

# **CONCRETE MIX**

**Very Fast-Setting Concrete** 

high-strength, multipurpose, unique





## Highlights:

- Fast-Setting
   workable for 15 minutes
   ready for stress in 1 hour
   curing only with water
- High-Strength in 1 hour already 19,0 N/mm²
- Non-Shrink crack-resistant
- Durable under extreme conditions frost / deicer resistant
- Sulfate Resistant resistant against many chemical attacks
- Excellent Bond directly - without bonding compound
- Multipurpose for repairs and new construction horizontally and vertically
- Installation Thickness 50 - 600 mm indoors and outdoors
- Improved Shelf-Life

## PRODUCT NAME Rapid Set® CONCRETE MIX

Very Fast-Setting Concrete

## PRODUCT DESCRIPTION

CONCRETE MIX is a high quality, easy to process, mineral multipurpose and very fast-setting concrete that is ideal where rapid strength, durability and low shrinkage are desired. CONCRETE MIX can be applied in thickness from 50 - 600 mm. INITIAL SET after 15 minutes, READY FOR STRESS in 1 hour.

## **FIELDS OF APPLICATION**

CONCRETE MIX is a multipurpose product qualified for general concrete repair, for repair and construction of footpaths, roads, concrete and machinery foundations, formed works as well as for industrial floors. Indoors and outdoors, also in wet areas.

## **COMPOSITION**

CONCRETE MIX is a high-performance blend of Rapid Set® Cement and special mineral aggregates. CONCRETE MIX is non-metallic, without chlorides. CONCRETE MIX is similar in appearance to Portland cement repair materials and may be applied using similar methods.

## **COLOR** [light-grey]

The final color and surface appearance of CONCRETE MIX may vary due to application techniques and environmental conditions.

## **INSTALLATION THICKNESS**

Qualified for installation thickness of 50 - 600 mm. For lower installation thickness the use of Rapid Set® MORTAR MIX or Rapid Set® CEMENT ALL is recommended. For application as wearing layer, the placing of test areas is recommended.

## PROCESSING PREPARATION OF SUB-BASE

Clean sub-base from loose debris, dust, cement slurry, acids, oils and greases. Then pre-wet thoroughly with no standing water.





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TECHNICAL DATA at + 20°C	
Color	light-grey
Grain size	0 - 8 mm
Consumption	2,0 kg/m²/mm
Layer thickness	50 - 600 mm
Setting time Referring to DIN EN 196-3 Test report No. 0-54/0696-C1/12	initial set: 15 min. final set: 35 min.
Ready for traffic	after 60 min.
Compressive strength DIN EN 1015-11 Test report No. 0-54/0696-C1/12	after 60 min. > 19,0 N/mm² after 180 min. > 25,0 N/mm² after 7 days > 35,0 N/mm² after 28 days > 41,0 N/mm²
Flexural strength DIN EN 1015-11 Test report No. 0-54/0696-C1/12	after 60 min. > 4,5 N/mm² after 24 hours > 6,5 N/mm² after 7 days > 4,7 N/mm² after 28 days > 7,0 N/mm²
Static modulus of elasticity ASTM C192, ASTM C469 Project No. 395683	approx. 30.690 N/mm² demands fulfilled
Sulfate resistance Test acc. to Wittekindt Test report No. 05-54/0696-C2/12	demands fulfilled

### MIXING

The use of pan type mixer or qualified stirrer is recommended. Organize work so that all personnel and equipment / tools are in place before mixing. Use clean water for mixing.

CONCRETE MIX is mixed with 3,0 I to 4,5 I water per 25 kg bag. Use less water to achieve higher strength values. Do not exceed the maximum water admixture of 4,5 I per 25 bag. For increased fluidity and workability use Rapid Set® FLOW CONTROL® plasticizing admixture. Place water into the mixing container and add CONCRETE MIX while the mixer / stirrer is running. To achieve a uniform consistency mix for 1 to 3 minutes. Do not retemper mixed material.

## **PROCESSING**

CONCRETE MIX may be processed using traditional methods. The final finish should be applied as soon as possible. CONCRETE MIX may be troweled, floated or textured.

Apply in one complete layer, i.e. not in several layers, and as uniformly as possible. Do not apply on frozen sub-base. When compacting, avoid the entry of air voids. To extend working time use Rapid Set® SET CONTROL® set retarding admixture.

#### **CURING**

Begin water curing as soon as the surface has lost its moist sheen. Keep exposed surfaces wet for a minimum of 1 hour until the product has achieved sufficient strength. When experiencing extended setting times, due to cold temperature or the use of a retarder, longer cure times may be required.

### PROCESSING TEMPERATURE

Do not apply CONCRETE MIX at sub-base or environmental temperature below + 5°C. Temperatures > + 20°C will reduce the working time. Temperatures < + 20°C may decrease the rate of strength gain.

#### **STORAGE**

Dry, like cement. Shelf-life approx. 9 months.

### **HINTS**

These products contain cement and have an alkaline reaction with moisture/water. Therefore protect hands and eyes. In case of contact with eyes consult a doctor. Our recommendations for application technique are based on our experiences. It is recommended to adapt processing and material quantities to the given local conditions and we refer in this context to our general terms of sale and delivery.

### **License Producer for Europe:**

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