

FRONTIER ACOUSTIC OFFICE SCREENS NCR RATING



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Product NRC Rating

18mm thick foam

Acoustic tiles are constructed with 18mm thick sound absorbing foam.

12mm sound absorbing equivalent test by University of Salford with NRC rating of 0.25.

25mm sound absorbing equivalent test by SRL with NRC rating of 0.55.

Therefore inferred results for 18mm thick foam is 0.43 NRC rating.

BS EN ISO 354:2003																																							
Acoustics - Measurement of absorption in a reverberation room																																							
Client:	Carpenter Ltd Dining Lodge Industrial Estate Glossop, Derbyshire SK13 6LE																																						
Object:	RX25140 12mm																																						
Size:	12.05 m ²																																						
Receiving room:	Volume: 220 m ³ Condition: clean Type: large reverberation room Location: acoustic transmission suite																																						
Sample out:	Temperature [°C]: 20.1 Humidity [%]: 32.6																																						
Sample in:	Temperature [°C]: 20.4 Humidity [%]: 34.1																																						
Sound absorption coefficient α_s 0.25 NRC																																							
<table border="1"> <thead> <tr> <th>Frequency Hz</th> <th>α_s</th> </tr> </thead> <tbody> <tr><td>100</td><td>0.02</td></tr> <tr><td>125</td><td>0.06</td></tr> <tr><td>160</td><td>0.05</td></tr> <tr><td>200</td><td>0.08</td></tr> <tr><td>250</td><td>0.08</td></tr> <tr><td>315</td><td>0.12</td></tr> <tr><td>400</td><td>0.12</td></tr> <tr><td>500</td><td>0.16</td></tr> <tr><td>630</td><td>0.22</td></tr> <tr><td>800</td><td>0.26</td></tr> <tr><td>1000</td><td>0.27</td></tr> <tr><td>1250</td><td>0.34</td></tr> <tr><td>1600</td><td>0.41</td></tr> <tr><td>2000</td><td>0.46</td></tr> <tr><td>2500</td><td>0.56</td></tr> <tr><td>3150</td><td>0.64</td></tr> <tr><td>4000</td><td>0.78</td></tr> <tr><td>5000</td><td>0.90</td></tr> </tbody> </table>	Frequency Hz	α_s	100	0.02	125	0.06	160	0.05	200	0.08	250	0.08	315	0.12	400	0.12	500	0.16	630	0.22	800	0.26	1000	0.27	1250	0.34	1600	0.41	2000	0.46	2500	0.56	3150	0.64	4000	0.78	5000	0.90	
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Test reference number: 1306-1040	Date: 14/05/13																																						
University of Salford, School of Computing, Science & Engineering	SSV1																																						



Test Report No: C/23 213/T01

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Date: 13/11/2015

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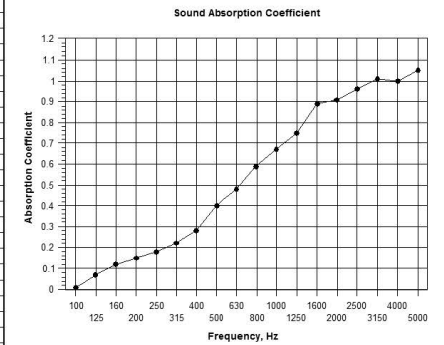
Data Sheet 1

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

Test Date: 16/10/2015
 Empty Room: Temperature: 16.3 °C Humidity: 66 %RH Pressure: 1013 mbar
 Room with Sample: Temperature: 16.7 °C Humidity: 65 %RH Pressure: 1013 mbar
 Sample Description: RX28150 25mm Thick

Mounting Method: A
 Sample Area: 11.85 m²
 Chamber Volume: 300 m³

Test 2				
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
50*	4.58	4.45	0.03	
63*	4.97	4.64	0.05	n/a
80*	5.32	5.11	0.03	
100	6.40	6.26	0.01	
125	6.72	6.08	0.07	0.05
160	6.64	5.68	0.12	
200	7.00	5.60	0.15	
250	7.30	5.52	0.18	0.20
315	7.03	5.07	0.22	
400	6.21	4.35	0.28	
500	5.32	3.49	0.40	0.40
630	5.11	3.20	0.48	
800	5.57	3.09	0.59	
1000	6.03	3.03	0.67	0.65
1250	5.82	2.81	0.75	
1600	5.31	2.47	0.89	
2000	4.82	2.33	0.91	0.90
2500	4.35	2.15	0.96	
3150	3.63	1.92	1.01	
4000	2.99	1.73	1.00	1.00
5000	2.38	1.48	1.05	
6300*	1.74	1.19	1.09	
8000*	1.35	0.99	1.11	n/a
10000*	0.95	0.76	1.09	



α_w 0.45(H)

Class D
 Calculated to EN ISO 11654:1997

NRC 0.55

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