

EP2010

LIME CEMENT MICROPORE SPECIALISED RESTORATION PLASTER

aerodurit® Putz- & Betontechnologie GmbH
Albert-Reis-Str. 7 · D-88356 Ostrach
Phone: +49 (0) 75 85 92 44 990
Fax: +49 (0) 75 85 92 44 999
E-Mail: tm@aerodurit.com
www.aerodurit.com

TECHNICAL DATA SHEET

As of: 5 August 2019
Page 1/3

aerodurit® **SPECIALISED**

EP2010

LIME CEMENT MICROPORE
SPECIALISED RESTORATION PLASTER

Advantages

- | | |
|--|---|
| Active capillary dehumidification | ✓ |
| Regulates / controls the micro-climate in damp rooms | ✓ |
| Anti mould effect | ✓ |
| No stand time between individual layers | ✓ |

Special Applications

- | | |
|--|---|
| Rapid dehumidification in case of flooding | ✓ |
| Preventive protection in floodwater areas | ✓ |
| Suitable for perimeter areas | ✓ |
| Lightweight masonry (expanded clay-pumice, gas concrete, vertical coring lightweight bricks) | ✓ |
| Object-related for listed buildings | ✓ |
| Old and new buildings | ✓ |

EP2010

LIME CEMENT MICROPORE SPECIALISED RESTORATION PLASTER

aerodurit® Putz- & Betontechnologie GmbH
 Albert-Reis-Str. 7 · D-88356 Ostrach
 Phone: +49 (0) 75 85 92 44 990
 Fax: +49 (0) 75 85 92 44 999
 E-Mail: tm@aerodurit.com
 www.aerodurit.com

TECHNICAL DATA SHEET

As of: 5 August 2019
 Page 2/3

Mineral micropore restoration plaster for a permanent solution to moisture, salinity and mould problems. Premixed dry mortar for damp and salt laden undergrounds, wet rooms and below grade building parts pursuant DIN 18557, formerly mortar group P II pursuant DIN 18550 V 2005 04 / DIN EN 998-1, mortar group CS II, EN 998-1).

INGREDIENTS

Selected crushed limestone sands 0–1,8mm, high quality Portland cement, hydrated lime, inorganic aerodurit®-additive.

SINGULAR PROPERTIES

Not waterproofed, no synthetic chemicals, high vapour permeability, high salt resistance, water repellent, frost/dew resistant, no waiting time between layers, homogenous plaster structure (one material for the entire plaster work), no shrinkage / creep free, excellent mechanical and manual processing, high daily performance.

APPLICATION

aerodurit® EP2010 offers a multitude of applications and fulfils the highest demands.

Renovation: In areas affected by damp in order to permanently dehumidify walls (cellar renovation without expensive drying measures), as external and internal plaster, for storerooms, tunnels, churches, city walls, etc. As plinth plaster, wall mortar, repair mortar, mortar substrate for tiling, for pipe laying, render for shafts, garden walls.

New buildings: As precautionary measure in case of high strain by room climate and / or weather. Limited application under the influence of water pressure on the fresh mortar; when hardened, the dehumidification plaster is resistant to hydrostatic pressure.

TECHNICAL DATA

Pressure resistance EN 1015 Class C II	5,0 N/mm ²
Flexural strength	ca. 2,5–3,5 N/mm ²
Water vapour diffusion resistance	μ = 13
Air cavity content of fresh mortar	ca. 29 %
Porosity	ca. 45 %
Grain size	0–1,8 mm
Adhesive tensile strength EN 1015-12	≥ 0,6 N/mm ² *
Thermal conductivity (tabular value acc. EN 1745: Lambda 10 dry)	≤ 0,43 W/(m.K) für P=50 %, ≤ 0,49 W/(m.K) für P=90 %
Water absorption EN 1015-18	(W=0,06 kg/m ² x h 0,5)

* Only system compliant finishing plaster may be applied to aerodurit® plasters; e.g. Superfine Finishing Plaster FP2015, Fine Finish Plaster Coating SSP1070, Regrating Structure Skin SBS1065, etc.

SUPPLY FORM

30 kg in paper bag. A maximum of 42 bags on euro pallet.

PRODUCT YIELD

30 kg produce about 21 litres of fresh mortar.

PREPARATION OF BASE LAYER

The existing plaster should be removed from the walls at least 80cm beyond the line of dampness or the area of crystallisation. Crumbling wall mortar should be removed from the joints, if possible to a depth of 20mm and be filled with aerodurit® EP2010. Thoroughly remove all dust and loose particles. Larger indentations and broad joints should be pre-filled and roughened before the final rendering with aerodurit® EP2010. **Remove sinter layers and moisten.** For levelling of heavily uneven wall surfaces, it is recommended that holes, unevenness and gaps in the walls be closed or filled out where necessary, either manually or mechanically.

CONSISTENCE

Plastic. The plaster is initially firm but during the mixing process will become more liquid. Practical tip: «When the mortar is cut with the trowel, it should stand on its own.»

LEVELLING LAYER

When working on uneven walls, a levelling layer should be applied first to avoid tension cracks caused by differing plaster thicknesses.

SPATTER-DASH / ROUGH CAST

About 5mm. aerodurit® EP2010 can be applied either by hand or with a machine, generally with total coverage and warty (remove sinter layers, also when spatter-dashing and rough casting). The stand time for the spatter-dash is approximately 12 hours. aerodurit® EP2010 is also used for the remaining plaster structure.

PLASTER THICKNESS

Do not exceed 20mm per layer. Optimum dehumidifying effect with a minimum total plaster thickness of 25mm. including spatter-dash / rough cast. **On uneven walls, a minimum plaster depth of 25mm is compulsory.**

IMPORTANT NOTICE FOR PROCESSING

Apply the plaster seamlessly by skimming with force and using a plasterer's float to create a level surface. Single layer plaster applications are possible. Additional structure options: Two-layer aerodurit® EP2010 wet on wet. Smooth the plaster surface with a **moist**, not dripping wet sponge, (danger of bonding agent accumulation resulting in surface cracks). **Sinter layers are to be avoided at all cost. Thoroughly wet the surface between the application of each plaster layer.**

EP2010

LIME CEMENT MICROPORE SPECIALISED RESTORATION PLASTER

TECHNICAL DATA SHEET

As of: 5 August 2019
Page 3/3

PROCESSING

aerodurit® EP2010 is used for the entire plaster structure. It has no stand time for the individual layers, thus small to medium areas can be completed in 3 to 4 working days. If two layers are applied, the pale damp surface should be skimmed and well roughened. If the skimming takes place too soon, there is a danger of sinter skin that reduces the adhesion of subsequent layers. Before the application of the next layer remove eventually existing sinter layers and water the surface thoroughly. **Even if the surface is already moist, it should be watered and, if necessary, the watering should be repeated during the processing. The plaster should never be applied to a dry surface (no adhesion).**

After 45 to 60 minutes for hardening and pore stabilisation, the final plaster layers can be treated as usual (e.g. levigated, smoothed, etc.) once the stability has been confirmed (finger pressure test). If a finishing plaster is to be applied, the surface should be intensely watered and roughened. Only system compliant finishing plaster may be applied to aerodurit® plasters; e.g. Superfine Finishing Plaster FP2015, Fine Finish Plaster Coating SSP1070, Regrating Structure Skin SBS1065, etc.

Indoor, the humidity must be kept below 65 % during the drying process. This can be achieved by regular airing. If the drying process takes place too quickly (mixing water deprivation by e.g. building dehydrators) this may lead to tension cracks and in the worst case to blistering.

MANUAL PROCESSING

Low water usage. Use approximately 5.5 litres clean water per 30 kg dry mortar. Hold the electric mixer at an angle and mix at medium rpm for 2 to 3 minutes, until the mortar is ductile and air bubbles are visible. Do not over-mix and only mix as much material as can be processed immediately.

MACHINE PROCESSING

Low water usage. With the correct setting, aerodurit® EP2010 can be used in all plastering machines. For machine processing, we recommend a PFT G4/G5: rotor and stator D6-3 (standard or twister), injection nozzle on top. Hose Ø 35 mm with max. 13.5 linear metres and hose Ø 25 mm with max. 5 lineal metres or just hose Ø 25 mm with max. 10-15 lineal metres. Spray nozzle 14 mm. Also check www.pft.de

Before starting up the machine, ensure that the hose is well lubricated internally (e.g. cement slurry). In case of processing breaks exceeding 20 minutes, machine and hose should be emptied.

FOUNDATION

Surfaces have to be primed with the mineral foundation aerodurit® CALSOL NATURE M-5 (stand time for foundation is approximately 12-24 hours).

PLASTER CARRIERS AND REINFORCEMENT FABRICS

In accordance with DIN 18550-2 and DIN EN 13914-1, the following applies: When plastering cracked surfaces (e.g. renovations), it is necessary to use special methods, like the reinforcement of the plaster, the employment of substructures or plaster carriers. Recommendation: In the final third of plaster, reinforcement fabric should be used.

PAINTS AND COATINGS

Please take care not to reduce the high diffusivity by using impermeable paints or coatings. We recommend silicate paints, in particular aerodurit® SOLAMENT CLIMATE colour coats on a silicate base.

STORAGE

Store weatherproof on wooden pallets in a cool, dry room. Reseal opened packaging immediately. Closed packaging has a shelf life of 12 months from the production date under proper storage conditions. Keep out of the reach of children.

For further details please refer to the safety data sheet.

The specifications contained in this technical data sheet are based on years of proven experience by the company aerodurit®. A liability for the general validity of the individual data and recommendations, must, however be ruled out due to the varying processing conditions, as the application and processing methods are beyond our control.

The general rules of construction engineering must be adhered to. The data of internal or third-party monitoring may vary on the construction site due to processing methods, intensity of the mixing, technical specifications of the machines, adhesion of the substrate, application thickness, environmental influences, and the age of the material (refer to «Forschungsgemeinschaft Kalk und Mörtel e.V.» (research community lime and mortar), Report on norms, practical experience and theory, «26th Aachener Baustofftag»).

Previous data sheets become void through the publication of this data sheet.