

KÖSTER

Restoration Plaster "E" Grey

Technical guideline / Article number **5.068**
Stand: 01st November 2005 Draft

Water repellent restoration plaster for renovation of salt-damaged and moisture-penetrated masonry

Features

KÖSTER Restoration Plaster "E" Grey is ex factory a ready mixed water repellent plaster with very good application characteristics. The material is easily and quickly mixed and it can be hand- or machine-applied. Due to the hydrophobic characteristic of the plaster, water in liquid form is not absorbed. The plaster can be applied in one or several layers. The factory production guarantees an always uniform quality.

Advantages of application

KÖSTER Restoration Plaster "E" Grey is mixed quickly and easily; it can be easily hand- or machine-applied and it is stable enough to be applied in a thickness of a few centimetres in one coat. It is applied in one or several coats, levelled smooth or structured.

Mode of functioning

The pore-hydrophobic restoration plaster pushes the liquid water back into the building material of the wall due to its higher surface tension but due to its high air pore content (porosity > 40 %) in combination with the dry plaster material, a considerable vapour circulation takes place. The building material of the wall can thus dry out via evaporation.

Field of application

KÖSTER Restoration Plaster "E" Grey is designed for restoring salt damaged and moisture penetrated masonry. It can be used to plaster rooms in which high humidity is expected like bathrooms, kitchens, basements etc.; it helps to avoid the formation of condensate. It is suited for rooms which are not continually heated, e. g. bedrooms, churches, holiday flats etc.; the material is also suited to be applied on top of the KD-system. It can be applied as a accompanying measure after waterproofing against rising damp using capillary water barriers. It is suited for new building as well as for repair. KÖSTER Restoration Plaster "E" Grey can not be used as waterproofing against pressurized water.

Substrate preparation

When restoring masonry, first remove the existing plaster, then clean out the joints approx. 2 cm deep and carry out a salt treatment using KÖSTER Salt Stop. After that, best "fresh in fresh"

but at the latest after 3 hours, apply a coat of plaster key with a coverage of max. 50 % onto the masonry which was treated with KÖSTER Salt Stop. The plaster key should be made of KÖSTER Restoration Plaster "E" Grey with 30 % KÖSTER SB Bonding Emulsion "Concentrate" added to the mixing water. Strongly absorbent substrates have to be pre-wetted.

Restoration of the inside of old buildings

For the restoration of moisture-penetrated and salt-damaged masonry, KÖSTER Restoration Plaster "E" Grey is used in combination with other products from the KÖSTER restoration product line such as KÖSTER KD-system, KÖSTER Mautrol® Liquid Sealant, KÖSTER Crisin® 76, KÖSTER Salt Stop.

Plastering the inside of new buildings

On top of a plaster key with a coverage of max. 50 % which is allowed to cure for min. 24 hours, KÖSTER Restoration Plaster "E" Grey is applied in one or several layers.

Application after waterproofing against rising damp

First, a barrier against rising damp is installed in the lower area of the masonry according to the respective technical guidelines using KÖSTER Mautrol® Liquid Sealant or KÖSTER Crisin® 76. Then the existing plaster is removed, bridle jointing mortar is raked out and brushed off. Then the salt treatment is carried out using KÖSTER Salt Stop. On top of the subsequently applied plaster key, KÖSTER Pre-Plaster is applied in a layer thickness of approx. 1 cm; after the KÖSTER Pre-Plaster begins to set, the surface is roughened thoroughly. Before applying KÖSTER Restoration Plaster "E" Grey in a layer thickness of min. 1 cm, a waiting time of min. 1 day per mm of layer thickness of the KÖSTER Pre-Plaster has (according to the WTA-guideline) to be observed.

Application against pressurized water from the side

The waterproofing against pressurized, flowing water, even if it occurs only occasionally, is done using the KÖSTER KD-System. On top of the plaster key, which is applied on top of the KÖSTER

KD-system, the KÖSTER Restoration Plaster "E" Grey is applied at the earliest after 24 hours. KÖSTER Restoration Plaster "E" Grey results in an improved heating insulation and it is effective against the formation of condensate.

Application

KÖSTER Restoration Plaster "E" Grey is mixed with water into an easy to apply mortar. For mixing, a compulsory mixer should be used.

Per 30 kg bag, approx. 4.8 l of water are required. A mixing time of approx. 5 minutes should be observed.

The plaster is generally applied in two coats with a total thickness of approx. 2.5 cm; the total layer thickness should be at least 2.0 cm.

After throwing the plaster on, it is levelled using a feather edge and after sufficient setting it is smoothed using a float. If several layers of plaster are applied, the lower layers must always be roughened thoroughly immediately after they begin to set.

Curing / after-treatment

In case of dry weather, wind and exposure to the sun, an after-treatment through wetting and possibly through shading is necessary. The surface can be shaped by a specially structured layer of restoration plaster or by a permanently permeable lime-based or mineral-based paint. Paints should be applied at the earliest after 28 days.

Water vapour impermeable layers, like e. g. synthetic plasters and vapour retardant dispersion paints, should not be applied since the effect of the plaster would be limited thereby.

Consumption

Approx. 12 kg of dry mortar / m² per cm of plaster layer thickness

Cleaning of tools

Clean tools immediately after use with water.

Packaging

30 kg bag (only purchase of whole pallets (40 bags per pallet))

Storage

Store the material in a dry place; if stored in originally sealed packages, it can be stored for approx. 6 month.

Technical guidelines cited

KÖSTER SB Bonding Emulsion „Concentrate“	Art.-No.	2.11
KÖSTER KD-System	Art.-No.	3.01
KÖSTER Crisin® 76	Art.-No.	3.081
KÖSTER Mautrol® Liquid Sealant	Art.-No.	3.041
KÖSTER Salt Stop	Art. No.	4.13
KÖSTER Pre-Plaster	Art.-No.	5.055

The accurate and thereby effective and successful application of our products is not subject to our control. The guarantee can therefore only be applied to the quality of our products within the scope of our terms and conditions, not, however, for their effective and successful application. These guidelines replace all previous ones.