

# WHY CHOOSE AMBIENT WINDOWS?

Whether you are a homeowner looking to make your family home a haven, a house builder or developer building close to a main road, flight path or railway with strict planning restrictions, we have a noise reducing solution to suit you.



## 42dB Noise Reduction

Whether positioned on a busy high street or an airport, with an overall window noise reduction rating of up to 42dB you will find a solution to restore the sound of silence.



## Bluesky Certified

Unique in that we have certified the window as a whole you have complete assurance that the dB rating we are stating is the sound reduction you will experience.



## Weatherproof

Weatherproofing and soundproofing go hand in hand and as such all products are tested to perform against all weather conditions with sliding sash windows tested to perform against winds of 136mph.



## A-Rated Noise Reduction

We have achieved a Bluesky certified A-rated noise reduction level which will help you create a home of calm and tranquility in which you can be truly safe and sound.



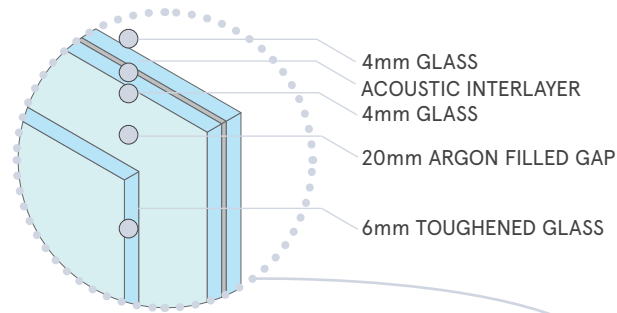
## Thermally Efficient

With whole window u values as low as 1.2 W/m<sup>2</sup>K, 40% better than current LB1 Building Regulations you can rest assured that your home is not only safe and sound but warm and cosy.



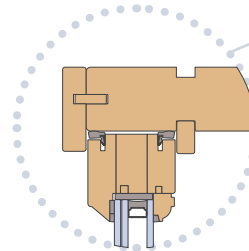
## Safe and Sound

Acoustic glass security ratings of P2 and P4 as standard surpasses the P1A required for Secured by Design and Part Q of the Building Regulations, keeping your home both soundproof and secure.



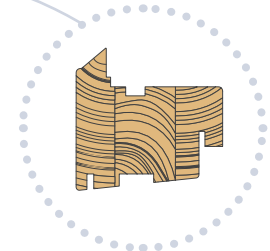
## Acoustic Glass

Acoustic glass consists of two panes which have been laminated together using an acoustic membrane. Aside from bonding these two panes together, this works to absorb the sound energy and prevent vibration travelling through the glass.



## Dual Weatherstrip

Where air leaks through as does sound. Making use of insulating double weatherstrip not only has benefits in terms of reduced air leakage and weatherproofing but has the advantage of increased acoustic performance.



## Engineered Timber

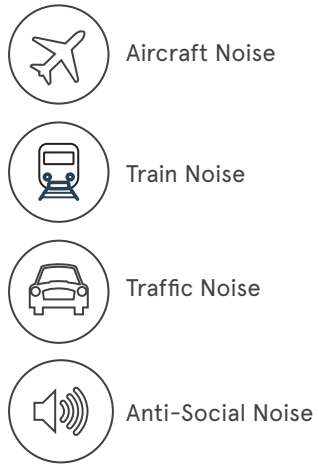
The ultimate renewable material, wood is one of the oldest and most attractive but that's not the only benefit; as a natural material, it also has a stronger sound dampening property than most other frame materials.



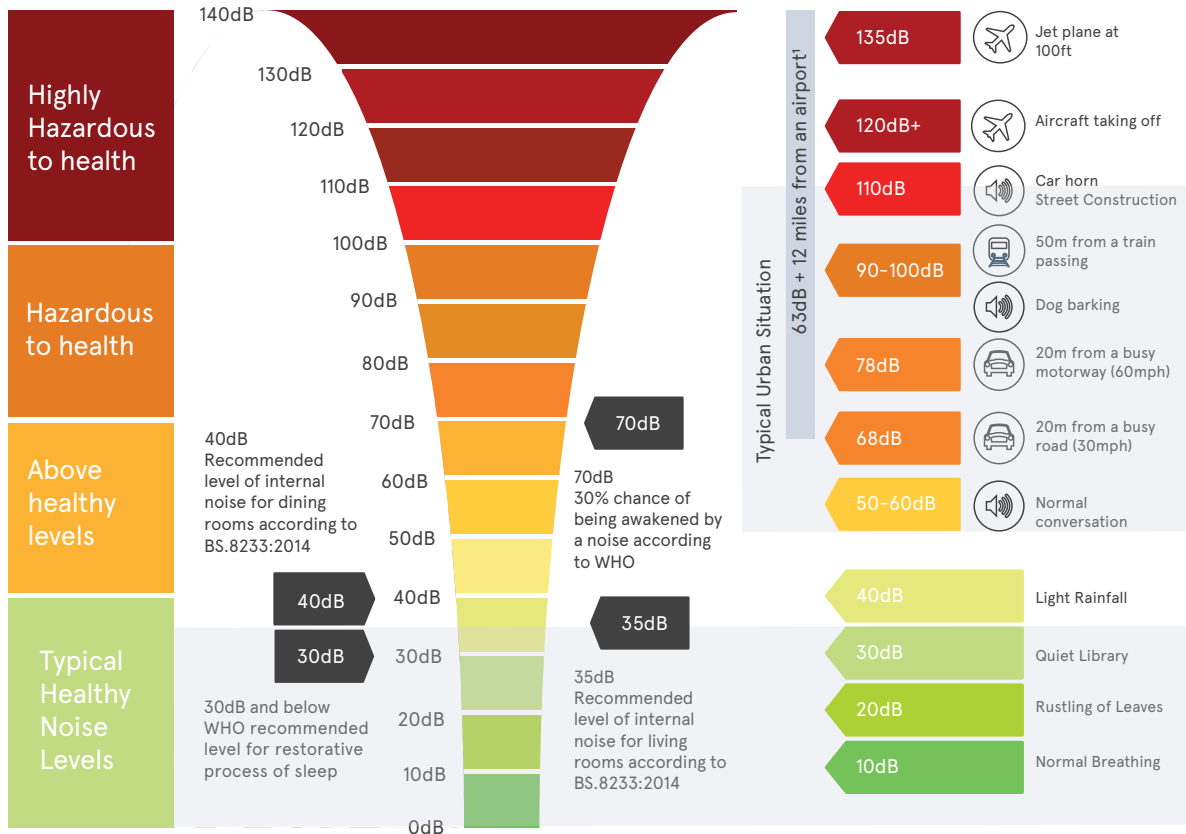
# IDENTIFY YOUR NOISE PROBLEM

In modern life, we are subjected to various types of environmental noise on a daily basis and the situation is getting worse.

The chart below gives you an idea of what we are subject to on a daily basis. In a typical urban situation, we are experiencing noise levels from 50dB to 110dB which is hazardous to our health.



1. BMJ, (2013). Aircraft noise and cardiovascular disease near Heathrow airport in London. The above noise levels are approximate and should only be used as a guide.



## Measuring Noise

The perceived loudness of sound is measured in decibels, often abbreviated to dB. The dB scale starts at the threshold of audibility with 0dB and even at this level noise can be perceived by the human ear.

# CHOOSE YOUR NOISE REDUCTION

Once you have identified the noise level you may be experiencing, choose the noise reduction rating that you need.

The dB rating stated represents the noise reduction for the overall window; frame and glass included. You will want to aim to get to a healthy 35dB indoor noise level as defined in BS8233: 2014 for living spaces.

**NOISE RATING**  
 MANUFACTURER: Bereco Ltd.  
 PRODUCT NAME: Vertical Sliding Sash Timber Window  
 SCOPE REFERENCE: NRW-0172

Sound Reduction Value (R <sub>w</sub> ): (BS EN 10140 - 2)	42 dB
Correction for traffic and low frequency (Ctr):	-5 dB
Frequency (Hz):	125 250 500 1000 2000 4000
Measured performance:	27.5 36.5 41.1 42.2 44.9 50.7

This Bluesky Noise Rating must be read in conjunction with the scope of certification that is referenced above and does not guarantee the performance of individual products. Visit [www.bluesky.com](http://www.bluesky.com) for further details.

**Bluesky Certification**

\*Test data relates to vertical sliding sash timber window  
 \*42dB available with Traditional beading only.

STANDARD UK DOUBLE GLAZED WINDOW	BERECO DOUBLE GLAZED WINDOW	AMBIENT RANGE				
		22 dB	33 dB	38 dB	41 dB	42 dB
Bluesky Rating						
None	C	B	A	A		
Whole Window Acoustic Rating R <sub>w</sub> (C:Ctr)						
22dB	33(-1; -5)dB	38(-1; -4)dB	41(-1; -6)dB	42(-1; -5)dB		
Glazing Acoustic Rating R <sub>w</sub> (C:Ctr)						
23dB	31dB	39dB	42dB	46dB		
Unit Configuration						
4/16Ar/4	4/16Ar/4ESGT	8.8/12Ar/4ESGT	8.8/20Ar/6ESGT	8.8/16Ar/9.5T		
Centre Pane U Value (U <sub>g</sub> ) (Wm <sup>2</sup> K)						
1.0	1.0	1.0	1.0	1.0		
Sound Reduction Indices for Each Octave Band						
Frequency Hz	Measured Performance - Average (dB)					
125	**	25	30	30	28	
250	**	19	26	32	37	
500	**	28	35	40	41	
1000	**	36	41	42	42	
2000	**	42	46	43	45	
4000	**	40	45	47	51	