

TECHNICAL DATA SHEET

ACOUSTIC FOAM

PRODUCT DESCRIPTION

A general purpose acoustic foam that due to its extended properties is highly adaptable. CMS Danskin Acoustics acoustic foam is a modified polyurethane acoustic foam. Dark grey/black in colour, it is CFC and HCFC free.

BENEFITS

- Available in sheet or roll form
- Flexible and easily cut
- Easy to handle and install
- CFC and HCFC free
- Available with various backings including self-adhesive backing

APPLICATIONS

- Internal and external duct linings
- Thermal & acoustic machine coverings
- Suspended ceiling absorptive panels
- Composite constituent combined with acoustic barrier material for acoustic flooring and external lagging



PHYSICAL INFORMATION

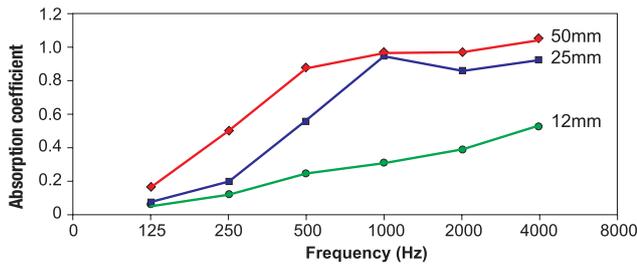
Standard sheet size:	2m x 1m (also available in 10m & 20m rolls)
Standard thicknesses:	6, 12, 25 and 50mm 15, 20, 30, 45, 75 and 100mm thicknesses available to order subject to quantity
Density:	80 to 100kg/m ³
Indentation Hardness:	156 N
Elongation at break:	188% (minimum unaged)
Operating temperatures:	80°C (max. continuous) 110°C (intermittent) -30°C (minimum)

ACOUSTIC PERFORMANCE

CMS Danskin Acoustics Foam is a high performance material that has been acoustically tested at a UKAS certified independent test laboratory.

Random Incidence Sound Absorption Coefficient.

Material Thickness	Frequency (Hz)						
	125	250	500	1k	2k	4k	NRC
12mm	0.08	0.14	0.22	0.32	0.40	0.53	0.27
25mm	0.08	0.20	0.56	0.93	0.84	0.92	0.63
50mm	0.19	0.49	0.87	0.97	0.97	1.04	0.76



Ductwork Attenuation (dB) - Airborne noise

Material Thickness	Duct Size	Frequency (Hz)					
		125	250	500	1k	2k	4k
12mm	900x600	0.2	0.6	1.7	3.7	5.3	4.5
25mm	900x600	0.2	0.8	2.9	10.8	6.9	7.2
50mm	900x600	0.8	2.9	7.2	11.0	7.1	6.2
25mm	450x600	0.4	1.0	3.3	14.1	8.3	8.9
50mm	450x600	1.6	3.1	8.7	16.6	8.8	8.6
25mm	300x600	0.6	1.4	3.8	15.1	12.0	11.4
50mm	300x600	2.6	5.4	10.5	19.5	15.1	11.6

Ductwork Attenuation (dB) - Breakout noise

Material Thickness	Duct Size	Frequency (Hz)					
		125	250	500	1k	2k	4k
12mm	900x600	2.9	5.1	8.8	4.2	7.2	13.0

FACING AND BACKING MATERIALS

CMS Danskin Acoustics 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
- Melinex Facing
- 200gm Woven Glass Cloth Facing
- S-V1 Polymeric Coating
- SVG1 Vinyl Coated Glass Cloth Facing

INSTALLATION GUIDELINES

CMS Danskin Acoustic foam is easy to handle and simple to install. To facilitate easy handling it is recommended that it be installed in sheets not larger than 2m x 1.2m, but larger sizes are available to special order.

Plain CMS Danskin Acoustics Foam

Installing plain (unfaced and unbacked) CMS Danskin Acoustics foam can be accomplished by either bonding or using mechanical fixings, or a combination of both.

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

For vertical surfaces, it should be laid, cross bonded, from the bottom upwards using a suitable adhesive.

For overhead or inverted surfaces, a combination of bonding and mechanical fixings must be used to avoid sagging of the foam.

Support pins should be fixed to the surface at a rate of 9 pins per m². Once the pins are in place, the foam should be cross bonded, and from one side press the foam to firmly fix the material in place.

Self Adhesive foam

Installing foam with a self adhesive backing provides a quick and efficient means of applying the acoustic foam. First, ensure that the substrate surface is dry, clean and free from oil and grease (this can be achieved using a solvent cleaner). The self-adhesive backing is protected with a backing paper 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.

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.

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

When adhering onto vertical or inverted horizontal surfaces, it is recommended to additionally use a mechanical fixing method such as hangers to prevent sagging of the acoustic foam at 9 per m².

Note, when using acoustic foam of 25mm thickness or greater on vertical surfaces, it is necessary to additionally use mechanical fixing hangers to help support the acoustic foam to the substrate surface.

INSTALLATION ACCESSORIES

CMS Danskin Acoustics can recommend the following products to assist installation.

Aerosol Adhesive

SPRAYTACK is a specially formulated nonflammable 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.

STA-PUT is a simple, strong adhesive spray for bonding materials to concrete, brick, wood, plaster or metal walls and ceilings. Available in 500ml aerosol cans, which provide approximately 3.4m² coverage. Offers immediate bond strength.

Pins and Washers

CMS Danskin Acoustics 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 CMS Danskin Acoustics Foam is held in place by a selflocking washer, which is slid over the spike after the material is installed.

CMS DANSKIN ACOUSTICS

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IMPORTANT: Directions for use are given for guidance only and are not intended to form part of any contract. They should be varied or adapted to suit your particular materials or conditions of use. It is strongly recommended that prospective users test a sample of the product under their own conditions to satisfy themselves of its suitability for the intended purpose. For the Pre Completion Testing route to compliance with the Building Regulations CMS Danskin Acoustics may provide site test evidence (where available) concerning the use of their product in a similar overall construction. Test evidence of a product passing minimum standards in one construction is not a warranty or specification that the same product will meet the desired acoustic performance level in any other building. Such evidence can only be considered indicative and should not be relied upon.

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