

ACOUSTICS

The acoustics of an office, school or home environment have an enormous effect on our well-being. The right acoustics reduce the reverberation time in a room. This positively affects noise levels and the intelligibility of speech.

The unique structure of our Organic panels ensures a very positive effect on the acoustics of a room.

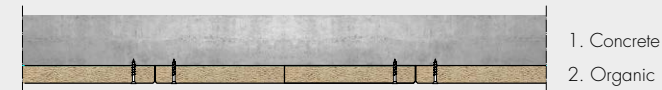
The open fibre structure absorbs a lot of the noise energy emitted, reducing reverberation time and the noise level in a room.

To assess the performance of our panels, we conducted thorough sound absorption tests for each type of Organic panel.

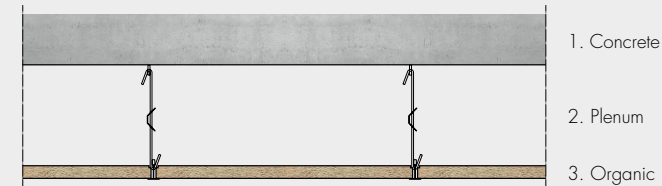
Three different setups were tested;

1. panels mounted directly on concrete,
2. with a plenum
3. with a plenum and extra insulation behind the panel.

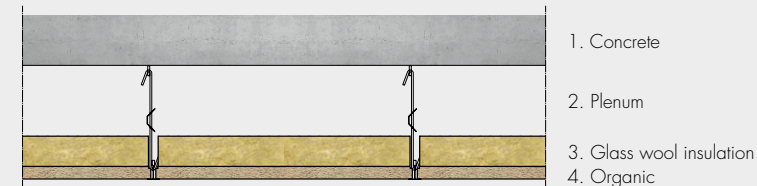
DIRECT FIXING



PLENUM



PLENUM WITH INSULATION



Panel type	125	250	500	1000	2000	4000	α_w	NRC	SAA	Report number
Mounted directly to concrete										
Organic 25	0.10	0.20	0.30	0.55	0.85	0.70	0.40	0.50	0.44	AC15-26055621
Organic 35	0.10	0.25	0.45	0.80	0.90	0.85	0.50	0.60	0.56	AC15-26055621
Organic Twin 25	0.10	0.35	0.70	0.95	1.00	1.00	0.65	0.75	0.70	AC15-26055621
Organic Twin 35	0.15	0.55	0.90	1.00	1.00	1.00	0.85	0.85	0.80	AC15-26055621
Organic Twin 50	0.20	0.65	1.00	1.00	1.00	0.90	0.95	0.95	0.86	AC15-26055621
Organic Mineral 50	0.20	0.55	1.00	1.00	0.90	1.00	0.85	0.90	0.83	AC15-26055621
Organic Mineral 50 Authentic	0.10	0.60	1.00	0.85	0.75	0.95	0.80	0.80	0.76	AC15-26055621
Organic Mineral 75	0.35	0.90	1.00	1.00	0.90	0.95	1.00	1.00	0.91	AC15-26055621
Organic Mineral 75 Authentic	0.35	1.00	1.00	0.85	0.80	0.90	0.85	0.90	0.85	AC15-26055621
Organic Mineral 100	0.45	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	AC15-26055621
Organic Mineral 100 Authentic	0.60	1.00	1.00	0.85	0.80	0.95	0.85	0.95	0.85	AC15-26055621
Plenum 50 mm										
Organic Twin 25	0.25	0.60	0.70	0.90	1.00	1.00	0.80	0.80	0.74	AC15-26055621
Organic Twin 25 Authentic	0.25	0.60	0.75	0.85	0.95	0.90	0.80	0.80	0.72	AC15-26055621
Organic Twin 35	0.25	0.70	0.90	1.00	1.00	1.00	0.95	0.90	0.84	AC15-26055621
Organic Twin 35 Authentic	0.30	0.65	0.80	0.95	0.95	0.85	0.85	0.85	0.78	AC15-26055621
Organic Mineral 50	0.30	0.80	1.00	1.00	0.95	1.00	1.00	1.00	0.91	AC15-26055621
Plenum 200 mm										
Organic 15	0.20	0.45	0.35	0.50	0.60	0.60	0.50	0.50	0.43	AC15-26055621
Organic 25	0.25	0.55	0.55	0.50	0.65	0.80	0.55	0.60	0.52	AC15-26055621
Organic 25 Authentic	0.25	0.60	0.55	0.45	0.60	0.80	0.55	0.55	0.50	AC15-26055621
Organic 35	0.30	0.65	0.60	0.55	0.75	0.90	0.60	0.65	0.58	AC15-26055621
Organic 35 Authentic	0.40	0.70	0.60	0.55	0.80	0.90	0.60	0.70	0.62	AC15-26055621
Organic Twin 25	0.35	0.45	0.65	0.95	1.00	1.00	0.70	0.80	0.72	AC15-26055621
Organic Twin 25 Authentic	0.45	0.60	0.70	0.80	0.95	0.95	0.80	0.80	0.70	AC15-26055621
Organic Twin 35	0.45	0.65	0.85	1.00	1.00	1.00	0.90	0.90	0.82	AC15-26055621
Organic Twin 35 Authentic	0.40	0.55	0.80	0.95	1.00	0.90	0.80	0.80	0.76	AC15-26055621
Organic Twin 50	0.40	0.70	0.95	1.00	1.00	0.95	0.95	0.90	0.85	AC15-26055621
Plenum 200 mm + 60 mm Glass wool insulation										
Organic 25	0.60	1.00	1.00	0.95	0.85	1.00	0.95	0.96	0.88	AC15-26055621
Organic 25 Authentic	0.60	0.90	0.95	0.85	0.75	0.95	0.85	0.90	0.80	AC15-26055621
Organic 35	0.60	1.00	1.00	0.95	0.95	1.00	0.95	1.00	0.91	AC15-26055621
Organic 35 Authentic	0.70	0.85	0.80	0.75	0.90	1.00	0.80	0.85	0.76	AC15-26055621