

Results acoustic insulation

	Thickness / R value	Lambda declared Value	Airborne sound insulation (with 2 gypsum plates 12.5 mm)
Home-Iso Premium	50 (R=1.67)	0.031	$R_w = 45$ dB
Home-Iso Premium	60 (R=2.00)	0.031	$R_w = 47$ dB
Home-Iso Performance	100 (R=3.13)	0.033	$R_w = 50$ dB
Home-Iso Universal	45 (R=1.29)	0.035	$R_w = 49$ dB
Home-Iso Universal	100 (R=2.87)	0.035	$R_w = 49$ dB
Home-Iso Roofbase	45 (R=1.10)	0.041	$R_w = 43$ dB
Home-Iso Roofbase	80 (R=1.46)	0.041	$R_w = 47$ dB
Home-Iso Roofbase	100 (R=2.44)	0.041	$R_w = 49$ dB
Home-Iso Roofbase	125 (R=3.05)	0.041	$R_w = 53$ dB
Home-Iso Roofbase	180 (R=4.39)	0.041	$R_w = 56$ dB

Results acoustic absorption (reverberation room) acc ISO 11654

	Thickness / R value	Lambda declared value	Soundabsorption coefficient α_w	Class
Home-Iso Premium	50 (R=1.67)	0.030	$\alpha_w = 0.95$	A
Home-Iso Premium	60 (R=2.00)	0.030	$\alpha_w = 1.00$	A
Home-Iso Performance	60 (R=1.88)	0.032	$\alpha_w = 1.00$	A
Home-Iso Performance	100 (R=3.13)	0.032	$\alpha_w = 1.00$	A
Home-Iso Universal	100 (R=2.87)	0.0348	$\alpha_w = 1.00$	A
Home-Iso Roofbase	60 (R=1.50)	0.040	$\alpha_w = 0.80$	B