

BETTOCRETE ST 100 TX

High Strength Structural Repair Mortar

MATERIAL DESCRIPTION

BETTOCRETE ST 100 TX is a cement based, one component, fiber added, thixotropic, high strength repair mortar.
Public Works POS No: 04.613/3b-EN 1504-3 standard/R4 class.

AREAS OF USE

- In the repair of high-strength concrete carriers,
- Composition places in chamfer making,
- Slab concrete repairs,
- Repair of marine structures,
- Coating of concretes for protection against sulfate and chlorine effects,
- Repair of tie-rod holes and core cavities.

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	20 N/mm ²
7 days	50 N/mm ²
28 days	60 N/mm ²
Flexural Strength (28 days)	(TS EN 196) 7 N/mm ²
Adhesion (Tensile) Strength	(TS EN 1542)
28 days (to concrete)	2 N/mm ²
Resistance to Carbonation	dk ≥ control concrete MC 0.45
Modulus of Elasticity (28)	20000 N/mm ²
Application Thickness	Min. 10 mm - Max. 40 mm
Service Temperature	+5°C +30°C
	-20°C +400°C
	30 minutes
Walkability Period. (*20°C)	24 hours
	28 days
Full Curing Time (*20°C)	

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

ADVANTAGES

- Mixes only with water, easy to apply,
- Provides high adherence to concrete and reinforcement,
- It has high compressive strength,
- It shows high thixotropic properties,
- Water impermeable,
- Resistant to freeze - thaw cycles,
- No primer required,
- No shrinkage (shrinkage).
- Gets fast strength.
- Resistant to chlorine, sulfate and oils.



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.

MIXING

Pour the appropriate amount of water described on the package into a clean mixing bowl. Open the **BETTOCRETE ST 100 TX** bag 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 TX**. Approximately 4 lt. water should be added to 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 the surface of the material should be protected with wet sacks or curing material in case of extreme wind and temperature. 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 temperatures rise. The material should be placed immediately after mixing.

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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BETTON CONSTRUCTION CHEMICALS SAN. VE TİC. LTD. ŞTİ. DES Sanayi Sitesi 112. Sk. D:02 Blok No:6 34776 Yukarı Dudullu - Ümraniye / İSTANBUL 16	
1020-CPR-040 051251 DOP NO: 30113 EN 19043 BETTOCRETE ST 100 TX Repair Product 3.1/3.2/7.2 (High Strength Structural Repair Mortar)	
Reaction to Fire	CLASS A1
Compressive Strength	CLASS R2
Adhesion Bond Strength	≥ 0.8 MPa
Restricted Contraction/ Expansion	≥ 0.8 MPa
Chloride Ion Content	≤ 0,05 %
Dangerous Goods	In accordance with Article 5.4



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