

# SOUND ABSORPTION COEFFICIENT

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ALA Test No.: ALA 24-083-2  
 Client: Acoustics  
 Specimen: Paneline Perf metal strip  
 Specimen: E-200 Mounting

**Description of Specimen:**

**Paneline Perforated metal strip**

- o Perforated Paneline slats - 84mm wide
- o Bridge perforated , open on one side of bridge
- o Metal thickness BMT 0.35mm; coated thickness 0.42mm
- o 16mm spacing between slats
- o **Installed in a Type E-200 Mounting (200mm air gap), over**
- o 75mm thick Ecowool at 9 kg/m3 density
- o Supported on wire mesh within the E-200 Frame

Tested To: AS ISO 354  
 Meas. Date: 9-Jan-24

**Specimen Installation**

Specimen size: 10.8 m2  
 Test Specimen Mounting: Type: E-200  
 Air Gap behind Specimen: 200mm mm  
 Location of Specimen: Floor central

**Test Facility**

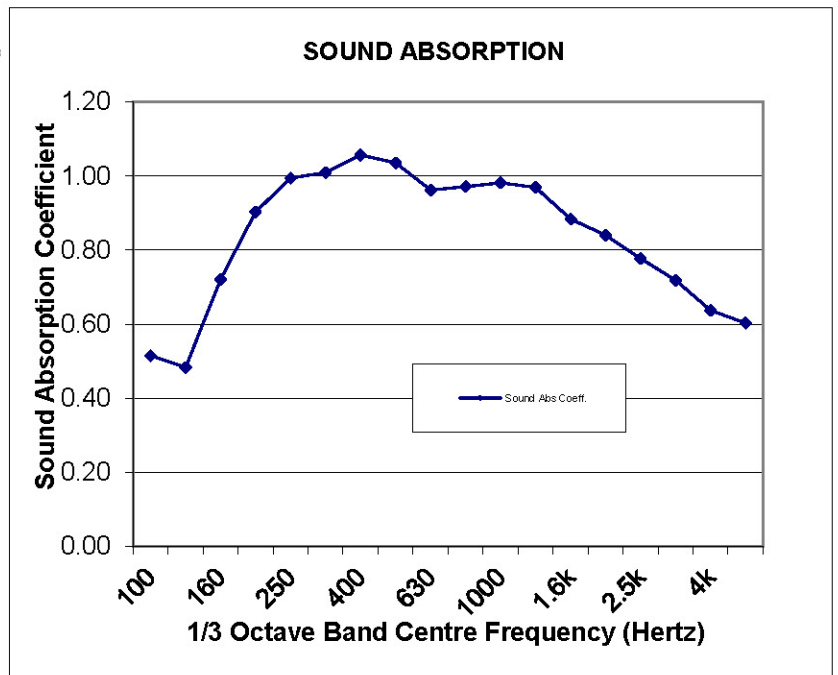
Shape of Reverb Chamber: 7m x 6m x 5m  
 Volume of Reverb Chamber: 208 m3  
 Area of Diffusers: 46.1 m2

	Specimen in Room	Empty Room	
Temp:	31.6	31.8	C
RH:	46.0	46.0	%
Atmos. Pressure:	1007	1007	hPa

Weighted Sound Absorption Coefficient: **α<sub>w</sub>** 0.80 L \* \*  
 Sound Absorption Average: **SAA:** 0.95  
 Noise Reduction Coefficient: **NRC:** 0.95

1/3 Octave Centre Frequency	RT for Empty Room	RT for room with Sample	Sound Absorption Coefficient
Hz	Sec.	Sec.	

100	6.50	3.09	0.51
125	7.85	3.48	0.48
160	7.77	2.72	0.72
200	7.90	2.35	0.90
250	7.95	2.20	0.99
315	8.33	2.20	1.01
400	8.67	2.15	1.06
500	8.02	2.14	1.04
630	6.98	2.17	0.96
800	5.65	2.01	0.97
1k	4.37	1.81	0.98
1.25k	3.79	1.71	0.97
1.6k	3.49	1.73	0.88
2k	3.37	1.74	0.84
2.5k	3.11	1.73	0.78
3.15k	2.78	1.68	0.72
4k	2.32	1.56	0.64
5k	2.00	1.43	0.60



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