

Predicted Weighted Sound Reduction Index (R_w) values of Celcon blockwork

TSD 55



Block Thickness (mm)	Mass (m) of wall construction (kg/m ²)									Predicted Weighted Sound Reduction Index (R _w) (dB)								
	Unfinished surfaces			Finished both sides with						Unfinished surfaces			Finished both sides with					
				13mm Lwt Plaster			13mm Dense Plaster						13mm Lwt Plaster			13mm Dense Plaster		
	Solar	Standard	High or Super strength	Solar	Standard	High or Super strength	Solar	Standard	High or Super strength	Solar	Standard	High or Super Strength	Solar	Standard	High or Super Strength	Solar	Standard	High or Super Strength
75	43	53	62	63	73	82	91	101	110	33.6	36.1	38.1	38.2	40.0	41.4	42.6	43.9	45.0
100	57	70	83	77	90	103	105	118	131	37.0	39.6	41.5	40.6	42.6	44.1	44.4	45.8	47.0
140	80	98	116	100	118	136	128	146	164	41.1	43.6	45.6	43.8	45.8	47.5	46.7	48.4	49.7
150	85	106	124	105	126	144	133	154	172	41.9	44.4	46.4	44.4	46.5	48.2	47.3	49.0	50.3
215	122	151	178	142	171	198	170	199	226	46.2	48.8	50.7	48.0	50.3	52.0	50.2	52.1	53.6
275	156	193	228	176	213	248	204	241	276	49.2	51.7	53.7	50.6	52.9	54.7	52.4	54.4	56.0
300	171	211	249	191	231	269	219	259	297	50.2	52.8	54.8	51.6	53.9	55.7	53.2	55.3	56.9
355	202	250	294	222	270	314	250	298	342	52.3	54.8	56.8	53.4	55.7	57.6	54.8	56.9	58.6

AIRCRETE (AUTOCLAVED AERATED CONCRETE) MASS LAW : $R_w = 27.7 \text{ Log } (m) - 11.6$
 From Rilem Recommended Practice: Autoclaved Aerated Concrete - Properties Testing and Design.

Note: Not all thicknesses shown are available from stock for all Grades. Consult H+H Sales Office on 01732 886444 for latest information on availability.