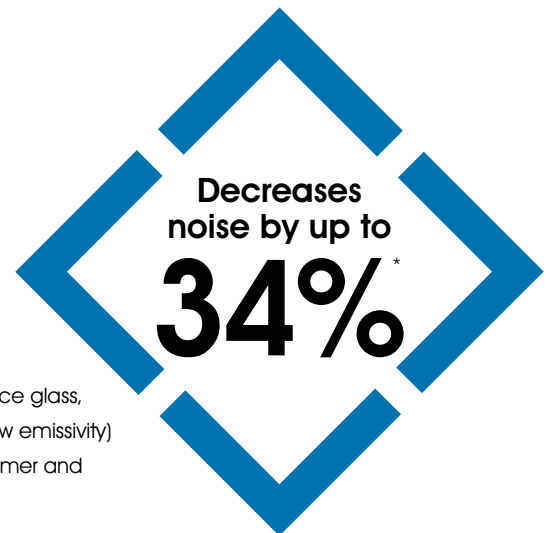




ComfortHush™
Engineered for urban living



The sound solution to common noise problems.



The majority of Australian homes have ordinary 3mm glass in their windows, which is a poor performer when it comes to sound reduction and energy efficiency. To help make a home the sanctuary it should be, Viridian has engineered ComfortHush to reduce unwanted noise entering a home, whilst providing superior energy efficiency.

ComfortHush provides a 6dB improvement compared to ordinary 3mm glass* found in residential windows – it's like moving a house roughly double the distance from the noise source to achieve the same reduction in sound. In fact, ordinary 3mm glass would need to be at least three times as thick to offer the equivalent sound reduction as ComfortHush.†

ComfortHush is an acoustic performance glass, which also features a durable Low E (low emissivity) coating to keep a home cooler in summer and warmer in winter.

Addressing a noise problem.

The best way to solve a noise problem is to address it at its source. If this is not possible, then products like ComfortHush help address the paths noise takes when entering your home.

When considering the noise paths, you should think about the entire home – its walls, windows, floors, ceiling and roof. CSR offers a wide range of noise reducing building products to assist in wall and roof construction.

ComfortHush offers better noise protection than ordinary glass by reducing the potential for sound to pass directly through the glass. It is essential to ensure that all other paths in the exterior of the building have also been sealed.



Viridian ComfortHush™

Reduce the transmission of noise.

There are three things that occur when sound waves encounter a window.

1. They may be **reflected** away, causing little concern to those inside the home.
2. They may be **absorbed** through dampening and dissipated, causing little concern to those inside the home.
3. What isn't reflected or absorbed is **transmitted** through the window by vibration or air leakage.

Reduce Vibration – Ordinary glass can vibrate at the same frequency as the noise source, allowing sound to penetrate through the window. This critical frequency range where ordinary glass offers little resistance is called the 'coincidence dip'. ComfortHush includes a special 3-layer laminate that has been specifically engineered to reduce vibration, especially within this critical frequency range making it effective in reducing urban noise.

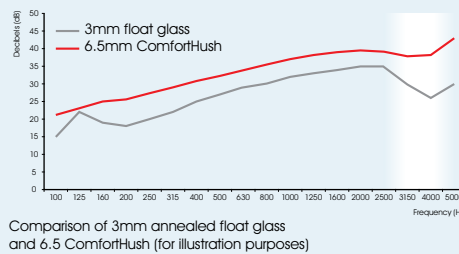
Reduce Air Leakage – Cracks, crevices and even the most minute gaps will greatly reduce the performance of windows by providing opportunities for sound to travel through. It is critical that ComfortHush is used in combination with a carefully selected window frame that is well sealed to significantly reduce air leakage. Many window manufacturers make and test windows designed to improve acoustic performance and energy efficiency. It is important these windows are professionally installed to reduce air leakage by ensuring a good seal between the exterior of the window and the wall it is being installed in to. Air leakage is tested by window manufacturers and is expressed as litres per second.

For air infiltration and window performance information refer to the window energy rating scheme website at www.wers.net.au

Performance that's no coincidence.

The diagram below demonstrates the 'coincidence dip' for ordinary glass compared to ComfortHush. Ordinary glass at the frequency range where the coincidence dip occurs is transparent to sound, allowing it to pass freely 'through' the glass and into the home. ComfortHush almost eliminates the coincidence dip of ordinary glass making it very effective in reducing noise in this critical frequency range. As our ears are generally more sensitive to high frequency, rather than low frequency sounds, the performance of glass within the 'coincidence dip' is perceived as much more effective. This makes ComfortHush particularly effective at reducing noise which comes from common urban sources such as traffic and noisy neighbours.

The coincidence dip

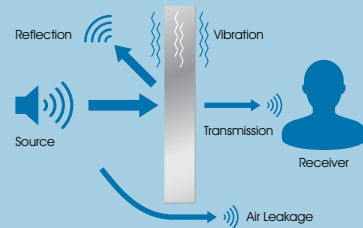


ComfortHush is the start of a comprehensive range of single and double glazed acoustic performance glass products developed by Viridian. To find out more on the range available call Viridian on **1800 810 403** or visit viridianglass.com



Noise

ComfortHush™



Applications

- ◆ New homes
- ◆ Residential renovations
- ◆ Unit developments and apartments
- ◆ Replacement and retrofit glazing

Maximum size

- ◆ 3660 x 2440mm

How to specify

- ◆ **Select glass name**
Viridian ComfortHush
- ◆ **Select colour**
Refer to product range chart

Product range

	Thickness (mm)
Product	6.5
ComfortHush SP10 Clear	◆
ComfortHush SP30 Neutral	◆

Performance data

Product Name	Nominal Thickness	Acoustic Rw	Visible			Solar		UV Trans	U Value	SHGC	Shading Co.	Weight m ²
			Trans.	Refl. Out	Refl. In	Trans.	Refl.					
ComfortHush SP10 Clear	6.5	36	82	10	11	64	9	<1	3.6	0.68	0.79	15.4
ComfortHush SP30 Neutral	6.5	36	59	7	9	42	7	<1	3.6	0.51	0.60	15.4

All performance data is determined using LBL Windows 5.2 software, NFRC 100-2001 conditions have been used.