



BF 42

High-strength cement mortar for micropiles and special foundations



Product description

BF 42 is a ready-mixed, single-component, pourable mortar based on selected aggregates in a suitably recomposed grain size curve from 0 to 3 mm, hydraulic binder and water-reducing and pumping additives.

Particularly suitable for micropiles and special foundations where high mechanical strength is required.

Supply and storage

BF 42 is supplied loose in a 22 m³ silo system or in bags.

Installation methods

The concrete mix BF 42 is automatically mixed by the mixing machine (type SMP) with water at a rate of approx. 17 litres per 100 kg of powder.

As an alternative to the SMP pump, we recommend the use of double-mixing machines or technical solutions capable of ensuring adequate and effective mixing of the product with the mixing water.

The mortar thus prepared is pumpable by the pump (type SMP) with flow rates of up to 100 l/' at a pressure of up to approx. 15 bar; these values are only a reference as the data is subject to variations depending on the length of the jet pipe, its diameter and climatic conditions.

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Peculiarities of mortar

The viscosity and fluidity of BF 42 concrete allows the use of a moderately long casting line or moderate head.

The mechanical strengths obtained with BF 42 concrete are higher than those of other products in its segment: a considerable margin is available to compensate for any deterioration in strength values due to external factors or differences.

in qualification and packaging procedures.

The use is also indicated when shorter setting and hardening times are required (in any case, an assessment of the rebalancing of the geotechnical conditions is essential).

BF 42 concrete undergoes continuous testing in the in-house laboratory, which ensures that it meets the required standards and provides consistent performance.

Warnings

Betoncino BF 42 must be applied at a room temperature between 5°C and 30°C. At low temperatures (5°C ÷ 10°C) it is advisable to mix the material with warm water. Conversely, at high ambient temperatures, it is advisable to mix with cold water.

Do not mix BF 42 with other substances.

Avoid large temperature changes during the setting phase. The product must be protected from frost and rapid drying.

The mixing water must be free of impurities for the correct functioning of the equipment.

Given the rheological characteristics of the product, start the mixing machine (type SMP) with cement slurry.

The qualification of the mortar is obtained by means of the spreading test and the mix density test; it is advisable to carry out these tests at least at the beginning of each casting session.

It is advisable to cast the micropiles from the bottom of the hole to avoid contamination of the concrete shaft.

BF 42

| TECHNICAL DATA | PERFORMANCE |
|---|----------------------------------|
| Fresh density | approx. 2200 kg/m ³ |
| Maximum inert diameter | 3 mm |
| Mixing water | 17% |
| Theoretical yield | approx. 1850 kg/m ³ |
| Mechanical flexural strength at 28 days | 9 N/mm ² |
| Compression mechanical res. at 28 days | > 40 N/mm ² |
| No-shock spreading (UNI EN 1015-3 mod.) | 190 - 230 mm |
| Reaction to fire | class A1 |
| Fluidity (Marsh cone nozzle 10mm) | 30" - 45" |
| Elastic modulus at 28 days | approx. 40.000 N/mm ² |

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I dati riportati si riferiscono alle prove di Controllo Qualità in condizioni ambientali normalizzate. Applicazioni pratiche di cantiere a seconda delle condizioni di esercizio possono rilevare dati sensibilmente modificati, pertanto le informazioni presenti nella Scheda hanno valore puramente indicativo in quanto l'utilizzatore deve sempre verificarne l'idoneità nell'impiego del prodotto assumendosi la responsabilità derivante dall'uso. Fornaci Calce Grigolin S.p.A. si riserva di apportare modifiche di qualsiasi genere senza alcun preavviso.