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COARSE FLOOR LEVELLING COMPOUND LM 5000



Product description

Fescon Coarse floor levelling compound LM 5000 is a fast-setting and fast-drying cement-based floor screed.

- For layer thicknesses of 5–80 mm
- Manually applied
- Suitable for sloped castings and slope corrections
- For thick screed layers
- Suitable as a substrate for waterproofing

Applications

- Levelling, filling, surface correction, and sloping of concrete floors in indoor areas
- Under waterproofing in wet rooms
- Surface screeds and underfloor heating floors

The product is listed in the portal for building products that can be used in Nordic Swan Ecolabelled buildings.

Instructions

Base

- Concrete substrates and gypsum-based boards
- The substrate must be clean, solid, and dust-free, and it must be vacuumed.
- Loose layers, cement laitance, and other impurities must be mechanically removed to ensure proper adhesion between the floor screed and the substrate.
- The substrate must be sufficiently strong, stable, and load-bearing.
- The substrate's tensile strength must be > 1.0 MPa. The floor must be constructed as a floating, reinforced structure if the substrate is weak concrete (tensile strength < 1.0 MPa).
- The floating floor structure must be separated from the subfloor using Fescon Separation fabric and from vertical structures using Fescon Bordering strip.
- The subfloor temperature must be > +10°C and the relative humidity < 95% RH. The relative humidity of the subfloor affects the drying time of the floor screed.

Priming

- Priming is carried out according to the instructions for Fescon Adhesion promoter or Flow Primer, depending on the substrate.
- Non-absorbent surfaces (e.g. ceramic tiles, epoxy, metal surfaces) must be pre-treated in accordance with the Primer PLUS instructions.

Instructions for use

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- The working area must be fully protected from wind, drafts, sunlight, and rain.
- During floor installation, the indoor temperature must be between +10°C and +25°C, and the relative humidity must be above 40% RH.
- One 20 kg bag of screed is mixed with 2.4–2.7 litres of cold water.
- Overdosing water is prohibited, as it weakens the strength properties of the screed, increases the risk of separation, and prolongs the drying time.
- The screed must be mixed into a uniform mass using a power drill with a mixing paddle. Mixing time is approximately 1.5 minutes.
- The screed is applied to the surface to be levelled using a steel trowel.
- Working time is approx. 0.5 hours from the addition of water.
- Tools must be cleaned with water immediately after use.
- Hardened material must be removed mechanically.

Covering

- Coarse floor levelling compound LM 5000 can be directly waterproofed using certified products from the Fescon Waterproofing system.
- It can be covered with ceramic tiles, laminate, and parquet.
- Other floor coverings require a skim coat using Fescon hand-applied levelling compounds, such as FlowPlan.
- It must be ensured that the screed meets the technical requirements of the floor covering manufacturer and the RYL guidelines, considering the entire floor structure. The flatness of the screed surface should be measured, if necessary, in accordance with RT instruction 14-11039.
- The floor screed must not be left uncoated for more than 3 months due to the risk of cracking and detachment.
- Once the screed has reached the required moisture level for the chosen floor covering, the covering should be installed or post-treatment started.
- Always check the moisture content of the entire floor structure before installing the covering.
- Favourable drying conditions for the screed require an indoor relative humidity below 50% RH and a temperature above +20°C. Poor conditions will slow down the development of the screed's strength properties and extend the drying time.

Waste handling

Storage and handling of waste
See the separate storage and disposal instructions https://www.fescon.fi/en/material-bank

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Technical information

Material usage	Approx. 1.8 kg/m^2/1 mm
Water requirement	Max. 2.4 - 2.7 l / 20 kg
Type	Powder
Binder	Special cement
Colour	Grey
Maximum grain size	1.2 mm
Package size	20 kg
Storage	Storage time in a dry location approx. 12 months
Layer thickness	5–80 mm (minimum 50 mm when installed as a floating, reinforced structure)
Fibre	Not fibre-reinforced
Additives	Additives to improve workability, casein-free
Usage temperature	+10°C...+25°C
Workability time	Approx. 0.5 h
Coatable	Approx. 1 day / 10 mm (+20°C, RH 50%)
Walkable	Approx. 3 h
Strength class	C 20 (EN 13813)
Compressive strength	> 20 MPa (28 days, +20°C, RH 50%)
Adhesion strength	> 1.2 MPa to concrete (28 days, +20°C, RH 50%)
Flexural bond strength	F5 (EN 13813)
Surface tensile strength	> 1.0 MPa (28 days, +20°C, RH 50 %)
Frost resistance	Not frost-resistant, for indoor use only
pH	< 11 low-alkaline (hardened material)
Waterproofness	Water-resistant
GWP A1-A3	0,32
GWP unit	kg CO2e/kg
Method for calculating the GWP value	Generic

Limitation of liability, product use notes and restrictions: Please familiarize yourself with Fescon Oy's general terms of delivery and the design and work instructions related to the product.