



Status 08/2023

KORODUR FSCem

**dimensionally stable, cementitious, fast-setting screed binder on ternary basis
acc. to DIN 18560 and EN 13813 to produce heavy-duty cement screeds,
which are quickly usable and early ready for covering**

DESCRIPTION

KORODUR FSCem is a cementitious, dimensionally stable, heavy-duty, fast-setting screed binder on ternary basis to produce cementitious 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. Shrinkage class SW1.

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 free
- shortened construction time
- quickly usable and ready for covering
- water-resistant, suitable in wet areas
- 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 A/B 8 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 A/B 8 water/cement ratio	60 kg 300 kg approx. 0,40
Colour	Binding agent	grey
Compressive strength [N/mm ²] measured on defined prisms acc. to DIN EN 13892-2	mixing ratio 1:4 FSCem : screed sand quality CT-C50-F7	after 3 days ≥ 35 N/mm ² after 28 days ≥ 50N/mm ²
	mixing ratio 1:5 FSCem : screed sand quality CT-C40-F6	after 3 days ≥ 25 N/mm ² after 28 days ≥ 40N/mm ²
Flexural strength [N/mm ²] measured on defined prisms acc. to DIN EN 13892-2	mixing ratio 1:4 FSCem : screed sand quality CT-C50-F7	after 3 days ≥ 5 N/mm ² after 28 days ≥ 7 N/mm ²
	mixing ratio 1:5 FSCem : screed sand quality CT-C40-F6	after 3 days ≥ 4 N/mm ² after 28 days ≥ 6 N/mm ²
Shrinkage class acc. to DIN 18560-4	SW1 – low shrinkage	< 0,2 mm/m
Processing time	depending on the installation method and water/cement ratio	approx. 45 - 60 minutes
Ready for walking stress	depending on the installation method and water/cement ratio	after approx. 1 day

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KORODUR FSCem

Layer thickness nominal thickness	on separation layer	min. 35 mm	
	as bonded screed (with bonding slurry)	min. 15 mm	
	on insulation layer	min. 40 mm	
	as heated screed (from top edge of heating pipe)	min. 40 mm	
Residual moisture CM-measurement after installation	mixing ratio 1:5 see above	after 24 hours after 7 days after 28 days	approx. 5,9 % approx. 1,9 % approx. 1,3 %
Temperature	processing, ambient and sub-base temperature	≥ 5 °C	
Material consumption per m ² and cm fast-setting screed	mixing ratio 1:4 mixing ratio 1:5	approx. 4,0 kg FSCem-cement approx. 3,3 kg FSCem-cement	

Hints: All the afore-mentioned technical data are to be understood as examples. The applicator shall carry out initial tests acc. to DIN EN 13813.

PROCESSING

Processing

Mix KORODUR FSCem in pan type mixer with screed sand A/B 8 acc. to EN 13139 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.

On hardened sub-base

Prepare the cementitious sub-base as supporting concrete or supporting screed, e. g. by milling and/or shot-peening. Any cracks, break-outs and damaged joints must be professionally repaired. Surface bond strength ≥ 1,5 N/mm² for surfaces subject to traffic or ≥ 1.0 N/mm² for surfaces not subject to traffic. The sub-base must be load-bearing, sound, clean, dry and free from loose particles, oil, grease or other contaminants that may impair adhesion. The requirements of DIN 18365 and DIN 18560-3 apply. Joints in the sub-base must be adopted. Pre-treat supporting concrete or screed with universal primer KORODUR uniPrimer (see data sheet) or alternatively thoroughly pre-wet one day before installation, avoid puddle formation.

Bonding layer

Mix KORODUR HB 5 rapid bonding compound with the prescribed quantity of water and apply to the matt damp surface at hand of hard street broom as bonding primer (see data sheet).

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. 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 acc. to DIN 18560-1.

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

PACKAGING

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

HINTS: This product contains cement and reacts alkaline with moisture/water. Therefore protect skin and eyes. In case of eye contact, 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.