

# **NTO BT-800**

Fibre-reinforced cementitious grout with very high mechanical strength, for structural plaster, including reinforced plaster, and the consolidation of masonry, arches and vaults.



## **TECHNICAL FEATURES**

**INTO BT-800** is a dry premix based on hydraulic binders with high mechanical strength, inert selected in granulometric curve defined from 0 to 3 mm, added with fibers and special additives, suitably dosed together, according to the research of the HERAKEM laboratory, to obtain in terms of quality excellent workability, expansion control, maximum mechanical resistance and adhesion to substrates.

## FIELD OF APPLICATION

**INTO BT-800** is a concrete that can be pumped with plastering machines and applied internally and externally, it is used for consolidating and renovating existing deteriorated or newly built masonry, in brick, tuff and mixed, concrete supports, in all those cases in which it is necessary to use reinforced plasters with a high thickness and high resistance. Can also be used as a consolidating base coat. **INTO BT-800** can be used both with fiberglass mesh and with a suitable metal reinforcing mesh.

## **PREPARATION OF THE SUBSTRATE**

The substrates to be plastered must be solid, stable and clean; powders, paints, dirt or release agents must be properly treated and eliminated. Mechanically remove any detached parts. It is advisable to pre-treat particularly absorbent substrates or substrates with different degrees of absorption with **HERALAX AC**. On particularly smooth and compact surfaces it is necessary to prepare a base with adequate adhesion by previously applying a rough coat or using **HERALAX GRIP**. Wet the substrates with water, especially if exposed to direct sunlight, about an hour before plastering so that they have time to cool down and dry on the surface. Very humid substrates can slow down setting.

### **APPLICATION**

INTO BT-800 can be applied by mechanical spraying using plastering machines for premixed products or manually.

For manual applications, mix the product by adding approximately 4.5–5 liters of clean water per 25 kg bag. Slowly add the powder to the water, mixing with a drill fitted with a low–speed mixing paddle. Mix the product for about 2–3 minutes until a homogeneous and lump–free mix is obtained. The product mixed in this way can be used within approximately 60 minutes of mixing it with water. Apply the product with a trowel like a traditional plaster.

For mechanical spray applications, apply the product evenly, in several layers, with a thickness between 10 and 50 mm. In consolidation operations with electro–welded mesh, it is first necessary to remove the old plaster from the masonry, making it bare, drill the wall with at least 4 through holes per m2, insert and anchor iron rods of suitable diameter in the holes, anchor the mesh to the masonry using the rods spacing it from it for about half the thickness of the plaster to be made, finally apply **INTO BT–800** with total coverage, taking care to carefully fill both the interstices of the masonry and the spaces between the masonry and the mesh. Level and finish the layer of reinforced plaster using an aluminum straight edge. Any burrs or excess material are eliminated by scraping and polishing the surfaces. The surfaces thus prepared are suitable for receiving the finishing products.

### **CLEANING**

The tools used must be cleaned with water before the mortar hardens; subsequently cleaning can only take place by mechanical removal.

### **ITEM OF SPECIFICATION**

Structural reinforcement of old existing masonry by plastering with premixed mineral mortar with high mechanical performance based on a highly resistant hydraulic binder. The product must be CE marked as plaster mortar in compliance with **EN 998–1** as **GP–CSIV–WO** as **INTO BT–800** produced by the company **HERAKEM SRL**.





#### WARNINGS

- INTO BT-800 mixes with clean water without adding other products.
- If mixed manually, do not mix more than 2÷3 minutes.
- Do not mix with a muller.
- Do not apply in direct sunlight or strong winds.
- Do not apply on frozen substrates or in any case at ambient temperatures below +5°C, because the hardening of the product is based on the hydraulic setting of the binders which, at low temperatures, is excessively delayed with consequent abnormal hardening.
- Protect the applied plasters for at least 24:48 hours from rain or washout and for at least 7 days from frost.
- A rapid drying of the product can lead to an abnormal hydration of the hydraulic binders and to the formation of cracks; in the hot season and above all in case of wind or strong sun, avoid the rapid drying of the applied product by spraying water every 4 - 6 hours.
- Subsequent finishes must be applied only after hardening and drying (minimum 28 days).

TECHNICAL DATA *(at +22±1°C and 55±5% B.H.)			
Appearance	powder	Chloride content	absent
Color	gray	Compressive strength	approx. 30 N/mm <sup>2</sup>
Granulometry	0÷3 mm	Flexural strength	approx. 6 N/mm <sup>2</sup>
Mixing water	19%	Adhesion	≥ 0,3 N/mm²
Apparent density hardened mortar	1450 kg/m <sup>3</sup>	Water absorption	WO
Maximum application thickness	5 cm	Vapor permeability	$15\div35\mu$ (tabulated value)
Customs heading	3824 50 90	Thermal conductivity coefficient	0,39/0,44 W/mK (tabulated value)
Workability time	approx. 60 min	Reaction to fire	class A1
Permissible application temperature	from +5°C to +35 °C	Freeze/thaw durability	good
Consumption	18 kg/m <sup>2</sup> per cm of applied thickness	Packaging	25 kg bag

#### PRODUCT FOR PROFESSIONAL USE ONLY

All the data and indications given in this technical data sheet, although resulting from laboratory tests carried out and from our direct application experiences, due to the infinite number of variables linked to the construction site conditions, are to be considered, in any case, purely indicative. Therefore, before applying the product, the user is required to establish whether it is suitable for the use envisaged by him, in the specific hygrothermal and application conditions foreseen at the time of use and, in any case, he assumes all responsibility for it. We are not liable for damage to people or things deriving from improper use of the product. We reserve the right to modify the data contained therein as a result of improvements and technical progress.