

Note on English translation / Hinweise zur englischen Fassung

This is a translation of the product data sheet valid in Germany.

All stated details and properties are in compliance with the regulations of the German standards and building regulations. They are only applicable for the specified products, system components, application rules, and construction details in connection with the specifications of the respective certificates and approvals.

Knauf Gips KG denies any liability for applications outside of Germany as this requires changes acc. to the respective national standards and building regulations.

Drywall Systems **K7610_DSP.de**

Thermoboard Plus GKF

Gypsum board with the best thermal conductivity for heating and cooling systems in drywalling

Product Data Sheet



GKF

grey

DF





Thermoboard Plus GKF is a gypsum board the best thermal conductivity thanks to its addition of graphite.

- Board type
 DIN 18180
 EN 520
- Colour of board liner
- Rear side marking

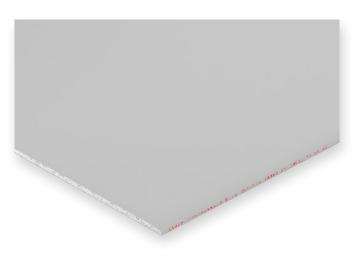
Storage

Store boards on board pallets in a dry environment.

Quality

Properties and added value

- Special gypsum core with a very high thermal conductivity
- Easy to apply
- Good coherence of structure when exposed to fire
- Non-combustible
- Low expansion and shrinkage when climate conditions change
- Concave and convex bending is possible



Field of application

Knauf Thermoboard Plus GKF 10 is the solution for cladding panel heating and cooling systems, which require very good thermal conductivity properties. The cooling and heating capacity is system dependent and is generally specified by the system provider.

The field of application encompasses diverse systems including cooling ceiling systems, wall heating systems and ceiling heating systems.

Application

Application

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Note	Application should be undertaken in accordance to the applicable standards and acc. to the relevant System Data Sheets for drywall systems.			
	Application acc. to DIN 18181. During			
	_			
Note	application, the guidelines of the system			
	supplier as well as specifications of the Code of			
	Practice no. 1 "Baustellenbedingungen - Site			
	conditions" (German only) of the BVG (IGG) have			
	to be taken into consideration			



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Joints

Apply expansion joints in case of:

- Cooling ceilings with side lengths from approx. 15 m or ceiling area ≥ 100 m².
- Heating ceilings with side lengths from approx. 7.5 m
- Significantly narrowed ceiling spaces (e.g. as caused by narrow ceiling spaces due to a break in the wall)

Separate connections of Themoboard Plus GKF to components made of a different building material, especially columns, or thermally highly stressed built-ins such as lighting fixtures, for instance with shadow gaps.

Grid substructure

The substructure is part of the particular cooling or heating system for the wall or ceiling and may vary depending on the different system suppliers.

Cladding

Apply the Thermoboard Plus GKF preferably lateral to furring channels with spacing ≤ 500 mm, longitudinal cladding along channels with spacing ≤ 420 mm.

Stagger the front edge joints by at least 400 mm and arrange on the channels.

Start fixing of the Thermoboard Plus GKF in the board centre or on the board corner to avoid sagging. Press Thermoboard GKF tightly to grid while fastening with screws. Centre screws at \leq 250 mm on walls and \leq 170 mm on ceilings. Use Thermoboard screws with drill point TB 3.5 x 23 mm for fastening to sheet metal profiles up to 0.7 mm thickness (e.g. CW studs / CD channels). In case of fastening directly on the system components, refer to instructions of the system provider.

Jointing

Fill all joints with Uniflott / Fugenfüller Leicht and use Knauf Joint Tape Kurt.

Note

The guidelines of the German Bundesverband Flächenheizungen und Flächenkühlungen e. V. (BVF) must be observed. The guidelines (in German) can be found at:

flaechenheizung.de/downloads

Technical data

Description	Thermoboard Plus GKF 10	Unit	Standard
Board type Germany	GKF	-	DIN 18180
Board type European	Type DF	-	EN 520
Reaction to fire	A2-s1, d0 (B)	Category	EN 520
Width dimensional tolerance	+0 / -4	mm	EN 520
Length dimensional tolerance	+0/-5	mm	EN 520
Thickness dimensional tolerance	+0.5 / -0.5	mm	EN 520
Angularity dimensional tolerance	≤ 2.5	mm per m board width	EN 520
Thermal conductivity λ (raw board)	0.52	W/(m·K)	EN ISO 10456
Long term temperature exposure (max. limit)	≤ 50	°C	-
Flow temperature with heating system max.	≤ 45	°C	-
Density	≥1000	kg/m ³	-
Flexural breaking load longitudinal direction	≥ 430	N	DIN 18180
Flexural breaking load transverse direction	≥168	N	DIN 18180
Bending radius dry	r≥2750	mm	-
Bending radius wet	r≥1000	mm	-
Field of application	Interior	-	-



Product variants

Description	Width mm	Length mm	Thickness mm	Edges	Delivery weight approx. kg/m ²	Packaging unit	Material number	EAN
Thermoboard Plus GKF 10	1250	2000	10	HRAK SFK	10.1	50 pieces / pallet 125 m² / pallet	00220669	4003982232106

HRAK = Half-rounded tapered long edge SFK = Cut and bevelled front edge

Sustainability and environment

Short description	Comments	Unit	Value
AgBB scheme	Version 2021	-	Compliant
French emissions class	Version modified in 2012	-	A+
eurofins	Indoor Air Comfort Gold®	-	Compliant
DGNB New building Version 2018	ENV 1.2	-	Not relevant for evaluation
DGNB New building Version 2023	ENV 1.2	-	Not relevant for evaluation
QNG Version 2023	Annex 3.1.3	-	Not relevant for evaluation
BREEAM New Construction	International New Construction v2.0 2016 (HEA / Indoor Air Quality)	-	Exemplary Level
LEED	v4.1 BETA 2021 (Low-Emitting Materials)	-	Compliant
SVHC	Substances of very high concern acc. to REACH \leq 0.1 percent by mass.	-	Compliant
Recycling share post-consumer (average value)	Board thickness 10 mm	%	approx. 3



Videos for Knauf systems and products can be found under the following link: youtube.com/knauf



Find the right system for your requirements! knauf.de/systemfinder



All Knauf Gips documents are available in an up-to-date and clearly organised format in the Download Center at www.knauf.com.

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