



# **KÖSTER Restoration Plaster White/Light**

Technical Data Sheet M 664 020

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

> 30 V-% Porosity of fresh mortar Porosity of cured plaster > 40 V-% Compressive strength (28 days) 5.0 N / mm<sup>2</sup> Flexural tensile strength (28 days)  $2 N / mm^2$ Modulus of Elasticity  $> 5500 \text{ N} / \text{mm}^2$ approx. 2 hours Setting time Working time (23 °C, 65 % RH) approx. 60 minutes + 5 °C Minimum application temperature Water consumption per 20 kg bag 5.0 - 5.5 |

# **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, 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. Loose particles and salt efflorescence should be removed mechanically prior to the beginning of the restoration. 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 /  $\rm m^2$ . 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 /  $\rm m^2$ . Substrates previously treated with KÖSTER NB Waterproofing Slurries do not require subsequent application of KÖSTER Polysil TG 500. Substrates containing gypsum are not suitable substrates and the gypsum must be removed.

Breakouts, surface imperfections greater than 5 mm and raked out joints should be filled flush with KÖSTER Restoration Plaster Grey/Light or KÖSTER Repair Mortar. Leave the surface rough and allow to harden before the application.

# **Application**

# KÖSTER Restoration Plaster Key

A plaster key is a thin slurry which is used as a bonding bridge between the substrate and the Restoration Plaster. The KÖSTER Restoration Plaster Key is cast onto the substrate with a brush or a trowel (Consumption approx. 4-6 kg /  $m^2$ ) so that the plaster key is no thicker than 5 mm and covers approximately 50% of the area. After hardening (approx. after 30 to 60 minutes) the Restoration Plaster can be applied.

The key can also be made of KÖSTER Restoration Plaster Grey with the addition of max. 10% KÖSTER SB bonding emulsion added to the mixing water (Consumption approx. 3 kg /  $m^2$ ). 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 /  $m^2$ ). After hardening the KÖSTER Restoration Plaster White/Light can be applied.

Mix each 20 kg bag of KÖSTER Restoration Plaster White/Light with 5.0 - 5.5 l of fresh water. The plaster is usually applied in two coats with a total layer thickness of approx. 2.5 cm. The layer thickness should be at least 2 cm. and maximum 3 cm. For layers thicker than 2.5 cm, it is recommended to apply in two layers. The second layer is applied within 24 hours or after 28 days. 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.

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 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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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 /  $\rm m^2$ , for strongly absorbent substrates up to 250 g /  $\rm m^2$ ). 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 /  $\rm m^2$ ), 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 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 / m² 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.

# Other

Shrinkage / hairline cracks are not a defect as they are harmless and do not affect the system properties. KÖSTER Restoration Plasters contain quartz sand which, as natural raw materials, can contain traces of pyrite or other inclusions.

# Related products

KÖSTER KB-Fix 5 Prod. code C 515 015
KÖSTER Polysil TG 500 Prod. code M 111
KÖSTER Restoration Plaster Key Prod. code M 154 025
KÖSTER Crisin Cream Prod. code M 278

KÖSTER Crisin 76
KÖSTER Fine Plaster
KÖSTER Façade Cream
KÖSTER Silicone Paint White
KÖSTER KD System
KÖSTER NB 1 Grey
KÖSTER NB 2 White
KÖSTER Repair Mortar
KÖSTER SB Bonding Emulsion

Prod. code M 279
Prod. code M 655 025
Prod. code P 200
Prod. code P 260 010
Prod. code W 219
Prod. code W 221 025
Prod. code W 222 025
Prod. code W 530 025
Prod. code W 710

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