KÖSTER
Waterproofing Systems

KÖSTER Mortar Tight

Technical Data Sheet C 788

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Waterproofing additive for renders, screeds and slurries

Features
With KÖSTER Mortar Tight, it is possible to create a waterproof render, screed or simple sealing slurry on the construction site using sand, cement, and water. KÖSTER Mortar Tight is added to the mixture as an additive.

KÖSTER Mortar Tight improves the density of the mortar structure. It makes the mortar water-repellent (hydrophobic) and promotes self-healing of microcracks through crystallization.

As a result, the mortar becomes waterproof and the capillary absorption capacity is reduced.

KÖSTER Mortar Tight is free of chlorides and nitrates.

Technical Data

Color	Milky, green
Density	approx. 1.02 g/cm^3
Processing temperature	+5 °C to +30 °C

Fields of Application
KÖSTER Mortar Tight increases the impermeability of mortars and slurries against ground moisture, hydrostatic pressure, and driving rain. It is used for the production of waterproof renders, screeds and slurries for internal waterproofing, of underground strctures such as basements or swimming pools.

It can also be used externally for the production of water-repellent renders and in various other areas where a waterproof mortar is required, e.g. for tanks, shafts, masonry, etc.

Always ensure that the intended application is in conformance with the requirements of local building control. The performance of KÖSTER Mortar Tight is dependant on correct on-site mixing and application and only high-quality materials should be used.

Substrate
For renders, screeds and slurries made with KÖSTER Mortar Tight, the surfaces and masonry to be treated must be thoroughly cleaned. Damaged joints must be excavated at least 2 cm deep. The substrate must be stable, rough, and free of substances that reduce adhesion, if necessary, roughen the surface.

External corners and edges must be chamfered, and internal corners must have a curved fillet installed using e. g. KÖSTER Repair Mortar Plus.

Prime the surface with KÖSTER Polysil TG 500 to insure and maximize the chemical and mechanical resistance of the substrate, especially on salt burdened substrates.

Application
KÖSTER Mortar Tight is added to the mixing water. The container should be well shaken before use. Ensure a thorough mixing of the mortar afterwards.

For basement and tank waterproofing, a layer of sealing slurry (approx. 2 mm) is applied, followed by a two-layer application of a sealing mortar made with KÖSTER Mortar Tight. The minimum total thickness of the system is 20 mm.

For waterproof floor screeds a layer of sealing slurry (approx. 2 mm) is applied to the concrete, followed by a two-layer, trowel application of a sealing mortar made with KÖSTER Mortar Tight. The minimum total thickness of the system is 30 mm.

For basement waterproofing, the waterproof render should terminate at least 30 cm above external ground level. When waterproofing floor surfaces, the sealing mortar should be extended over the previously installed fillet (with a leg length of at least 4 cm) and continue up the wall at least 20 cm.

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

By volume (approximate values):

	Cement	Sand	Water	KÖSTER Mortar Tight
Sealing mortar	1	1.5	0.4	0.04
Sealing slurry	1	0,3	0.4	0.04
Floor Screed	1	3	0.4	0.04

If the sand is damp, reduce the amount of water accordingly.

By weight (assumed bulk density: cement 1.1 kg/l; sand 1.45 kg/l):

	Cement	Sand	Water	KÖSTER Mortar Tight
Sealing mortar	25 kg	50 kg	10 kg	1.0 kg
Sealing slurry	25 kg	10 kg	10 kg	1.0 kg
Floor Screed	25 kg	100 kg	10 kg	1.0 kg

These mixtures may vary depending on the desired consistency, type, and condition of the cement and mortar sand. Preliminary tests should be conducted. The water-to-cement ratio (w/c value) should not exceed 0.5. Higher w/c values reduce the strength and tightness of the mortar.

The following sieve sizes are recommended for the mortars:
Slurry: grain size 0.2 to 1.0 mm
Render: grain size 0.2 to 2.0 mm
Screed: grain mixtures 0.2 to 4.0 mm (e. g. screed sand)

Cleaning
Clean immediately after use with water.

Packaging
C 788 010 10 kg jerrycan

Storage
Store cool and frost-free in original sealed containers for at least 18 months.

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

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Safety
Wear protective gloves and goggles. Avoid eye contact. Please refer to the safety data sheet for further information.

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