

Acoustic Glass
Technical Guide



Handcrafted by us, perfection for you

Wandsworth Sash Windows is a trading name of Sanford Group Limited
Company Reg. No.: 10550497 VAT Reg. No.: 263 2750 10
Directors: N Smith M Smith T Smith

Our Acoustic Glass

Noise Pollution

Noise pollution is a growing environmental concern and nuisance, especially in urban areas. Even the background noise of 70 decibels caused by outside traffic can cause disturbance and stress over a continued period of time. Acoustic glass technologies have been developed to combat levels of unwanted noise, whether it be for a translator's booth, a house located near a busy road or an office next to the airport.

What is acoustic glass?

Acoustic glass considerably reduces outside noise, especially near busy areas such as motorways, main roads and airports. When used in overhead or roof glazing, double glazing window also provides insulation from rain impact noise. It can be used for interior sound insulation needs, such as office partitions and meeting rooms.

Acoustic glass consists of two or more sheets of glass, bonded together with one or more acoustic interlayers: Double glazing window. The interlayers act as a noise dampening core, weakening the sound as it travels through the glass. Interestingly, by varying the thickness of the sheets of glass, even better sound insulation can be achieved. Acoustic laminated glass also benefits from all the safety and security properties of standard laminated glass.

Solutions

We offer two main types of acoustic glass. Both options can be incorporated into most replacement windows and doors:

- Single glazed acoustic glass - If noise is your sole concern, rather than thermal insulation
- Double glazed acoustic glass - When both noise reduction and thermal insulation are important

Calculations

Statistical information concerning the acoustic performance of glass set out in this guide, is provided by the manufacturer's specifications and relates only to the performance of the glass itself.

Installing acoustic glass is only one part of sound proofing your building and we cannot be responsible for the acoustic performance of other materials such as brick work.

Types of Acoustic Glass

As specified above, different configurations have different acoustic qualities. Most of these options below can be incorporated into any of our windows and doors.

The main measure of acoustic glass performance is an Rw value. This is the weighted sound reduction index in decibels.

We have included in the table below specifications of various types of acoustic glass and standard glass for comparison.

Glass Type	Description	Rw(dB)	Weight
Single glazed - 4mm float glass	This is most likely the glass in your existing windows	28	10.0kg/ m ²
Double glazed - 4mm/16mm/4mm	Standard double glazed units with no acoustic glass	31	20.0kg/ m ²
Single glazed acoustic - LamiGlass 7.52mm	Single glazed acoustic glass 7.52mm thick	36	15.16kg/ m ²
Single glazed acoustic - LamiGlass 18.28mm	The thickest possible single glazed acoustic glass that we can use	41	40.24kg/ m ²
Double glazed acoustic - Lamiglass 8.76mm/12mm/4mm float glass	Double glazed units with acoustic glass on the exterior pane	40	30.08kg/ m ²

Other types of acoustic glass are available and can achieve Rw values up to 58 decibels. However, the types of acoustic glass that have greater acoustic reduction values than those listed above cannot be incorporated into a standard timber window and the section dimensions would need changing. If you require an Rw value greater than 41 decibels, please contact us.

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