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SCHEDA TECNICA



## IP 100 BIO DESAN

NHL 3.5 NATURAL HYDRAULIC  
LIME-BASED RESTORATION  
PLASTER



### PRODUCT

Fibre-reinforced, macro-porous, breathable, NHL 3.5 Natural hydraulic lime-based plaster with lightweight mineral aggregates, for "fine float" finish of the IP 100 BIO Desan plaster in the restoration of damp masonry and masonry with saline efflorescence. Indoor/outdoor.

### CARATTERISTICS

Easy, fast and cheap to use, it has excellent adhesion to substrates and high vapor permeability, hardening with low tensions. Sulphate-resistant, water-repellent.

### APPLICATION FIELDS

Background plaster for the restoration of interiors and exteriors damp masonries of buildings for civil and industrial use

### SUBSTRATES

Damp masonries.

### CONSUMPTION

10,0 - 12,0 kg/sqm per 10 mm of thickness

### PACKAGING

25 kg bags on pallets of 1500 kg.

### STORAGE

12 months in a dry place in its original packaging.

### ITEM SPECIFICATIONS

The mechanical or manual background plastering of the internal and external wet masonries, must be made with specific pre-mixed plaster such as IP 100 BIO Desan by Edilcol Italia, mixed with water and applied with a thickness of 2 - 3 cm having a compressive strength  $\geq 3$  N/sqmm after 28 days.



Cert. n. 27395-2008-AQ-ITA



Cert. n. 1982-CPR-059/471



Polizza n. 70023

## PREPARATION

- Check that the substrates are clean, resistant, rough and uniform.
- Prepare the masonry removing completely the existing plaster to an height of at least one meter higher than the top where the moisture is visible.
- Do the scratch coat with IP 100 BIO Desan.
- Adjust the flow of the plastering machine to about 18 liters for every 100 kg of powder or mix a bag of IP 100 BIO Desan with about 4-5 liters of water, to obtain a consistent and plastic mortar.

## APPLICATION

- Apply with a thickness of 2 - 3 cm in a single coat staying at about 20 cm of distance (machine application) then, after few minutes of waiting, level with a metal straightedge.
- For thicknesses greater than 3 cm, apply a second coat after 24 hours away.
- After about 3 - 6 hours, after the hardening process, smooth the surface and square corners and edges.

## RECOMMENDATIONS

Do not apply to inconsistent, crumbly or painted substrates. Do not apply on gypsum substrates insulating blocks and cellular concrete.

In warm seasons, always wet the day before the application and then for few days, to prevent a rapid drying.

Avoid the outdoor application in very windy days, on substrates during frozen or thawing phase, with frost risk in the next 24 hours and at temperatures below of +5 °C or higher than +35 °C.

To ensure the maximum effect of dehumidifying plaster, it is really important to use a highly breathable materials as finishing products.

The lasting of the restoring plaster depends on the saturation of saline air speeds macropores.

Although the details contained in this product report correspond to the best of our current experience, all the above information must be confirmed after practical applications. Anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of product. The values given in the technical data derived from tests conducted in laboratory, in a controlled environment, so they may be greatly modified by the conditions of installation.

## DATI TECNICI

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|                                                                |                                                                                                |              |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------|
| Appearance:                                                    | Hazelnut powder                                                                                |              |
| Composition:                                                   | NHL 3.5 Natural hydraulic lime limestone aggregates, lightweight mineral aggregates, additives |              |
| Granulometry:                                                  | ≤ 3 mm                                                                                         |              |
| Application temperature:                                       | + 5°C / + 35°C                                                                                 |              |
| Mixing water:                                                  | ≈ 18 %                                                                                         |              |
| Consistence of fresh mortar:                                   | ≈ 180 mm                                                                                       | (EN 1015-3)  |
| Bulk density of fresh mortar:                                  | ≈ 1,7 Kg/l                                                                                     | (EN 1015-6)  |
| Bulk density of the dried mortar:                              | ≈ 1,5 Kg/l                                                                                     | (EN 1015-10) |
| Pot life:                                                      | ≈ 2 hours                                                                                      |              |
| Plaster application:                                           | mechanical or manual                                                                           |              |
| Levelling thickness:                                           | 2 - 3 cm per coats                                                                             |              |
| Waiting time for the second coat:                              | ≈ 24 hours                                                                                     |              |
| Waiting time for the scratch coat:                             | ≈ 6 hours                                                                                      |              |
| Compressive strength:                                          | ≥ 3 N/sqmm - Category CSII                                                                     | (EN 1015-11) |
| Flexural strength:                                             | ≥ 1,5 N/sqmm                                                                                   | (EN 1015-11) |
| Adhesion - FP:                                                 | ≥ 0,6 N/sqmm- B 12)                                                                            | (EN 1015-12) |
| Water absorption by capillarity:                               | c ≥ 0,3 kg/m <sup>2</sup> after 24 hours                                                       | (EN 1015-18) |
| Water penetration after the test of absorption by capillarity: | ≤ 5 mm                                                                                         | (EN 1015-18) |
| Permeability to water vapor μ:                                 | μ ≤ 15                                                                                         | (EN 1015-19) |
| Thermal Conductivity (λ <sub>10,dry</sub> ):                   | 0,45 (tabulated value)                                                                         | (EN 1745)    |
| Reaction to fire:                                              | Class A1                                                                                       | (EN 13501)   |
| Contribution to smoking:                                       | none                                                                                           |              |
| Hazard classification:                                         | none                                                                                           | (EC 99/45)   |