An MHG Company

Silencia™

Noise Reducing Acoustic Solutions

solos glass
see the possibilities

Silencia™ Noise Reducing Acoustic Solutions

Effective protection from unwanted noise

As urban areas develop, the volume of traffic increases, the density of buildings increase and the pressure on available land becomes more acute. The subsequent effect of increased levels of noise on the lives and comfort levels of people is becoming increasingly apparent and for some, increasingly untenable.

Silencia™ is one of the most effective glass types in reducing unwanted noise being transmitted through the glazing. Silencia™ can be both single glazed or incorporated as part of any one of the SOLOS Glass IGU range dependent on the level of noise reduction required.

Using a special three layer acoustic interlayer, Silencia™ significantly reduces sound transmission by 'dampening' a broad range of noise levels across a wide frequency range to ensure enhanced sound insulation.

Focusing on frequencies within the 1000-3500Hz range, Silencia™ is therefore effective in reducing the level of noise transmission from a number of different sources including; traffic, aircraft, trains and voices.

The special noise absorbing qualities of the Silencia™ interlayer enables thinner and lighter glass to be used to achieve the noise reduction performance associated with thicker and heavier glass types.

Available in a standard range of thicknesses from 6.5mm through to 12.5mm, Silencia™ can also be incorporated into KlymetControl® IGU to achieve noise reduction levels of up to 45dB.

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Effective protection from unwanted noise

Sound insulation levels may not be satisfactory to all occupants and are contingent on a number of considerations being in place; gaps being sealed, space being under the house and individual comfort levels. It is always recommended to seek the advice of an acoustic engineer or acoustic consultant to create a solution specific to the type of room, its conditions and the preferred level of noise transmission.

Each glass within the Silencia™ range incorporates a special interlayer which has been specifically designed to reduce the co-incidence dip and significantly improve the noise reduction properties, maximising the available performance possible for each relevant thickness.

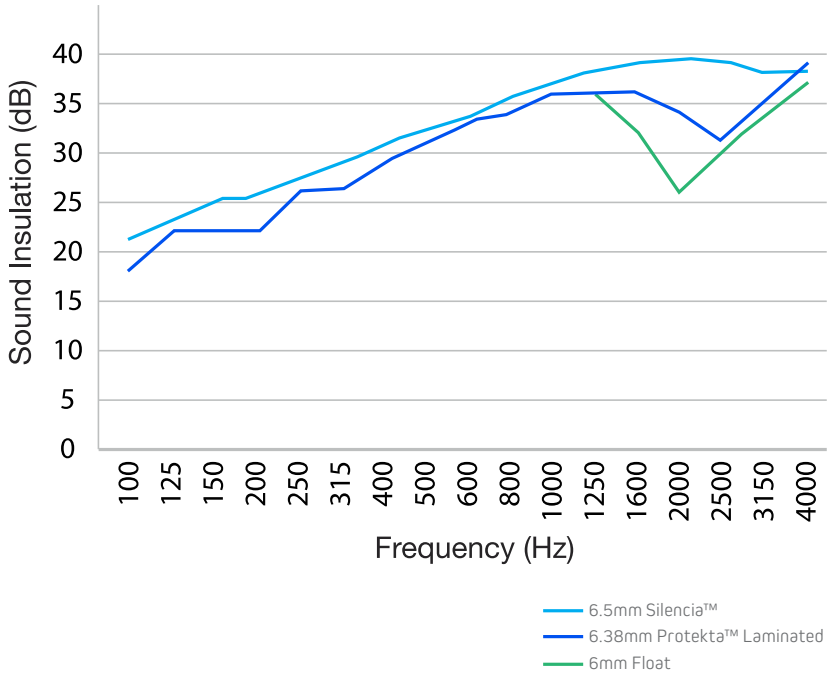
Silencia™ is suitable for a broad range of glazing applications where noise reduction is the prime concern:

- Buildings close to major or minor roads to minimise low frequency traffic noise
- Buildings close to railway lines to minimise high frequency train and rail noise
- Buildings close to airports to minimise high frequency aircraft noise
- Internal walls and windows to provide an oasis away from high frequency voice noise
- Silencia™ can provide over 4dB improvement in noise reduction when compared to glass types of similar thickness. That's significant when a 10dB noise reduction equates to a 50% reduction in loudness

Comparative Sound Insulation Data (dB)

	Monolithic							Laminated			Silencia™			
Thickness	3	5	6	10	12	15	19	6.38	10.38	12.38	6.5	8.5	10.5	12.5
Rw rating (dB)	30	32	32	36	37	37	40	33	36	37	36	38	39	40

As with any window glazing system, a window incorporating Silencia™ is only as good as its weakest point. As such, any gaps around the window itself which are not sealed properly or windows which are not fitted correctly will allow noise to pass through. Similarly it is important to ensure that any possible potential entry point for noise, from either under the house or through the roof space is effectively sealed to ensure maximum effectiveness of the glazing.



Silencia™ Noise Reducing Acoustic Solutions

Benefits

- Available in 6.5mm through 12.5mm thicknesses dependent on the level of noise reduction required
- Can be incorporated into a KlymetControl® or KlymetControl® Plus IGU for further enhanced noise reduction and additional benefits such as energy efficiency, décor or security
- Grade A safety glass with >99% UV protection to prevent fading
- Reduces noise from a broad range of sources across a wide frequency band

Applications

- Buildings close to main roads, airports and railway lines
- Commercial offices and stadiums
- External and internal windows, doors and partitions
- Hospitals and aged care facilities
- Multi density residential apartments and hotels

For further information visit the section on **Sound Management**