



National Federation of Glaziers

Excellence and Integrity in Glazing

UPGRADING EXISTING DOUBLE GLAZED WINDOWS

In the UK tens of millions of windows have been replaced over the past 35 years which may be perfectly sound and serviceable but would benefit from **upgrading**. The most common replacement window frame material in the 1970's and well into the 1980's was aluminium. The original silver finish anodised finishes were replaced by, firstly, electrophoretic colour finishes and then by the more durable polyester powder finishes in the 1980's.

At the same time uPVC (unplasticised PVC) material entered the UK market from Europe in some quantity. uPVC eventually became the most common material.

With the introduction of Building Regulations being applied to replacement windows in 2002 the incentive for more **efficient** windows really took off. Aluminium frames had been upgraded over the previous 20 years with the incorporation of polyurethane thermal breaks, which made the frames more efficient and less prone to condensation. Some uPVC frames were modified with additional chambers.

The original double glazing using glass sealed units was the key step forward in reducing heat loss and noise reduction. These original replacements in fact provided the greatest gain in energy efficiency. This was the major step as far as improving the insulation of windows.

However, **significant advances have been made in the energy efficiency of glass sealed units.** This has been achieved with low emissivity coatings on the inside of one of the panes, the infill of an inert gas, most commonly Argon, and the improvement of the spacer bars around the unit from being aluminium to an insulating material. These technologies had been available for some time, but it was the introduction of Part L of the Building Regulations in 2002 (with revisions in 2006 and 2010) which accelerated their use and development. The proposed 2013 revisions will encourage even further developments.

Replacement windows in all materials are designed for decades of use: It is worth reflecting how long the original windows lasted! Both uPVC and aluminium **frames**, in most cases, will not need replacing.

It may be, therefore, a feasible alternative to upgrade the original replacement windows to gain that extra insulation which technology has now delivered.

There are 4 components which need to be considered:

Locking mechanisms: If these are regularly maintained, they should last for many years. In any event, it is normally possible to replace them.

Hinges: Probably, the most vulnerable part of the window. Again, if they are regularly maintained they will usually give good service for much of the lifetime of the window. If replacements are needed, they are easily changed.

Glazing gaskets: Quite often the "wedge" or "fir-tree" gaskets used on older windows shrink. They are easily replaced.

Sealed units: These are normally the easiest to replace and this is where the **most gain** as far as efficiency is concerned, is to be achieved.

All four items need to be checked by a competent glazier before a quotation can be arranged. The savings in cost over replacements and in the use of resource (sustainability) could be considerable.

For a suitable glazier contact us now at nfoguk@yahoo.com or on 0207 404 3099