



Technical Data Sheet M 664 020

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M - Restoration of masonry

# **KÖSTER Restoration Plaster White/Light**

# White, light weight restoration plaster for salt- and moisture damaged masonry for hand or spray application

# Features

KÖSTER Restoration Plaster White/Light is a fast setting, salt and pressure resistant restoration plaster for the restoration of heavily moisture and salt burdened substrates. Due to its high porosity and hydrophobicity, KÖSTER Restoration Plaster White/Light allows for the damage free drying and de-salting of masonry even in the case of high salt contents. It improves the insulative properties of the wall and therefore helps prevent the formation of condensate. KÖSTER Restoration Plaster White/Light is free of light fillers and therefore requires no further surface treatment prior to the application of breathable paints or wallpaper which is open to vapor diffusion.

# **Technical Data**

Porosity of fresh mortar	> 30 V-%
Porosity of cured plaster	> 40 V-%
Compressive strength (28 days)	5.0 N / mm <sup>2</sup>
Flexural tensile strength (28 days)	2 N / mm <sup>2</sup>
Modulus of Elasticity	> 5500 N / mm <sup>2</sup>
Setting time	approx. 2 hours
Water consumption per 20 kg bag	4.8 - 5.6 l

#### **Fields of Application**

KÖSTER Restoration Plaster White/Light is suitable for the repair of moisture and salt damaged masonry, also after the post installation of a horizontal barrier with KÖSTER Crisin 76 Concentrate, KÖSTER Mautrol, KÖSTER Mautrol 2C, or KÖSTER Mautrol Flex 2C. It can be applied to reduce the formation of condensate after waterproofing rooms with high humidity using mineral sealing slurries such as the KÖSTER KD System or KÖSTER NB 1 Grey. KÖSTER Restoration Plaster White/Light can also be used as a decorative water repellent exterior plaster. In the case of exterior application we recommend the application of KÖSTER Repair Mortar on the base area up to 30 cm above ground level.

# Substrate

Suitable substrates include concrete, masonry consisting of brick, natural stone, porous concrete block, perforated brick, mixed masonry, etc., sealing slurries such as KÖSTER NB 1 Grey, KÖSTER NB 2 White, or the KÖSTER KD System. Prior to the application of KÖSTER Restoration Plaster White/Light, the substrate is primed with KÖSTER Polysil TG 500 with a minimum consumption of 120 g / m<sup>2</sup>. Apply the KÖSTER Polysil TG 500 until the surface is saturated. In the case of strongly absorbent substrates the consumption can be up to 250 g / m<sup>2</sup>. Loose particles and salt efflorescence should be removed mechanically prior to the beginning of the restoration. Substrates containing gypsum are not suitable substrates and the gypsum must be removed.

# Application

Directly after priming the substrate with KÖSTER Polysil TG 500 the key coarse is applied. The key coarse is made of KÖSTER Restoration Plaster White/Light and KÖSTER SB Bonding Emulsion diluted in water with a ratio of 1 : 3. The Key Course is cast onto the substrate with a brush or a trowel so that the plaster key is no thicker than 5 mm

and covers approximately 50% of the area, (Consumption approx. 2.5 - 3.0 kg / m<sup>2</sup>). Alternatively, the KÖSTER Restoration Plaster Key Coarse can be used (Consumption approx. 4 - 6 kg / m<sup>2</sup>). After hardening the KÖSTER Restoration Plaster White/Light can be applied.

Mix each 20 kg bag of KÖSTER Restoration Plaster White/Light with 4.8 - 5.6 l of fresh water. The plaster is usually applied in two coats with a total layer thickness of approx. 2.5 cm; the thickness should be at least 2 cm. After casting the plaster onto the substrate, it is trued using a feather edge, a straight edge, or a long float trowel. Once the plaster starts to set it is smoothed using a float. Do not use a felt or sponge float to smooth the surface. Do not re-wet the surface after the initial floating. If several layers of plaster are to be applied, the lower layer is roughened thoroughly by scratching immediately after it begins to set. Interior surfaces can be smoothed using KÖSTER Fine Plaster. KÖSTER Fine Plaster must be applied either within 3 days after the application of the last coat of KÖSTER Restoration Plaster White/Light or after the restoration plaster has cured for 28 days.

#### Machine processing

For plastering machines, the water adjustment values must be set in such a way that a consistent consistency is achieved. The settings to be selected depend on the machine, the type of rotor, and the wear of the stator.

Suitable plastering machines are, for example, the PFT G4 or G5 with Rotoquirl after-mixer, Putzknecht S 48.3 or S 58 each with after-mixer R 3 , > stockbig No.1-400 with after-mixer or comparable machine types from other manufacturers. Rotor / stator must be with air inlet.

#### Repair against capillary rising moisture

Immediately following the closure of the drill holes with KÖSTER KB-Fix 5, the salt treatment and substrate consolidation can be carried out with KÖSTER Polysil TG 500, (minimum consumption 120 g / m<sup>2</sup>, for strongly absorbent substrates up to 250 g / m<sup>2</sup>). Immediately afterwards, a key coat made from KÖSTER Restoration Plaster white / light and KÖSTER SB Bonding Emulsion (diluted 1: 3 with water) can be applied, (consumption: approx. 2.5 - 3.0 kg / m<sup>2</sup>), after another 24 hours waiting time KÖSTER Restoration Plaster White / Light is applied in one or two layers with a minimum total layer thickness of 2 cm.

#### Reduction of condensation (after waterproofing with the KÖSTER KD System or KÖSTER NB 1 Grey)

Waterproofing against pressurized, flowing water is carried out using the KÖSTER KD System. Waterproofing against non-pressurized and pressurized water after stopping active water ingress is accomplished with KÖSTER NB 1 Grey and KÖSTER Polysil TG 500. Approx. 24 hours after completing the waterproofing, the application of the KÖSTER Restoration Plaster is carried out, (consumption and

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processing see above). After a further 24 hours, the spray plaster can be reworked with KÖSTER Restoration Plaster white / light. The restoration plaster surface obtained after floating and hardening can be reworked without further pretreatment with vapor permeable paints and wallpapers.

#### Aftertreatment

If aftertreatment is required or desired, for example due to very dry conditions, the plaster can be treated according to the general practice for mortars, such as covering with a thin PE sheet.

# Consumption

Approx. 8 kg / m<sup>2</sup> per cm layer thickness

On uneven surfaces additional consumption may have to be considered for levelling the surface.

#### Cleaning

Clean tools immediately after use with water.

Packaging M 664 020

20 kg bag

#### Storage

Store the material in a dry environment. In originally sealed packages, the material can be stored for a minimum of 12 months.

#### Safety

Wear protective gloves and goggles when processing the material. Observe all governmental, state, and local safety regulations when processing the material.

# **Related products**

KÖSTER KB-FIX 5	Prod. code C 515 015
KÖSTER Polysil TG 500	Prod. code M 111
KÖSTER Restoration Plaster Key Coarse	Prod. code M 154 025
KÖSTER Crisin Cream	Prod. code M 278
KÖSTER Crisin 76 Concentrate	Prod. code M 279
KÖSTER Fine Plaster	Prod. code M 655 025
KÖSTER Façade Cream	Prod. code P 200
KÖSTER Silicone Paint White	Prod. code P 260 010
KÖSTER KD System	Prod. code W 219
KÖSTER NB 1 Grey	Prod. code W 221 025
KÖSTER NB 2 White	Prod. code W 222 025
KÖSTER Repair Mortar	Prod. code W 530 025
KÖSTER SB Bonding Emulsion	Prod. code W 710

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