

# Knauf Safeboard®

Technical Data Sheet 12/2023

## Knauf Safeboard®

X-ray shielding board

### Product Description

Lead-free, X-ray shielding special boards that have high sound insulation capabilities.

### Storage

Boards should be stored on pallets in a dry environment. If the boards are stored inside, max. 6 pallets on each other; outside max. 5 pallets on each other. Gypsum boards should be stored so as to prevent damage to the front faces of each boards during packaging. If the boards are stored outside, they must be covered with nylon and etc.

### Standards referred to

EN 520 - Tip DF

DIN18180 - GKF

### Fields of Application

Knauf Safeboard® is suitable for buildings used for health purposes, in areas where X-ray emitting equipment is located.

- Partition walls
- Suspended ceilings
- Wall Claddings

### Properties

- X-ray protection
- Lead-free substance
- Fire resistance
- High sound insulation
- Bendable
- High surface quality
- Clean and easy installation
- Time saving

### Determining the thickness of Knauf Safeboard®

The required number of Knauf Safeboard® and its thickness can vary acc. to the tube voltage of the equipment and equivalent lead thickness value. To determine the proper thickness, please refer to table below. To ensure the required performance values, Knauf Safeboard® should be applied with its special joint filler.

Knauf Safeboard®		Equivalent lead thickness (mm Pb) of Knauf Safeboard® acc. to tube voltage (kV)						
Number of boards	Thickness	60	70	80	90	100	125	150
1	12,5	0.45	0.60	0.75	0.70	0.70	0.50	0.40
2	25	0.90	1.20	1.50	1.40	1.40	1.00	0.80
3	37,5	1.35	1.80	2.20	2.10	2.10	1.50	1.10
4	50	1.80	2.30	2.90	2.80	2.80	2.00	1.40
5	62,5	-	-	-	-	3.40	2.40	1.70
6	75	-	-	-	-	4.00	2.80	2.00

### Technical Data

Description	Unit	12,5 mm	Standard
Board type	-	GKF DF	DIN 18180 EN 520
Density	kg/m <sup>3</sup>	≥ 1400	DIN 18180
Weight	kg/m <sup>2</sup>	approx. 17,8	-
Reaction to fire	class	A2-s1,d0	EN 520
Long edges	-	Half-rounded tapered edge 	-
Front edges	-	Cut edge 	-
Width dimensional tolerance	mm	+0 / -4	EN 520
Length dimensional tolerance	mm	+0 / -5	EN 520
Thickness dimensional tolerance	mm	+0,5 / -0,5	EN 520
Angularity dimensional tolerance (for 1 m board width)	mm	≤ 2,5	EN 520
Bending radius (dry bending)	mm	r ≥ 2750	-
Bending radius (wet bending)	mm	r ≥ 1000	-
Thermal conductivity λ	W/(m·K)	0,26	EN 12664
Water vapour resistance factor (dry)	μ	10	EN ISO 10456
Water vapour resistance factor (wet)	μ	4	EN ISO 10456
Flexural breaking load longitudinal direction	N	≥ 610	EN 520
Flexural breaking load transverse direction	N	≥ 210	EN 520

### Product Range

Description	Width (mm)	Length (mm)	Weight (kg/m2)	Packaging Unit (pcs./pallet)	Material Number
Knauf Safeboard® 12,5 mm	625	2500	17,8	42	132849

### System Performance Values

Performance values as sound insulation, fire resistance etc. may differ acc. to the drywall system to be applied. Please check the performance values of the drywall systems;

[Knauf Technical Website Document Center](#)

### Application

Application should be done acc. to the applicable standards and acc. to the Knauf Technical Brochures of the respective drywall system.

[W11 Partition Wall Catalogue](#)  
[D11 Suspended Ceiling Catalogue](#)