

# **Class O Acoustic Foam**

Class O Acoustic Foam is a flexible open cell material offering durability and excellent sound absorbing qualities. The material is chemically inert, non-dusting and due to its flexibility is easily applied to curved surfaces or deformed to fit complex shapes. The product has the additional benefit of being exceptionally fire resistive, meeting the requirements of Class 'O' to Building Regulations. Class O Foam also meets euro class B-S1, D0 EN13501-1 6MM to 50MM tested with 1mm steel. Class O Acoustic Foam is available with a self-adhesive backing film to simplify installation. Optionally, the product can be supplied with an extensive range of facing materials or spray applied surface coatings. The material is commonly supplied in composite form in combination with polymeric barriers and damping sheets. The product is also available, cut to size or shape.

### **Applications**

The product is used in many varied applications and including construction, marine, automotive, H & V and OEM. Some applications use the product as a component sound absorbing or resilient spacing layer within a bespoke composite material. Common applications include: internal lining of ductwork & ventilation equipment to stop panel resonance and lower sound breakout; spatial absorbers; absorption linings in marine craft, automotive vehicles, generators, compressors, process plant and electrical equipment.



For further information call 01255 475 475



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#### Installation

The material is normally adhered to the background surface using a separate adhesive or by means of the optional self-adhesive backing. Additionally the product can be mechanically fixed (using large headed fixings or spreader washers).

## **Technical Information**

TAP Spec guide

**Density**: >90kg/M3 BS EN ISO 845

Colour:Dark GreyThickness:6mm to 100mmFire Performance\*:B-s1, d0 EN 13501-1Fire Propagation Index:<12</th>BS 476 pt 6Surface Spread of Flame:Class "1" BS 476 pt 7

Building Reg. 1991 (Fire Safety): Class "0" Building Regulations

Operating Temperature: -30 to 100°C UL94 Classification: 94 V-0 UL 94

Surface Burning Behavior: Class A ASTM E84-95

Air Erosion Resistance (4001-6000 FPM): Pass ASTM C1071-05 12.7
Fungus Resistance Test: Does not support growth ASTM G 21-96
Mildew (Fungus) Resistance: Does not support growth ASTM D-2020-92

Water Vapour Sorption: <9% ASTM C553-92

**Thermal Conductivity:** 0.3824 Btu-in/hr-ft<sup>2</sup>-°F ASTM C518-04

Corrosiveness (galvanized steel):

Hot Surface Performance @ 100°C 96hr:

Pass ASTM C665-95

ASTM C411-04

### **Acoustic Performance Information**

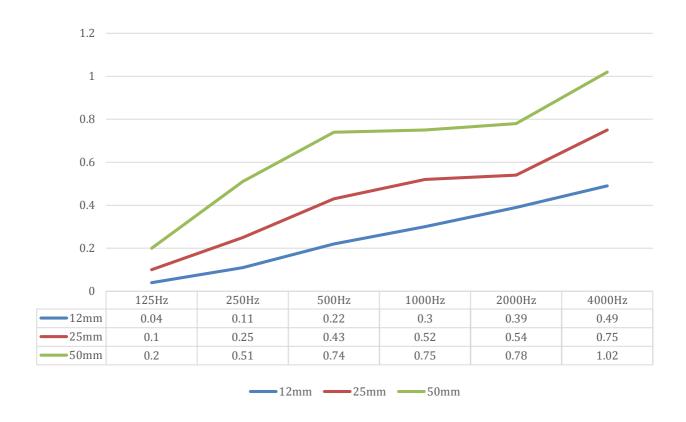
Sound Absorption @ 12mm (Random Incidence): NRC > 0.30 Sound Absorption @ 25mm (Random Incidence): NRC > 0.45 Sound Absorption @ 50mm (Random Incidence): NRC > 0.75

<sup>\*</sup>Euro Class certification 6mm – 50mm adhered to 1mm steel sheet, 50mm unadhered to 1mm steel sheet.



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## **Absorption Co-efficients**



Acoustic performance of Class O Foam – Measurement of Absorption in a Reverberation Room BS EN ISO 354:2003