

aerodurit[®] BASIC

aerodurit[®] BASIC is a mineral microporous factory-made dry-mortar acc. DIN V 18550/ DIN EN 998-1, mortar group CS II

FIELD OF APPLICATION

aerodurit[®] BASIC has excellent moisture and climate control properties. At the same time, thermal insulation and thermal storage values are improved. aerodurit[®] BASIC was developed to supplement and close residual areas of aerodurit[®] dehumidifying plasters - EP 2010 and ZEP 2040 - above the humidity zone. aerodurit[®] BASIC supports the dehumidification process with its excellent room humidity regulation function. An application as renovating dehumidifying plaster is not possible. New buildings: As a preventive measure with high demands due to indoor climate or weather. Old buildings: In the humidity area to support aerodurit[®] renovating dehumidifying plaster EP 2010 or aerodurit[®] cement plaster ZEP 2040 above the moisture zone. As exterior and interior plaster. As an economic supplement and levelling plaster for still load-bearing wall areas. Not applicable in the case of pressurized water or on softer primer plaster with a compressive strength <5 N / mm² (e.g. soft lime plaster, in this case priming with aerodurit[®] mineral primer CMG including reinforcement is required).

TECHNICAL DATA

Compressive strength EN 1015 Klasse C II	5,0 N/mm ²
Bending tensile strength	2,0 N/mm ²
Water vapor diffusion resistance	μ = 15
Air pore content of fresh mortar	ca. 25 %
Grain size	0 - 1,8 mm
Tensile strength EN 1015-12	> 0,3 N/mm ² *

MIXING WATER

The water requirement for mixing is very low for aerodurit[®] BASIC. Initially stiff plaster slowly becomes more fluid during the mixing process. (Failure to comply with the amount of mixing water can influence the strength values).

The required MINIMUM THICKNESS as levelling plaster is ≥ 0,5 cm aerodurit[®] BASIC can be applied in layer thicknesses of 2 cm each layer. The dry mortar is mixed with electric paddle mixer, free-fall or compulsory mixers. **MIX TIME:** approx. 3 - 4 minutes until air bubbles become visible. [IMPORTANT] Do not over-mix!

PROCESSING TIME

30 - 60 minutes after mixing. Keep electric paddle mixer at an angle, mix thoroughly. Mix whole trading units and process immediately.

CONSISTENCY

Consistency: plastic. **PRACTICAL TIP** Consistency check: "If you cut the mixed plaster with the edge of a trowel, the plaster edges must stand!".

SURFACE PREPARATION

Remove existing old plaster. Crumbly masonry joints should be exposed as far as possible to a depth of 20 mm. Thoroughly remove dust and loose parts. Scrape out larger slots wide joints and refill them with aerodurit[®] BASIC before the actual plaster application with aerodurit[®] BASIC and roughen well the surface. Remove sintered layers. Then apply aerodurit[®] BASIC as a full-coverage spray. For a professional relaxed balance between the wall surface and plaster layer, a

bricking up of missing blocks, closing smaller holes etc. is required (manually or mechanically).

COMPENSATION LAYER

For horizontally and vertically uneven walls, a levelling layer should be applied to avoid stress cracks due to different thicknesses of plaster.

PRE-SPRAY / PRE-COATING

The pre-spraying is carried out with the same material by hand or by machine, generally closed over the whole surface and wart-shape-like. (Remove sintered layers, even when sprayed / pre-coated!) The hardening time is approx. 12 hours. For the further plaster build-up use again the same material (aerodurit[®] BASIC).

IMPORTANT NOTES ON PROCESSING

Throw the plaster seamlessly and strong. Applicable as single-layer plaster. Further construction options: Wet on wet in two layers the same day, or one layer a day another. The first and second render layer is produced with aerodurit[®] BASIC. Lightly press with the plasterer's float manually or mechanically applied plaster layers. Wet the plaster surface with a damp sponge, not with a soaked wet sponge. Danger of binder enrichment and subsequent risk of surface cracks. Avoid this sinter layers! Always rewet well between the plaster layers! Optimal effect with recommended total plaster thickness of at least 10 mm.

PROCESSING

A MATERIAL FOR ALL WORKING STEPS

The entire plaster construction is done with one material. The same material is used for all preparatory work, pre-spraying / grouting and plaster construction. aerodurit[®] BASIC has no stand times for applied plaster layers. Therefore, smaller and medium-sized render surfaces can be completed in 3- 4 workdays.

HAND PROCESSING

Put about 5.5 l of clean water per 30kg of dry mortar and mix with electric paddle or twin paddle mixer until the mortar has been mixed to plastic consistency and the air bubbles are visible (approx. 2-3 minutes in the middle). Do not over-mix. Only mix as much mortar as can be processed within 1 hour. aerodurit[®] BASIC can be applied up to 2 cm in one layer. After 45 - 60 min. hardening time (setting and pore stabilization), the plaster layers can be processed as usual after checking the felting ability (finger pressure test!), e.g. rubbing, felting, structuring with a painter's brush, broom structure, etc.. If applied in 2 layers, remove the cement sintered layer (thin cement skin) from the surface and roughen well. If you rub or felting too soon and too wet, there is a risk of cement-sinter-skin formation, which reduces the adhesion on the subsequent plaster application. Before application of the subsequent plaster layer, the last layer must be well roughened, freed from sintered layers and well pre-wetted depending on the absorbency of the substrate. Moisture already wet surfaces well, even if it is wet. The plaster should never be applied on dry surfaces. (no adhesion!) If the application of a fine plaster * or decorative plaster * is intended as a top coat, then the surface of aerodurit[®] BASIC is to be raised horizontally and roughened. Before the top coat application, the surface should be thoroughly pre-wetted. When indoors, make sure that the humidity during the dehumidification phase is kept below 65%. This can be achieved by regular ventilation or similar measures. Too fast / strong drying out = mixing water removal (e.g. by dryers) can lead to stress cracks.

* Only system-conforming topcoats, such as aerodurit[®] superfine plaster FP2015, decorative plaster SSP1070, broom structure plaster SBS1065, etc., can be applied to aerodurit[®] BASIC.

PLASTER THICKNESS

General: 10 mm. For vertical or horizontal, uneven walls, a minimal plaster thickness of 25mm is required.

PLASTER CARRIER INSERT according to DIN 18550-2

When plastering cracked plastering grounds (e.g., old buildings), special measures are necessary, such as plaster carrier and/or Reinforcement Fiber Glass Mesh (embed in the last third of the last plaster layer).

MACHINE PROCESSING

aerodurit[®] BASIC can be processed with all plastering machines if properly adjusted. [NOTE]: Reduced water requirement even with machine processing. When using plastering machines we recommend PFT G4 / PFT G5: Rotor & Stator D6 - 3 (standard) | Injection nozzle (top) | Hose Ø 35mm, max. 13.5l/m + hose Ø 25mm, max. 5l/m or hose Ø 25mm, max. 10 - 15m. | Spray nozzle 14mm | Ensure sufficient internal hose lubrication before starting, e.g. Cement slurry | Hotline +49 (0) 9323/31 760 | [www.pft.de]. During processing breaks > 20 Min, the machine and hoses must be emptied.

COLOR COATING

Please make sure that the high diffusibility of aerodurit[®] BASIC is not restricted by vapor barrier coatings. We recommend silicate paint, especially aerodurit[®] SOLAMENT indoor climate-silicate paint.

STORAGE

Store dry, preferably on wooden pallets, protect against moisture. Storability of approx. 12 months.

The information contained in this technical information is based on proven experience. A liability for the general validity of the individual data and recommendations must, however, be ruled out due to the different processing conditions, since application and processing methods are beyond our control. The general rules of construction engineering must be respected. The values of self-monitoring and external monitoring can show deviations at the construction site due to the method of processing, the intensity of the mixing, the machine technology, the absorption behavior of the substrate, the application thickness, climatic environmental influences and age (cf. research community lime and mortar, report in standardization, Practice and theory of the 26th Aachener Baustofftag). As of 10.2018.