



Glass and Glazing Federation



# A Consumer Guide to Conservatories

Helping you make the right choice







# You and your conservatory

It has been described as the most versatile space in the home – perfect for dining, studying, playing, relaxing or anything you want.

It lets in the light and warmth of the sun, giving you the sense of being closer to the outdoors yet still shielded from the elements...and of course, a carefully chosen and well built conservatory adds value to any home.

Whatever your reasons for choosing one, the modern conservatory has captured the imagination of the country's homeowners, making it the most popular choice of home extension, not to mention an ever more familiar feature on new houses.

As well as being versatile in use, it also offers many choices of design with a whole range of shapes, styles and materials.

But, as with many things, the range of options means that a little careful thought and planning can help you to make the right choice of conservatory that fits in with your home and suits the needs of everyone who will be using it.

# In the beginning...

The idea goes back several centuries when palaces and other grand houses would have orangeries, winter gardens or hothouses to nurture some of the exotic plants and fruits that were prized novelties at that time. Only recently have modern

materials brought such a luxury within the reach of many more homeowners and it has now become one of the most aspirational of all home improvements.

# The right choices

It may seem obvious but the first decision is which part of the house should a conservatory extend from. Appearance, view and available space are factors of course, but you might also want to consider how much direct sunlight it will receive and in what part of the day. There may also be planning and safety implications, but a GGF Conservatory Association Member will advise on these matters. (Please see "Why Choose a GGF Member").

When you are choosing the size of your conservatory, you can ensure you have enough living space by measuring out the actual dimensions in your living room.

This will show what furniture can be

This will show what furniture can be contained within your new conservatory.

You can choose from a wide range of materials, not only in the frames but also in the glazing, the roof and any masonry such as dwarf walls. Each material may have benefits and drawbacks for what you have in mind. Cost is important but it is not the only factor.

Also, think about the mood and texture you want to achieve. Some people like the 'outdoor' feel with tiled floors, patio-type furniture and bare brick or stone for the house wall;

others prefer an 'indoor' character with carpeting, soft furnishings and wall coverings.

Comfort levels and environmental factors should also be checked out. You may wish to extend the house's central heating, install a separate heater or an underfloor

heating system, but remember careful specification, design of materials and the location of the conservatory itself can all lead to natural environmental control.

Similarly, you can have overhead wiring for lights built-in or simply a few wall sockets for a table lamp and other appliances.

Ventilation is also important.

The need to let in fresh air and avoid condensation must be thought about.





# Which design?

## The choice of designs is infinite but nearly all are based on a few fundamental styles:



#### **Victorian:**

This has a ridged roof and a multi-faceted end wall creating a rounded effect.



#### **Edwardian:**

Here a ridged roof is combined with a rectangular base, giving the classical feel of the Victorian design, but with greater use of space.



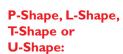
#### Lean-to:

Also sometimes known as Mediterranean or sun-room. This is the simplest design, with a single-sloped roof and usually the longer wall adjoining the house. It is also a useful style for fitting into a corner.



#### **Edwardian Gable:**

The ridged roof meets a gabled end, resulting in very clean lines that suit many modern homes.



Combine any of the above and the choices take on a massive scope.



## **Custom:**

You can also choose the bespoke option and create a truly individual design.



You have a choice for the lower part of your conservatory.

You can take the glass panels right to ground level or build a 'dwarf wall', usually of material to match the house. This will be highly insulated to optimise comfort levels.



### **Orangery:**

The classic Orangery uses a parapet wall and solid corner construction. This provides a more traditional design with all the benefits of a modern conservatory.







# Which glazing?

Double glazing is a must nowadays to keep a conservatory comfortable all year round and by using low emissivity (Low-E) glass, it will cut heat loss even more. The orientation of your conservatory may mean that certain specifications of glazing are more appropriate than others because of the impact of solar heat gain from the sun.

All Conservatory Association Members – as a condition of Membership – MUST use safety glazing throughout the conservatory.

Solar control options range from 'body tinted' glass (where the colour in the glass absorbs heat from the sun) to 'metallic coated' glass products. Modern metallic coated products have the advantage of being neutral in appearance, not obscuring views, while still reflecting the sun's heat. Single 4mm glass reflects only 15% of the sun's heat, whereas modern solar control glass units can easily reflect over 70% of the sun's heat, minimising overheating. Due consideration should be given to the position of your conservatory. If south or west facing it's very advisable to consider the use of a modern solar control glass for the roof and side panels of the conservatory.



Consideration should also be given to cleaning and maintenance of the glass, throughout the conservatory. Surface modified glass such as 'self cleaning glass' is a standard product from many companies and can reduce the need for cleaning the external pane. This can be particularly important in those difficult to reach roof areas where access is impractical.

Finally, sound control can be an important consideration in your conservatory. Whether it's rain, music, lawn-mower, traffic or aircraft noise, reducing its impact can enhance the enjoyment of your conservatory. Using laminated glass or enhanced acoustic insulation laminated glass, can reduce the amount of noise transferring into or even out of your conservatory! With due consideration to the frame system, appropriate glass units can easily double or treble the level of sound insulation compared to other glazing materials. In addition, laminated or acoustic laminated glasses have an ancillary benefit of reducing standard ultra violet ("UV") light transmission. This means sun bleaching of furniture or fittings is dramatically slowed.



## Which roof?

There are two main choices of roof-glass or polycarbonate.

Glass gives you a clear view up through the roof - it can be supplied with Solar Control and Self Cleaning coatings too. Laminated glass and safety filmed glass can add protection from falling debris through the roof glazing of your conservatory. Polycarbonate creates a softer light effect in bright sun (however, it is slightly noisier in heavy rain or hail.)



## Which frame materials?

Members can supply conservatories in all framing materials - Aluminium, PVC-U, Steel and Timber.

# The right foundation

A conservatory is a building extension just like any other, so it needs the appropriate foundations.

This means the base has to be level, and effectively damp-proofed and insulated. To be stable, it must be dug out to a depth that will vary according to local conditions.

Where brick or stone is visible in the base or in dwarf walls,

materials should be chosen that match the main building unless you specifically want something different.

Your Conservatory Association Member will insulate the sub floor and dwarf walls to assist improvement to thermal performance.



Before installation



Digging foundations



Concrete foundation



Insulation installed



Base is levelled



Dwarf wall built

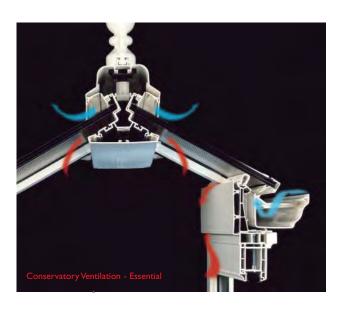
## A breath of fresh air

Control of the internal environment can be aided by the correct specification of both materials and ventilation (minimises condensation and heat build up).

Many roofs have built-in trickle ventilation and Building Regulations specify a certain area of opening windows per floor area. Technological developments mean that you can even have opening roof vents installed that can be thermostatically controlled with built in rain sensors. Members will advise you on this.

Almost every window lock has a 'night-vent' setting, which allows you to lock it in the slightly open position. It's a good idea to set a couple this way, if not fully open, on hot days in a sunny conservatory.

However to maximise security no windows should be left open.





# Using your conservatory all year round

A well designed conservatory can help reduce energy bills, by creating a 'buffer zone' on your home, and so any heat that escapes through the walls where the conservatory fits is used within the conservatory. This buffer effect can also be used to store heat during the day; this can then heat the main building when the conservatory doors are open.

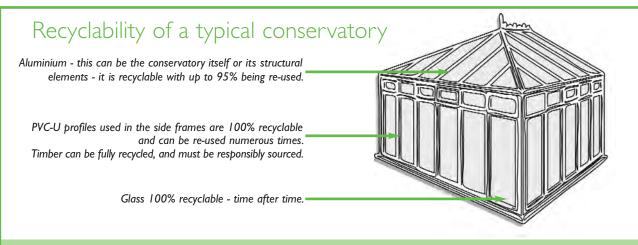
As well as the advice in this guide so far, these tips will further assist in the optimisation of the thermal efficiency of your proposed conservatory - please consider them at the design stage with your Conservatory Association Member:

- Use external quality double glazed doors between your home and your new conservatory; this will provide added thermal performance and security between the main house and the conservatory.
- Select the best glazing specification you can afford with your budget.
  - Low emissivity coatings on the inside face of the insulating glass unit reduces heat loss from your radiators inside the structurethis is strongly recommended for north facing conservatories.
  - Solar control layers can control glare and the amount of the sun's energy that is transferred into the living space - this is specifically recommended for south facing conservatories.
- Ensure any heating appliances have their own thermostatic controls, so you can separately control the conservatory's temperature.
- Members will offer good thermally insulated bases, dwarf walls and floors.
- Design in natural ventilation (trickle vents, top opening windows, roof vents) when the conservatory is on the drawing board - it is much easier at this stage than later.
   The use of natural ventilation is far more economical (and better for the planet) than air conditioning.

# Health and Safety

Needless to say, the safety of the consumer and the site operatives is fundamentally important when any form of construction work is being undertaken. The GGF in conjunction with the Conservatory Association is the organisation that provides standards of "Best Practice" for conservatory manufacturers and installers across the UK.

Each GGF member complies with strict "Codes of Practice" for various manufacturing and installation activities. The GGF also operates a scheme named the GLASS Charter. This is a working partnership between the glass industry and the Health and Safety Executive and sets the requirements for safe working. The Glass Charter is recognised as a significant contributor in helping to reduce accidents across the industry and has left the UK glass industry operating more safely, complying with standards that have become the envy of other industries. By using a GGF member you will benefit from having a safer working environment during the construction of your conservatory.



## Green credentials

The materials typically used to build your conservatory feature a large percentage of recycled material. In addition, the key materials used within your conservatory are all recyclable at the end of their life. Old conservatories being replaced will have most of their material recycled. Conservatory Association Members will responsibly dispose of any redundant materials.



# How do I get a conservatory?

As you would expect, we recommend you select one of our Members (see below for a comprehensive list of reasons to choose a GGF Conservatory Association Member).

In membership we are represented by small, local family companies through to major national brands. Which ever type of company you choose, you can rest assured that the basic process is very similar.

Normally, you would contact a Member and explain your basic requirements over the phone. The Member would then arrange a mutually convenient time to come and discuss your requirements at your home, and at the same time undertake some basic measurements and check that the proposed site for the conservatory is suitable.

# Conservatory legislation

A GGF Conservatory Association member will be happy to assist you in ascertaining if planning permission is required. If it is they will normally obtain planning permission on your behalf (some official fees will be payable, which varies from Council to Council).

Building Regulations should also be considered and will cover areas such as electrical work, safety and structural stability. In the Building Regulations, for England and Wales conservatories are kept exempt if they are:

- Built onto domestic dwellings;
- Where the existing walls, doors and windows in the part of the dwelling which separates the conservatory are retained or, if removed, replaced by walls, windows and doors which meet the energy efficiency requirements.
- Under 30m<sup>2</sup> in floor area;

Then a fully detailed quotation is prepared along with a contract. The contracts that Members use have been prepared in consultation with the Office of Fair Trading.

Once the contract is signed, a surveyor will be sent to undertake a more detailed appraisal of your property; the host wall to which the conservatory is attached and the garden area on which the conservatory will be sited (checking for drains, tree roots, local ground conditions etc...). The survey is then used to manufacture the roof and frames and the bricklayer uses the survey documents to build the foundations. Conservatory Association Members will keep you informed of progress every step of the way.

- Built at ground level;
- Glazed in compliance with safety glazing requirements of approved Document N of the Building Regulations and BS 6262 Part 4 2005;
- The roof must be 75% glazed and the walls 50%;
- Where the heating system of the dwelling is NOT extended into the conservatory;

In Northern Ireland and Scotland equivalent provisions apply. In addition for Scotland, conservatories under  $8m^2$  are not subject to building standards and those over  $50~m^2$  are subject to building standards and although all elements should be built to the same maximum U-value standards as other new build, glazing and frames used in the construction of walls and roof are unlimited in area but must have an area-weighted average U-value of  $2.0~W/m^2K$  or less and a maximum individual element of  $3.3~W/m^2K$  or less.

# Why you should use a GGF Member

By selecting a GGF Conservatory Association Member, you will deal only with reputable and financially sound companies. The additional benefits of dealing with a GGF member are:

- They must have been trading for three years and pass vetting at local and national levels before becoming a Member.
   Only companies with a good reputation are in membership.
- Their conduct is governed by a Code of Good Practice.
- Members are obliged to use only products that comply with the relevant British Standards Institution and Conservatory Association specifications.
- Conduct is regulated and monitored by the Conservatory Association which is in turn controlled by its parent body, the Glass and Glazing Federation, the industry leading Trade Association.
- Any disputes between a customer and a Member can be conciliated through the GGF at no cost.
- Deposits are protected by the GGF Deposit Indemnity Scheme (subject to the exercise of the Fund Administrator's discretion) for up to 25% of the purchase price or £3,000 whichever is lower.
- All Members comply with the GGF Publication 'A Guide to Good Practice in the Specification and Installation of Conservatories within the United Kingdom'.



# What to do next

The Conservatory Association (CA) is a specialist division of the Glass and Glazing Federation (GGF), the pre-eminent body in the glass and glazing sector. The GGF and the CA are actively consulted by and work with the Government on all consultations and changes to the Building Regulations. Deposits placed with a Member are protected by the GGF's independent Deposit Indemnity Scheme and the GGF also provides a FREE Conciliation Service should a customer and a Member company not see eye to eye on work carried out.

To find your local Conservatory Association Member see www.ggf.co.uk/conservatoryassociation/



Member details





Glass and Glazing Federation
Conservatory Association

**The Conservatory Association** 

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