

## Pure and Natural Hydraulic Lime (NHL 3.5) Product Data

### St Astier Natural Hydraulic Limes (NHL)

Conforms to European Norms EN 459 and BS 459  
 Strength factor: 3.5 (Moderately hydraulic)  
 Residue @ 0.09 mm: 6.5%  
 Density (volumetric weight) : typical 650gr / litre  
 Available (free) lime after slaking  $\text{Ca(OH)}_2$ : 25% +  
 Packing: 25kg. Bags

Contains no additives.  
 Whiteness index: 72  
 Surface cover (cm<sup>2</sup>/pergram): 9000  
 Expansion : < 1mm  
 Residue of quick lime after slaking: < 1%  
 Shelf life: 8-12 months kept sealed and dry

MORTARS MIX RATIO	Compressive strength N/mm <sup>2</sup>				Elasticity Moduli (Mpa)		
	EN459*	1 : 2	1 : 2.5	1 : 3	1 : 2	1:2.5	1 : 3
7 DAYS		0.75	0.57	0.53			
28 DAYS	3.5*	1.88	1.47	1.34	9010	9000	8070
6 MONTHS		7.1	5.34	3.94	15260	13501	13150
12 MONTHS		7.5	5.90	3.90	15280	13620	13150
24 MONTHS		8.63	6.00	3.97	17480	13785	13670
Consumption for 1m <sup>3</sup> of mortar Kg. +/- 10%		305	244	216			
EN 459/BS 459 ( mortar ratio 1:1 by volume, with ISO 679 Sand)							

**Mixing:** can be mixed in cement mixers.

**Application by spray gun:** possible. Please consult us.

**Working temperatures:** not below 5°C or above 30°C. Make sure that high suction materials are thoroughly dampened before application. Avoid rapid drying due to high temperatures or strong winds by curing with a light water mist several times a day if necessary. See "[Protecting Lime Mortar](#)".

**SUITABLE FOR LATH WORK / LIME CONCRETE/INJECTION/GROUTING** See relevant sheets

**Reworking:** possible within 12 hours

**Mortar composition: MASONRY/POINTING/ CAPPING/ BEDDING/ ASHLAR**

Binder: sand ratio: from 1:1.5 to 1:3 depending on the support/background conditions, the size of the joint and the fineness of the sand. Always use well graded sands ( 3 - 75mm down to 75 microns).

See also "[Applications & Good Working Practices Sands for Lime Mortars](#)".

### RENDERING

A. Scratch coat (3-5mm) 1 VOLUME OF NHL 3.5 : 1.5 VOLUMES OF SAND - Cast on

B. Undercoat (15-20mm) 1 VOLUME OF NHL 3.5 : 2 VOLUMES OF SAND\*

C. Finishing (5-10mm) 1 VOLUME OF NHL 3.5 : 2.5 VOLUMES OF SAND

With very fine sands possibly containing clays the binder content may have to be reduced.

\*At this dosage the consumption is approx. 0.35kg. of NHL 3.5 per m<sup>2</sup> for each mm thickness.

Please also refer to "[Applications & Good Working Practices - NHL Renders](#)".

**For further Guidance, contact your St Astier Distributor.**

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