



KEMASAN 580

Drying plaster

- ▶ Conforms to the requirements for R plasters, in accordance with the standard EN 998-1:2004
- ▶ Mandatory mixing in free-fall (drum) mixer minimum 10 minutes
- ▶ Manual application, layer thickness minimum 2 cm
- ▶ Years of references
- ▶ Application approx. 0,7 m above visible damage
- ▶ Also suitable as final coating (rougher appearance and structure)



PRODUCT DESCRIPTION	Drying plaster based on hydraulic binding agents with high content of special open micro pores.
FIELD OF USE	For restoration of plasters damaged by capillary moisture and for protection of new constructions in areas exposed to moisture and salt. For internal and external render, plynth plaster, cellar plaster, vault plaster. For all types of walls (brick, stone, concrete). Not suitable for restoration due to water ingress.
PRODUCT	<ul style="list-style-type: none"> • Conforms to the requirements for R plasters, in accordance with the standard EN 998-1:2004
PROPERTIES	<ul style="list-style-type: none"> • Mandatory mixing in free-fall (drum) mixer minimum 10 minutes • Manual application, layer thickness minimum 2 cm • Years of references • Application approx. 0,7 m above visible damage • Also suitable as final coating (rougher appearance and structure)

PRODUCT DATA		
BASIC INFORMATION	Appearance	Grey powder
	Packing	30 kg in bag (plastificated) / 1260 kg (42 x 25 kg) on pallet
	Storage and expiration date	12 months from date of production if stored properly in undamaged original sealed packaging in dry and cool conditions. Date of production is printed on packaging.
TECHNICAL DATA	Type of product	Hydraulic binder based plaster
	Bulk density of powder	1,68 kg/l (at + 20°C) EN 1015-1:1999
	Weight of hardened mortar	1,30 kg/l (at + 20°C) EN 1015-11:1999
	Grain size	D _{max} : 3,15 mm EN 1015-1:1999
	Layer thickness	2-5 cm
	Contents of air pores in fresh mortar	approx. 30-35 vol. % EN 1015-7:1999
	pH (at 20°C)	11-13,5 pri 20°C
	Compressive strength	4,5 MPa (CS II) EN 1015-11:2001
	Strength of adhesion - to brick	>= 0,2 MPa; MP:A EN 1015-12:2001
	Capillary water absorption due to capillary action	>= 0, 34 kg/m ² *24h EN 1015-18:2004
	Water vapour permeability coefficient (μ)	< = 15 EN 1015-19:2004
	Value Sd (m)	< = 0,3 (minimum layer thickness d=20 mm) EN 1015-19:2004
Water penetration after determinating water absorption due due to capillary action		< = 5 mm EN 1015-18:2004

INSTRUCTIONS FOR USE

DECIDING UPON THE HEIGHTH UP TO WHICH THE KEMASAN 580 DRYING PLASTER SHOULD BE BUILT-IN	The height up to which the KEMASAN 580 drying plaster should be built-in depends on the wall thickness and the degree of humidity. It can easily be calculated in such a way that approximately 0.8 m (the thickness of the wall multiplied by 1.5) is added to the visible humidity level on the existing plaster.
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CONSUMPTION approx. 30 kg/m² for a layer thickness of 20 mm

BASE KEMASAN 580 drying plaster adheres to any base surface (concrete, brick wall, stone walls or concrete block walls, ...). 0,5 hour prior application the surface is intensively moistened with clean water.

BASE The old plaster, coatings and layers of other materials have to be completely removed up to the prescribed height.
PREPARATION The mortar in joints, which is usually full of salt, has to be scraped up to the depth of min. 2 cm. Finally all the residues of mortar are removed by a wire-brush. Dusty particles are removed with compressed air.

Waste plaster has to be transported away from the structure in order to prevent oozing of water-soluble salts back to the wall due to capillary forces.

MIX RATIO Approx. 9,6 l of water per 2 bags (60 kg) of dry mixture / approx.: 4,8 l of water per 1 bag (30 kg) of dry mixture

MIX TIME KEMASAN 580 drying plaster is a ready made mixture to which exclusively water may be added during the preparation. When using a 80 l mixer, the best results are obtained when two sacks of KEMASAN 580 drying plaster are mixed with water.

Attention! In order to ensure optimum quantity of air pores in the mortar and the foreseen consumption of the drying plaster per m², the mortar has to be stirred for at least 10 minutes.

If mixing is with electric mixer pour water in clean container, add dry mixture and mix until appropriate consistence for application. Leave it for approx. 1 minute, then mix again for a 2 minutes until creamy consistence is achieved.

MIX TOOL Hand drill mixer or regular construction mixer

INSTALLATION The surface to be plastered has to be intensely moistened with water about half an hour before plastering. Long-term experiences have shown, that the binding spraying can be omitted and that the first layer of the plaster, approx. 1 cm thick, can be directly plastered on the moistened wall without being smoothed. In the case that spraying is nevertheless performed, it may be prepared exclusively from the KEMASAN 580 drying plaster. Eventual holes in the wall are filled-in with brick or stone morsels, using KEMASAN 580 drying plaster as the binding media – this time used as mortar.

During the following days the first layer of the plaster is intensely re-moistened and than KEMASAN 580 drying plaster is plastered on it again, up to the total thickness of at least 2 cm of the plaster. If thicker plaster is required, the plaster is built-in in layers of 1 cm up to the desired thickness. The thickness of a layer is regulated by previously prepared lathing or plastering leaders made of KEMASAN 580 drying plaster. The last layer of KEMASAN 580 drying plaster is leveled by a screed board from the bottom upwards. Too intense smoothing is to be avoided. Lathing is then removed and the resulting grooves are filled-in with KEMASAN 580 drying plaster before the last layer of plaster hardens.

According to the required appearance of the surface, the following treatment is possible:

- (a) upon hardening (after 2-3 hours) the last layer of KEMASAN 580 drying plaster is finished by a wooden or a plastic finishing trowel until medium smooth structure is achieved,
- (b) a structure resembling the surface of old walls can be finished by a trowel,
- (c) for a totally smooth surface approx. 2 mm of KEMASAN 550 fine plaster can be applied and classically smoothed with slight moistening, as the fine plasters. The final layer of KEMASAN 550 fine plaster is applied after one to two days to a well moistened surface (see the technical sheet for KEMASAN 550 fine plaster).

Stopping between particular layers of KEMASAN 580 drying plaster is possible, but the last laid plaster layers have to be well moistened before continuing the work.

After three weeks the drying plaster KEMASAN 580 may be painted with a facade paint. Using a facade paint which has at least the same or even higher vapor-permeability as KEMASAN 580 drying plaster ($S_d < 0.16 \text{ m}$) is very important. The required vapor-permeability is achieved by silicate or silicone mineral paints, lime whitewash and similar.

TOOL For spraying is trowel suitable.
For multiple layers is notched trowel suitable.
For final layer is wooden or plastic finishing trowel suitable.

CLEANING OF TOOL Clean tools immediately after the use before adhesive hardens. Hardened material on tools can only be removed mechanically.

COAGULATION /

LIMITATIONS

BASE TEMPERATURE +5°C min./ +30°C max.

AIR TEMPERATURE +5°C min./ +30°C max.

MATERIAL TEMPERATURE +5°C min./ +30°C max.

- WARNINGS**
- When plastering facade surfaces, direct sunshine, rain, strong wind or fog are to be avoided. KEMASAN 580 drying plaster has to be cured in the same manner as other facade surfaces against unfavorable weather conditions (most frequently classical protective curtains are used).
 - Lime or other chemical additives must never be added to the plaster. The plaster is mixed to appropriate consistency for plastering. It must not be stirred for too long, as too many air pores create that cause the strength to decrease. For the same reason, it is not allowed to subsequently stir the plaster after it has been already stirred.
 - During plastering and binding the air and surface temperature must not drop below 0°C. Protect freshly installed material from freezing, rain and other weather conditions. The material should not be used at (surface, air, material) temperatures lower than +5°C.
 - In order to prevent the plaster from drying too quickly while binding, the direct sunshine has to be avoided as well as strong wind. The facade surface has to be protected with protection curtains or sprinkled with water. As well the surface has to be protected from rain while binding.
 - Times specified in the technical sheet were measured at the temperature of +23°C and relative air humidity of 50 %. Higher temperatures reduce, while lower temperatures prolong those times.
 - KEMASAN 580 drying plaster can not be considered as hydroinsulation and should not be used for walls exposed to water under pressure or trickling water. In cellars with high air humidity sufficient ventilation has to be provided for optimal effectiveness of KEMASAN 580 drying plaster.

Recommendation: Remains of unhardened/unset material had to be removed in accordance with the legislation.

Data source: All technical data in this technical sheet was obtained by laboratory research. Actual data may differ due to different working conditions.

Local restrictions: Due to specific local regulations the installed product can differ from country to country. For exact instructions for use a country specific technical sheet should be obtained.

PROOFS

NORMS/ STANDARDS In accordance with European standards 998-1:2004



SAFETY DATA

Irritating. Contains cement. Irritating to eyes, skin and respiratory tract. In case of eye contact wash thoroughly with water at once and consult a doctor. In case of skin contact flood with a lot of water. Keep away from the reach of children. More data on storage, handling and use of mixture can be found in the safety sheet which contains safety, toxicological and ecological data. Warnings on the original packaging should also be considered.

LEGAL BASE

Information and recommendations related to use of KEMA products are presented in good faith and believed to be correct. The later is based on our knowledge and experience with the products. Information is supplied upon the condition that products are stored and used according to the recommendations and the persons receiving the same will make their own determination as to its suitability for their purposes prior to use. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to Information or the product to which information refers. In no event will KEMA be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information or the product to which Information refers. Nothing contained herein is to be construed as a recommendation to the use any product, process, equipment or formulation in conflict with any patent, and KEMA makes no representation or warranty, expressed or implied that the use thereof will not infringe any patent. All orders fall under current sales and supply conditions. The user should always check the latest technical sheet available upon demand.