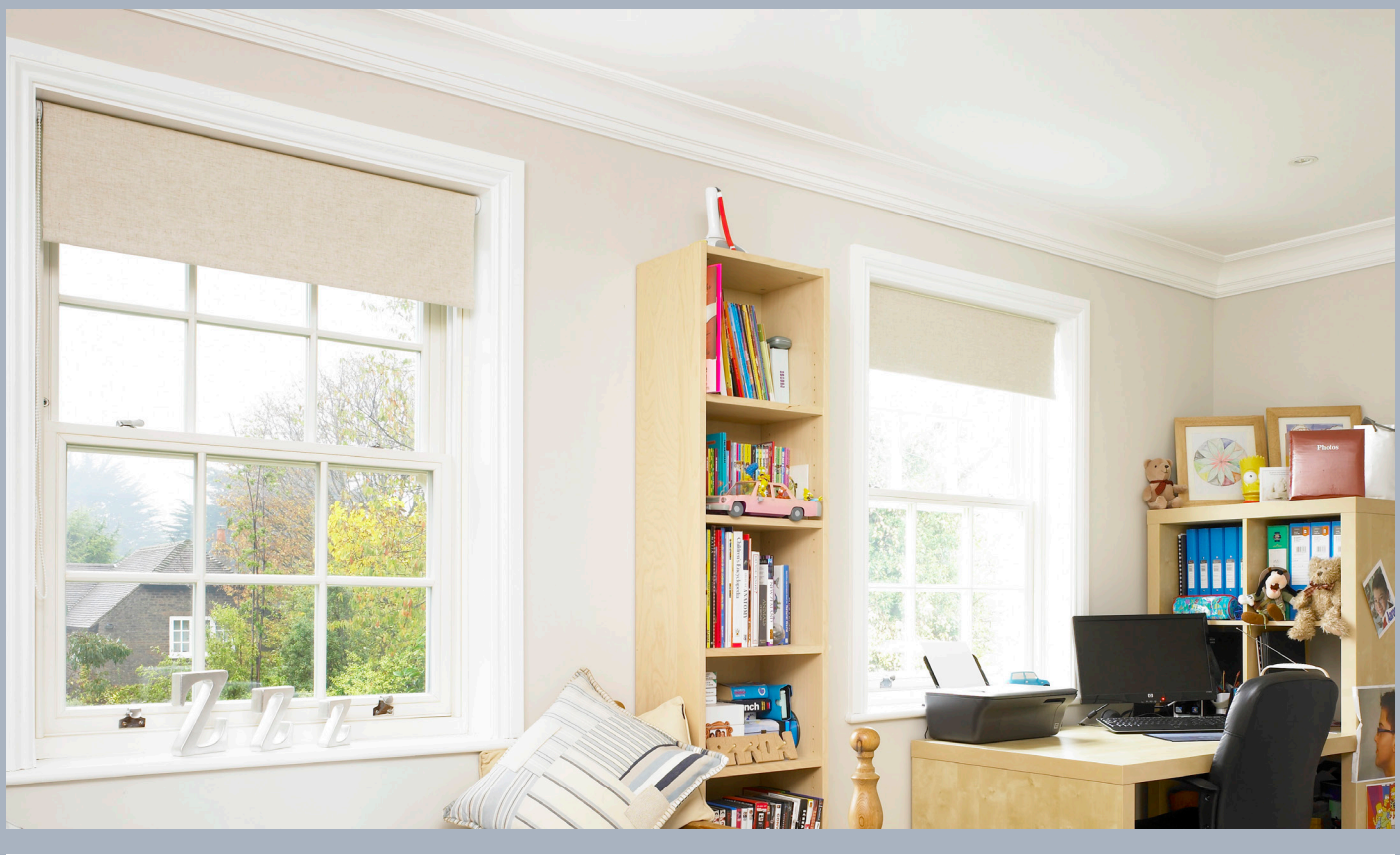
Acoustic Glazing Special

Bereco
DELIVERING THE DIFFERENCE



Choosing the right glazing for the home is an important decision, particularly for properties exposed to high levels of environmental noise.

Consumers are becoming increasingly aware of how important it is to keep levels of external noise entering the home to a minimum and a key part of this is selecting glazing that increases acoustic performance. Acoustic glazing absorbs noise energy and reflects it back to the original source ensuring comfortable noise levels that are acceptable to homeowners .

At Bereco we supply timber products with acoustic double glazing options across both our Contemporary and Traditional ranges. This means we can offer customers design choice and flexibility combined with high acoustic performance.

The acoustic insulation property of a building material is defined by the R index representing the difference between internal and external noise levels. The Weighted Sound Reduction (RW) is a number used to rate the effectiveness of a soundproofing system or material.

The R Index is used when choosing building materials to help achieve the specified noise reduction level. It incorporates a weighted correction for the human ear and is expressed in dB.

By increasing the RW value by one the noise level will be reduced by 1dB. Generally speaking, the higher the RW value, the better the product will perform as a sound insulator.

Reduce your noise levels in the home without compromising on aesthetics.

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HEALTH FOCUS

Findings from recent studies into the effects of environmental noise on health have highlighted a link between prolonged exposure to high levels of noise and serious health issues.

The studies published in both the British Medical Journal and European Heart Journal suggest that high levels of aircraft and road traffic noise are associated with an increased risk of strokes, coronary heart disease and cardiovascular disease.

The quality of sound insulation in the home was noted as a factor that had a significant impact on the levels of environmental noise that people are exposed to.

At Bereco we understand the importance of reducing sound levels in the home and continue to work hard to supply products with decibel ratings to meet individual customer specifications.

The table below shows maximum decibel ratings that can be achieved on Bereco products:

Product Range	Traditional Range			Contemporary Range		
Product Type	Casement	Sliding Sash	Doors	Casement	Sliding Sash	Doors
RW, Max dB Rating	39	39 (*45)	44	44	39 (*45)	44
* by increasing frame and sash sections sliding sash can accomodate 36mm glazing units which can achieve up to 45 dB						

BERECO LAUNCH ACOUSTIC SLIDING SASH ACHIEVING DECIBEL RATINGS UP TO **45dB**

Bereco are unique in that we are able to achieve higher decibel ratings than many of our competitors particularly on our Sliding Sash designs.

Our standard Sliding Sash has a 24mm glazing unit that can achieve up to a maximum decibel rating of 39dB. However, the frame and sash profile can be increased to accommodate a 36mm glazing unit where a high performance acoustic glass can be used to achieve decibel ratings up to 45dB.

Things to consider when choosing **acoustic glazing**

If a property is in close proximity to an airport, motorway or in a busy inner city location it is likely to be affected by high levels of environmental noise. The levels of external noise entering the home can be attributed to many factors; however one of the key factors is the performance of the windows installed in the property.

Define Levels Required

Improved sound reduction in a room is often achieved with high performance acoustic glazing. The very best acoustic performance is achieved where glazing panes are made from laminated glass which can vary in thickness. It is important to quantify the required acoustic performance required and ideally a sound engineer should be consulted to help in this assessment. Once you have defined the reduction in noise you are looking for, this needs to be matched to a glass type that will offer the required performance. Your window manufacturer should have data on the glass types available.

Highly experienced Bereco staff are on hand to discuss acoustic glazing options and offer guidance on the glass types we can offer to suit individual projects.

Manufacturing Capabilities

Often overlooked at this stage, manufacturing capability is a crucial consideration when choosing the window type you require. Window manufacturers have many different designs, which can often only accommodate double glazing units up to a certain thickness. There is little point in having a glazed unit chosen for its acoustic value if the unit size cannot be accommodated within the product you require. Many are only able to accommodate 24mm double glazed units into their profiles although acoustic glass can be a lot thicker. The use of laminated panes of glass, which offers the best acoustic performance often means this thickness can be up to 36mm.
Most manufacturers would not be able to fit such wide glazing units within their window types, particularly on the more traditional types of windows such a Sliding Sash.

The skilled workmanship and technical advances in our factories mean we have the manufacturing capabilities necessary to produce sash windows with profiles up to the 36mm necessary to accommodate the most superior acoustic glazing.

Window Performance

The overall performance of the window also has a significant impact on acoustic performance and is often overlooked. There is little point of investing in acoustic glass that it is then fitted into a window which has poor performance characteristics. Any gaps between sashes, however small, will allow the noise to penetrate regardless of the glass type used. Windows in general should have independent testing from a third party independent body such as BM TRADA or BSI. Look for the windows which have severe weather ratings which are independently tested and accredited in high performance schemes such as the BM TRADA Q Mark scheme.

Bereco's acoustic sash windows have achieved outstanding weather testing results and we are one of only 3 manufacturers in the UK covered by the BM TRADA Q Mark High Performance Window Scheme

Ventilation

It is also important to consider how the use of trickle vents can impact on a windows acoustic performance. Where high acoustic performance is required trickle vents should be avoided as they will have a detrimental effect. Acoustic block ventilators are large, aesthetically unattractive and often cannot be accommodated in window designs.

In the event of an acoustic glazing requirement we advise alternative means of air flow via mechanical extraction rather than the use of Trickle Vents.

Seagate Homes - Case Study

Stonebrook House, Port Lane, Castor, Peterborough

Classic Entrance Door | Contemporary Folding Doors | Contemporary Spiral Balance | Contemporary Casement

Award winning house builders Seagate Homes are well known for their bespoke traditionally styled, high specification homes individually designed to compliment local architecture and surrounding landscape. Completed in late 2013 Stonebrook House is a natural stone built property located in the leafy conservation village of Castor near Peterborough surrounded by open views of the countryside.

Interesting Fact

Seagate homes are no stranger to winning multiple awards for their unique homes. In 2012 they were regional winner of the Premier Guarantee Excellence Awards for Small Development of the Year and won the LABC East Anglia award for Best Small Housing Development in the same year. Now completed Stonebrook House has been entered for the 2014 LABC Individual Build Award.

Why Bereco?

Bespoke timber windows and doors from Bereco allowed choice and flexibility with unique design options available to suit this unique home. A combination of Casement and Sliding Sash style windows with modern performance and high security features from the Contemporary Range were the perfect choice. Classically designed Entrance Doors perfectly compliment the natural stone façade of the property.

Special Requirements of the job

The build faced challenges in the initial stages due to a history of planning applications and refusals dating back to 2005. When planning permission was finally granted for Stonebrook House to be built it was essential that all building materials were sympathetically chosen to be in keeping with the distinct character of Castor.

> Seagate Homes believe that acoustic glazing is paramount to the living experience.
> We have chosen to use Bereco windows and doors for several of our bespoke developments and we continue to be very impressed with the high quality and flexibility of the product range.
> The high level and speed of service we receive has always been second to none and the staff at Bereco have been very helpful.

Bernard Snowden
Seagate Homes