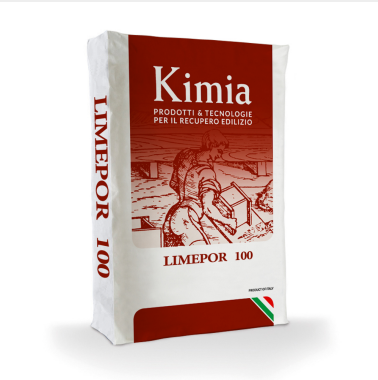

Limepor 100

ST13-0217

Injection mix containing natural hydraulic lime for the consolidation of cavity walls

EN 998-2 CE

DESCRIPTION

Limepor 100 is an injection mix containing natural hydraulic lime NHL with the addition of natural pozzolan and carbonate filler.
This mix was specially designed for the restoration and pre-consolidation of cavity walls and brick or stone foundations by means of injection techniques.
Limepor 100 has low water-soluble salt content which makes it physically and chemically compatible with the original components of walls with similar mechanical properties. It can be injected into cracks or cavities using any kind of pump with special injectors.
It is CE marked in compliance with EN 998-2.

ADVANTAGES

- **Performances:** improvement of the static and dynamic behavior of the structure; low water soluble salts, it is not susceptible to degenerative chemical reactions in case of sulphates in the masonry; compensated shrinkage; high breathability.
- **Compatible**: mechanical characteristics comparable to those of a masonry structure: it allows a homogeneous and isotropic structural behavior of the resinated masonry; chemical compatibility with materials used in historic buildings.
- **Easy to apply:** very fluid with low water / binder ratio and high penetration power resulting in saturation of small cracks or cavities and even smaller gaps; absence of segregation in the mixture during injection.
- **Long-lasting:** tested formulation and optimized in applications, experiments and comparative tests carried out since the early 1980s.

USES

Limepor 100 is used for the restoration and pre-consolidation of ancient brick or flint walls by means of injecting with low pressure injection systems.

APPLICATION

	Pourable		Fresh mortar workability time: 195 ± 30 mins
			Mixing water: 7-8 lt/ 25Kg

Limepor 100 must be mixed with water in the quantity shown in the table.
Add 3/4 of water required into the mixer, then add the product and the remaining water continuously until you obtain the consistency required.
No component other than the mixing water must be added to the product during preparation and laying.
Limepor 100 must be injected into walls by means of normal electric or manual low-pressure pumps, using injectors fixed into the holes and proceeding from the lower holes towards the upper ones.
Do not remix by adding water to the product when it has already started to set. With frescoed walls, use **Limepor IZ8** and contact our Technical Department for support.

CONSUMPTION

1,5 Kg/dmc
Absorption per cubic metre of masonry: about 80-190 kg depending on the size of the cavities in the wall.

PACKAGING

25 Kg bags.
Pallet 60x25 – 1500 Kg.

STORAGE

Protect from humidity. Store in a dry, sheltered place.
In these conditions the product remains stable for 12 months.

Characteristics	Value
Appearance	Powder
Colour	Light grey-hazel shades
Application temperature C°	+2 - +35 °C
pH in water dispersion	11,5 -12,5
Particle size distribution UNI EN 1015-1	passante a 0,09mm: 100 %; 0,06mm: 90%;
Soluble salts, sulphates, nitrates, chlorides content (Normal 13/83)	< 1.5% Of which chlorides < 0,03%
Resistance to sulphates	No resistance loss for specimens immersed for 90 days in Na_2SO_4 solution at 5%
Resistance to sulphates Anstett-Le Chatelier edited (internal procedure)	Clamping aperture: <10 mm; the product has high resistance to sulfur attack
Fluidity (consistency through gutters) UNI 8997	70 - 80 cm
Fluidity EN 445 (Marsh cone)	Beginning < 25 secs; 30 mins < 25 secs; 60 mins < 25 secs.
Workability time of fresh mortar UNI EN 1015-9	195 ± 30 mins
Bleeding UNI 480-4	None
Elastic modulus UNI EN 13412	~ 5000 MPa
Compressive strength UNI EN 1015-11	in 7 dd > 10 Mpa in 14 dd > 15 MPa in 28 dd > 18 MPa in 90 dd > 20 MPa
Flexural strength UNI EN 1015-11	in 7 dd > 3,6 Mpa in 14 dd > 3,9 MPa in 28 dd > 4,9 MPa
Thermal conductivity	0,83 W/mK (table value)

Characteristics	EN 998-2 Limits	Value
Components ratio in weight [%]	Declared value	Binder: 25-35 Pozzolanic materials: 12-22 Aggregates: 42-52 Additives: < 1
Chlorides content [%] EN 1015-17		≤ 0,1
Compressive strength in 28 dd EN 1015-11 [MPa]		> 15
First shear resistance [MPa] In combination with masonry elements compliant to EN 771		0,15 [Table value]
Absorption of water for capillarity EN 1015-18		0,4
Permeabilty to water-vapour EN 1745		15/35 [Table value]
Reaction to fire class		A1
Hazardous substances		See the safety data sheet

WARNING

Product for professional use. The use of natural raw materials may result in natural color variations from one production lot to another.

Before using, check bags have not been damaged, and do not use the product if there are any lumps. The technical specifications and application methods recommended herein are based on our current knowledge and experience and do not represent any form of guarantee of the final results obtainable with the product. It is the customer's responsibility to check that this data sheet is still effective and has not been replaced with a more recent version, and that the product is suitable for the intended use.