

1. DESCRIPTION

REABILITA CAL FORCE is a dry premixed mortar, formulated from natural hydraulic lime for mechanical or manual application, intended for reinforced renders and laying joints for the consolidation and rehabilitation of mechanically fragile masonry and for the execution of joints among masonry construction elements, even on exposed surfaces and new supporting masonry or reconstruction of existing ones.

It is intended for the structural stabilization of old elements such as structural walls, pillars, beams, vaults and arches. It has particular properties of mechanical strength, adhesion, chemical resistance and durability particularly suited to its intended purpose.

Its composition based on natural hydraulic lime ensures full chemical and mechanical compatibility with old masonry, with optimized characteristics such as modulus of elasticity, water vapour permeability and salt resistance. Its hydraulic properties ensure the development of mechanical strength over time, ensuring excellent preservation of heritage.

The absence of soluble salts in *REABILITA CAL FORCE* minimizes the occurrence of degradation phenomena associated with efflorescence formation.

It is a product designed for sprayed application.

2. FIELD OF USE

REABILITA CAL FORCE is used in the construction of high water vapour permeability renders with high mechanical performance either indoors or outdoors, on stone, brick, tuff and mixed masonry, not subject to untreated uprising damp. It enables to carry out new renders or to reconstruct the existing ones in masonry with historical value, as well as renders 'reinforced' with electro galvanized welded mesh, or others, in mechanically weakened masonry. It is also possible to use it in 'reinforced layers' with reinforcing metal mesh in vaults, joints between stones, brick, tuff of exposed masonry and laying joints.

3. PRODUCT CHARACTERISTICS

Powdered product	Value	Standard
Colour	Beige	-
Granulometry	4,0 mm	-
Water-soluble chlorides	≤ 0,1 %	EN 998-2
Paste product	Value	Standard
Mixing water	17,0 ± 1,0 %	-
Theoretical consumption	14,5 kg/m ² /cm	-

Hardened Product	Value	Standard
Compressive strength	$\geq 14 \text{ N/mm}^2$	EN 998-1
Adhesion to brick and block / Mode of fracture	$\geq 0,5 \text{ MPa / A and B}$	EN 1015-12
Modulus of elasticity	$< 12000 \text{ N/mm}^2$	BS 1881-5
Reaction to fire	Class A1	EN 988-1
Water vapour permeability coefficient	$\leq 25 \mu$	EN 1015-19

4. APPLICATION**a) Substrate preparation**

The masonry to repair should be submitted to inspection and any loose pointing mortar should be entirely removed, so as to check on its condition. The surface should be washed with water to eliminate any soluble or insoluble substances harmful to the reinforcement technique. Washing can be done with water pressure, taking precautions not to damage the wall, particularly in joints or cracks. As an alternative to washing, mechanical cleaning may be carried out with metal brushes. Any voids or discontinuities in the masonry should be repaired.

Before applying **REABILITA CAL FORCE**, it is necessary to saturate the substrate in order to prevent the substrate from absorbing water from the mortar, impairing the mortar's final characteristics. Excess free water should be eliminated, so that the wall is saturated with water but the surface is dry.

When carrying out 'reinforced' renders or layers, or in the presence of mixed masonry, apply a 5 x 5 cm, \varnothing 2 mm galvanized metal mesh, or others, for which the reinforcement has been calculated, that should be fixed to the existing masonry with suitable bolts and plugs, away from the substrate so as to be placed midway the mortar thickness.

b) Mortar preparation

REABILITA CAL FORCE should be prepared with a continuous mixing spraying machine, or in a concrete mixer if manually applied using a trowel.

When small quantities have to be mixed, a low speed electric mixer can be used, using about 4,0 to 4,5 litres of water per 25 kg bag, to obtain the appropriate consistency.

c) Application

When applying, good practices should be used that underlie the application of sprayed renders, providing for the mortar tightening, the trowelling, the use of fiberglass mesh reinforcements in stress concentration areas, such as, substrate transitions, angles of openings, corners, etc., among other precautions important for a successful application.

The surface of **REABILITA CAL FORCE** should be finished with the traditional trowelling technique preparing it to receive the final finish layer.

Seeing that these are specific situations in each rehabilitation work, our Technical Services should be consulted.

d) Restrictions

REABILITA CAL FORCE should not be applied at room and support temperatures below 5 °C and above 30 °C. It has a curing time of 28 days.

In hot and/or dry weather or when supports are directly exposed to sunlight, the substrate should be previously wetted and application should only be started when it is dry.

Under these conditions daily watering of the surfaces should be carried out, for one week, so as to keep mortars permanently moist.

Application in the presence of strong winds may cause render cracking. In such case, walls should be protected so as to minimize the effects of the wind action.

e) Complementary Advices

The mixing water should be free of any impurities (clays, organic matter) and drinking water should be used;

No mortar that has started its setting process should be applied. Do not soften mortars by adding water after preparation;

Do not add any other products to the mortar. **REABILITA CAL FORCE** should be applied as it is shown in its original packaging.

5. PACKAGING AND VALIDITY

Packaging

25 kg paper bags in plasticized pallets of 60 bags.

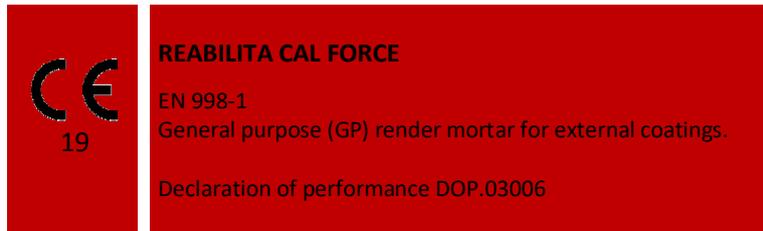
Validity

6 months provided the conditions of the original packaging remain unaltered and in good storage conditions, protected from extreme temperature and humidity.

6. HEALTH AND SAFETY

(DOES NOT REPLACE CONSULTATION OF THE PRODUCT SAFETY DATA SHEET)

- Irritating to eyes, respiratory system and skin;
- May cause sensitization in contact with skin;
- Do not breathe dust;
- Avoid contact with skin and eyes;
- If it comes in contact with eyes, rinse immediately and thoroughly with water and seek a specialist advice;
- Use protective clothing and appropriate gloves;
- Keep out of children's reach.



Being the conditions of applying our products out of our reach we do not take responsibility for its misuse. It is the customer's duty to verify the suitability of the product for the intended purpose. In any case, our responsibility is limited to the value of the goods supplied by us. The information contained in the present data sheet may be altered without prior notice. In case of doubt and if you need any further advice please contact our Technical Services.

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