

SONOBATTS™ AND SONOBLANKET™

High Performance Acoustic Insulation

PRODUCT DESCRIPTION

Insulation Solutions™ *SonoBatts* and *SonoBlanket* are a versatile range of sound control products for cavity infills, overlays and for use as sound absorbing materials in architectural acoustic applications such as partitions, screens and baffles. *SonoBatts* are designed to provide solutions to ‘problem’ acoustic applications which cannot be satisfied by using more routine acoustic products such as *Insulation Solutions* Noise Control Batts™ or QuietPipe™ (refer to appropriate Data Sheets for these).

SonoBatts and *SonoBlanket* are available in a range of thicknesses (from 25mm to 100mm), and densities from (14Kg/m³ to 48Kg/m³), although not all are stocked items. All grades are manufactured from FBS-1 Biosoluble Glass Wool™ and can be supplied plain or faced to order with, for example, black scrim, perforated Sisalation™ or Melinex film. *Insulation Solutions* technical staff are ready to work with you to design the best possible solution for your sound control problem, using *SonoBatts*.

TYPICAL APPLICATIONS

SonoBatts and *SonoBlanket* are categorized by product density. The variations in thickness and density available across the range mean that each type has its own particular combination of Sound Absorption and Sound Transmission Loss characteristics. Mechanical properties vary too – from soft compressible batts and blanket to rigid fibrous boards at higher densities. Typical applications for each

SonoBatt grade are outlined below, although these applications are by no means exhaustive.

SONOBATTS 22 - General reverberation control.

SONOBATTS 32 - Ceiling overlay or cavity wall batts to minimise room to room transmission.

SONOBATTS 48 - Hanging baffles & Sound Absorber panels.

Please Note: In all cases Minimum Order Quantities apply for product required in special dimensions. Fabrication of cut to size or specially faced product can be arranged. As standard production sizes vary with thickness and density, please contact Insulation Solutions local Sales Office to discuss your specific requirements.

FIRE PROPERTIES

When tested in accordance with AS1530 Part 3 ‘Early Fire Hazard Properties of Materials’, all *Insulation Solutions Glass Wool SonoBatts* and *SonoBlanket*™ products exhibit the following characteristics.

Note: Some facing materials may cause variations to these tests results.

Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Developed Index	0-1

Tests were conducted by AWTA or CSIRO.

SOUND ABSORPTION

SonoBatts have the following sound absorption coefficients when tested in accordance with AS1045 by the Reverberation Room method. Tests were carried out on plain (unfaced) material, with no airspace behind the samples. Results shown below are for 50mm

thick *SonoBatts* only, for comparison purposes. Test Reports for other thicknesses (eg, 25, 75, 100mm), and faced product are available on request. These results are test report extracts from RMIT, CSIRO and other NATA registered laboratories.

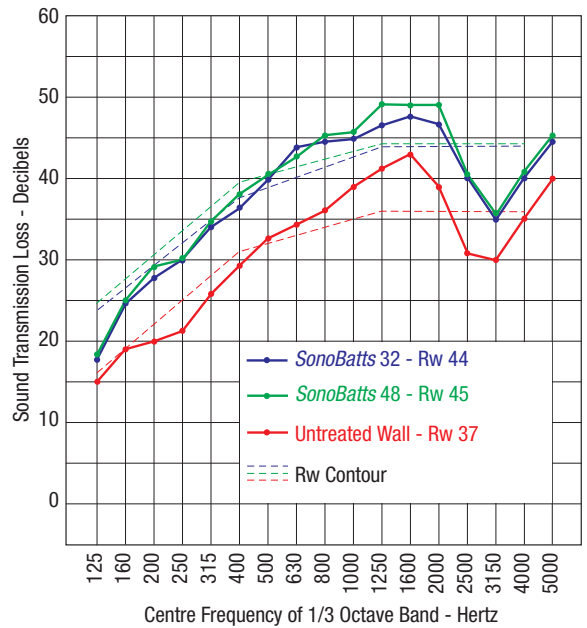
Product	Nominal Thickness (mm)	Sound Absorption Coefficients at frequencies (Hz) of:					
		125	250	500	1000	2000	NRC
<i>SonoBatts/SonoBlanket</i> 22	50	0.20	0.45	0.80	0.95	0.95	0.80
<i>SonoBatts/SonoBlanket</i> 32	50	0.26	0.64	1.04	1.12	1.09	0.95
<i>SonoBatts/SonoBlanket</i> 48	50	0.33	0.74	1.18	1.11	1.12	1.05



SOUND TRANSMISSION LOSS

The use of *SonoBatts* and *SonoBlanket* as a cavity infill in stud wall construction can provide an increase in STC (Sound Transmission Class, now modified to *Rw*), of up to 8dB. This may provide a more effective way of achieving B.C.A. compliance than increasing the mass of a wall. Doubling the mass of a simple cavity wall will usually only give approximately a 5dB increase. The graphs show the increase in Sound Transmission Loss of *SonoBatts* 32 and 48, both 50mm thick, across the frequency spectrum. The test wall consisted of 64mm steel studs with 13mm standard plasterboard on both sides. The resulting STC's, according to AS1191, were as follows -

Untreated Wall	STC (Rw) 37
<i>SonoBatts</i> 32 in Wall Cavity	STC (Rw) 44
<i>SonoBatts</i> 48 in Wall Cavity	STC (Rw) 45



THERMAL PROPERTIES

As well as possessing excellent acoustic properties, *SonoBatts* or *SonoBlanket* used as either a cavity wall infill or ceiling overlay can substantially increase the overall U-Value of a building envelope by providing excellent thermal performance.

R-Values of the <i>SonoBatts</i> range at 50mm thickness are as follows -	
<i>SonoBatts/SonoBlanket</i> 22	R1.5
<i>SonoBatts/SonoBlanket</i> 32	R1.6
<i>SonoBatts/SonoBlanket</i> 48	R1.6

BIO-SOLUBILITY

The fibre used in this product is *FBS-1 Bio-Soluble Glass Wool* Insulation. This means that it dissolves in bodily fluids and is quickly cleared from the lungs. It complies with the test of short term

biopersistence in Note Q of [NOHSC: 10005 (1999)]. *Glass Wool* is classified as safe to use.



SUSTAINABILITY

Sustainability...measures that satisfy the needs of people today while enhancing the quality of life for future generations.

The demands on non-renewable resources for the production of energy are not sustainable without compromising the environment. Insulation, correctly specified and installed, is one of the most critical

products in improving energy efficiency and reducing the levels of greenhouse gas emissions.

Insulation Solutions is committed to providing environmentally sustainable products and utilises up to 70% recycled waste glass in the production of *Glass Wool* Insulation.