 215 Universal Floor
- 3 Surface protection (wall) KÖSTER Silicone Paint White



- 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 Anti-Slip Granulate 20 KÖSTER TS transparent
- 6 Surface protection (wall) KÖSTER Silicone Paint White

# Floor coatings which are exposed to heavy stresses



- 1 Substrate
- 2 Primer KÖSTER CT 121 KÖSTER VAP I 2000
- 3 Slip resistance (optional) Quartz Sand
- 4 Floor coating KÖSTER LF-VL

### **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



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



# Hygienic protective coating for the food production industry



- 1 Substrate2 PrimerKÖSTER CT 121
- Quartz Sand 0.06 0.36 mm

  3 Broadcast
- Quartz Sand 0.4 0.8 mm

  Top Coat

  KÖSTER CT 221

- 1 Substrate
- 2 Floor coating and underlayment KÖSTER UC 100 KÖSTER UC 300

#### **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

### **Protection system for cooling towers**



- 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
- 6 Painting
  KÖSTER Acrylic Paint

#### 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

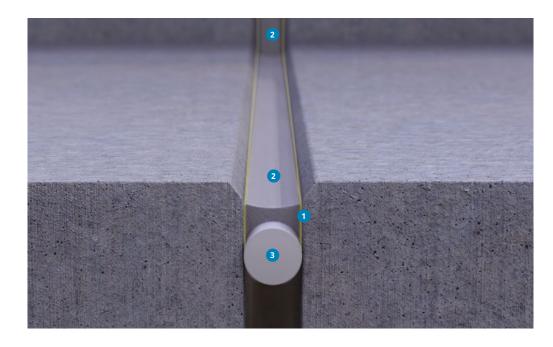
- 1 Primer KÖSTER FS Primer 2C
- 2 Joint sealing KÖSTER Joint Sealant FS-H black

KÖSTER Joint Sealant FS-H grey

KÖSTER Joint Sealant FS-V black

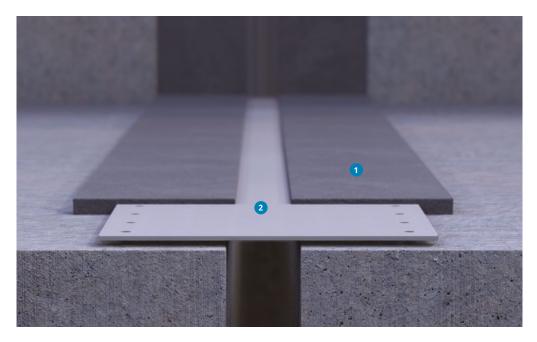
KÖSTER Joint Sealant FS-V grey

3 Backing rod



# Joint sealing on dilatation joints and other moving joints

- Primer
   KÖSTER KB-Pox Adhesive
   Joint sealing
  - KÖSTER Joint Tape 20 KÖSTER Joint Tape 30



# **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

  with B+
- 5 Joint protection
  KÖSTER PU-Flex 25

# Injection of expansion joints



- 1 Injection packer KÖSTER Packer 13 mm x 130 mm CH KÖSTER Superpacker 13 mm x 130 mm CH
- 2 Joint waterproofing KÖSTER Injection Gel S4 with B+

# Waterproofing of cable and pipe penetrations



- 1 Penetration
- 2 Backing
- 3 Waterproofing KÖSTER KB-Flex 200
- 4 Protection layer KÖSTER KB-Fix 5

#### 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 KÖSTER Superfleece

- 3 Waterproofing outside corners
  - KÖSTER BD Outside Corner KÖSTER Superfleece
- 4 Waterproofing inside corners

KÖSTER BD Inside Corner KÖSTER Superfleece

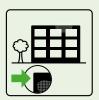
5 Waterproofing wall penetrations

KÖSTER BD Wall Sleeve KÖSTER Superfleece

- **6** Waterproofing floor drains KÖSTER BD Floor Sleeve KÖSTER Superfleece
- 7 Waterproofing layer KÖSTER BD 50 KÖSTER BD 50 Contrast
- 8 Tile adhesive KÖSTER BD Flexible Tile Adhesive



#### **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 KÖSTER Siloxan

### 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

## 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 ECB 2.0

KÖSTER TPO 1.2

KÖSTER TPO 1.5

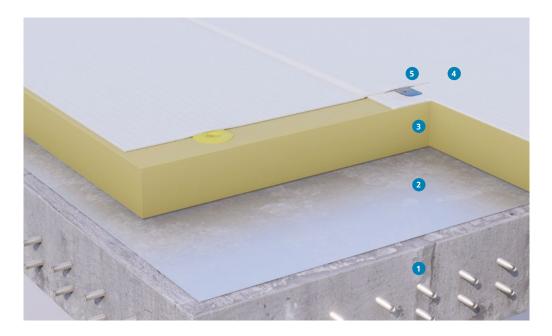
KÖSTER TPO 1.8

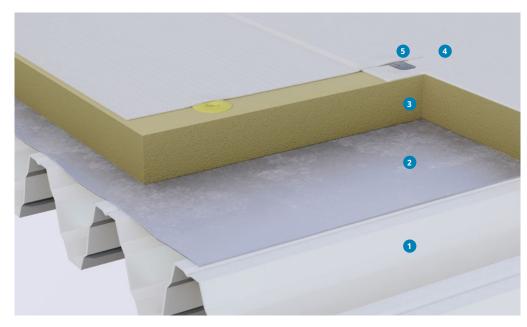
KÖSTER TPO 2.0

KÖSTER TPO Pro 1.5

**KOSTER TPO Pro 1.8** 

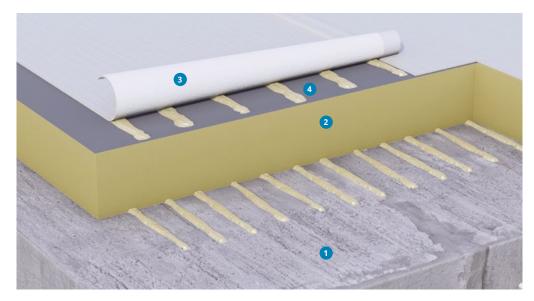








# **Roof waterproofing with bonded membranes**



- 1 Substructure
- 2 Insulation
- **3** KÖSTER TPO Membrane KÖSTER TPO 2.0 F
- 4 Adhesive

KÖSTER 2C PUR Membrane Adhesive KÖSTER PUR Membrane Adhesive

# Roof waterproofing with loose-laid membranes

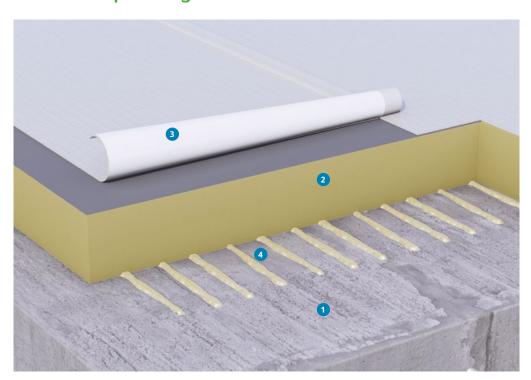


- 1 Substructure
- 2 Vapor Barrier Vapor Barrier FR
- 3 Insulation
- 4 KÖSTER TPO Membrane KÖSTER ECB 2.0 KÖSTER TPO 1.5 KÖSTER TPO 1.8 KÖSTER TPO 2.0 KÖSTER TPO Pro 1.5 KOSTER TPO Pro 1.8
- 5 Protection Layer
- 6 Ballast System



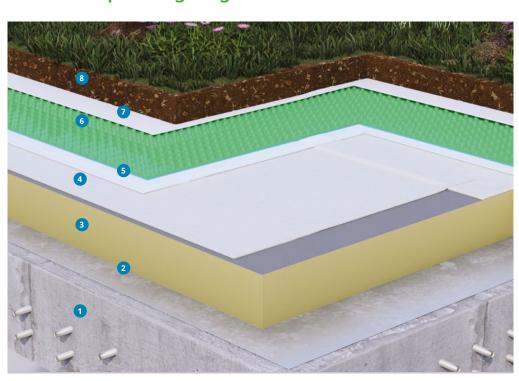
# Roof waterproofing with self-adhered membranes

- 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
  KÖSTER 2C PUR
  Membrane Adhesive

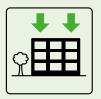


# Roof waterproofing on green roofs

- 1 Substructure
- 2 Vapor Barrier Vapor Barrier FR
- 3 Insulation
- 4 KÖSTER TPO Membrane KÖSTER TPO 1.8 KÖSTER TPO 2.0
- 5 Protection Layer
- 6 Drainage Sheet KÖSTER SD Protection and Drainage Sheet 3-400
- 7 Protection Layer
- 8 Ground / Greenery / Landscaping

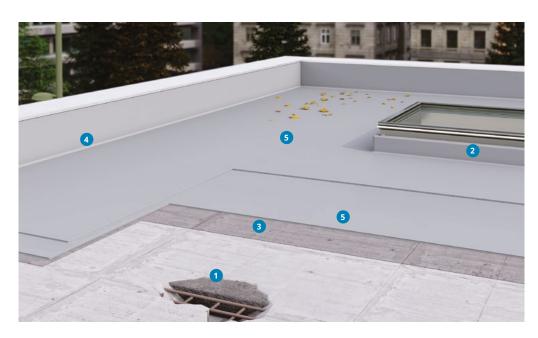


#### Flat roof waterproofing with liquid applied systems



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 Installing fillets KÖSTER WP Mortar
- 3 Primer KÖSTER CT 121
- 4 Waterproofing wall / floor junctions KÖSTER MS-Flexfolie with

KÖSTER Superfleece

5 Waterproofing layer KÖSTER MS-Flexfolie

### Roof waterproofing with resin base 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 Dachflex with KÖSTER Superfleece
- 5 Waterproofing layer KÖSTER Dachflex
- 6 Reinforcement KÖSTER Flex Fabric KÖSTER Glass Fiber Mesh



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