

**BS EN ISO 354:2003**  
**Acoustics - Measurement of absorption in a reverberation room**

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**Client:** **TECH MATERIALS**  
 Unit D, Halesfield 10  
 Telford. TF7 4QP

**Product Identification:** 51mm Class O foam  
**Description of Sample:** Panel absorber

Room Volume: 220 m<sup>3</sup>                      Location: Acoustic Transmission Suite  
 Sample Size: 11.98 m<sup>2</sup>                      Test Room Large reverberation Room  
 Sample Thickness: 50 mm                      Condition: Clean

**Sample Out**    **Sample In**  
 Temperature 18.9 °C                                      Temperature 19.1 °C  
 Relative Humidity 51.0 %                                      Relative Humidity 52.4 %  
 Static Pressure 100.2 kPa                                      Static Pressure 100.2 kPa

**Random Incidence Sound Absorption Coefficient**

| Frequency<br>[Hz] | $T_1$<br>[s] | $T_2$<br>[s] | $\alpha_S$ |
|-------------------|--------------|--------------|------------|
| 100               | 4.12         | 3.23         | 0.19       |
| 125               | 4.64         | 3.17         | 0.29       |
| 160               | 3.68         | 2.66         | 0.31       |
| 200               | 3.62         | 2.39         | 0.43       |
| 250               | 3.79         | 2.38         | 0.47       |
| 315               | 4.16         | 2.31         | 0.57       |
| 400               | 4.25         | 2.26         | 0.62       |
| 500               | 4.50         | 2.28         | 0.63       |
| 630               | 4.51         | 2.21         | 0.68       |
| 800               | 4.50         | 2.19         | 0.70       |
| 1000              | 4.41         | 2.15         | 0.71       |
| 1250              | 4.17         | 2.05         | 0.73       |
| 1600              | 3.92         | 1.95         | 0.76       |
| 2000              | 3.60         | 1.87         | 0.76       |
| 2500              | 3.21         | 1.77         | 0.75       |
| 3150              | 2.73         | 1.57         | 0.81       |
| 4000              | 2.28         | 1.36         | 0.90       |
| 5000              | 1.80         | 1.17         | 0.91       |

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**Test reference: 2118-2036**

Date: 15 October 2015

University of Salford, School of Computing Science & Engineering

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**Acoustics - Measurement of absorption in a reverberation room**

**Client:** **TECH MATERIALS**  
 Unit D, Halesfield 10  
 Telford. TF7 4QP

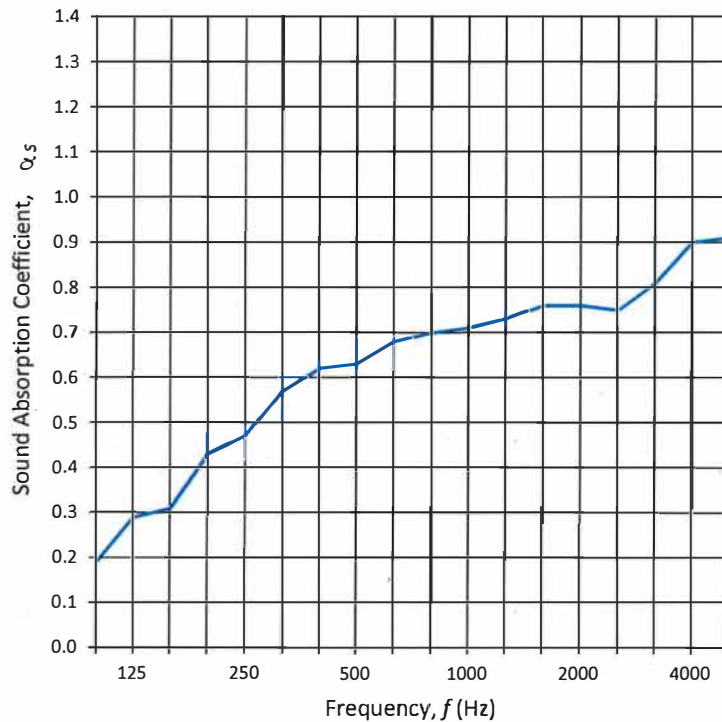
**Product Identification:** 51mm Class O foam  
**Description of Sample:** Panel absorber


**Room Volume:** 220 m<sup>3</sup>      **Location:** Acoustic Transmission Suite  
**Sample Size:** 11.98 m<sup>2</sup>      **Test Room** Large reverberation Room  
**Sample Thickness:** 50 mm      **Condition:** Clean

**Sample Out**      **Sample In**  
**Temperature** 18.9 °C      **Temperature** 19.1 °C  
**Relative Humidity** 51.0 %      **Relative Humidity** 52.4 %  
**Static Pressure** 100.2 kPa      **Static Pressure** 100.2 kPa

**Random Incidence Sound Absorption Coefficient**

| Frequency [Hz] | $\alpha_s$ |
|----------------|------------|
| 100            | 0.19       |
| 125            | 0.29       |
| 160            | 0.31       |
| 200            | 0.43       |
| 250            | 0.47       |
| 315            | 0.57       |
| 400            | 0.62       |
| 500            | 0.63       |
| 630            | 0.68       |
| 800            | 0.70       |
| 1000           | 0.71       |
| 1250           | 0.73       |
| 1600           | 0.76       |
| 2000           | 0.76       |
| 2500           | 0.75       |
| 3150           | 0.81       |
| 4000           | 0.90       |
| 5000           | 0.91       |



Signed: 

**Test reference: 2118-2036**

**Date: 15 October 2015**

University of Salford, School of Computing Science & Engineering

**BS EN ISO 11654:1997**  
**Acoustics - Sound absorbers for use in buildings**

**Client:** **TECH MATERIALS**  
 Unit D, Halesfield 10  
 Telford. TF7 4QP

**Product Identification:** 51mm Class O foam

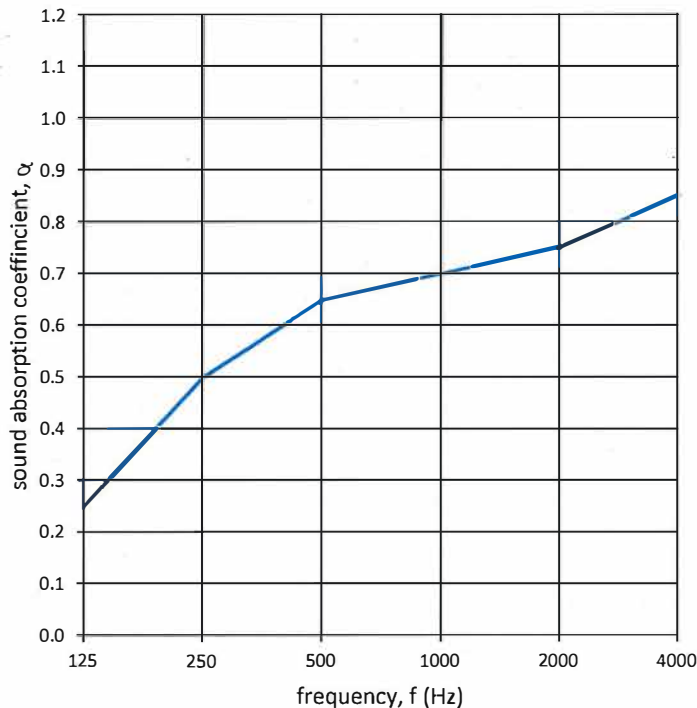
**Description of Sample:** Panel absorber

Room Volume: 220 m<sup>3</sup>      Location: Acoustic Transmission Suite  
 Sample Size: 11.98 m<sup>2</sup>      Test Room Large reverberation Room  
 Sample Thickness: 50 mm      Condition: Clean

|                   |           |                   |           |
|-------------------|-----------|-------------------|-----------|
| <b>Sample Out</b> |           | <b>Sample In</b>  |           |
| Temperature       | 18.9 °C   | Temperature       | 19.1 °C   |
| Relative Humidity | 51.0 %    | Relative Humidity | 52.4 %    |
| Static Pressure   | 100.2 kPa | Static Pressure   | 100.2 kPa |

**Random Incidence Sound Absorption Coefficient**

| Frequency [Hz] | $\alpha_{pi}$ |
|----------------|---------------|
| 125            | 0.25          |
| 250            | 0.50          |
| 500            | 0.65          |
| 1000           | 0.70          |
| 2000           | 0.75          |
| 4000           | 0.85          |



**$\alpha_w = 0.70$  (H)**

**Classification: C**

Signed: *[Handwritten Signature]*

If a shape indicator is given, it is strongly recommended to use this single-number rating in combination with the complete absorption coefficient curve that can be obtained on request.

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