# Frequently Asked Questions Triple Glazing

At Turkington Windows & Conservatories we have been selling Triple glazing for over ten years. In the past five years it has become one of our standard products.

During that time we have installed thousands of triple glazed units. We are proud to be the market leader, providing customers with the enhanced benefits of a warmer, safer and more energy efficient home.



### What is Triple Glazing?

Triple glazed windows were first introduced in Sweden many years ago, as colder climates receive the most benefits from these high-performance windows due to their improvement of interior comfort climate.

- Triple glazing is typically three panes of 4mm glass in a 36mm or 40mm sealed unit.
- The air spaces have a 90% fill of inert gas called Argon which increases heat retention and acts as a better buffer than dry air.
- Turkingtons typically use 'Planitherm Total +' thermal glass units. This glass has a metal oxide coating that helps reflect heat back into your home. It maximises solar gain and minimises heat loss. It also lets in natural light without the haze and tint of cheaper options.
- Finally, we use a Warm Edge Spacer bar which retains heat better than standard aluminium spacer bars around the edge of the unit.

# turkingtonwindows.com



# **Triple Glazing**



## What are the advantages?

#### It is Warmer!

U-values measure how effective a material is as an insulator. The lower the U-value is, the better the material is as a heat insulator.

- Single Glazing
  U-value 5.7 W/m<sup>2</sup>k (approx.)
- Standard double glazing U-value of 2.7 W/m<sup>2</sup>k
- 'A' rated double glazing U-value of 1.2 W/m<sup>2</sup>K
- 'A' rated triple glazing U-value of 0.9 W/m<sup>2</sup>k
- 'A' rated triple glazing with 2 x coats of Planitherm Total + U-value of 0.7 W/m<sup>2</sup>k

#### Heat

With Turkington triple glazed windows, cold spots are reduced, leaving the inner pane warmer and your home much more comfortable.

The physics involved here have been worked out in Germany by the PassivHaus Institute. It has shown what happens to surface temperatures on various forms of glazing when it gets really cold outside, and the internal air temperature is designed to be at 21°C:

- Next to a single glazed window, the internal surface temperature is around 1°C.
- Next to a double glazed window (2000 vintage), the surface temperature is around 11°C.
- Next to a modern, energy-efficient triple glazed window, the surface temperature is 16°C.

So you can see that a triple glazed window is just that much more comfortable, because it hangs onto heat just that little bit better. You will notice the difference inside the house.

## **Draughts**

Additionally, our secure by design locking and 4-part fitting (Foam, Bolt, Seal and Trim) reduces draughts and noise so keeping your home safer and more comfortable.

#### Condensation

Due to the difference between external and internal temperatures, condensation may be formed on windows. Since triple glazed windows have three panes with additional air pockets, heat does not seep through at a fast pace so the internal temperature difference is significantly reduced. This helps to keep your internal pane clear and dry.

#### **Frames**

The Turkington frame is:

- Multi-chambered, steel reinforced 70mm profile for robust strength, security and heat performance.
- Co-extruded integral gaskets for an air tight seal for life.
- Internally glazed for security.
- Wide Choice of colour, design options and finishes.

#### Size

Triple glazed units are limited to 3m<sup>2</sup>.



