

Confidential

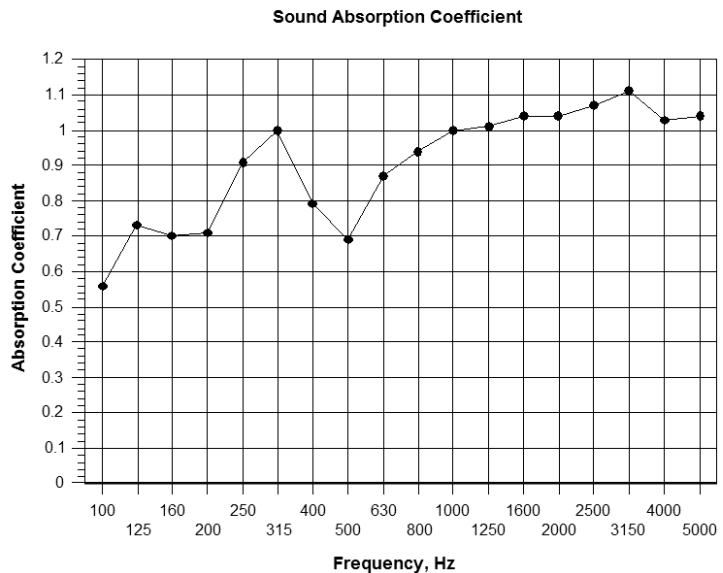
See SRL report C/23619/T01 for full details

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

**Client:** USG Middle East Ltd  
**Test Date:** 16/01/2017  
**Empty Room:** **Temperature:** 15.5 °C **Humidity:** 49 %RH **Pressure:** 1018 mbar  
**Room with Sample:** **Temperature:** 15.0 °C **Humidity:** 49 %RH **Pressure:** 1019 mbar  
**Sample Description:** Lay-in Panel Perforated 600x600x20mm with Infill Halcyon 19mm

**Mounting Method:** E-400  
**Sample Area:** 12.96 m<sup>2</sup>  
**Chamber Volume:** 300 m<sup>3</sup>

| Test 6  |        |        |              |                          |
|---------|--------|--------|--------------|--------------------------|
| Freq Hz | T1 sec | T2 sec | Absorp Coeff | Practical Absorp Coeff # |
| 50*     | 4.35   | 3.05   | 0.37         |                          |
| 63*     | 4.14   | 2.65   | 0.51         | n/a                      |
| 80*     | 5.42   | 2.94   | 0.59         |                          |
| 100     | 6.87   | 3.40   | 0.56         |                          |
| 125     | 7.35   | 3.02   | 0.73         | 0.65                     |
| 160     | 6.22   | 2.88   | 0.70         |                          |
| 200     | 6.40   | 2.90   | 0.71         |                          |
| 250     | 7.18   | 2.63   | 0.91         | 0.85                     |
| 315     | 6.92   | 2.44   | 1.00         |                          |
| 400     | 6.26   | 2.71   | 0.79         |                          |
| 500     | 5.39   | 2.72   | 0.69         | 0.80                     |
| 630     | 5.06   | 2.34   | 0.87         |                          |
| 800     | 5.51   | 2.32   | 0.94         |                          |
| 1000    | 5.85   | 2.29   | 1.00         | 1.00                     |
| 1250    | 5.49   | 2.22   | 1.01         |                          |
| 1600    | 4.94   | 2.09   | 1.04         |                          |
| 2000    | 4.47   | 2.00   | 1.04         | 1.00                     |
| 2500    | 3.93   | 1.85   | 1.07         |                          |
| 3150    | 3.33   | 1.67   | 1.11         |                          |
| 4000    | 2.64   | 1.52   | 1.03         | 1.00                     |
| 5000    | 2.01   | 1.28   | 1.04         |                          |
| 6300*   | 1.33   | 0.96   | 1.05         |                          |
| 8000*   | 1.13   | 0.85   | 1.04         | n/a                      |
| 10000*  | 0.80   | 0.62   | 1.30         |                          |



$a_w$  0.90  
**Class A**  
 Calculated to EN ISO 11654:1997  
**NRC** 0.90  
 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



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