

# **Our Secondary Products**

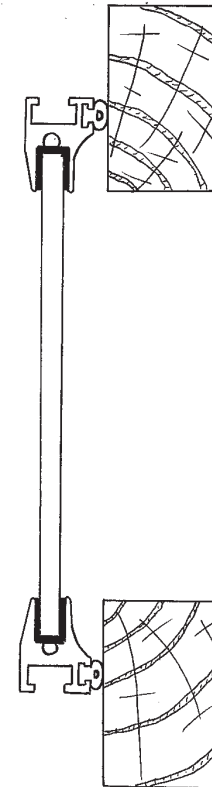
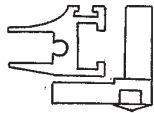
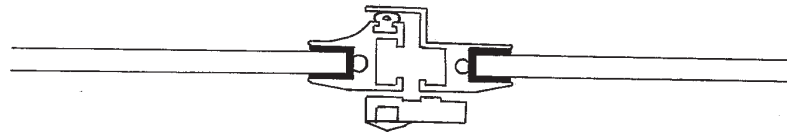
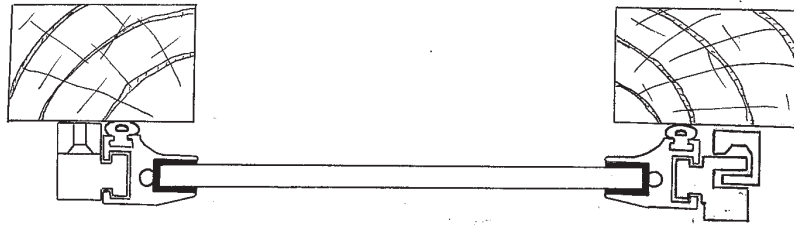
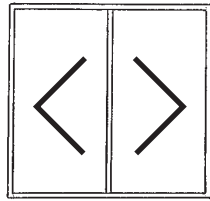
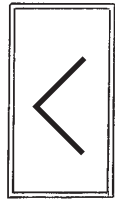
**Our System offers a complete fabrication of secondary double glazing, with three different styles of outer frames to enhance and complement any style of installation.**

Extrusions are available as standard in White, Van Dyke Brown, Silver Anodised and Mill Finish for powder coating to an extensive range of colours.

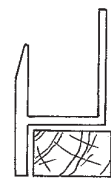
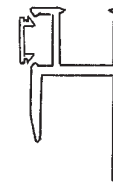
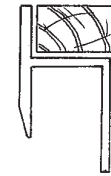
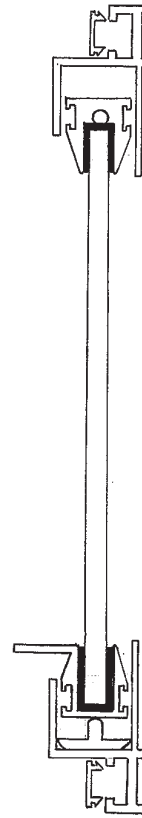
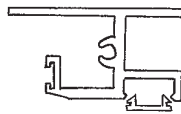
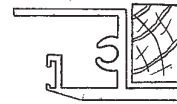
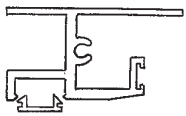
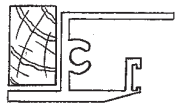
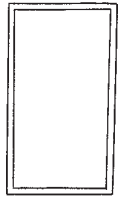
Stock lengths are 5000mm with some outer frames in 5600mm

# Single/Double Hinged Secondary Glazing

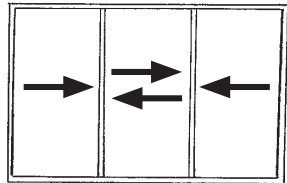
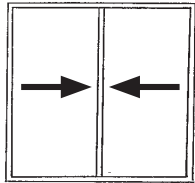
Also available as Hinged In Frame (see Lift Out Frames)



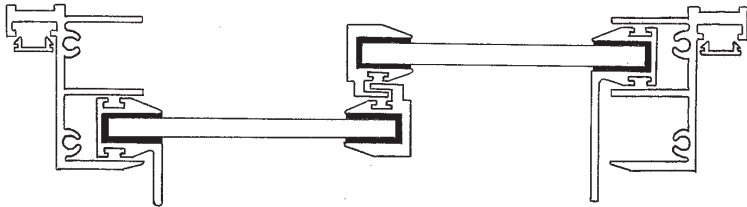
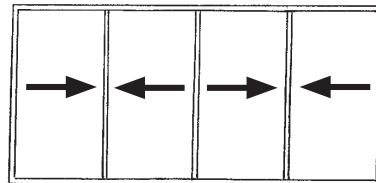
# Lift Out Secondary Glazing



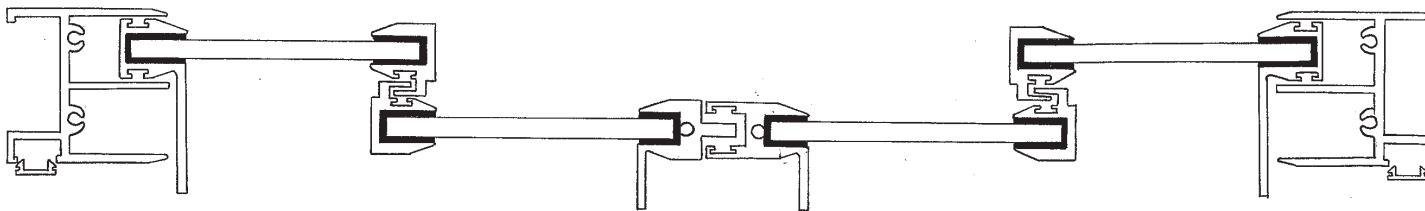
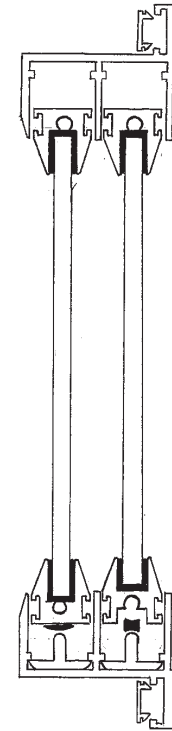
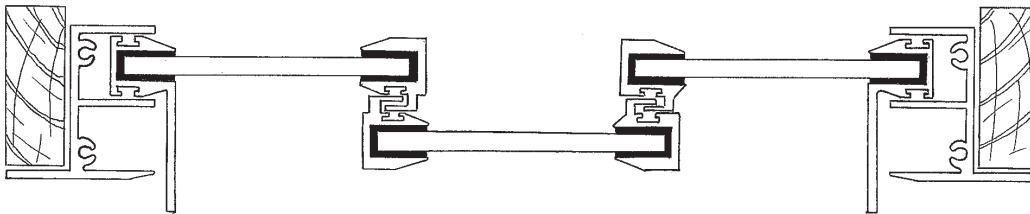
# Horizontal Sliders Also available in 5 and 6 panes



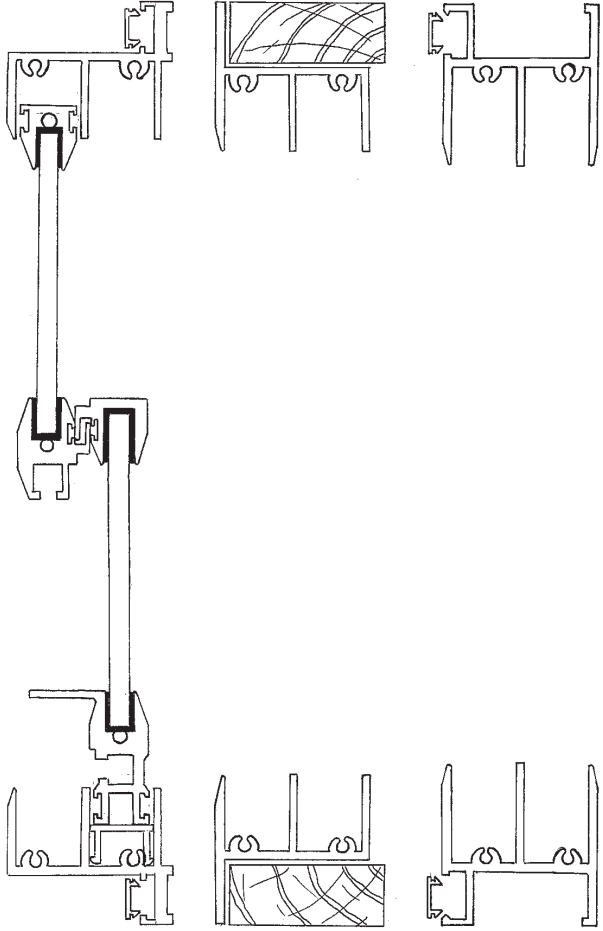
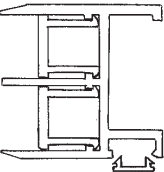
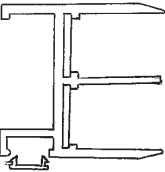
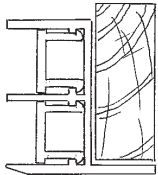
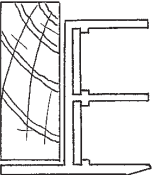
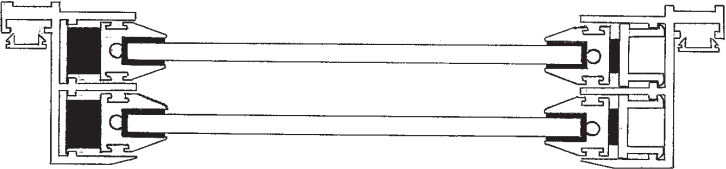
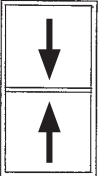
3 pane centre sliding or fixed



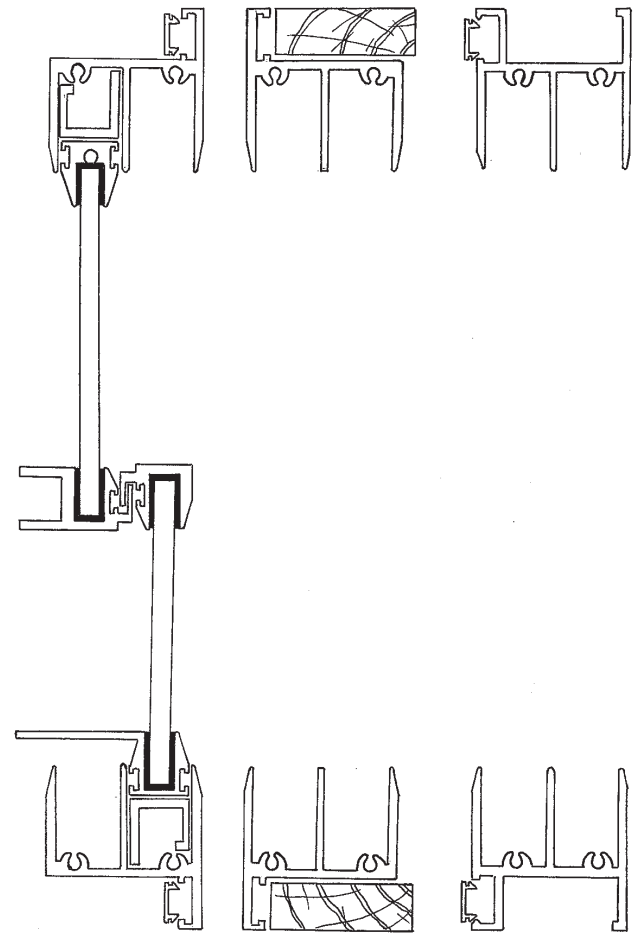
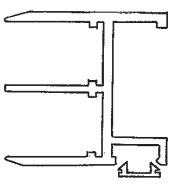
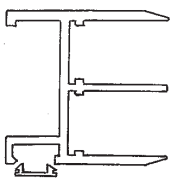
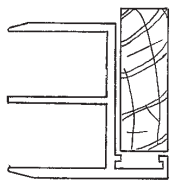
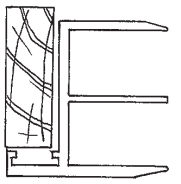
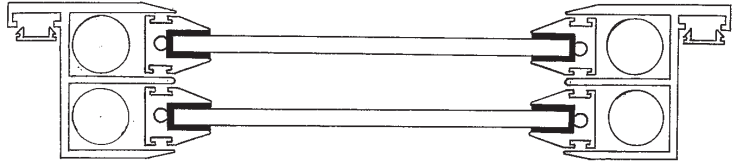
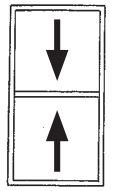
Heavy duty interlocks for larger panel heights are also available



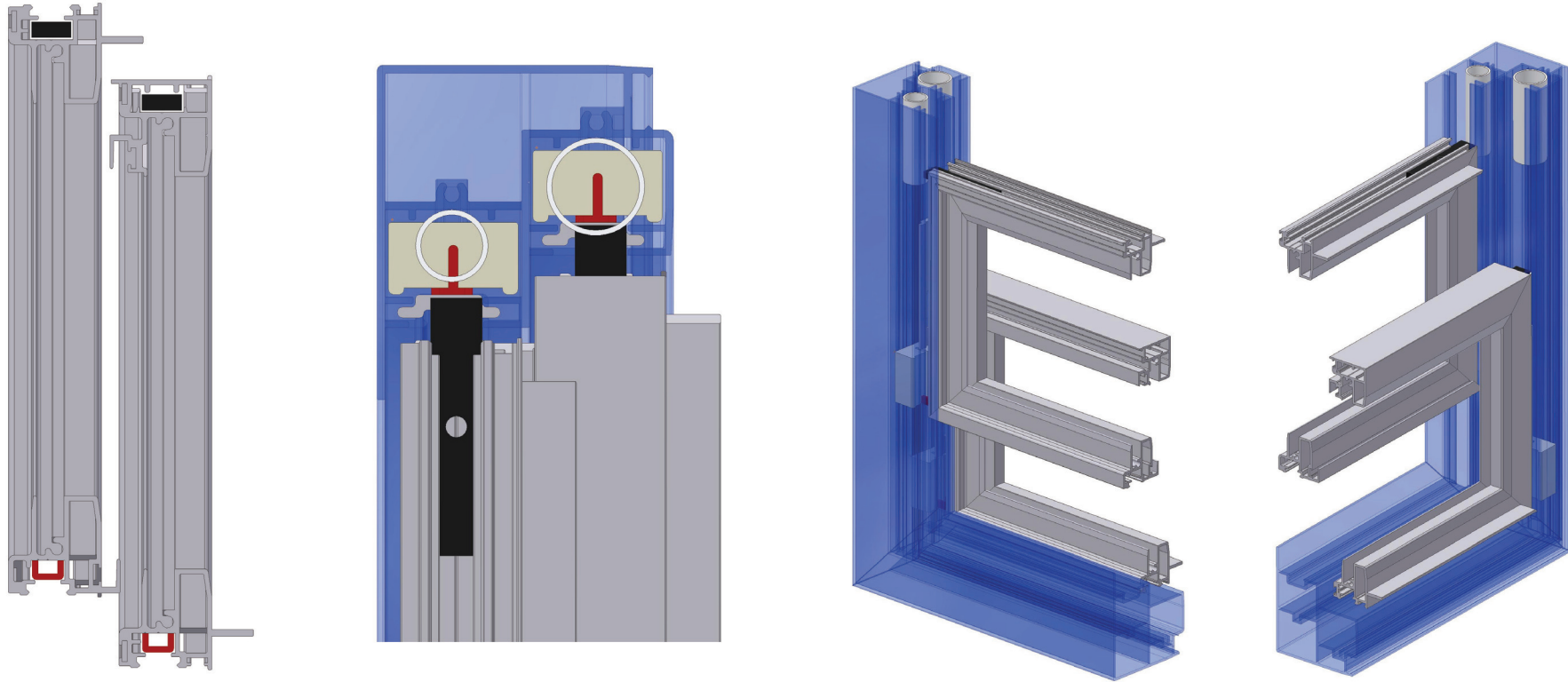
# Vertical slider guillotine (Shoot Bolt)



# Vertical slider balanced (with springs)



# Secondary Vertical Sliding Tilt in to Clean

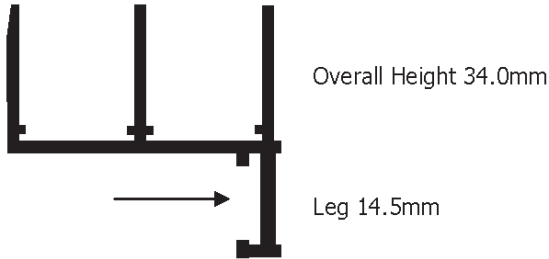


**You can also put flyscreens into any of the secondary above  
(Apart from the vertical slider balanced)**

# Secondary Dimensions and Drawings

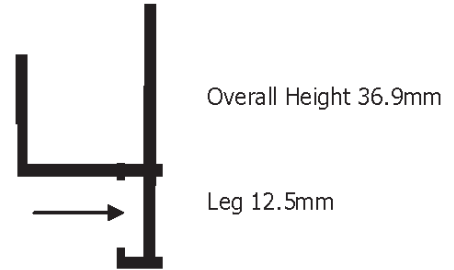
## 707 Odd Leg Face Fix

Overall Width 38.4mm



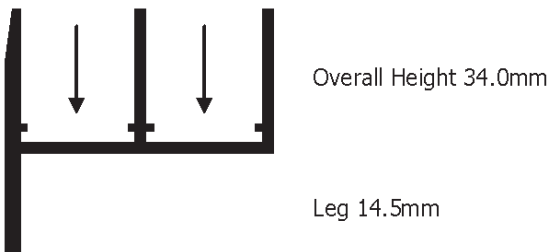
## 719 Odd Leg Face Fix

Overall Width 19.7mm



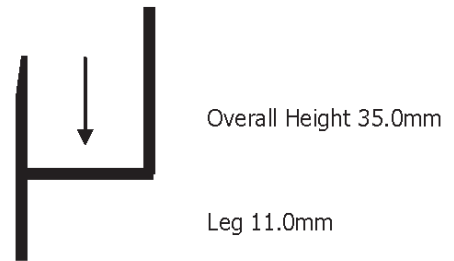
## 307 Odd Leg Reverse Fix

Overall Width 36.1mm



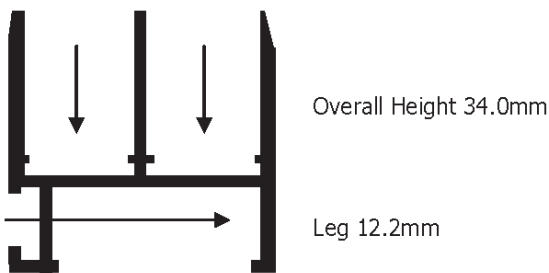
## 307 Odd Leg Reverse Fix

Overall Width 18.9mm



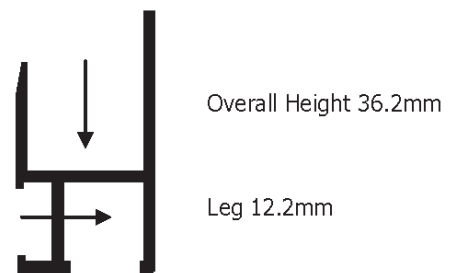
## 507 Equal Leg Face and Reverse Fix

Overall Width 36.0mm



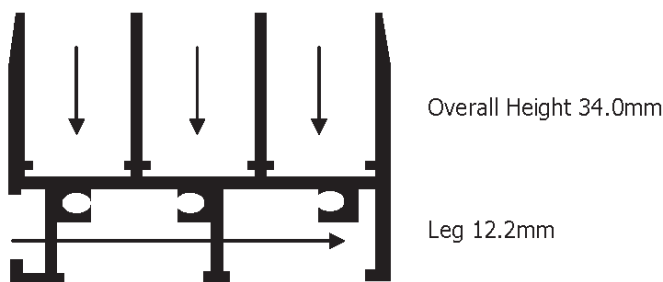
## 507 Odd Leg Face and Reverse Fix

Overall Width 18.9mm



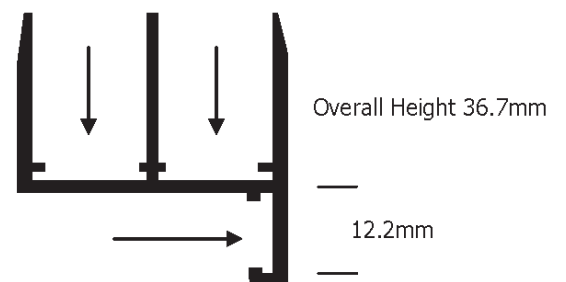
## 608 Equal Leg Face and Reverse Fix

Overall Width 52.9mm



## 807 Odd Leg Face and Reverse Fix

Overall Width 36.6mm



Arrows show direction of fixing screws. Arrows shown in two different directions section can be fitted either way  
Drawings are for illustration only. Do not scale



# Sound Reduction

## How does sound travel?

Sound travels through the air like ripples on a pond surface when a stone is dropped into it. The sound radiates outwards in all directions from the source, gradually reducing in intensity or until an object stops its progress.

## Sound (dB Decibels)

Sound is described in different ways but primarily in terms of intensity and frequency. The sound intensity is described in dB. A low dB indicates a soft sound, a high dB value indicates a loud sound.

Frequency describes how high or low pitched the sound is (Hz).

## Sound Reduction

A stereo's volume set at **60dB** decreased by...

**-3dB** is just perceptible

**-5dB** clearly noticeable

**-10dB** Half the original volume

## Recommended Indoor Ambient Noise Levels

Dwellings:

Bedrooms 30-35dB

Living rooms 30-40dB

Offices:

Private 35-40dB

Open plan 45-50dB

## Typical noise levels

50 metres overhead aircraft 140dB

Car alarm 120dB

Passing train 90dB

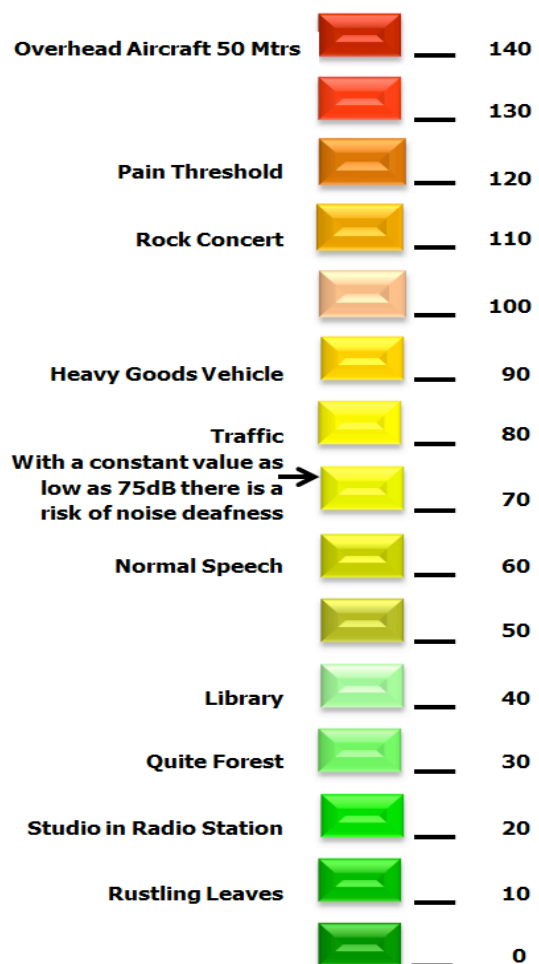
20 metres from busy carriageway 78dB

20 metres from busy main road 68dB

## 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.

## 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?

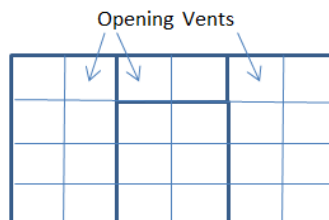
A cavity wall was built into the aperture between two rooms of the BRE transmission suite to the following specification

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.

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%

# U Values

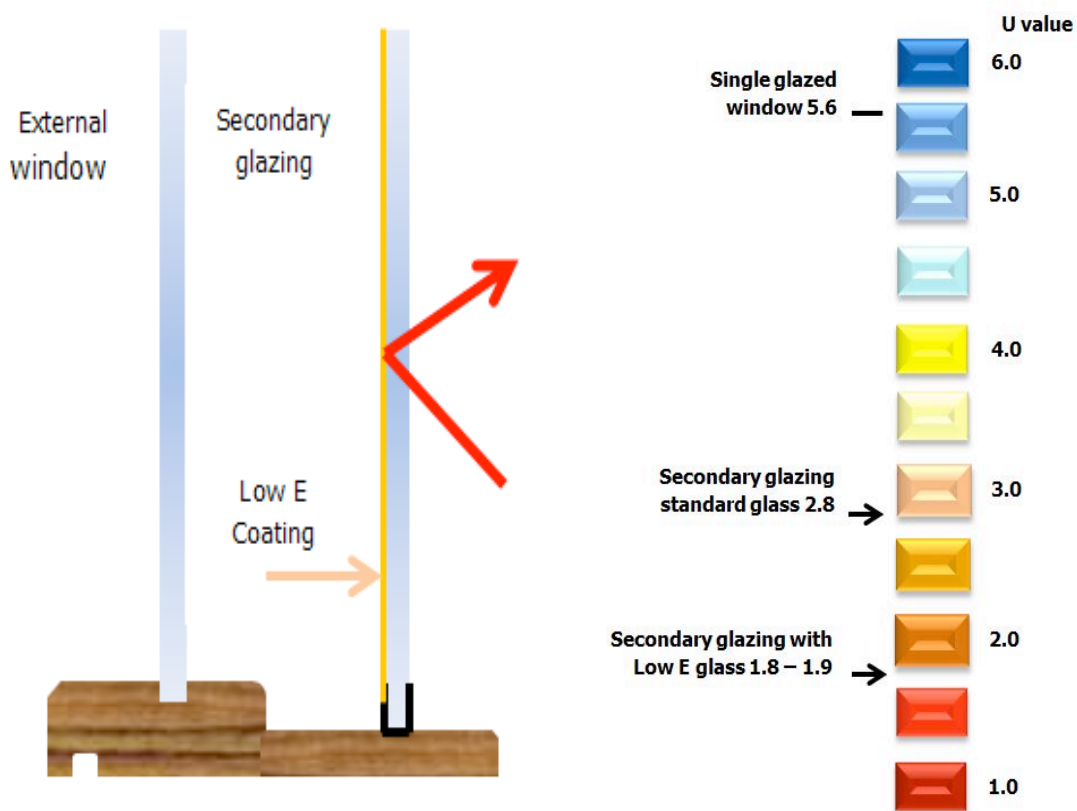
## What do we mean by U value?

U value is a means of comparing the heat lost through various parts of a building. A part of a building with a U value of  $4.0 \text{ W/m}^2\text{K}$  will lose twice as much heat as one with a U value of  $2.0 \text{ W/m}^2\text{K}$ .

**The lower the U value the less heat you lose through your windows.**

Single Glazed window with Low E glass fitted in the secondary:

**U Value 1.8-1.9  $\text{W/m}^2\text{K}$**



# Sound Reduction

## **Draughty windows affect your comfort**

Draughts through your windows can create cold spots around the room, particularly around the legs and feet, as a result heating is normally turned up higher to compensate, even the dog will want to jump up on the settee next to you. The tight tolerances designed into our secondary glazing system keep cold air and dust out whilst retaining the warm air in the building.

## **Air permeability Test**

**BS 5368:Part 1**

**BS 6375:Part 1**

This defines the ability of the window to resist air penetration when it is subjected to differential pressure and is a measure of the air which seeps through the test window at given test pressures.

The average amount of air which leaks through a metre of the opening weather seal (as seen from the inside of the window) is measured and the measurements are calibrated in cubic metres (m<sup>3</sup>), per hour, per metre of opening seal. A two panel slider 1215 W x 1193 H was fitted to a test rig at BSI in Hemel Hempstead.