



LevelFlor

Status 01/2021

mineral, self-leveling, fast-setting underlayment

DESCRIPTION

LevelFlor is a high-quality, advanced, self-leveling underlayment, based on special cement technology, for indoor and outdoor use. LevelFlor is fast-setting and designed as floor underlayment. It can be covered with finished flooring in 6 - 16 hours (at 20 °C). LevelFlor qualifies for both new construction and repair projects.

APPLICATION

Rapid Set LevelFlor is a fast-setting, self-leveling underlayment for indoor and outdoor use, in residential and industrial construction, applied in bond on cementitious sub-bases. LevelFlor is load-bearing and an ideal base for floor coverings such as linoleum, textile and PVC coverings, laminate, ceramic tiles and natural stone. LevelFlor must be covered with a finished floor.

SUSTAINABLE CONSTRUCTION

The use of LevelFlor reduces the CO₂ footprint, increases the energy and resource efficiency and conserves natural resources. The production of Rapid Set cement generates 30 % less CO₂ emissions than conventional Portland Cement. For further information (e.g. LEED values) contact KORODUR.

PROPERTIES

- application thickness up to 120 mm (see processing)
- self-leveling
- fast-setting
- quickly ready for covering
- high-strength
- low-shrinkage
- mineral
- easy to mix
- pumpable
- indoors and outdoors

TECHNICAL DATA

Quality	CT-C30-F6	
Grain size	0 - 2 mm	
Colour	grey	
Working time at +20 °C and 65 % rel. air humidity	approx. 30 minutes	
Flow life	approx. 15 minutes	
Setting time with reference to DIN EN 196-3	initial set final set	approx. 140 minutes approx. 200 minutes
Ready for foot traffic	after approx. 3 - 4 hours	
Ready for covering The readiness for covering is independent of the layer thickness and is influenced by the ambient temperature and air humidity. It is recommended to check the residual moisture by suitable measurement.	diffusion-open coverings (e.g. tiles, paint coats)	after approx. 6 h
	diffusion-tight coverings (e.g. parquet, bitumen waterproofing)	after approx. 16 h
Compressive strength [N/mm ²] DIN EN 1015-11	after 24 hours	> 20,0 N/mm ²
	after 7 days	> 24,0 N/mm ²
	after 28 days	> 34,0 N/mm ²
Flexural strength [N/mm ²] DIN EN 1015-11	after 7 days	> 7,9 N/mm ²
VOC content	0 g/L	
Temperature processing, ambient and sub-base temperature	≥ 5 °C	
Water addition	per 25 kg bag	approx. 4,75 l
	Material consumption	per m ² per mm

PROCESSING

Sub-base

Pre-treatment of sub-base by milling and/or shot-peening. Existing cracks, breakouts and damaged joints must be properly repaired. The sub-base must be load-bearing, solid, clean, dry and free from loose debris, oils, greases or other bond impairing contamination.

Surface bond strength: • without traffic stress $\geq 1,0 \text{ N/mm}^2$
• with traffic stress and/or in outdoor areas $\geq 1,5 \text{ N/mm}^2$

The demands of DIN 18365 and DIN 18560 apply. Apply KORODUR PC (see data sheet) on the prepared sub-base or, on difficult sub-base, apply the two-component epoxy-resin primer KORODUR TXPK and broadcast with fire-dried quartz sand in grain size 0,4 - 0,8 mm (see data sheet KORODUR TXPK).

Processing

Mix LevelFlor in a clean, suitable container (e.g. KORODUR 30 liter mixing bucket) with approx. 4,75 l water with a suitable stirrer (minimum 650 r.p.m.) or in pan type mixer (e.g. Collomix LevMix, Hippomixer) for approx. 3 - 5 minutes until the mix is lump-free and homogenous. Define the correct consistency by determination of the slump. We recommend the use of our „FLOW kit“ with the relevant instructions.

Apply LevelFlor on the prepared and primed sub-base in a typical layer thickness of 2 - 70 mm. (layer thickness > 70 mm possible after checking the given conditions resp. consulting the KORODUR application engineering department). LevelFlor will level within its 15 minutes flow life. For uniform application of the material, the use of a qualified rake is recommended. To remove air enclosures, treat the still flowable surface with a spiked roller. To achieve the planned nominal thickness we recommend to set height markings or to take other suitable measures. The total area must be protected from too rapid drying out, during the application and until it can be walked on, from wind, air drafts, sun exposure etc. Ambient and material temperature above 20 °C may accelerate the setting time and strength development. Adapt the processing accordingly. It is recommended to use cold mixing water. Ambient and material temperature below 20 °C may slow down the setting time and strength development, especially with thinner layers. It is recommended to keep the material warm and/or to use heated mixing water.

CURING

Differing temperatures may influence the setting resp. hardening process. Under normal conditions at +20 °C no curing required. For outdoor applications, the spraying of a fine water mist on the freshly set surface is recommended as soon as this is possible without damaging the surface. Continue the curing with water for at least 1 hour. Avoid applications in extremely dry, windy, hot or sunny conditions.

JOINTS

Joints in the sub-base have to be taken over in the layer. LevelFlor must be separated from uprising masonry (walls, columns etc.).

SUPPLEMENTARY HINTS

Moisture insensitive floors, such as tiles, may be placed in approx. 6 hours. Moisture sensitive floors, such as PVC flooring, in 16 hours. Follow the flooring manufacturer's recommendations regarding vapor diffusion and retained water. It is recommended to adapt the application/qualification of LevelFlor to the jobsite conditions and to install test sections. LevelFlor is ready for foot traffic in 3 - 4 hours (at +20 °C), for rubber wheel traffic in 24 hours. LevelFlor is not designed as final floor and must be covered with a finished floor such as TRU Self-Leveling, TRU PC, TRU SP, NEODUR Level (see data sheets) or tiles etc.

SUPPLY

25 kg special paper packaging

STORAGE

Dry, like cement. Shelf-life approx. 6 months.

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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