

## SOUNDLAG®

### foam-based pipe and duct lagging

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.

Pyrotek Soundlag is available in a variety of compositions to meet customer requirement. Barrier weights are available in 3 kg/m<sup>2</sup> to 8 kg/m<sup>2</sup> with convoluted foam, plain foam, polyester or glass wool backing in thicknesses ranging from 6 mm to 50 mm.

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

### VOC, ODP, HEALTH AND SAFETY

Soundlag is non-toxic and safe to handle by methods prescribed in the Safety Data Sheet. No ozone depleting substances are used during the manufacture of Soundlag.

### SPECIFICATIONS

|           |                                                                                                                                                                                                                    |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Colour    | Silver (Aluminium foil facing)<br>Blue convoluted (Soundlag 4525C)<br>Plain grey foam (Soundlag 4512)<br>(Available with black and white foil)                                                                     |
| Available | Standard roll size:<br>1.35 m x 5 m (4.4 ft x 16.4 ft)<br>Various roll sizes available including:<br>0.675 m x 5 m (2.2 ft x 16.4 ft)<br>1.35 m x 3 m (4.4 ft x 9.8 ft)<br>Custom sizes available depending on MOQ |



### applications

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

### 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



## PRODUCT SPECIFICATIONS

| Product         | Standard thickness | Standard roll weight | Standard roll size               | Barrier weight                                      | Operating Temperature range                                                                          |
|-----------------|--------------------|----------------------|----------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Soundlag® 4525C | 25 mm<br>(0.98 in) | 37 kg<br>(82 lb)     | 1.35 x 5 m<br>(4.4 ft x 16.4 ft) | 5 kg/m <sup>2</sup><br>(1 lb/ft <sup>2</sup> )      | Continuous:<br>-40 to 100 °C<br>(-40 to 212 °F)<br>Intermittent:<br>-40 to 120 °C<br>(-40 to 248 °F) |
| Soundlag® 4512  | 14 mm<br>(0.55 in) | 36 kg<br>(79 lb)     |                                  | 4.5 kg/m <sup>2</sup><br>(0.92 lb/ft <sup>2</sup> ) |                                                                                                      |

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                                                                                                                                                     |
|                 | ISO 5660                                                                    | Fire hazard properties                                  | FH5997-01-3  | 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 <sup>2</sup> /hr                                                                    |
|                 | AS 4964                                                                     | Asbestos Testing                                        | 318653       | No Asbestos Detected                                                                                                                                        |
|                 | California Department of Public Health CDPH/EHLB/ Standard Method V1.2 2017 | VOC emission testing                                    | 250814-01    | LEED v5, compliant as a low VOC emitting material<br>Formaldehyde and TVOC emissions are compliant for CDPH criterion for maximum allowable concentrations. |
| Soundlag® 4512  | 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 <sup>2</sup> /hr                                                                    |
|                 | ISO 5660                                                                    | Fire hazard properties                                  | FH 5242-01-2 | Group 3                                                                                                                                                     |

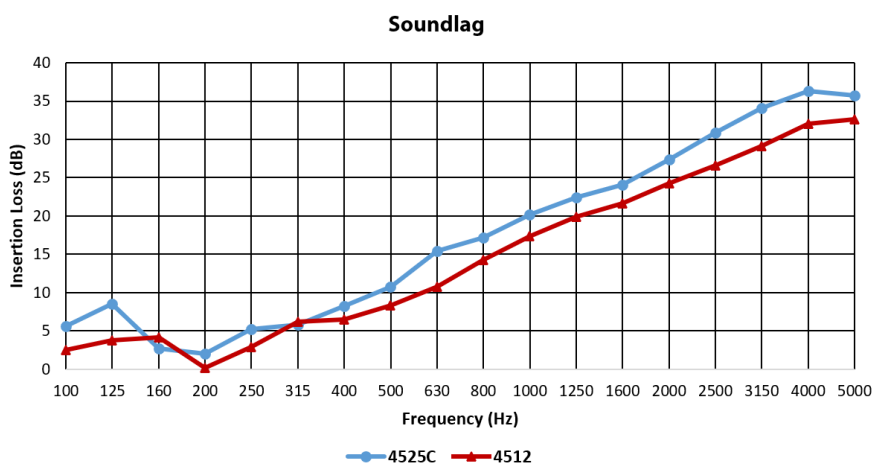
### ACOUSTIC PERFORMANCE

| Product         | Test                                                                                                       | Report            | Result                             |
|-----------------|------------------------------------------------------------------------------------------------------------|-------------------|------------------------------------|
| Soundlag® 4525C | Insertion loss (single layer)                                                                              | ATF750B           | 25 dB(A)                           |
|                 | Insertion loss (double layer)                                                                              | nss22253b         | 29 dB(A)                           |
|                 | 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(A)                           |
|                 | 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 dB(A)   | 23 dB(A)  |

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



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and contact details,  
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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 or fire engineer 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, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights.

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