



SAINT-ASTIER

LIME, LIFELONG EXCELLENCE

STONE DESIGN MORTAR

LIMESTONE CLADDING PLASTER FOR
ELEGANT STONE DESIGN FINISHES



THE + BENEFITS

- STONE IMITATION FOR ELEGANT FACADES
- BREATHABLE LIME RENDER
- ALTERNATIVE TO STONE CLADDING
- NUMEROUS DECORATIVE FINISHES POSSIBLE

SUITABLE FOR

Interior & exterior applications. CMU, thermoclay block, brick, poured concrete (with preparation). For panel substrates, please contact us.

PACKAGING

25 kg bag
40 bags per pallet (1T pallet)

PRODUCT COMPOSITION

Saint-Astier® hydraulic lime, selected aggregates and specific additives. Coloured on demand.

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.

25
KG



EN
998-1



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GENERAL RECOMMENDATIONS

Backgrounds must be clean, sound and free from anything that may interfere with the render adhesion (oil, grease, salts, dust ...).

Concrete must be pressure washed (>400 bars) or sanded, in order to remove all traces of formwork oil. Prior to the main coat application, non-absorbent surfaces, such as concrete must be treated with a 3 to 5 mm stipple coat made by mixing 0,4 l of latex per 25 kg bag of Stone Design Mortar (SDM). The stipple coat must be done 2 to 3 hours before the main application.

In case of localised damage on the masonry (dents resulting from accidental impacts, etc.), repairs must be carried out in accordance with the block manufacturer's recommendations. These repairs must be allowed to dry sufficiently to avoid shadowing through the render.

High absorption substrates must be tempered by dampening to saturation point the day before and again prior to application. Always wait until all surface water is fully reabsorbed into the support before applying the render.

In the case of adjacent heterogeneous supports (bricks/concrete, cement bedding mortar/bricks...), the SDM must be applied in two coats to avoid masonry ghosting.

In the case of adjacent heterogeneous supports, embed fibreglass mesh in the first coat of mortar, (minimum overlapping of 20 cm on each side) and at all stress points (minimum dimensions 60 x 40 cm).

The use of a 19 x 19 mm² metal mesh pegged to the support is mandatory for a total rendering thickness greater than 3 cm.

If necessary, create expansion joints (floor level, structural joint in the building...)

APPLICATION

Always mix using the full content of the bag. Do not add any other material unless specifically agreed with the Manufacturer.

Add 4.5 to 5 litres of clean water per bag ensuring that proper measuring devices are used and that the same water dosage is used for each mix. **Mix for 5 to 10 minutes maximum** until a homogeneous, lump free paste is obtained. Always maintain the same mixing time for all mixes and use the mixed material within 1 hour. Do not try and re-work the mortar.

The SDM mortar is sprayed in 1,5 cm passes, as soon as the previous pass has firmed up. Maximum total thickness is 5 cm. When the mortar is carved, a minimum render thickness at the bottom of the joint of least 12 mm on regular masonry and 5 mm on concrete must be maintained.

MORTAR PREPARATION

 + 	Water : 4.5 to 5 litres For a 25 kg bag
 5/10 min	MECHANICAL MIXING : From 5 to 10 minutes

25Kg
STONE DESIGN
MORTAR bag

 litre bucket
of water

CONSUMPTION

1.6 / 1.7 kg per mm of thickness per m².

ASHLAR JOINTS

Dampen the substrate with a light spray but do not saturate it and apply the mortar in the desired thickness. When the mortar is at its optimum point, give the desired finish (scraped, floated or fine) and carving can then be performed. Ruled lines imitating ashlar joints are achievable with the appropriate tool. Limit the carving to a maximum depth of 10 mm.

STONE IMITATION

Dampen the substrate with a light spray but do not saturate it and apply the mortar in one or two coats with a maximum thickness of 30 mm. A second coat can be applied if more thickness is needed to level the substrate however, it is not required for this technique. When the mortar is at its optimum point, make the desired finish (scraped, floated, rustic/rugged effect, etc.) Whilst the mortar is still wet, an airless sprayer can be used in to apply a suspension of pigment and water, generally in an irregular pattern to achieve a textured stone effect (fresco technic). When the mortar is hard but still fresh enough to be sculpted, begin to carve the joints required to imitate the desired stone design. Once the mortar is dry, brush the surface with a soft sieve to remove any loose particles from the mortar surface.

STONE STAMPS/IMPRINTS

Dampen the substrate with a light spray but do not saturate it and apply the mortar in one or two coats with a maximum thickness of 30 mm. When the mortar is fresh, a mould can be used to stamp the surface, creating a stone design effect. The mould must be sprayed with liquid release agent to avoid the mortar sticking in the mould and if desired, it is also possible to add pigments to the mould or alternatively, the pigment mix can be sprayed on the wall directly as explained above (Stone Imitation). This technique can create a uniform stone design if the mould is positioned with consistency and stamped with equal force. An irregular stone design can be achieved by varying the orientation of the mould and/or beating the mould with varying force. Whilst the mortar is still fresh but sufficiently firm, a trowel can be used to carve the joints to the desired depth to complete the stone design being imitated.

WORKING TEMPERATURE

Not below 5°C or above 30°C. Ensure high suction substrates are thoroughly dampened before application. Avoid rapid drying due to high temperatures and strong winds by covering and curing with a light water mist several times for a period of 72 hours.

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TECHNICAL CHARACTERISTICS

TEST TYPE	RESULT	TEST STANDARD
Wind Driven Rain	Passed - 0.7 oz (78% lower than the federal specification requirement)	ASTM D6904
Vapour Permeability	84 Perms	ASTM E96 (Method B)
Air Permeance	0.002 CFM/ft ²	ASTM E2178
Sorption Isotherm	1.36% (90% Relative Humidity)	ASTM C1498
Combustibility	Non-combustible - NFPA 285 Exempt	ASTM E136
Impact Resistance	140 Pounds	ASTM D2794
Accelerated Weathering	No colour change, blistering, chalking, checking, cracking, or other after 2000 hours	ASTM G154
Thermal Conductivity	R-Value: 1.02 @ 3/8*	ASTM C177
Granulometry	0.8 - 4.0 mm	ASTM C136
Water Retention (on paste)	94% (2% variance)	ASTM C91
Dry Density (cured product)	1450 g.1+/100g/1	EN 459-2
VOC Content	0	ASTM D2369
Capillarity	Between 1 and 2.5g/dm ² .min1/2	EN 1015-18
Modulus of Elasticity	1.05x10 ⁶ psi / 7239 Mpa	ASTM C469
Salt fog Exposure	No effect	ASTM B117
Compressive Strength (28 days)	1500 Psi at Full cure	ASTM C109
Flexural Strength (28 days)	Between 2 and 2.5 N/mm ²	EN 1015
Solar Reflectance	Air mass 1.5 - 0.8 / Thermal Emittance, 300k - 0.88	ASTM E903
Solar Reflectance Index (SRI)	Low, 5 W/m ² K = 98.3 Medium, 12 W/m ² K = 98.5 High 30 W/m ² K = 98.8	ASTM E903

RECOMMENDATION

If in doubt always try on a small test area.

HEALTH AND SAFETY

Refer to the indication of MSDS.

