

TRU Self-Leveling

per 03/2022

mineral, self-leveling, fast-setting, polished decorative screed

DESCRIPTION

Rapid Set TRU Self-Leveling is a high quality, innovative, self-leveling, mineral, polished decorative screed, based on special cement technology. Ideal where high early strength, durability and low shrinkage setting are required. TRU Self-Leveling maintains workability for up to 20 minutes and is ready to receive foot traffic after 2 - 3 h. TRU Self-Leveling can be polished to high dense sheen already 24 h after placement. Installation thickness 5 - 35 mm.

APPLICATION

Use for polished, decorative screeds. For attractive, unique design of sales rooms, restaurants, foyers, museums, administrative buildings, schools, airports as well as any prestigious interiors. Qualified for indoor and outdoor use, also in wet areas. TRU Self-Leveling is a multipurpose product that allows individual and creative design in many colour variants and by broadcasting decorative aggregates (e.g. glass, marble). Given the manifold design options, it is recommended to run on-site pilot tests/test areas.

SUSTAINABLE CONSTRUCTION

The use of TRU Self-leveling reduces the CO_2 footprint, increases the energy and resource efficiency and conserves natural resources. The production of Rapid Set cement generates 30 % less CO_2 emissions than conventional Portland Cement. For further information (e.g. LEED values) contact KORODUR.

PROPERTIES

- fast-setting, ready for foot traffic in 2 - 3 h, ready for polishing to high dense sheen in 24 h
- highly flowable
- outstanding clarity and gloss, polishable to high gloss due to low polymer content and high density
- attractive and versatile. Use as new coating and underlayment. Numerous design options by addition of colours and decorative aggregates.
- 5 - 35 mm installation thickness
- mineral, physiological and ecological harmless
- indoors and outdoors, also in wet areas
- easy to clean

TECHNICAL DATA

Quality	CT-C40-F10
Colour	natural grey
Compressive strength [ASTM C 109 Mod.] after 28 days, measured on defined prisms acc. to DIN EN 13892-2	after 4 hours approx. 20 N/mm² after 1 day approx. 34 N/mm² after 28 days approx. 45 N/mm²
Flexural strength [ASTM C 307 Mod.]	after 24 hours approx. 6 N/mm² after 28 days approx. 13 N/mm²
Tensile strength [ASTM C 348 Mod.]	after 7 days approx. 1,5 N/mm² after 28 days approx. 2,5 N/mm²
Working time	approx. 20 minutes
Flow time	approx. 15 minutes
Temperature ambient and sub-base temperature material temperature	10 - 30 °C 16 - 27 °C
Water addition	approx. 3,8 - 4,3 l/22,7 kg bag
Layer thickness	5 - 35 mm
Material consumption per m² / per mm layer thickness	approx. 1,7 kg

PROCESSING

Sub-base

Prepare sub-base e.g. by 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 contamination impairing the bond, crack free.

Surface bond strength:
- without traffic stress ≥ 1,0 N/mm²
- with traffic stress and/or in outdoor areas ≥ 1,5 N/mm²

TRU Self-Leveling

The demands acc. to DIN 18365 and DIN 18560 apply. Apply the 2-components epoxy primer KORODUR TXPK on the prepared sub-base and broadcast to saturation with fire-dried silica sand, grain size 0,4 - 0,8 mm (see data sheet KORODUR TXPK).

Mixing

The use of qualified mixing equipment is recommended, e.g. Hippo Mixer, Collomix LevMix or stirrer with min. 650 rpm. Avoid mixers that entrap large amounts of air. Mix TRU Self-Leveling with the specified amount of clean water. To achieve a uniform, lump-free consistency, mix for 3 - 5 minutes. Define the correct consistency by determination of slump. We recommend the use of our "FLOW kit" with relevant instructions. Process TRU Self-Leveling within 20 minutes. Keep material temperature above 10 °C.

Processing

Apply TRU Self-Leveling on the prepared and primed sub-base in a thickness of 5 mm and up. 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 plastic spiked roller. Protect the whole area during the application and until walkability is achieved, from too rapid drying out, wind, drafts, sun exposure etc. For layer thickness > 35 mm the TRU material can be modified by adding quartz sand (check-back with application engineering department). Ambient and material temperature above 20 °C may speed setting time and strength development. Adapt the application. It is recommended to use chilled mixing water. Ambient and material temperature below 20 °C may delay setting time and strength development, especially for thinner layers. It is recommended to warm up material and/or mixing water.

CURING

Under normal conditions at 20 °C no curing with water required. Under extremely dry, windy, hot or sunny conditions, the application of fine water mist on to the sufficiently set TRU area is recommended.

JOINTS

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

GRINDING / POLISHING

TRU Self-Leveling is ready for polishing in 24 hours after application. Grinding and polishing of TRU Self-Leveling similar as concrete. The surfaces can be polished to a high dense sheen. Polishing guidelines are available on request. Please note: When polishing, up to 3 mm (depending on the desired optics) of the initial layer thickness are polished off.

FIRST MAINTENANCE TREATMENT

After drying/walkability, it is recommended to apply a qualified impregnation or first maintenance treatment. This provides increased chemical resistance, has a moisture and dirt-repellent effect, optimizes the optical appearance and makes TRU Self-Leveling to an easy to clean, durable and attractive design floor.

SUPPLEMENTARY HINTS

KORODUR design floors are cement screeds and subject to building physics laws. Unfavourable site conditions and unpredictable influences, e.g. temperature, air draft or sun exposure, may cause unwanted reactions (cracks/deformation). In particular, cracks can be of most different origin and cannot be totally excluded. Depending on the quality of planning and execution, their number and extent may be considerably reduced. Cracks contribute to the authenticity of a floor and are not considered as depreciation of the design performance. KORODUR design floors are exclusively based on natural raw materials. Thus, colour and texture variations cannot be excluded. Depending on the time of day, the light conditions or the viewers' perspective, the floor surfaces may have differing appearances. See also BEB Worksheet Design floors 09/14.

SUPPLY

22,7 kg special paper packaging

STORAGE

Dry, like cement. Shelf-life approx. 12 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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