# Rapid Set MORTAR MIX Fast-Setting Repair Mortar

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 17,0 N/mm<sup>2</sup>
- Non-Shrink
  crack resistant
- Durable under extreme conditions frost / deicer resistant
- Sulfate Resistant
  resistant against many chemical
  attacks
- Excellent Bond directly without bonding combound
- Multipurpose for repairs and new construction horizontally, vertically and overhead
- Installation Thickness 15 - 150 mm indoors and outdoors
- Improved Shelf-Life

PRODUCT NAME Rapid Set<sup>®</sup> MORTAR MIX Fast-Setting Repair Mortar

# **PRODUCT DESCRIPTION**

MORTAR MIX is a high quality, easy to process, mineral multipurpose and fast setting repair mortar that is ideal where rapid strength, durability and low shrinkage are desired. MORTAR MIX can be applied in thickness from 15 - 150 mm. Initial set after 15 minutes, ready for stress in 1 hour.

# FIELDS OF APPLICATION

MORTAR MIX is a multipurpose product qualified for general concrete repair, for repair of stucco and plaster, one-layer outdoor plasters, underlayments, mortar beds, formed works as well as the repair of roads. Indoors and outdoors, also in wet areas. MORTAR MIX can be processed horizontally, vertically and overhead.

# COMPOSITION

MORTAR MIX is a high-performance blend of Rapid Set<sup>®</sup> Cement and special mineral aggregates. MORTAR MIX is non-metallic, without chlorides. MORTAR 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 MORTAR MIX may vary due to application techniques and environmental conditions.

#### INSTALLATION THICKNESS

Qualified for installation thickness of 15 - 150 mm. For higher installation thickness the use of Rapid Set<sup>®</sup> CONCRETE MIX 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, cement slurry, dust, acids, oils and greases. For permabond compound the surface must be free of cracks, even, rough and openpore. The bond strength values required in the technical guidelines have to be observed (the value must not be less than 1,0 N/mm<sup>2</sup>). Before the application, pre-wet the sub-base thoroughly. In case of highly absorbent sub-bases, this process may have to be repeated several times.\* The formation of a water film or puddles has to be avoided.

\*If necessary, a primer on acrylic basis can be integrated.





# **MORTAR MIX**

Fast-Setting Repair Mortar

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TECHNICAL DATA at +20°C	
Color	light-grey
Grain Size	0 - 3 mm
Consumption	2,0 kg/m²/mm
Layer thickness - recommended for ceiling/overhead - recommended for wall *in the first working step depending on the chosen consistency	15 - 150 mm 10 - 15 mm* 20 - 25 mm*
Setting time Referring to DIN EN 196-3 Test report No. 0-54/0696-B1/12	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-B1/12	after      60 min.      > 17,0 N/mm²        after      180 min.      > 28,0 N/mm²        after      7 days      > 35,0 N/mm²        after      28 days      > 48,0 N/mm²
Flexural strength DIN EN 1015-11 Test report No. 0-54/0696-B1/12	after      60 min.      > 3,40 N/mm²        after      180 min.      > 5,40 N/mm²        after      7 days      > 5,20 N/mm²        after      28 days      > 5,25 N/mm²
Static modulus of elasticity ASTM C192, ASTM C469 Project No. 395683	approx. 26.827 N/mm <sup>2</sup> demands fulfilled
Sulfate restitance Test acc. Wittekindt Test report No. 05-54/0696-B2/12	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.

MORTAR 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<sup>®</sup> FLOW CONTROL<sup>®</sup> plasticizing admixture. Place water into the mixing container and add MORTAR MIX while the mixer / stirrer is running. To achieve a uniform consistency mix for 1 to 3 minutes. DO NOT re-temper mixed material.

# PROCESSING

MORTAR MIX may be processed using traditional methods. The final finish should be applied as soon as possible. MORTAR 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<sup>®</sup> SET CONTROL<sup>®</sup> set retarding admixture.

# 0715/420

# 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 MORTAR MIX at sub-base or environmental temperature below  $+5^{\circ}$ C. Temperatures >  $+20^{\circ}$ C will reduce the working time. Temperatures <  $+20^{\circ}$ C may decrease the rate of strength gain.

# STORAGE

Dry, like cement. Shelf-life approx. 12 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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