



HYDROMENT DRYING PLASTER

Drying plaster

- ▶ Meets the requirements for R plasters, in accordance with the standard EN 998-1
- ▶ For manual application
- ▶ For indoor and outdoor use
- ▶ Years of references
- ▶ For restoration of objects damaged by capillary moisture



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. Suitable for unlimited dehumidification of all types of walls saturated with capillary moisture and salts, even in cases where moisture cannot be blocked. Areas of use: internal and external basic plaster, plaster for sub-wall (plinth), basement plaster, plaster on basement vaults for all types of walls (brick, stone, concrete). Not suitable for restoration due to water ingress.

- PRODUCT PROPERTIES**
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PRODUCT DATA

BASIC INFORMATION

Appearance Grey powder

Packing 30 kg in bag (plastificated) / 1260 kg (42 x 30 kg) on pallet

Storage and expiration date In a cool and dry place, on a wooden pallet, in the original closed packaging, protected from frost: 365 days. The production date is printed on the packaging.

TECHNICAL DATA

Chemical base Hydraulic binder based plaster

Bulk density of powder 1,6 kg/l (at + 20°C)

Weight of fresh mortar 2,0 kg/l (at + 20°C)

Grain size D_{max} : 3,15 mm

Layer thickness Min. 20 mm

Contents of air pores in fresh mortar 30-35 vol. %

Colour Cement grey

Compressive strength $\geq 4,5$ MPa (CS II)

Strength of adhesion - on substrate $\geq 0,2$ MPa; MP:A

Capillary water absorption due to capillary action $\geq 0,34$ kgm⁻² /24 ur

Water vapour permeability coefficient (μ) ≤ 15

Value Sd (m) $\leq 0,22$ (minimum layer thickness d=20 mm)

Water penetration after determinating water absorption due due to capillary action 4,37 mm (≤ 5 mm)

Thermal value 0,83 W/mK (P=50 %)

0,93 W/mK (P=90 %)

INSTRUCTIONS FOR USE



DECIDING UPON THE HEIGHT UP TO WHICH THE DRYING PLASTER SHOULD BE BUILT-IN	The height up to which the 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 0,7 m (the thickness of the wall multiplied by 1 to 1,5) is added to the visible humidity level on the existing plaster.
CONSUMPTION	approx. 30 kg/m ² for a layer thickness of 20 mm
BASE	HYDROMENT drying plaster adheres to any base surface (concrete - at least C12/15, brick wall, stone walls or concrete block walls, ...). 0,5 hour prior application the surface is intensively moistened with clean water. Not under any circumstances the base may be primed with primer!
BASE PREPARATION	The old plaster, coatings and layers of other materials have to be completely removed up to the prescribed height. The mortar in joints, which is usually full of salt, has to be scraped up to the depth of min. 1 - 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. Electrical installations on the wall, where the drying plaster will be installed, must not be attached using the gypsum, but with the fast-setting cement mortar HIDROZAT!
MIX RATIO	Approx.: 8,4 l water per 2 bags (60 kg) of dry mixture / approx.: 4,2 l of water per 1 bag (30 kg) of dry mixture
MIX TIME	HYDROMENT 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 HYDROMENT drying plaster are mixed with water. Add 90% of the mixing water to the mixer and add two bags of dry mixture and stir about approx. 2 minutes. After this time, the mortar must pass into a soft, creamy consistency. If this does not happen, add the remaining 10% of the mixing water and mix to a creamy consistency for a total time of 5 – 10 minutes. The creamy consistency ensures the correct content of micropores, so it can serve us as an indicator of sufficient mixing time. Mix always for a minimum of 5 minutes and a maximum of 10 minutes. WARNING: Mixing efficiency is not the same for all mixers. In certain cases, too long mixing (mixing after the creamy consistency is already achieved) can cause too many micropores in the fresh plaster and thus a drop in the final strength of the plaster. Exceptionally, an electric mixer (with attachment for mixing mortars) can also be used for mixing. Pour into the bucket ca. 4,2 liters of water, add 30 kg of dry mixture and stir at low turns for 3 minutes until a slight, creamy consistency is formed.
MIX TOOL	Regular construction mixer. Exceptionally, an electric mixer (with attachment for mixing mortar) for mixing mortars can be used.



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 drying plaster. Eventual holes in the wall are filled-in with brick or stone morsels, using 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 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 drying plaster. The last layer of 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 drying plaster before the last layer of plaster hardens.

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

- Upon hardening (after 2-3 hours) the last layer of drying plaster is finished by a wooden or a plastic finishing trowel until medium smooth structure is achieved.
- A structure resembling the surface of old walls can be finished by a trowel.
- For a totally smooth surface approx. 2 mm of HYDROMENT fine plaster can be applied and classically smoothed with slight moistening, as the fine plasters. The final layer of HYDROMENT fine plaster is applied after one to two days to a well moistened surface (see the technical sheet for HYDROMENT fine plaster). If necessary, a glass, alkali-resistant, facade mesh with 10 X 10 mm windows can also be inserted into the HYDROMENT fine plaster to prevent micro-cracks.

Stopping between particular layers of 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 may be painted with a facade paint. Using a facade paint which has at least the same or even higher vapor-permeability as HYDROMENT drying plaster ($S_d < 0,22 \text{ m}$) is very important. The required vapor-permeability is achieved by silicate or silicone or mineral paints, lime whitewash and similar. Under no circumstances should dispersion or latex paints be used.

TOOL Mason's trowel, mortar trowel, leveling board, wooden finishing trowel, plastic finishing trowel.

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

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. HYDROMENT 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 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.
 - HYDROMENT 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 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

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.