

# DEUMISAN LEGANTE

HYDRAULIC LIME-BASED BONDING AGENT, FOR PREPARING DAMP-PROOFING PLASTER, WITH ADDED SYNTHETIC FIBRES, AERATING AND WATERPROOFING AGENTS

# DEUMISAN PRONTO

HYDRAULIC LIME-BASED TRANSPIRING MACROPOROUS FIBRE-REINFORCED DAMP-PROOFING PLASTER, FOR RESTORING WALLS AFFECTED BY CAPILLARY RISING DAMP AND SURFACING SALTS

GRANTS *LEED* CREDITS

CHARACTERISTICS		ENVIRONMENTAL		METHOD OF USE			PRECAUTIONS
DAMP-PROOFING	ALLOWS TO BREATHE	ECO GREEN	RECYCLABLE	MIX MECHANICALLY	SPRAY APPLICATION	APPLY BY TROWEL	STORAGE: IN A DRY PLACE

## PROBLEM

### DEHUMIDIFY WALLS DEGRADED BY RISING DAMP



Damp and its effects make rooms unhealthy and uninhabitable. Capillary rising damp is a problem often affecting walls of old and modern buildings, causing damage to the plaster. This process is caused by capillary absorption by porous building materials coming into contact with ground water. The effects are devastating: damp walls and flaking plaster caused by the salts carried by water, which penetrate the wall's capillaries and crystallise on its external surfaces to form efflorescence. As a result, the plaster crumbles and falls off due to the increased volume of the salt crystals themselves.

## SOLUTION

**DEUMISAN PRONTO** is a pre-mixed powdered product formulated with hydraulic lime, aggregates with selected grain-size curve, additives for improving workability, water-repellents, pore-creating agents and reinforcing fibres. When mixed with water, **DEUMISAN PRONTO** yields a plaster that is particularly suitable for refurbishing masonry walls degraded by damp, as its high uniform porosity facilitates water evaporation. The problem of dehumidifying a wall affected by rising damp is resolved thanks to the remarkable evaporation rate, which in the case of the **DEUMISAN PRONTO** plaster exceeds the humidification rate.

**DEUMISAN PRONTO** is highly permeable to water vapour and favours its rapid passage from the wall to the outside environment. Moreover, it possesses substantial gripping power and good water-repellency properties.

## APPLICATION FIELDS

**DEUMISAN PRONTO** is particularly suitable for indoor and outdoor restoration works and for refurbishing damp walls. Thanks to the mineral properties and physical characteristics it assumes after hardening, this type of lime-based plaster is specifically recommended for preserving the existing type of mortar when restoring old and degraded walls.

## ADVANTAGES

- High workability.
- Its ease of application reduces application costs.
- Excellent breathability.
- Restores the natural moisture of walls to within the normal environmental values.
- Eliminates the disintegrating action of salts.
- Excellent resistance to frost-thaw cycles.
- Natural composition ideally suited to restoring and preserving historical buildings.



## METHOD OF USE

### • SURFACE PREPARATION

Plaster must be removed from damp walls for about one metre beyond any evident signs of damp. Remove all loose and flaking material, oils, release agents, dust and dirt in general by tapping, brushing and washing the surface with water.

Fill any cavities with brick fragments and cement-lime mortar. In case of saline efflorescence, after cleaning the surface treat it with DEUMISAN AL, an anti-saline impregnating agent (1). Immediately after the anti-saline treatment, apply a partial render coat using semi-liquid cement-lime mortar mixed with water and Collaseal (adhesion promoter) in a ratio of 3:1 (1). Plaster the surface with **DEUMISAN PRONTO** 24 hours after applying the partial anchoring render coat, up to a recommended minimum thickness of 2 cm.

### • PREPARING THE MIX

**DEUMISAN PRONTO** is prepared by mixing the product with right quantity clean water (see table). The mixing time when using a cement mixer should not exceed 3 minutes (2).

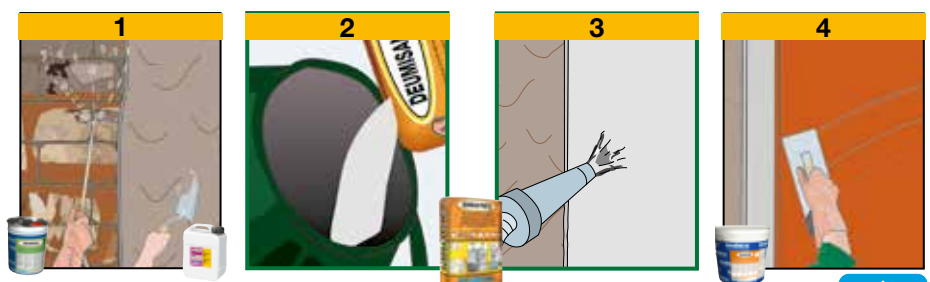
### • APPLICATION

Apply **DEUMISAN PRONTO** within one hour

from mixing; apply one or more coats up to a minimum recommended thickness of 2 cm.

**DEUMISAN PRONTO** can also be applied – besides using a trowel – with automatic spraying machines, such as PFT or Turbosol (3). No special precautions are required for its application

(See following)



## TECHNICAL CHARACTERISTICS

	Standard	DEUMISAN PRONTO
Appearance		Powder
Colour		Beige
Particle size		0 ÷ 1.3 mm
Apparent density	EN 1015-6	1.35 ± 0.05 kg/L
Mixing water		19% ± 1%
Storage in original packaging in a dry place		12 months
<b>Mix properties and workability</b>		
Density of the mix		1.60 ± 0.05 kg/L
Application temperature		+5°C ÷ +35°C
Minimum application thickness		8 mm
Maximum application thickness per layer		20 mm
Application		Manual or mechanical
<b>Performance characteristics</b>		
<b>Class and type</b>	<b>Standards</b>	<b>Product performance</b>
<b>Resistance to compression - after 28 days</b>	EN 998-1	<b>R</b>
<b>Resistance to bending - after 28 days</b>	EN 1015-11	6.0 N/mm <sup>2</sup> - CS II
<b>Adhesion</b>	EN 196-1	2.5 N/mm <sup>2</sup>
<b>Adhesion to concrete substrate</b>	EN 1015-12	≥0.20 N/mm <sup>2</sup> - FP: B
<b>Water absorption through capillarity</b>	EN 1015-12	0.89 N/mm <sup>2</sup> - FP: A
<b>Water vapour permeability coefficient</b>	EN 1015-18	w ≤ 0.2 kg/m <sup>2</sup> ·h <sup>0.5</sup> - W2
<b>Thermal conductivity λ<sub>10,dry</sub></b>	EN 1015-19	μ = 10
<b>Durability</b>	EN 1745 A.12	0.54 W/mK
<b>Thermal resistance - Working temperature</b>	EN 998-1	5.2.3.2 compliant
<b>Reaction to fire</b>	EN 13501-1	-30°C ÷ +90°C
<b>Hazardous substances</b>	EN 998-1	A1
		According note in ZA.1

Test conditions: temperature 23 ± 2 °C, R.H. 50 ± 5% and air speed in the test area < 0.2 m/s. These figures may vary depending on the specific conditions of the worksite: temperature, humidity, ventilation, absorbency of the base coat.

(\*) The stated times may be longer or shorter as the temperature decreases or increases.

Complies with the general principles defined in EN 998-1 – Principles for evaluation of the use of products and systems.

(See previous)

beyond those normally observed when using normal plaster. The product's high workability time ensures that it can be applied to any architectural solution. Recently plastered surfaces, especially during the hot season, must be kept moist with nebulised water to avoid crazing. During the cold season, fresh plaster should be adequately protected against frost. Joints involving different elements must be reinforced with a special alkali-resistant fibreglass mesh, which must be embedded in the surface layer of the plaster. Cracks and holes in the masonry must be filled in beforehand; in order to preserve the verticality of the walls, it is advisable to fix angle beads to the corners and vertical guides to the walls. **DEUMISAN PRONTO** can also be supplied in the additivated binder version **DEUMISAN LEGANTE**. In this case, the mortar is prepared by mixing clean site sand with **DEUMISAN LEGANTE** in the following proportions: 20 kg of **DEUMISAN LEGANTE** + 5 buckets of plaster sand (approx. 15 kg each) + approx. 15 litres of clean water.

### • FINISHES

For painting purposes, it is advisable to use highly breathable lime-, silicate- or siloxane-based wall paints, such as *BioCALCECOLOR* or *SILICOLOR*, or decorative mineral coatings such as *DECORFINE (4)*.

### • COVERAGE

14 kg/m<sup>2</sup> per 1 cm of **DEUMISAN PRONTO**.

### • PRECAUTIONS

- Use cold water during summer and water at 20°C during winter.
- Application temperature: from +5°C to +35°C.
- Do not add other materials such as binders, aggregates or additives.
- During the hot season, keep the surface of the laid mortar damp so as to prevent the product from drying rapidly, for at least 8 hours.
- Wet the surfaces in case of high temperatures.
- Avoid sudden temperature changes while the plaster dries.
- Do not add water when the mix starts setting.

- For application on smooth or poorly absorbent surfaces, always apply an anchoring render coat and check that it adheres properly.
- In environments characterised by damp caused by water infiltrations, a waterproofing treatment with **OSMOSEAL** osmotic cement must be applied before the dehumidifying plaster, followed by an anchoring render coat. To this aim, we suggest consulting the chapter entitled 'RENOVATING DAMP WALLS WITH DEHUMIDIFYING PLASTER'.
- Joints involving different elements must be reinforced with special fibreglass mesh, **RETINVETRO PER INTONACI**, which should be embedded in the last layer of plaster.
- Store the product in its original closed packaging in a dry place. Protect against frost and high temperatures.



the numerous possible uses and the possible interference of conditions or elements beyond our control, we assume no responsibility regarding the results which are obtained. The purchasers, of their own accord and under their own responsibility, must establish the suitability of the product for the envisaged use.

The figures shown are average indicative figures relevant to current production and may be changed or updated by INDEX at any time without previous warning. The advice and technical information provided, is what results from our best knowledge regarding the properties and the use of the product. Considering

## PACKAGING

**DEUMISAN PRONTO**  
25-kg Sack

**DEUMISAN LEGANTE**  
20-kg Sack

• FOR ANY FURTHER INFORMATION OR ADVICE ON PARTICULAR APPLICATIONS, CONTACT OUR TECHNICAL OFFICE • IN ORDER TO CORRECTLY USE OUR PRODUCTS, REFER TO INDEX TECHNICAL SPECIFICATIONS •

**index**  
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