

System KORODUR-KOROTAN Industrial Floor

Status 01/2021

KORODUR hard aggregate screed, in one layer, in combination with bonding compound on set base concrete

APPLICATION

KORODUR-KOROTAN industrial floor is a cementitious KORODUR hard aggregate screed acc. to DIN 18560, applied in one layer as bonded screed in combination with bonding bridge on set concrete base in nominal thickness of on average 15 mm. The installation takes place nearly without joints. Existing joints in the sub-base have to be taken over. The combination with the bonding compound provides full bond. Fields of application: everywhere in industrial and commercial construction.

KORODUR-KOROTAN hard aggregate screed consists of KORODUR hard aggregates acc. to DIN 1100, cement and the additive KOROTAN. The KOROTAN additive is a high-grade screed plasticizer with additional stabilizing properties, see data sheet KOROTAN.

PROPERTIES

- highly wear resistant
- resistant to shock and impact
- forklift resistant
- non-slip
- high surface density
- resistant against mineral oil
- nearly without joints
- water-resistant
- frost/de-icer resistant
- easy to clean
- suitable for drinking water
- physiological harmless

TECHNICAL DATA

	standard / characteristic values of the hard aggregate acc. to DIN 1100	standard values acc. to DIN 18560-7 resp. EN 13813
	coating group A	e.g. hard aggregate screed DIN 18560-CT-C60-F9-A6 DIN 1100-A
Flexural strength [N/mm ²]	10**	9*
Compressive strength [N/mm ²]	80**	60*
Wear resistance*** [cm ³ /50 cm ²]	6*	6*
Bulk density* [kg/dm ³]	acc. to DIN 1100	
Granulometric composition*	acc. to DIN 1100	

*standard value **characteristic value ***average value KORODUR-KOROTAN meets all demands acc. to quality assurance.

MATERIAL CONSUMPTION

Hard aggregate screed DIN 18560-CT-C60-F9-A6 DIN 1100-A-V 15	material consumption per m ² - layer thickness (nominal thickness) 15			
	KORODUR 0/4 hard aggregate	KORODUR VS 0/5 hard aggregate	KORODUR WH-special	NEODUR HE 65 hard aggregate
	kg/m ²	kg/m ²	kg/m ²	kg/m ²
KORODUR HB 5 bonding compound	2	2	2	2
KORODUR hard aggregate	24	24	24	32
CEM I 42,5 R cement	8	8	8	already contained in the product
KOROTAN additive	0,16	0,16	0,16	already contained in the product
KOROTEX curing agent	0,15	0,15	0,15	0,15

Hint: Qualification test acc. to DIN 18560-7 resp. DIN EN 13813 required.

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PROCESSING

Sub-base

The base concrete (minimum grade C 25/30, surface bond strength $\geq 1,5 \text{ N/mm}^2$) must be prepared, e.g. by milling and shot peening. For full bond, the surface must be free from cracks, level, free from loose and brittle particles and fine mortar slurry, rough and open-pore. The demands acc. to DIN 18365 and DIN 18560 apply. The flatness should be acc. to DIN 18202, table 3, line. Thorough pre-wetting of the base concrete one day prior to the installation, avoiding formation of puddles. Application of the KORODUR bonding compound HB 5 on the matt-damp surface (see data sheet).

Processing

Mix KORODUR-KOROTAN hard aggregate screed with water in the specified mixing ratio in pan type mixer for approx. 3 minutes until a workable, plastic consistency is achieved. Apply the mix on the fresh KORODUR bonding compound HB 5, strike off over gauges (round bars) by means of aluminium lath or vibrating beam. Trowel in good time with disk float, pore-closing, and smooth acc. to the specified surface texture (wing float).

MIXING RATIO

3	weight units	KORODUR 0/4 - KORODUR VS 0/5 - KORODUR WH-special
1	weight units	cement CEM I 42,5 R
0,02	weight units	KOROTAN additive (maximum 2% of cement weight)

Add water until a stiff/plastic consistency is achieved.

AFTER-TREATMENT

Differing temperatures may influence the setting and hardening process. The KORODUR-KOROTAN hard aggregate screed must be protected from too rapid drying out acc. to DIN EN 13670 / DIN 1045-3. For the after-treatment of the hard aggregate layer we recommend the use of our products KOROMINERAL CURE or KOROTEX (see data sheets). If a follow-up surface modification, coating or marking is specified, the after-treatment should be carried out with foil.

JOINTS

Joints in the set base concrete have to be taken over in the hard aggregate layer. The hard aggregate screed must be separated from uprising masonry (walls, columns etc.).

SUPPLY

see relevant data sheet

STORAGE

see relevant data sheet

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.