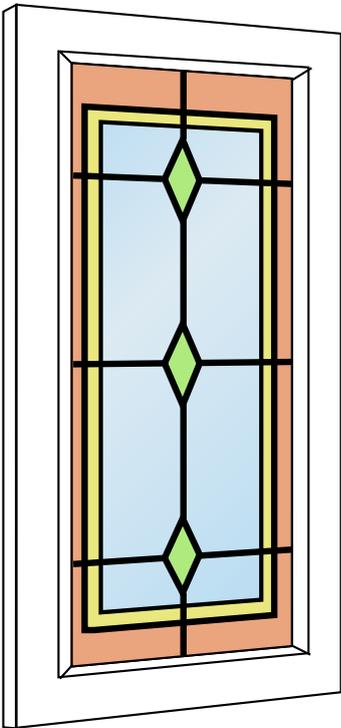


## Windows (a)

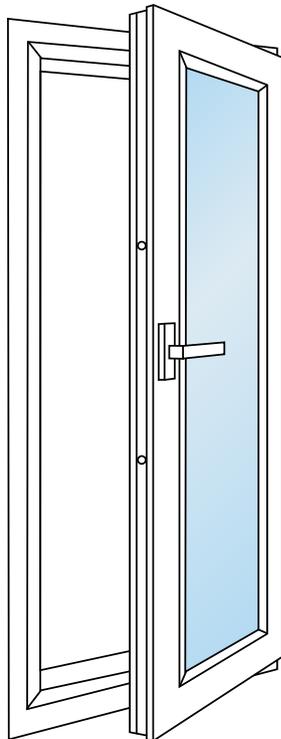
A window is an opening in a wall that lets in light, air and sound. Windows are held in place by frames.

Windows also keep weather out, so in winter you should keep the windows and doors shut to keep your home warm, but in summer you can open windows to let air in and cool the house down.

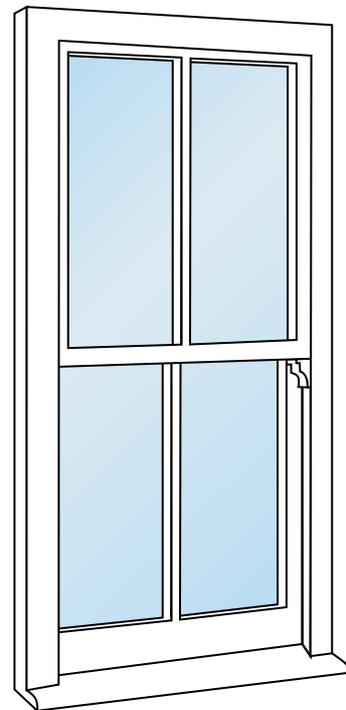
There are many different types of window:



**Fixed:** This window does not open, it only lets light in. These types of window can be decorated with stained glass, like in a church.



**Hinged:** This window opens on a hinge. This is the usual window that you will see in a house or office.



**Sash:** This window has two halves and opens by sliding. This type of window is common in older houses.

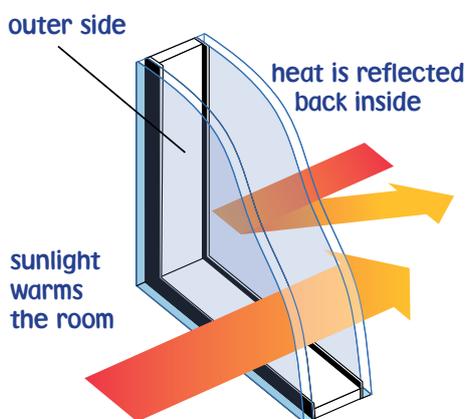
Windows are usually made of glass. The scientific name for plain glass used in a standard window is 'float glass'.

## Windows (b)

### Glazing

Single glass pane windows are not as good at keeping cold air, rain and sound, out as double or triple glazed windows.

### Double glazed window:



A **double glazed** window is made of two pieces of glass with a space between them that acts as an insulator, stopping heat from escaping. The space between the glass can either be filled with air or special gas. Double and triple glazed windows are also stronger and harder to break, which can mean greater safety.

**Triple glazed** windows are made from three pieces of glass, each with a space between them, just like double glazing. Triple glazing is mostly used in colder climates.

**Secondary glazing** is when a second layer of glass or plastic is added to an old window to help keep heat and sound in.

Secondary glazing is cheaper than double glazing, but is not as good.

Just like layers of clothing help to keep you warm in winter, curtains make an extra layer of insulation between the outside and inside.

### Frames

Frames can be made from wood, metal or UPVC (a type of plastic). Metal is not a good insulator, as it conducts heat. Wood or UPVC are poor conductors, meaning they trap heat and so are good insulators.

It is important that a window fits its frame properly so that heat does not escape from inside and cold air does not get in from outside.

### Did you know?

In the 17th and 18th centuries home owners paid **window tax**. This cost 2 shillings for buildings with less than 10 windows, 4 shillings for 10 - 20 windows and 8 shillings if there were more than 20 windows. This tax was very unpopular and many people bricked up windows so that they didn't have to pay it. These bricked up windows can still be seen in very old houses today.

In those days, one shilling would be a whole day's pay for most people and would be roughly £40-50 in today's money. The tax was finally stopped in 1851 and replaced by house duty.