

# TILED ROOF

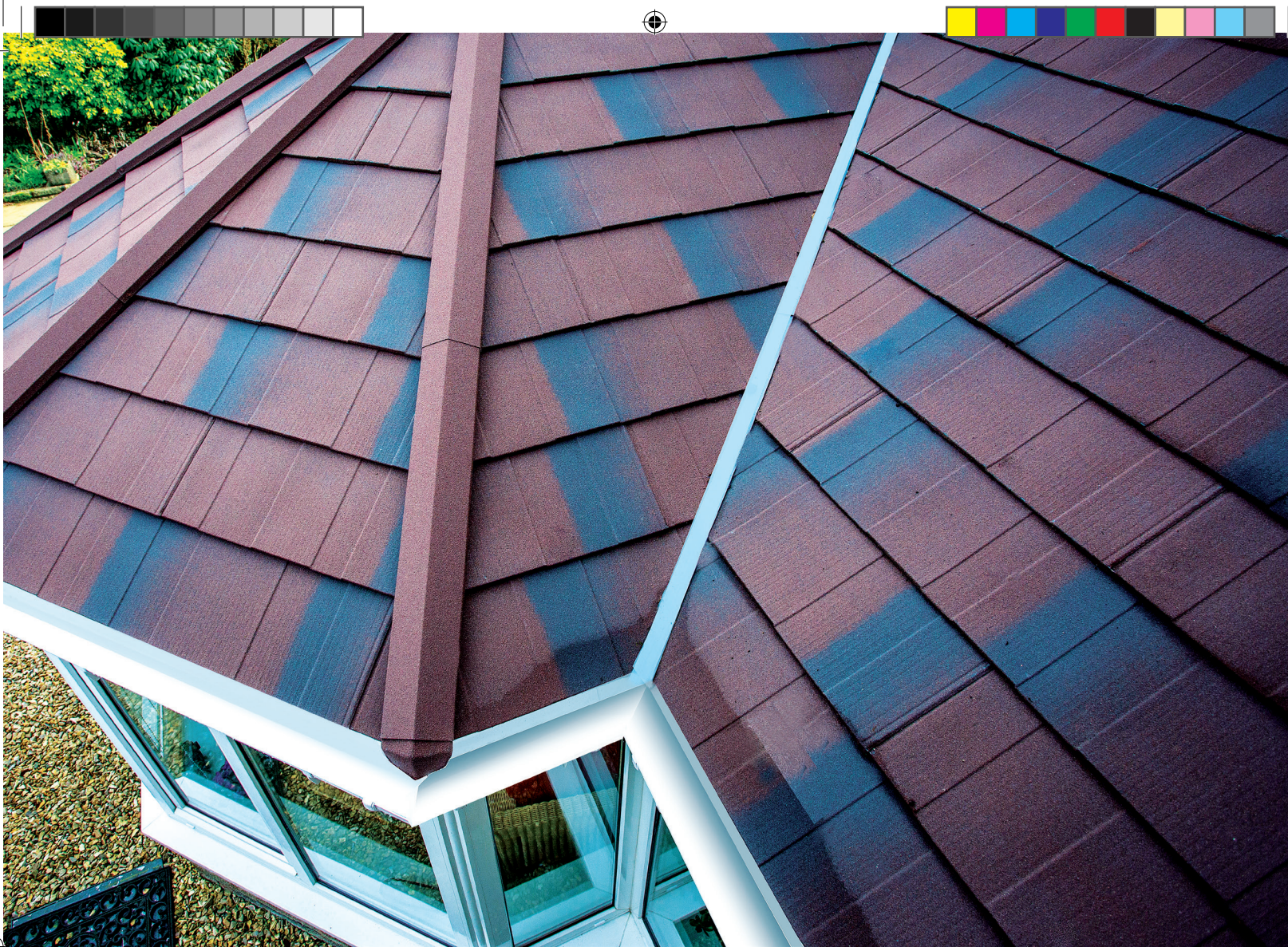
## The Complete Guide



ROOFING EXCELLENCE THROUGH INNOVATION







# SHOULD YOU UPGRADE YOUR CURRENT CONSERVATORY?

A helpful guide to all the benefits of a lightweight solid tile roof conversion.

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# INTRODUCTION

A conservatory creates extra living space and enhances your lifestyle.

A growing number of homeowners want every room in their home to be a space that they can enjoy whatever the season.

With poorly performing glass or polycarbonate roofs, conventional conservatories can be too cold in the winter and too hot in the summer, which makes them unusable for several months of the year.

Solid tiled conservatory roof systems have been developed to overcome these problems by maintaining heat during the winter and staying cool in the summer.

Many homeowners are now choosing to upgrade their existing roof to a lightweight tiled roof. Delivering

better thermal performance and improved energy efficiency, they create a far more comfortable living space that can be used all year round.

When installing a tiled roof, there are many factors to consider, including structural integrity, safety and energy efficiency. There are certain Building Regulations that must be met too so it's important to choose a reputable and experienced company to install a structurally and thermally proven roof system.



## DON'T COMPROMISE ON YOUR SOLID TILED ROOF!

This brochure will guide you through every stage of your lightweight tiled roof conversion.

# BUILDING REGULATIONS EXPLAINED

Revised guidance on the definition of a 'conservatory' under the 2010 Building Regulations means that it is no longer a requirement to have an external translucent wall area of at least 50% and a minimum of 75% for the roof area.



These changes put homeowners at risk of installing a solid tiled roof onto their existing conservatory without the correct safeguards in place to ensure the job was carried out safely, efficiently and without risk. This resulted in many unregulated roof conversions.

Inexperienced companies could simply overlay the existing roof with lightweight or standard roof tiles on the outside and with plasterboard on the inside. Many of these existing roofs and frames were not designed to carry the additional load, which caused major safety issues. It also led to increased condensation and little to no increase in the energy efficiency.

Many unregulated conversions were carried out by opportunistic companies looking to cash in on what seemed like an easy way to make money fast.

A reputable, experienced conservatory installer would not carry out this type of work.

Even when a lightweight roof conversion product is correctly specified, many installers fail to carry out an adequate survey and structural inspection of the existing foundations, walls and frames to ensure that they are able to carry the additional load.

- The 2010 Building Regulations amended guidance on the definition of a 'conservatory'.
- Unscrupulous companies used this opportunity to perform sub-standard unregulated tiled roof conversions.
- All conservatory roof conversions were brought under Building Regulation control in August 2013.





# THE LEKA WARM ROOF

## CURRENT BUILDING REGULATIONS

In August 2013, new guidelines were introduced to bring tiled roofed conservatories under the control of Building Regulations. This included additional guidelines, which are contained within the document "LABC's guidance on solid roofs to conservatories or porches attached to dwellings". For further details, please visit the LABC website – [www.labc.co.uk](http://www.labc.co.uk).

These changes provide better protection for customers because they ensure that conservatory roofs are upgraded in a legally compliant manner.

A conservatory installation company must adhere to this additional guidance when upgrading to a solid tiled roof.

## KEY POINTS

- If the amount of glazing to the walls or roof was significantly reduced, the conservatory could no longer be regarded as exempt from Building Regulations.
- A replacement or new tiled conservatory roof system must comply with Building Regulations Part L (Conservation of Fuel and Power).
- Under the 2013 legislation, Building Regulations approval should be sought before work is carried out to convert a translucent to a tiled roof. It's also important to note that any new structure must also adhere to the existing 2010 requirements to be exempt from full Building Regulations control.

## KEY POINTS FOR A NEW BUILD CONSERVATORY

- Must be at ground level and have a floor area less than 30m<sup>2</sup>.
- Must be thermally separated from the dwelling by walls, windows or doors that meet energy efficiency requirements.
- The heating system in the dwelling must not be extended into the conservatory or porch.



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# CONSIDERATIONS WHEN CARRYING OUT A TILED ROOF CONVERSION

Some installers are still fitting tiles on top of an existing roof and fitting plasterboard internally.

This type of top and bottom cladding can lead to excess load and condensation, which damages the plasterboard and compromises water tightness. These problems are only avoided if the entire roof is replaced properly.

A correctly specified and installed tiled roof system will ensure compliance with Building Regulations Part L, making the conservatory habitable all year round and saving on heating bills.

A structural assessment is required to ensure that the existing conservatory foundations, walls and frames are strong enough to withstand the load of a replacement tiled roof.

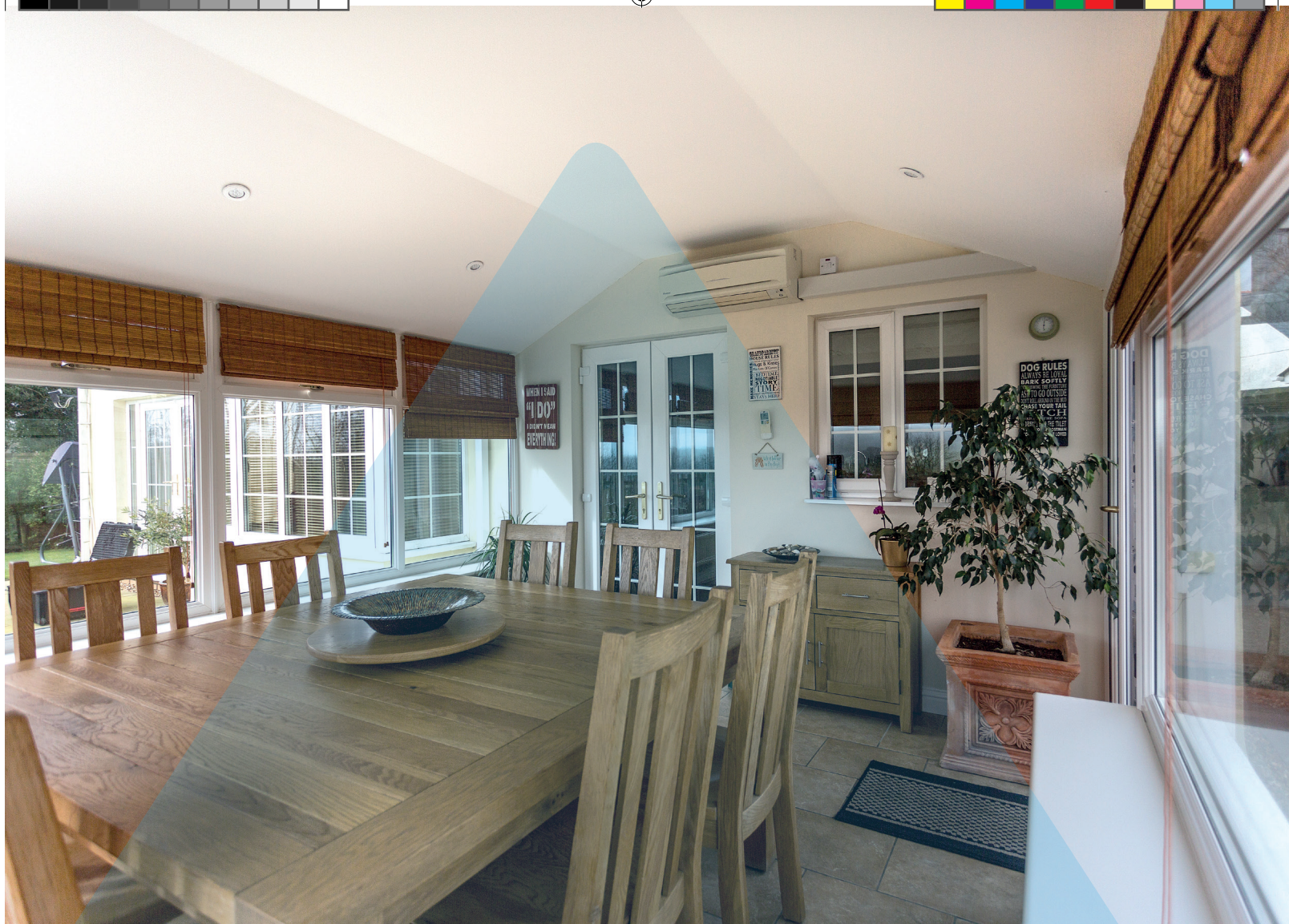
A tiled roof cannot simply be placed over an existing conservatory roof.

- Local Authority Building Control (LABC) recommends that installers check the strength of the structure by drilling pilot holes into the vertical supports, or by using a magnet to see whether there is a steel core in place.
- Conservatory foundations should comprise of a 150mm thick concrete strip or reinforced concrete slab.
- Foundations passing over drains, close to tree roots or on filled ground may require further consideration.
- In some instances, the conservatory might need new window frames to support the weight of a new tiled roof. It may be possible to make existing frames more rigid, depending on the strength of the existing conservatory.
- The structural integrity of a conservatory is vitally important. The roof has to withstand changes in weather, ranging from being loaded with snow to pressure from high winds. Problems can be avoided by undertaking a thorough inspection of the conservatory. If this is not carried out correctly and any remedial action is not taken at this stage, it could lead to a wide range of avoidable problems in the future.

## KEY POINTS

- All conservatories need to be assessed to ensure that they can support a new tiled roof.
- Foundations, walls and frames must be strong enough to support the weight.





It's important to know that your solid tiled roof has been installed to meet current Building Regulation guidelines. This protects you from sub-standard work and ensures you benefit from a comfortable, all-year round living space that's energy efficient to meet Part L regulations.

- Cutting corners with your roof could lead to issues in the future.
- Mortgage lenders are more rigorous in their assessments of properties for sale, which means that they may employ a surveyor to assess a property. Buyers can choose to commission their own building survey.
- Regulations and guidelines that have been evaded may cause problems. In extreme circumstances, the conservatory may need to be removed before a sale can proceed.



## KEY POINTS

- Buyers could be deterred from purchasing a property with a conservatory that has not been built to the required standard. The same advice applies to sellers.
- Some conservatories could be removed if non-compliant.





# THE MANY ECO BENEFITS

## SAVE ENERGY & REDUCE YOUR HEATING BILLS!



### WHY REPLACE YOUR GLASS OR POLYCARBONATE ROOF WITH A LIGHTWEIGHT TILED ROOF SYSTEM?

There are many reasons why you should upgrade your existing conservatory roof to a new lightweight tiled alternative. One of the main benefits of a solid tiled roof is the improved energy efficiency it delivers.

If your conservatory has a glass roof that's more than a few years old or a roof made from polycarbonate panels, then replacing it with a modern, lightweight tiled roof system is the most effective way of making your conservatory more eco-friendly.

### 25 PER CENT OF THE HEAT IN A HOME TYPICALLY ESCAPES THROUGH THE ROOF

The u-value of a lightweight tiled roof conservatory is around  $0.15\text{w/m}^2\text{K}$ , which is far better performing than a traditional, glazed or polycarbonate conservatory roof. It also meets the requirements of Building Regulations. This u-value can be achieved because lightweight tiled roofs have high performance insulation integrated into the structure to lock heat inside your conservatory. By being fully insulated, your conservatory no longer needs as much heat in the winter or temperature control in the summer. This makes the space more enjoyable and helps to save you money all year round. And, by conserving energy and reducing your home's carbon footprint, you'll also be doing your bit for the environment too.





A conservatory with a  
correctly specified and  
installed lightweight tiled  
roof conversion can be up to

**10x**

more thermally efficient  
than a conservatory with a  
standard polycarbonate roof.



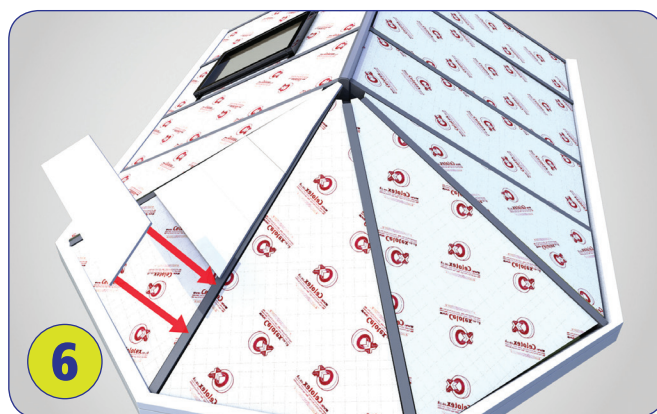
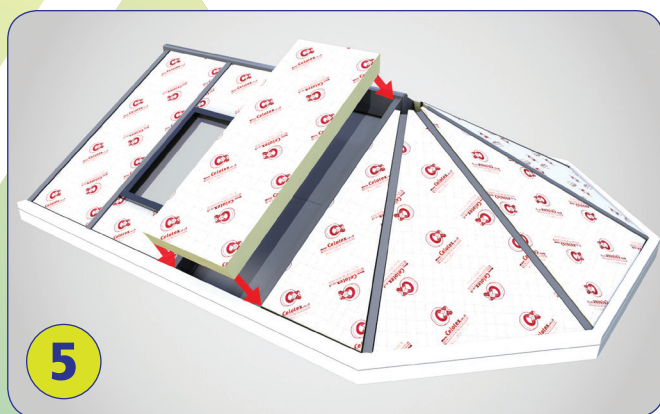
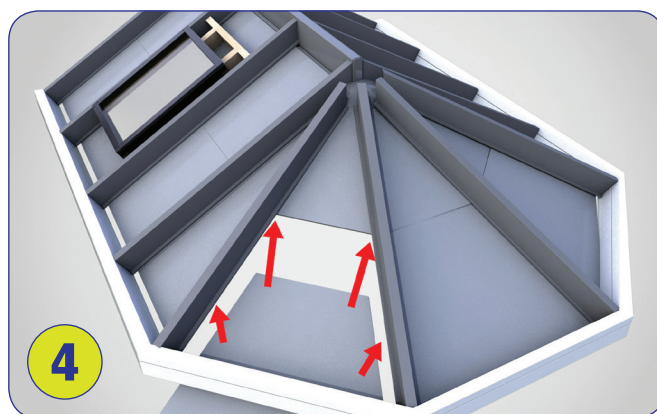
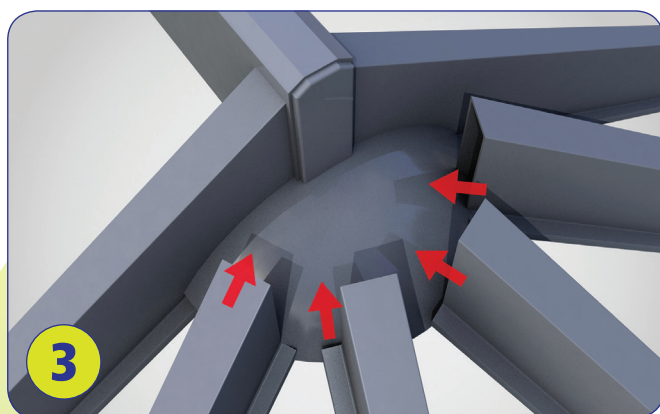
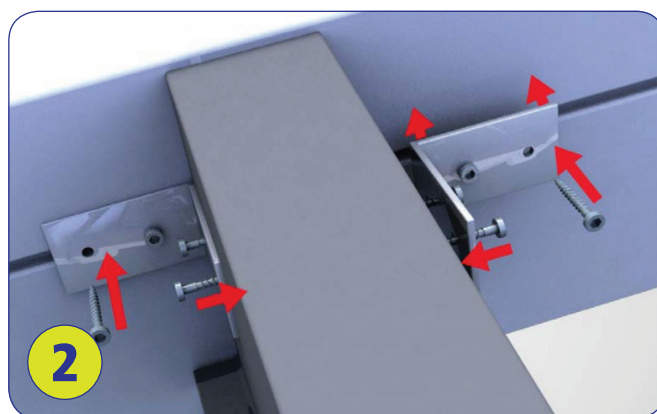
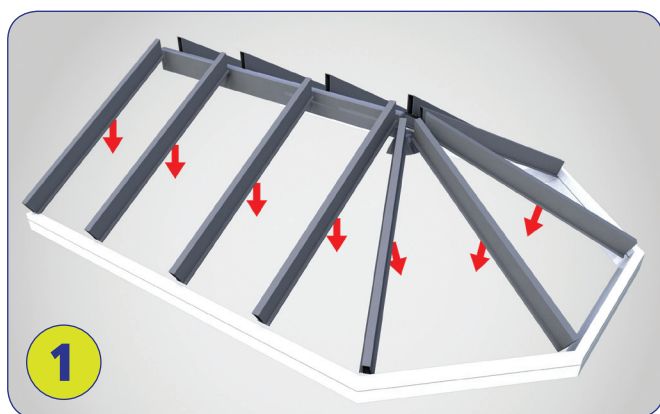
*"Almost half the CO<sub>2</sub> emissions in the UK are produced  
by lighting, heating or cooling our homes and offices."*





# WHY YOU NEED AN EXPERIENCED INSTALLER

It is essential to find an installer that is highly experienced in this type of work.





# From start to finish...

## KEY POINTS

- Your installer will invite the local authority to inspect the build to ensure that it fully conforms to all the necessary guidelines and regulations.
- Building Regulations requirements will be looked after for you by your installer, so you don't need to worry.
- A comprehensive structural survey will be carried out before replacing an existing polycarbonate or glass roof with a tiled roof system.

## CHOOSE THE RIGHT INSTALLER

You should select one who works with qualified chartered surveyors and your local Building Control department. This department will provide you with a Building Regulations certificate upon completion. This ensures that your conservatory has:

- Full structural integrity.
- Thermal efficiency.



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