

## Energy Efficiency

*Get the low-down on 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 W/m<sup>2</sup>K will lose twice as much heat as one with a U value of 2.0 W/m<sup>2</sup>K.

### The lower the U value the less heat you lose

A single glazed window has a U value of 5.6, with secondary glazing this can be reduced to 1.8 - 1.9.

Low E glass in secondary glazing reflects most of the heat back into the room.

## Eliminating Draughts



*Living with your windows is easy...*

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. The tight tolerances designed into our secondary glazing system keeps cold air and dust out whilst retaining the warm air in the building.

### Air permeability test

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 secondary met the stringent test results of Pressure Class 300Pa, and was tested by BSI to the following standards.

**BS 5368: Part 1**

**BS 6375: Part 1**

### Air-conditioning

Extensive use is made of air-conditioning in today's busy offices, shops and at home. Installing secondary glazing will help to reduce the energy used in cooling the building and stops cool air escaping out through your windows.

## Sound Reduction

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

### How does sound travel?

Sound travels through the air like ripples on a pond surface. 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 sound's volume at 60dB decreased by...

- **3dB** is just perceptible
- **5dB** clearly noticeable
- **10dB** half the original volume



### Recommended Indoor Ambient Noise Levels In Dwellings:

Bedrooms 30-35dB

Living rooms 30-40dB

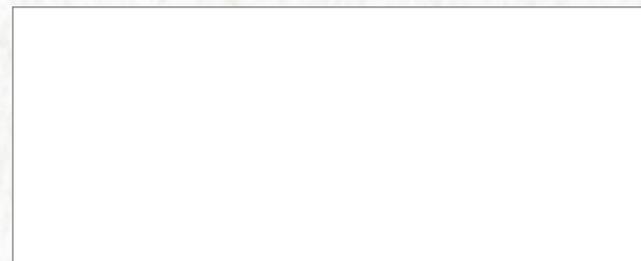
### Test results carried out at BRE

At the Building Research Establishment in Watford, a primary window with 4mm glass was tested with our secondary glazing installed behind and achieved the following results.

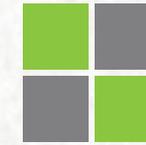
### The Existing Window Achieved a Reduction of 26 dB

With secondary glazing installed with a 100mm air gap between the two, the following results were achieved:

<b>4mm Glass</b>	<b>39 dB</b>	<b>Estimated</b>	<b>65%</b>
<b>6mm Glass</b>	<b>39 dB</b>	<b>reduction in</b>	<b>65%</b>
<b>Laminated</b>	<b>40 dB</b>	<b>sound through</b>	<b>70%</b>
<b>Acoustic Glass</b>	<b>45 dB</b>	<b>the window</b>	<b>75%</b>



All information is given in good faith and the company will not be responsible for any errors or omissions.



# Secondary Glazing



Have you become a radiator hugger?

Is local noise a major distraction to your daily routine?



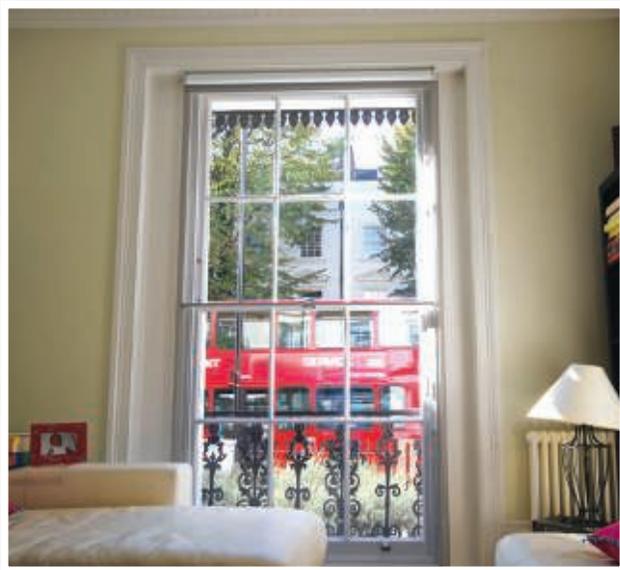
Would you prefer life to be a little more comfortable?

Do you suffer from cold rooms and draughts?



*Secondary Glazing*  
*Improving your life style for the better*

Secondary glazing has stood the test of time and remains the best form of insulation for homes, offices, public and private sector buildings against heat loss, draughts and noise intrusion.



**Easy Installation With No Mess**

All windows in our range are aesthetically designed to integrate seamlessly with your existing décor, and are available in a full range of colours.



**Unsurpassed Quality...  
Effective Simplicity**



- Up to 45dB reduction in sound through your windows depending on glass choice
- Draught free
- Low E glass available to help reduce heat loss
- Reduced energy consumption in winter and summer
- Keeps cool air in when using air conditioning
- Fly screens to keep insects out

A number of window designs are available to choose from to help suit existing window and door styles.

**Excellence Through Design**



Tailor-made units are manufactured to exact specifications. Combined with our highly efficient sealing qualities, this makes our system the obvious choice for the discerning buyer.



Fly screens can also be installed behind a glazed panel to offer additional protection throughout the year against airborne and crawling insects.

**Window Styles available**

Fixed, Hinged, Lift Outs, Horizontal Sliders, Friction & Counter Balanced Vertical Sliders, Easy Clean Tilt-in Counter Balanced Verticals.