Betonfix 200

ST4 1006

High resistance expansive hydraulic slurry



Description

Betonfix 200 is a high resistance expansive hydraulic slurry. The product does not contain chlorides, ferrous particles or corrosive agents which could cause damage to the reinforcements and the metal equipment. Betonfix 200 has high mechanical resistance for both short and long

curing. The product is easy to pour, flows in very small spaces due to its consistency and adheres very well to both concrete and iron. When mixed with water and inert material in the appropriate granulometric curve, the result is a concrete with high mechanical and chemical resistance, self-levelling, shrinkage compensated, pumpable and free from segregation or bleeding phenomena. Betonfix 200 is compliant to the UNI 8147 standard.

Uses

Betonfix 200 is used to fill rigid structural joints in prefabrication by injection into protective pre-stretched cable containment shells, to block tie rods and metal reinforcements (for both brickwork and rockwork), for anchors, to regenerate and consolidate mixed masonry subject to cracking. Adding appropriate inert materials, it is used to prepare concrete castings with volumetric stability. They can be pumped with a low water/concrete ratio, have high mechanical resistance properties for both short and long curing, with high resistance to chemical attack from sulphates.

Application

Betonfix 200 is ready-to-use on the addition of 5.5-6.5 litres of drinking water per 20 kg pack, and it can be injected with the usual equipment. It is used to produce high-quality concrete. Betonfix 200 must be mixed with washed inert materials in the appropriate granulometric curve for a dosage of 400-500 kg/m³ and mixed with drinking water to obtain the required consistency (maintaining the water/Betonfix 200 ratio below 0.5). The substrate must be clean and solid. Soak the area to be treated eliminating any pools of water when casting. Mix the product for about 5 minutes with a cement-mixer or, for small quantities, with a mechanical stirring device and an agitator. Add 3/4 of the water required, then add the product and the remaining water continuously until you obtain the consistency required. Once a smooth and free of any lumps mix forms, pour or inject it with the usual equipment.

| Characteristics | Value |
|---|-------------------------------|
| Appereance | Powder |
| Colour | grey |
| Apparent specific weight UNI 9446 | $0,90 \pm 0,1 \text{ g/cm}^3$ |
| Hazard classification 1999/45/CE e 67/548/CEE | Irritant |
| Maximum inert material size UNI EN 1015-1 | 200 μ |
| Apparent volumetric mass of wet mortar UNI EN 1015-6 | $2050 \pm 50 \text{ Kg/m}^3$ |
| Consistency UNI 7044/72 | > 200 % |
| Contrasted expansion UNI 8147 | 0,075 % |
| Minimum application temperature | +5 °C |
| pH of mixture | 12 ± 0.5 |
| Exudation UNI 8988 | Absent |

| Proprietà della boiacca indurita | Value |
|--|------------------|
| Compression strength 1 day UNI EN 12190 | > 23 MPa |
| Compression strength 7 days UNI EN 12190 | > 58 MPa |
| Compression strength 28 days UNI EN 12190 | > 81 MPa |
| Flexural strength 1 day UNI EN 12190 | > 3 MPa |
| Flexural strength 7 days UNI EN 12190 | > 4 MPa |
| Flexural strength 28 days UNI EN 12190 | > 5,5 MPa |
| Modulus of elasticity secant on compression UNI 6556 | 23000 ± 1000 MPa |

Packaging

20 kg multilayer polythene bag. 1,200 kg pallets.

Consumption

Used as a ready-to-use slurry: 1.6 kg per 1 litre of structure to fill. For high quality concrete: 400-500 kg/m³.

Storage

Protect from humidity. Store the product in a dry, sheltered place. Stored in these conditions and in unopened containers, the product remains stable for 12 months.

Warning

Product for professional use. Do not mix with other binders (concrete, lime, gypsum). Before using, check bags have not been damaged, and do not use the product if there are any lumps. Use the entire contents once the bag has been opened. Do not remix by adding water to the product when it has already started to set. Take all necessary precautions to ensure correct curing of the casting. Wet with water for the fi rst 48 hours, or cover with plastic sheets or damp jute bags. The technical specifications and application methods recommended herein are based on our current knowledge and experience and do not represent any form of guarantee of the fi nal results obtainable with the product. It is the customer's responsibility to check that this data sheet is still effective and has not been replaced with a more recent version, and that the product is suitable for the intended use.

