

Wilhams Noise Reduction Batt

Acoustic, fire and thermal insulation for internal, external walls and roofs

Wilhams Noise Reduction Batt and Wilhams Noise Reduction Batt Plus are large sized insulation panels that when installed in conjunction with steel mesh and a thin layer of concrete each side, create light weight, thermally insulated, up to 3 hours fire rated, high performance sound insulated walls.

Advantages

- Contributes to GBI requirements
- Aids MS 1525 compliance
- Non-combustible to EN 13501 Part 1
- Large size panels
- Light weight
- Excellent thermal properties
- Superior acoustic properties
- Durable for the life of the building
- Moisture resistant
- Environmentally friendly

Description

Standard sheet size

1200 x 2400mm (Other sizes are available upon request)

Thickness

25*, 30, 40, 50, 60, 75 and 100mm (Other thicknesses are available upon request)

Density

The nominal density of Wilhams Noise Reduction Batt is 86kg/m³ and Wilhams Noise Reduction Batt Plus is 108kg/m³ unless otherwise specified.

Finishes

Wilhams Noise Reduction Batt and Wilhams Noise Reduction Batt Plus are available with a number of facing options upon request, which are:-

- Non-woven mineral black tissue
- Non-woven mineral white tissue
- Aluminium foil

Performance and Properties

Condensation control

The vapour resistivity of Wilhams Noise Reduction Batt and Wilhams Noise Reduction Batt Plus are negligible and usually considered to be the same as that of air (typically 5.2MNs/gm).



U-values

Wilhams Noise Reduction Batt and Wilhams Noise Reduction Batt Plus contributes to Green Building Index (GBI) requirements, significantly improving the energy efficiency of the external walls and roofs.

This solution also aids compliance to MS 1525 Energy efficiency and use of renewable energy for non-residential buildings - Code of practice. Please contact our technical department regarding insulation thicknesses relating to typical external wall and roof constructions.

The 'U' values for typical Wilhams Noise Reduction Batt wall systems are:-

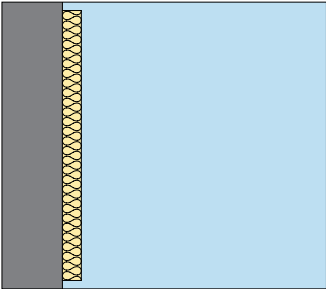
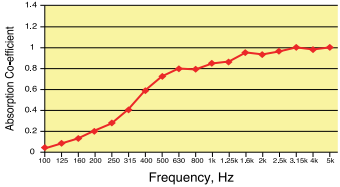
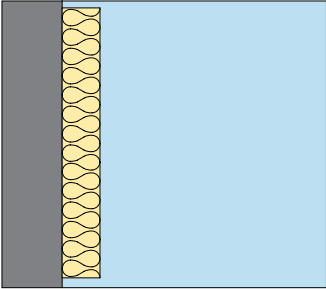
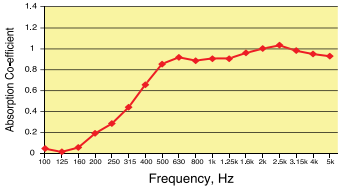
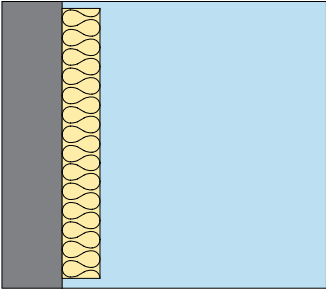
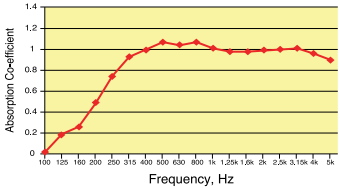
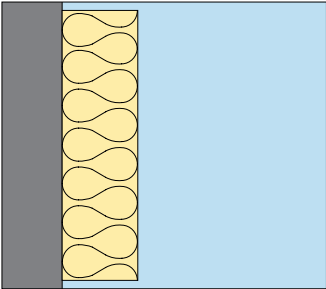
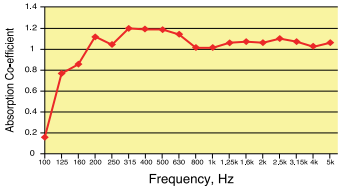
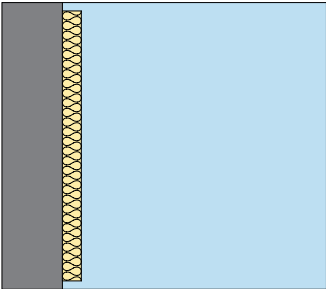
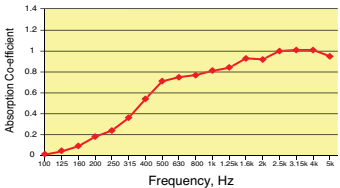
- External Wall 0.56 W/m²K
- 2 Hour Fire Rated Party Wall 0.56 W/m²K

Water resistance

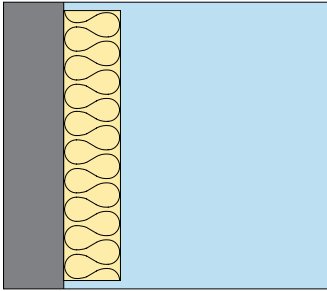
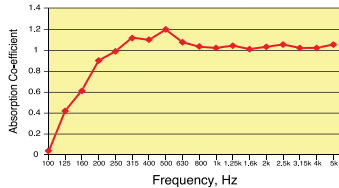
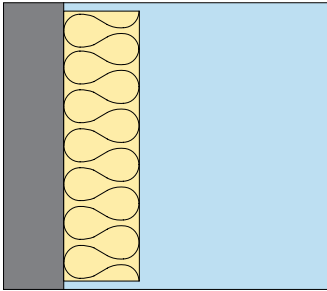
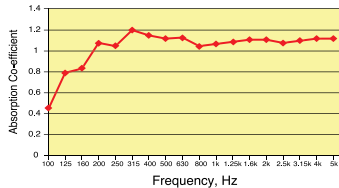
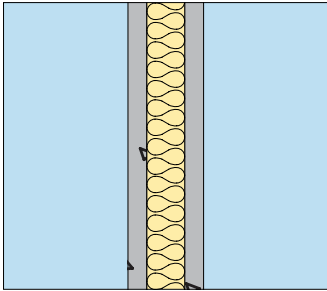
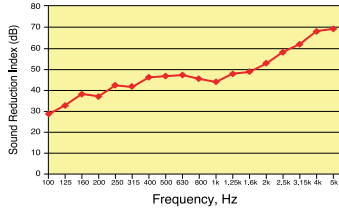
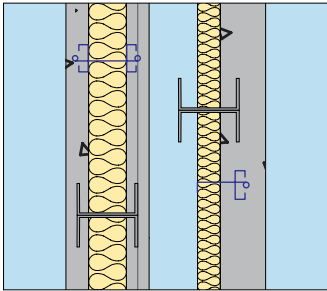
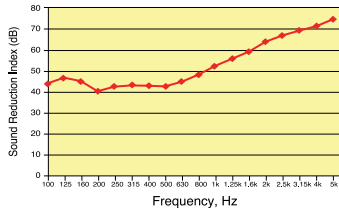
Wilhams Noise Reduction Batt and Wilhams Noise Reduction Batt Plus repel water due to the presence of water-repellent additives. Moisture condensing from the air within Wilhams Noise Reduction Batt is less than 0.02% by volume at 95% relative humidity.

Acoustic Performance

The following acoustic tests are undertaken on roofing systems incorporating Wilhams Noise Reduction Batt and Wilhams Noise Reduction Batt Plus.

Wall Structures	Specification	NRC	Test Report Number
Graph			
Sound Absorption Tests			
	1) 25mm thick Wilhams Noise Reduction Batt with solid backing	NRC 0.70	SRL C/04/5L/3048/1/AS Data Sheet 1
			
	1) 30mm thick Wilhams Noise Reduction Batt with solid backing	NRC 0.80	SRL C/04/5L/3048/1/AS Data Sheet 29
			
	1) 50mm thick Wilhams Noise Reduction Batt with solid backing	NRC 0.95	SRL C/04/5L/3048/1/AS Data Sheet 10
			
	1) 100mm thick Wilhams Noise Reduction Batt with solid backing	NRC 1.10	SRL C/04/5L/3048/1/AS Data Sheet 24
			
	1) 25mm thick Wilhams Noise Reduction Batt Plus with solid backing	NRC 0.65	SRL C/04/5L/3048/1/AS Data Sheet 2
			

Acoustic Performance

Wall Structures	Specification	NRC	Test Report Number
Graph			
Sound Absorption Tests			
	1) 75mm thick Wilms Noise Reduction Batt Plus with solid backing	NRC 1.10	SRL C/04/5L/3048/1/AS Data Sheet 18 
	1) 100mm thick Wilms Noise Reduction Batt Plus with solid backing	NRC 1.10	SRL C/04/5L/3048/1/AS Data Sheet 25 
Transmission Loss Tests			
	1) 50mm thick Wilms Noise Reduction Batt with 25mm concrete applied either side	Rw48	UiTM WIFE STL 
	1) 30mm thick concrete 2) 50mm thick Wilms Noise Reduction Batt 3) Double C channel 4) Intermediate wall tie with wall distancer 5) Wire mesh 6) 30mm thick concrete 7) 64mm air gap 8) 30mm thick Wilms Noise Reduction Batt 9) 60mm thick concrete	Rw52	PSB 54S023051/LCM 

Fire

Rated A1 when tested to BS EN 13501-1:2007+A1:2009
Fire classification of construction products and building elements. Classification using test data from reaction to fire tests.

Wilms Noise Reduction Batt and Wilms Noise Reduction Batt Plus have been SIRIM QAS International Sdn Bhd certified. Certification available upon request.

HeatPro® is the registered trademark of Wilms Insulation Far East Sdn Bhd

WILMS

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