

## 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

# K716F.de

Product Data Sheet

2022-01



# Diamant GKFI

Robust allrounder for premium drywalling

## Product description

Diamant GKFI boards are hard gypsum boards with fibre reinforcement and flexurally ductile special gypsum core for fire resistance and sound insulation systems as well as enhanced mechanical requirements. Diamant GKFI boards are impregnated for reduced water absorption in rooms with moderately high humidity. The premium Diamant board liner can be identified by its blue colour and has a particularly robust surface.

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

GKFI  
DFH2IR  
blue  
red

## 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 bears the CE marking.

## Properties and added value

- Universal application
- Increased permissible wall heights due to high strength
- Robust surfaces
- High dowel load capacity
- Impregnated for reduced water absorption
- Good coherence of structure when exposed to fire
- Flexurally ductile special gypsum core for high level of sound insulation
- Easy application
- Non-combustible
- Bending possible (Diamant GKFI 12.5)

### Field of application

Diamant GKFI 12.5 / 15 is used in all fields of interior works as cladding of premium drywall systems with enhanced requirements for sound insulation and fire protection, and in case of special requirements on mechanical resistance and in rooms with moderately high humidity.

Rooms with moderately high humidity are rooms with a constant relative air humidity of  $\leq 70\%$  (e.g. domestic bathrooms).

Suitable for the following systems:

- Metal stud partitions
- Ceiling linings and suspended ceilings
- Attic linings
- Timber stud partitions (non-load bearing)
- Installation shaft walls
- Room-in-room systems Knauf Cubo

### Technical data

Description	Standard	Unit	Diamant GKFI 12.5	Diamant GKFI 15
Board type Germany	DIN 18180	–	GKFI	GKFI
Board type European	EN 520	–	DFH2IR	DFH2IR
Reaction to fire EN 13501-1	EN 520	Class	A2-s1, d0 (B)	A2-s1, d0 (B)
Width dimensional tolerance	EN 520	mm	+0 / -4	+0 / -4
Length dimensional tolerance	EN 520	mm	+0 / -5	+0 / -5
Thickness dimensional tolerance	EN 520	mm	+0.5 / -0.5	+0.5 / -0.5
Angularity dimensional tolerance	EN 520	mm per board width	$\leq 2.5$	$\leq 2.5$
Thermal conductivity $\lambda$	EN 12664	W/(m·K)	0.27	0.27
Shrinkage and expansion air humidity per 1 % change in the relative air humidity	–	mm/m	0.005 – 0.008	0.005 – 0.008
Shrinkage and expansion temperature per 1 Kelvin change of temperature	–	mm/m	0.013 – 0.02	0.013 – 0.02
Long term temperature exposure (max. limit)	–	°C	$\leq 50$	$\leq 50$
Density	–	kg/m <sup>3</sup>	$\geq 1000$	$\geq 1000$
Flexural breaking load longitudinal direction	EN 520	N	$\geq 725$	$\geq 870$
Flexural breaking load transverse direction	EN 520	N	$\geq 300$	$\geq 360$
Board weight (nominal)	–	kg/m <sup>2</sup>	Approx. 12.8	Approx. 15.5
Water vapour resistance factor $\mu$ dry	EN ISO 10456	–	10	10
Water vapour resistance factor $\mu$ , wet	EN ISO 10456	–	4	4
Total water absorption	EN 520	%	$\leq 10$	$\leq 10$
Bending radius dry	–	mm	$r \geq 2750$	–
Bending radius wet, <b>on-site</b> (extended residence time <sup>1)</sup> due to hydrophobic core)	–	mm	$r \geq 1000$ ( <b>on-site</b> )	–
Surface hardness (impact diameter)	EN 520	mm Ø	$\leq 15$	$\leq 15$

1) Perforate boards crosswise | Apply water generously 4 to 5 times | total duration time  $\geq 45$  min

### Application

#### Installation

Use Knauf Brio screws for fastening the boards to a timber or metal substructure. Fastening on timber is also possible with staples or nails.

#### Note

Application should be undertaken in accordance to the applicable standards and acc. to the relevant Knauf system data sheets for drywall systems.

**Product range**

Description	Width	Length	Thickness	Edges	Packaging unit	Material number	EAN
Diamant GKFI 12.5	1250 mm	2000 mm	12.5 mm	HRAK SFK	40 pieces / pallet 100 m <sup>2</sup> / pallet	00072184	4003982182364
	1250 mm	2000 mm	12.5 mm	HRAK SFK	20 pieces / pallet 50 m <sup>2</sup> / pallet	00081200	4003982512499
	1250 mm	2500 mm	12.5 mm	HRAK SSK	40 pieces / pallet 125 m <sup>2</sup> / pallet	00009478	4003982182395
	1250 mm	Custom length	12.5 mm	HRAK SSK	–	00049158	4003982183699
Diamant GKFI 15	1250 mm	1875 mm	15 mm	HRAK SFK	40 pieces / pallet 93.8 m <sup>2</sup> / pallet	00744994	4003982547804
	1250 mm	2000 mm	15 mm	HRAK SFK	40 pieces / pallet 100 m <sup>2</sup> / pallet	00072188	4003982305190
	1250 mm	2500 mm	15 mm	HRAK SSK	40 pieces / pallet 125 m <sup>2</sup> / pallet	00072225	4003982182418
	1250 mm	Custom length	15 mm	HRAK SSK	–	00096827	8590408000655

HRAK = Half-rounded tapered long edge

SFK = Bevelled cut edge

SSK = Front cut square edge

**Sustainability and environment**

Short description	Unit	Value
Requirements of the German AgBB-scheme	–	fulfilled
Complies with the requirements of the French emission class	–	A+
LEED requirements (v4.1 BETA outside the USA)	–	fulfilled
Requirment BREEAM International (New Construction v2.0)	–	Exemplary Level
Eurofins Indoor Air Comfort Gold®	–	fulfilled
Recycling share post-consumer (thickness 12.5 mm)	%	Approx. 4
Recycling share post-consumer (thickness 15 mm)	%	Approx. 3
Environmental product declaration	–	EPD-BVG-KNG-20160122-IAE1-DE



**Observe safety data sheet!**

For safety data sheets and CE marking see  
[pd.knauf.de](http://pd.knauf.de)



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[youtube.com/knauf](https://youtube.com/knauf)



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