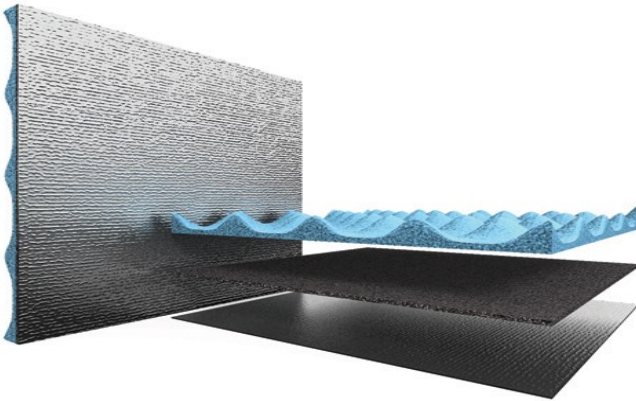




Acoustic Pipe & Duct Lagging



Soundlag® is a high-performance composite acoustic lagging product consisting of a reinforced aluminium foil faced, mass loaded flexible vinyl noise barrier bonded to a decoupling layer. The product was developed to reduce noise break-out from pipes, valves, fan housings and ductwork in commercial, industrial and domestic buildings.

The unique construction of **Soundlag** gives the dual benefits of a noise barrier and a noise absorber. The highly dense and flexible mass layer provides excellent sound reduction properties, whilst the decoupling layer breaks the vibration path between the substrate and the mass barrier, thus allowing the vinyl external wrap to remain flexible and thereby optimise its performance. The external foil facing offers a fire resistant covering and an excellent surface to join adjacent sheets.

Laboratory and field testing by acoustic engineers have shown that **Soundlag** products outperform traditional high density acoustic preformed fibre pipe section/insulation, cast iron pipes, high density polypropylene acoustic pipes and labour intensive plasterboard enclosure/box designs.

Soundlag is easily cut to size with a knife or scissors and installed in 3 easy steps: cut, wrap and tape; making it the most cost effective acoustic lagging product on the market. To suit varying application needs, Pyrotek offers varying compositions with barrier weights of 3 to 8 kg/m² and the decoupling layer with a choice of foam (plain or convoluted), polyester or fibreglass with thicknesses from 6mm to 50mm.

Soundlag products contain no ozone depleting substances and comply with European and Australian standards for Volatile Organic Compound emissions.

FEATURES

- Low cost and long lasting with over 40 years' industry use
- No ozone depleting substances generated during manufacture
- This product is classed as low VOC emitting
- The material emissions are less than the "Green Star" threshold of 0.5mg/m²/hr
- Free from odour producing oils and bitumen
- Reduces the noise in hydraulic and waste pipes by up to 25dB(A)
- Broad operating temperature range
- Tested to AS 1530.3 with excellent flame resistance
- Low spread of flame surface
- The most widely specified pipe lag product throughout the world
- Easiest and quickest product in the market to install, therefore the most cost effective
- Made in Australia accredited to ISO 9001 Quality Control Standard
- Endorsed and tested by leading acoustic consultants and engineers combined with independent lab and field testing
- Available in a range of weights and thicknesses
- Available with foam, polyester, fibre or glass wool decoupling layer
- Easy to bond onto other substrates using matching **Tape ALR** adhesive or equivalent

APPLICATIONS

- Hydraulic and waste pipes in all locations
- Air-conditioning ducting and shrouds
- Compressor wraps
- Spa motor wraps
- Factory custom cut sizes available or can be cut to size easily with a knife on site
- Working with acoustic consultants and test facilities, Pyrotek has designed and tested systems that achieve a high level of noise reduction for all plumbing and hydraulic situations

PRODUCT SPECIFICATIONS

PRODUCT NAME	THICKNESS (mm)	ROLL SIZES (mm)	ROLL WEIGHT (Kg)	BARRIER WEIGHT (Kg/m ²)	THERMAL CONDUCTIVITY (W/mK)	OPERATING TEMPERATURE RANGE (°C)
Soundlag 4525C	25	1350 X 5000 OR 675 X 5000	36 18	5.0	0.0476*	-40 to 100 (Continuous) -40 to 120 (Intermittent)
Soundlag 4512	12	1350 X 5000	30	4.5	-	
Soundlag 4525GW	25	1350 X 5000	36	4.5	-	

Tolerances: Length: - 0 /+50mm; Width: - 0 /+5mm; Thickness: +/- 3mm; Weight: +/- 5%

* Tested to ASTM C 518 -Report No. BRANZ D10324

ACOUSTIC PERFORMANCE - Insertion Loss

PRODUCT	Weighted	100Hz TO 10kHz 1/3 OCTAVE	100Hz TO 5kHz 1/3 OCTAVE
Soundlag 4525C	Linear	22.5dB	21.0dB
	A Weighted	25.0 dB(A)	25.0 dB(A)
Soundlag 4512	Linear	20.0dB	19.5dB
	A Weighted	23.0dB(A)	22.5dB(A)
Soundlag 4525GW	Linear	17.5dB	17.0dB
	A Weighted	20.5dB(A)	20.0dB(A)

ACOUSTIC TEST RESULTS

PRODUCT	TEST	DESCRIPTION	RESULTS
Soundlag 4525C	Renzo Tonin (Report Number TA 129-07F03)	Insertion Loss (System)	> Rw45
	Marshall Day Acoustics (Report Lt 01 R02 2010167 29 April 2010)	Deemed to comply system Section F5.6 of the current Australian Building Code (2005)	Meets, Rw + Ctr 40 for habitable rooms Meets, Rw + Ctr 25 non-habitable rooms
	PKA Acoustic Consulting (PKA-A078)	AAAC Star Rating	6 Star*
	Day Design (Report Number 4613-3B)	Insertion Loss (A-weighted)	23.5 dB(A)

*Testing is in line with Australian Standard AS-NZS Recommended Noise Levels for Areas of Occupancy in Buildings.

FLAMMABILITY PROPERTIES

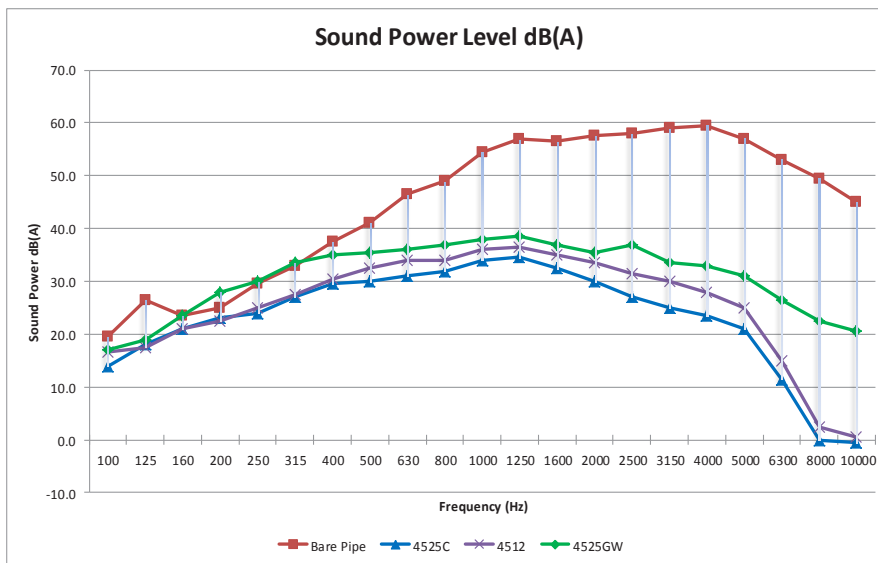
PRODUCT	TEST METHOD	INDEX	RESULTS	DESCRIPTION
Soundlag 4525C	AS 1530.3 1999 (Report No. 7-526320-CN)	Ignitability Spread of Flame Heat evolved Smoke Developed	0 0 0 2	Method for fire tests on building materials, components and structures.
Soundlag 4512	UL94 (Report No. 7-547751-CV)	Burning rate shall not exceed 40mm/min	HBF 12mm/min	Horizontal burn test for foam materials.
	BS 476: Part 7: 1997 (Report No. 325819)	Class1/Class2/Class3	Class 1	Classification of the surface spread of flame.
Soundlag 4525GW	BS 476: Part 7: 1997 (Report No. 325818)	Class1/Class2/Class3	Class 1	Classification of the surface spread of flame.

TOTAL VOLATILE ORGANIC COMPOUNDS

PRODUCT	TEST	DESCRIPTION	RESULTS
Soundlag 4525C	ASTM D5116 (Report No. CV 100812)	TVOC Specific area emission rate	0.08mg/m ² /hr
This product can be classed as low VOC-emitting. The material emissions are less than the recognised threshold of 0.5 mg/m ² /hr. e.g. “Green Star”			

ACOUSTIC PERFORMANCE

(NAL Test report numbers ATF 750C, ATF 750B and ATF 749B)



Frequency (Hz)	Bare Pipe	4525C	4512	4525GW
100	19.5	14.0	16.7	17.0
125	26.5	18.0	17.5	19.0
160	23.5	21.0	21.0	23.5
200	25.0	23.0	22.5	28.0
250	29.5	24.0	25.0	30.0
315	33.0	27.0	27.5	33.5
400	37.5	29.5	30.5	35.0
500	41.0	30.0	32.5	35.5
630	46.5	31.0	34.0	36.0
800	49.0	32.0	34.0	37.0
1000	54.5	34.0	36.0	38.0
1250	57.0	34.5	36.5	38.5
1600	56.5	32.5	35.0	37.0
2000	57.5	30.0	33.5	35.5
2500	58.0	27.0	31.5	37.0
3150	59.0	25.0	30.0	33.5
4000	59.5	23.5	28.0	33.0
5000	57.0	21.0	25.0	31.0
6300	53.0	11.5	15.0	26.5
8000	49.5	0.0	2.5	22.5
10000	45.0	-0.5	0.5	20.5
Sum (A-weighted)	67.5	42.0	44.0	47.5



Frequency (Hz)	4525C	4512	4525GW
100	5.5	2.5	6.0
125	8.5	4.0	6.5
160	2.5	4.0	3.0
200	2.0	0.0	0.0
250	5.0	3.0	0.5
315	6.0	6.0	5.5
400	8.0	6.5	5.0
500	11.0	8.5	6.5
630	15.5	11.0	9.5
800	17.0	14.0	11.5
1000	20.0	17.5	15.5
1250	22.5	20.0	18.5
1600	24.0	21.5	20.5
2000	27.5	24.5	22.0
2500	31.0	26.5	21.5
3150	34.0	29.0	26.5
4000	36.5	32.0	27.5
5000	35.5	32.5	27.0
6300	41.5	38.5	28.0
8000	50.0	47.5	28.5
10000	45.5	45.0	26.0
Sum (Linear)	21.5	20.0	17.5
Sum (A-weighted)	25.0	23.0	20.5



Caveats: Specifications are subject to change without notice. The data in this document are typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic or mechanical engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek NC is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights. **DISCLAIMER:** This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See www.pyroteknc.com/disclaimer.

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