

Acoustical Data

The acoustical data represented here is the octave band data from the acoustical test reports. For the complete acoustical tests reports, please contact Pyrok Inc.

Note: When comparing acoustical data of different products it is important to note the mounting of the acoustical specimen as well as how the exposed edges are treated in the laboratory. The data reported here is the most conservative as the edges of the test samples have been sealed with a metal or wooden frame. In this manner there is no edge absorption. Edge absorption artificially inflates a product's acoustical value in the laboratory and this value is not representative of the field applied material. Some products have been tested with only duct tape on the edges of the acoustical samples instead of wood or metal frames. It is estimated that that acoustical data obtained in this manner is 10% - 20% higher than if the data were obtained with metal or wood frame negating edge absorption of the test specimen.

Sound Absorption Coefficients							
Octave Board Center Frequencies (Hertz)							
Test Description	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	NRC
StarSilent system with 20mm air gap	.12	.35	.61	.66	.59	.49	.55
StarSilent system with 20mm air gap with 1 in of 1.7 PCF fiberglass	.21	.62	.73	.68	.53	.49	.65
StarSilent system with 20mm air gap and painted (2coats)	.08	.38	.60	.64	.54	.52	.55
StarSilent System with 16 inch air gap (E 400 mounting)	.61	.60	.52	.53	.58	.58	.55
StarSilent system with 16 inch air gap with 2 inches of 1.7 ACF fiberglass (E400 mounting)	.44	.60	.61	.60	.54	.62	.60
StarSilent system with 3 5/8 inch air gap with 2 inches of 1.7 PCF fiberglass	.71	.81	.68	.52	.49	.54	.65
StarSilent board only with 3 5/8 inch air gap	.27	.77	.94	.71	.59	.75	.75
StarSilent board only with 3 5/8 inch air gap with 2 inches of 1.7 PCF fiberglass	.41	1.08	1.01	.71	.70	.70	.90
StarSilent board with basecoat plaster only with 16 inch air gap (SE 400 mounting)	.60	.75	.59	.60	.67	.71	.65
StarSilent Atec system on 16 inch air gap (E 400 mounting)	.50	.67	.63	.79	.82	.75	.75
StarSilent Atec Alumi system on 16 inch air gap (E 400 mounting)	.27	.48	.83	.97	.78	.80	.75
StarSilent Atec board only on 20mm air gap	.12	.33	.89	1.03	.89	.93	.80
StarSilent Atec board only on 2 1/2 inch air gap	.16	.61	1.07	.86	.94	.94	.85
StarSilent Atec board only on 3 5/8 inch air gap	.38	.98	.99	.77	.97	.93	.95
StarSilent finishes over 1 inch Acoustement Plaster 40 (A mounting)	.20	.54	.59	.53	.45	.56	.55
5/8 inch Acoustement Plaster 20 over StarSilent board on 16 inch air gap (E 400 mounting)	.56	.44	.51	.71	.82	.82	.60
StarSilent Atec Alumi system with 20mm air gap	.20	.69	.80	.92	.75	.75	.80
StarSilent system on 8mm StarSilent board over 16 inch air gap (E400 mounting)	.68	.73	.59	.60	.64	.57	.65