

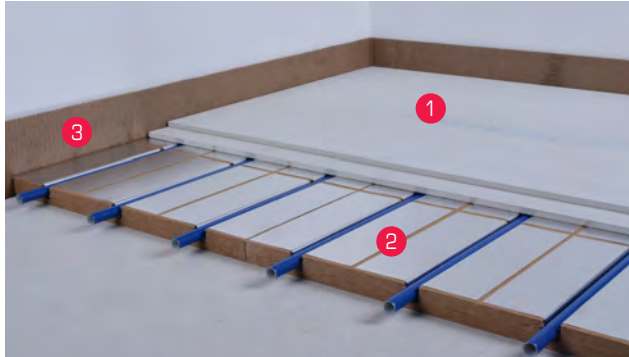
Floor installation

Dry screed element (Fermacell)



Basic installation

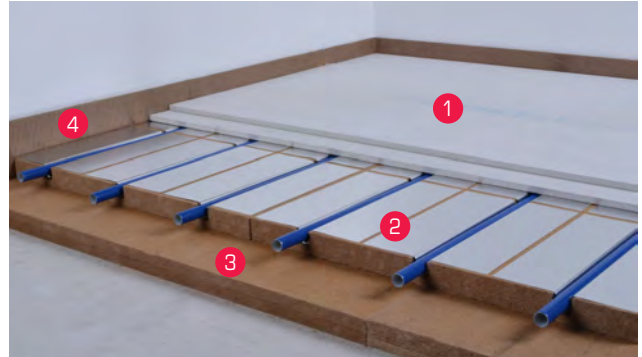
Advisable for upper floors and for lower installation heights



1	Plaster fibre dry screed element (Fermacell)	20 mm
2	GreenLine system panel & MVR heating pipe	30 mm
3	Edge insulation strips	
Total installation height approx.		50 mm

Extended installation with additional insulation

Advisable for the ground floor or cellar and for larger installation heights



1	Plaster fibre dry screed element (Fermacell)	20 mm
2	GreenLine system panel & MVR heating pipe	30 mm
3	Additional insulation	30 mm
4	Edge insulation strips	
Total installation height approx.		80 mm

Suitable floor coverings



Technical data	Basic installation	Extended installation
Heating circuit length	ø 80 – 90 m (~ 15 m ²) max. 110 m	
Additional heat insulation	20 – 30 mm wood fibre insulation ≥ 150 kPa	
Weight	40 kg / m ² (without floor covering)	
Surface load Point load	2.0 kN / m ² 1.0 kN	2.0 kN / m ² 1.0 kN
Minimum thermal conductivity resistance R	≥ 0.75 m ² K / W ✓ DIN EN 1264: Floors in mezzanine floors	≥ 1.25 m ² K / W ✓ DIN EN 1264: Floors on ground floors / cellars

Important information

Base requirements (acc. DIN 18202 table 3, line 4)	Bases must be level, stable and able to take a load. Unevenness > 3 mm at 1 m length must be compensated.
Compensation of unevenness (according to degree of unevenness)	0 – 10 mm: Floor levelling paste 10 – 50 mm: Floor levelling paste, thin screed from 40 mm: Bulk filling, light concrete
Special aspects	Alternatively, plaster fibre dry screed elements with a thickness of 25 mm can be used.

Dry screed element (Fermacell)

Performance table

Floor installation	Room temperature	Heating water temperature							
		30°C		35°C		40°C		45°C	
		W / m ²	ST	W / m ²	ST	W / m ²	ST	W / m ²	ST
Floor covering $R_{\lambda,B} = 0.00 \text{ m}^2 \text{ K} / \text{W}$ Tiles	20 °C	41.0	23.8	62.2	25.8	83.3	27.7	104.3	29.7
	24 °C	23.6	26.2	45.2	28.2	66.4	30.1	87.5	32.1
Floor covering $R_{\lambda,B} = 0.05 \text{ m}^2 \text{ K} / \text{W}$ Laminate, needle punched flooring, PVC	20 °C	32.8	23.0	49.8	24.6	66.7	26.2	83.5	27.7
	24 °C	18.9	25.7	36.2	27.4	53.2	28.9	70.0	30.5
Floor covering $R_{\lambda,B} = 0.10 \text{ m}^2 \text{ K} / \text{W}$ Carpet	20 °C	27.4	22.5	41.5	23.8	55.6	25.1	69.6	26.4
	24 °C	15.7	25.5	30.2	26.8	44.3	28.1	58.4	29.4
Floor covering $R_{\lambda,B} = 0.15 \text{ m}^2 \text{ K} / \text{W}$ Ready-made parquet, wooden floor boards	20 °C	23.5	22.2	35.6	23.3	47.7	24.4	59.7	25.5
	24 °C	13.5	25.3	25.9	26.4	38.1	27.5	50.1	28.6

W / m² – System heating output
ST – Surface temperature

Installation



Sample laying plan

