

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	60	63	73	80	91	101	108	33.6	36.1	37.6	38.2	40.0	41.1	42.6	43.9	44.7
100	57	70	80	77	90	100	105	118	128	37.0	39.6	41.1	40.6	42.6	43.8	44.4	45.8	46.8
140	80	98	112	100	118	132	128	146	160	41.1	43.6	45.2	43.8	45.8	47.1	46.7	48.4	49.5
150	85	106	120	105	126	140	133	154	168	41.9	44.4	46.0	44.4	46.5	47.8	47.3	49.0	50.0
215	122	151	172	142	171	192	170	199	220	46.2	48.8	50.3	48.0	50.3	51.6	50.2	52.1	53.3
275	156	193	220	176	213	240	204	241	268	49.2	51.7	53.3	50.6	52.9	54.3	52.4	54.4	55.7
300	171	211	240	191	231	260	219	259	288	50.2	52.8	54.3	51.6	53.9	55.3	53.2	55.3	56.5
355	202	250	284	222	270	304	250	298	332	52.3	54.8	56.4	53.4	55.7	57.2	54.8	56.9	58.2

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.