

galileo

# MURATURA

**Cement mortar, thixotropic, polymer modified, fiber-reinforced, pozzolanic cement-based for the in-depth rehabilitation of masonry**



## Product description

GALILEO MURATURA is a premixed mortar, cement-based, mono-component, polymer modified, fiber-reinforced with polyacrylonitrile fibers.

## Supply and Storage

Packaging: 25 kg. bag. GALILEO MURATURA is available in special paper and high-density and thickness polyethylene bags that allow for the product to be stored in a dry place for at least 8 months, without loss of performance characteristics.

## Fields of use

GALILEO MURATURA is suitable for restoration, regularization and/or thickness adjustments for masonry work (stone, brick, concrete).

It is indicated to perform light restorations and reinforcement interventions by means of the "armored slab" techniques. It can be applied with a plastering machine (type Maltech M5) or manually with a trowel.



## Technical features

GALILEO MURATURA is resistant to aggressive environmental agents: thanks to the pozzolanic binders, it is suitable for applications on substrates potentially contaminated by salts (bricks and/or stones) thus ensuring maximum compatibility between original material and restoration product. Its low elastic module allows the use even where a limited rigidity is required. Additives with polymers make it perfectly suitable for application on concrete. It is a product with controlled shrinkage: in addition to the use of fiber PAN (polyacrylonitrile) it is added to counteract the phenomenon of plastic and hygrometric shrinkage.

## Supports preparation and application methods

1) Surface Preparation and Application Before applying GALILEO MURATURA, it is necessary to properly clean the surface by scraping, sand-blasting or other suitable methods, to obtain a sufficiently rough surface. This method ensures the removal of inconsistent parts and dust, the disposal of any pollutants that might hinder the proper adhesion of the product (cement laitance, oil, disarming).

The clean and steady surface thus obtained, will be saturated with water, taking the precaution not to apply the product when there is water stagnation or if the wall is covered by a water film not fully absorbed by the surface.

In the execution of interventions type "armored slab", the reinforcement mesh must be firmly bound to the substrate and positioned at least 1 cm from the same (using appropriate spacers).

For application on smooth concrete, after cleaning and saturation with water, apply one layer with the same product,

that must not be smoothed. After at least 24 and no more than 72 hours it is possible to apply the plaster. If there is outcropping iron reinforcement need to be repaired, remove the surface rust and apply a treatment with GALILEO PASSIVANTE, protective slurry for the restoration of oxidized reinforcements. For specific interventions of high-performance structural restoration of reinforced concrete infrastructures, use the mortars of GALILEO product line, contacting our Technical Dept. for any information.

### 2) Mortar mixing

The mixing of GALILEO MURATURA should be done, if you do not use plaster machine, with a power drill at reduced speed.

Always pour the water first (4/5 of total) and then, gradually, the powder. After a first blending, add the remaining water quantity and mix to obtain a homogeneous mixture free of lumps, with a consistency suitable for further processing. GALILEO MURATURA should be mixed with water at a rate of approx. 18 liters per 100 kg of powder (about 4,5 liters per 25 kg bag).

### 3) Application

GALILEO MURATURA can be applied by hand with a trowel or by spraying, with a plastering machine. In any case, the surface should be prepared as described. The application thickness, depending on the type of intervention, may range from 10 to 40 mm per layer. Once the product has reached the condition known as "out of touch", finish with a float. The wetting of the mortar in the first days after application effectively counteracts the occurrence of any superficial cracks. Before applying the finishing layer wait for at least 4 weeks.

## Technical data

Water in the mix	approx. 18%
Particle size	< 3 mm
Mechanical resistance to compression (UNI 196) 28 days	30 MPa
Mechanical resistance to flexion (UNI 196) 28 days	6 MPa
Elastic module (UNI 6556) 28 days	< 20.000 MPa
Adhesion to brick (UNI EN 1015-12)	1,2 MPa (type C break)
Adhesion to concrete (UNI EN 1015-12)	1,5 MPa (type A break)
Water absorption	W1
Reaction to fire	A1 class
Theoretical consumption	approx. 17 kg/m <sup>2</sup> for 1 cm thickness

## Disclaimers

GALILEO MURATURA should be applied at temperatures between 5°C and 30°C. In the presence of particularly harsh conditions (high temperature or strong wind), it is recommended to protect the application for the next few days after the intervention. According to external temperature the curing times may be modified.

v. 09/2018



www.fornacigrigolin.it  
info@fornacigrigolin.it



The reported data refers to Quality Control tests in standard environmental conditions. Practical applications in the construction sites may detect significantly changed data, depending on operating conditions, so the information on the Card is only indicative because the user must always check its suitability for intended use of the product by taking responsibility for the use. Fornaci Calce Grigolin S.p.A. reserves the right to make technical changes of any kind without prior notice.