



Knauf Safeboard.
The X-ray Shielding Partition.
Entirely lead free. Your 100% safeguard.



lead free

Lead is a thing of the past.

Knauf Safeboard is the future.

Be it a doctor's surgery or a hospital, lead is used to shield people from X-rays. We have the ultimate alternative: Knauf Safeboard, the lead free X-ray Shielding Partition.

The newly developed Safeboard system does entirely without lead while fully shielding you from radiation.





absolutely safe

Reboot. Think anew.

Benefit from Knauf Safeboard.

- Reliability and efficiency with great value as compared with conventional lead-based constructions.
- Safety during installation and inspection. Check if the right number of Safeboards have been installed by just looking at the yellow core.
- Flexible onsite application and design. Build niches, pitches and recesses easily.
- Eco-friendly disposal without environmental fallout.

Knauf Safeboard Standard.

More than 80 percent of all X-ray equipment operates at voltages of 70 kV to 125 kV. For this, Knauf offers two standard solutions with a lead equivalence of at least 1.0 mm, and 2.0 mm respectively.

Knauf Safeboard 1.0

Lead equivalence \geq 1.0 mm

1st Layer:

Knauf Safeboard with Safeboard Filler

2nd Layer:

Knauf Diamant filled with Uniflott

Lead equivalence for preferred solution

X-ray Shielding Partition Knauf Safeboard 1.0

Board layers Safeboard	Top layers Diamant	Lead equivalence (mm Pb) depending on the voltage (kV)				
		70	80	90	100	125
2	2	1.2	1.5	1.4	1.4	1.0

Knauf Safeboard 2.0

Lead equivalence \geq 2.0 mm

1st and 2nd Layer:

Knauf Safeboard with Safeboard Filler

3rd Layer:

Knauf Diamant filled with Uniflott

Lead equivalence for preferred solution

X-ray Shielding Partition Knauf Safeboard 2.0

Board layers Safeboard	Top layers Diamant	Lead equivalence (mm Pb) depending on the voltage (kV)				
		70	80	90	100	125
4	2	2.3	2.9	2.8	2.8	2.0

► Knauf Safeboard for all types.

The lead equivalence of Knauf Safeboard depending on the voltage and the number of layers can be found in the following table.

Number of boards	Total thickness mm	Lead equivalence of Knauf X-ray Shielding Safeboards (mm Pb) depending on the voltage (kV)						
		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

Directions: Interim values can be linearly interpolated. Calculation of the lead equivalence according to DIN 6812

The lead equivalence as a reference parameter defines the ratio of the shielding effect to the equivalent lead thickness. Information on the lead equivalence of various building materials is listed in DIN 6812, table 16. By applying 12.5 mm of Knauf Diamant twice, the lead equivalence increases by 0.1 mm.

■ Example 1: Dental surgery

X-ray unit voltage: 90 (kV)

Required lead equivalence: 1.40

The solution: Knauf Safeboard 1.0

■ Example 2: Orthopedic surgery

X-ray unit voltage: 100 (kV)

Required lead equivalence: 2.80

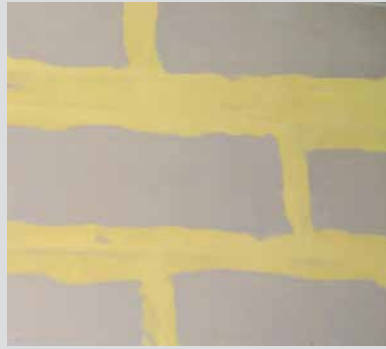
The solution: Knauf Safeboard 2.0

Certified standard
**Knauf
Safeboard**
No complicated calculations

Installation of Knauf Safeboard.



Installed Safeboards at a hospital in Lauf an der Pegnitz, Germany



Jointing for maximum safety. Use only Safeboard Filler (yellow)



Easy visual inspection onsite. Look for the yellow core



Entire top layer: use Knauf Diamant (blue) for a flawless surface

■ Absolutely safe

Knauf Safeboard, a fire-resistant board, also features excellent sound insulation properties.

■ Premium stability

Combine Knauf Safeboard with Knauf Diamant to make your construction even sturdier.

■ Flawless surface

Use Knauf Diamant as the top layer to create an excellent and robust surface.

■ Easy to install

Process and install Knauf Safeboard onsite like any standard gypsum board. Subsequent alignment is easy.

definitely

convincing arguments.

The Knauf Safeboard profile.

- Forget about backing with lead strips. No longer necessary with Knauf Safeboard.
- Finish joints only with Safeboard Filler. Save time and costs.
- Let your imagination run wild using our folding and bending techniques.
- Score and cut the Safeboard easily. Processing and handling become mere child's play.
- Install only one type of board. Avoid mistakes on the jobsite. Increase or decrease the number of Safeboard layers in accordance with the required lead equivalence.



We reserve the right to amend technical specifications without notice. The current edition applies. Our guarantee applies only to the defect free state of our materials. The structural, static and physical characteristics of Knauf systems can only be ensured where only Knauf system components or products recommended by Knauf are used. Consumption, quantity and design specifications are typical figures, which may not be transferable under different circumstances. All rights reserved. Changes, reproductions and photo-mechanical and electronic repetition, even in part; require the specific permission of Knauf LLC, P.O. Box 112871, Dubai, United Arab Emirates.



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