Cartridge System with KÖSTER Mautrol® Liquid Sealant

System description
Updated: 01st of January 2007

- Official certificate of inspection, AMPA, Hanover – damp proofing
- Industry classification "MAUTROL" registered at the German patent office, K 50 862
- Capillary rods registered at the German patent office nr. 43 06 687

Self dosing waterproofing against rising damp

Features

KÖSTER Mautrol® Liquid Sealant is a very thin, deeply penetrating silicifying liquid with hydrophobing effect. It effectively seals off rising damp. The material is injected via boreholes into the masonry. It spreads into the capillaries of the construction material and it reacts to form insoluble and water repellent compounds.
Besides the hydrophobing effect, KÖSTER Mautrol® Liquid Sealant considerably strengthens the damaged construction members. KÖSTER Mautrol® Liquid Sealant does not attack steel reinforcements.
KÖSTER Mautrol® Liquid Sealant Cartridges are delivered ready-for-use and enable easy adjustment of the consumption.

Technical Data

Viscosity	approx. 80 mPa.s
Type of effect	narrowing of pores / hydrophobing of pore walls
ph-value	approx. 11

Field of application

KÖSTER Mautrol® Liquid Sealant is used to seal off rising damp in masonry up to a damage level of approx. 1 % (by mass) salt content and 50 % moisture content (equals approx. 5 – 8 % water content by mass).
KÖSTER Mautrol® Liquid Sealant Cartridges are suitable for application in all types of masonry except for those that contain loam mortars.

Application

Depending on the thickness of the wall, holes are drilled into the masonry at a distance of max. 12.5 cm from each other (see the table overleaf) with a diameter of 14 mm and at an angle of approx. 30 ℃ (to a depth of approx. 5 cm less than the thickness of the wall). The holes are flushed out with clean water or blown clear with pressurised air.
If a subsequent horizontal barrier is to be installed in a lime-free substrate - such as e. g. tuff or non-alkali, old masonry - then the boreholes are filled with lime water after cleaning.

Application case 1

Masonry free of voids and cracks:

After drilling the holes, the cartridges are put in place and are left in the masonry until they are completely empty.

Application case 2

Masonry free of voids, but cracked or very porous masonry:

In the cleaned boreholes, KÖSTER Capillary Rods are inserted so that approximately the first 4 cm of the borehole are left clear. Then the KÖSTER Capillary Rods are saturated with clean water. After that, the cartridges are put in place and are left in the masonry until they are completely empty. The capillary rods can remain in the masonry after application of the material.

Application case 3

Masonry with voids:

The boreholes are filled with KÖSTER Mautrol® Borehole Suspension and are drilled open after a setting time of approximately 30 minutes up to a maximum of 3 hours. Then the cartridges are put in place and are left there until they are completely empty.

After the waterproofing is done, the boreholes are closed with KÖSTER KB-Fix 5.

Packaging

0.55 kg cartridge = 28 units / carton

Storage

Store the material in a cool but frost-free place; it can be stored for 2 years.

Cleaning of tools

Clean tools immediately after use with water.

Consumption (max.)

Approx. 0.1 kg / m per cm of wall thickness

Safety

KÖSTER Mautrol® Liquid Sealant is alkaline and thus acts corrosively. When processing the material, wear gloves. In case of splashes on the skin or in the eyes, flush off the material with a lot of water. Protect surroundings from splashes.

Please note

Due to the chemical composition of KÖSTER Mautrol® Liquid Sealant, visible discolorations (efflorescence) can take place which possibly can not be removed.

Technical guidelines cited

KÖSTER Mautrol® Liquid Sealant	Art.-No. 3.041
KÖSTER Mautrol® Borehole Suspension	Art.-No. 3.05
KÖSTER KB-Fix 5	Art.-No. 5.015
KÖSTER Capillary Rods	Art.-No. 11.06

Wall thickness including interior/exterior plaster	∅ the drill holes	Drill holes per metre	Distance between drill holes from centre of the hole to centre of the hole (horizontal)	Cartridges per metre	Cartridges per drill hole	Consumption of capillary rods (48 cm)
	[mm]	[unit]	[cm]	[unit]	[unit]	[unit per m]
to 10 cm	14	8	12.5	8	1	1
to 20 cm	14	8	12.5	8	1	2
to 30 cm	14	8	12.5	8	1	4
to 40 cm	14	9	11.0	9	1	7
to 50 cm	14	11	9.0	11	1	11
to 60 cm	14	13	8.0	13	1	16
to 70 cm	14	15	7.0	15	1	22
to 80 cm	14	17	6.0	17	1	29
to 90 cm	14	19	5.5	19	1	37
to 100 cm	14	21	5.0	21	1	46

PLEASE NOTE: For wall thicknesses of more than 24 cm, the use of the KÖSTER Suction Angle System is recommended.

KÖSTER BAUCHEMIE AG · Dieselstr. 3 - 10 · D - 26607 Aurich · Germany
Tel. + 49 4941 9709 0 · Fax + 49 4941 9709 40 · info@koster.eu – www.koster.eu