



FIRE RETARDANT ACOUSTIC FOAM TYPE FR25

INS FR25 acoustic foam is a fire retardant polyether based polyurethane foam designed to provide acoustic and fire resistant properties. It is grey in colour and flexible to use and handle.

ADVANTAGES

- Available in sheet form
- Flexible and easily cut
- Easy to handle and install
- Suitable for curved surfaces or complex shapes.
- Available with various backings including self-adhesive backing

PHYSICAL INFORMATION

Standard sheet size	2m x 1.2m
Standard thicknesses	12mm, 25mm, 35mm, and 50mm
Density	21–25 kg/m ³
Indentation Hardness	125–155 N
Tensile strength	70 kps
Elongation at break	150% (minimum unaged)
Operating temperatures	80°C (max continuous) 110°C (intermittent) –30°C (minimum)

TECHNICAL INFORMATION

INS FR25 acoustic foam conforms to the following specifications.

Fire tests:

BS 4735:1974*	Complies
Flammability (FMVSS 302)	Pass

* BS 4735 contains the statement “The test results relate to the behaviour of the test specimens under particular conditions of test; they should not be used as a means of assessing the potential fire hazard of the material in use”.

APPLICATIONS

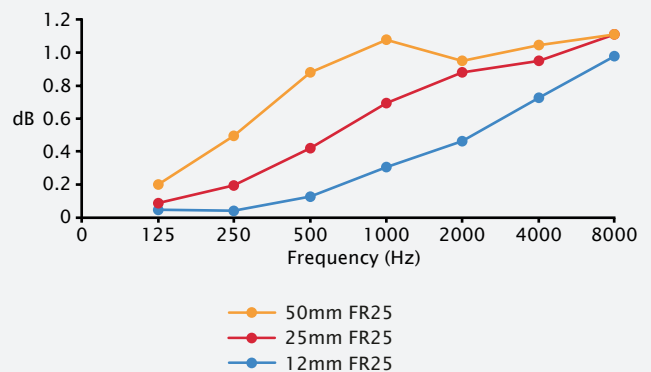
INS FR25 acoustic foam is typically used for machinery enclosures, doors, walls, partitions and air conditioning ducts. It is also ideal for insulating cabs of industrial vehicles and enclosures for vehicle and boat engines. For wall and machinery enclosures, the acoustic performance of INS FR25 can be dramatically enhanced when used in combination with DS damping sheet. FR25 is a non-dusting and flexible acoustic foam that provides excellent sound absorption.

ACOUSTIC PERFORMANCE

INS FR25 acoustic foam is a high performance material that has been acoustically tested as follows.

Random Incidence Sound Absorption Coefficients

Material Thickness	Frequency (Hz)							
	63	125	250	500	1k	2k	4k	8k
12mm FR25	0.05	0.07	0.06	0.13	0.31	0.45	0.74	0.98
25mm FR25	0.04	0.09	0.20	0.41	0.68	0.88	0.94	1.11
50mm FR25	0.09	0.20	0.51	0.90	1.08	0.94	1.02	1.11



FACING AND BACKING MATERIALS

INS FR25 acoustic foam is available in plain format or with a wide range of facing and backing materials to suit the application or to ease installation. Standard surface treatments available are:

- Self adhesive backing
- Class 'O' foil facing (COFF)
- Melinex facing

INSTALLATION GUIDELINES

INS FR25 acoustic foam is easy to handle and simple to install. To facilitate easy handling it is recommended that FR25 foam be installed in sheets not larger than 2m x 1.2m.

Plain FR25 foam

Installing plain FR25 foam can be accomplished by either bonding or using mechanical fixings, or a combination of both.

1. First, ensure that the substrate surface is dry, clean and free from oil and grease (this can be achieved using a solvent).
2. For vertical surfaces, the 25FR foam should be laid, cross bonded, from the bottom upwards using a suitable adhesive.
3. For overhead or inverted surfaces, due to its light weight, the FR25 can be fitted without the need for mechanical fixings and the use of adhesive only is usually sufficient to hold the acoustic foam in place.

Self adhesive FR25 foam

Installing FR25 foam with a self adhesive backing provides a quick and efficient means of applying the acoustic foam.

1. First, ensure that the substrate surface is dry, clean and free from oil and grease (this can be achieved using a solvent).
2. The FR25 foam with a self adhesive backing is protected that can be peeled off. If it is required to cut the acoustic foam to size, it is recommended this is undertaken before removal of the protective backing.
3. When the acoustic foam is cut to size, peel back one edge of the backing paper and line the material edge up square, then gently peel off completely and press until the panel is fixed firmly.

4. Apply an even pressure by pad or roller to ensure intimate contact between the self adhesive film and the substrate surface.

INSTALLATION ACCESSORIES

INS can recommend the following products to assist installation.

Aerosol adhesive

INS Spraytack is a specially formulated non-flammable synthetic rubber adhesive. Available in 500ml aerosol can, which provides approximately 5m² coverage. INS 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 rapid tack development. Available in 5 litre cans which provide approximately 3m² coverage. INS A8514 can be used either as a one way wet or two way dry contact adhesive.

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.