

## TECHNICAL DATA SHEET

### HASIT HASOLAN®

Lime mortar



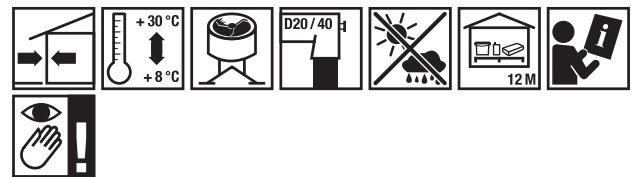
#### Areas of application

Multi-layer, hydraulic lime plaster system for historic and new masonry from ground level, indoors and outdoors. Purely cement-free lime plasters with natural hydraulic limes, hydrated limes and pozzolan for use on monuments, among other things, for professionals and enthusiasts. Suitable for fresco works or as grouting mortar for the closing of cracks and breakouts, especially in historic masonry. As a special machine-applied plaster for subsequent lime-based plaster. HASIT HASOLAN® is a permeable lime plaster system that can be hydrophobic or non-hydrophobic. The articles 2000020944, 2000006456, 2000006458 and 2000006709 are hydrophobic (water-repellent).

#### Properties

- Vapour permeable
- Can be processed manually and mechanically
- Natural biocidal effect through lime

#### Application procedure



#### Technical data

|                                  |                                                                                                                                     |                                   |                                                                                     |                                                                                       |                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Item number                      | 2000006453                                                                                                                          | 2000006454                        | 2000095369                                                                          | 2000006455                                                                            | 2000006706                                                                            |
| EAN                              | 4038502100696                                                                                                                       | 4038502102751                     | 4038502147783                                                                       | 4038502102799                                                                         | 4038502146892                                                                         |
| Customs Tariff No.               | 32149000                                                                                                                            |                                   |                                                                                     |                                                                                       |                                                                                       |
| Technical Data Sheet information | Application thickness min. 1,5 mm                                                                                                   | Application thickness min. 3,0 mm |                                                                                     | Application thickness min. 6,0 mm                                                     |                                                                                       |
| Packaging                        |                                                  |                                   |  |  |  |
| Quantity per unit                | 20 kg/unit                                                                                                                          | 30 kg/unit                        | 1000 kg/unit                                                                        | 30 kg/unit                                                                            | 1000 kg/unit                                                                          |
| Unit per pallet                  | 42 unit/Pal.                                                                                                                        |                                   |                                                                                     | 42 unit/Pal.                                                                          |                                                                                       |
| Grain size                       | 0-0,5 mm                                                                                                                            | 0-1 mm                            |                                                                                     | 0-2 mm                                                                                |                                                                                       |
| Colour                           | Natural white                                                                                                                       |                                   |                                                                                     |                                                                                       |                                                                                       |
| Consumption                      | approx. 1,5 kg/m²/mm                                                                                                                |                                   |                                                                                     |                                                                                       |                                                                                       |
| Consumption instructions         | The consumption figures are based on experience, but may vary depending on the nature of the substrate and the type of application. |                                   |                                                                                     |                                                                                       |                                                                                       |

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| Item number               | 2000006453                                 | 2000006454 | 2000095369 | 2000006455 | 2000006706 |
|---------------------------|--------------------------------------------|------------|------------|------------|------------|
| Yield in litres           | 17 L/unit                                  | 18 L/unit  | 600 L/t    | 18 L/unit  | 600 L/t    |
| Water consumption         | approx. 4,8 L/unit                         |            |            |            |            |
| Vapour diffusion openness | High open diffusion                        |            |            |            |            |
| Compressive strength      | $\leq 3 \text{ N/mm}^2$ (90 d)             |            |            |            |            |
| Thermal conductivity      | 0,82 W/mK for P=50%<br>0,89 W/mK for P=90% |            |            |            |            |
| Profusion                 | Carbonization                              |            |            |            |            |
| Dry density               | approx. 1800 kg/m <sup>3</sup>             |            |            |            |            |
| Packaging                 | In recyclable paper bags.                  |            |            |            |            |
| WDDZ min                  | 15                                         |            |            |            |            |
| WDDZ max                  | 35                                         |            |            |            |            |

| Item number                      | 2000006457                                                                                                                          | 2000099311                                                                          | 2000006459                                                                            |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| EAN                              | 4038502102836                                                                                                                       | 4038502159496                                                                       | 4038502102867                                                                         |
| Customs Tariff No.               | 32149000                                                                                                                            |                                                                                     |                                                                                       |
| Technical Data Sheet information | Application thickness min. 12,0 mm                                                                                                  |                                                                                     | Application thickness min. 18,0 mm                                                    |
| Packaging                        |                                                  |  |  |
| Quantity per unit                | 30 kg/unit                                                                                                                          | 1000 kg/unit                                                                        | 30 kg/unit                                                                            |
| Unit per pallet                  | 42 unit/Pal.                                                                                                                        |                                                                                     | 42 unit/Pal.                                                                          |
| Grain size                       | 0-4 mm                                                                                                                              |                                                                                     | 0-6 mm                                                                                |
| Colour                           | Natural white                                                                                                                       |                                                                                     |                                                                                       |
| Consumption                      | approx. 1,5 kg/m <sup>2</sup> /mm                                                                                                   |                                                                                     |                                                                                       |
| Consumption instructions         | The consumption figures are based on experience, but may vary depending on the nature of the substrate and the type of application. |                                                                                     |                                                                                       |
| Yield in litres                  | 16,5 L/unit                                                                                                                         | 550 L/t                                                                             | 16 L/unit                                                                             |
| Water consumption                | approx. 4,8 L/unit                                                                                                                  |                                                                                     |                                                                                       |
| Vapour diffusion openness        | High open diffusion                                                                                                                 |                                                                                     |                                                                                       |
| Compressive strength             | $\leq 3 \text{ N/mm}^2$ (90 d)                                                                                                      |                                                                                     |                                                                                       |
| Thermal conductivity             | 0,82 W/mK for P=50%<br>0,89 W/mK for P=90%                                                                                          |                                                                                     |                                                                                       |
| Profusion                        | Carbonization                                                                                                                       |                                                                                     |                                                                                       |
| Dry density                      | approx. 1800 kg/m <sup>3</sup>                                                                                                      |                                                                                     |                                                                                       |
| Packaging                        | In recyclable paper bags.                                                                                                           |                                                                                     |                                                                                       |

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| Item number | 2000006457 | 2000099311 | 2000006459 |
|-------------|------------|------------|------------|
| WDDZ min    |            | 15         |            |
| WDDZ max    |            | 35         |            |

### Material base

- Quarry sand, washed and selected
- Hydraulic lime
- Lime
- Air lime

### Application conditions

Do not use with air or object temperatures below +8 °C and relative humidity above 70 %. During applying and setting process provide frost protection (min. 7 days).

### Surface pre-treatment

The substrate test must be carried out according to DIN 18350. The substrate to be plastered must be mineral, frost-free, absorbent and dust-free, free of release agents and other impurities. In historic buildings and old buildings, the as-is-state (moisture load, salt load, masonry type and condition) of the masonry must be known. Impurities, moss and algae must be removed. In the case of salt load, the substrate must be prepared according to the WTA data sheet 2-2-91. Non-load bearing, hollow and salt-affected old plaster must be removed. If presumably salt-affected areas of the masonry are plastered over, the joints in these areas must be scraped out to a depth of approx. 2 to 3 cm and damaged bricks must be removed. The chipped off material must be immediately removed and deposited out of the way. Defects in plaster, joints and damaged stones must be replaced with material of the same type. Major irregularities and deep joints must be closed or levelled with HASIT HASOLAN® 6 mm grain and then dried. As a bonding bridge and standardisation of the absorption behaviour in the substrate, a full-covering machine-applied plaster with HASIT HASOLAN® 6 mm grain size must be applied. The adhesion of the machine-applied plaster must be checked. To ensure that the plaster substrate can be properly wetted, it is recommended to treat the surfaces to be plastered in advance with HASIT ALUMINA SOLUTION. Dry substrates must be pre-wetted before each plaster application, puddle

formation and overwatering must be avoided.

### Preparation

HASOLAN® can be used as a manually or machine-applied plaster. Mixing is carried out using gravity mixer, continuous or compulsory mixer, motor stirrer or suitable plastering machines. Piston pumps have proven to be effective for the mechanical processing of coarse-grained qualities. The minimum application thickness per plaster layer depends on the maximum grain size and should not be less than the values in Table 1. The service life of individual plaster layers must be strictly observed depending on the plaster thickness and type. With favourable weather conditions they are: As pre-spray mortar at least 3 d, as plaster in the hydrophobic version at least 1 d per mm plaster thickness and as plaster in the non-hydrophobic version at least 12 h per mm plaster thickness. The plaster structure goes from coarser grain to finer grain. After application and start of the hardening process, HASOLAN® should be roughened with a wooden slat or brayed with a wooden float as the last layer. Any sintered layers must be completely removed to improve the drying behaviour and subsequent plaster adhesion.

### Processing note

Regulates the indoor climate through its binding agent, supports the decomposition of organic impurities, odours and nitrogen oxides in the ambient air. Shrinkage cracks are unavoidable in cement-free lime plaster systems and do not constitute a technical defect if there are no cavities.

### Hazard statements

Please refer to our separate safety data sheets for detailed safety instructions. Read through these before use.

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## Storage

Store in a dry place on wooden pallets.  
Not later than 12 months after the date of manufacture.  
Storage time indications refer to the date of manufacture and are only valid if the product has been stored and transported properly.

## Certificates



## Label



## General information

This technical data sheet substitutes and annuls the previous editions of the same. If you have further questions, please contact your sales advisor or specialist retailer. Updated technical data sheets are available on the website [www.roefix.com](http://www.roefix.com), or you can ask the sales representative. All technical data listed in this product specification has been determined under laboratory conditions. The 0,5 mm grain material is only suitable for indoor use. The spiral casing of the plastering machine must be selected according to the largest grain size of the material. Lime mortar systems only prove to be permanently surface-stable in masonry areas without salt and moisture loads. The water-repellent finish of the hydrophobic HASOLAN® lime mortars reduces the characteristic capillary conductivity and increases the salt resistance, since the evaporation area lies now within the plaster cross-section. However, attacks on the stability of water-repellent substances due to subsurface salt exposure cannot be ruled out. The causes of moisture must be eliminated in advance with suitable structural and sealing measures. Lime mortars can only develop their positive properties with unhindered diffusion and access of air. In interior areas, suitable measures must be taken to ensure adequate ventilation, particularly during the drying/hardening of the plaster. No rapid heating-up in order

to avoid cracking. Fresh lime mortars require post-treatment by moistening and possibly shading in dry weather, wind and sunlight. When fresh, they must be protected from frost and precipitation. Plaster layers must be carried out in uniform thicknesses, large irregularities and cavities in the masonry must be levelled out in separate work steps. The minimum thickness of plaster systems in outdoor areas is 20 mm. Outdoor areas that are particularly exposed to weather conditions and are subject to stress should, if possible, be plastered with hydrophobic HASOLAN® lime mortar. Plain plaster structures using fine plaster mortars are not recommended for outdoor use due to their tendency to form hairline cracks. Do not use HASOLAN® lime mortar in areas in contact with the ground. Do not plaster directly down to the ground when there are compact coated surfaces in the outdoor area, attach instead an approx. 5 cm high wooden lath on the ground and remove it after the plastering work. Then plaster and seal this area with suitable material. If wooden components and other critical substrates are to be plastered, special coordinated measures (e.g. plaster bases made of wire mesh and fabric inlay) are necessary. With different plaster substrates, colour differences in the finishing plaster can occur due to the different absorbencies, particularly in damp weather. HASIT lime paints and other permeable, single-component mineral paints. The coating may only be applied when the plaster has completely dried. The maximum application thickness is specified for each plaster layer. The maximum layer thickness for machine-applied plaster is 8 mm for article 2000006459