



TECNO  
EDILE  
TOSCANA

PRODOTTI E TECNOLOGIE PER IL RESTAURO

# LEDAN® STUC FORTE

Grouting mortar

High resistance mixture for grouting and reconstruction of natural and artificial stony material.

## ▲ PARTICULAR FEATURES

Excellent adhesive power, high thixotropicity; chemical mechanic compatibility with the support. Exceptional chromatic yield. Absence of efflorescences even in very wet environments. Durability of the added colours.

## ▲ COMPOSITION OF FORMULATION

It is made up of special hydraulic binders (C40) chemically stable and with very low soluble salt contents, inert flints, calcareous and a special combination of fluidifying, retentive, airing additives. The formulation, produced in 1/10,000 planetary dispersion for a time not under 20 minutes, forms a homogenous pre-mix of a white marble colour.

## ▲ APPLICATION FIELDS

Product appropriately formulated to solve problems related to plastering and reconstruction of missing parts in ornamental elements made by stony material, such as statue, capitals, colonnade. Special suited to restore fountains.



## PREPARATION'S INSTRUCTIONS

LEDAN STUC FORTE is a premix ready-to-use with the addition of water only. Knead energetically, for about three minutes, little doses of LEDAN STUC FORTE, with clean water. Reached the desired workability, apply preferably during the first twenty minutes since the preparation.

## RECOMENDED DOSES

USE	LEDAN STUC FORTE	WATER
SMOOTHING	10 Kg	2,5 lt
GROUTING	10 Kg	2 lt

## INSTRUCTIONS FOR USE



- 1) Clean well the surfaces on which the intervention will must be executed, taking care of removing friable parts, dirtiness any protective substance that can damage the adherence between the support and the mortar for restoration.
- 2) Apply the mixture prepared in thicknesses not more than 2 cm par time.
- 3) If is necessary to reconstruct lacking parts of considerable dimensions "reinforce" with polypropylene fibre nets and do the restorations in more phases.

## LIMITS FOR THE USE



LEDAN STUC FORTE is hydraulic binder; is not advised the application in periods of extreme cold (with minimum temperatures less than 5° C) or extreme heat (with maximum temperatures over 35°C).

The application of LEDAN STUC FORTE is done generally with little manual tools that allows to shape the surfaces objects of the restoration depending on what needed.

PHYSICAL - CHEMICAL FEATURES					
SPECIFIC WEIGHT	1,6 Kg/Dm <sup>3</sup>	MEDIUM	ADHERENCE	0,2 N/mm <sup>2</sup>	EXCELLENT
INITIAL SETTING	4 HOURS	MEDIUM	EXUDATION	NONE	EXCELLENT
FINAL SETTING	8 HOURS	MEDIUM	STEAM PERMEABILITY	10 μ	MEDIUM
WORKABILITY	1 HOURS	MEDIUM	ELASTIC MODULE	15.000 N/mm <sup>2</sup>	MEDIUM
RESISTENCE TO COMPRESSION	19 N/mm <sup>2</sup>	HIGH	WATER RETENTION	>85%	EXCELLENT
RESISTENCE TO BENDING	7 N/mm <sup>2</sup> (28 gg)	HIGH	SHRINKAGE	NONE	EXCELLENT

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 STUC FORTE undergoing such a test does not cause efflorescence phenomena.

#### DURABILITY

Some LEDAN STUC FORTE samples undergoing an accelerated aging cycle, simulating a natural ageing of around 20 years, have demonstrated a performance drop of under 3%.

#### STORAGE

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

#### PACKAGES

Buckets/bags of: 20 Kg

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

A product to use in the sector of cultural heritage, as well as rigorous laboratory studies, also requires careful checks in yards, aiming to verify real behaviour over time, stability, the absence of direct and indirect negative effects and possible reversibility. LEDAN STUC FORTE is made up of C30 and very pure inerts, and is been focused on solving problems related to plastering of ornamental and structural elements made by stony material, composing sculptural groups and fountains. The recently formulation (on sale since 3 years) is an evolution of the pre-mixture LEDAN TRAVER STUC, used yet in the intervention of the restoration of Fontana di Trevi.

#### SPECIFICATION ENTRY

Plaster of ornamental and structural elements made by natural and artificial compact stony material, done by a product with an high mechanical resistance named LEDAN STUC FORTE, based on special hydraulic binders with very low soluble salt contents, inert flints and chalks. As for the product used, its principal chemical-physical features, the places and date of occurred testing must be declared.