

# FIREPRO CENTABUILD INSULATION

HEAD OFFICE: AUCKLAND (09) 579 0367  
CHRISTCHURCH (03) 379 9364

www.firepro.co.nz sales@firepro.co.nz

Product specifications can change. Contact us to ensure you have our latest datasheet

## SOUNDLAGGING

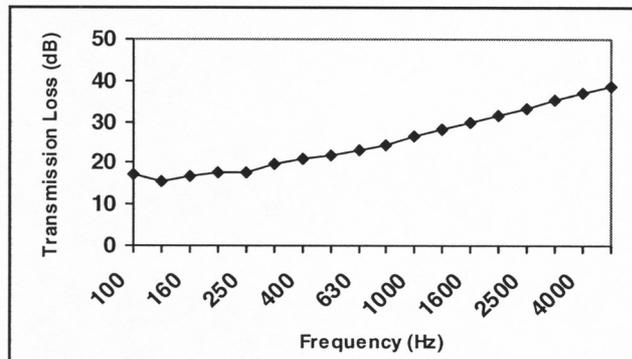
PSL4525 with 25mm acoustic insulating foam.  
PSL4512C with 12mm acoustic insulating foam.

These products provide acoustically tested pipe insulation for hydraulic and wastewater pipework. They are designed for superior performance combined with ease of installation. PSL4525 is a composite material with an aluminium foil face over flexible loaded vinyl adhered to 25mm elastomeric acoustic foam. PSL4512C has the same composition but use 12mm thick elastomeric acoustic foam to allow an alternative to PSL4525 where space does not allow for the higher specification product.

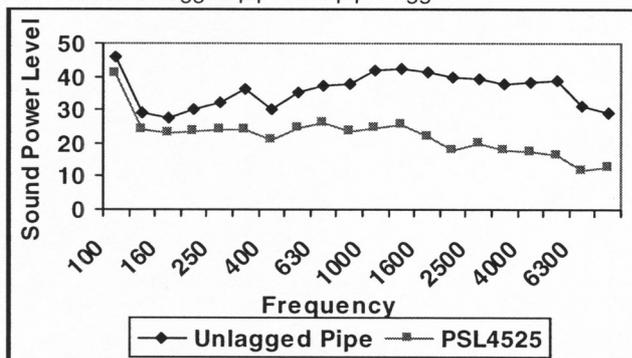
Leaving the flexible loaded vinyl layer to absorb most of the sound energy, the acoustic foam acts as a decoupling layer to separate the loaded vinyl from the pipe it is surrounding. This provides a greater change in the density of the medium the sound must travel through, allowing the vinyl to perform most effectively. When over 12mm thick the acoustic effect of increasing foam thickness by a further 13mm is only to increase the Noise Reduction Coefficient (NRC) by 0.10 — the loaded vinyl layer itself is identical. PSL4525 is however the standard product due to its superior thermal insulation.

### ACOUSTIC TESTING

National Acoustic Laboratories Report ATF173  
Testing to AS1191, PSL4525 produced noise attenuation rating of STC27:



National Acoustic Laboratories Report ATF173  
Tested to AS 1217.2. Comparative test of acoustic transmission loss between unlagged pipe and pipe lagged with PSL4525:



Palmer Acoustics Pty Ltd Report dated 12/7/97:

Field tests on hydraulic pipes measuring hydraulic noise levels from ceiling void pipes from the room below. The effect of lagging with PSL4525 was to reduce the room noise levels by close to 11dB(A).

National Acoustic Laboratories Report ATF290

Testing to AS1217 - Part 2. Results showed that in a duct lined with one layer of standard 13mm gypsum board, a pipe lagged with PSL4525 had lower noise emission characteristics than an unlagged pipe in a duct with 3 layers of gypsum board.

### COMPARATIVE THERMAL INSULATION

MATERIAL	DENSITY kg/ m <sup>3</sup>	K FACTOR W mK
PSL4525	23	0.04
Expanded Polystyrene	25-32	0.04
Cork	110	0.04
Fibreglass	190	0.03

### SIZES

1350mm wide and available in 1000mm sheets or 5000mm Rolls.

### INSTALLATION

PSL4525 and PSL4512C should be installed by professional applicators with an understanding of acoustic requirements. A licensed applicator is available in Auckland, Wellington and Christchurch.

For use where operating temperatures do not exceed 135°C

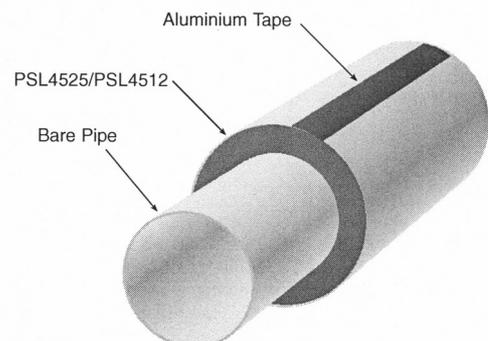
### FIRE TESTING

Tested for Early Fire Hazard to AS1530 Part 3 with the following results:

Ignitability	0
Spread of Flame	0
Heat Evolved	0
Smoke Developed	0-1

### SAMPLE SPECIFICATION

Where indicated on drawings, all Traps, Waste, Down Pipes etc shall be contained within an acoustic envelope constructed of PSL4525 comprising of 4.5kg/m<sup>2</sup> loaded vinyl adhered to reinforced thermafoil plus 25mm acoustic foam then taped with 50mm aluminium tape (refer to Centabuild Ph. 09-5790367), all as per National Acoustic Lab Test No. ATF150.



NOTE: The technical information and suggestions for use and application presented herein represent the best information available to us and are believed to be reliable. If used beyond the situations detailed on this datasheet we advise confirming their suitability before installation. All dimensions are nominal.

We reserve the right to make changes or to withdraw designs and products without notice.