

#### 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

K713T.de

Product Data Sheet

2019-05



# Thermoboard GKF

Gypsum board with the good thermal conductivity for heating and cooling systems

## Product description

Thermoboard GKF is a gypsum board with good thermal conductivity.

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

## Storage

Store boards on board pallets in a dry environment.

## Quality

In compliance with EN 520, the product is subject to initial type testing and continuous factory production control and is marked with the CE marking.

DF  
GKF  
grey  
red

## Properties and added value

- Special gypsum core with high thermal conductivity
- Easy application
- 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

Thermoboard GKF s used with drywall systems as a cladding for panel heating and cooling systems, which require very good thermal conductivity features.

The cooling and heating capacity is system dependent and is generally specified by the system provider.

Suitable for the following systems:

- Cooling ceiling systems
- Wall heating systems
- Ceiling heating systems

### Application

#### Application

Application acc. to DIN 18181. During 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.

Apply expansion joints in case of:

- Cooling ceilings with side lengths from approx. 15 m or ceiling area  $\geq 100 \text{ m}^2$
- 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 Thermoboard 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 heating system and may vary depending on the different system supplier.

### Cladding

Apply the Thermoboard GKF preferably lateral to furring channels with spacing  $\leq 500 \text{ mm}$ , longitudinal cladding along channels with spacing  $\leq 420 \text{ mm}$ . Stagger the front edge joints by at least 400 mm and arrange on the channels.

Commence with the fixing of the Thermoboard GKF in the board centre or on the board corner to avoid sagging. Press Thermoboard GKF tightly to grid while fastening. Centre screws at  $\leq 250 \text{ mm}$  on walls and  $\leq 170 \text{ mm}$  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

<b>Note</b>	Observe guideline no. 7 of the BVF (German Association for Area Heating and Cooling Systems e.V.) "Creation of wall heating and cooling systems in residential, commercial and industrial buildings" (German only).
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Fill all joints with Uniflott / Fugenfüller Leicht and use Knauf Joint Tape Kurt.

## Technical data

Description	Standard	Unit	Value
Board type Germany	DIN 18180	–	GFK
Board type European	EN 520	–	DF
Board weight (nominal)	DIN 18180	kg/m <sup>2</sup>	approx. 10
Reaction to fire	EN 520	Class	A2-s1,d0 (B)
Long edge types	–	–	Half-rounded tapered edge (HRAK)
Front edge types	–	–	Bevelled cut edge (SFK)
Width dimensional tolerance	EN 520	mm	+0 / -4
Length dimensional tolerance	EN 520	mm	+0 / -5
Thickness dimensional tolerance	EN 520	mm	+0.5 / -0.5
Angularity dimensional tolerance	EN 520	mm per metre board width	≤ 2.5
Density	DIN 18180	kg/m <sup>3</sup>	approx. 1000
Thermal conductivity λ	Following EN 12664	W/(m·K)	approx. 0.30
Flexural breaking load longitudinal direction	DIN 18180	N	≥ 430
Flexural breaking load transverse direction	DIN 18180	N	≥ 168
Long term temperature exposure (max.) limit	–	°C	≤ 50
Flow temperature with heating system max.	–	°C	≤ 45
Bending radius dry	–	mm	≥ 2750
Bending radius wet	–	mm	≥ 1000

## Product range

Description	Width mm	Length [mm]	Thickness mm	Weight kg/m <sup>2</sup>	Packaging unit	Material number	EAN
Thermoboard GKF 10	1250	2000	10	approx. 10.2	50 pieces / pallet 125 m <sup>2</sup> / pallet	00008380	4003982144324

Also available as perforated design with air-cleaning effect (Cleaneo Thermoboard), see Product Data Sheet K713C.de.

## Sustainability and environment

Short description	Unit	Value
Recycling share post-consumer	%	Approx. 4 <sup>1)</sup>
Recycling share pre-consumer	%	Approx. 45 <sup>1)</sup>
Origin of resources (Ø transportation distance) 45 %	km	Approx. 250 <sup>1)</sup>
Origin of resources (Ø transportation distance) 25 %	km	Approx. 10 <sup>1)</sup>
Environmental product declaration	EPD-KNA-20160144-IAG1-DE	

1) Average values of various manufacturing sites



**Observe safety data sheet!**

For safety data sheet see

[pd.knauf.de](http://pd.knauf.de)



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