



Limepor COCCIOFORTE

ST9-0221

“Cocciopesto” (aggregates) system for structural consolidation

DESCRIPTION

System consisting of a mix of “cocciopesto” (Limepor COCCIOFORTE C) aggregates mixed with a two-component organic binder (Limepor COCCIOFORTE/A + Limepor COCCIOFORTE/B).

Final mechanics achieved after just 7 days; applicable to substrates painted on the intrados, available in ivory and antique red color variants; no need of metal meshes and connectors. The whole system is positioned without altering the integrity of the vault with dense anchors; it can easily be removed after heat treatment.

ADVANTAGES

- Reduced increase in loads thanks to the light weight due to reduced thicknesses.
- Low elastic modulus associated with excellent resistance to compression and bending.
- High permeability.




USES

Structural system with cocciopesto effect collaborative castings

WORKS

- Reinforcement of vaults through reinforced castings with structural cocciopesto ([SA106](#)).

APPLICATION

	Manual application		Total curing time: 7 days Walkability time: 1 day
	Min thickness per coat: 3 cm		

Shoring of the vault, emptying, cleaning and grouting of the cracks.

Preparation of perimeter anchors (and metal pieces for the solidarization of the mesh) to be anchored by inorganic mortar or resin for grouting.

On damp or light substrates, priming (by spray or by brush) with Kimicover FIX, respecting a consumption of 0.3 Kg/sqm.

Application of **Limepor COCCIOFORTE A + B** as adhesion promoter, respecting a consumption of 0.7 Kg/sqm and performing of the casting on fresh (which can be possibly reinforced) with **Limepor COCCIOFORTE**.

To mix the product pour component "B" (hardener) into component "A" (resin) and mix with a low-speed drill (200-300 per minute) until you get a perfect mixture, taking care not to incorporate air during mixing.

Add the inert **Limepor COCCIOFORTE C** (which must be perfectly dry at the time of mixing) and mix until the mixture has a damp earth consistency.

In the case of fractionated mixes respect the ratios in weight (and not in volume) indicated on the packages.

CONSUMPTION

16,8 Kg/m²/cm (A+B+C)

PACKAGING

- Limepor COCCIOFORTE A+B:
Com. 5 Kg;
Com. 25 Kg;
- Limepor COCCIOFORTE C:
Sac. 25 Kg.

STORAGE

Limepor COCCIOFORTE A + B → In sealed containers and in a dry environment, its stability is 24 months.

Limepor COCCIOFORTE C → Store in sealed containers and in a dry environment.

Characteristics A+B	Value
Density (A+B) EN ISO 2811-1	1,06 – 1,18 g/cm ³
Frost time (200 g at 25°C)	10-20 mins
Complete curing at 25°C	7 days
Min. Temperature of application	+5 °C
Resin:hardener ratio	4:1
Color	Translucent white
Viscosity (poises at 25°C)	8 - 10 (A+B)
Dry residue (A+B) UNI 8309	> 98 %
Compressive strength in 7 dd ASTM D695-02a	> 50 MPa
Max. tensile strength ASTM D 638	> 30 MPa
Tensile tangent modulus ASTM D 638	1760 MPa
Adhesion to concrete	> 3 MPa

Characteristics of the system	Value
Density (A+B+C)	1,68 kg/dm ³
Ratio Limepor COCCIOFORTE A+B : Aggregates	[Ratio by weight] 1:20
Consumo Limepor COCCIOFORTE A+B Limepor COCCIOFORTE C	[Kg/mq/cm] 0,8 16
Max size of aggregates [mm]	3 mm
Compressive strength	In 1 d ay11 MPa In 3 days 13 MPa In 7 days 15 MPa
Flexural strength	In 1 day 5,4 MPa In 3 days 5,7 MPa In 7 days 6,3 MPa
Adhesion to the substrate	> 2,4 Mpa *

* cohesive failure of the concrete substrate

VARIANTS

Limepor COCCIOFORTE is available in two different colors of the aggregates (**Limepor COCCIOFORTE C Rosso Antico** and **Limepor COCCIOFORTE C Avorio**) maintaining the characteristics of the systems unaltered in terms of mechanical performance, mixing ratios and aggregate size.

WARNING

Product intended for professional use.

For further information and advice on safe handling, storage and disposal of chemical products, the user must refer to the most recent Safety Data Sheet, containing physical, ecological, toxicological and other data related to safety. All technical data shown in this Technical Data Sheet are based on laboratory tests. Actual measurement data may vary due to circumstances beyond our control. The information and requirements indicated in this Technical Data Sheet are based on our current knowledge and experience and are to be considered, in any case, purely indicative. They cannot guarantee the final result of the applied product and they have to be confirmed by exhaustive practical

applications; therefore the user must test the suitability of the product for the intended application and its purpose. Users must always refer to the latest version of the local technical data sheet related to the product.

TECHNICAL SPECIFICATIONS

SK106 - Reinforcement of vaults through the construction of hoods reinforced with structural earthenware

In case of cracks on the intrados a careful grouting will be performed. If the plaster on the bottom of the vault is damaged or detached in some of its parts, it will be consolidated properly. Shoring of the structures involved in the intervention. Extradite cleaning with total elimination of flaking parts and of any material that could compromise the good anchoring of the coating. Grouting of any passing cracks.

Positioning of perimeter anchors Kimisteel CONNECT in stainless steel, to be anchored by mortars Limepor 100, Betonfix 200/200TH or resin for grouting Kimitech F3.

In the case of damp or inconsistent substrates, contact the Technical Office to chose the best solution.

Mix Limepor COCCIOFORTE A and Limepor COCCIOFORTE B and apply with a brush on the surface as an adhesion bridge with a consumption of about 0.7 Kg/sqm.

Mix the three-component mixture adding the aggregate Limepor COCCIOFORTE C.

Pour the mixture on the substrate treated with the adhesion promoter, fresh on fresh, trying to lay the material evenly according to the surface to be covered.

During the laying it is essential to carefully cover the previously placed perimeter rods and compact the material on the substrate.

Any further construction joints do not require further anchoring.

The three-component system consisting of a mix of cocciopesto-colored aggregates mixed with a two-component organic binder will be prepared and applied scrupulously following the instructions on the technical data sheets provided by the manufacturer and must have the following characteristics:

- Specific weight: 1.68 Kg / dmc;
- Compressive strength → A 1 g: 11 MPa; A 3 days 13 MPa; At 7 days 15 MPa;
- Flexural strength → A 1 g: 5.4 MPa; At 3 days 5.7 MPa; At 7 days 6.3 MPa;
- Adhesion to the support > 2.4 MPa.