



Acoustic treatment for noisy pipes

The trend towards high-density living environments and lightweight building construction over the last decade has required an improvement in the control of noise from waste pipes and general plumbing. Soundlag 4525C, carrying a ten year warranty, is the choice for many leading acoustic consultants, architects and consulting engineers as its quality assured consistent performance guarantees quieter pipes.

Beware of imitations! Soundlag® products are embossed with the 'Soundlag' name.

Introduction

Soundlag 4525C is a pipe wrap comprising of 5.0 kg/flexible acoustic barrier bonded to 25mm thick flexible convoluted foam. The function of the foam is to provide acoustic decoupling between the pipe's noise energy and the 5kg flexible acoustic barrier external wrap, resulting in superior performance. The external face of the barrier is bonded to an aluminum foil providing a fire resistant covering.

Solution/application

Soundlag 4525C has been developed as an easy to use acoustic treatment which reduces noise breakout from pipes. The unique flexibility of the polymer-based noise barrier provides superior performance and allows even the smallest pipes to be lagged effectively. It's independently tested in laboratory conditions and on site to give proven consistent performance. Leading consultants specify Soundlag 4525C with confidence.

Low maintenance with a long service life, the aluminium foil facing provides a robust lifetime surface finish, ensuring protection from damage, and improves fire resistance.

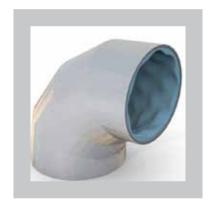
- Easiest pipelag product on the market to cut, wrap & install
- Most widely specified by leading acoustic & EMP (electrical, mechanical & plumbing) consultants
- Highly flexible, allowing it to conform to the smallest dia. Pipes & bends (has no memory)
- No odour & non irritant
- No solvents or adhesives used during manufacture
- Complies to building standard regulations for low VOC ommission
- Ten year warranty
- Available world wide



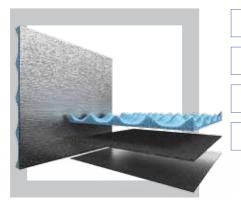




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Product construction

FOIL FACING

Soundlag 4525C uses a strong aluminium foil facing, giving improved fire resistance and increased mechanical strength.

NOISE BARRIER (5 kg/m²)

The Soundlag acoustic barrier reduces noise through it's unique construction. The specialist fillers create a heavy flexible mass barrier, maximising noise reduction. Soundlag's uniquely flexible and naturally inert nature allows effective, easy installation, essential in achieving a noise-tight seal.

CONVOLUTED FOAM

The foam provides a decoupling layer which breaks the vibration path allowing the noise barrier to continue to perform in a limp non-constrained manner. Soundlag has enough inherent flexibility to allow convoluted foam to be used, improving fit-out quality on traps and joins.

The polyether foam used in the manufacture of Soundlag products is nonfibrous, will withstand the effects of moisture (hydrolysis resistant), displays excellent acoustic characteristics and has a long serviceable life.

Construction options

Extensive research has enabled Soundlag 4525C to maximise results while remaining cost effective. However, if extra barrier weights or a variation in foam thickness is required, consult your local Pyrotek representative for special orders. Soundlag dBX now available on request (PVC free).

Pre cut pieces for bends, junctions and floor waste gullies can be produced from templates available on request.











System design considerations

When designing a system using Soundlag 4525C, penetrations through ceilings 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.

Did you know?

Manufacturers of HDPE and HDPP heavy density acoustic pipes also recommend acoustically lagging pipes with products such as 4525C to comply with building codes.

Installation

Soundlag 4525C is easily installed using Soundtape, a high quality, self adhesive, reinforced foil tape. To ensure a high quality fit-out, we suggest placing 3 circumferencial wraps of Soundtape every 300 - 400mm, ie 3 wraps per 1m of pipe.















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Acoustic performance

Working with acoustic consultants and test facilities, Pyrotek has designed and tested systems that achieve a high level of noise reduction for all plumbing and hydraulic situations.

Soundlag 4525C is tested in field and independent laboratories to international standards.

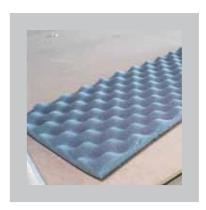
Properties

Standard roll size	1350mm x 5000mm (nominal ±3%)	675×5000 mm (nominal $\pm 3\%$)
Roll weight	34kg - 36kg (nominal ±5%)	17kg - 19kg (nominal ±5%)
Operating temperature (maximum continuous)	80°C	
Operating temperature (maximum intermittent)	100°C	
Flammability - AS 1530 Part 3 1999	Ignitability 0	
	Spread of flame 0	
	Heat evolved 0	
	Smoke developed 0-1	
Green Star - ASTM D5116	Low VOC less than the recognised threshold of 0.5mg/m²/hr	





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Acoustic testing

Insertion loss: (NAL ATF 750B Report)	25 dB (A) (1/3 octave band 100Hz to10kHz)	
Insertion loss (system): (TA 129-D7F03 Report)	Greater than R _w 45	
Free hanging (ASTM E-90-90)	R _w 28	
Transmission loss (AS1276)	R _w 27	
AAAC 6 star rated system PKA - A078	Less than 27dBA	

AUSTRALIAN BUILDING CODE REQUIREMENTS

Section F5.6 of the current Australian Building Code (2005) requires that:

"If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole-occupancy unit, the duct or pipe must be separated from the rooms of any sole-occupancy unit by construction with an $R_W + C_{tr}$ (airborne) not less than -

(i) 40 if the adjacent room is a habitable room (other than a kitchen); or (ii) 25 if the adjacent room is a kitchen or non-habitable room."



 R_w 30 system and R_w 25+ C_{tr} system



R_w45 system



R_w40+C_{tr} system





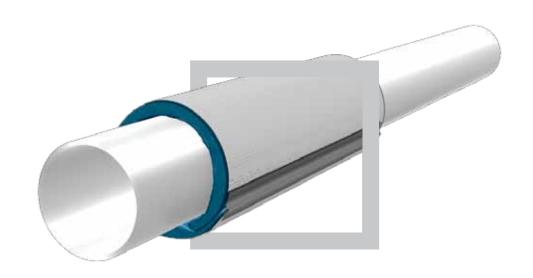


Fixing and cutting

Nominal inside diameter	Outside diameter	Actual cut length	Coverage 1.35 x 5m roll
32	36	260	25.5
40	43	280	23
50	56	320	20
65	69	360	17.5
80	83	405	16
100	110	500	13.5
150	160	650	9.5
225	250	930	7
300	316	1135	5
375	401	1400	4

This is an indicative calculation based on a minimal overlap

Soundlag 4525C is easily cut with a knife or scissors to size, minimising wastage. Wrap soundlag 4525C around the pipe and then use high quality aluminium tape to join the product together. Pyrotek recommends an overlap at all joins to eliminate potential flaking noise.





Scan with your mobile phone using a QR code scanner app



VIEW THE PRODUCT INFO pyroteknc.com/soundlag.html

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Caveats: Specifications are subject to change without notice. The data in this document are 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 or mechanical engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek NC 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 patients or rights. DISCLAIMER: This document is covered by Pyrotek standard Disclaimer, Warranty and @ Copyright clauses. See www.pyroteknc.com/disclaimer.

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