



Audioshield

An Australian Glass Group Product



Acoustic Laminate,
Your Genuine Solution
for your Quiet Space

When it comes to noise, you want to make sure you know what type of noise you want to block. Low base type noise is low frequency (Hz) while high treble type noise is high frequency (Hz). Mass (thicker glass make-ups) is good for blocking low frequency noise while acoustic laminate is ideal for blocking high frequency noise. Combine the two if needing to block a range of different noise types. So Weighted Average Rw figures alone can be misleading if you do not identify the noise type and look at the dB blocking factor in that frequency range.

Key Terminology

Decibel (dB)

How sound is measured. A change of 3 dB is only just recognisable while a change in 5 dB is an obvious change in noise level.

Weighted Reduction (Rw)

An average Weighted Sound Reduction Index of dB across a full range of Hertz frequencies.

Hertz (Hz)

A standard unit for measuring frequency (repetition of soundwaves per second). Low frequency noise is bass and high frequency noise is treble.

An increase of 10 dB will be twice as loud while a decrease of 10 dB will be half as loud.

Recommended dB performance*				
	Offices & Working Environments (45 dB)	Libraries & Living Rooms (40 dB)	Schools & Universities (35 dB)	Meditation & Sleeping Environments (30 dB)
Conversational Speaking 65 dB	20 dB Low-Mid Frequency Hz	25 dB Low-Mid Frequency Hz	30 dB Low-Mid Frequency Hz	35 dB Low-Mid Frequency Hz
Low level traffic 70 dB	25 dB Low Frequency Hz	30 dB Low Frequency Hz	35 dB Low Frequency Hz	40 dB Low Frequency Hz
High level traffic 80 dB	35 dB High Frequency Hz	40 dB High Frequency Hz	45 dB High Frequency Hz	50 dB High Frequency Hz
Aircraft close to Airport 97 dB	52 dB High Frequency Hz	57 dB High Frequency Hz	62 dB High Frequency Hz	67 dB High Frequency Hz

Acoustic Performance*	Octave Centre Frequency Performance							Total Thickness	Total Weight
	Rw (dB)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
Single Glazed									
4mm Clear Float	30	22	22	27	32	35	28	4.00mm	9.80 kg/m ²
6mm Clear Float	31	25	25	29	34	29	36	6.00mm	14.71 kg/m ²
6.38mm Standard Laminate	32	26	25	30	34	31	39	6.38mm	15.11 kg/m ²
6.76mm Audioshield™	36	27	28	31	36	39	39	6.76mm	15.52 kg/m ²
8.76mm Audioshield™	37	28	30	33	37	39	43	8.76mm	20.36 kg/m ²
10.76mm Audioshield™	38	29	30	34	38	39	46	10.76mm	25.32 kg/m ²
12.76mm Audioshield™	39	29	32	35	39	40	50	12.76mm	30.23 kg/m ²
Double Glazed Units (DGU)									
4mm Clear / 12mm argon / 4mm Clear	32	25	17	28	37	41	37	20.00mm	19.61 kg/m ²
6mm Clear / 12mm argon / 6mm Clear	34	23	22	30	38	33	43	24.00mm	29.41 kg/m ²
6mm Clear / 12mm argon / 6.76mm Audioshield™	41	27	26	37	44	44	51	24.76mm	30.23 kg/m ²
6mm Clear / 12mm argon / 10.76mm Audioshield™	42	25	28	38	45	44	52	28.76mm	40.03 kg/m ²
6mm Clear / 18mm argon / 12.76mm Audioshield™	44	26	32	40	46	46	59	36.76mm	44.93 kg/m ²
8mm Clear / 20mm argon / 12.76mm Audioshield™	47	29	37	44	48	51	58	40.76mm	49.83 kg/m ²
12.76mm Audioshield™ / 20mm argon / 12.76mm Audioshield™	51	30	36	43	47	46	61	45.52mm	60.45 kg/m ²
20.76mm Audioshield™ / 16mm argon / 20.76mm Audioshield™	54	36	45	52	59	66	84	57.52mm	100.16 kg/m ²
Triple Glazed Units (TGU)									
8.76 Audioshield™ / 10mm argon / 12mm Clear / 18mm argon / 20.76 Audioshield™	55	43	43	53	55	69	72	69.52mm	100.16 kg/m ²

*Note: all data is glass only and generalised for comparison. The condition of other buildings materials and installation can cause air leakage around the windows, walls, floors and ceilings which will impact sound penetration. For best results consult a qualified sound engineer.

Proudly manufactured, stocked and supported in Australia by Australian Glass Group®

Australian Glass Group offers Audioshield™ available as:

- Single glaze application:
 - 6.76mm, 8.76mm, 10.76mm, 12.76mm
 - Maximum size: 2440mm x 3660mm
- Further custom-made make ups available
- Can be combined within an Insulglass® Insulated Glass Unit (IGU)



Australian Glass Group®

agg.com.au | info@agg.com.au
ph: 1300 768 024 NSW | VIC | TAS