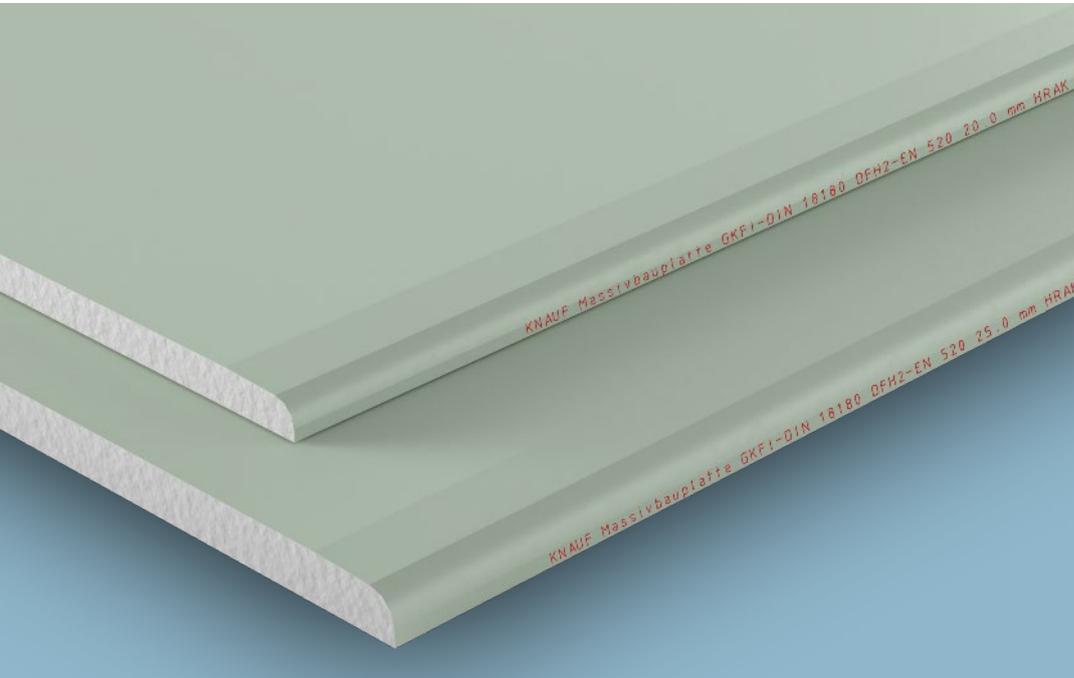


Note on English translation / Hinweise zur englischen Fassung

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

K714M.de

Product Data Sheet

2022-02



Solid Board GKFI

Impregnated thick gypsum board for fire resistance systems and solid design

Product description

Solid Boards GKFI are gypsum boards with a fibre-reinforced gypsum core for fire resistance systems. They are particularly effective thanks to their greater material thickness. The board width of 625 mm ensures easy handling. The boards are impregnated for reduced water absorption in moderately high humidity.

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

Storage

Store boards on board pallets in a dry environment.

GKFI
DFH2

green
grey
red

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

- Impregnated for reduced water absorption
- Good coherence of structure when exposed to fire
- Solid character
- Suitable for larger substructure clearances
- High stability even with single-layer constructions
- Easy application
- Non-combustible
- Low expansion and shrinkage when climate conditions change

Field of application

Solid Board GKFI is used in all fields of interior works as cost-effective cladding of drywall systems with enhanced fire protection requirements 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).

In addition, EN 1995-1-1 NA allows the application in structural wood frame wall panels as exterior cladding in the service class 2 (e.g. as substrate for ETICS).

Suitable for the following systems:

- Ceiling linings and suspended ceilings
- Attic linings
- Metal stud partitions
- Wood frame partitions
- Structural wood frame wall panels
- Installation shaft walls

Technical data

Description	Standard	Unit	Solid Board GKFI 20	Solid Board GKFI 25
Board type Germany	DIN 18180	–	GKFI	GKFI
Board type European	EN 520	–	DFH2	DFH2
Reaction to fire	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	+0.8 / -0.8	+1.0 / -1.0
Angularity dimensional tolerance	EN 520	mm per board width	≤ 2.5	≤ 2.5
Thermal conductivity λ	EN ISO 10456	W/(m·K)	0.23	0.23
Water vapour resistance factor μ dry	EN ISO 10456	–	10	10
Water vapour resistance factor μ , wet	EN ISO 10456	–	4	4
Shrinkage and expansion air humidity per 1 % change of 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	≤ 50	≤ 50
Density	–	kg/m ³	≥ 800	≥ 800
Board weight	DIN 18180	kg/m ²	≥ 16	≥ 20
Flexural breaking load longitudinal direction	DIN 18180	N	≥ 860	≥ 1075
Flexural breaking load transverse direction	DIN 18180	N	≥ 336	≥ 420
Characteristic compressive strength $f_{c,90,k}$ (out of plane board) ¹⁾	EN 1995/1/1 NA	N/mm ²	≥ 5.5	≥ 5.5
Characteristic bending tensile strength $f_{m,k}$ (out of plane loads) longitudinal direction ¹⁾	EN 1995/1/1 NA	N/mm ²	≥ 4.2	≥ 4.2
Characteristic bending tensile strength $f_{m,k}$ (out of plane loads) transverse direction ¹⁾	EN 1995/1/1 NA	N/mm ²	≥ 1.5	≥ 1.5
Average E modulus E_{mean} (out of plane loads) longitudinal direction ¹⁾	EN 1995/1/1 NA	N/mm ²	≥ 2800	≥ 2800
Average E modulus E_{mean} (out of plane loads) transverse direction ¹⁾	EN 1995/1/1 NA	N/mm ²	≥ 2200	≥ 2200
Total water absorption	EN 520	%	≤ 10	≤ 10

1) Rated using nominal thickness 18 mm - cf. EN 1995-1-1/NA

Design

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	Delivery weight	Packaging unit	Material number	EAN
Solid Board GKFI 20	625 mm	2000 mm	20 mm	HRAK SSK	16.2 kg/m ²	24 pieces / pallet 30 m ² / pallet	00046381	4003982152015
	625 mm	Custom length	20 mm	HRAK SSK	16.2 kg/m ²	–	00009479	4003982156174
Solid Board GKFI 25	625 mm	2000 mm	25 mm	HRAK SSK	20.3 kg/m ²	20 pieces / pallet 25 m ² / pallet	00002902	4003982001603
	625 mm	2500 mm	25 mm	HRAK SSK	20.3 kg/m ²	20 pieces / pallet 31.3 m ² / pallet	00599797	4003982418579
	625 mm	Custom length	25 mm	HRAK SSK	20.3 kg/m ²	–	00007465	4003982250582

HRAK = Half-rounded tapered long 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
Requirement BREEAM International (New Construction v2.0)	–	Exemplary Level
Eurofins Indoor Air Comfort Gold®	–	fulfilled
Recycling share post-consumer	%	approx. 2
Environmental product declaration	–	EPD-KNA-20160144-IAG1-DE



Observe safety data sheet!

For safety data sheets and CE marking see
pd.knauf.de



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



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