

Acoustic Insulation - Noise Reduction

Secondary Glazing is extremely effective in noise reduction. This can play a significant part in the comfort and effective use of a building or room. Noise wherever it is generated, will impact on the effective use of a sales office, meeting room, library or classroom. Noise pollution from a busy road, railway line, airport or industrial estate is substantially reduced using the Clear View system.

When at home, unpleasant or disruptive noise is extremely annoying, particularly if you want to relax, sleep or concentrate. Even the most basic of our Secondary systems will have a significant impact on noise reduction, we can also install specialised Acoustic glass to further subdue the passage of sound.

When fitting Secondary Glazing to assist with noise insulation, one of the most significant factors is the air-gap between the existing primary window and the new secondary glazed unit. We recommend where possible a gap of 100mm to an optimum 150mm (larger air-gaps will continue to reduce noise, but the audible difference is less apparent). This fitting arrangement will normally require our reveal fix frames, whereby the unit is fastened to the side walls of the reveal, rather than directly to the face of the existing window. 6mm, 6.4mm laminated or 6.4mm Stadip Silence acoustic glass will further added to the performance.

Clear View's units have been tested for sound reduction at the AIRO Acoustics Laboratory (an accredited NAMAS Testing lab, number 0483) in accordance with BS2750: part 3 and BS5821: part 3 1980 : 1984, using a purpose built sound transmission suite. The findings of these tests can be seen by clicking .
These tests were carried out in November 1997 as part of an on-going research and development programme.

Frequency Hz	R dB	Frequency Hz	R dB
100	23.2	800	49.8
125	26.9	1000	51.9
160	30.1	1250	51.0
200	36.8	1600	50.5
250	37.8	2000	50.0
315	37.1	2500	48.9
500	43.1	4000	41.0
400	34.6	3150	43.3
630	45.7	5000	44.5

The weighted Sound Reduction Index, $R_w = 45\text{dB}$ (BS5821:part3:1984)