

# 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 ADVICE

**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 feather-edge 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 VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Maximum grain size	mm	2.2	
Mixing ratio	kg/l	25 : 5 - 5.5	powder component : water
Working time	minutes	approx. 30	temperature-dependent at 20° C and 65 % rel. humidity
Application conditions	°C	≥ 5 ≥ 10	substrate temperature ambient temperature
Flexural strength	N/mm <sup>2</sup>	≥ 0.3	
Colour		natural white	
Delivery form		25 kg bags; 1 pallet (40 bags @ 25 kg)	
Storage		Can be stored in cool and dry conditions for at least 12 months in original unopened packs.	
Packaging disposal		Make sure single-use containers are completely empty.	

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2300019118]