

Suction angle system with KÖSTER Mautrol® Liquid Sealant

System description

Updated: April 1, 2010

- Official certification report, AMPA, Hanover – damp proofing
- Industry classification "MAUTROL" registered at the German patent office, K 50 862
- Capillary rods - German patent Nr. 43 06 687

Self-dosing waterproofing against rising damp

Features

The suction angle system allows for quick and safe waterproofing against rising damp.

The system's most important feature is its special adaptability to the specific requirements of the project at hand.

Using the suction angle system,

- the depth of the drill hole is reduced drastically.
- the actual required drill depth can be exactly calculated and adhered to.
- the horizontal barrier can be placed directly in the horizontal joint between the first and second row of bricks.
- the holes can all be drilled from one side, even in case of greater wall thicknesses.
- time and materials are saved.

Technical Data

Type of effect	narrowing of pores / hydrophobing of pore walls
Viscosity	80 mPa·s (compared to water: 1 mPa·s)
ph-value	11

Field of application

The system can be used for waterproofing against rising damp in masonry with continuous horizontal joints. Fissures or cavities do not compromise the functionality of the system.

Application

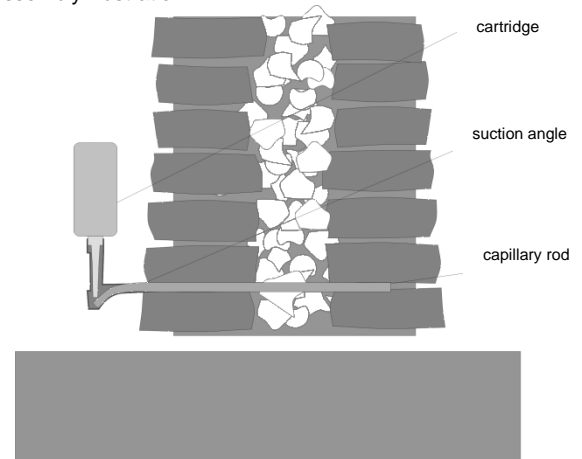
Drill horizontal holes (14 mm diameter) according to the table overleaf in the lowest horizontal joint with a depth of 5 cm less than the thickness of the masonry and clean the holes by flushing with compressed air or briefly with water.

The capillary rods are measured and cut at least 7 cm longer than the depth of the drill hole.

Now insert the end of the capillary rod into the suction angle's supply tank and then push the capillary rod and the suction angle together into the drill hole so that the suction angle is securely stuck in the hole. (The suction angles are reusable.)

Now fill the supply tank with water twice in short intervals in order to achieve a rapid swelling of the capillary rods. After about 15 minutes, place the KÖSTER Mautrol® Liquid Sealant Cartridges in the suction angle's clamping device, so that a firm contact to the capillary rod is achieved.

Assembly illustration:



Remove the cartridges after approximately 12 - 48 hours (when completely empty).

After the injection, the capillary rods can remain in the masonry.

Protruding ends can be pulled out and cut off so that the drill holes can be closed with KÖSTER KB-Fix 5.

Cleaning of tools

After the injection is finished, the suction angles can be cleaned with water and then be reused.

Packaging

KÖSTER Mautrol® Liquid Sealant Cartridge	0.55 kg cartridge = 28 units / carton
KÖSTER Suction Angle	individual delivery
KÖSTER Capillary Rods (48 cm)	50 units
KÖSTER Capillary Rods (96 cm)	50 units

Storage

Store the material cool but frost free. In originally sealed packages, it can be stored for approx. 2 years.

Safety

Wear protective gloves and safety goggles during processing.

Please note

During the drying process above the horizontal waterproofing barrier built with KÖSTER Mautrol® Liquid Sealant, salts which are already present in the wall can effloresce on the surface of the wall causing damage.

Consequential damage can be avoided by taking accompanying measures with KÖSTER Polysil® TG 500 as well as KÖSTER Restoration Plaster systems.

It is important to make sure that restoration plaster is applied after KÖSTER Mautrol® Liquid Sealant has fully reacted (after 7 days at the earliest). This prevents the migration of the injection fluid and a resulting discolouration of the plaster.

Technical guidelines cited

KÖSTER Mautrol® Liquid Sealant	Art.-No.	3.041
KÖSTER Polysil® TG 500	Art.-No.	4.011
KÖSTER KB-Fix 5	Art.-No.	5.15
KÖSTER Restoration Plaster	Art.-No.	5.06
KÖSTER Capillary Rods	Art.-No.	11.06

Wall thickness including interior and exterior plaster	Ø 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*	2
to 20 cm	14	8	12.5	8	1*	4
to 30 cm	14	8	12.5	8	1*	5
to 40 cm	14	8	12.5	8	1	7
to 50 cm	14	10	10.0	10	1	11
to 60 cm	14	11	9.0	11	1	14
to 70 cm	14	13	7.5	13	1	20
to 80 cm	14	15	6.5	15	1	26

* If necessary, proportionally less than one cartridge can be applied.

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.