

POWA Group

PowAcoustic Soundlag 4525C

High-performance composite acoustic lagging



POWACOUSTIC SOUNDLAG 4525C



INTRODUCTION

Soundlag is a highly flexible foam-based composite acoustic pipe lagging product. It was developed to reduce breakout noise from wastewater pipes, valves, fan housings and ductwork in commercial, industrial and residential buildings.

The product range complies to international fire standards to meet fire safety demands in buildings. all Soundlag products are also equipped with a aluminium foil facing that achieves a Class 0 rating.

Soundlag 4525C provides an optimal soundproofing solution for those seeking compliance to BCa (Building Code of Australia) F5.6 requirements for habitable and non-habitable rooms. Based on test results, Soundlag™ 4525C can offer a significantly higher performance of up to 5 dB(a) compared to low noise pipe products especially in areas with no ceiling or with penetrations.

The highly dense flexible mass layer delivers excellent sound reduction properties. Soundlag's decoupling layer breaks the vibration path between the substrate and the mass barrier, allowing the vinyl wrap to remain flexible - optimising performance.

Alternative colour options to the reinforced aluminium facing are black and white foil. These anti-glare foil colours are suitable for exposed ceiling spaces.



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FEATURES

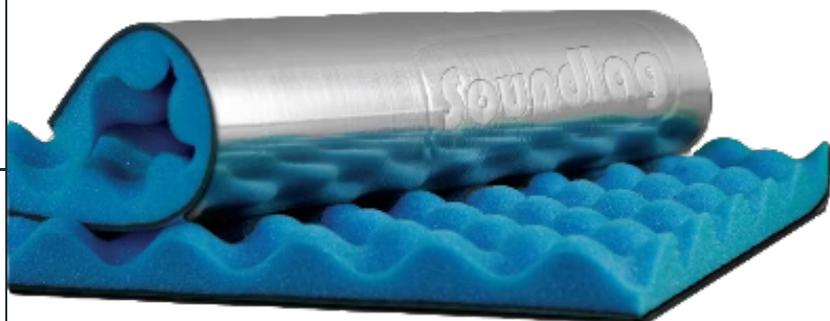
- Better performance - up to 5 dB(A) with Soundlag 4525C compared to low noise pipe products without ceiling or areas with penetrations
- Class 0 aluminium foil facing
- Tested to AS/NZS 1530.3 with excellent flame resistance (4525C)
- Soundlag range complies to international fire standards
- Broad operating temperature range
- Reduces the noise in hydraulic and wastewater pipes by up to 25.2 dB(A)
- Free from odour producing oils and bitumen
- Contain no ozone depleting substances
- Choice of blue convoluted foam, grey plain foam, polyester or glass wool
- Simple to install - can be cut to size
- Easy to bond - matching Tape ALR or equivalent
- Endorsed and tested by leading acoustic consultants and engineers

APPLICATIONS

- Wastewater pipes
- Compressor and pump wraps
- Fan housings
- Hydraulic pipes
- HVAC

SPECIFICATIONS

| | |
|-----------|---|
| Colour | Silver (Aluminium foil facing) Blue convoluted (Soundlag 4525C) |
| Available | POWACOUSTIC 5KG/M2 - WAVE FOAM 3 mtr x 1350mm wide Roll |
| | POWACOUSTIC 8KG/M2 - WAVE FOAM 3 mtr x 1350mm Wide Roll |



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PRODUCT SPECIFICATIONS

| Product | Standard thickness | Standard roll weight | Standard roll size | Barrier weight | Operating Temperature range |
|-----------------|--------------------|----------------------|----------------------------------|--|--|
| Soundlag® 4525C | 25 mm (0.98 in) | 37 kg (82 lb) | 1.35 x 5 m (4.4 ft x 16.4 ft) | 5 kg/m ² (1 lb/ft ²) | Continuous: -40 to 100 °C (-40 to 212 °F) Intermittent: -40 to 120 °C (-40 to 248 °F) |
| Soundlag® 4512 | 14 mm (0.55 in) | 36 kg (79 lb) | | | |

Tolerances: Length: ±1%, Width: -0/+5 mm (0.2 in), Thickness: ±5 mm (0.2 in), Weight: ±10%

MATERIAL PROPERTIES

| Product | Test method | Property | Report | Results |
|-----------------|--------------------------------------|---|-------------|--|
| 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-T0 | Group 3 |
| | ASTM C518 | Thermal conductivity | DI0324/DU01 | 0.0476 W/mK |
| | BS 476 Part 6 | Fire propagation | 381636 | Class 0 foil facing |
| | BS 476 Part 7 | Surface spread of flame | 381638 | |
| | ASTM D5116 | TVOC specific area emission rate | CV 100812 | Emissions are less than the Green Star recognised threshold of 0.5 mg/m ² /hr |
| | AS 4964 | Asbestos Testing | 318653 | No Asbestos Detected |
| Soundlag® 4512 | 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-CV | HBF |
| | BS 476 Part 6 | Fire propagation | 381636 | Class 0 foil facing |
| | BS 476 Part 7 | Surface spread of flame | 381638 | |
| | ASTM D5116 | TVOC specific area emission rate | CV 100812 | Emissions are less than the Green Star recognised threshold of 0.5 mg/m ² /hr |

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ACOUSTIC PERFORMANCE

| Product | Test | Report | Result |
|-----------------|--|-------------------|------------------------------------|
| Soundlag® 4525C | Insertion loss (single layer) | ATF750B | 25 dB |
| | Insertion loss (double layer) | nss22253b | 29 dB |
| | NCC BCA Volume 1 F5.6 - Sound insulation rating of internal services: Habitable room | Lt 002 20161709 | Suitable with ≥10 mm plasterboard* |
| | NCC BCA Volume 1 F5.6 - Sound insulation rating of internal services: Non-habitable room | Lt 01 r02 2010167 | Suitable without ceiling* |
| | AAAC Rating (Association of Australasian Acoustical Consultants - Apartment and Townhouse Acoustic Rating) | PKA-A186 | 6 Star Rating |
| | Transmission loss (ISO 15186-1 & ISO 10140-4) | 189 (rev 1)c | Rw 28, STC 28 (barrier layer only) |
| Soundlag® 4512 | Insertion loss (single layer) | ATF750C | 23 dB |
| | Transmission loss (ISO 15186-1 & ISO 10140-4) | 189 (rev 1)c | Rw 28, STC 28 (barrier layer only) |

*Please see report for further information

| Frequency (Hz) | 4525C (dB) | 4512 (dB) |
|----------------|------------|-----------|
| 100 | 5.6 | 2.5 |
| 125 | 8.5 | 3.8 |
| 160 | 2.7 | 4.2 |
| 200 | 2.0 | 0.2 |
| 250 | 5.2 | 2.9 |
| 315 | 5.8 | 6.2 |
| 400 | 8.2 | 6.5 |
| 500 | 10.8 | 8.3 |
| 630 | 15.4 | 10.8 |
| 800 | 17.2 | 14.3 |
| 1000 | 20.2 | 17.4 |
| 1250 | 22.4 | 19.9 |
| 1600 | 24.1 | 21.6 |
| 2000 | 27.4 | 24.3 |
| 2500 | 30.9 | 26.6 |
| 3150 | 34.1 | 29.1 |
| 4000 | 36.3 | 32.0 |
| 5000 | 35.7 | 32.6 |
| Insertion Loss | 25 | 23 |

Tested at National Acoustic Laboratories, Australia
Report Numbers: ATF750B, ATF750C

