

SONOBATTS™ & SONOMATT™

High Performance Acoustic Insulation

PRODUCT DESCRIPTION AND TYPICAL APPLICATIONS

SonoBatts™ and SonoMatt™ 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 Pink Batts Silencer™ or QuietPipe™ (refer to appropriate data sheets for these). *SonoBatts* and *SonoMatt* are available in a range of thicknesses (from 25mm to 100mm), and densities from (22kg/m³ to 48kg/m³), although not all are stocked items. *SonoBatts* and *SonoMatt* are categorised 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, 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 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 Fletcher Insulation™ to discuss your specific requirements.

PHYSICAL PROPERTIES

Product	Material R-value (m ² k/W)	Thickness (mm)	Batt Size (mm)	No. Per Pack	Area Per Pack (m ²)	Packs Per Bale
<i>SonoBatts</i>	R2.3	75	1160 x 430	8	4.0	5
		75	1160 x 580	8	5.4	5
		75	1200 x 600	6	4.3	6
<i>SonoBatts</i>	R3.0	100	1160 x 430	6	3.0	4
		100	1160 x 580	6	4.0	4
		100	1200 x 600	4	2.9	5
<i>SonoMatt</i>	R0.7	25	20m x 1200	1	24	-
<i>SonoMatt</i>	R1.3	55	20m x 1200	1	24	-

EARLY FIRE HAZARD RATING

When tested in accordance with AS1530 Part 3 - “Early Fire Hazard Properties of Materials”, *SonoBatts* and *SonoMatt* 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

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.

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

THERMAL PROPERTIES

As well as possessing excellent acoustic properties, *SonoBatts* or *SonoMatt* 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. Material R-values of the *SonoBatts* range at 50mm thickness are as follows:

<i>SonoBatts/SonoMatt 22</i>	R1.5
<i>SonoBatts/SonoMatt 32</i>	R1.5
<i>SonoBatts/SonoMatt 48</i>	R1.5

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High Performance Acoustic Insulation

Fletcher™
Insulation

BUILDING CODE OF AUSTRALIA (BCA)



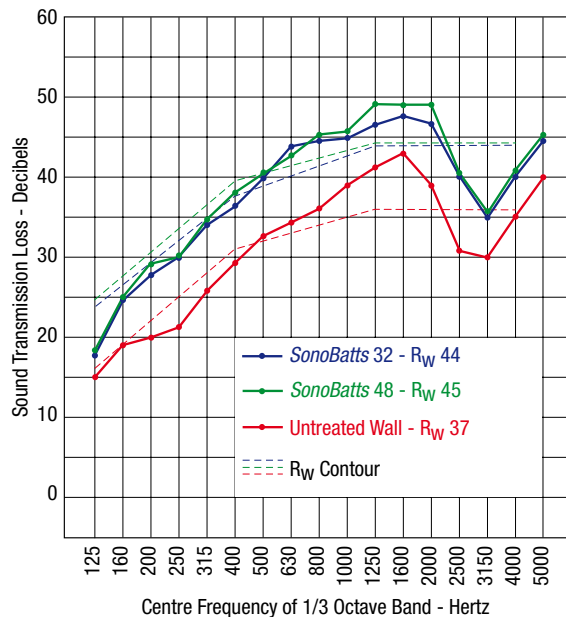
The Energy Efficiency provisions of the BCA requires that all insulation complies with the requirements of the Australian/New Zealand standard AS/NZS 4859.1 - Materials for the thermal insulation of buildings. AS/NZS 4859.1 specifies testing and labelling requirements for all types of insulation incorporated into the

building envelope and it's services. The thermal resistance (R-value) shown on all labelling must be determined by a recognised laboratory, accredited to test to the relevant standards and procedures. All applicable *Fletcher Insulation* products are independently certified by an accredited organisation to comply with AS/NZS 4859.1.

SOUND TRANSMISSION LOSS

The use of *SonoBatts* and *SonoMatt* as a cavity infill in stud wall construction can provide an increase in Weight Sound Reduction Index (R_w), of up to 8dB. This may provide a more effective way of achieving BCA 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 R_w *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 R_w , according to AS1191, were as follows -

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



SPECIFICATION NOTES

State:

- Product name - *Fletcher Insulation SonoBatts* and *SonoMatt*
- Thickness or heat loss/gain criteria
- Type of equipment and operating temperature range

- Whether a vapour barrier facing is required (eg: *Sisalation*® 450).

BIO-SOLUBILITY

Fletcher Insulation glasswool products are manufactured from FBS-1 Bio-Soluble Glass Wool™. FBS-1 Bio-Soluble Glass Wool™ is classified as non-hazardous according to the criteria of the Australian Safety and Compensation Council (formerly

NOHSC), Approved Criteria for Classifying Hazardous Substances (NOHSC:1008) 3rd Edition. *Fletcher Insulation* glasswool is classified as safe to use, refer to our MSDS.



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. *Fletcher*

Insulation is committed to providing environmentally sustainable products and utilises up to 70% recycled waste glass in the production of glasswool insulation. *Fletcher Insulation* products comply with the GreenStar Insulant ODP Emissions credit requirement, avoiding the use of ozone depleting substances in both manufacture and composition.

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Note: *Fletcher Insulation* (Vic) Pty. Ltd. reserves the right to change product specifications without prior notification. Information in this publication and otherwise supplied to users as to the subject product is based on our general experience and is given in good faith, but because of the many particular factors which are outside our knowledge and control and affect the use of products, no warranty is given or is to be implied with respect to either such information or the product itself, in particular the suitability of the product for any particular purpose. The purchaser should independently determine the suitability of the product for the intended application.

Fletcher Insulation (Vic) Pty. Ltd. trading as *Fletcher Insulation* ABN 15 083 169 402

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TECHNICAL DATA SHEET