

# TRIPLE GLAZING

CHOOSE THE BEST  
ENERGY PERFORMANCE  
FOR YOUR HOME



Correct at time of going to press  
Feb 2013. We reserve the right to  
make changes to specification,  
system or product details.



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A homeowner's **guide**



# ENERGY EFFICIENT TRIPLE GLAZING

Get the ultimate sealed unit window performance money can buy.

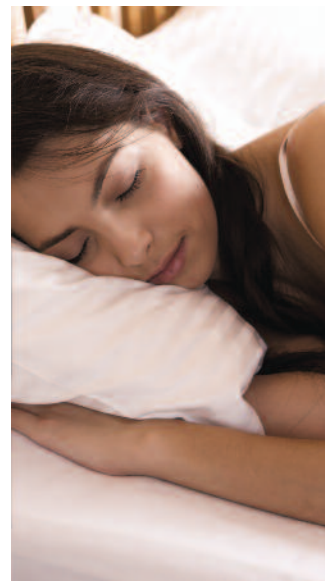
If you demand truly exceptional glazing performance, triple glazing simply stands apart. Now you can specify superior thermal insulation and noise reduction in any frame of your choice. Advanced triple glazed units are engineered to give you a comfortable, secure, quiet, energy-efficient home.

## Reduce wasted energy. Cut bills.

Choosing triple glazing has the potential to further reduce the heat loss from windows. It can perform up to a third better than double glazing, and is ideal for large glazed areas. In fact, triple glazing could reduce your total heating costs by up to £766 a year.

## Choose better looking frames.

Triple glazed windows feature low profiles with reflective spacers - so you can't see them at the window edge. Clear, uncluttered sightlines ensure windows look well proportioned, elegant and attractive.



## TRIPLE GLAZING IS UP TO 60% MORE EFFICIENT THAN C-RATED WINDOWS

## REDUCE CONDENSATION AND NOISE

Lower heat loss at window edges makes our glass 3-4°C warmer - cutting condensation by up to 80%. Using our unique high performance Q-Lon weatherseal gaskets, triple glazing reduces noise pollution too.

## REDUCE YOUR CARBON FOOTPRINT. CUT CO<sub>2</sub>

The more energy you use for heating, the more CO<sub>2</sub> you create. That's your 'carbon footprint'. Fitting energy efficient triple glazed windows could cut your CO<sub>2</sub> production by as much as 4.7 tonnes a year.\*

\* Replacing single glazed aluminium windows with energy efficient 'C' rated double glazing in an average gas heated bungalow/semi. GGF carbon calculator @ 2% inflation.



## Our energy efficient triple glazing lets you...

- Use less energy
- Save on heating and cooling
- Be comfortable all year round
- Reduce condensation
- Reduce your carbon footprint
- Combat climate change
- Add value to your property
- Reduce noise



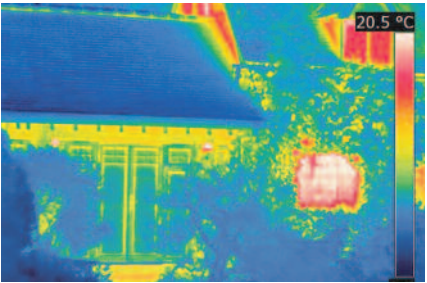
# TRIPLE GLAZED PERFORMANCE:

count the savings

GREATER THERMAL EFFICIENCY THAN A-RATED DOUBLE GLAZING BY **UP TO 40%**

**UP TO 60%** MORE EFFICIENT THAN C-RATED DOUBLE GLAZED WINDOWS.

Over a 10 year period, triple glazing a typical home could result in energy savings worth over **£7,000** and **47 tonnes of CO<sub>2</sub>**.



**Right system right glass**  
The images show just how effective fitting energy efficient windows to your property can be. The right hand side of the property still has the original windows – the reds and pinks show heat escaping. However, the new extension on the left is fitted with energy efficient windows, the lack of reds and pinks proving they help dramatically reduce heat loss.

## A LIVING ENVIRONMENT WITH LESS NOISE, LOWER HEATING BILLS & MORE STYLE

### Triple glazing maximises ambient heat

In winter, the energy efficient coated glass used in triple glazed units retains warmth within the home. It's also designed to exploit radiant heat energy from the sun. These properties, coupled with excellent thermal insulation, result in significant fuel savings compared to a single glazed dwelling, and higher savings than standard double glazing.

Replacing single glazed...	With...	Could save a year...
Timber framed windows	A++ triple glazing	<b>£357</b> (2.3 tonnes CO <sub>2</sub> )
Aluminium framed windows	A++ triple glazing	<b>£766</b> (4.8 tonnes CO <sub>2</sub> )

### Understanding Window Energy Ratings

The British Fenestration Rating Council's Domestic Window Energy Rating Scheme provides a way to compare the energy performance of windows on a 'like for like' basis. Windows that achieve a C rating or higher can carry the 'Energy Saving Recommended' tag.

All our triple glazing windows achieve A++ status Put simply, they're the most energy efficient windows money can buy.

### U-factors and you

The U value of a window is important too. It's a measure of the rate that heat is lost from any window assembly.

The lower the U-factor, the more resistant a window is to losing heat and the better the structure's ability to insulate. The National Fenestration Rating Council (NFRC) whole window U-value rates a window in its entirety including glazing, frame and spacers.

Our triple glazed units are over 5 times as effective as single glazing. Additionally, they are 3 times as effective as regular double glazing in saving energy and reducing your household bills.

### Glazing compared

Glazing Type	U Value
Single glazing	5.2
Normal double glazing	2.8
C-Rated double glazing	1.8
A-Rated double glazing	1.4
Triple glazing	0.8

**Energy Window**  
Malco UK Windows Group Ltd  
Duraflex Diamond Suite PVC U Casement Techniglass

Energy Index (kWh/m²/year)  
(Energy Index certified by BRC and based on UK standard window. The actual energy consumption for a specific application will depend on the building, the local climate and the indoor temperature)

The climate zone is: **UK**

Thermal Transmittance (U<sub>g</sub>) 1.2 W/m²K  
Solar Factor (g) 0.65  
Effective Air Leakage (L<sub>air</sub>) 0.01 W/m³K

Reg. No.: 598  
www.brc.org

This label is not a statutory requirement. It is a voluntary label provided as a customer service to allow consumers to make informed decisions on the energy performance of competing products.



# SAY GOODBYE TO CONDENSATION AND NOISE

Our energy efficient windows  
reduce condensation by  
**as much as 80%**

## Reduced condensation

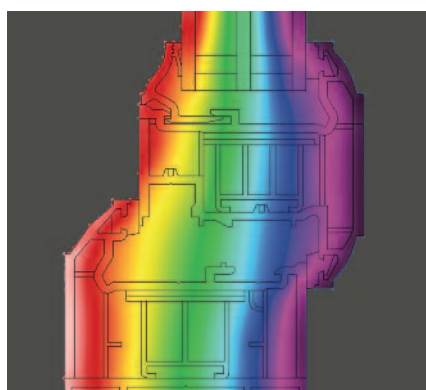
The air in homes often has a high moisture content. Whenever we cook, bathe or even breathe, we increase water vapour. When saturated air contacts a cold surface, condensation forms, promoting bacterial growth and mould. Both can compound respiratory problems such as asthma.

With lower heat loss at the edges, our triple glazed windows are typically 4% warmer than those with metal spacer bars, reducing condensation by up to 80%.

## Cuts down noise from outside

In today's world, it's difficult to avoid external noise. Whether you live near a major road, under a flight path or near some vocal wildlife, noise pollution can be a cause of major disruption. As well as two Argon Gas filled spaces sandwiching the extra glass pane, triple glazing features an additional 12mm cavity.

The insulation coupled with our high performance warm edge spacer allows triple glazed units to dramatically reduce external noise pollution.



## Thermal break

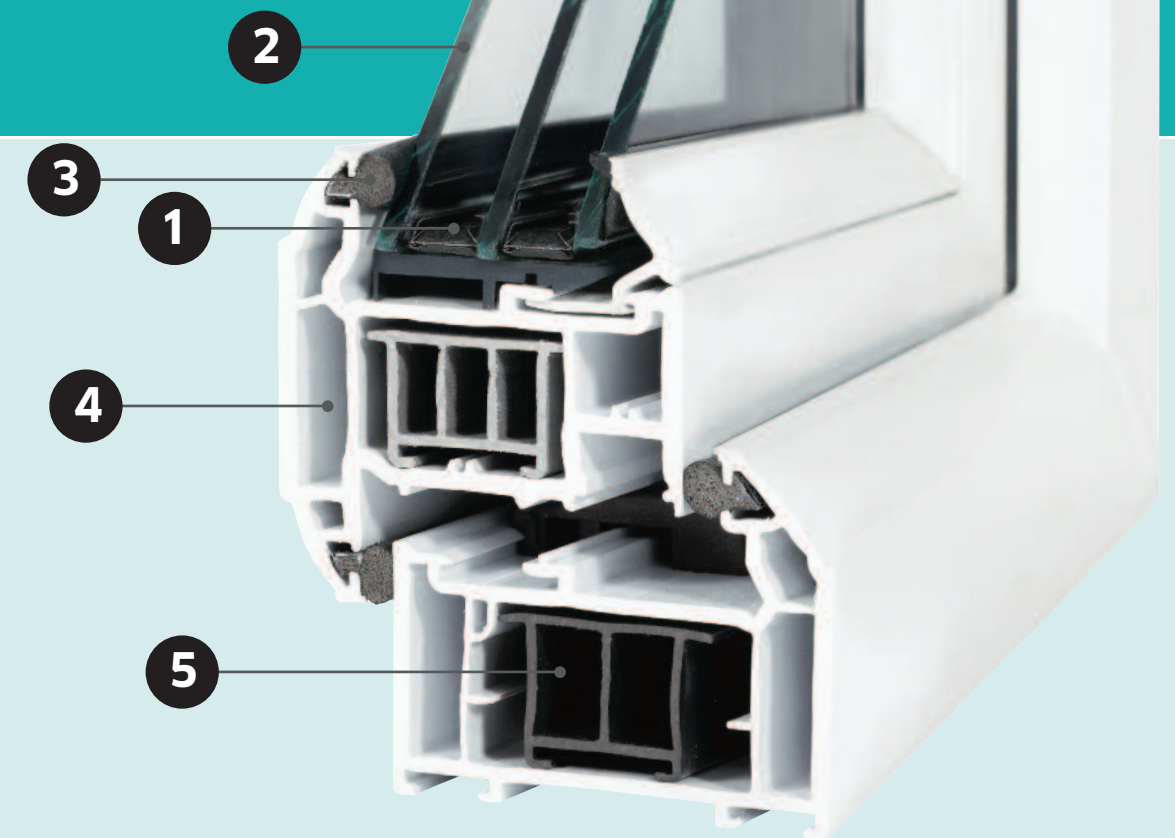
The diagram shows cold areas (purple and blue) at the outside of the window and warm (red and yellow) on the inside of the window. As heat isn't transmitted across the profile, spacer or glass, windows maintain a warm and comfortable living environment.

**For the ultimate energy efficiency for  
your home, choose triple glazing NOW!**

## How do we do it?

Choose proven technologies for a longer,  
maintenance-free life – **GUARANTEED.**

The system components that  
set our windows apart.



## The spacer

### 1) Warm edge spacers: Intercept

Up to 80% of a triple glazed window's energy loss occurs at the glass edge. Ordinary aluminium spacers are highly conductive. In winter they let heat escape and encourage condensation.

That's why our windows feature Intercept - a warm edge spacer engineered for strength and insulation. Intercept's advanced construction is designed to prevent heat transfer around window edge. It flexes during temperature changes protecting bonded sealant so resisting seal failure.

Impervious to gas transmission, it has a near zero vapour loss, increasing window service life.

## The glass

### 2) Pilkington glass

Pilkington's range offers proven products and technologies to meet a range of Window Energy Rating and Building Regulation requirements. Providing the Leading Low E glass in the UK, Pilkington also offers a good balance of U and G values, helping you retain costly energy and exploit radiant heat from the sun.

## The profile

### 3) Q-Lon weather seals

Our windows feature the innovative Q-Lon weather seals. Offering exceptional performance over a wide temperature range, they don't shrink or stretch. Instead they retain their original shape year after year to maintain an excellent weather seal.

The unique construction actively absorbs sound pollution, increasing acoustic insulation. Immune to rot, mould, mildew, UV and ozone, CFC-free Q-Lon weather seals will last the lifetime of a window.

### 4) Multi-chamber construction

Our multi-chamber construction is designed to improve strength as well as thermal, acoustic and security performance.

### 5) Thermal Reinforcing

Our triple glazed windows also include the very latest in energy efficient reinforcing. Our thermal reinforcing not only provides strength and rigidity, it also helps prevent cold bridging of the frames, providing you with the highest performing window system.