

## Class O Acoustic Foam

Class O Acoustic Foam is a flexible open cell material offering durability and excellent sound absorbing qualities. Class O Acoustic Foam is chemically inert, non-dusting and owing to its flexibility is easily applied to curved surfaces or deformed to fit complex shapes. Class O Acoustic Foam exceptionally fire resistant, meeting the requirements of Class O Building Regulations. Class O Acoustic Foam is available with a self-adhesive backing film to simplify installation. Optionally, Class O Acoustic Foam can be supplied with an extensive range of facing materials or spray applied surface coatings. Class O Acoustic Foam can be supplied in a composite form in combination with lead foil, polymeric barriers and damping sheets. Class O Acoustic Foam can be supplied in custom sizes and shapes.

### Applications

Class O Acoustic Foam can be used in a variety of applications, including construction, marine, automotive and H & V. Some applications use the product as a component sound absorbing or resilient spacing layer within a bespoke composite material. Common applications of Class O Acoustic Foam include: internal linings of offshore ductwork and ventilation equipment, spatial absorbers; absorption linings in marine vessels, vehicles, generators, compressors, process plant and electrical equipment.

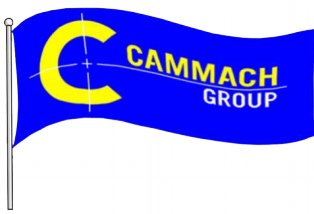


### Installation

Class O Acoustic Foam is normally glued to a backing material using a glue or by means of an optional self adhesive backing, (this can be ordered separately and its use is restricted, information is available in the specification sheet). Class O Acoustic Foam can be mechanically fixed, (using large headed fixings or spreader washers).

|                       |   |
|-----------------------|---|
| Density               | 108 kg/m <sup>3</sup>                                       |
| Indentation/Hardness  | 156N  |
| Tensile Strength      | 88kps   |
| Elongation at break   | 188%  |
| Operating Temperature | 80°C (max. continuous) 110°C (intermittent) -30°C (minimum) |





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## Technical Information

### Fire tests

- BS 476 Parts 6 & 7 Class O
- BS 476 part 5 1979 Class F
- BS 476 Part 6 1981 F P 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 O
- ATS 1000.001 Smoke Toxicity Pass

### Acoustic Performance

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

### Ductwork Attenuation (dB) -Airborne Noise

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

### Ductwork Attenuation (dB) Breakout Noise

| Material  | Duct Size | 125 | 250 | 500 | 1k  | 2k  | 4k   |
|-----------|-----------|-----|-----|-----|-----|-----|------|
| 25mm TCOF | 900x600   | 2.9 | 5.1 | 8.8 | 4.2 | 7.2 | 13.0 |

Note: The information and instructions provided in relation to our products are based on experimental and practical experience and are general recommendations. Local conditions can affect the results and as the qualification and experience of the personnel used in the installation is beyond the control of Cammach Group Ltd we do not take responsibility for the results obtained when using our products.

