KREISEL

TECHNICAL DATA SHEET

CEMENT GROUNDWORK M-15 441

Cement universal floor underlay 25-80 mm

Areas of application

Intended for the execution of cement floor bases binding with the groundwork, of 25 mm in minimal thickness, or possibly bases on separating layer, of 35 mm in minimal thickness. Suitable for applying on all groundworks on hydraulic binding agents and vapor barriers or anti-humidity insulation layers. The screed can also be used to execute other, small elements poured directly at the construction site, after applying sufficient reinforcement.

Properties

- Waterproof
- Frost-resistant
- Universal
- High mechanic durability

Application procedure

Technical data

Item number	11075
Packaging	
Quantity per unit	25 kg/unit
Unit per pallet	48 unit/Pal.
Consumption	2 kg/m²/mm
Water requirement	approx. 3,5 L/unit
Compressive strength	≥ 16 MPa (28 d)
Pressure resistance	≥ 4 MPa (28 d)
Possibilities to enter	48 h
Suitable for floor cover	28 d
Chromium content	≤ 0,0002 %
Mortar class	CT-C16-F4
Coating thickness	25-80 mm
Processing time	60 min

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Material base

- Mineral fillers
- Modifying additives
- Portland cement

Application conditions

Apply at temperatures from +5 °C to +25 °C, these temperature refer to air, groundwork and product temperature. All groundwork surfaces must be load-bearing, tight, stable, even and clean and, if required, primed with GRUNTOLIT-W 301 or GRUNTOLIT-SG 302

Surface

The groundwork should be prepared according to the application option. Repair slits and larger cracks of a bed e.g. using 428 levelling mortar. Concrete beds must be at least 6 months old, and cement screeds - at least 4 weeks old and moisture cannot be higher than 2%.
Concrete, reinforced concrete: Prime with GRUNTOLIT-W 301, pour the grout maintaining the wet-on-wet principle
Cement screed: Prime with GRUNTOLIT-W 301 or EXPERT 6

Surface pre-treatment

While making bases, it is necessary to comply with the rules on using expansion joints. In case of making a base linked with a bed, it is necessary to transfer any possible expansion joints in a bed so that expansion joints in the base made will overlap with them. Before pouring a screed, it is necessary to make expansion joints separating from walls and other elements by using a special joint filler tape or strips of styrofoam preferably 10mm thick. Free edges of the area poured must be protected against flow of screed and it is also necessary to use an expansion joint separating from a limiter. In case of making a floor base on a separating layer, preparation of a bed must be started from its cleaning and making an expansion joint separating a screed from walls by means of a joint filler tape. PE film shall then be uniformly spread on the entire surface. The film shall be placed with a min. 0.2 mm turn up on the wall above the expected poured base level. Film shall be joined with min. 10 cm overlaps by gluing, joining with self-adhesive tape or welding to achieve tight insulation.

Preparation

Pour the dry mix gradually to a container with a sufficient amount of clean, cool water, mixing manually or using a low-speed mixer to produce homogenous, lump-free mass. Leave to mature for 5 minutes, and then mix again. If there is a need to use a part of the packaging, the entire dry compound must be carefully stirred because during transport components could be separated. Do not mix the hardened grouting mixture again.

Application procedure

The mortar prepared must be laid, most often between screeds, layer with thickness dependent on the type of construction of floor and compressibility of layer of thermal or acoustic insulation. Remove the excess of grout with a trowel, moving on the guides. After initial setting, smoothen the surface with a long float. In case of big floor loads, high temperature variations, floors on ceilings of prefabricated elements at premises with increased intensity of use, when subfloors are laid on thermal or acoustic insulation layers, highly susceptible to deformation, as well as to reduce the number of anti-contraction joints, subfloor reinforcement systems shall be applied.

Instructions

The obtained screed shall be protected for the first 7 days from pouring against excessive sunlight, high temperatures, strong wind and water (rainfalls) as well as temperatures below zero (minimum drying temperature is +5 °C). Drying of poured screed with hot-air blowers shall be forbidden. Such conditions must be ensured also during performance of works. Occurrence of cracks and scratches in case of using a screed on cracked or deformable beds is not excluded. While subfloors are made, the principles shall be followed of expansion joints application: structural, insulation and anti-shrinkage. Structural expansion joints shall be used at the areas where structural building expansion joints run and when it is necessary to eliminate the effect of thermal material expansion. Insulation expansion joints shall be used

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to separate the floor from other building elements (walls, pillars, stairways, etc.) which may constrain floor movements. They shall also be used where subfloor thickness is changed and at the contact point of various floors, as well as to separate rectangular subfloor fields at premises with complex shapes. Anti-shrinkage joints shall separate the entire area into fields, not larger than: 30 m^2 with side length up to 6 m at indoor premises, 20 m^2 with side length not exceeding 5 m- in rooms with floor heating, 40 m^2 with side length up to 8 m- in rooms with floor heating when anti-shrinkage reinforcement is applied (a recommended solution). In corridors, the spacing of anti-shrinkage joints shall not exceed 2–2.5-fold value of corridor width. Expansion joints of screeds on terraces shall be spaced every 2–2.5 m, depending on insolation and outer lining colour. Avoid contact with skin and protect eyes. Detailed guidelines are included in the material safety data sheet.

Storage

The mortar can be stored for up to 12 months from production date in sealed packaging and at temperatures, ranging from +5 °C to +25 °C. The storage area shall be kept out of the reach of children, protected against direct sunlight and located far from heat sources and naked flames. It can be transported by any means of transport, at a temperature not lower than +5 °C. It is not subject to ADR provisions.

General information

This product data sheet replaces all its previous versions.The information, included in this technical card, represents our current knowledge and practical experience. This is general information only which shall not obligate the manufacturer to take any responsibility either for workmanship or for the manner of use. For there may be differences and specific execution conditions.The product shall be applied in accordance with required technical knowledge and OHS rules.Avoid contact with skin and protect eyes. In case of contact with eyes, rinse them up with a large quantity of clean water and consult a doctor. It shall be recommended to use gloves, safety goggles and protective clothing. All technical data is given for the temperature of 20 degrees Celsius. These temperatures apply to air, bed and embedded material.
All technical data listed in this product specification has been determined under laboratory conditions.