

Pyrotek®

SOUNDLAG™ HIGH PERFORMANCE ACOUSTIC LAGGING

Soundlag™ is a premium acoustic lagging that has been developed to effectively reduce noise from pipes, valves, hydraulic services, fan housing and duct work in commercial, industrial and domestic buildings, whilst being easy to cut to size and install.



SOUNDLAG™ FOAM BASED PIPE AND DUCT LAGGING

Soundlag has a highly dense and flexible mass layer providing 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.

Features

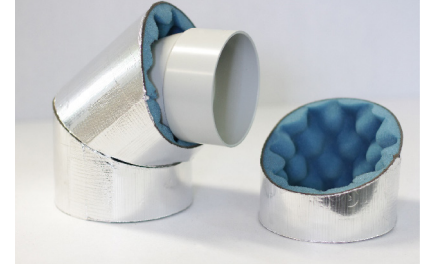
- Dual benefit as a noise barrier and noise absorber.
- The external foil facing offers a fire resistant covering and an excellent surface to join adjacent sheets.
- Free from odour producing oils and bitumen.
- Can cut to size and simple to install.
- Easy to bond with matching tape or equivalent.
- Endorsed and tested by leading acoustic consultants and engineers.
- Accredited to ISO 9001 Quality Control Standard.
- Class 0 aluminium foil facing.
- Tested to AS1530.3 with excellent flame resistance.
- Reduces the noise in hydraulic and waste pipes by up to 25.2 dB(A).
- Varying range of weights and thicknesses.
- Its highly dense and flexible mass layer provides excellent sound reduction properties, whilst its decoupling layer breaks the vibration path between the substrate and the mass barrier, thus allowing the vinyl external wrap to remain flexible to optimise performance.

Product Specifications

Colour		Specification			
Aluminium facing Blue convoluted foam backing (4525C)		Standard roll size 1:35m x 5m (4.4ft x 16.4ft)			
Product	Standard Thickness (mm)	Roll Size (mm)	Roll Weight (kg)	Barrier Weight (kg/m ²)	Operating temperature range
Soundlag 5	(27m x 1.06 in)	1.35 x 5m (4.4ft x 16.4 ft)	36kg (79 lb)	5kg/m ² (1lb/ft ²)	Continuous: -40 to 100 °C (-40 to 212 °F) Intermittent: -40 to 120 °C (-40 to 248 °F)

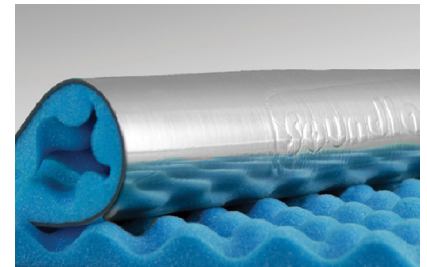
System Design Considerations

When designing a system using Soundlag 4525C, penetrations through ceiling must be taken into account to ensure effective sound reduction especially from down-lights, air conditioning ducting, access hatches and where lightweight ceilings such as mineral fibre tiles are used.



Installation

Soundlag 4525C is easily installed using Soundtape, a high quality, self adhesive, reinforced foil tape. To ensure a high quality fit-out, place 3 circumferential wraps of Soundtape every 300 - 400 mm, i.e. 3 wraps per 1m length pipe.



Material Properties

Product	Test Method	Property	Report	Result
Soundlag 4525C	AS/NZS 1530.3	Ignitability, 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-TO	Group 3
	ASTM C518	Thermal conductivity	DIO324/DUO1	0.0476 W/mK
	BS 476 Part 6	Fire propagation	381636	Class 0 foil facing
	BS 476 Part 6	Surface spread of flame	381638	
	ASTM D5116	TVOC specific area emission rate	CV 100812	Emissions are less than the Green Star recognised threshold of 0.5mg/m ² /hr

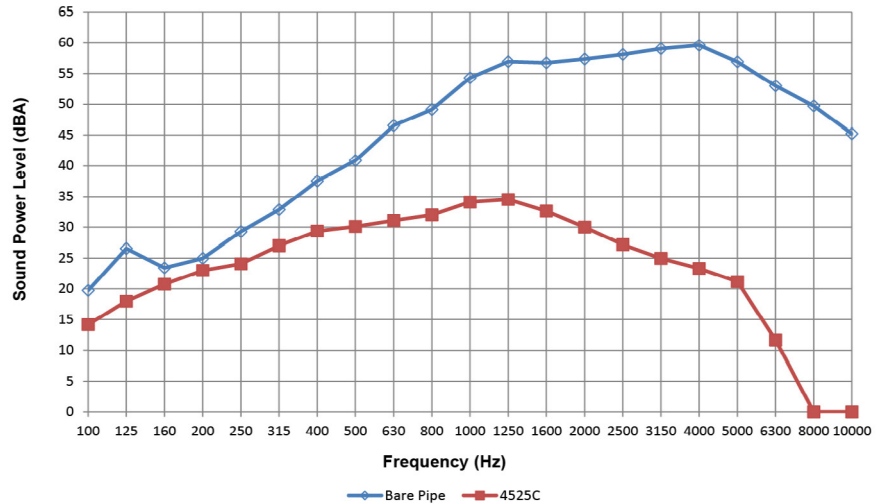
Acoustic Performance

Product	Test Method	Report	Results
Soundlag 4525C	Insertion loss (single layer)	ATF750B	25 dB
	Insertion loss (double layer)	nss22253b	29 dB
	BCA(Building Code of Australia) Compliance Section F5.6 - Non-Habitable room	Lt 01 r02 2010167	Compliant (with no ceiling)
	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)	PKAA186	6 Star Rating
	ISO 10140	189 [rev 1)c	Rw 28. STC 28 (barrier layer only)

Acoustic Performance

Frequency (Hz)	Bare pipe (dBA)	4525C (dBA)
100	19.7	14.2
125	26.5	18.0
160	23.5	20.8
200	25.0	23.0
250	29.3	24.1
315	32.8	27.0
400	37.5	29.3
500	40.9	30.1
630	46.5	31.1
800	49.1	32.0
1000	54.3	34.1
1250	57.0	34.5
1600	56.7	32.6
2000	57.4	30.0
2500	58.1	27.2
3150	59.1	25.0
4000	59.6	23.4
5000	56.9	21.2
6300	53.0	11.6
8000	49.7	0.0
10000	45.2	0.0
Sum	67.1	41.9

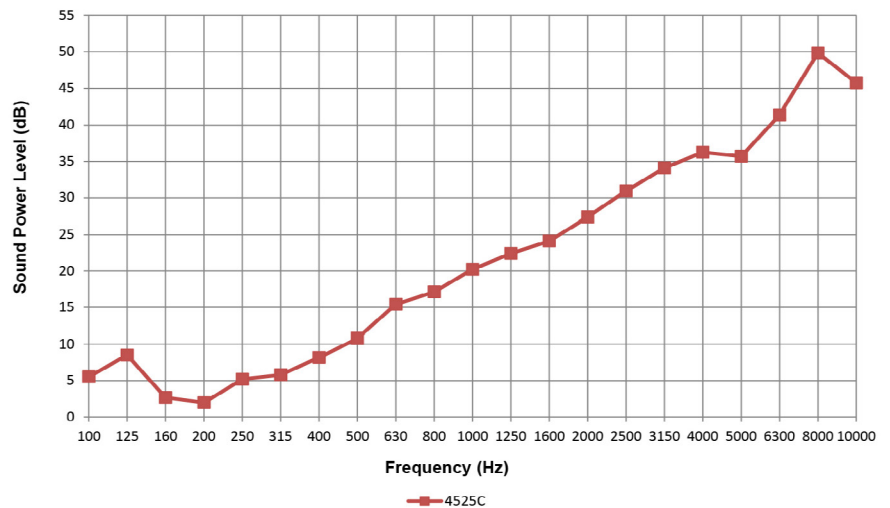
Sound Power Level



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

Frequency (Hz)	4525C (dBA)
100	5.6
125	8.5
160	2.7
200	2.0
250	5.2
315	5.8
400	8.2
500	10.8
630	15.4
800	17.2
1000	20.2
1250	22.4
1600	24.1
2000	27.4
2500	30.9
3150	34.1
4000	36.3
5000	35.7
6300	41.4
8000	49.8
10000	45.7
Insertion Loss	25.2

Insertion Loss



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