

KNAUF



Revolutionary performance

Peerless sound reduction

Outperforms masonry walls

Easy to install

Ideal for new construction and refurbishment

Knauf Silentboard

A revolution in drywall acoustic performance

Build for the world we live in

Knauf Silentboard

Knauf Silentboard rewrites the rules on drywall acoustic performance. Its patented design allows the creation of drywall partitions which outperform the sound reduction of traditional plasterboard and solid masonry walls across a wider range of sound frequencies.

Quick and simple to install, Knauf Silentboard is highly versatile and can be used for both new and existing buildings.

Knauf Silentboard can be used in:

- Partitions
- Suspended ceilings
- Linings
- Curved partitions

KEY FACTS

Superior sound insulation

Enhanced fire performance in double layered systems

Combines slim constructions with highest sound insulation

Improved performance for low frequency sound insulation

Non-combustible

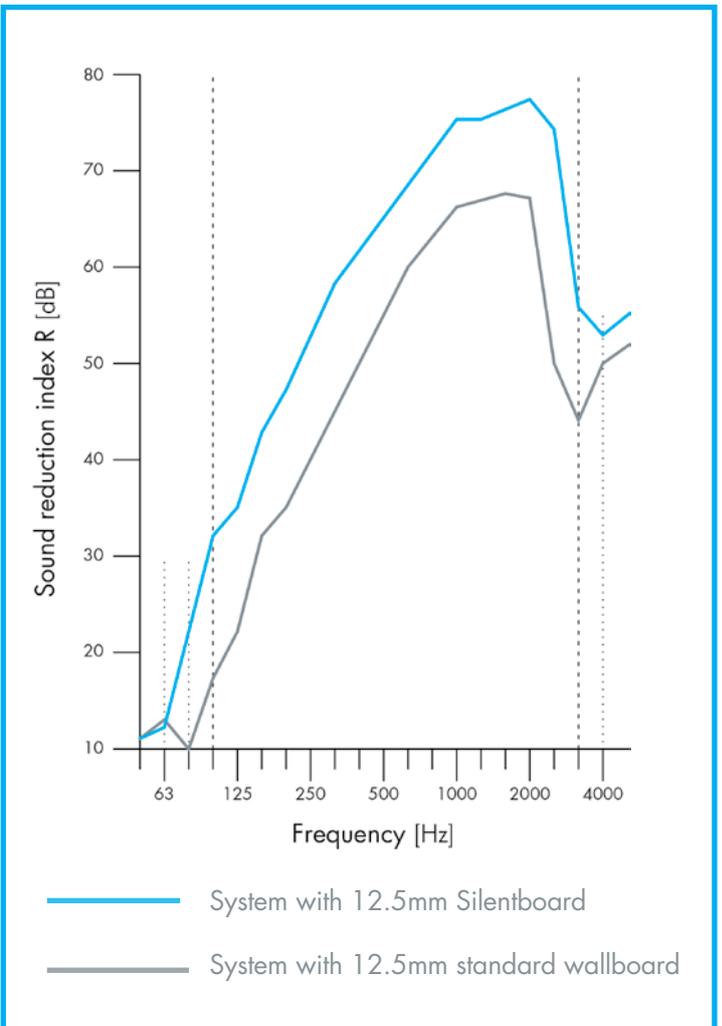




How does it compare to traditional plasterboard?

The unique formulation used to manufacture Knauf Silentboard couples density with a high level of flexibility. The result is a board which offers exceptional sound reduction at high as well as low frequencies. Knauf Silentboard is therefore ideal for use in cinemas, entertainment complexes and other buildings where low-frequency sounds are an issue.

The excellent sound insulation properties of Knauf Silentboard in comparison to standard wallboard.

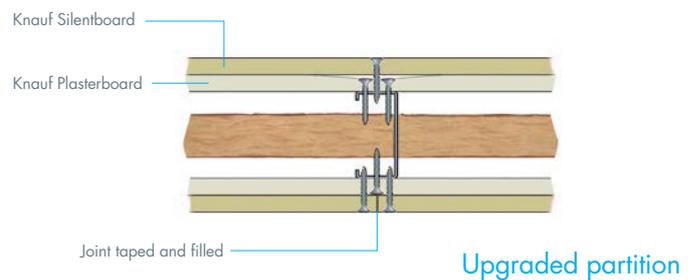
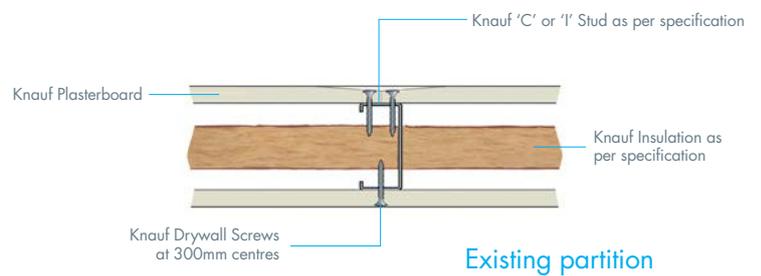




Upgrading of existing partitions with Knauf Silentboard

Knauf Silentboard is an ideal solution for upgrading the sound reduction of existing walls and can be used to overboard drywall partitions.

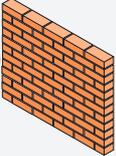
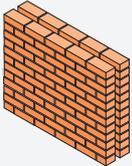
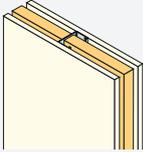
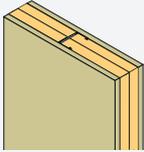
Knauf Silentboard has been proven to improve the sound reduction of a drywall partition by up to 5dB when a single layer is applied to one side, up to 7dB when two layers are applied to one side and up to 9dB when a single layer is applied to each side of the partition.



Knauf Silentboard Properties

Board Thickness	12.5mm
Board Width	625mm
Board Length	2000mm, 2400mm and 2500mm
Board Weight	17.5kg/m ²
Edge Profile	Bevelled edge
Colour	Brown
Manufactured to	BS EN 520 : Type D & F
Reaction to fire	EN 13501-1 : A2-s1,d0(B)
Thermal conductivity	0.26 (W/mK)
Minimal bending radii	2750mm

Comparison of typical wall constructions

		Thickness of construction (mm)	Sound reduction index dB (Rw)
	Brick wall, single skin, unplastered	110	42
	Brick wall, double thickness, plastered both sides	225	50
	12.5mm Wallboard, single layer each side of 70mm Knauf 'C' stud, with 25mm insulation in the cavity	97	42
	12.5mm Knauf Silentboard, single layer each side of 70mm Knauf 'C' stud, with 2 x 25mm insulation	97	59

Performance Table

Dimensions (mm)				Acoustic rating (dB Rw)	Fire rating (resistance in minutes)****
Stud depth and gauge	Overall Width (mm)	Board thickness (mm)	Layers	With insulation	BS 476
70mm 'C' (0.55)	97	12.5	1	59*	30
	122	12.5	2	67*	90
100mm 'MW' (0.60)	127	12.5	1	60**	30
	152	12.5	2	70***	90
	177	12.5	3	74**	120

* 2 x 25mm Knauf Earthwool Acoustic Roll.

** 75mm Knauf Earthwool Acoustic Roll.

*** 100mm Knauf Earthwool Acoustic Roll.

**** Both single layer Systems require flat plate.

These optimised solutions provide the most effective system to suit the specific performance criteria.

Should your requirements fall outside these, please contact Knauf Technical team on 01795 416259.

Installation procedures

Knauf Silentboard offers unparalleled levels of sound reduction, but are easily installed in a similar way to standard plasterboard partitions.

1. Framework

Lightweight metal Knauf 'C' or 'MW' Studs should be positioned within channels to coincide with the abutments of the boards and at centres dependant on the performance requirement, maximum of 600mm.

2. Cutting Knauf Silentboard

Knauf Silentboard is easily and accurately cut using a coarse bladed saw, or by the standard score and snap method. Score one side with a sharp knife, cutting through the paper. Snap the board along the score, and then cut through the paper on the other side. Smooth any rough areas caused by scoring with a rasp.

3. Fixing Knauf Silentboard

All boards are to be fixed horizontally. Knauf Silentboard should be screwed to the framework with Knauf Drywall Screws at maximum 300mm centres, reduced to 200mm centres at the corners.

Ensure all vertical and horizontal board joints are staggered on each layer of a multi-layer system, and on each side of a partition. Vertical joints should be staggered by at least one stud spacing, and horizontal joints by half a board width.

4/5. Jointing

The bevelled edge of Knauf Silentboard allows for jointing without the need for tape. Simply fill all joints and screw heads with Knauf Uniflott, then finish with a coat of either Knauf Joint Cement Lite Easy Sand or Knauf Joint Cement Easy Sand.

6. Finishing

Knauf Silentboard can be finished in the same way as standard plasterboard. It can be skimmed with Knauf MPFinish, or covered by a coat of Knauf Wallboard Primer prior to decoration.



Fixings

Knauf Drywall Screws are self drilling and self tapping, and designed to work perfectly with Knauf Plasterboard.



Head Track



Knauf 'U' Channel used with Knauf 'C' Studs.

Knauf 'UW' Channel for use with Knauf 'MW' Studs

Studs

Knauf metal studs simply twist and snap into head and floor tracks.



Knauf 'C' Stud lightweight steel section.

Knauf 'MW' Stud for improved acoustics.

Insulation

Knauf Earthwool Acoustic Roll used to improve the acoustic performance.



Jointing

Knauf Uniflott used to fill joints and screw heads without the need for tapes.



Finish with a coat of Knauf Joint Cement Easy Sand.

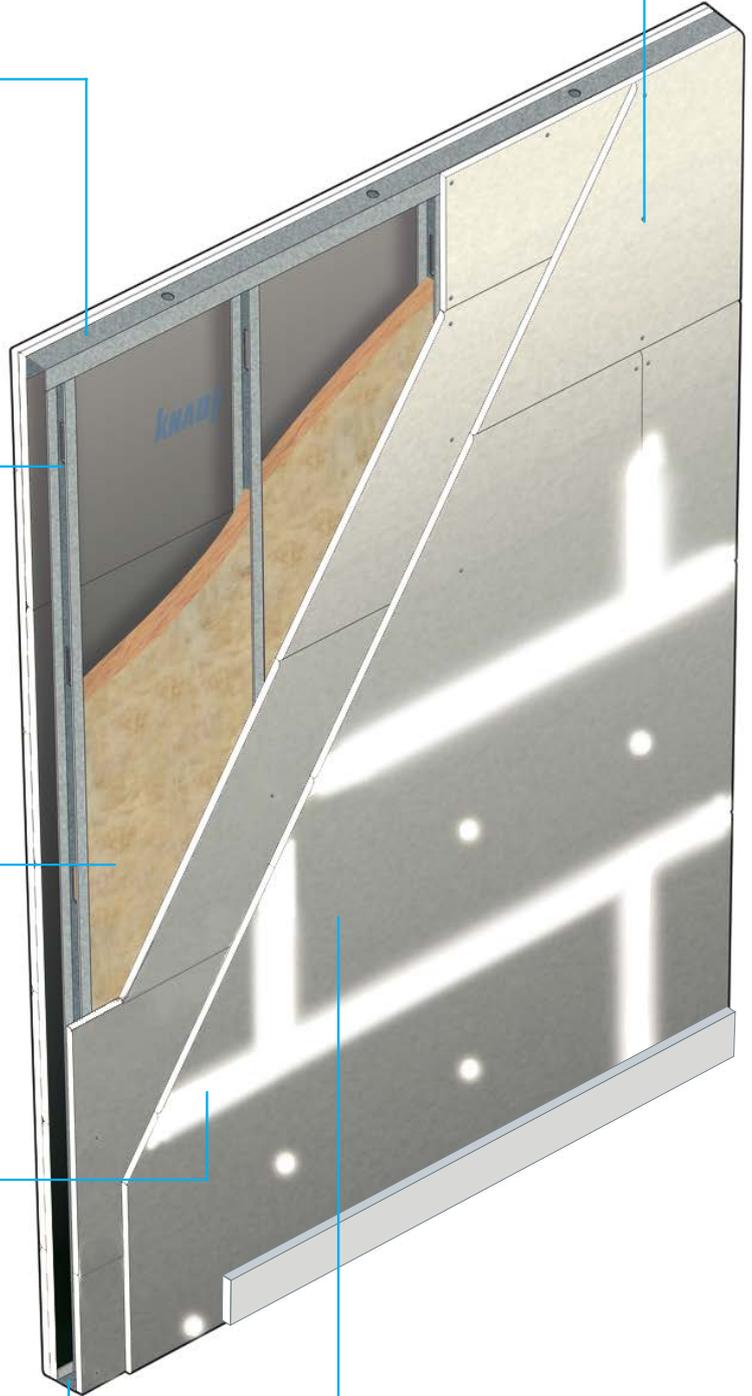
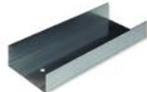


Floor Track

Knauf 'U' Channel.



Knauf 'UW' Channel for use with Knauf 'MW' studs.



Knauf Silentboard

Knauf Silentboard offers superior sound insulation.





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