



# Noise

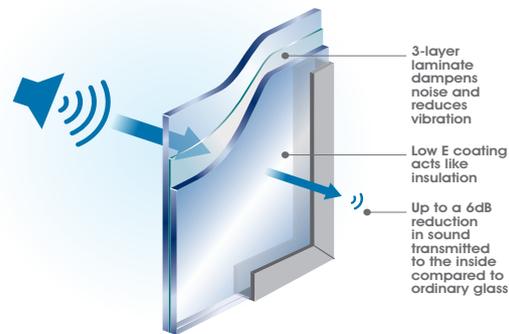
## ComfortHush™



# Enjoy your neighbourhood with less noise

### Description

**ComfortHush™** is an acoustic performance glass, which also features a durable Low E (low emissivity) coating. It is available as a 6.5mm, 6.88mm and 10.5mm Grade A laminated safety glass that uses a special 3-layer acoustic PVB laminate that is specifically designed to reduce sound transmission. The inclusion of a durable Low E coating also provides improved energy efficiency performance, by helping to keep homes and buildings cooler in summer and warmer in winter.



Viridian has engineered ComfortHush™ to reduce unwanted noise entering homes and buildings, whilst providing improved energy efficiency performance. ComfortHush™ 6.5mm and 6.88mm provides a 6dB improvement compared to

ordinary 3mm glass\* found in many residential windows. In fact, ordinary 3mm glass would need to be at least three times as thick to offer the equivalent sound reduction as ComfortHush™ 6.5mm and 6.88mm.†

### 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 homes and buildings.

Typically the weakest point in a building is the windows. Installing windows with good acoustic performance needs to be supported with the careful selection and insulation of walls, floors and roof materials to enhance the overall acoustic performance of the building. It is essential to ensure that all other paths in the exterior of the building have also been sealed. It is advised that ComfortHush™ be used in conjunction with those building products that have been carefully engineered to reduce external noise intrusion into buildings, control and dampen sound within buildings and improve the overall acoustic performance of buildings.



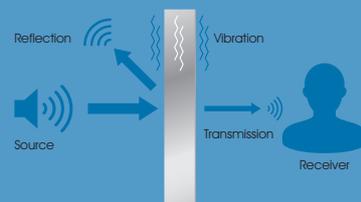
Normal conversation	Dog barking	Loud traffic	Train whistle at 150m	Lawn mower, truck, car horn	Loud rock concert
60dB	70dB 2x as loud as 60dB	80dB 4x as loud as 60dB	90dB 8x as loud as 70dB	100dB 16x times as loud as 70dB	115dB

The nature of the decibel scale illustrates how a small variation in decibels equates to a large variation in what we hear.



## Noise

### 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 building
2. They may be absorbed through dampening and dissipated, causing little concern to those inside the building
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. ComfortHush™ includes a special 3-layer laminate that has been specifically engineered to reduce vibration, 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 into.

#### Make a sound decision on frames

To avoid noise leaks, you need to ensure that ComfortHush™ is installed in a frame that's well sealed and professionally fitted. If the frame isn't sealed properly then ComfortHush™ can't work to its full potential.

Talk to an experienced architect, builder or window fabricator to learn more about how ComfortHush™ can help keep your building more tranquil. ComfortHush™ is the start of a comprehensive range of single and double glazed acoustic performance glass products made by Viridian. Refer to the Viridian **VLam Hush™** range for more acoustic performance glass products.

#### Features and benefits

- ◆ ComfortHush™ 6.5mm and 6.88mm can be installed into most single glazed window frames
- ◆ ComfortHush™ 6.5mm and 6.88mm provides up to 39% better insulation than ordinary glass† resulting in a more comfortable home and energy savings all year round
- ◆ ComfortHush™ is a Grade A safety glass and helps to protect your interior furnishings from fading by eliminating 99% of Ultra Violet (UV) light

#### Applications

- ◆ New homes
- ◆ Residential renovations
- ◆ Unit developments and apartments
- ◆ Replacement and retrofit glazing
  - Office Buildings
  - Retail
  - Institutional and social buildings

#### Maximum size

- ◆ 3660 x 2440mm

#### How to specify

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

#### Product range

Product	Thickness (mm)		
	6.5	6.88	10.5
ComfortHush™ Clear	◆		◆
ComfortHush™ Neutral	◆		◆
ComfortHush™ Grey		◆	
ComfortHush™ Translucent		◆	

#### Performance data

Product Name	Nominal Thickness	Acoustic Rw	Visible			Solar		UV Trans	U Value	SHGC	Shading Co.	Weight m²
			Trans.	Refl. Out	Refl. In	Trans.	Refl.					
ComfortHush™ Clear	6.5	36	82	10	11	64	9	<1	3.6	0.68	0.79	15.4
ComfortHush™ Neutral	6.5	36	59	7	9	42	7	<1	3.6	0.51	0.60	15.4
ComfortHush™ Clear	10.5	39	79	11	11	58	9	<1	3.6	0.64	0.74	25.5
ComfortHush™ Neutral	10.5	39	62	8	10	40	7	<1	3.6	0.49	0.58	25.5
ComfortHush™ Grey	6.88	36	39	6	9	39	6	<1	3.6	0.49	0.57	15.4
ComfortHush™ Translucent	6.88	36	63	8	10	57	7	<1	3.6	0.59	0.67	15.4

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

\* Based on comparison of weighted sound reduction index (Rw) of ComfortHush™ and 3mm annealed float glass.  
 † Based on comparison of weighted sound reduction index (Rw) of ComfortHush™ and 10mm annealed float glass.  
 ‡ Based on U-value comparison of 4mm clear float glass.