



TECHNICAL DATA SHEET

KEIM NHL-H

1. PRODUCT DESCRIPTION

KEIM NHL-H is a ready-mixed dry mortar according to DIN EN 998-1 based on sand, highly hydraulic lime and hydraulic additives, as well as additives for better processing and bonding. The strength complies with mortar category CS II or PII in accordance with DIN V 18550.

2. FIELD OF APPLICATION

KEIM NHL-H is a universal lime-bound exterior and interior plaster for manual and machine application. It can be used as a base and finishing plaster for the entire interior, exterior and damp areas from the cellar to the roof. KEIM NHL-H Suitable for plastering all types of masonry, roughcast concrete, etc. As a finishing plaster, KEIM NHL-H can be used on all common base plasters of mortar category CS II - IV. Particularly recommended for use in building biology-oriented areas or for the renovation of historical buildings.

Not suitable:

gypsum renders; plasto-elastic coatings; saponifiable existing substrates

3. PRODUCT PROPERTIES

- excellent application properties
- good machine processability
- sound in terms of building biology
- fiber-reinforced
- permeable
- anti-fungal and anti-algae thanks to natural alkalinity
- fire behaviour: non-flammable (A1)

MATERIAL CHARACTERISTICS:

- Maximum grain size: 4 mm

CLASSIFICATION:

- Water absorption class: W0
- Standard Water absorption: DIN EN 1015-18
- Thermal conductivity $\lambda_{10, \text{dry, mat}}$ for P=50%: 0.82 W/(mK)
- Thermal conductivity $\lambda_{10, \text{dry, mat}}$ for P=90%: 0.89 W/(mK)
- Water vapour diffusion resistance value (μ -value): ≤ 15
- Compressive strength category: CS II (1,5 – 5,0 N/mm²)
- Standard compressive strength: DIN EN 1015-11
- Adhesive tensile strength: $\geq 0,08$ N/mm²
- Standard Adhesive tensile strength: DIN EN 1015-12
- Fracture pattern Adhesive tensile strength: A,B,C
- Classification according to: DIN EN 998-1
- Plaster type: GP

COLOUR SHADES:

natural

4. APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION:

The substrate must be strong, dry, clean, sound and free from adhesion-reducing residues and must not be too absorbent. In the case of highly absorbent substrates or very warm ambient conditions, prewetting must be carried out. Separating substances, e.g. shuttering oil residues on concrete surfaces, must be removed by suitable means. Equalise strong unevenness with suitable material of the same type. Bei schlecht saugenden oder glatten Flächen ist mit KEIM NHL-Kalkputz-Fein eine Putzhaftbrücke im Kambett zu erstellen. Die Oberfläche dieser Putzhaftbrücke ist mit geeigneten Mitteln (z.B. mit einem Besen) aufzurauen. Vor einer weiteren Beschichtung ist hier eine Standzeit von 1 bis 2 Tagen einzuhalten.

APPLICATION CONDITIONS:

Ambient and substrate temperature ≥ 5 °C during application and drying. Do not apply in direct sunlight or on sun-heated substrates. Protect surfaces from direct sun, wind and rain during and after application.

PREPARATION OF MATERIAL / MIXING & CONVEYING:

Mix KEIM NHL-H with approx. 6.0 - 6.5 L (specification per bag) of clean water with a power stirrer to a stiff-plastic consistency without lumps and allow to mature briefly. Do not remix already stiffened material with water. Application can be performed by hand, via continuous mixer or rendering machine.

CONSUMPTION:

approx. 1,6 kg/m² per mm

These material consumption values are guide values for smooth substrates. Exact consumption values must be determined by means of test areas.

APPLICATION:

Apply mixed KEIM NHL-H quickly with suitable tools in uniform layer thickness.

LAYERING SYSTEM:

The minimum plaster thickness is 5 mm when used as a base coat 10 mm and 5 mm when used as a finishing coat. In the case of plaster thicknesses greater than 20 mm and other unfavourable circumstances, apply in several layers, whereby a sufficient standing time of the base coat is recommended before applying the last layer (roughen previous layers). This is especially important at low temperatures and thus delayed setting! If the substrate is highly absorbent, apply the base coat in two layers – wet on wet.

Note: Masonry with an apparent density of less than 700 kg/m³ and/or a thermal conductivity of less than 0.13 W/mK must be rendered with LW lightweight plasters (KEIM Porosil lightweight plaster) in accordance with DIN EN 998-1 (formerly DIN V 18550). Use special plaster for base are. When plastering on damp masonry or on a very different plaster base, a multi-layer application of KEIM NHL-H is recommended to reduce the risk of cracking.

TOP RENDER:

When using KEIM NHL-H as finishing plaster, the surface can be felted with a sponge board after sufficient consolidation. Free texturing or washing is also possible.

AFTERTREATMENT:

KEIM NHL-H must be protected from drying out too quickly due to sun or wind, or kept moist if necessary.

FINISHING:

KEIM NHL-H can be coated with all KEIM paint systems and covered with slabs or tiles. All KEIM finishing renders are suitable for overcoating KEIM NHL-H with KEIM Purkristalat. When applying a subsequent coat of KEIM Purkristalat, always observe the minimum layer thickness of 5 mm. Note: Observe standing times before recoating.

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SETTING TIME:

at least 1 day per mm render thickness (depending on temperature and relative humidity). When used as top coat render, allow to set for at least 5 days before coating. (If the standard rule of 1 day per mm results in longer setting times due to the layer thickness, the longer setting time must then be observed before painting).

CLEANING OF TOOLS:

Clean tools, machines and mixers immediately after use with water. In hardened state only a mechanical removal is possible.

5. PACKAGING

Container content	Unit of measure	Quantity on pallet	Type of container
25	kg	42	bag

6. STORAGE

max. storage time	Storage conditions
12 months	dry

7. DISPOSAL

For disposal information refer to section 13 of the safety data sheet.

Waste code: 17 01 01

8. SAFETY INSTRUCTIONS

Please, refer to the Material Safety Data Sheet.

GISCODE: ZP 1

9. GENERAL INFORMATION

Cover surfaces not to be treated, especially glass, ceramics and natural stone. Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water.

Mixing with products not part of the system or other foreign additives is not permitted.

10. CERTIFICATES & QUALITY SEALS

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release the purchaser and processor from the obligation to convince themselves of the suitability of our products for the intended application with due care, which is general practice in trade and crafts. The general rules of construction technology must be observed. We reserve the right to make modifications to improve the product or its application. This edition supersedes all earlier editions.

