Sound absorption coefficients according to ISO 354
Measurement of sound absorption in a reverberation room

Client: Autex Industries Ltd

Date of test: 21-Jun-07
Test room: Chamber A

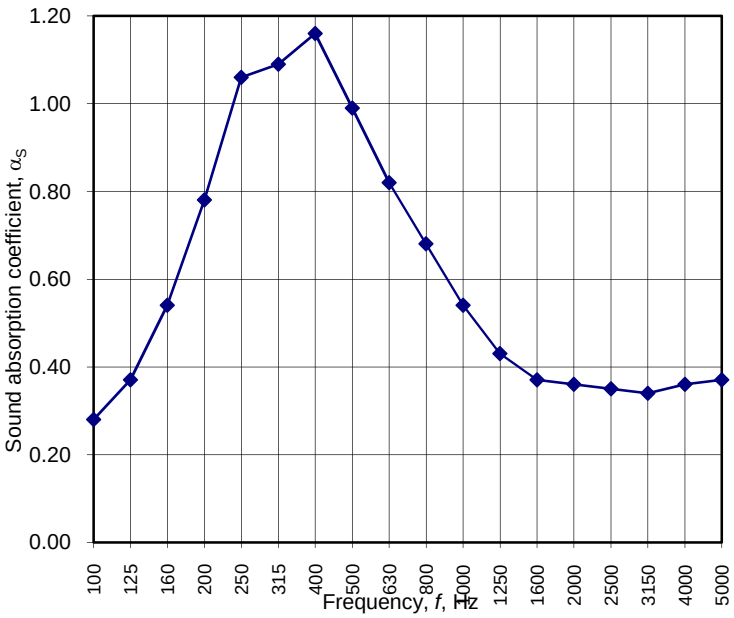
Description of the test specimen:
Multi-groove panels w AAB 35-50+17mm air gap

The shape of the reverberation chamber and its diffusion treatment are described in the Annexes of the full test report.
Associated computer files: RT-Empty: RT-Sample:

Area of test specimen: 9.84 m^2
Air temp in the test room: 15 ^oC
Air humidity in test room: 61 %

Number of sound source positions: 2
Number of microphone positions per sound source position: 12
Type of noise used: Pink random noise.
Type of mounting used: Type A

Frequency f (Hz)	T_1 - Empty Chamber (seconds)	T_2 - With Sample (seconds)	α_S One-third octave
100	**7.40**	**4.59**	**0.28**
125	**6.44**	**3.76**	**0.37**
160	**7.50**	**3.37**	**0.54**
200	**8.38**	**2.83**	**0.78**
250	**7.94**	**2.26**	**1.06**
315	**8.69**	**2.26**	**1.09**
400	**8.39**	**2.14**	**1.16**
500	**8.63**	**2.43**	**0.99**
630	**8.36**	**2.73**	**0.82**
800	**7.83**	**3.02**	**0.68**
1000	**6.91**	**3.26**	**0.54**
1250	**6.43**	**3.51**	**0.43**
1600	**5.82**	**3.52**	**0.37**
2000	**4.86**	**3.19**	**0.36**
2500	**4.16**	**2.90**	**0.35**
3150	**3.61**	**2.64**	**0.34**
4000	**3.00**	**2.27**	**0.36**
5000	**2.34**	**1.86**	**0.37**



Ratings according to ISO 11654

Weighted sound absorption coefficient:

α_W = 0.45(LM)

It is strongly recommended to use this single number rating in combination with the complete sound absorption coefficient curve.

Sound absorption class: D

Practical sound absorption coefficients

Frequency (Hz)	α_P
125	**0.40**
250	**1.00**
500	**1.00**
1000	**0.55**
2000	**0.35**
4000	**0.35**

Rating according to ASTM C423 - 99

Noise Reduction Coefficient = 0.75 **Sound Absorption Average = 0.72**

Evaluation based on laboratory measurement results obtained by an engineering method.

No. of test report: T0712-16
Name of test institute: University of Auckland Acoustics Testing Service.

Date:
Signature: **Preliminary Results Only**