

Oxal NHL 3 historic

Cement free, mineral bound lime render for the restoration of historic buildings

Product Properties

- Absolutely cement free material, even under the declaration limit
- Traditional material based on Roman lime
- NHL 3.5 - Natural hydraulic lime
- Low shrinkage and low tendency to crack
- Comfortable indoor climate due to high breathability
- Open to water vapour diffusion
- High stability, surface can be felted
- Simple machine application utilizing common plastering machines

Areas of Application

- Historical buildings under a preservation order, heritage building
- Buildings with the requirement to traditional building materials
- Can be applied in- and outdoor
- For different kinds of masonries, walls and ceilings

Application Notes

Substrate Preparation

If old render is present, remove it completely first. Furthermore, loose particles, dirt, coatings, slurries, dust, bitumen, etc. must be removed completely. The substrate has to be stable and free from adhesion-reducing substances. Dry or highly absorbent substrates should be pre-wetted sufficiently.

Mixing

For application by hand, the content of one bag Oxal NHL 3 historic (25 kg) has to be poured into approx. 5 - 5.5 l of clean water and must then be mixed with a slow-moving agitator until a lump-free, workable consistency has been achieved. After 2 - 3 minutes, shortly mix up again.

Besides the manual application Oxal NHL 3 historic can also be applied utilizing machine technology. It is suitable for all common render machines, and also for open spiral pump systems. The amount of water added depends on the type of the machine and the desired working consistency.

Application

Oxal NHL 3 historic as spatter coat is hand applied or sprayed on 100 % of the substrate in a reticular shape.

The leveling render is applied with an h-shaped featheredge at least 15 mm in one layer and afterwards horizontally combed with a toothed featheredge or toothed trowel (at least 6 - 8 mm teeth). A stress relief in the render system is necessary (crack occurrence). For this reason, further layers can be applied only after standing time of 1 day / mm layer thickness.

The plaster is not finished after the last layer and has to be overworked with another layer of at least 10 mm thickness. After applying the last layer, the render is rubbed with a non-absorbent floating board.

If a coating is desired, we recommend water vapour open materials with a $SD \leq 0.2$ m only. No film forming substances should be used.

After-treatment

During the curing phase, fresh lime render must be protected against rapid dehydration (sun, wind, high temperatures). Do not work with this product at substrate temperatures lower than 5 °C and surrounding temperatures lower than 10 °C.

Further Information

Partially cured mortar is not allowed to be reused again by neither adding water nor fresh mortar!



Technical Data for Oxal NHL 3 historic

Characteristic	Unit	Value	Comments
Density	kg/dm ³	approx. 1.45	Mixed material
Mixing ratio	kg : l	25 : 5 - 5.5	Oxal NHL 3 historic : water
Processing conditions	°C	≥ + 5 ≥ + 10	Substrate- temperature Sourrounding temperature Store at ≥ 5 °C for at least 24 hours before use
Processing time	minutes	approx. 30	at + 20 °C and 65 % humidity Depending on temperature, humidity, substrate and wet layer thickness, the drying time will be reduced or extended
Flexural Strength	N/mm ²	≥ 0.3	
Grain size	mm	0 - 2.2	

Product Characteristics for Oxal NHL 3 historic

Colour	Natural White
Form of delivery	25 kg bag 1 pallet (40 bags at 25 kg each)
Storage	Can be stored in original unopened packs for at least 12 months under frost-free and dry conditions.
Disposal	To protect our environment please empty the packs completely.

Property specifications are based on laboratory tests and may vary in practical application. To determine the individual technical suitability, preliminary suitability tests should be carried out under the application conditions.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 06/15. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.