

BILIZO® **MORTAR THIX**

Cement-Based, High Strength, High Resistant Structural Repair Mortar

Product Description

It is a high strength repair mortar which is cement based, single component, fiber-supplemented and thixotropic. It complies with the Ministry of Public Work pos number 04.613/3b – EN 1504-3 standard/R4 class.

Uses

- Repair of high strength load-bearing concretes
- Chamfering in joints
- Repair of concrete floors
- Coating concretes for protecting them against the influence of sulphate and chloride
- Repair of tie-rod holes and drilling holes

Packaging

25 kg in paper package with polyethylene reinforcement.

Usage and Consumption

To obtain a 1 mm thickness, approximately 1,72 kg/m² powder product should be used.

Depending on the system solutions, the usage and amount may change.

Advantages

- It only mixes with water.
- It provides adhesion to concrete and fittings.
- It has high pressure resistance.
- It has highly thixotropic.
- It is water-proofed.
- It is resistant against the freezing-thawing cycle.
- It does not require primer.
- It does not shrink.
- It gets strong quickly.
- It is resistant against chloride, sulphate and oils.

Technical Data

Material structure	It contains mineral fillings, fibers and special cement with polymer reinforcement.
Color	Grey
Pressure Resistance	Class R4
Chloride Ion Content	≤ %0,05
Bonding formed	Class R2
Classified Contraction / Expansion	Class R2
Resistance to Carbonation	dk ≥ control concrete MC 0,45
Elasticity Module	Class R4
Application Thickness	Min.10mm - max. 40 mm
Application Floor Temperature	+5 °C +30°C
Service Temperature	-20°C +400°C
Use Time (+20°C)	30 minutes
Time to Walk on it (+20°C)	24 hours
Full Cure Time (+20°C)	28 days
Compressive Strength (TS EN 196)	
1 day	24 N/mm ²
7 day	50 N/mm ²
Flexural Strength (TS EN 196)	7 N/mm ²
Adhesion Strength(TS EB 1542)	
On Concrete	2 N/mm ²

PS: The informations above are given according to +23 °C and 50% humidity. High temperatures shorten the curing time and low temperatures increase the curing time.

Application

Preparation of Surface: Application surfaces should be free of any damage and all kinds of dust and dirt. Surfaces which are broken for repair should be steepened as much as possible. Water should be drained away from surfaces which are extremely wet or with water accumulation. Dry surfaces should be damped slightly.

Preparation of Mixture: The amount of water described on the package is poured into a clean mixing container. BILIZO[®] MORTAR THIX package is opened and it is slowly added into the water and also stirred for about 4 minutes by a 400 to 600 rpm mixing drill until homogeneity is obtained. No aggregates should be left in the material. After the material is rested for about 30 seconds, it is again stirred for 1 minute and made ready for application.

Approximately 190 gr of water should be used for 1 kg of BILIZO[®] MORTAR. Approximately 4 lt of water should be added to the 25 kg paper package. Mixing density is 2,25 kg/lt.

Surface Application: The prepared mixture should be placed into the molds or cut surfaces in a single pouring so as not to exceed 4 cm. Care should be taken so that no air gaps are left in the mold while placing. Therefore the material should be placed into the space within the mold through a trowel or steel rod. No vibrator should be used. Molds should not be taken away before 24 hours and the material surface should be protected by damp sacks or curing material in the case of extreme wind or heat. The mortar surface should not be watered during drying. The material remains usable in the container for 30 minutes in +20°C temperature. This time period decreases as the temperature rises. The material should be applied immediately after it is mixed.

Storage

It should be stored in its original unopened package in a cool and dry environment protected against freezing. For short-term storing, a maximum of 3 pallets should be piled one over another and their shipment should be carried out by the “first in, first out” system. For longer term storing, pallets should not be piled at all. Its life is 12 months from its production date in proper storage conditions. Opened packages should be closed firmly and consumed within 1 week.

Safety Data

Please refer to the Material Safety Data Sheet (MSDS) for detailed information.