

Acoustic Performance - Quietstone Light

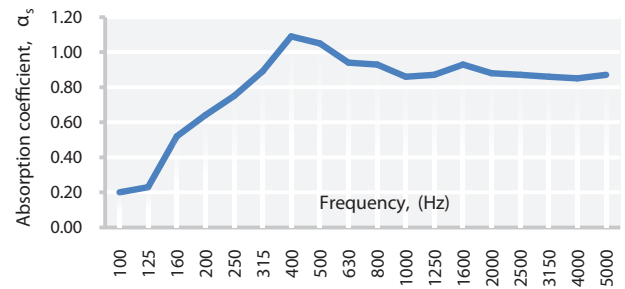
85mm panel + 12mm air cavity (fixings)

BS EN ISO 1793-1: 1998 DL_{α} = 9 dB(A) Cat A3

BS EN ISO 11654: 1998 α_w = 0.95
Classification: A

Comments: A high performance option with excellent durability. This build-up is designed for mechanical fixings to concrete

Frequency, Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
α_s	0.20	0.23	0.52	0.64	0.75	0.89	1.09	1.05	0.94	0.93	0.86	0.87	0.93	0.88	0.87	0.86	0.85	0.87
α_p		0.30			0.75			1.00						0.90			0.85	



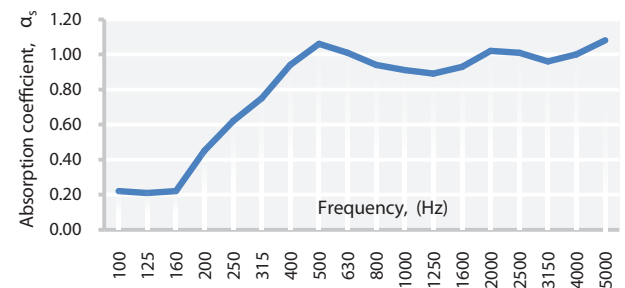
50mm panel + 25mm air cavity

BS EN ISO 1793-1: 1998 DL_{α} = 10 dB(A) Cat A3

BS EN ISO 11654: 1998 α_w = 0.90
Classification: A

Comments: The 25mm air gap allows for flexible mechanical fixing options. Suitable for ceilings and walls, inside and out

Frequency, Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
α_s	0.22	0.21	0.22	0.45	0.62	0.75	0.94	1.06	1.01	0.94	0.91	0.89	0.93	1.02	1.01	0.96	1.00	0.98
α_p		0.20			0.60			1.00			0.90			1.00			1.00	



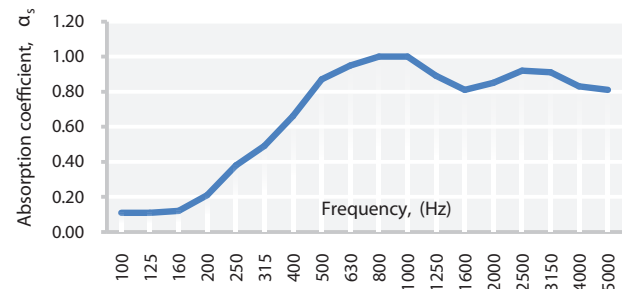
50mm panel

BS EN ISO 1793-1: 1998 DL_{α} = 8 dB(A) Cat A3

BS EN ISO 11654: 1998 α_w = 0.65 (M) (H)
Classification: C

Comments: Installation is simple when bonding with a cement based adhesive. High impact resistance achieved

Frequency, Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
α_s	0.11	0.11	0.12	0.21	0.38	0.49	0.66	0.87	0.95	1.00	1.00	0.89	0.81	0.85	0.92	0.91	0.83	0.81
α_p		0.10			0.35			0.85			0.95			0.85			0.85	



25mm panel + 50mm mineral fibre

BS EN ISO 1793-1: 1998 DL_{α} = 12 dB(A) Cat A4

BS EN ISO 11654: 1998 α_w = 0.90 (L)
Classification: A

Comments: This build-up delivers high performance but slightly reduces the impact resistance

Frequency, Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
α_s	0.32	0.56	0.79	0.94	1.05	1.15	1.17	1.13	1.03	1.02	0.92	0.83	0.82	0.77	0.80	0.87	0.98	1.08
α_p		0.55			1.05			1.10			0.90			0.80			1.00	

