

## Note on English translation / Hinweise zur englischen Fassung

This is a translation of the technical 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.



# K716F.de

GKFI - DIN 18180 DFH2IR - EN 520

Drywall Systems

2013-10

## Knauf Diamant 12.5 / 15

Special gypsum boards GKFI for premium drywalling

### Product description

- Board type  
DIN 18180 GKFI  
EN 520 DFH2IR
- Colour of board liner: blue
- Rear side marking: red

### Order information

Knauf Diamant 12.5

Board thickness 12.5 mm

- 2000x1250 mm Material no. 00072184
- 2500x1250 mm Material no. 00009478

Knauf Diamant 15

Board thickness 15 mm

- 2000x1250 mm Material no. 00072188
- 2500x1250 mm Material no. 00072225

Customized lengths on request

### Storage

Store boards on wooden 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.

### Field of application

Knauf Diamant 12.5 / 15 are 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, in rooms with moderately high humidity.

### Systems:

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

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

### Properties and added value

- Universal application
- Increased permissible wall heights due to high strength
- High dowel load capacity
- Robust surface
- Impregnated for reduced water absorption
- Good coherence of structure when exposed to fire
- Flexurally ductile special gypsum core for high sound insulation
- Easy application
- Non-combustible
- Bending is possible (Knauf Diamant 12.5)
- Folding with mitring is possible
- Low expansion and shrinkage when climate conditions change

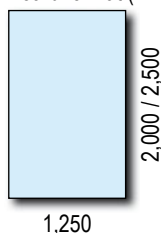
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Special gypsum boards GKFI for premium drywalling



## Technical data

### ■ Board format (in mm):



### ■ Edge type

- Long edges with paper lining:

**HRAK**



- Front edges:

**SK**



### ■ Dimensional tolerances acc. to EN 520:

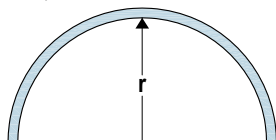
- Width: +0 / -4 mm
- Length: +0 / -5 mm
- Thickness: +0.5 / -0.5 mm
- Angularity: ≤ 2.5 mm per m board width

### ■ Minimum bending radii

#### Knauf Diamant 12.5

- Dry bending:  $r \geq 2,750$  mm
- Wet bending:  $r \geq 1,000$  mm

(Note extended residence time due to hydrophobic core)



### Board type:

GKFI

DIN 18180

DFH2IR

EN 520

### Reaction to fire EN 13501-1:

A2-s1,d0 (B)

EN 520

### Water vapour diffusion resistance $\mu$ :

EN ISO 10456

#### ■ Dry

10

#### ■ Wet

4

### Thermal conductivity $\lambda$ :

W/(m·K) 0.27

EN 12664

### Shrinkage and expansion

#### ■ per 1 % change of relative air humidity:

mm/m 0.005 - 0.008

#### ■ per 1 Kelvin change of temperature:

mm/m 0.013 - 0.02

### Total water absorption:

% ≤ 10

EN 520

### Density:

kg/m<sup>3</sup> ≥ 1000

### Board weight

#### ■ Knauf Diamant 12.5:

kg/m<sup>2</sup> approx. 12.8

#### ■ Knauf Diamant 15:

kg/m<sup>2</sup> approx. 15.5

### Flexural breaking load

EN 520

#### ■ Knauf Diamant 12.5:

##### - Longitudinal direction:

N ≥ 725

##### - Transverse direction:

N ≥ 300

#### ■ Knauf Diamant 15:

##### - Longitudinal direction:

N ≥ 870

##### - Transverse direction:

N ≥ 360

### Surface hardness (impact diameter)

mm Ø ≤ 15

EN 520

### Max. limit for long term temperature exposure: °C

≤ 50

## Notes

### Application

Application should be done in accordance to the applicable standards and according to the relevant Knauf System Data Sheets for drywall systems.

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

### Safety instructions and disposal

See Safety Data Sheet.

### Knauf Direct

Technical Advisory Service:

▶ [knauf-direkt@knauf.de](mailto:knauf-direkt@knauf.de)

▶ [www.knauf.de](http://www.knauf.de)

**Knauf Gips KG** Am Bahnhof 7, 97346 Iphofen, Germany

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