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Contract: C/22710

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Confidential

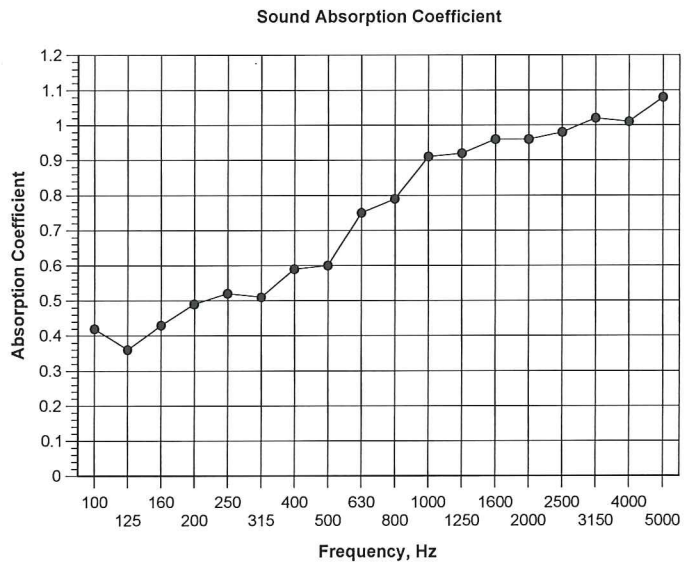
See SRL report C/22710/T01 for full details

The Laboratory Measurement of Random Incidence Sound Absorption to BS EN ISO 354:2003

Client: Armstrong
Test Date: 18/01/2014
Empty Room: Temperature: 17.1 °C Humidity: 64 %RH Pressure: 985 mbar
Room with Sample: Temperature: 16.8 °C Humidity: 54 %RH Pressure: 985 mbar
Sample Description: Ultima+ 600x600x19mm

Mounting Method: E-200
Sample Area: 12.96 m²
Chamber Volume: 300 m³

| Test 5 | | | | |
|---|--------|--------|--------------|--------------------------|
| Freq Hz | T1 sec | T2 sec | Absorp Coeff | Practical Absorp Coeff # |
| 50* | 5.55 | 4.08 | 0.24 | |
| 63* | 4.47 | 3.07 | 0.38 | n/a |
| 80* | 6.25 | 3.67 | 0.42 | |
| 100 | 7.58 | 4.08 | 0.42 | |
| 125 | 7.77 | 4.46 | 0.36 | 0.40 |
| 160 | 6.86 | 3.82 | 0.43 | |
| 200 | 6.93 | 3.65 | 0.49 | |
| 250 | 7.58 | 3.69 | 0.52 | 0.50 |
| 315 | 7.12 | 3.62 | 0.51 | |
| 400 | 6.59 | 3.23 | 0.59 | |
| 500 | 5.56 | 2.94 | 0.60 | 0.65 |
| 630 | 5.12 | 2.53 | 0.75 | |
| 800 | 5.50 | 2.55 | 0.79 | |
| 1000 | 5.99 | 2.44 | 0.91 | 0.85 |
| 1250 | 5.70 | 2.37 | 0.92 | |
| 1600 | 5.19 | 2.22 | 0.96 | |
| 2000 | 4.77 | 2.13 | 0.96 | 0.95 |
| 2500 | 4.35 | 2.00 | 0.98 | |
| 3150 | 3.71 | 1.80 | 1.02 | |
| 4000 | 3.00 | 1.59 | 1.01 | 1.00 |
| 5000 | 2.46 | 1.36 | 1.08 | |
| 6300* | 1.82 | 1.06 | 1.23 | |
| 8000* | 1.37 | 0.85 | 1.31 | n/a |
| 10000* | 1.00 | 0.65 | 1.48 | |
| <i>a_w</i> 0.70(H) | | | | |
| Class C | | | | |
| Calculated to EN ISO 11654:1997 | | | | |
| NRC 0.75 | | | | |
| Calculated to ASTM C 423-01 | | | | |
| * Denotes frequencies outside the range covered by BS EN ISO 354:2003 | | | | |
| T1, empty room reverberation time | | | | |
| T2, room reverberation time with sample | | | | |



Practical absorption coefficient, BS EN ISO 11654:1997

v4.3

Quality Manager

Deputy Technical Manager