

Part Code – PUNF Pyrosorb Duct Foam



Advantages

- Available in sheet form.
- Flexible and easy to cut.
- Easy to handle and install.
- **CFC and HCFC free.**
- Available with various facing options.
- Available with optional self-adhesive backing.

Description

PUNF Duct Foam is a fire retardant modified polyurethane acoustic foam designed to meet the stringent requirements of British Building Regulations.

Dark grey / black in colour PUNF foam is CFC and HCFC free.

Applications

Our PUNF Fire Retardant Acoustic Duct Foam is used for internal duct linings, thermal / acoustic machine linings and wall / ceiling acoustic absorptive panels. It can also be used as part of composites combined with acoustic barrier materials. It is extremely versatile and highly adaptive.

Technical Information

Standard sheet size: 1.2m x 1m
Standard thicknesses: 12mm and 25mm

Density: approx. 80-90 kg/m³
Thermal conductivity: 0.05 W/mK
Tensile strength: 88 kps
Elongation at break: 188%
Operating temperatures: 80°C (max. continuous)
110°C (intermittent)
-30°C (minimum)

Custom Audio Designs PUNF Duct Foam conforms to the following fire specifications:

Fire Tests

- BS 476: Parts 6&7 Class '0'
- BS 476: Part 5: 1979 Class P
- BS 476: Part 6: 1981 F.p.i index 8.5
- BS 476: Part 7: 1987 Class 1
- BS 4735 Char 4.5mm
- BS 5852 Part 2 Pass
- Civil Aviation CAA8 / FAA Pass
- Flammability (FMVSS 302) Zero burn rate
Self extinguishing
- ASTM 1692: 1974 Resists ignition
- UL 94 Classification 94-V-0
- ATS1000.001 Smoke Toxicity Pass

Bespoke

Subject to minimum orders we can cut this foam to any thickness from 6mm up to 200mm.

We can also custom trim sheets to specific sizes from 2m x 1.2m.

We can also supply a wide range of add-on facing options – contact our technical department for details.

Acoustic Performance

Random Incident Sound Absorption Coefficients

Material / Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	NRC
12mm PUNF	0.05	0.15	0.20	0.35	0.40	0.45	0.28
25mm PUNF	0.10	0.25	0.45	0.60	0.65	0.75	0.49
50mm PUNF	0.25	0.45	0.70	0.85	0.85	1.00	0.71

Ductwork Attenuation (dB) – Airborne noise

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

Installation Guidelines

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

The substrate should be dry, clean and free from oil and grease (this can be achieved using our solvent cleaner).

For vertical surface the foam 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.

Installing the self-adhesive version is similar to the above process. If the foam needs to be cut to size then this is best done before the adhesive backing is removed.

When the foam is cut to size peel back one edge of the backing paper, line the material up square, then gently peel off completely and press until the panel is fixed firmly.

Note: when using PUNF foam greater than 25mm thick on vertical surfaces it is necessary to use additional mechanical fixings to help support the acoustic foam to the substrate.