

INS ACOUSTI-LAG FL FOAM LAMINATES

A flexible material available in a range of formats to suit consisting of a four part laminate, incorporating two spacer or isolating layers, a heavy mass absorptive layer and an outer flame / vapour barrier meeting Class 'O' of the UK Building Regulations. Being of a laminated construction it overcomes the need for a separate isolation layer normally required beneath most forms of acoustic lagging or isolated acoustic barriers.

ADVANTAGES

- · Easy and quick to apply
- · Excellent acoustic performance
- · Applied as a single layer treatment
- · Excellent fire resistance & temperature stability
- Available in various formats to suit application
- · Low thermal conductivity
- · Low toxicity

APPLICATIONS

INS Acousti-lag FL foam laminates are a highly efficient acoustic treatment for ductwork, suspended ceilings, infills for partitions and baffles between offices, enclosures and similar outer treatment applications where a considerable reduction in the passage of breakout noise is required.

PHYSICAL INFORMATION (CONT)

Acousti-lag FL-B uses a polymeric heavy mass barrier material of either 5kg/m² (WB5) or 10kg/m² (WB10) surface weights

Acousti-lag FL-L uses an acoustic grade lead sheet mass barrier of either 5kg/m^2 (L5) or 10kg/m^2 (L10) surface weights.

Formats

INS Acousti-lag FL foam laminates type FL-B and FL-L, are available with standard facing and backings applied to standard acoustic foam thicknesses:

SA self adhesive backing
CO Class 'O' foil facing
P6 Acoustic foam 6mm thick P12 Acoustic foam
12mm thick P25 Acoustic foam 25mm thick

TECHNICAL INFORMATION

Foam spacer (absorptive) See INS Class "O" acoustic laver foam data sheet

Polymeric barrier See INS WB acoustic

barrier data sheet

Composite operating -30 to 85°C temperature

Thermal conductivity To BS 4745 1990

Mean temperature °C	10	25	50
W/m°K	0.0529	0.0541	0.0561

ACOUSTIC PERFORMANCE

Measurement of sound transmission in accordance with BS 2750:1980, ISO 140:1978.

INS Acoust-lag FL-B is a composite of two layers of INS Class "O" PolyUrethane Non-Flammable Acoustic Foam, with an inner isolated layer of heavy mass barium sulphate loaded polymeric barrier.

Sound Reduction Index

	Frequency (Hz)							
Format	63	125	250	500	1k	2k	4k	8k
F12/B5/F6.CO + 1mm steel	24	19	21	35	44	47	54	44
F12/B5/F6.CO	18	15	18	22	28	37	41	41
F25/B5/F6.CO	19	17	32	34	46	48	51	47
F12/B10/F6.CO	22	19	24	27	32	41	52	49
F25/B10/F6.CO	22	21	35	37	47	50	56	52

PHYSICAL INFORMATION

Dimensions

Standard sheet size: 1.2m x 1m

Other sizes are available upon request. Composite overall thickness depends on format required.

Grades

INS Acousti-lag FL foam laminates are available in two basic designs depending on the type of mass barrier employed.

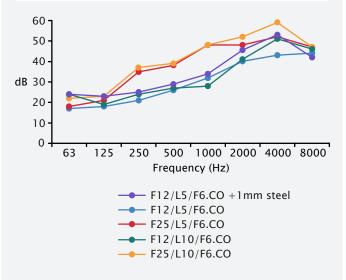


ACOUSTIC PERFORMANCE (CONT) 60 50 40 dB 30 20 10 0 125 500 1000 2000 4000 8000 Frequency (Hz) — F12/B5/F6.CO +1mm steel --- F12/B5/F6.CO F25/B5/F6.CO - F12/B10/F6.CO **F25/B10/F6.CO**

INS Acousti-lag FL-L is a composite of two layers of INS Class "O" PolyUrethane Non-Flammable acoustic foam with an inner isolated layer of heavy mass acoustic grade lead sheet barrier.

Sound Reduction Index

	Frequency (Hz)							
Format	63	125	250	500	1k	2k	4k	8k
F12/L5/F6.CO + 1mm steel	24	23	25	29	34	46	53	42
F12/L5/F6.CO	17	18	21	26	32	40	43	44
F25/L5/F6.CO	18	21	35	38	48	48	52	47
F12/L10/F6.CO	24	19	24	27	28	41	51	46
F25/L10/F6.CO	22	23	37	39	48	52	59	47



INSTALLATION GUIDELINES

INS Acousti-lag FL foam laminates are easy to handle and simple to install. Installation can be accomplished by either bonding or using mechanical fixings, or a combination of both.

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First, ensure that the substrate surface is dry, clean and free from oil and grease (this can be achieved using a solvent cleaner).

Where the composite weight is greater than 5kg/m² we strongly recommend that mechanical fasteners are used in combination with adhesive or self adhesive backed laminates. Particular attention should be paid to vertical or inverted surfaces to avoid any sagging of the laminate.

Additional support by banding maybe required in certain applications. If in doubt please call our sales and technical support team for assistance.

INSTALLATION ACCESSORIES

Aerosol adhesive

INS spraytack is a specially formulated non-flammable synthetic rubber adhesive. Available in 500ml aerosol cans, which provides approximately 5m² coverage. Spraytack is a contact adhesive that requires application to both surfaces before bonding.

Brush applied adhesive

INS A8514 is a low n-Hexane formula designed specifically for INS acoustic foams and provides approximately $10m^2$ coverage. INS A8514 can be used either as a one way wet or two way dry contact adhesive.

Pins and washers

INS pins and washers are available in two designs:

- 1. With a self adhesive base
- 2. With a perforated base for use with a separate adhesive

Both types consist of a pointed spike attached to a square steel base. The INS Acousti-lag is held in place by a self-locking washer which is slid over the spike after the material is installed.

INSTALLATION SERVICE

In addition to supply of this product INS Acoustics offers a competitively-priced installation service anywhere in the UK. Use of our service ensures that installation is performed to the highest standards by tradesmen fully experienced in the specialist skills of fitting acoustic materials correctly.

For further details contact our technical team on 0151 677 8650.

