HASIT
Natürlich besser bauen

TECHNICAL DATA SHEET

253 CalceClima® Thermo

Lime insulation plaster

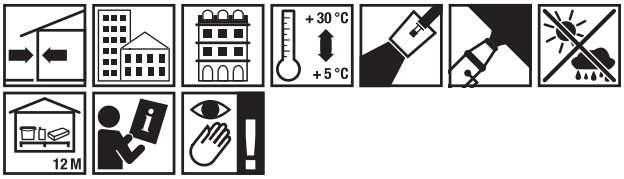
Areas of application

Thermal insulation plaster according to DIN EN 998-1 with purely mineral lightweight aggregates and thermal conductivity class WLG 055 (measured according to ISO 8301). Complies with the technical specification for thermal insulation plaster mortar of the Association for Insulation Systems, Plaster, and Mortar e.V. (VDPM). The seamless thermal insulating lime plaster is suitable for both renovation and new construction on facades and as interior insulation. As a subsequent protective layer for the insulation plaster, we recommend HASIT 250 RENOPLUS® with our HASIT reinforcing mesh White. All HASIT LITHIN® fine plasters (except HASIT 725 OPTI LITHIN® scratch plaster opti) can be used as the top coat.

Properties

- Lime-based thermal insulating plaster WLS 0.053 W/mK
- Environmentally friendly, purely mineral
- No biocides, no polystyrene
- Diffusion-permeable and water-repellent
- Alkaline, resistant to mould and algae

Application procedure



Technical data

Item number	2000959988
EAN	4038502163448
Customs Tariff No.	32149000
Packaging	
Quantity per unit	60 L/unit
Unit per pallet	30 unit/Pal.
Consumption	approx. 1,1 L/m²/mm
Consumption instructions	Consumption values are indicative and depend heavily on the substrate and processing technique.
Yield	approx. 51 L/unit
Yield in litres	60 L/unit
Water consumption	approx. 22 L/unit
Reaction to fire	A1
Compressive strength	≥ 0,4 N/mm² (28 d) EN 1015-11

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Item number	2000959988
Thermal conductivity λD	≤ 0,053 W/mK EN 12667 ≤ 0,055 W/mK EN 12667
Application thickness min	20 mm
Max. application density	100 mm
Minimum plaster thickness	20 mm
Mortar class	CS I EN 998-1 W1 EN 998-1 T1 EN 998-1
pH-value	10,5
Average bulk density	approx. 220 kg/m³
Layer thickness	0-100 mm
Packaging	In recyclable paper bags.

Material base

- High-quality crushed lime sand
- Light additive (mineral)
- Air-entraining agents
- Mineral
- Sulphate-resistant binder based on natural hydraulic lime
- Water-repellent additives
- Additives to improve processing properties

Application conditions

During the processing and drying phase, the ambient or substrate temperature must not fall below +5 °C or rise above +30 °C. During the processing and hardening of the material, but at least for 7 days, protect it from frost and driving rain.High humidity indoors or fog outdoors prevents drying. Lime plasters require carbon dioxide from fresh air to set and must simultaneously be able to release water to it. Therefore, in poorly ventilated rooms, sufficient fresh air supply must be ensured (e.g., fans). Dehumidifiers are unsuitable for the rapid drying of lime plasters that have not yet set (risk of cracking) and must not be used.

Surface pre-treatment

After completing the inspection and preparation of the substrate (closing of slots, joints, and defects), the substrate must be pre-sprayed with a spray coat (HASIT HASOLAN® – not hydrophobized) (old masonry 40–60%, new masonry 90% covered). The resulting sinter skin must be removed with a broom. If substrates that are not sufficiently load-bearing (e.g., old plasters, coatings) are to be plastered, a Welnet plaster carrier system must be applied before applying the thermal insulation plaster, as well as when plaster thicknesses of more than 90 mm are to be applied. When using plaster profiles, the leaflet for the - Planning and Application of Metallic Plaster Profiles for Exterior and Interior Use - of the European Association of Profile Manufacturers must be observed.

Preparation

For manual processing, mix one bag with clean water according to the water requirement using a rotor stirrer or in a forced-action mixer until homogeneous. Mixing time for manual mixing is between 2 and 3 minutes; avoid longer mixing times.

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The substrate must be dry, dust-free, frost-free, absorbent, even, sufficiently rough and load-bearing, as well as free from efflorescence and separating agents such as form-release oil or similar. The substrate inspection must be carried out according to DIN 18350. The processing instructions apply to masonry manufactured according to standards and assume closed joints. Open masonry joints and breakouts must be sealed beforehand with suitable material. The material must be completely dried before plaster application. For critical substrates (such as highly porous masonry, aerated concrete, HWL boards, cladding concrete blocks, XPS-R boards, etc.), the special processing guidelines must be observed.
For manual processing, apply the mixed material with the trowel or skim it on with the float.
The use of a remixer ensures an even flow of material and increases the smoothness of the wet mortar. In addition, the yield of the mortar is increased, which also improves the thermal insulation properties.
From a wet conveying hose length of more than 10 m, we recommend using a NW35 wet conveying hose from the plastering machine and covering a maximum of the last 10 m with a NW25 wet conveying hose.
This protects the finishing machine and its components.
After application, level with the lath and, if necessary, roughen with the Rabot for subsequent coating after stiffening.
Surfaces of individual intermediate layers remain in the spray pattern and do not require roughening.
As soon as one layer of plaster is sufficiently stiffened (possible on the same day in good conditions), apply the next layer of plaster. If an intermediate layer remains in place for more than 3–4 days, this surface must be roughened. We recommend pre-wetting the substrate before applying another layer of insulating plaster or the subsequent mesh filler.
During setting, especially when using heaters, good drying and curing conditions (e.g. through shock ventilation) must be ensured.
Direct heating of the plaster is not permitted.
Drying time before applying the final coating: 14 days or 5 days per cm plaster thickness at least.
Before applying the subsequent coating, check that the substrate has completely dried out.

Hazard statements

Detailed safety instructions can be found in our separate safety data sheets. These must be read before use.

Storage

Store in a dry place and protect against moisture.
Properly stored, in an unopened container, the product is low in chromate in accordance with Regulation 1907/2006 EC Annex XVII at +20 °C, 65 % RH. Minimum shelf life 12 months after production (date of manufacture see packaging imprint).

Label

General information

This technical data sheet substitutes and annuls the previous editions of the same. Time-based values refer to standardised climatic conditions (+20 °C/65 % relative humidity). These can vary due to environmental factors, such as temperature, moisture and type of substrate. The data is processed carefully and conscientiously, however they do not provide a warranty for the accuracy and completeness of the same, nor are they responsible for future decisions of users. These data itself is not based on legal relations or other additional obligations. These data do not release the customer from the obligation to check whether the product is suitable for its intended purpose. Our products, as well as all raw materials contained in them, are subject to continuous monitoring in order to guarantee consistent quality. If you have further questions, please contact your sales advisor or specialist retailer. The current status of our technical bulletins can be found on our website or can be requested in the responsible office.
All technical data listed in this product specification has been determined under laboratory conditions.