

## Sound Reduction

### Sound doesn't have to be complicated...

#### Sound reduction test

A three panel horizontal sliding secondary glazing unit (1960mm x 1190mm High) was sent to the Building Research Establishment in Watford for testing

#### How was the test carried out?

A cavity wall was built into the aperture between two rooms of the BRE transmission suite to the following specification

Block thickness 100mm

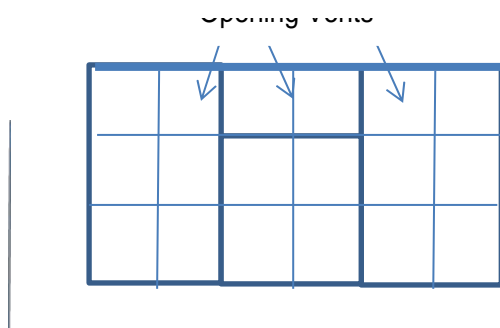
Block density 1800 kg/m<sup>2</sup>

Cavity spacing 75 – 80mm

Finished with plasterboard on dabs.

An aperture was left in the wall to house the window.

A typical Georgian window from a Builders Merchant with three openers was fitted.



The secondary was installed behind the window on timber liners to provide a minimum pane spacing of 100mm. The condition of the primary window will have an effect on the overall system performance.



#### Keeping sound in - 70% of people admit to feeling harassed by noise

Loud music remains the main source of noise complaints in England, Scotland & Wales. Secondary glazing is an excellent solution for Hotels, Pubs & Clubs or factory's close to housing to keep noise in.

#### New Glass Technology

Acoustic laminated glass (Silence) is the latest product to come onto the market. Two sheets of glass are bonded together with a 0.76mm thick layer of special acoustic polyvinyl butyral (PVB). Solaglas estimate a 20% improvement over standard glass. Taking this increase into account when installed into our secondary glazing a reduction of 44-45dBs should be easily achievable.

Silence Glass is a safety glass so can be used in safety critical areas and meets the requirements of BS6206.

Test Number	Primary Window	Secondary Window	Seal Polypropylene Weatherpile	RW	Sound reduction over test window in %
1	4mm Glass	None	Standard pile	26	
2	4mm Glass	4mm Glass	Standard pile	39	65%
3	4mm Glass	6mm Glass	Standard pile	39	65%
4	4mm Glass	Laminated	Standard pile	40	70%