Pyrotek.

TECHNICAL DATA SHEET

411IP

SOUNDLAG

acoustic pipe and duct lagging

Soundlag is a high-performance composite acoustic lagging product developed to reduce noise from pipes, valves, fan housings and ductwork in commercial, industrial and domestic buildings.

The highly dense and flexible mass layer provides excellent sound reduction properties, whilst the decoupling layer breaks the vibration path between substrate and the mass barrier, allowing the vinyl external wrap to remain flexible - optimising performance. The external foil facing offers a fire resistant covering and an excellent surface to join adjacent sheets.

Pyrotek[®] offers varying compositions with barrier weights from 3 kg/m² to 8 kg/m² and the decoupling layer with a choice of foam (convoluted or plain) or polyester with thicknesses from 6 mm to 50 mm.

Soundlag glass wool (GW) or quilted glass wool options available. Please view our Soundlag GW technical datasheet or visit pyroteknc.com for more information.

SPECIFICATIONS

Colour	Aluminium facing		
	Blue convoluted foam backing (4525C)		
	Grey foam backing (4512, 4506)		
	Standard roll size: 1.35 m x 5 m (4.4 ft x 16.4 ft)		
Available	Various roll sizes available including:		
	675 mm x 5000 mm, 1350 mm x 3000 mm,		
	1350 mm x 20 000 mm		

Custom sizes available depending on MOQ





applications

- Hydraulic and waste water pipes
- Air-conditioning ducting and shrouds
- Compressor wraps
- Spa motor wraps

features

- Free from odour producing oils and bitumen
- Contain no ozone depleting substances
- Accredited to ISO 9001 Quality Control Standard
- Class 0 aluminium foil facing
- Tested to AS 1530.3 with excellent flame resistance
- Broad operating temperature range
- Reduces the noise in hydraulic and waste pipes by up to 25.2 dB(A)
- Varying range of weights and thicknesses
- Choice of blue convoluted foam, grey plain foam or polyester
- Can cut to size and simple to install
- Easy to bond matching Tape ALR or equivalent
- Endorsed and tested by leading acoustic consultants and engineers



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PRODUCT SPECIFICATIONS

Product	Standard Thickness	Roll Size	Roll Weight	Barrier Weight	Operating
	(mm)	(mm)	(kg)	(kg/m²)	temperature range
Soundlag 4525C	27 mm	1.35 x 5 m	36 kg	5 kg/m²	Continuous:
	(1.06 in)	(4.4 ft x 16.4 ft)	(79 lb)	(1 lb/ft²)	-40 to 100 °C
Soundlag 4512	14 mm (0.55 in)	1.35 x 5 m (4.4 ft x 16.4 ft)	33 kg (73 lb)	4.5 kg/m² (0.9 lb/ft²)	(-40 to 212 °F) Intermittent: -40 to 120 °C (-40 to 248 °F)
Soundlag 4506	8 mm (0.31 in)	1.35 x 5 m (4.4 ft x 16.4 ft)	32 kg (71 lb)	4.5 kg/m² (0.9 lb/ft²)	

 $\label{eq:constraint} Tolerances: Length: \pm 1\%, Width: -0/+5 mm (0.2 in), Thickness: \pm 3 mm (0.12 in), Weight: \pm 10\%$

MATERIAL PROPERTIES

Product	Test method	Property	Report	Results	
	AS/NZS 1530.3	lgnitability, flame propagation, heat and smoke release	16-004295	0,0,0,1	
	AS/NZS 3837, ISO 5660-1 & ISO 5660-2	Fire hazard properties	FH 5997-T0	Group 3	
Soundlag 4525C	ASTM C518	Thermal conductivity	DI0324/DU01	0.0476 W/mK	
	BS 476 Part 6	Fire propagation	381636		
	BS 476 Part 7	Surface spread of flame	381638	Class 0 foil facing	
	ASTM D5116	TVOC specific area emission rate	CV 100812	Emissions are less than the Green Star recognised threshold of 0.5 mg/m²/hr	
	AS/NZS 3837, ISO 5660-1 & ISO 5660-2	Fire hazard properties	FH 5242-TT	Group 3	
	UL 94	Flammability of plastic materials 7-547751-C		HBF	
Soundlag 4512	BS 476 Part 6	Fire propagation	381636	Class 0 foil facing	
	BS 476 Part 7	Surface spread of flame	381638		
	ASTM D5116	TM D5116 TVOC specific area emission rate		Emissions are less than the Green Star recognised threshold of 0.5 mg/m²/hr	
Soundlag 4506	BS 476 Part 6	Fire propagation	381636		
	BS 476 Part 7	Surface spread of flame	381638	Class 0 foil facing	
	ASTM D5116	TVOC specific area emission rate	CV 100812	Emissions are less than the Green Star recognised threshold of 0.5 mg/m²/hr	



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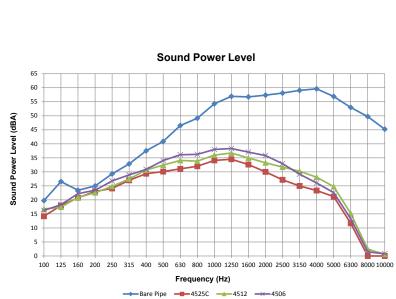
ACOUSTIC PERFORMANCE

Product	Test method	Report	Results
	Insertion loss (single layer)	ATF750B	25 dB
	Insertion loss (double layer)	nss22253b	29 dB
Courselle at 4525 C	BCA (Building Code of Australia) Compliance Section F5.6 - Non-habitable room	Lt 01 r02 2010167	Compliant (with no ceiling)
Soundlag 4525C	BCA (Building Code of Australia) Compliance Section F5.6 - Habitable room	Lt 002 20161709	Compliant (with 10 mm thick standard plasterboard, no insulation)
	AAAC Rating (Association of Australian Acoustic Consultants - Apartment and Townhouse Acoustic Rating)	PKA-A186	6 Star Rating
	ISO 10140	189 (rev 1)c	Rw 28, STC 28 (barrier layer only)

Product	Weighting	Insertion Loss	
Coundlag 4E2EC	Linear	21.6 dB	
Soundlag 4525C	A Weighted	25.2 dB	
Soundlag 4512	Linear	20 dB	
	A Weighted	23 dB	
Soundlag 4506 –	Linear	19.1 dB	
	A Weighted	21.8 dB	

ACOUSTIC PERFORMANCE

Frequency	Bare pipe	4525C	4512	4506
(Hz)	(dBA)	(dBA)	(dBA)	(dBA)
100	19.7	14.2	16.7	16.2
125	26.5	18.0	17.4	18.3
160	23.5	20.8	20.9	22.2
200	25.0	23.0	22.6	23.4
250	29.3	24.1	24.8	26.8
315	32.8	27.0	27.4	28.9
400	37.5	29.3	30.7	30.9
500	40.9	30.1	32.4	34.1
630	46.5	31.1	34.1	36.1
800	49.1	32.0	33.8	36.2
1000	54.3	34.1	36.0	38.0
1250	57.0	34.5	36.7	38.3
1600	56.7	32.6	35.0	37.1
2000	57.4	30.0	33.3	35.8
2500	58.1	27.2	31.7	32.9
3150	59.1	25.0	30.2	29.2
4000	59.6	23.4	28.1	26.1
5000	56.9	21.2	24.8	22.6
6300	53.0	11.6	15.2	13.3
8000	49.7	0.0	2.4	1.5
10000	45.2	0.0	0.6	0.8
Sum	67.1	41.9	44.3	45.9



Tested at National Acoustic Laboratories, Australia Report Number: ATF750B, ATF750C & ATF750D

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ACOUSTIC PERFORMANCE

Frequency	4525C	4512	4506
(Hz)	(dB)	(dB)	(dB)
100	5.6	2.5	6.5
125	8.5	3.8	7.0
160	2.7	4.2	4.5
200	2.0	0.2	1.9
250	5.2	2.9	3.7
315	5.8	6.2	9.8
400	8.2	6.5	8.9
500	10.8	8.3	7.9
630	15.4	10.8	9.7
800	17.2	14.3	12.1
1000	20.2	17.4	15.4
1250	22.4	19.9	18.6
1600	24.1	21.6	20.1
2000	27.4	24.3	22.0
2500	30.9	26.6	25.8
3150	34.1	29.1	30.6
4000	36.3	32.0	34.5
5000	35.7	32.6	35.5
6300	41.4	38.3	40.9
8000	49.8	47.7	49.5
10000	45.7	45.2	45.7
Insertion Loss	25.2	23.0	21.8

Insertion Loss 55 50 45 Sound Power Level (dB) 40 35 30 25 20 15 10 5 0 100 125 160 200 250 315 400 500 630 800 1000 1250 1600 2000 2500 3150 4000 5000 6300 8000 10000 Frequency (Hz)

Tested at National Acoustic Laboratories, Australia Report Number: ATF750B, ATF750C & ATF750D

Stotic Conception

For further information and contact details, please visit our website pyroteknc.com Caveats: Specifications are subject to change without notice. The data in this document is 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 mechanical and the regineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek 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; porcesses or equipment to which this information Page refers will not infinge any third party's patents or rights. DISCLAIMER: This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See pyrotek.com/disclaimer.