Audioshield®

An Australian Glass Group Product

Acoustic Laminate, Your Genuine Solution for your Quiet Space

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Audioshield® is a high performance acoustic laminate that uses a special interlayer for superior sound reduction against a full range of noises.

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.

% Improvements compared to Single Glaze 3mm							
	Single Glaze	Single Glaze Audioshield®	Double Glaze		Double Glaze with Audioshield® Acoustic Laminate		
	3mm	6.5mm	4/12/4mm	6/12/6mm	4/12/6.5mm	6/12/6.5mm	10.5/12/12.5mm
Rw – an overall comparable but not specific to low or high frequency noise	**28 dB**	29%	14%	21%	32%	46%	71%
Low Frequency Bass (250 Hz) e.g. Low Traffic noise	**20 dB**	40%	10%	25%	10%	30%	90%
High Frequency Treble (2000 Hz) e.g. High Traffic noise	**32 dB**	22%	6%	13%	47%	38%	84%

Acoustic Performance*		Octave Centre Frequency Performance							
	Rw	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Total Thickness	Total Weight
Single Glazed									
3mm Clear Float	**28**	11	20	24	29	32	23	3.00mm	7.5 kg/m²
4mm Clear Float	**30**	22	22	27	32	35	28	4.00mm	10.0 kg/m²
6mm Clear Float	**31**	25	25	29	34	29	36	6.00mm	15.0 kg/m²
6.38mm Standard Laminate	**32**	26	25	30	34	31	39	6.38mm	15.4 kg/m²
6.5mm Audioshield®	**36**	27	28	31	36	39	39	6.50mm	15.5 kg/m²
8.5mm Audioshield®	**37**	28	30	33	37	39	43	8.50mm	20.5 kg/m²
10.5mm Audioshield®	**38**	29	30	34	38	39	46	10.50mm	25.5 kg/m²
12.5mm Audioshield®	**39**	29	32	35	39	40	50	12.50mm	30.5 kg/m²
Double Glazed Units (DGU)									
4mm Clear / 12mm argon / 4mm Clear	**32**	25	22	28	37	34	37	20.00mm	20.0 kg/m²
6mm Clear / 12mm argon / 6mm Clear	**34**	23	25	30	38	36	43	24.00mm	30.0 kg/m²
6mm Clear / 12mm argon / 6.38mm Standard Laminate	**35**	27	24	31	38	41	53	24.38mm	30.4 kg/m²
6mm Clear / 12mm argon / 6.5mm Audioshield®	**41**	27	26	37	44	44	51	24.50mm	30.5 kg/m²
8.5mm Audioshield® / 12mm argon / 12.5mm Audioshield®	**47**	27	38	45	56	59	70	33.00mm	51.0 kg/m²
12.5mm Audioshield® / 20mm argon / 12.5mm Audioshield®	**51**	30	36	43	47	46	61	45.00mm	61.0 kg/m²
Triple Glazed Units (TGU)									
12.5mm Audioshield®/ 14mm argon / 12mm Clear / 18mm argon / 12.5mm Audioshield®	**55**	38	43	53	56	67	75	69.00mm	91.0 kg/m²

*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:

- Grade A safety
- Single glaze application:
  - 6.5mm, 8.5mm, 10.5mm, 12.5mm
  - Maximum size: 2440mm x 3660mm
- Can be combined within an Insulglass® Insulated Glass Unit (IGU)

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