4.04 BETEC® FLOORTOP 860 R

rapid industrial floor covering with steel fibres

Product Description

BETEC FLOORTOP 860 R is as cementitious mortar, reinforced with steel fibres. BETEC FLOORTOP 860 is used for the production of highly wear-resistant coatings in the field of industrials

floors. The steel-fibres reinforced mortar is free from chlorides, high-alumina cements and resistant to frost and gritting materials. Due to the steel fibers BETEC FLOORTOP 860R is resistant to shearing stress.
The high qualities (bending tensile/ pressure/disk-test bending strengths) provide this steelfibres reinforced material BETEC FLOORTOP 860 R with excellent characteristics as to taking up forced and distributing stresses (e.g. caused by different temperatures impacts). Thus the formation of cracks is avoided.

Fields of application

BETEC FLOORTOP 860 R is used for floor coatings in the industrial sector (in case of high shearing stress) The main fields of application are as follows:

- **concrete floor coatings in the industrial sector**
- **floor coating in the field of airport construction**
- **track of scrapers used in the purification plant sector**

Specifications for using

BETEC FLOORTOP 860 R is stirred in a forced mixer. A lump-free, homogeneous mixture is achieved by adding 4/5 of the required quantity of water into the mixer. After adding the respectively necessary quantity of powder and having mixed for two minutes, the remaining quantity of water has to be added. The mixing-time depends on the mixer; however, 4 minutes can be considered the minimum. The result is a homogeneous material. The thus mixed and homogeneously stirred BETEC industrial floor coating mortar FLOORTOP 860 R is applied in one or more operations. As an alternative a two-component epoxy resin bonding layer is possible.

Preparation of the foundation

The mineral concrete foundation has to be removed from any dirt, grease, and all particles or layers which could weaken the bonding strength until the core concrete is exposed. The prepared foundation has to be sufficiently non-slippery for the bonding layer, the capillaries must be open. The pre-watering of the concrete surface has to be executed until it is saturated, however at least 4 hours. Apply when the foundation surface of the concrete appears only a little wet; any stagnant water caused by the pre-watering of the concrete foundation has to be removed. The surface of the concrete foundation has to be frost-free. The tensile strength of the concrete foundation surface must be on the average 1,5 N/mm².

After-treatment

The required after-treatment of the free mortar surface is effected, as with all hydraulically setting cement mortars, by means of jute bags and plastic foils lying above the jute bags. When covering with foils heat accumulation has to be avoided for example by sprinkling with water. The after-treatment should last at least 5 days. It should take place as soon as possible, however, at the latest when the mortar surface starts to become rigid. As an alternative to the traditional after-treatment methods, it is possible to use a protection material against evaporation.

Size of delivery units of 25 kg

Storage
to be stored in dry, frost-free locations, in the not yet opened packs;
best before 6 months

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Technical Data

	BETEC FLOORTOP 860 R
grain size mm	0-4
density of freshly-mixed mortar kg/dm³	2,42
setting time (20 °C) min (depending on the temperature)	approx. 10 if possible use immediately
setting temperature min./max. °C (temperature precast element) with temperatures below +5 °C winter construction measures (DIN 1045)	+5/+30
max. water quantity l/25 kg	2,5
calculated quantity kg/m³	2.200
consistence	flowing
thickness layer mm	15-40
wear reaction	linear
bending-tensile strength* N/mm² after 4 hours	5,0
8 hours	9,0
1 day	16,0
7 days	18,0
28 days	19,0
90 days	20,0
compressive strength* N/mm² after 4 hours	40,0
8 hours	49,0
1 day	60,0
7 days	80,0
28 days	90,0
90 days	120,0

* storage of samples according to DIN EN 196, T. 1
* the strength values are average supervision results of our manufacturing plant

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