





Incorporating the QuietWave® technology.

A revolutionary noise barrier.



Improved vibration damping with microcellular noise barrier and solid foam barrier

Reduced installation time - a result of the resilience and softness of the microcellular QuietWave® noise barrier and the special foam decoupling layer

Exceeds the acoustic requirements of the BCA (Building Code of Australia)

Tough & tear resistant, yet easily cut & shaped

GreenLAG® pipe lagging was developed to contain the intrusive noise generated by the turbulent flow of waste-water through pipes, fittings and general noise break-out from ductwork, fan housings, valves, and the like in residential, commercial and industrial buildings. As shown on test results, a soft and cellular structure increases 'Vibration Dampening' and thus for a given weight and thickness will achieve a better STL (Sound Transmission Loss). This is one of the reasons 'GreenLAG®' is substantially lighter than other thicker products. Another direct consequence of material thickness, is the reduction of the 'Vibrations Radiating Surface', when lagged over pipe.

GreenLAG® ticks all the boxes for health, safety, ease & economy of installation, acoustic performance, material saving & conservation.

Applications:

- waste water & storm water pipes
- hydraulic pipes
- air-conditioning ducts
- swimming pool / spa pump lagging & enclosures
- valves
- fan housings
- compressor & generator enclosures





Key Benefits

Group 1 fire rating

Low VOCs (volatile organic compounds) - less than a recognised threshold 0.5mg "Green Star"

Flat foam GreenLAG is the thinnest & lightest BCA compliant acoustic pipe lagging - saving you \$\$\$ in quantities

Flexible, easy to cut & install - saving you previous time

Environmentally safe - no protective wear required

Cost effective - a saving of 12.7% when using Flat foam GreenLAG

Australian designed & manufactured, Australian made

Product Specifications

GreenLAG® pipe lagging has a noise barrier with a microcellular structure (image below). The soft and cellular structure increases 'Vibration Dampening' and thus for a given weight and thickness will achieve a better STL (Sound Transmission Loss).

A patented Visco-elastic acoustic barrier using the 'QuietWave technology'

A 15mm or 25mm thick decoupling layer acoustic foam A Special design foil for improved durability standard roll dimensions 1.3x5m or 1.3x3m

export roll dimensions 1.25x5m

convoluted foam roll 1.3x3m or 1.3x5m

GreenLAG can be supplied in pre-cut strips, bends & junctions - available on request

BUILDING CODE OF AUSTRALIA (BCA) 2011
REQUIREMENTS: F5.6 Sound Insulation rating of services a) 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 Rw + Ctr (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.
- b) If a storm water pipe passes through a soleoccupancy unit it must be separated in accordance with a) i) and ii).

"Compliance requirements and ODP-EMI9 requirements in that there are no Ozone depleting substances used



Installation

Easily cut GreenLAG to size with a knife or scissors, keeping wastage to a minimum.

Wrap GreenLAG around the pipe overlapping all joints by 50mm (vertical & horizontal) to avoid potential flanking noise.

Wrap three (3) circumferential wraps of high quality 48-72mm wide reinforced aluminium tape (sold separately) at approximately every 350mm (ie 3 wraps every 1m of pipe length) & tape along all seams.

Ensure a minimum separation of 50mm between the pipe and the plasterboard ceiling for maximum effect.

Important note - the product needs to be kept dry at ALL times & kept away from the direct sun.

For maximum sound reduction, penetrations through ceilings and walls need to be addressed especially when downlights, air conditioning returns and access hatches are present.

Calculating the width (W) $W = \prod x [OD + (2xT)] +50 \text{ mm overlap}$ W = width of pipe lagging to go around the pipe OD = outside pipe diameter T = pipe lagging thickness $\prod = \text{approx } 3.14$

Technical

Total Volatile Organic Compounds (VOCs) tested by CETEC Professional Scientific Solutions test method ASTM D5116 (report no. CV090805), time 24 hours, specific area emission rate mg/m2/h2 <0.01 The material emissions are less than a recognised threshold of 0.5 mg/m2/hr, eg. "Green Star". This product can be classed as low VOC emitting.

Acoustic tests by Wilkinson Murray report no. 1217-3.5_15 (result comparison of noise levels dB(A)

- bare pipe with Rw+Ctr 40 ceiling / wall 37.7 LAmax 44.4 LAF
- pipe lagged with wall 10mm standard plasterboard 36.9
 LAmax 43.5 LAE

Maximum Noise Level (LAmax) - The maximum noise level over a sample period is the maximum level, measured on fast response, during the sample period.

LAE - The A Weighed Sound Exposure Level which is the noise level that would be generated if all the energy from a discreet noise event (e.g. a toilet flush) was compressed into 1 second.

CSIRO flammability tested to AS 1530 part 3, 1999 - ignitability 0, spread of flame 0, heat evolved 0, smoke developed 0-1

Noise barrier - Group 1 (in accordance with Specification A2.4 of the BCA (Building Code of Australia)

Average specific extinction area 49.0 m (refer to Specification C.10a section 3(c) of the BCA

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