



Application procedure:

## 253 CalceClima® Thermo

Lime Insulation Plaster

Areas of application:	Thermal insulation plaster according to DIN EN 998-1 and plaster mortar group P II according to DIN 18550 with pure mineral lightweight aggregates and thermal conductivity group WLG 055 (measured according to ISO 8301). Corresponds to the technical specification of thermal insulation plaster mortar of the Association for Insulation Systems, Plaster and Mortar e.V. (VDPM). The jointless, heat-insulating base coat can be used in layer thicknesses of up to 60 mm per layer for old and new buildings on facades and as interior insulation. As a subsequent insulation plaster protective layer, we recommend HASIT 250 RENOPLUS® or HASIT DIEPLAST 865 MINERAL with our HASIT White Insulation Fabric. All HASIT LITHIN® finishing plasters (except HASIT 725 OPTI LITHIN® Kratzputz opti) can be used as finishing plaster.
Properties:	<ul> <li>Lime-based thermal insulating plaster WLS 0.053 W/mK</li> <li>Environmentally friendly, purely mineral</li> <li>No biocides, no polystyrene</li> <li>Diffusion-permeable and water-repellent</li> <li>Alkaline, resistant to mould and algae</li> </ul>

	+30 °C			·//	
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Technical data				
SAP-Art. Nr.:	2000959988			
Packaging type				
Unit per pallet	30 unit/Pal.			
Quantity per unit	60 l/unit			
Yield per litre	approx. 60 l/unit			
Consumption	approx. 1 l/m²/mm			
Consumption instructions	Consumption values are guideline values and depend heavily on the substrate and processing technology.			
Amount of water required	approx. 23 l/unit			
Layer thickness	20 - 100 mm			
Minimum plaster thickness	20 mm			
Thermal conductivity λD (EN 12667)	≤ 0.053 W/mK			
Compressive strength (28 d)	≥ 0.4 N/mm² (EN 1015-11)			
pH-value	approx. 10.5			
MG (EN 998-1)	CS I			
MG (EN 998-1)	W1			
MG (EN 998-1)	T1			
Average bulk density	approx. 200 kg/m³			
Packaging	In recyclable paper bags.			
Reaction to fire	A1			





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Preparatory work:	The surface has to be dry, without dust, unfrosted, absorptive, flat, sufficiently rough and bearing as well as without efflorescence and release agents creating a film (such as formwork oil and similar). Substrate testing must be carried out in accordance with DIN 18350. The processing instructions apply to masonry manufactured in accordance with standards and require closed joints. Open masonry joints and blowouts must be sealed beforehand with suitable material. The material must be completely dried out before applying plaster. In the case of critical substrates (such as highly porous masonry, aerated concrete, wood-wool panels, jacketed concrete blocks, XPS-R panels, etc.), the special processing guidelines must be observed.
Material base:	<ul> <li>Sulphate-resistant binder based on natural hydraulic lime</li> <li>High-quality crushed lime sand</li> <li>Mineral</li> <li>Light additive (mineral)</li> <li>Additives to improve processing properties</li> <li>Air-entraining agents</li> <li>Water-repellent additives</li> </ul>
Application conditions:	During the processing and drying phase, the ambient or substrate temperature must not fall below +5 °C and must not rise above +30 °C. During processing and hardening of the material, but at least for 7 days, protect it from the effects of frost and driving rain. High humidity indoors or fog outdoors prevents drying. Lime plasters need carbon dioxide from fresh air to set and must be able to release water into it at the same time. Therefore, sufficient fresh air supply must be ensured in poorly ventilated rooms (e.g. fans). Dehumidifiers are unsuitable for the rapid drying of lime plasters that have not yet set (risk of cracking) and must therefore not be used.
Surface pre-treatment:	After completion of the inspection and preparation of the substrate (closing of slots, joints and defects), the substrate must be pre-sprayed with a spray grout (HASIT HASOLAN <sup>®</sup> – non-hydrophobic) (old masonry 40–60 %, new masonry 90 % covered). The resulting sinter skin should be removed with a broom. Smooth, non-absorbent or slightly absorbent substrates must be provided with a bonding bridge (made of HASIT 250 RENOPLUS <sup>®</sup> ) to improve adhesion and be reworked after 24 hours of holding time. If substrates that are not sufficiently load-bearing (e.g. old plasters, paints) are to be plastered, a Welnet plaster support system must be installed before the thermal insulation plaster can be applied, as it is the case if insulating plaster layers of more than 90 mm are used. When using plaster profiles, the leaflet for the planning and application of metallic plaster profiles in outdoor and indoor areas of the European Association of Profile Manufacturers must be observed.
Preparation:	In the case of manual processing, mix a bag with clean water homogeneously according to the amount of water required by means of a rotor whisk or in a forced mixer. Mixing time for manual mixing between 2 and 3 minutes, avoid longer mixing times.





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Application procedure:	For manual processing, apply the mixed material with the trowel or skim it on with the float. For machine processing with a commercially available fine plastering machine including HASIT Special Screw Spiral Casing Insulation Plaster Mixing Shaft, NW35 Wet Conveying Hose and Mortar/Spray Nozzle 12 mm green or blue conical. 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. In the case of machine processing, empty and clean the mixing pump and hoses in the event of a work interruption of more than 15 minutes. 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. As a subsequent insulation plaster protective layer, use HASIT 250 RENOPLUS® or HASIT DIEPLAST 865 MINERAL with our HASIT White Insulation Fabric. In order to compensate for the absorbency of the insulation plaster before applying the reinforcement layer or to
Hazard statements:	Please refer to our separate safety data sheets for detailed safety instructions. Read through these before use.
Storage:	Store in a dry place on wooden pallets. Can be stored for at least 12 months.
Certificates:	
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.