Saint-Astier® NHL 3.5: The Versatile Lime
Technical Data Sheet

Conforms to European Norms EN 459 and BS 459
Strength factor: 3.5 (Moderately hydraulic)
Residue @ 0.09mm: 6.5%
Bulk density: Approx. 650g/litre
Free lime after slaking $Ca(OH)_2$: >28%
Packing: 25kg bag

Contains no additives.
Whiteness index: 72
Surface cover (cm2 per gram): 9,000
Expansion : <1mm
Quicklime residue after slaking: <1%
Shelf life: 1 year from production date if kept sealed and dry

MORTARS	Compressive strength – N/mm2				Elasticity Moduli (Mpa)		
MIX RATIO	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	9,010	9,000	8,070
6 MONTHS		7.1	5.34	3.94	15,260	13,501	13,150
12 MONTHS		7.5	5.90	3.90	15,280	13,620	13,150
24 MONTHS		8.63	6.00	3.97	17,480	13,785	13,670
Consumption for 1m3 of mortar (kg +/- 10%)		305	244	216			
EN 459/BS 459 (mortar ratio 1 : 1 by volume, with ISO 679 sand)							

Suitable for:

> Masonry, consolidation, grouting

> Plastering, rendering, pointing

> Decoration, finishing

Before starting, always try on a small test area.

Mixing
Can be mixed in cement mixers.

Application
Application by spray gun is possible. Please consult the Saint-Astier® Technical Department: technical_support@saint-astier.com

Working temperatures
Not below 8°C or above 30°C. Dampen the substrates the day before and prior to application, allowing the surface water to be reabsorbed. Avoid rapid drying due to high temperatures and/or strong winds by covering and curing with a light water mist as necessary. Protect wet mortars from frost for at least 10 days after application. See *Protecting Lime Mortar*.

Reworking
Possible within 12 hours.

Mortar composition

1) For masonry, pointing, capping, bedding, ashlar:
NHL 3.5/sand ratio > from 1:1.5 to 1:3 depending on the background conditions, the size of the joint and the fineness of the sand. Always use well graded sands (3-4mm down to 75 microns). See *Sands for Lime Mortars*.

2) For rendering:
A. Scratch coat (3-5mm) > NHL 3.5/sand 1:1.5 (cast on recommended)

B. Undercoat (15-20mm) > NHL 3.5/sand 1:2*
**At this dosage the consumption is approx. 0.35kg of NHL 3.5 per m^2 for each mm of thickness.*

C. Finishing (5-10mm) > NHL 3.5/sand 1:2.5 (with very fine sands possibly containing clays the binder content may need to be reduced)
See NHL Renders.