Hämeenkatu 9
05800 HYVINKÄÄ
Tel. 020 789 5900
www.fescon.fi

FLOW GS 3.0 MM GYPSUM FLOOR MASS



Product description

Fescon Flow GS 3.0 mm Gypsum floor mass is a gypsum-based, pumpable, easy-to-level floor compound with excellent workability and flow properties. Especially suitable for underfloor heating systems.

- For layer thicknesses 20-80 mm (partial levelling max. 100 mm)
- Can be pump-applied and manually levelled
- Heated and dB floors and floating floor structure solutions
- Easy to level
- A non-shrinking floor levelling compound

Applications

- Heated and dB floors and floating floor systems

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

Instructions

Base

- Concrete bases, hollow slabs, wood and gypsum-based boards and insulating boards
- The base is clean, solid, dust-free, and vacuum-cleaned
- Loose layers, cement paste, and other impurities have been mechanically removed to ensure adhesion between the floor levelling compound and base
- The base must be sufficiently strong and immobile, and have a sufficient load-bearing capacity
- The floor must be made as a floating structure, if the base is a wood, gypsum, or insulating board. The floating floor structure must be detached from the base by Fescon Separation fabric and from vertical structures by a Fescon Bordering strip
- The temperature of the underfloor structure is > +10°C and relative humidity < 90% RH The relative humidity of the underfloor structure affects the setting of the floor levelling compound
- If need be, any rough areas are filled by Fescon LM 5000 before the floor levelling compound is applied
- Possible leakage areas are sealed with putty

Priming

- Priming is carried out according to the instructions of the Fescon Flow Primer, depending on the base

Instructions for use

- The workspace must be protected all over against wind, draught, sun, and rain
- During floor work, the indoor temperature has to be +10°C…+25°C, and the relative humidity of the indoor air > 40 % RH

Hämeenkatu 9
05800 HYVINKÄÄ
Tel. 020 789 5900
www.fescon.fi

- Mix a bag (20 kg) of the levelling compound in 3.2-3.6 litres of cold water
- The levelling compound is mixed to a consistent paste with an automated or pipe mixer
- Apply the levelling compound with a steel trowel or pump onto the surface being levelled
- Workable for about half an hour after adding water
- Wash tools with water immediately after completing the work
- Remove dried levelling compound mechanically
- The minimum layer thickness must be checked with the contractor
- Make sure ventilation is adequate after finishing the floor levelling compound work
- If need be, the setting of the floor levelling compound can be accelerated by grinding the surface because this reduces the resistance of water vapour in the surface of the floor levelling compound
- The setting times are greatly affected by the conditions at the work site, ventilation, and the amount of water used in the floor levelling compounds
- Pumping from a tanker lorry is not recommended < -25°C
- The floor load capacity is estimated work site specifically with the floor levelling contractor

Covering

- Fescon Flow GS 3.0 mm Gypsum floor mass can be directly coated by board parquet and laminate
- When coating with ceramic tiles, the surface of the gypsum floor levelling compound needs to be carefully ground with, for example, a Wetrok type of floor maintenance machine, followed by careful vacuuming. Priming is performed once with Fescon Flow Primer adhesion promoter (mixture ratio 1:3) before the adhesive plaster is installed. The adhesive plaster to use is selected from Fescon Tile adhesive plaster ILL or VSL according to the tiles used.
- Plastic and textile floor coverings require an overlay levelling layer of approx. 5–10 mm using Fescon FlowPlan or Flow CS floor compound. In overlaying, the surface of the gypsum floor levelling compound is carefully ground, e.g. with a Wetrok type of floor maintenance machine, followed by careful vacuuming. Priming is performed once with Fescon Flow Primer adhesion promoter (mixture ratio 1:3). After the Flow Primer adhesion promoter has set, overlay with Fescon FlowPlan manually-applicable levelling compound according to the instructions on the product card
- Possible deviations in straightness in connection with the tiling work are straightened with Fescon Underfloor heating filler LL5500 (minimum layer thickness 10 mm). The surface of the gypsum floor levelling compound is carefully ground with a diamond grinding machine, followed by careful vacuuming. Priming is carried out twice with Fescon Flow Primer; the first priming with the mixture ratio 1:3 and the second 1:1. Once the Flow Primer has set, the surface is levelled according to the product card of Fescon Underfloor heating filler LL5500 or Floor levelling plaster LT 4000 according to the instructions on the product data sheet.
- When installing floor coverings it must be ensured that the gypsum floor levelling compound, concerning its technical properties, meets the requirements of the manufacturer of the floor covering and RYL for bases to be covered, with the entire structure in mind. The straightness of the levelled surface is measured according to the RT instruction 14-11039, if necessary.
- Once the floor levelling compound has reached the degree of dryness required by the covering, the floor is covered
- Check the humidity of the entire floor structure before installing a coating
- Good setting properties for the floor levelling compound require that the indoor humidity is less than 50 % RH and the temperature is over +20°C. Poor conditions slow down the development of the strength characteristics of floor levelling compounds and increase the setting time

Waste handling

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

Hämeenkatu 9
05800 HYVINKÄÄ
Tel. 020 789 5900
www.fescon.fi

Technical information

Material usage	Approx. 1.8 kg/m^2/mm
Water requirement	3.2 - 3.6 l / 20 kg (115-120 mm flow as measured by Fescon flow plate)
Type	Powder
Binder	Gypsum
Colour	Whitish
Maximum grain size	3.0 mm
Package size	1000 kg
Storage	Storage time in a dry location approx. 8 months
Layer thickness	20-80 mm (partial levelling max. 100 mm), as a floating floor structure min. 30 mm over a floor heating pipe min. 16-20 mm
Fibre	Non-fibre reinforced
Additives	Substances improving workability, casein-free
Usage temperature	+10°C...+25°C
Workability time	Approx. 1 h
Coatable	Approx. 2 – 12 weeks (+20°C, RH 50 %)
Walkable	Approx. 4 - 6 h
Strength class	C 20 (EN 13813)
Compressive strength	Approx. 25 MPa (28 days +20°C, RH 50 %)
Adhesion strength	> 1.0 MPa for concrete (28 days +20°C, RH 50 %)
Flexural bond strength	F 5 (EN 13813)
Surface tensile strength	> 1.0 MPa (28 days, +20 °C, RH 50 %)
Reaction to fire	A1
Heat conductivity	Lambda10: 0.64 W/(m·K)
Frost resistance	Non-frost resistant, for indoor spaces
pH	< 11 low alkaline (hardened material)
GWP A1 raw material	0,0313
GWP A2 transport	0,0463
GWP A3 manufacturing	0,0309
GWP A1-A3	0,108
GWP A4 transport	0,00631
GWP A5 assembly	0,000435

Hämeenkatu 9
05800 HYVINKÄÄ
Tel. 020 789 5900
www.fescon.fi

GWP unit	kg CO2e/kg
Method for calculating the GWP value	EPD

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.