



very low specific weight injection mortar for large size cavities consolidation with expansive and not destructive power during the plastic phase. Cracks width up to 30mm

PARTICULAR FEATURES Pre-mix suitable to carry out the filling up of voids present among plaster's layers (till 30 mm), sealing of superficial cracks and re-gluing of plaster's parts degraded and friable. As well as a specific weight particularly limited the formulation presents suitable mechanical resistances. COMPOSITION OF FORMULATION

It is made up of natural limes and special hydraulic binders (C30), chemically stable and with very low soluble salt contents, pozzolana, ventilated perlite and a special combination of fluidifying, retentive, airing additives. The special formulation, produced in 1/10,000 planetary dispersion for a time under 20 minutes, forms a homogenous premix of a white colour. To the mortar can be added micro-fibres to improve its mechanical features in special uses.



The product, considering the low specific weight and the low mechanical resistances, results suitable to carry out readherence of elements lacking of static functions and not possible to be made heavy.

The 3 LEDAN RI.STAT products can be used mixed together in order to achieve the best chemical, physical and mechanical performances for the work to be done.

PREPARATION'S INSTRUCTIONS

Knead energetically, for about three minutes, LEDAN RI.STAT EXTRA with demineralised water. If necessary, and in case of application with tubes of which the diameter is less

RECOMENDED DOSES					
USE	LEDAN RI.STAT A	WATER			
FILLING UP OF CRACKS AND HOLLOWS	1 Kg	11			
INJECTIONS OF BIG HOLLOWS (carried out with syringes having a diameter over 6 mm)	1 Kg	1,2 I			

than 5 mm, filter the grout obtained to eliminate possible lumps formed in the kneading phase.

INSTRUCTIONS FOR USE

1) Before to execute the plasters, remove well friable and incoherent parts and apply only on previously desalinated and reinforced supports.

2) Plaster well the product's possible outlets from the building support with the appropriate LEDAN RALAC plastering mixture (also available in dough ready for use in the appropriate tube with spout, in a 1-kg pack).

3) If possible wet the surfaces that have to be handled with repeated water's applications.

4) Add water to the LEDAN RI.STAT EXTRA, mixing energetically by electrical drill at low speed for about 6-8 minutes.

5) Keep the mixture shaken before to inject, by syringes not equipped with needle $\emptyset < 6$ mm

6) Inject uninterruptedly to avoid occlusions and obtain the maximum filling up.



LEDAN RI.STAT EXTRA is lime based mixture, therefore avoid application in periods of extreme cold (with minimum temperatures less than 5° C) or extreme heat (with maximum temperatures over 35°C). Avoid moreover the application on supports that have presence of soluble salts.





LEDAN RI.STAT EXTRA application usually occurs with common syringes. It's recommend the use of veterinary-style not equipped with needle (having a diameter of exit over 6 mm).

PHYSICAL - CHEMICAL FEATURES						
SPECIFIC WEIGHT	0,75 Kg/Dm ³	LOW	ADHESION	1 N/ mm²	GOOD	
INITIAL SETTING	5 HOURS	LOW	EXUDATION	NONE	EXCELLENT	
FINAL SETTING	10 HOURS	LONG	STEAM PERMEA- BILITY	7 μ	GOOD	
WORKABILITY	30 Minutes	HIGH	ELASTIC MODULE	7000 N/ mm ²	MEDIUM	
COMPRESSION STRENGHT	6 N/mm²	MEDIUM	WATER RETENTION	>89	EXCELLENT	
BENDING STRENGHT	1,9 N/mm² (28 gg)	MEDIUM	EXPANSION	+2 %	GOOD	

N.B. The material was characterized bearing in mind its own application modalities. The numerical values refer to averages revealed on laboratory supports reproducing problems inherent in building structures.

• EFFLORESCENCE

To evaluate if possible soluble salts present in a mortar may cause undesired chemical and chromatic alteration phenomena, it is possible to carry out a test according to the RAL 544/3 regulations in the laboratory. The formulation LEDAN RI.STAT EXTRA undergoing such a test does not cause efflorescence phenomena.



DURABILITY

Some LEDAN RI.STAT EXTRA samples undergoing an accelerated aging cycle, simulating a natural ageing of around 20 years, have demonstrated a performance drop of under 4%.

STORAGE

If conserved in a dry place and closed containers the product is conserved for 24 months.

PACKAGES

Buckets of: 10 Kg

EXPERIMENTATIONS CARRIED OUT IN YARDS CHECKED BY THE MINISTRY FOR CULTURAL HERITAGE AND ACTIVITIES

The product is the result of a State Research born by a protocol of agreement between the Ministry for Cultural Heritage and the M.I.U.R. for the consolidation of frescoed plasters in the phase of detachment from the masonry supports. Studied in an high qualified laboratory, was experimented in yards, under the supervision of the competent Authorities. Was used by the Opificio delle Pietre Dure (Factory of the Hard Stones) of Florence in the consolidation of the frescoed plasters of the Church of Santa Croce in Florence.



Injections for re-adherence and filling up with very low content of soluble salts carried out with pre-mix named LEDAN RI.STAT EXTRA. As for the product used, its principal chemical-physical features, the places and date of occurred testing must be declared. The producer must also supply the papers relating to the performed research activity, ratified by the Public Organ responsible for control thereof.

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