

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





411IF



PRODUCT SPECIFICATIONS

| Product | Standard Thickness (mm) | Roll Size (mm) | Roll Weight (kg) | Barrier Weight (kg/m²) | Operating temperature range |
|----------------|-------------------------|----------------------------------|---------------------|---------------------------|------------------------------------------------------------------------------------------------------|
| Soundlag 4525C | 27 mm (1.06 in) | 1.35 x 5 m (4.4 ft x 16.4 ft) | 36 kg (79 lb) | 5 kg/m² (1 lb/ft²) | 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) | 1.35 x 5 m (4.4 ft x 16.4 ft) | 33 kg (73 lb) | 4.5 kg/m² (0.9 lb/ft²) | |
| 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) | |

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

MATERIAL PROPERTIES

| Product | Test method | Property | Report | Results | |
|----------------|-----------------------------------------|------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------|--|
| | AS/NZS 1530.3 | 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 | |
| Soundlag 4525C | ASTM C518 | Thermal conductivity | DI0324/DU01 | 0.0476 W/mK | |
| | BS 476 Part 6 | Fire propagation | 381636 | Class O fail facing | |
| | 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-CV | HBF | |
| Soundlag 4512 | BS 476 Part 6 | Fire propagation | 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 | |
| Soundlag 4506 | 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/m²/hr | |





ACOUSTIC PERFORMANCE

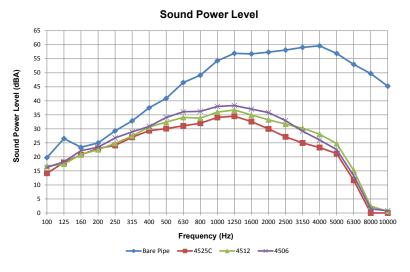
| Product | Test method | Report | Results |
|----------------|-----------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------|
| | Insertion loss (single layer) | ATF750B | 25 dB |
| | Insertion loss (double layer) | nss22253b | 29 dB |
| C 4525C | 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 |
|----------------|------------|----------------|
| Coundled 4F3FC | 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 (Hz) | Bare pipe (dBA) | 4525C (dBA) | 4512 (dBA) | 4506 (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 |









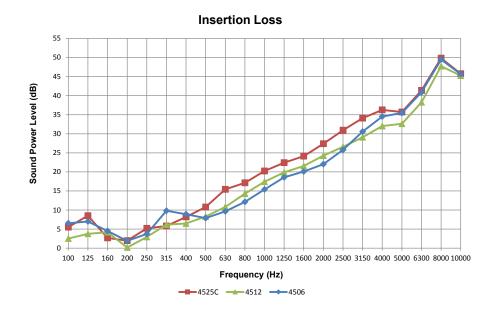




ACOUSTIC PERFORMANCE

| Frequency | 4525C | 4540 | |
|----------------|-------|--------------|--------------|
| (Hz) | (dB) | 4512 (dB) | 4506 (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 |

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



For further information and contact details, please visit our website pyroteknc.com





