



SAINT-ASTIER

LIME, LIFELONG EXCELLENCE

Saint-Astier® NHL 5

THE ROMAN LIME



PURE NATURAL HYDRAULIC LIME

THE + BENEFITS

- HIGH MECHANICAL STRENGTH
- IDEAL IN EXPOSED AREAS
- ENABLES MOISTURE EXCHANGE
- RESISTANT TO SULPHATES AND SALTS

SUITABLE FOR

- > Masonry, consolidation, grouting
- > Plastering, rendering, pointing
- > Lime concrete

PACKAGING

25 kg bag (55 lb)
35 or 40 bags (875kg/1T)

PRODUCT COMPOSITION

100 % pure natural hydraulic lime NHL 5 by Saint-Astier®.

SHELF LIFE & GUARANTEE

One year from production date, if protected in the original packaging and stored in dry conditions. Close open bags as soon as possible. Manufacturer Civil Responsibility.

55
LB

NHL
5

EN
459

www.limes.us



RENDERING / PLASTERING

MANUAL APPLICATION	STIPPLE COAT	BASE COAT	TOP COAT (preferably with NHL 3.5)	
	1/8" to 3/16"	3/8" to 3/4"	Scratched 1/4" to 1/2"	Smooth or floated 3/16" to 1/4"
	200 ft² per bag with 1/8" thickness	36 ft² per bag with 3/4" thickness	120 ft² per bag with 1/4" thickness	
	2 Days		7 Days	
NEW MASONRY, BRICKS OR STONE BLOCKS				
OLD MASONRY, SOFT SUPPORTS AND/OR PLASTERS				
ESTIMATED CONSUMPTION				
WAITING TIME BETWEEN COATS				

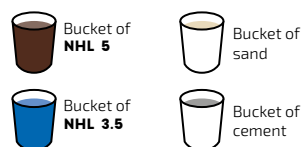
MECHANICAL APPLICATION (Ask Saint-Astier Technical dept)	BASE COAT	TOP COAT (preferably with NHL 3.5)	
	5/8" to 3/4"	1/4" to 1/2" (Scratched , brushed)	Smooth or floated 3/16" to 1/4" (manual only)
	NHL 5 + 1/4 Cement + 4 Sand #6	1 NHL 3.5 OR 1 NHL 5 + 3 Sand #6	1 NHL 3.5 OR 1 NHL 5 + 3 Sand #8
	1 NHL 5 + 2 Sand #6	1 NHL 3.5 OR 1 NHL 5 + 2,5 Sand #6	
	32 ft² per bag with 3/4" thickness	110 ft² to 120 ft² per bag with 1/4" thickness	
At least 7 days per 1/2" applied			
NEW MASONRY, BRICKS OR STONE BLOCKS			
OLD MASONRY SOFT SUPPORTS AND/OR OLD PLASTERS			
ESTIMATED CONSUMPTION			
WAITING TIME BETWEEN COATS			

BEDDING, POINTING, TILING & OTHER APPLICATIONS

BEDDING, POINTING, TILING, SLABS	Bedding concrete blocks, hollow or solid bricks, hard stone		LIMECONCRETE	Lime concrete/screed	
	Floors: laying slabs terracotta tiles and flagstones		CHIMNEYS	Fireplace bricks (concrete, clay), solid bricks, stone	
	Pointing: hard to medium natural stone		OLD MASONRY CONSOLIDATION	Injection	
ABOVE THE ROOF LINE*	Roof tiles, roof ridge, roof edges, roof connections			Grouting	

*In the case of low absorbent substrates, it may be necessary to incorporate a SBR into the mortar.

ADDITIONAL INFORMATION



> For the first coat (base and stipple), the use of rendering machines is possible. If necessary, add an air-entraining agent. For finishing, please contact the Saint-Astier® Technical Department.

> Smooth finish with a maximum thickness of 5 mm. Do not use a plastic trowel for this finish.

> Traditional renders tend to have shading after a rain shower. This phenomenon shows that the lime mortar has a moisture-regulating function.

> Quantity of mixing water depends on the moisture of the sand and the dosage. **Generally 14 litres (3.7 gallons) for a 25kg bag (55 lb).**

> Technical documentation for implementation is available at www.limes.us



PERFORMANCE

ESSENTIAL SPECIFICATION	NF-EN 459 PERFORMANCE STANDARD	SAINT-ASTIER® NHL 5 TYPICAL VALUES
Bulk density	0.5 to 0.8 kg/l (31.2 to 49.94 lb/ft³)	0.7 kg/l (43.7 lb/ft³)
Compressive strength 7 days	≥ 2 (290 PSI)	4 MPa (580.1 PSI)
Compressive strength 28 days	From 3.5 to 15 MPa (725 to 2.175 PSI)	9 MPa (1.305.3 PSI)
SO ₃	≥ 2	≥ 2
Free lime	≥ 15 %	> 20 %
Stability	≤ 2 mm (5/64")	≤ 1 mm (3/64")
Initial setting time	More than 1 hours	2 to 3 hours
Particle size 90µm	≤ 15 %	≤ 7 %
Particle size 200µm	≤ 2 %	≤ 2 %
Whiteness index	No requirements	67
Quicklime residue after slaking	n/a	< 1 %
Surface cover (cm² per gram)	n/a	8.000

MORTARS	COMPRESSIVE STRENGTH – MPa (PSI**)				ELASTICITY MODULI MPa (MPSI**)		
Mix ratio	NF-EN 459*	1 : 2	1 : 2.5	1 : 3	1 : 2	1 : 2.5	1 : 3
7 days		1.96 (284)	1.00 (145)	0.88 (128)	n/a	n/a	n/a
28 days	5(725)	2.20 (319)	2 (290)	1.5 (217)	10.800 (1.57)	11.000 (1.59)	10.000 (1.45)
6 months		7.31 (1060)	5.91 (857)	5.31 (770)	18.000 (2.61)	17.050 (2.47)	16.150 (2.45)
12 months		9.28 (1346)	8.84 (1282)	6.50 (942)	18,510 (2.68)	17.280 (2.50)	16.150 (2.34)
24 months		10.81 (1567)	8.81 (1277)	7.8 (1131)	21,500 (3.12)	18.020 (2.61)	17.430 (2.53)

*NF-EN 459 (mortar ratio 1 : 1 by volume with ISO 679 sand) **values rounded in imperial system

APPLICATION

Application with spray gun possible. Do not hesitate to contact our Technical Support : contact@saint-astier.com

WORKING TEMPERATURE

Not below 8°C (47°F) or above 30°C (86°F). Dampen the substrates the day before and prior to application, allow 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.

REWORKING

Possible within 8 hours.

HEALTH AND SAFETY

Follow the instructions on the safety data sheet and wear the appropriate equipment (gloves, mask, safety shoes....).

FURTHER INFORMATION

Available on our website www.limes.us