

**INFINITY**  
by GB·Sol

## The ultimate integrated solar roof system



The Infinity solar roof is the ultimate use of “GB·Sol’s award winning Roof Integrated System, for an almost seamless glass roof. Frameless solar panels are mounted within a structural framing system and the roof is then finished with high quality welded aluminium flashings that are powder coated for colour matching. The result is a glass and aluminium roof covering from ridge to gutter and side to side, with huge solar power output and a 25 year warranty.

### **BRE tested**

Working with BRE as partners in the EUR-Active Roofer project, Infinity was used to develop the tests which inject dense tropical rain in the horizontal airstream from a wind tunnel in front of the roof, while simultaneously imposing a vacuum behind. This simulates the very worst case conditions and shows that Infinity is completely watertight.

*In 2013 it was awarded a Solar Power Portal Award for its innovation.*

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## Infinity solar roofs

- Complete solar roof from edge to edge
- Based on GB-Sol's fully waterproof RIS solar roof system
- Internal drainage systems for water ingress protection & condensation management
- Hundreds of installations across the UK, going back to 1995
- Can be produced to exact dimensions and can incorporate purpose made triangular panels, for a perfect edge-to-edge look and maximum power output
- Clear-backed panels are available, also with the option of double and triple glazing
- The system offsets the cost of the standard roof covering e.g. tiles or slates, and the time spent on a bare roof can be significantly quicker than cutting tiles and fitting hooks
- Ideal for Passive and low carbon houses, including SIP panel constructions

### Infinity Concept

The Infinity solar roof is unique in using unframed solar panel laminates, fitted onto a robust aluminium frame which is securely fixed to the roof structure. The resulting system is strong, completely weatherproof and well sealed from the risk of bird nesting or build up of debris.

Each panel is fitted with EPDM edge gaskets that complete the sealing of the roof. The mounting system framework provides backup drainage for management of any water ingress and condensation.

Once a roof has been membraned & battened, the RIS frame is fitted directly to the battens or the plywood or OSB under the membrane. When the framework is in place solar PV laminates are added and the capping strips are riveted in place, retaining the panels by compressing the gaskets to form a perfect seal.

Finally the surrounding flashings are installed. These are high quality welded aluminium and powder coated to your specified RAL colour. They will have been designed to precisely finish your roof.

### Design Service

Infinity is available fully installed by GB-Sol. Once we have some basic details of the installation we will respond with an initial quotation, showing the proposed system size with the total dimensions of the array plus its flashings.



### Frequently Asked Questions

Our award-winning RIS system has been around for over 20 years and is the foundation of our Infinity and Integrated roof integrated solar roof systems. If you have a question, you may find the answer here...

**Q.** Is my roof suitable for RIS?

**A.** Most roofs are suitable for our roof integrated system. Please get in touch with your architect's drawings and we'll be happy to confirm and offer advice if required.

**Q.** What information do you need to give me a quotation?

**A.** For a new build, please send us an email containing your architect's drawings (all elevations and a site plan if possible). If it's an existing building, please provide the roof dimensions and details of any obstructions such as roof lights or vents. If neither of these are possible, please provide the address and we may be able to give a very rough guideline quotation.

**Q.** Is there a minimum or maximum roof angle for the RIS?

**A.** The roof needs to have at least a 15 degree slope to ensure the drainage system is sufficient in removing any condensation from behind the panels and for effective self-cleaning. If less than this, contact us as we can discuss the options. Some customers have low profile Infinity roofs that are completely horizontal.

**Q.** Is the Roof Integrated System an accredited product with the Microgeneration Certification Scheme (MCS)?

**A.** Yes, contact us to discuss why this may be important for your project.

**Q.** How heavy is the system?

**A.** 20kg per square metre for a standard system not including double or triple glazing, so much lighter than most clay tiles & slates.

**Q.** What warranty comes with the Roof Integrated System?

**A.** RIS comes with a comprehensive 25 year warranty on product, solar performance and weatherproofing. The system is made of high quality powder coated aluminium and 4mm toughened glass, the toughest in the solar industry, so it likely to significantly outlive its warranty period..

**Q.** What colours are available?

**A.** The most popular systems have black solar panels with discrete black aluminium trim. The aluminium trim can be in any RAL colour, so some customers choose a grey to match their zinc roofing, for example, or white to match painted wood areas. Polycrystalline solar cells can be used to give the roof a blue tint. Coloured glass and coloured solar cells are also options, but these are more expensive.

**Q.** Is it really Made in Britain?

**A.** Yes, GB-Sol has been manufacturing solar panels in South Wales since 1995, mainly specialising in solar for demanding environments and architectural applications. We are trusted to make most of the solar panels in use on buoys in the North Sea & Irish Sea.

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*Please note that visits to our premises are by appointment only.*

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