

**WORLD
GROUP**

TRUST IN QUALITY



Sentinel
SOLID ROOF

real wood
solid roof



The UK's first and only patented timber conservatory roof system



*the **easy** way to transform your conservatory into a room you can use and enjoy all year round*



what **is** the Sentinel Solid Roof?



a highly insulated, lightweight, timber solution

Sentinel Solid Roof is designed to be used for new sun room installations or as a roof replacement to existing conservatories, and features a U-value of 0.18.

This “warm roof” design was conceived through the use of a pod system (patent granted) finished off externally with lightweight tiles, of your choosing.

regulation compliant

All structural and building regulations are met thanks to careful design and engineering. The roof has been extensively tested and certificates issued to ensure it complies and exceeds the current Building Regulation requirements for both structural and thermal performance.

made from pre-built pods for maximum efficiency on-site

A roof pod is a boarded one piece timber framework section, either shaped or rectangular, which forms a structural link between both the eaves and ridge.

These pods are factory pre-assembled using roofing grade timber (1) and have been specifically designed to replace existing glass or polycarbonate roofed conservatories. All pod joints are glued and screwed together before being boarded with 18mm OBS3 roofing sheets (2).

The one piece roof pods are then glued and screwed onto a continuous Glulam* ring beam (3) attached to the head of the window frames, which are finished with a 150mm fascia board (4) and an 'ogee' decorative gutter system (5). This specially produced and engineered beam provides incredible structural strength, long term durability and performance.

*A **U value** is a measure of heat loss. It is expressed in W/m²k, and shows the amount of heat lost in watts (W) per square metre of material (for example wall, roof, floor etc.) when the temperature (k) outside is at least one degree lower. The lower the u value, the better the insulation provided by the material.*

Glued laminated timber, also called **glulam, is a type of structural timber product comprising a number of layers of timber bonded together with durable, moisture-resistant structural adhesives.*

what else is in a roof pod?

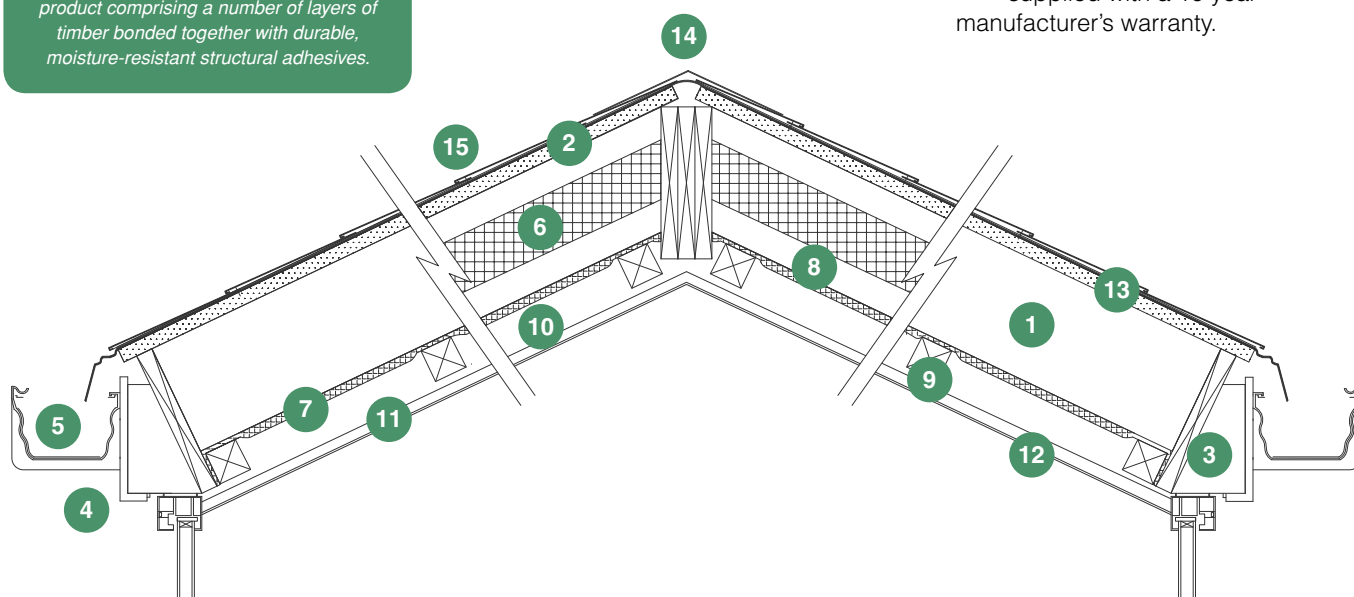
A 90mm thick multi layer of Hybris foam and foil backed insulation (6) is fitted into the pods, which are bolted together to secure the installation. An additional 19 layer vapour barrier (7) is then added and fitted across the underside of the roof. This provides further insulation as well as air (8) and watertight seals to prevent both air leakage and moisture passing through the roof, to eliminate the risks of condensation.


Internally 2x2 battens (9) are fitted to create a further air gap (10) and allow 12.5mm foil backed plasterboard (11) to be attached, ready for a typical 2.5mm skim finish (12).

On the outside the pods are covered with a waterproof air permeable breather membrane (13) which lies below the tiles (14)/(15).

All Sentinel roofs are factory built and pre assembled to ensure accuracy and fast installation. This not only reduces the time the old conservatory has to be left open and exposed to the elements but also minimises disruption and any mess created by on site assembly.

Your Sentinel roof will be supplied with a 10 year manufacturer's warranty.









A woman with long dark hair, wearing a grey long-sleeved top, is sitting on a light-colored textured sofa. She is looking back over her shoulder with a smile. The room is bright with large windows in the background showing greenery outside. To the right, there is a small table with two potted plants.

*“...it’s just
so much more
comfortable
in here now!”*

why do I **need** the Sentinel Solid Roof?



-  *Is your Conservatory unusable for parts of the year?*
-  *Too hot to use in the summer yet too expensive to keep cool?*
-  *Too cold to use in winter, too expensive to heat?*
-  *Too bright to allow you to relax, read a book or watch TV - your furnishings fading in the sun?*
-  *Too loud to hear yourself think or talk when it rains?*
-  *No privacy when the lights are on in the evening?*



The Sentinel solid roof is 'The Roof for All Seasons'.

year round comfort and use

With the Sentinel roof you will enhance your enjoyment of your conservatory. This tiled and highly insulated roof will keep your room cosy and warm in winter yet cool and comfortable in summer.

rediscover your room

Whether it is being able to use it in comfort, when it rains or in the evening, without feeling the neighbours can see your every move, a Sentinel roof will allow you to regain personal space, be it for dining, entertaining, playing, relaxing or simply daydreaming.

traditional quality

We only use structural grade timber, the very same wood traditionally used for housing, and still the number one roofing product of choice in new build homes.

thermal performance

Wood outperforms metal structures such as aluminium or steel when it comes to thermal efficiency. It is not a thermal conductor and less likely to condensate.

fast installation and minimal disruption

When carrying out a roof replacement speed is vital to protect your room and minimise disruption. Because the Sentinel pods are fabricated in the factory we offer a solution that is installed and made watertight faster than any other roof system. Typically the inside of your conservatory could be exposed for as little as an hour and your finished installation is likely to take a day less than comparable aluminium systems.

low energy costs

The Sentinel roof is at least 5 times more energy efficient than traditional glazed conservatory roofs. So not only will you be able to once again enjoy your room but its efficiency might just help you save money on your energy bills too.

*“...finally,
a room we
can relax in.”*



case study: from dull to **delightful**



The owners of this tired Lean-to were looking for ways to be able to use this somewhat disused room all year round. It lacked light and was a little gloomy and cold, with the roof making it noisy in the rain.

Whilst they were looking for options they came across the Sentinel Roof, a solid roof solution made using timber rather than aluminium offering them better thermal performance and improved resistance to the risks of condensation.

And because the product comes in a ready to install kit they were assured on site disruption and mess would be limited and installation fast, with their room left exposed for a minimal time and waterproof within hours



On the outside the difference is striking. A lightweight tile was chosen to fit in with the existing house roof, ensuring it blends in with its surroundings, much better than the old roof.

And of course inside the results left the property owners simply delighted. The smooth plasterboard finish, which they opted to paint in white, made the room feel bigger and lighter. This airiness is further enhanced by the use of low voltage LED lighting which make it ideal to use in the evening.







this is **how it happens!**

from a selection of typical installation photos

Step 1. Old roof removed.



Step 2. Glulam eaves beam goes on.



Step 3. Individual pods including pre-cut and fitted insulation located, glued and bolted into position.



Step 4. Waterproof air permeable felt membrane attached - roof already waterproof within hours.

Step 5. Eaves protection fitted and tiling can begin ahead of fascia board and gutter fixing.



Step 6. Internal vapour barrier attached and secured in place with 50mm x 50mm horizontal battens.



Step 7. Standard thickness foil backed plasterboard fitted onto battens, before taping and skimming.

Step 8. Sit back and enjoy your new room!



a smooth internal finish...



...even with roof vents!



your Sentinel roof can be **personalised** inside and out.



Internally the plastered finish remains the most popular as it makes the room bright and airy, although timber and pvc cladding can be considered.

For added light and ventilation doubts velux type roof vents are available.

Your installer will offer you lighting options, either surface mounted or concealed along the length of the ridge within a drop down lowered ceiling.

Externally you can choose from a range of coloured lightweight tiles and slates from the likes of Metrotile and Tapco. Both have BBA accreditation, offer proven weatherproof performance and come with extensive guarantees against corrosion, warping, fading and cracking.

- **Metrotile – BBA Agreement**
Certificate : 07/4470
40 year weatherproof guarantee

- **Tapco – BBA Agreement**
Certificate : 08/4603
50 year manufacturers limited warranty
We only use Class A Fire Rated Tiles to BS476 part 3
Boarded Roof SAA



roof vents

Opt to have a roof vent fitted into your Sentinel Solid Roof for added light and ventilation.

- 10 years guarantee
- Slimline wooden frame design
- Lacquer coating, toughened outer glass

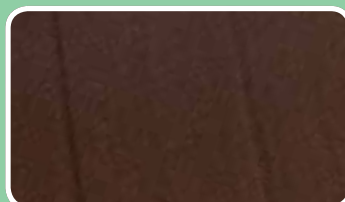
great range of tile styles & colours

tapco



brick red

metrotile



burnt umber



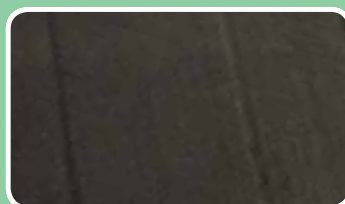
stone black



charcoal



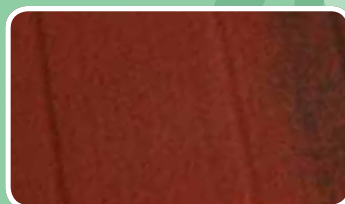
chestnut brown



ebony



pewter grey



antique red



plum

Alternative slate colours available



*“It was
always too
bright in
here during
the day.”*

everything else you need to know

Consumer Assured Protection

the Sentinel roof **fully complies** with current building regulations

The Sentinel roof has been independently tested and certified by JHAI, an accredited national building control approvals agency. These tests involve detail analysis and verification of the roof system from independently sourced structural calculations figures, along with further assessment checks on thermal performance and condensation resistance.

As a result the roof has been certified to achieve a 'u' value as low as 0.18Wm2.

Designing roofs in timber combats the risk of condensation in a way that similar metal structures cannot.



your conservatory
roof exemption may
no longer apply

According to a letter dated 30th July 2013, and issued by the Department for Communities and Local Government, "in certain circumstances an existing conservatory or porch can no longer be considered exempt from the requirement of Building Regulations if the amount of glazing in either the walls or roof is significantly reduced by further work or alteration". The percentage reduction is not stated so it is advisable to check in advance with your local Building Control office or seek the advice of your installer.

planning permission
should always be checked

Existing conservatories are likely to have been built either with prior planning consent or under permitted development rights. If the roof of an existing conservatory is to be replaced with a tiled roof similar to those on adjoining buildings and the overall footprint and height are to remain unchanged it is unlikely further planning permission will be required. In all cases it is advisable to check with your local planning department prior to the start of any works.

Patented design

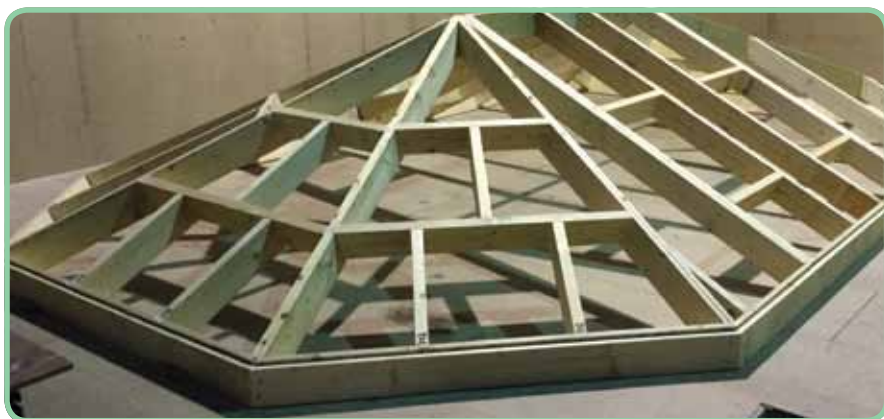
The unique and innovative design of the Sentinel solid roof incorporates patented (patent number 2515294) timber pod technology. The patented protection should provide consumers the peace of mind to know they are receiving a proven tried and tested original British designed product.

The Sentinel Solid Roof is a product designed, manufactured and distributed by TradeFrame Conservatories Ltd, based in Frome, Somerset.

We have supplied roofs for over 30,000 conservatories in over 16 years of trading.

A patent application submitted in 2013 and granted on 5th August 2015 (patent number 2515294) secures the exclusivity of the timber roof 'pod' system in the UK marketplace.

for more information on
Sentinel Solid Roof visit
www.sentinelssolidroof.co.uk



Recommended Local Installer



TRUST IN QUALITY

YOUR PROPERTY IMPROVEMENT SPECIALISTS

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