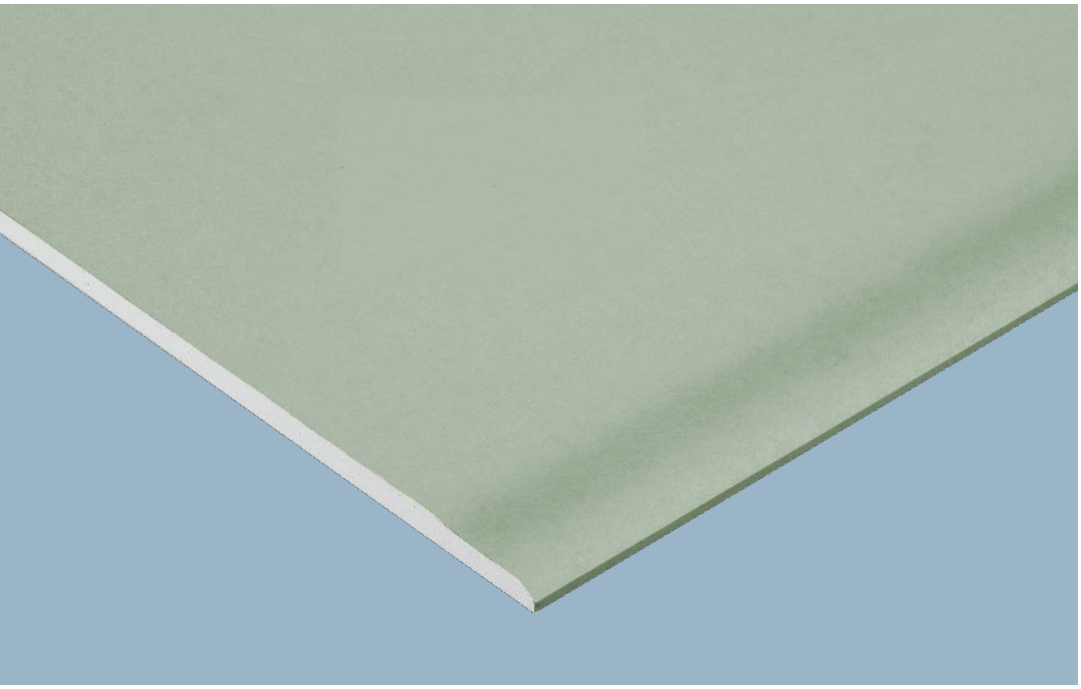
Note on English translation / Hinweise zur englischen Fassung
This is a translation of the product data sheet valid in Germany.
All stated details and properties are in compliance with the regulations of the German standards and building regulations. They are only applicable for the specified products, 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

K714E.de

Product Data Sheet 2020-10

Knauf Piano Fire-Resistant Board GKFI

Impregnated Drywalling Board for Fire Resistance and Sound Insulation Systems

Product description

Knauf Piano GKFI fire-resistant boards are gypsum boards with a fibre-reinforced gypsum core for fire resistant systems. The gypsum boards are flexurally ductile for good sound insulation quality and impregnated for reduced water absorption in rooms with moderately high humidity.

- Board type
  - DIN 18180 — GKFI
  - EN 520 — DFH2
- Colour of board liner
  - Face side — green
  - Rear side — grey
- Rear side marking — 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

- Impregnated for reduced water absorption
- Good coherence of structure when exposed to fire
- Easy application
- Non-combustible
- Bendable
- Folding with mitring is possible
- Low expansion and shrinkage when climate conditions change

Field of application

Fire-resistant board Knauf Piano GKFI is used in all fields of interior works as cost-effective cladding for drywall systems in rooms with fire resistance and/or sound insulation requirements in moderately high humidity.

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

In addition, DIN EN 1995-1-1NA 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

Application

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

Technical data

Description	Standard	Unit	Fire-Resistant Board Knauf Piano GKFI
Board type Germany	DIN 18180	–	GKFI
Board type European	EN 520	–	DFH2
Reaction to fire EN 13501-1	EN 520	Class	A2-s1, d0 (B)
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 board width	≤ 2.5
Thermal conductivity λ	EN ISO 10456	W/(m·K)	0.23
Water vapour resistance factor μ dry	EN ISO 10456	–	10
Water vapour resistance factor μ wet	EN ISO 10456	–	4
Shrinkage and expansion air humidity per 1 % change of relative air humidity	–	mm/m	0.005 – 0.008
Shrinkage and expansion temperature per 1 Kelvin change of temperature	–	mm/m	0.013 – 0.02
Long term temperature exposure (max. limit)	–	°C	≤ 50
Density	–	kg/m^3	≥ 800
Board weight	DIN 18180	kg/m^2	≥ 10
Flexural breaking load longitudinal direction	DIN 18180	N	≥ 610
Flexural breaking load transverse direction	DIN 18180	N	≥ 210
Characteristic compressive strength $f_{c,90,k}$ (out of plane board)	EN 1995/1/1 NA	N/mm²	≥ 5.5
Characteristic bending tensile strength $f_{m,k}$ (out of plane loads) longitudinal direction	EN 1995/1/1 NA	N/mm²	≥ 6.5
Characteristic bending tensile strength $f_{m,k}$ (out of plane loads) transverse direction	EN 1995/1/1 NA	N/mm²	≥ 2.0
Mean E modulus E_{mean} (out of plane loads) longitudinal direction	EN 1995/1/1 NA	N/mm²	≥ 2800
Mean E modulus E_{mean} (out of plane loads) transverse direction	EN 1995/1/1 NA	N/mm²	≥ 2200
Total water absorption	EN 520	%	≤ 10
Bending radius dry	–	mm	r ≥ 2750
Bending radius wet (Note extended residence time due to hydrophobic core .)	–	mm	r ≥ 1000

Product range

Description	Width mm	Length mm	Thick-ness mm	Edges	Delivery weight kg/m²	Packaging unit	Material number	EAN
Fire-Resistant Board Knauf Piano GKFI 12.5	1250	2000	12.5	HRAK SFK	10.2	50 pieces / pallet 125 m² / pallet	00002916	4003982001696
						24 pieces / pallet 60 m² / pallet	00055443	4003982512468
		Customized length		HRAK SSK		–	00007488	4003982183286

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+
Environmental product declaration	–	EPD-KNA-20160144-IAG1-DE

K714E.de Knauf Piano Fire-Resistant Board GKFI

Impregnated Drywalling Board for Fire Resistance and Sound Insulation Systems

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:
www.youtube.com/knauf

The iPad App Knauf Infothek now provides all the current information and documents from Knauf Gips KG at any time and in every location in a clear and comfortable way.
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The stated constructional and structural design specifications and characteristics of building physics of Knauf systems can only be ensured with the exclusive use of Knauf system components, or other products expressly recommended by Knauf.