



SAINT-ASTIER

LIME, LIFELONG EXCELLENCE

Saint-Astier® NHL 3.5

THE VERSATILE LIME



PURE NATURAL HYDRAULIC LIME

THE + BENEFITS

- ◆ RESPECTS COLOUR OF LOCAL SANDS
- ◆ VERSATILE
- ◆ RESISTANT TO SULPHATES AND SALTS
- ◆ COMPATIBLE WITH PLASTER SUBSTRATES

SUITABLE FOR

- > Masonry, consolidation, grouting
- > Plastering, rendering, pointing
- > Decoration

PACKAGING

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

PRODUCT COMPOSITION

100% pure Natural Hydraulic Lime NHL 3.5 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
3.5

EN
459



RENDERING / PLASTERING

| MANUAL APPLICATION | STIPPLE COAT | BASE COAT | TOP COAT | |
|-------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|---------------------------------|
| | 1/8" to 1/4" | 3/8" to 3/4" | Scratched 1/4" to 1/2" | Smooth or floated 3/16" to 1/4" |
| OLD MASONRY AND/OR COARSE PLASTER | | | | |
| NEW MASONRY, BRICKS OR STONE BLOCKS | | | | |
| ESTIMATED CONSUMPTION | 200 ft² per bag with 1/4" thickness | 36 ft² per bag with 3/4" thickness | 120 ft² per bag with 1/4" thickness | |
| WAITING TIME BETWEEN COATS | 2 Days | | 7 Days | |

| MECHANICAL APPLICATION | BASE COAT | TOP COAT | |
|-------------------------------------|------------------------------------|-------------------------------------|-----------------------------------------------|
| | 1/2" to 3/4" | Scratched 1/4" to 1/2" | Smooth or floated 3/16" to 1/4" (manual only) |
| OLD MASONRY AND/OR COARSE PLASTER | | | |
| NEW MASONRY, BRICKS OR STONE BLOCKS | | | |
| ESTIMATED CONSUMPTION | 32 ft² per bag with 3/4" thickness | 110 ft² per bag with 1/4" thickness | |
| WAITING TIME BETWEEN COATS | At least 7 days | | |

BEDDING, POINTING, TILING & OTHER APPLICATIONS

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

*In the case of low absorbent substrates, it may be necessary to incorporate an adhesion agent into the mortar.



ADDITIONAL INFORMATION

> For the base and stipple coats, 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 show shading after a rain shower. This phenomenon shows that the lime mortar has a moisture-regulating function.

> Amount of mixing water: Depends on the moisture of the sand and the dosage. **Generally, 15 litres per 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 3.5 TYPICAL VALUES |
|------------------------------------------|----------------------------------------------------|-----------------------------------------|
| Bulk density | 0.45 to 0.75 kg/l (28 to 46.8 lb/ft ³) | 0.65 kg/l (40.57 lb/ft ³) |
| Compressive strength 7 days | - | 3 MPa (435.1 PSI) |
| Compressive strength 28 days | from 3.5 to 15 MPa (507.6 to 1450.4 PSI) | 7 MPa (1015.2 PSI) |
| SO ₃ | ≤ 2% | ≤ 2% |
| Free lime | ≥ 25% | > 28% |
| Stability | ≤ 2 mm (5/64") | ≤ 2 mm (5/64") |
| Initial setting time | More than 1 hour | 5 to 6 hours |
| Particle size 90µm | ≤ 15% | ≤ 15% |
| Particle size 200µm | ≤ 2 mm (5/64") | ≤ 1 mm (3/64") |
| Whiteness index | No requirements | 72 |
| Quicklime residue after slaking | n/a | < 1% |
| Surface cover (cm ² per gram) | n/a | 9.000 |

| MORTARS | COMPRESSIVE STRENGTH - MPa (MPSI**) | | | ELASTICITY MODULI MPa (MPSI**) | | | |
|-----------|-------------------------------------|-------------|------------|--------------------------------|------------------|------------------|------------------|
| | NF-EN 459* | 1 : 2 | 1 : 2.5 | 1 : 3 | 1 : 2 | 1 : 2.5 | 1 : 3 |
| Mix ratio | NF-EN 459* | 1 : 2 | 1 : 2.5 | 1 : 3 | 1 : 2 | 1 : 2.5 | 1 : 3 |
| 7 days | | 0.75 (108) | 0.57 (86) | 0.53 (76) | n/a | n/a | n/a |
| 28 days | 3.5 | 1.88 (272) | 1.47 (213) | 1.34 (194) | 9.010 (1.30) | 9.000 (1.30) | 8.070 (1.17) |
| 6 months | | 7.1 (1029) | 5.34 (787) | 3.94 (517) | 15.260 (2.20) | 13.501 (1.95) | 13.150 (1.90) |
| 12 months | | 7.5 (1087) | 5.90 (855) | 3.90 (565) | 15.280 (2.21) | 13.620 (1.97) | 13.150 (1.90) |
| 24 months | | 8.63 (1251) | 6.00 (870) | 3.97 (575) | 17.480 (2.53) | 13.785 (1.99) | 13.670 (1.98) |

*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 12 hours.

HEALTH & 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