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Method Statement

Positive side waterproofing with KÖSTER 21

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Table of Contents

KÖSTER
Waterproofing Systems

1 General information		**4**
1.1	Scope	4
1.2	Manufacturer	4
1.3	Definitions	4
2 System Description		**5**
2.1	System features	5
2.2	Characteristics/Advantages	5
2.3	Main products and components	5
2.4	Associated products	6
2.5	Associated literature	7
3 Tools and equipment		**8**
3.1	Tools	8
3.2	Equipment	8
3.3	Cleaning	8
4 Environmental, health and safety		**9**
4.1	Personal Protection Equipment (PPE)	9
4.2	Material safety & First Aid	10
4.3	Waste disposal	10
5 Fields of application		**11**
5.1	General examples	11
5.2	Example: Waterproofing balconies and terraces	11
5.3	Example: Waterproofing water tanks	12
5.4	Example: Waterproofing roofs	13
6 Substrate preparation		**14**
6.1	Project site conditions	14
6.1.1	Application temperature	14
6.1.2	Moisture content in substrate	14
6.1.3	Relative humidity	14
6.1.4	Rain and frost	14
6.2	Substrate requirements	14
6.3	Substrate quality testing	14
6.3.1	Scratch test	14

Table of Contents

KÖSTER
Waterproofing Systems

6.3.2	Wipe test	14
6.3.3	Water test	14
6.4	Preparation	15
6.4.1	Concrete surfaces	15
6.5	Levelling and repairing the surface	16
6.6	Corners and fillets	16
6.5	Priming the substrate	16
7	**Application/Installation instructions**	**17**
7.1	Mixing	17
7.2	Applying KÖSTER 21	17
7.2.1	Brush application	17
7.2.2	Trowel application	18
7.2.3	Roller application	18
7.2.4	Spray application	18
7.3	Using KÖSTER Glass Fiber Mesh/KÖSTER Flex Fabric as a reinforcement	19
7.4	Surface details	19
7.4.1	Pipe penetrations	19
7.4.2	Moving joints	20
8	**General consumption guidelines**	**20**
9	**General notes**	**21**
10.1	Material storage	21
10.2	Packaging	21
10.3	Important considerations	21
10.4	Limitations	21
10	**Certifications**	**22**
11	**Appendix**	**22**
12	**Legal disclaimer**	**22**

1 General information

1.1 Scope

This method statement is intended for use by developers, contractors and applicators as a general guideline for the application of the waterproofing product KÖSTER 21.

While this document describes the tools, equipment, materials and process for preparing and installing the waterproofing product, it must be used and referred to, in combination with all other relevant technical information available for the product and its components.

1.2 Manufacturer

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KÖSTER
Waterproofing Systems

1.3 Definitions

Absorption
The process by which one substance, such as a solid or liquid, takes up another substance, such as a liquid or gas, through minute pores or spaces between its molecules. An absorption process is generally reversible.

Crack-bridging
Crack-bridging waterproofing means that a waterproofing system remains intact even though the substrate has cracked. Often "crack–bridging" is confused with "elastic". An elastic material may be far from waterproof when stretched. An elastic material may also be waterproof under normal circumstances, but not once water pressure is applied.

Carbonization
Carbonization explains the reaction between the carbon dioxide from the outside enviroment with the co-products of the hydration process that already exsists in the concrete structure for a long time. This reaction could result in new compounds with lower PH values which affects the PH value of the original concrete, so the base layer around the steel bars is broken and they start to corrode.

Positive Side Waterproofing
Positive Side Waterproofing means that the waterproofing layer is applied to the side of the construction element which is in direct contact to the water.

Solar Reflectance Index (SRI)
It is a measure of the solar reflectance of a material and that indicates how hot the material is likley to be when exposed to direct sun radiation. The lower this indicator is, the hotter the material is expected to be in sunlight.

Volatile organic compounds (VOC)
They are carbon based materials which evaporate easily, most of them are not very toxic but they could be harmful to human health, they are known for low boiling points.

2 System description

2.1 System features

KÖSTER 21 is a 2 component, solvent-free, liquid, elastic, crack-bridging waterproofing material with excellent adhesion on dry and slightly damp substrates for indoors and outdoors. The white color reflects sunlight and heat. The fast-drying film-like coating can be walked on, is highly flexible, resistant to aging, hydrolysis, UV radiation as well as frost and road salt.

KÖSTER 21 waterproofs up to 2 bars water and synthetic oils as well as high boiling aliphatic hydrocarbons. It does not contain volatile organic components (VOC = 0), it is free from polyurethanes, isocyanates and bitumen.

2.2 Characteristics/Advantages

- Easy to apply
- Elastic and crack-bridging (up to 0.4 mm)
- For indoor and outdoor application
- Good adhesion to slightly moist mineral substrates
- Good adhesion to a wide variety of materials
- Resistant to pressurized water
- Hydrophobic (water repelling effect)
- Free of solvents and volatile organic compounds (VOC)
- Does not contain isocyanates or bitumen
- 2 component, fast-curing
- White color, reflects thermal radiation (saves energy)
- Carbonization inhibiting coat
- Versatile application per brush, trowel, roller, or spraying
- Viscosity and workability can be adjusted with water according to jobsite requirements
- Resistant to UV-radiation, salt, hydrolysis, and freeze/thaw effects

2.3 Main products and components

KÖSTER Polysil TG 500
Low viscous, substrate solidifying, salt binding, and hydrophobizing combination product on a polymer/silicate basis for the protection of mineral substrates and priming of mineral substrates before waterproofing with cementitious waterproofing slurries, PMBC, and installation of restoration plasters.

See online

KÖSTER Repair Mortar
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.

See online

KÖSTER Glass Fiber Mesh
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.

See online

KÖSTER 21
Multifunctional waterproofing product for interior and exterior use with excellent adhesion on dry and slightly damp substrates. KÖSTER 21 is a 2-component, solvent-free, liquid-applied, elastic and crack-bridging waterproofing material. The white color reflects sunlight and heat. The fast drying film-like coating is walkable, highly flexible, resistant to aging, hydrolysis, UV radiation as well as frost and road salt. KÖSTER 21 is a waterproofing against water and synthetic oils as well as high boiling aliphatic hydrocarbons water poofs up to 2 bars.

See online

KÖSTER PU-Flex 25
Highly elastic, low modulus polyurethane sealant, with good UV resistance and excellent adhesion to typical construction materials. KÖSTER PU-Flex 25 is one component and cures with moisture to form a flexible sealant that can be overpainted after curing is finished. The sealant is non-sagging, highly thixotropic, easy to smooth, and has good workability.

See online

2.4 Associated products

KÖSTER Brush for slurries

See online

KÖSTER Flex Fabric

See online

KÖSTER FS Primer 2C

See online

KÖSTER Glass Fiber Mesh

See online

KÖSTER Joint Sealant FS-H black

See online

KÖSTER Joint Sealant FS-H grey

See online

KÖSTER Joint Sealant FS-V black

See online

KÖSTER Joint Sealant FS-V grey

See online

KÖSTER Joint Tape 20

See online

KÖSTER Joint Tape 30

See online

KÖSTER KB-Pox Adhesive

See online

KÖSTER KB-Flex 200

See online

KÖSTER KB-Fix 5

See online

KÖSTER NB 1 Flex

See online

KÖSTER Peristaltic Pump

See online

KÖSTER Polysil TG 500

See online

KÖSTER PU-Flex 25

See online

KÖSTER Repair Mortar

See online

KÖSTER SB Bonding Emulsion

See online

KÖSTER Universal Cleaner

See online

2.5 Associated literature

- Technical Data Sheet
- Environmental Product Declaration (EPD): KÖSTER 21
- Product Declaration of Performance: KÖSTER 21
- Product Flyer KÖSTER 21

3 Tools and Equipment

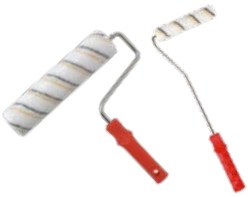
3.1 Tools

KÖSTER Brush for slurries

Rounded trowel

Notched Trowel

Finishing trowel



Roller (150 mm, 250 mm)

Mixing vessels (30 l)

3.2 Equipment

Single paddle mixer

KÖSTER Peristaltic Pump (optional for spray application)

3.3 Cleaning

Clean all tools and equipment immediately after use with water. Cured and hardened material can only be removed mechanically.

4 Environmental, health and safety

4.1 Personal Protection Equipment (PPE)

The following is a short overview of Personal Protective Equipment and serves only as a guideline. Contractors and Employers are responsible for meeting the occupational safety guidelines in their countries, states, and localities.

Eye protection
Employers must be sure that their employees wear appropriate eye and face protection and that the selected form of protection is appropriate to the work being performed and properly fits each worker exposed to the hazard.

Head protection
Employers must ensure that their employees wear head protection if any of the following apply: Objects might fall from above and strike them on the head; they might bump their heads against fixed objects, such as exposed pipes or beams; or there is a possibility of accidental head contact with electrical hazards.

Foot and Leg Protection
Employees who face possible foot or leg injuries from falling or rolling objects or from crushing or penetrating materials should wear protective footwear.

Hand Protection
When selecting gloves to protect against exposure hazards, always check with the manufacturer or review the manufacturer's product literature to determine the gloves' effectiveness against specific workplace chemicals and conditions. Gloves commonly used are: Coated fabric gloves and Chemical - and Liquid - Resistant Gloves

Hearing protection
Suitable hearing protection must be provided for the job environment.

4.2 Material safety & First Aid

Every KÖSTER product is labeled with specific information and symbols as to the related dangers. Please consult the respective Material Safety Data Sheet for specifics.

If inhaled:
Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

After ingestion:
Rinse mouth immediately and drink plenty of water.

In case of contact with eyes:
Rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After contact with skin:
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower).

4.3 Waste disposal

Disposal recommendations
Dispose of waste according to applicable legislation.

Contaminated packaging
Completely emptied packages can be recycled.

List of Wastes Code -
used product (200128)
MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); paint, inks, adhesives and resins other than those mentioned in 20 01 27.

List of Wastes Code -
Used product (170107)
CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES); concrete, bricks, tiles and ceramics; mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06 (according to the German Standards).

5 Fields of application

5.1 General examples

- Waterproofing Basements
- Waterproofing Roofs (with occasional foot traffic)
- Waterproofing steel roofs
- Waterproofing Tanks and basins
- Carbonization inhibiting
- Protection against aliphatic oils
- Waterproofing old aggregate covered bituminous roofing membranes (renovation)
- Waterproofing balconies and terraces, also before installing ceramic tiles

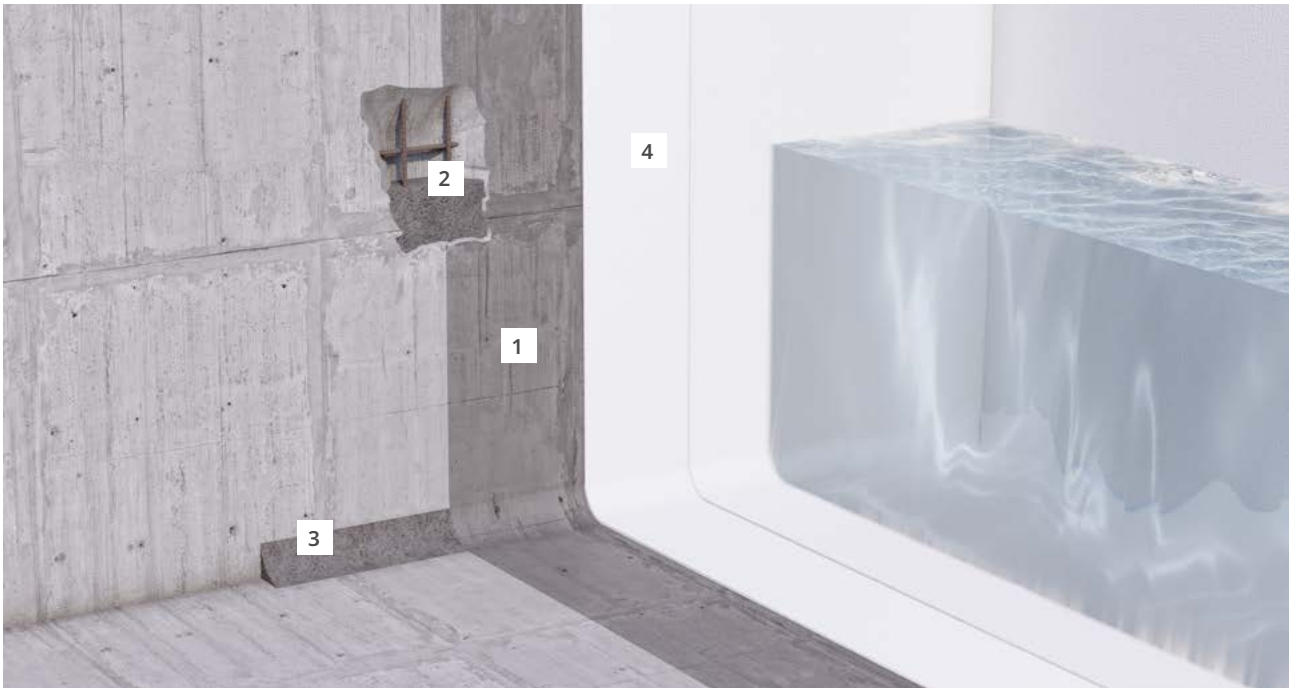
5.2 Example: Waterproofing balconies and terraces

1. Primer/Prewetting	KÖSTER Polysil TG 500 (optional)
2. Concrete repair	KÖSTER Betomor Multi A KÖSTER Repair Mortar R4
3. Levelling underlayment	KÖSTER Repair Mortar KÖSTER SL Protect
4. Waterproofing Layers (first coat)	KÖSTER 21
5. Reinforcement	KÖSTER Flex Fabric KÖSTER Glass Fiber Mesh
6. Waterproofing Layers (second coat)	KÖSTER 21
7. Tile Adhesive	KÖSTER BD Flexible Tile Adhesive
8. Waterproofing wall/floor junctions	KÖSTER Flex Fabric

Installation process:

The substrate is hardened and prepared with the primer KÖSTER Polysil TG 500. Before installing the waterproofing system, concrete repair work is done with KÖSTER Betomor Multi A or with KÖSTER Repair Mortar R4. To level the surface, the self-levelling underlayment KÖSTER SL Protect is highly recommended. Fillets are installed with KÖSTER WP Mortar. Apply a first coat of the KÖSTER 21. In the wall/floor junction and all areas in danger of cracking KÖSTER Flex Fabric is embedded into the fresh first waterproofing layer of the KÖSTER 21. Full area reinforcement is carried out by embedding KÖSTER Glass Fiber Mesh into the first layer of the waterproofing material as well. Apply the second coat of the KÖSTER 21 to cover the whole surface. The final finish with the installation of tiles can be carried out with the flexible adhesive KÖSTER BD Flexible Tile Adhesive.

5.3 Example: Waterproofing water tanks



1. Primer	KÖSTER Polysil TG 500
2. Concrete Repair	KÖSTER Repair Mortar R4
3. Installed fillet	KÖSTER Repair Mortar Plus
4. Waterproofing layer	KÖSTER 21

Installation process:

The substrate is first primed with the KÖSTER Polysil TG 500, to prevent any salts could be present inside the structure from appearing on the surface.

The sufrace imperfections, holes, weak points shall be first repaired with the cementatious mortar KÖSTER Repair Mortar R4. This mortar is charectrized with a high pH value, which protects the steel bars from corroding. The KÖSTER Repair Mortar R4 can be applied up to thickness of 50 mm.

Fillets shall be rounded and prepared using the KÖSTER Repair Mortar Plus.

Make sure that the surface is damp enough before applying the positive side waterproofing product KÖSTER 21, then apply the first coat, leave it to dry for minimum 3 to 24 hours (according to the weather conditions) before applying the second coat.

The second coat shall be applied as soon as it can be done without damaging the first coat.

KÖSTER 21 is certified to be applied in drinking water retaining structure.

5.4 Example: Waterproofing roofs

1. Primer	KÖSTER Polysil TG 500
2. Concrete Repair	KÖSTER Repair Mortar Plus KÖSTER Betomor Multi A
3. Installing fillets	KÖSTER WP Mortar
4. Waterproofing layer (first coat)	KÖSTER 21
5. Waterproofing wall/floor junctions	KÖSTER Flex Fabric
6. Reinforcement	KÖSTER Glass Fiber Mesh
7. Waterproofing layer (second coat)	KÖSTER 21

Installation process:

As a primer, KÖSTER Polysil TG 500 is used. It hardens the substrate and reduces the mobility of salts (optional in case the presence of salts is suspected). Concrete repair work is done with KÖSTER Betomor Multi A or with KÖSTER Repair Mortar R4. The installation of a fillet is done with KÖSTER WP Mortar to prevent stresses in the subsequent waterproofing layers. The first coat of the waterproofing is carried out with KÖSTER 21.

This waterproofing material has the ability to create an excellent bond to damp substrates. In the wall/floor junction and all areas in danger of cracking KÖSTER Flex Fabric is embedded. The installation of KÖSTER Glass Fiber Mesh is recommended between the first and second layer of the waterproofing system. Apply the second coat of the KÖSTER 21 to cover the whole surface.

6 Substrate preparation

6.1 Project site conditions

6.1.1 Application temperature

The waterproofing system should be applied at temperatures between +5 °C and +35 °C. Do not apply cementitious waterproofing when the temperature is lower than +5 °C or expected to fall below this temperature within 24 hours from time of application. Do not apply the material in direct sunlight with temperatures over +35 °C. In hot climates (+35 °C) up to 0.8 liters of water per package can be added in order to extend the time of application. Also, it is recommended not to mix up several buckets at a time while working with the peristaltic pump.

6.1.2 Moisture content in substrate

The substrate must be prepared in such a way that it does not absorb water from the fresh coating. This can be achieved either by prewetting the substrate or by applying a primer to it, for example KÖSTER Polysil TG 500. When pre wetting, the surface must be wet enough that it will remain damp for at least 10 minutes directly before being coated.

6.1.3 Relative humidity

Relative humidity should not exceed 95 % as it may affect the final results and curing process. Low levels of relative humidity increase the risk of water evaporation from the material, consequently increasing the risk of premature drying and shrinkage cracking.

6.1.4 Rain and frost

KÖSTER 21 is water soluble and must be protected from rain before it reaches the full cure. The minimum waiting time before backfilling or the application of screed is 24 hours. The minimum temperature for application and until final cure is +5 °C.

6.2 Substrate requirements

The substrate can be dry or moist, (no puddling water), and must be free of loose particles or other bond inhibiting substances. Soiled substrates must be cleaned down to a solid layer. Clean off dust completely. On interior corners, install a fillet made of KÖSTER Repair Mortar Plus approx. 24 hours prior to the application of KÖSTER 21.

6.3 Substrate quality testing

6.3.1 Scratch test

Scratch the substrate with a nail or something similar. If particles come off the surface or if the fingernail can penetrate the substrate, remove the entire weak or sinter layer.

6.3.2 Wipe test

Wipe with your hand over the substrate. If no particles become detached and if the hand remains clean, then the substrate is acceptable.

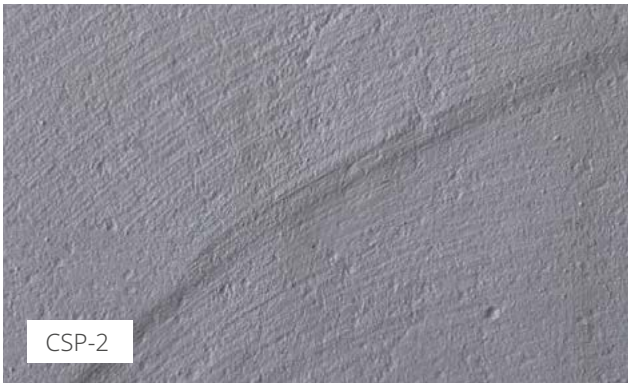
6.3.3 Water test

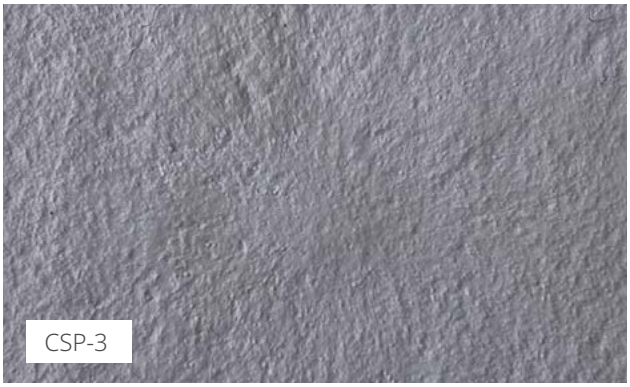
After lightly spraying the surface with water, it can be determined whether there are still separating substances (e.g., formwork oils) on the surface or how strong the absorbency of the substrate is.

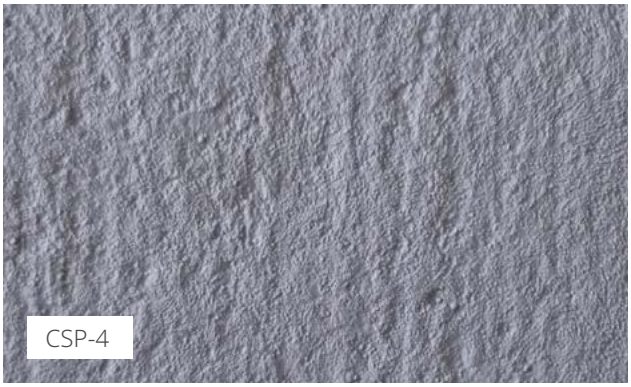
6.4 Preparation

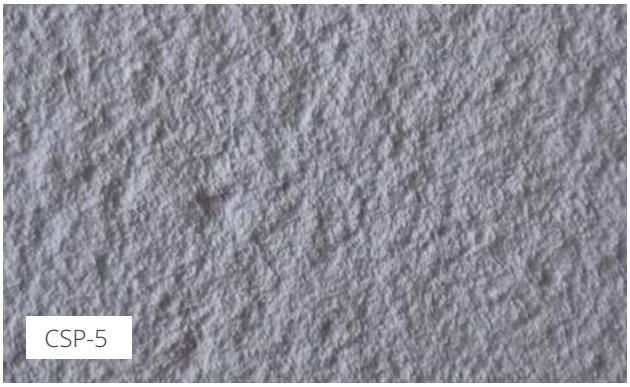
6.4.1 Concrete surfaces

Concrete surfaces must be prepared to have an open pore surface free of laitance. The surface roughness must present a structure corresponding to a Concrete Surface Profile CSP-2, CSP-3, CSP-4 or CSP-5; according to the guidelines by the International Concrete Repair Institute (ICRI). The surface must then be intensively cleaned prior to the installation.









Grinding
Suitable for creating a CSP-1 to CSP-3.

High-pressure water blasting
(at least 350 bar)
Suitable for creating a CSP-3 to CSP-10. In case there is formwork release oil on the surface, apply a suited detergent to the surface before cleaning with the water jet.

Sandblasting or **shotblasting**
Suitable for creating a CSP-2 to CSP-8.

6.5 Levelling and repairing the surface

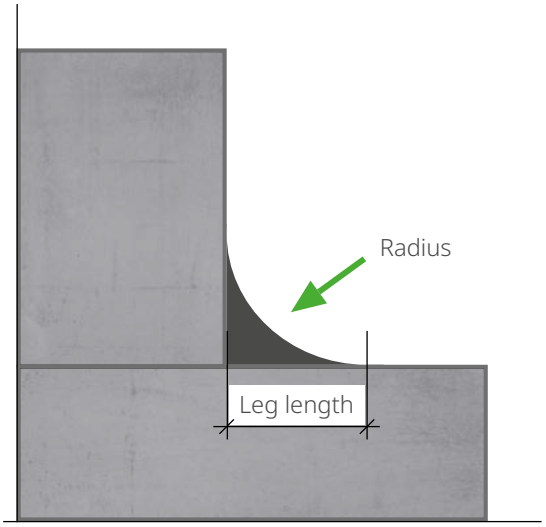
Damaged concrete or plaster areas, honeycombed areas, cavities, recesses and chipped out areas as well as cracks and holes with a depth of more than 5 mm are to be repaired with KÖSTER WP Mortar.

Blowholes and cracks on the surface caused by shrinkage must be treated with a homogeneous and uniform scratch coat of KÖSTER 21.

On areas which are likely to crack, embed KÖSTER Flex Fabric into the fresh first layer. At intersections and details (e.g., wall/floor junctions, pipe penetrations) KÖSTER Flex Fabric or KÖSTER Glass Fiber Mesh can be used. Roofs and balconies are always completely reinforced.

6.6 Corners and fillets

On interior corners a fillet must be installed to reduce stress concentrations in the walls, and therefore in the coating. Install fillets (leg length of approx. 4 - 6 cm) made from KÖSTER Repair Mortar at least 24 hours before applying the KÖSTER 21. Alternatively, they can also be made with KÖSTER Repair Mortar Plus.



6.5 Priming the surface

Cementitious fillets must have dried completely before primers are applied.

Its highly recommended to prime the surface before applying the KÖSTER 21. In case of a strongly salt contaminated and absorbent substrates, apply KÖSTER Polysil TG 500 (consumption 100 - 130 g/m^2, for strongly absorbent substrates up to 250 g/m^2 possible).

The priming layer must be allowed to dry completely. In other cases where no salt contamination is present, just prime the surface with clean water.

The surface should not be dry before applying the KÖSTER 21.

7 Application/Installation instructions

7.1 Mixing

The powder component is slowly added into to the liquid component into a mixing vessel which is large enough to accommodate the liquid and the powder component. Use a clean mixing vessel for each combi package of 20 kg or respectively clean the mixing vessel every time before mixing a new set. Mix it with a slowly rotating electrical mixer (below 400 rpm) so that a lump free, homogenous consistency is achieved. Up to 0.8 liters of water can be added to each 20 kg combi-package to achieve a brushable or sprayable consistency. Use only clean and potable water. Mixing time is a minimum of 3 minutes.

7.2 Applying KÖSTER 21

KÖSTER 21 is applied with a brush, roller, trowel, or other customary mason's tools. The material can also be spray applied. For this, we recommend using the KÖSTER Peristaltic Pump. KÖSTER 21 is applied in 2 coats. The waiting time before application of the second coat depends on the load of conditions of the waterproofed area: min. 3 hours without foot traffic (e.g., vertical areas) and 24 hours before walking on the first layer (according to the surrounding enviromental conditions).

7.2.1 Brush application

KÖSTER 21 is applied in 2 coats by brush. The second coat is to be applied as soon as can be done so without damaging the first coat. The layers must be free of defects, even and in the recommended layer thickness (0.5 mm - 2.0 mm). The actual dry layer thickness must not be less than the recommended minimum and must not exceed it by more than 100 %. It is recommended to make the 2 coats perpendicular to each other.

7.2.2 Trowel application

KÖSTER 21 is applied in 2 coats by toothed or finishing trowel. The size of the toothed trowel is commonly between 6 - 8 mm and is to be chosen according to the desired layer thickness. After distributing the material with the toothed trowel, the material can be smoothed with the finishing trowel for an easier installation of the KÖSTER Glass Fiber Mesh/KÖSTER Flex Fabric reinforcement. The second coat is to be applied the same way as soon as can be done so without damaging the first coat.

7.2.3 Roller application

KÖSTER 21 is applied in 2 perpendicular coats with a roller. The second coat is to be applied the same way as soon as can be done so without damaging the first coat. It is recommended to add a reinforcement layer between the 2 coats, with either KÖSTER Flex Fabric or KÖSTER Glass Fiber Mesh.

7.2.4 Spray application

The material shall be mixed for at least 3 minutes with the KÖSTER Drill Stirrer. KÖSTER 21 can be spray applied in a 2-layer application, to adjust the consistency of the material and prolong its pot life. It is recommended to use clean water, up to 0.8 liters can be added to each 20 kg combi-package to achieve a sprayable consistency. When processing several containers by spray application, intermediate cleaning of the pump equipment after 5 to 10 containers is recommended.

Characteristics	Value
Max. hose length	10 m
Hose diameter	3/4“
Nozzle	8 mm
Speed	Adjusted according to air pressure
Voltage	230 V

7.3 Using KÖSTER Glass Fiber Mesh/KÖSTER Flex Fabric as a reinforcement

Areas prone to or in danger of cracking should have KÖSTER Glass Fiber Mesh or KÖSTER Flex Fabric as a reinforcement to the KÖSTER 21.

Apply the first layer of the KÖSTER 21. Embed KÖSTER Glass Fiber Mesh/KÖSTER Flex Fabric into the first fresh layer. Apply the second layer as soon as it can be done without damaging the first coat to cover the surface of the reinforcement layer completely.

7.4 Surface details

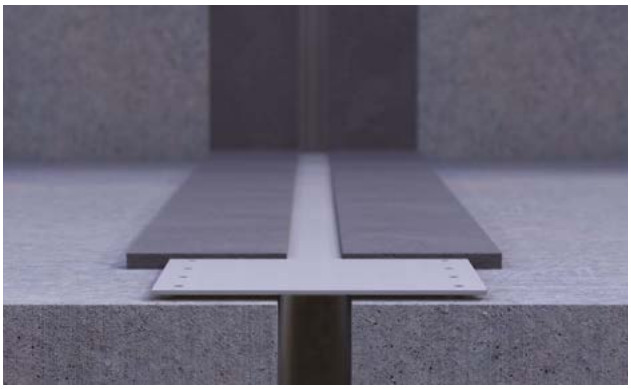
7.4.1 Pipe penetrations

Pipe and cable penetrations can be waterproofed with KÖSTER KB Flex 200. As an additional safeguard and to hold the pipe/cable centered, the exposed material is covered with KÖSTER KB-Fix 5.

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

7.4.2 Moving joints

If dilation joints are present in the structure, these should be sealed with KÖSTER Joint Tapes 20/30 before starting with the application of KÖSTER 21. KÖSTER KB-Pox Adhesive is applied to the prepared substrate on both sides of the joint so that both sides of the KÖSTER Joint Tape 20/30 are embedded into the adhesive at least 40 – 50 mm. The layer thickness of the KÖSTER KB-Pox Adhesive should be approx. 1-2 mm. The KÖSTER Joint Tape 20/30 is then immediately embedded into the fresh adhesive and pressed into the adhesive using a hand roller or a similar suited tool. Make sure that the tape has complete contact to the adhesive. A second layer of KÖSTER KB-Pox Adhesive is then applied on top of the KÖSTER Joint Tape 20/30 so that the edges of the tape are over coated at least 40 – 50 mm. The KÖSTER Joint Tape 20/30 can be installed in the middle with a slightly concave form (omega profile) to allow for greater displacements of the joint. KÖSTER 21 is applied on both sides of the tape. The joint tape remains free in the middle.



8 General consumption guidelines

Approx. 2.2-2.6 kg/m²
Do not exceed layer consumption by more than 100 %.

9 General notes

9.1 Material storage

Store the material frost free at temperatures between +5 °C and +25 °C. In originally sealed packages, the material can be stored for a minimum of 12 months.

9.2 Packaging

20 kg combipackage

1 x 8 kg powder component

2 x 6 kg liquid component

9.3 Important considerations

- KÖSTER 21 is water soluble and must be protected from rain before it reaches the full cure. The minimum waiting time before backfilling or the application of screed is 24 hours. The minimum temperature for application and until final cure is +5 °C.
- KÖSTER 21 can be cured within 3 to 24 hours according to the enviromental conditions, temperature and humidity.

9.4 Limitations

- Do not use if suspected to rain or snow in the next 2 or 3 hours as the fresh coat is sensitive to water and ice.
- Do not apply the material in direct sunlight with temperatures over +35 °C.
- KÖSTER 21 was not developed as a high traffic coat such as a flooring system.
- No gaps caused by substrate imperfections are accepted.
- KÖSTER 21 is not applicable with aromatic hydrocarbons (benzene, xylene, toluene, etc.).

10 Certifications

- **MPA Braunschweig (1202/794-20-1) Test according to DIN EN 1504-2:**
  Surface Protection System for concrete
- **MPA Braunschweig (2301/921/20) Testing for Fire Resistance and Classification of Fire Class:**
  K-2301-921/20-MPA BS
- **Determination of the Solar Reflectance Index (SRI):**
  Fraunhofer Institute (Test Report P15-018e/2013)
- **Test Report 130567/P00857/13**
  From the Croatian Institute for Public Health Appropriate for Drinking Water.

11 Appendix

Technical Data	**Product Name: KÖSTER 21**
Material Class	Universally applicable liquid waterproofing
Temperature range for application	+ 5°C to + 35°C
Consumption approx.	2.5 – 3.0 kg / m^2
Layers	2 / no primer (W)
Color	Pasty White
Solvent-Free	Yes
Can be plastered over	+
Crystallizing properties, penetrates into substrate	No
Mode of application	Trowel, brushable / sprayable
Suitable for negative side waterproofing	Sandwich-Waterproofing
Waiting time until backfilling	>48 hours
Simplicity of application	++
Sd Value Co^2	924 m
Thickness per layer	0.5 mm – 2.0 mm
Density	1.55 g / m cm^3
SRI value	0.93
Substrate	
Masonry	++
Cementitious plaster	++
Concrete	++
Polystyrene	+
Old Bitumen membranes	++
Plaster	++
Concrete or ceramic bricks	+++
Screeds	+++
Old ceramic substrates	+++
Gypsum	Should be removed
Moisture condition of surface	Dry or slightly damp (not wet)
Performance	
Waterproofing against max. load condition	Retained seepage
Time until rainproof	Approx. 3 hours
Chemical resistance	Good
Permeability to vapor diffusion	Medium
UV-resistance	Yes
Abrasion resistance	++
Crack bridging	+++
Embedding of a mesh	Yes

Lower+ Medium++ High+++

In case of highly absorbent substrates prime with KÖSTER Polysil TG 500

12 Legal disclaimer

This method statement reflects general cases with standard parameters. It is not suitable as a step-by-step guide for all and each waterproofing projects as the conditions on site at the moment of the application cannot be foreseen. It is solely the applicator's responsibility to decide on the actual procedure considering the specific situation on the construction site. In any case, KÖSTER's Terms of business are valid and can be viewed under www.koester.eu