

NON-COMBUSTIBLE ACOUSTIC INSULATION SOLUTIONS





Acoustic Performance







WHAT IS ACOUSTIC INSULATION?

Acoustic insulation is a simple and effective way to control sound transfer between rooms and multi-level homes, apartments and office buildings.

To secure a long-term solution for a peaceful and comfortable environment, installing acoustic insulation in internal and external walls should be considered.

Benefits

- Sound absorbing
- ✓ Non-combustible
- No added formaldehyde
- ✓ 50 year insulation warranty
- ✓ Soft to handle and install
- ✓ Odourless
- Compression packed more product per pack
- ✓ Warranted in Knauf Systems.



Acoustic Performance

Installing acoustic insulation into the internal and external walls will help control the internal noise transfer between rooms such as media rooms, children's bedrooms, bathrooms and laundry rooms.



Specify Knauf Insulation products with NATSPEC worksections

Knauf Insulation is a NATSPEC product partner, to access NATSPEC thermal and acoustic worksections and specify our products go to:

www.knaufinsulation.com.au/architects



CERTIFICATION



AS 1530.1 Non-Combustible

Knauf Insulaiton Acoustic products have been tested to AS 1530.1 and are deemed non-combustible. Knauf Insulation Acoustic products are an ideal solution for systems requiring non-combustible materials, in accordance to the requirements of the National Construction Code of Australia (NCC 2019).



Indoor Air Quality

Knauf Insulaiton products are certified by Eurofins as an outstanding material according to the VOC (Volatile Organic Compounds) Indoor Air Quality emissions regulations.



EUCEB

The results of intensive studies into human exposure, both in manufacturing and in the user industry, show no link between exposure to glasswool fibre and an increased risk of respiratory disease.

All mineral wool products manufactured by Knauf Insulation are made of non-classified fibres (fibres that are less bio-persistent than every day dust) and are certified by EUCEB. EUCEB is an independent certification authority that guarantees that products are made of fibres, which comply with the exoneration criteria for carcinogenicity – the fibres are non-carcinogenic.



Sustainability

The Knauf Insulaiton Acoustic product range is GreenTag Level A certified and will contribute to achieving credits in the Green Building programs shown in the table below.

Green Building, Interiors & Infrastructure Sustainbility Rating Tools	Product & Material Related Features & Credit	Does Global GreenTag Demonstrate Conformance?	
WELL [™] , LEED [®] , Green Star [®]	Volatile Organic Compounds (VOC's), Indoor Air Quality (IAQ)	✓	
Green Star®	Indoor Pollutants (Formaldehyde Minimisation in Engineered Wood)	✓	
WELL™	Enhanced Material Safety	✓	
Green Star [®] , LOTUS [®] , MyHIJAU [®] , IS Rating Tool	Sustainable Product Ecolabel Certification	✓	

For supporting literature please refer to www.knaufinsulation.com.au/architects/certification

PERFORMANCE COMPARISON: GLASSWOOL VS. POLYESTER

When Knauf Insulation Acoustic products are manufactured, tiny air pockets are created within the glasswool, which results in a higher Flow Resistivity value compared to common insulation products used for acoustic applications, such as polyester insulation and other mineral wool products. Flow Resistivity is commonly used for assessing acoustic attributes of materials. The following table compares the density and Flow Resistivity of Knauf Insulation and polyester products that are commonly specified for acoustic performance in wall systems.



Knauf Insulation Acoustic insulation, 11kg/m³, 50mm and Polyester Sound Blanket, 50mm. Sourced from: Insul 9.0.20. (2017). New Zealand: Marshall Day Acoustics.

The Flow Resistivity of Knauf Insulation at 9000Rayl/m compared to polyester at 580Rayl/m shows that glasswool will provide superior acoustic performance.

System Performance

Knauf Insulation Acoustic Roll 32kg/m³, 75mm achieves Rw 46 in the internal partition wall system shown below. This high Rw rating will improve the acoustic performance by absorbing sound transfer between the internal spaces.



Sourced from: Insul 9.0.20. (2017). New Zealand: Marshall Day Acoustics.

KNAUF INSULATION ACOUSTIC PRODUCT RANGE

ACOUSTIC BATT AND ROLL

11kg/m³ and 14kg/m³

Product Code	Density (kg/m³)	Thickness (mm)	Width (mm)	Length (mm)	Pieces per pack	Area per pack (mm)
248352	11	50	580	1160	40	26.91
290599	11	75	430	1160	28	13.97
248361	11	50	450	2700*	20	24.30
248360	11	50	600	2700*	20	32.40
248362	11	75	450	2700*	14	17.01
2437819	11	75	600	2700*	14	22.68
546373	11	110	600	1160	20	13.92
672594	11	50	450	21000\$	2	18.90
705462	11	75	450	11600\$	2	10.44
607094	11	75	600	11600\$	2	13.92
672626	11	90	600	11600\$	2	13.92
2437822	14	50	430	1160	38	18.95
2437560	14	50	450	1160	38	19.84
2437561	14	50	600	1160	38	26.45
2438916	14	75	430	1160	24	11.97
2437562	14	75	450	1160	24	12.53
2438638	14	75	580	1160	24	16.15
2437563	14	75	600	1160	24	16.70
672624	14	90	600	9100\$	2	10.92

ACOUSTIC ROLL

24kg/m³

Product Code	Density (kg/m³)	Thickness (mm)	Width (mm)	Length (mm)	Pieces per pack	Area per pack (mm)
543489	24	25	600	18900	2	22.68
672586	24	75	600	6200	2	7.44
672621	24	90	600	5300	2	6.36

32kg/m³

Product Code	Density (kg/m³)	Thickness (mm)	Width (mm)	Length (mm)	Pieces per pack	Area per pack (mm)
672573	32	50	600	7200	2	8.64
672609	32	75	600	4800	2	5.76
672603	32	90	450	4000	2	3.60
672604	32	90	600	4000	2	4.80
672596	32	100	600	3600	2	4.32



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