



St-Astier limes



THERMOCROMEX®

TECHNICAL DATA SHEET



HIGH-TECH MORTAR LIMESTONE RENDER



Manufactured by **CESA**

THERMOCROMEX® - VINTAGE BUILDING

SAINT-ASTIER LIMES HAS DEVELOPED A VINTAGE NEW BUILD CONCEPT WITH THE BENEFITS OF TRADITIONAL MATERIALS WITH MODERN DESIGNS.

THERMOCROMEX® IS A READY MIX, SPRAYABLE, RENDERING MORTAR BASED ON FORMULATED HYDRAULIC LIMES FROM SAINT-ASTIER, TO BE APPLIED ON MULTIPLE SUBSTRATES AND TO ACHIEVE A TIMELESS AND PERFECT FINISH.

- Excellent Weatherproofing
- Elasticity
- High Breathability
- Low Capillarity
- Vibrant Coloured Finishes
- Custom colours available

Shelf life and Guarantee

12 months from production date if kept sealed in original container and stored in dry conditions at temperatures above 8°C. Manufacturer civil Responsibility.

Suitable backgrounds

Masonry units conforms to BS EN 771 , or Mineral Background with $R_t \geq 0,3$ MPa (follow recommendation from your local distributor).

Background must be clean, free of dust, biological growth, capillarity raise, water infiltration and salts. For smooth and non absorbent substrates add a bonding agent SBR (0,6l per 25kg bag).

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.

Mixing

Always use whole bags. Do not add any other material unless specifically agreed with the Manufacturer.

Add 4.5 to 5 litres of clean water per bag. Always use the same water dosage for each mix (proper measuring devices should be used). **Mix for 5 to 10 minutes maximum.** Always maintain the same mixing time for all mixes. Use the mixed material within 1 hour. Do not try and re-work the mortar.

Consumption

1.6/1.7 kg. per mm of thickness per m²

General Recommendation

On properly prepared background offering adequate keying, cast on or spray on a minimum of 10 mm in one pass for floated finishes or a minimum of 15 mm if a scratched finish is required. On waterproofed or smooth backgrounds spray or cast on a 1st bonding coat of about 3 mm adding 500 grams of SBR per bag of product. Straighten the work immediately after with an appropriate tool. Float (sponge, wooden or plastic) after 2-3 hours or more depending on weather conditions.

THERMOCROMEX® – DIFFERENT FINISHES USING

Rustic (rough cast), partly smoothed rough cast and dragged finishes

Work in 2 passes at an interval of some hours. The first pass has to be at least 10mm to guarantee the waterproofing effect of the whole work. If the second pass cannot be done within few hours, dampen the surface before its application. In sprayed renders, make sure that the pressure and the distance of the spraying nozzle are constant.

In rough cast finishes the render is left as cast.

Smoothing a rough cast finish is done once the render is slightly hardened

Dragged finishes are achieved by scraping the surface once sufficiently hardened.

Scratched finishes

The render is applied in 1 or 2 passes, depending on the background: the first will be cast on or sprayed coat (10 mm), the second is applied soon after. The total thickness of the work should be minimum 15mm making sure that a minimum of 10mm is left after scratching over the whole surface.

Rule the second pass immediately after application.

The scratching should be uniform and using appropriate scratching tools (devil floats etc...) and it can be done between 3 to 24 hours after ruling, depending on the weather conditions.

Remember that scratching will cause a different visual effect in the colour of the product from the colour of the same product with a smooth finish.

Deep scratched surfaces are more sensible to rapid drying and therefore more attention should be paid to curing with light water mist. This should not be done in full sun or on sun baked surfaces (cure in advance and later on in the day).

Sanded finish

Proceed as per scratched finish. When the surface is hard enough, usually 48 hours but could be longer.

Sponged finish

Can be applied on various types of work, using different sponges texture or hardness when the work is sufficiently dried.

Smooth floated finishes (floats, sponge, trowel)

The render is applied in 2 passes of 5mm each, ruled and floated when sufficiently dry. The minimum thickness has to be 10mm after floating. Note: on large surfaces without joints it might be necessary to introduce joints. In all cases, if joints are present in the background, these should not be bridged.

Dry dashing

Apply the render in 2 passes to achieve a 15mm overall thickness.

Dry dashing is possible on the second pass when still fresh

Lined inishes

Lined finish, simulating stonework, is achievable with the appropriate tools.

Limit the line to a maximum thickness of 10 mm.

THERMOCROMEX® - GENERAL CHARACTERISTICS : 25 Kg BAG

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 color 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 2.5 g/dm ² . min 1/2	EN 1015-18
Modulus of Elasticity	1.05 x 10 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, 5W/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.



Tŷ-Mawr

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sustainable building materials for healthier homes...deunyddiau adeiladu cynaliadwy ar gyfer cartrefi iachach

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