



YAPI KİMYASALLARI SAN. VE TİC. LTD. ŞTİ.

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BETTOCRETE ST 100

High Strength Flowable Structural Repair Mortar

MATERIAL DESCRIPTION

BETTOCRETE ST 100 is a cement based, one component, fiber added, high strength repair mortar with flowable consistency.

Public Works pose No: 04.613/3c

Conforms to EN 1504-3 standard/R4 class.

AREAS OF USE

- Structural concrete floor repairs,
- Coating of concretes for protection against sulfate and chlorine effects,
- Slab concrete repairs,
- Repair of marine structures,
- Special coatings for future pavements and surface repairs with light and medium traffic loads,
- Used in concrete road repairs.

ADVANTAGES

- It is mixed with water alone, poured into the mold and applied easily,
- Provides high adherence to concrete and reinforcement.
- It has high compressive strength,
- Resistant to freeze - thaw cycles,
- Resistant to chlorine and sulfate attacks,
- Resistant against oils,
- No shrinkage (shrinkage)
- Gets fast strength.

TECHNICAL SPECIFICATIONS

Structure of the Material	Mineral fillers include special cement with fiber and polymer reinforcement
Color	Gray
Compressive Strength	(TS EN 196)
1 day	22 N/mm ²
7 days	48 N/mm ²
28 days	63 N/mm ²
Flexural Strength (28 days)	(TS EN 196) 8 N/mm ²
Adhesion Strength Betona (28 days)	(TS EN 1542) 2 N/mm ²
Modulus of Elasticity (28 days)	20000 N/mm ²
Application Thickness	Min. 10 mm - Max. 40 mm
Applicable Floor Temperature	+5°C +30°C
Service Temperature	-20°C +40°C
Use Time (+ 20°C)	30 minutes
Walk-Through Time (+ 20°C) Full	24 hours
Curing Time (+ 20°C)	28 days

Note: The above values are given for +23°C and 50% relative humidity. High temperatures shorten the time, low temperatures lengthen the time.



SURFACE PREPARATION

The surfaces to be repaired must be sound and free from dust and dirt. Broken surfaces to be repaired should be straightened as much as possible. Water should be drained away from excessively wet and puddled surfaces. Dry surfaces should be thoroughly moisturized.

Cases where rebar reinforcement should be added:

In cases where the depth of repair or installation exceeds 4 cm, reinforcement should be added with a 1 cm pass margin. In this way, shrinkage of the mortar is controlled.

MIXING

Pour the appropriate amount of water described on the package into a clean mixing bowl. Open the bag of **BETTOCRETE ST 100** and add it into the water slowly and mix it with a 400-600 speed mixing drill for about 4 minutes until it becomes homogeneous. There should be no lumps in the material. After resting the material for 30 seconds, it is mixed again and made ready for application.

MIXTURE AMOUNT

Approximately 160 g water should be used for 1 kg **BETTOCRETE ST 100**. Approximately 4 liters of water should be added to a 25 kg bag.

Mixture density 2.25 kg/lt.

APPLICATION METHOD

The prepared mixture is placed on the mold or cut surface so as not to exceed 4 cm in a single casting. During placement, care should be taken to avoid air compression in the mold. For this reason, the material is placed into the cavities in the mold with a trowel or a steel rod. Vibrator should not be used. Molds should not be removed before 24 hours and in case of extreme wind and temperature, the surface of the material should be protected with wet sacks or curing material. The mortar surface should not be watered during drying. The material remains usable in the container for 30 minutes at +20°C. This time decreases rapidly when

PACKAGING

25 kg polyethylene reinforced paper bag.

EXPENDITURE

Approximately 20 kg/m² powder product should be used to obtain 1 cm thickness.

SHELF LIFE

12 months from the date of production under appropriate storage conditions. Opened packages should be sealed and consumed within 1 week.

STORAGE

It should be stored in its unopened original packaging, in a cool and dry environment, protected from frost. For short-term storage, maximum 3 pallets should be stacked on top of each other and shipment should be made on a first-in, first-out system. For long-term storage, pallets should not be stacked on top of each other.

SECURITY MEASURES

During application, work clothes, protective gloves and goggles should be worn in accordance with Occupational Health and Safety rules. Avoid contact with skin and eyes during storage and application, in case of contact, wash immediately with plenty of water and soap, and in case of ingestion, consult a doctor immediately. Food and beverage products should not be brought into the application areas. It should be stored out of the reach of children. For detailed information, Material Safety Data Sheet should be consulted.

RESPONSIBILITY

The data contained in this technical document are based on our scientific and practical knowledge. **BETTON Construction Chemicals San. ve Tic. Ltd. Şti.** is only responsible for the quality of the product. **BETTON Construction Chemicals San. ve Tic. Ltd. cannot be held responsible** for any consequences that may occur due to misuse and/or misuse other than the written recommendations on where and how to use the product. **Ltd. Şti.** cannot be held responsible.



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