

**APPLICATION**

- Insulation for:
- Multipurpose doors
  - Acoustic doors
  - Thermal insulation doors
  - Multifunctional wooden constructed doors

**TECHNICAL PROPERTIES**

- Reaction to fire: Euroclass A1 (EN 13501)
- Fire resistance: EI 30 – 60 min
- Product customized according to needs of the customer
- Good thermal and sound insulation properties

**STANDARD DIMENSIONS**

- Density: 50 – 250 kg/m<sup>3</sup>
- Length, width, thickness & die-cutting: customized according to customer requirements

**KNAUF INSULATION DRS BOARD (DRS B)**  
Boards for multipurpose, multifunctional, acoustic and thermal insulation doors

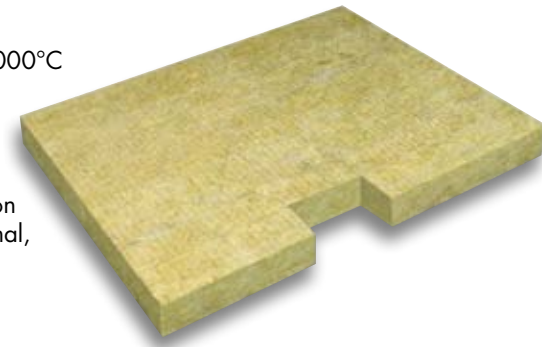
**DESCRIPTION**

**KNAUF INSULATION DRS B** are rock mineral wool boards with horizontally oriented fibres.

High-density boards (up to 250 kg/m<sup>3</sup>) can also be produced. Due to its exceptional fire, thermal and sound insulation properties and precise thickness dimension tolerances this board can also be used as a core in multifunctional wooden constructed doors.

**PREFERENCES**

- Good fire resistance
- Material melting point above 1,000°C
- Non-combustibility
- Dimensional stability
- Precise thickness dimension tolerances
- Various combinations of insulation characteristics (sound, fire, thermal, climate insulation) possible



**HEALTH AND ENVIRONMENTAL PROTECTION**

The incorporation of insulation material from mineral wool makes it possible to build healthy and comfortable living spaces as its properties improve the microclimate in a room and, at the same time ensure excellent thermal, sound and fire protection. Products are tested according to Directives 97/69/EC, for which they were granted the »Test Certificate of Bio-solubility«, demonstrating their health safety. Knauf Insulation products are also ecologically oriented, as they reduce the consumption of thermal energy sources, thereby reducing environmental pollution. It is also of great importance that the production procedure of mineral wool is carried out in a closed circuit, i.e. production process waste is recycled in briquette manufacturing and then returned back to the production line.

As part of our policy of continuous product development, we reserve the right to revise specifications without notice. The information given in the brochure is correct to the best of our knowledge. It provides general information only and users should verify whether the products described are suitable for their specific requirements.



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**Door Insulation**



# Door Insulation



## MAIN PROPERTIES

- **THERMAL INSULATION PROPERTIES;** thermal conductivity of 0.035 – 0.040 (W/mK)
- **NON-COMBUSTIBILITY –** highest possible A1 fire classification according to European standards (melting point above 1,000°C)
- **SUPERB ACOUSTIC PERFORMANCE;** due to the open fibrous structure rock mineral wool has the ability to absorb and reduce high levels of sound
- **ENERGY SAVING MATERIAL;** for reduced energy bills and CO<sub>2</sub> emissions
- **VAPOUR PERMEABILITY;** because of its fibrous structure, rock mineral wool is permeable to vapour
- **WATER REPELLENCE;** its fibres are permanently water-repellent
- **HIGHLY SUSTAINABLE;** non-hazardous to personal health and the environment. Rock mineral wool is free from CFCs, HCFCs and any other material with ozone depletion potential in their manufacture and content and represents no known threat to the environment
- **PERMANENTLY STABLE DIMENSIONS;** products do not change in length or width with fluctuations in humidity or temperature
- **RESISTANCE TO MICRO-ORGANISMS;** rock mineral wool is non-hygroscopic, rot proof, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria

Knauf Insulation is a leading European supplier of rock mineral wool core to the producers of metal fire protection doors. Doors with rock mineral wool insulation offer improved fire protection performance. Rock mineral wool has a high melting temperature (above 1,000°C), is non-combustible (Euroclass A1) and is lighter than other materials with comparable fire and mechanical properties. In addition, doors with rock mineral wool core have excellent sound and thermal insulation properties.

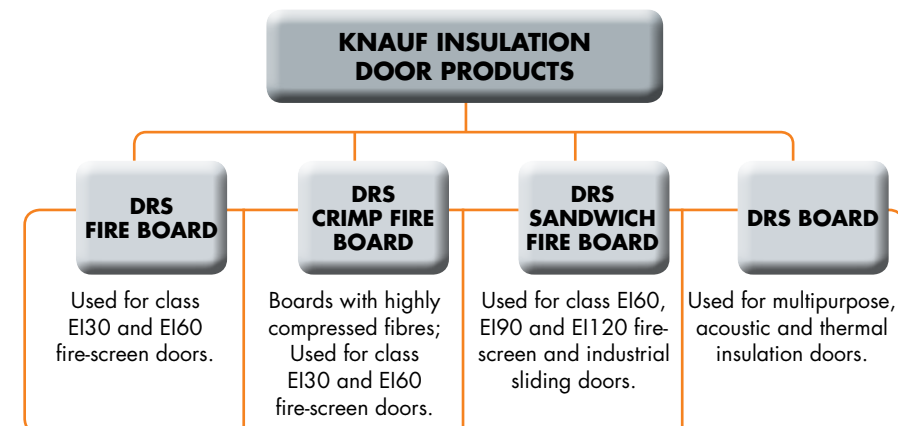
**We build partnership through high quality products, excellent service and permanent support to your development projects.**

With modifications in our production process we are able to supply a full range of products for all classes of fire protection doors (European Class EI30 - EI120). On request, the boards may be further processed (ensuring minimum dimensional deviations, surface flatness, cut-out specific shapes).



We provide solutions for:

- Fire protection doors
- Functional doors
- Multipurpose doors (thermal & acoustic)



## KNAUF INSULATION DRS FIRE BOARD (DRS FB) Fire-resistant boards

### DESCRIPTION

**KNAUF INSULATION DRS FB** are high-density rock mineral wool boards, whose main purpose is to provide fire and thermal protection for constructions in compliance with EN 13501-1. The mineral fibres are bound with a minimum quantity of binder, ensuring board preservation at high temperatures. On request, the boards may be further processed (ensuring minimum dimensional deviations, surface grinding, dust removal, possibility of cutting out specific shapes).

### PREFERENCES

- Excellent fire protection
- Preservation at high temperatures
- Material melting point above 1,000°C
- Good mechanical properties
- Non-combustibility
- Dimensional stability
- AS Quality



### APPLICATION

The board properties make it convenient for insulating industrial elements that require **high temperature tolerances** - fire-screen doors which are specified by European standards such as:

- Class EI30
- Class EI60

### TECHNICAL PROPERTIES

- Reaction to fire: Euroclass A1 (EN 13501)
- Fire resistance: EI 30 – 60 min
- Product customized according to needs of the customer

### STANDARD DIMENSIONS

- **Density:** 80 – 190 kg/m<sup>3</sup>
- **Length, width, thickness & die-cutting:** customized according to customer requirements

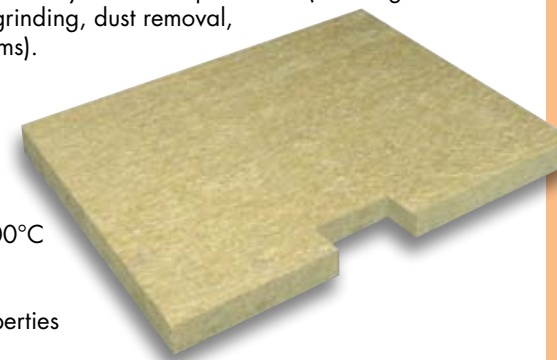
## KNAUF INSULATION DRS CRIMP FIRE BOARD (DRS CFB) Fire-resistant boards with highly compressed fibres

### DESCRIPTION

**KNAUF INSULATION DRS CFB** are high-density rock mineral wool boards with highly compressed fibres, whose main purpose is to provide fire and thermal protection for constructions in compliance with EN 13501-1. The fibres are bound with a minimum quantity of binder, ensuring the boards' preservation at high temperatures. Upon the customer's request the boards may be further processed (ensuring minimum dimension deviations, surface grinding, dust removal, possibility of cutting out specified items).

### PREFERENCES

- Good fire protection
- Preservation at high temperatures
- Material melting point above 1,000°C
- Non-combustibility
- Dimensional stability
- Thermal and sound insulation properties
- AS Quality



### APPLICATION

Because of the boards' properties, they are convenient for insulating industrial elements which require **advanced mechanical characteristics and high temperature tolerances** - fire-screen doors which are specified by the European standards as:

- Class EI30

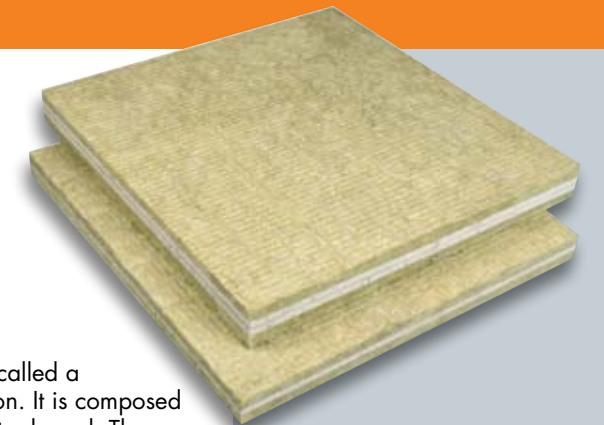
### TECHNICAL PROPERTIES

- Reaction to fire: Euroclass A1 (EN 13501)
- Fire resistance: EI 30 min
- Product customized according to needs of the customer
- Excellent mechanical properties

### STANDARD DIMENSIONS

- **Density:** 130 – 190 kg/m<sup>3</sup>
- **Length, width, thickness & die-cutting:** customized according to customer requirements

## KNAUF INSULATION DRS SANDWICH FIRE BOARD (DRS SFB) Fire-resistant sandwich boards



### DESCRIPTION

**KNAUF INSULATION DRS SFB** is a board which may also be called a "sandwich element" or bonded panel, depending on its composition. It is composed of a fire-resistant board made of rock mineral wool fibres and plaster board. The bonded joint is made with an inorganic adhesive based on water glass, which offers additional fire protection. This method of production makes it possible to produce DRS SFB elements with different layers, dimensions and combination of different materials. Customized products can be produced within +/-1 mm tolerances.

### PREFERENCES

- Ultimate level of fire protection
- Preservation at high temperatures
- Material melting point above 1,000°C
- Non-combustibility
- Thermal and sound insulation properties
- AS Quality

COMPOSITION OF KNAUF INSULATION DRS SANDWICH FIRE BOARD			
	DRS FB	PLASTER BOARDS	DRS SFB
Boards	1	1 or 2	
Dimensions	On request Max. 1,250 x 2,100 mm	On request Max. 1,250 x 2,100 mm	On request Max. 1,250 x 2,100 mm
Thickness	Min. 18 mm	9.5 or 12.5 mm	On request
Density	140 – 185 kg/m <sup>3</sup>		5,00



### APPLICATION

Sandwich fire boards are particularly convenient as cores for **fire-screen and industrial sliding doors**, where fire protection requirement standards are high:

- Class EI60,
- Class EI90
- Class EI120

### TECHNICAL PROPERTIES

- Reaction to fire: Euroclass A1 (EN 13501)
- Fire resistance: EI 60 – 120 min
- Product customized according to needs of the customer
- Excellent mechanical properties
- Dimensional stability

### STANDARD DIMENSIONS

- **Density:** 150 – 190 kg/m<sup>3</sup>
- **Length, width and thickness:** customized according to customer requirements