

KOROCRETE Fast-Setting Concrete System

Fast-setting concrete for the production and repair of industrial floors

DESCRIPTION

KOROCRETE is a fast-setting concrete based on KORODUR FSCem, a cementitious, dimensionally stable, fast-setting screed binder on ternary basis for the production of heavy-duty concrete floors, which are quickly usable and early ready for covering (strength classes C35/45 to C50/60 based on DIN EN 206). Due to the high early strength, the flooring areas can be used and released to traffic within a few hours after their placement. KOROCRETE rapid concrete is mixed directly on the construction site by means of special concrete mixers (e.g. Cemen Tech).

APPLICATION

For production of quickly usable concrete floors, indoors and outdoors.
Repair of concrete floors with high durability due to dimensional stability and high final concrete strengths.

PROPERTIES

- concrete production directly on site
- consistency / processing time individually adjustable
- fast and crack-free setting
- dimensionally stable
- quickly usable and ready for covering
- water-resistant, suitable in wet rooms
- electrostatically non-chargeable
- physiologically and ecologically harmless
- pumpable

TECHNICAL DATA

Mixing ratio as an example for fast-setting concrete for the repair of industrial areas	KORODUR FSCem aggregates A/B16 water/cement ratio	360 kg approx. 1.900 kg approx. 0,47
Fresh mortar consistency	slump	F3 - F4
Processing time	depending on the formulation and weather	approx. 45 - 60 minutes
Temperature	processing, ambient and sub-base temperature	≥ 5 °C
Compressive strength $f_{c,cube}$	after 8 hours after 24 hours after 28 days	≥ 20 MPa ≥ 35 MPa ≥ 60 MPa

Hints: All the afore-mentioned technical data are examples and depend on the formulation.

PROCESSING

Mixing technology

As mixing technology, volumetric mixer trucks (e.g. Cemen Tech M-Series) should be favoured. Volumetric mixer trucks hold all the concrete components separated from each other and mix them on site to fresh concrete. This ensures optimal processing of the fast-setting concrete. The parameters for the consistency and processing time pre-programmed in the system, can be adapted on site to cope flexibly with differing weather conditions. When fully loaded, a volumetric mixer truck can produce approx. 8 - 10 m³ of concrete. The storage chambers for aggregates and cement can also be charged continuously during the mixing process to produce larger quantities of concrete.



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PROCESSING

General processing hints

Apply KOROCRETE quickly in uniform layer thickness, compact, level and smooth. For mechanical smoothing, use only hand-operated single-disc smoothing machines. Only apply an area size as can be treated within the processing time.

Higher temperatures shorten, lower temperatures extend the processing time. The fast-setting concrete must be protected from too rapid drying out. For curing we recommend the products KOROMINERAL CURE or KOROTEX (see data sheets).

For further information see data sheet KORODUR FSCem.

JOINTS

All joints in the base concrete have to be taken over. The concrete has to be separated from uprising masonry (walls, columns, etc.).

HINTS: This product contains cement and has an alkaline reaction with moisture/water. Therefore, protect skin and eyes. In case of contact with eyes, consult a doctor. The specifications provided in this data sheet for application and processing are based on tests carried out by KORODUR under ideal conditions in the laboratory and acc. to the relevant technical regulations. Therefore, the indicated data don't represent directions for application or a quality agreement in the meaning of § 434 (1) BGB, no regulation in the meaning of § 434 (2) sentence 2 BGB (German Civil Code) and no guarantee for practical application. Due to the differing conditions on site, preliminary own tests and suitability checks are required before application. Please consider the currently valid product information as well as the relevant safety data sheet acc. to Regulation (EC) No. 1907/2006 in the latest version – also published on the internet: www.korodur.de.



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