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KORODUR FSCem

**dimensionally stable, cementitious fast-setting screed binder
on ternary basis acc. to DIN 18560 and EN 13813**

DESCRIPTION

KORODUR FSCem is a cementitious, dimensionally stable fast-setting screed binder on ternary basis for the production of heavy-duty screeds, which are quickly usable and early ready for covering acc. to DIN 18560 and EN 13813 (strength classes CT-C40-F6 to CT-C50-F7).

APPLICATION

For the production of cement screeds which are quickly ready for covering, indoors and outdoors:

- as bonded screed
- on separation layer
- on insulation layer
- as heated screed

As sub-base for the installation of KORODUR/NEODUR screeds, KORODUR decorative screeds, coatings, tiles, natural stone tiles, cast concrete tiles, parquet, laminate, elastic and textile coverings.

With KORODUR FSCem also wear-resistant screeds can be produced e.g. by adding the hard aggregate KORODUR VS 0/5. KORODUR FSCem is also suitable for the repair and renovation of worn concrete floors, the repair of cementitious sub-bases for screed installation as well as for the setting of ground anchors and fence posts.

PROPERTIES

- fast-setting
- fast-drying
- dimensionally stable
- nearly shrinkage- and tension-free
- crack-free setting
- shortened construction time
- quickly usable and ready for covering
- water-resistant, suitable in wet areas
- electrostatically non-chargeable
- non-flammable
- physiological and ecological harmless
- pumpable

TECHNICAL DATA

Mixing ratio as an example 1:4 in weight units* quality CT-C50-F7	KORODUR FSCem screed sand A8 - B8 water/cement ratio	75 kg 300 kg approx. 0,42
Mixing ratio as an example 1:5 in weight units* quality CT-C40-F6	KORODUR FSCem screed sand A8 - B8 water/cement ratio	60 kg 300 kg approx. 0,40
Colour	binding agent	grey
Compressive strength [N/mm ²] after 28 days, measured on defined prisms acc. to DIN EN 13892-2	mixing ratio 1:5 in weight units FSCem : screed sand	after 3 days approx. 25 N/mm ² after 28 days approx. 40 N/mm ²
Flexural strength [N/mm ²] after 28 days, measured on defined prisms acc. to DIN EN 13892-2	mixing ratio 1:5 in weight units FSCem : screed sand	after 3 days approx. 4 N/mm ² after 28 days approx. 6 N/mm ²
Temperature	processing, ambient and sub-base temperature	≥ 5 °C
Processing time	depending on the installation method and water dosage	approx. 45 - 60 minutes
Residual moisture CM-measurement after installation	mixing ratio 1:4 and 1:5 see above	after 24 hours approx. 5,9 % after 3 days approx. 1,9 % after 28 days approx. 1,3 %

Layer thickness acc. to DIN 18560 For layer thickness up to 25 mm, the addition of hard aggregates in grain size 0/5 mm is recommended, e.g. the hard aggregate KORODUR VS 0/5.	on separation layer	minimum 35 mm
	as bonded screed (with KORODUR HB 5/60 rapid)	minimum 15 mm
	on insulation layer	minimum 40 mm
	as heated screed (from top edge of heating pipe)	minimum 40 mm
Stress / use	depending on the installation method and water dosage	after approx. 3 hours
Material consumption per m ² and per cm fast-setting screed	mixing ratio 1:4 mixing ratio 1:5	approx. 4,0 kg FSCem approx. 3,3 kg FSCem

Hints: All the afore-mentioned technical data are examples.

PROCESSING

Mixing

Mix KORODUR FSCem in pan type mixer with screed sand 0/8 mm (acc. to EN 13139, grading curve A8 - B8) and cold, clear water to a homogenous mix. Adjust a stiff-plastic consistency, consider the moisture of the hard aggregate. When using pneumatic screed conveyors, the recommended filling quantities of the machine manufacturer must be observed.

When installed as bonded screed, alternatively KORODUR VS 0/5 can be used as hard aggregate to increase the wear resistance.

General processing hints

Apply KORODUR FSCem fast-setting screed quickly in uniform layer thickness, compact, level and smooth. For mechanical smoothing use hand-held one-disk equipment. Only apply an area size as can be treated within the processing time. Perimeter and movement joints have to be taken over.

Higher temperatures shorten, lower temperatures extend the processing time. In outdoor areas, exposed to air drafts or low humidity, the fast-setting screed has to be protected from too rapid drying out with foil. The readiness for covering must be ensured by checking the residual moisture with the CM-device.

Underfloor heating

The heating can start from the third day after the installation at a flow temperature of +25 °C. For further proceeding and information refer to relevant standards and guidelines, e.g. the BEB guideline "Interface coordination for underfloor heating and cooling systems in new buildings".

JOINTS

When installed as bonded screed, all joints in the base concrete have to be taken over. The screed must be separated from uprising masonry (walls, columns etc.).

SUPPLY

25 kg special paper packaging
big bag

STORAGE

Dry, like cement. Shelf-life approx. 12 months.

HINTS 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.