mass-loaded vinyl noise barrier composite

SOUNDLAG™

Pyrotek®

SOUNDPROOFING SOLUTIONS FOR ALL INDUSTRIES

pyroteknc.com

SOUNDLAG - NOISE ABSORBER AND NOISE BARRIER

Soundlag 4525C is a pipe wrap comprising of 5 kg/m^2 flexible acoustic barrier bonded to 25 mm thick flexible convoluted foam. The function of the foam is to provide acoustic decoupling between the pipe's noise energy and the 5 kg/m^2 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.

Acoustic treatment for noisy pipes
The trend towards high-density living and lightweight building construction over the last decade has required an improvement in the control of noise from waste pipes and general plumbing.

SOLUTION/APPLICATION

Soundlag 4525C has been developed as an easy to use acoustic treatment that 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 in situ 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 improved fire resistance.

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

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.

- 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 diameter pipes & bends (has no memory)
- No odour & non irritant
- No solvents or adhesives used during manufacture
- Complies with building standard regulations for low VOC emission
- Ten year warranty
- Available world wide



PRODUCT CONSTRUCTION

Foil facing

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

Noise barrier (5 kg/m^2)

The Soundlag 4525C 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 unconstrained 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 non-fibrous, will withstand the effects of moisture (hydrolysis resistant), displays excellent acoustic characteristics and has a long service 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).
Precut pieces for bends, junctions and floor waste gullies can be produced from templates available on request.

Unwanted sound easily travels through any perforation such as lighting or ducting.

SYSTEM DESIGN CONSIDERATIONS

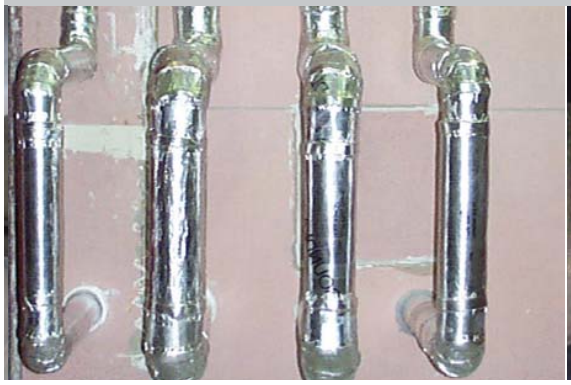
When designing a system using Soundlag 4525C, penetrations through ceilings must be taken into account to ensure effective sound reduction especially from down-lights, air conditioning ducting, access hatches and where lightweight ceilings such as mineral fibre tiles are used.

Did you know?

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

Installation

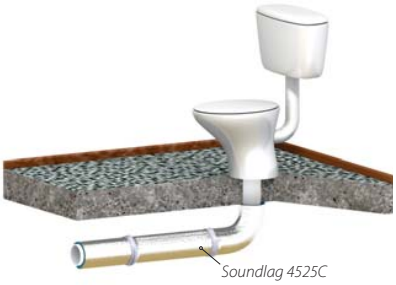
Soundlag 4525C is easily installed using Soundtape, a high quality, self adhesive, reinforced foil tape. To ensure a high quality fit-out, place 3 circumferential wraps of Soundtape every 300 - 400 mm, i.e. 3 wraps per 1 m length of pipe.



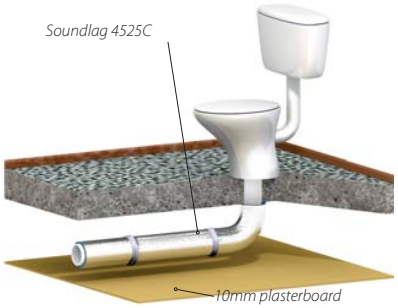
Simply use AGC tape to affix and join Soundlag even around complex bends in pipework.

MATERIAL PROPERTIES

Available roll size	675 mm x 5000 mm	1350 mm x 3000 mm	1350 mm x 5000 mm
Roll weight	18 kg	22 kg	36 kg
Operating temperature (maximum continuous)	100 ^{0}C		
Operating temperature (maximum intermittent)	120 ^{0}C		
Flammability - AS 1530 Part 3 1999	Ignitability 0		
	Spread of flame 0		
	Heat evolved 0		
	Smoke developed 1		
Green Star - ASTM D5116	Low VOC 0.08 mg/m^2/hr less than the recognized threshold of 0.5 mg/m^2/hr		



BCA Section F5.6 Compliant
Non-habitable room



BCA Section F5.6 Compliant
Habitable room

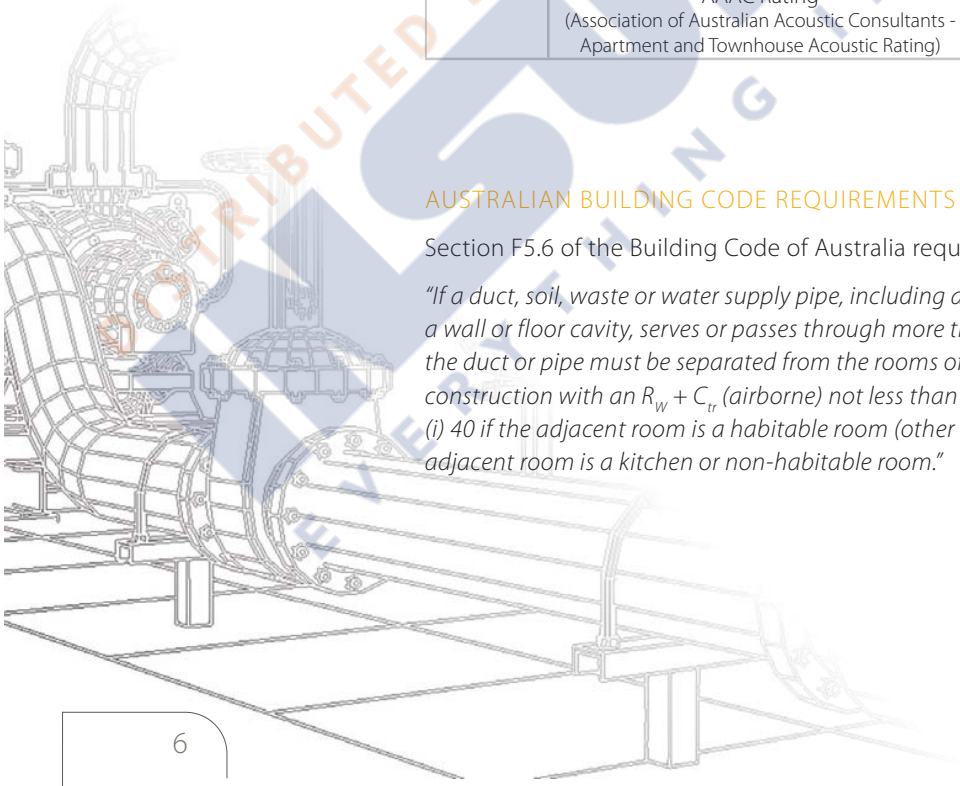
ACOUSTIC PERFORMANCE

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 has been acoustically tested in field and independent laboratories.

ACOUSTIC TESTING

Product	Test	Report	Result
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)	PKA-A186	6 Star Rating



AUSTRALIAN BUILDING CODE REQUIREMENTS

Section F5.6 of the Building Code of Australia 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."

FIXING AND CUTTING

Nominal inside diameter	Outside diameter	Actual cut length	Coverage (m) 1.35 m x 5 m 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. Simply 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 flanking noise.

Right: Examples of configurations for various bends and typical pipe wrapping requirements








Pyrotek®

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PYROTEK WORLDWIDE LOCATIONS

AUSTRALIA
CANADA
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SINGAPORE
NEW ZEALAND
TAIWAN
THAILAND
TURKEY
UNITED ARAB EMIRATES
UNITED KINGDOM
UNITED STATES OF AMERICA
VIETNAM

CONTACT DETAILS
for further information and
contact details, please visit
our website at pyroteknc.com

Pyrotek endorse forest sustainability and the preservation of natural environment. We procure the highest quality materials from suppliers who hold FSC (Forest Stewardship Council) Certification and PEFC (Programme for the Endorsement of Forestry Certification) amongst other certification programmes.