

31210 Roman Cement

Description

Natural belite fast-hardening cement from Grenoble, according to the Norm CNP PM NF P 15-314. Comparable with a non-hydrated NHL 15 (natural hydraulic lime, with compression strength class 15).

Raw Material Production

The raw material lime marl is mined underground and then burned in a kiln.

Compatibility / Miscibility

Binder: slaked lime, lime hydrate, NHL, casein and cellulose

Aggregate: grit, sand, stone powder, perlite, vermiculite, cocchio pesto, charcoal, alkali-resistant pigments.

Reinforcement: wire, ribbed drawn metal, hemp

Incompatibility

Binder: gypsum, anhydrite, water glass, high clay content

Reinforcement: jute, glass fiber.

Plaster Bases

Mineral, solid, fest, sound, absorbent, free from separating layers and gypsum.

Possible substrates: massive brickwork, mineral gravel, concrete slab.

Consumption / Guide Formulation

1 Part Roman Cement, 1-2 parts of Calix Blanca NHL (31840) and 6-12 parts of grit / sand / stone powder.

Per m³:

approx. 200 kg Roman Cement (31210) – 150-200 kg Calix Blanca NHL 3.5 (31840) – 1 m³ sand (approx. 1.5 tons)

For each 1mm plaster layer per m²:

Approx. 0.2 kg Roman Cement (31210) – approx. 0.15-0.2 kg Calix Blanca NHL 3.5 (31840) – approx. 1.5 kg sand (approx. 1 liter).

TECHNICAL DATA

Processing

- Follow the processing instructions !
- Moisten sufficiently
- Do not stir mortar beyond the initial setting
- Do not process below 5°C

Technical Data

	Requirement accord. UNI EN 459-1	Roman Cement tested as NHL 15	Requirements accord. NF-P 15-314	Roman Cement tested as Natural Cement
Grain size 200 µm (%)	≤ 5	1.8		1.8
Volume stability (mm)	≤ 2	n.g.	≤ 15	3
Residual water (%)	≤ 2	0	0	0
Initial setting time (min)	> 60	3	≤ 4	2
Compressive strength 7 Days (MPa)		12	≥ 14	23
Compressive strength 28 Days (MPa)	≥ 3.5 ≤ 10	15	≥ 19	31
Spec. surface (Blaine) (cm ² /g)		7000	≥ 5000	7000
Bulk density (kg/dm ³)		0.9		0.9
SO ₃ (%)	≤ 3	3.4		3.4
Free lime (%)	≥ 9	2		2
C ₂ S (%)		≥ 50		≥ 20
C ₃ S (of electrodes) (%)		≤ 10		≤ 10

Storage:

When stored in a dry area, the shelf-life of Roman Cement is at least 6 months.