

Solar Panel Support Posts™

Latchways Fall Protection

Product Overview



Latchways Fall Protection



With the ever increasing requirement for renewable energy, the use of a building's roof as a generator of power and subsequent revenue stream has become more viable and principally linked with the installation of solar panels.

Latchways success in the fall protection market has been based on innovative fixing and load control technology which is utilised in the Latchways Solar Panel Support Post™.

Checklist

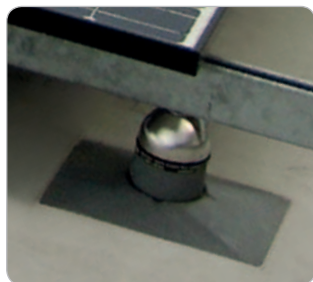
The post enables solar panels to be 'top fixed' to the complete roofing system rather than the more traditional methods of attaching the support post through the roof to the building structure.

Although particularly suited to metal roofs, the post also negates the use of unsightly concrete counterweights used to hold down the panels on warm flat membrane roofs. Such weights impede drainage, cause localised ponding of water and subsequent build-up of algae, over-compress the supporting insulation and can be prone to 'slippage' causing critical misalignment of the panels. Furthermore, leading membrane manufacturers will generally require the use of an additional isolation layer between the weight and the membrane adding cost to the final installation.

This document sets out to explain the key selection criteria behind the post with each element supported by an explanation to assist the decision making process.



Traditional 'through the roof' post



Solar Panel 'top fixed' post

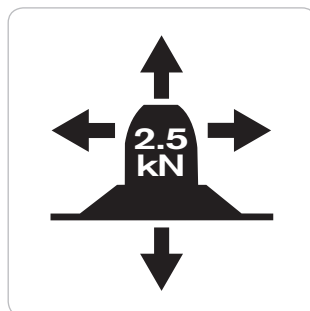
'Top fixed' solution
Retrofit and
new build
Roofing system
manufacturer approval

2.5 kN tensile, shear
and imposed load
capacity per post

Unique
'Overload™' facility
Recyclable
Cost effective

Product testing and performance

The Latchways Solar Panel Support Post is secured to the roof using tried and tested fixing solutions derived from the Constant Force® post fall protection product range and provides a base to which the solar panel frame can be attached. Each post is capable of resisting a tensile, shear and imposed load of 2.5 kN maximum



Each post incorporates the unique Latchways Overload™ feature that assists the protection of the finished roof in the event of excessive uplift. This feature can also provide a visual indication that remedial action may be required.

Roofing system manufacturer approval

As an essential element of the overall roofing system, Latchways partner with industry-leading manufacturers to ensure an holistic approach and are therefore able to provide both up-to-date solutions for existing and new roofing system innovations. In addition, Latchways solutions maintain the guarantees/warranties offered by partner manufacturers.

Design liability

It is the responsibility of the clients' structural engineer to undertake the necessary calculations to ensure the integrity of the overall construction for each installation including the required number of posts.

The post is not suitable for the attachment of Personal Protection Equipment (PPE). Where maintenance access is required it is recommended that a Latchways ManSafe® system be installed by a Latchways registered installer.

Product marking

Each post carries the following marking;

- 1 Means of identification e.g. manufacturer's name
- 2 Individual serial number for traceability
- 3 Pictogram indicating method of use

System maintenance and access

It is recommended that the installation be checked on an annual basis to ensure the integrity of the complete system.

Where access is required for maintenance an appropriate Latchways ManSafe system, utilising the Constant Force post, should be specified. The use of a Constant Force post system will ensure complete continuity for both maintenance access and solar installation.

Solar Panel Support Post type and availability

There are now some 70 variations of the Latchways Solar Panel Support post available covering in excess of 400 different roofing systems worldwide.

The post is available in the following standard colours;

PVC membrane applications—Traffic grey

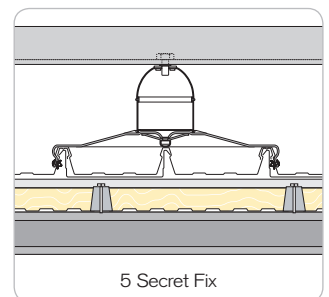
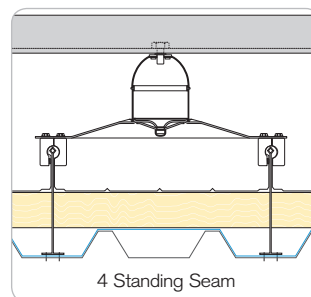
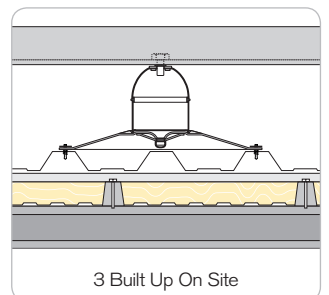
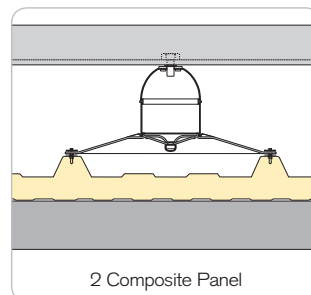
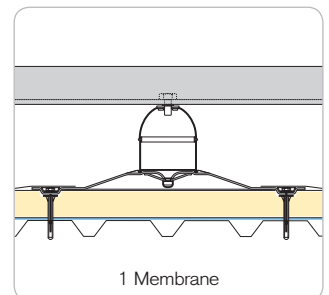
Bituminous membrane applications—Goosewing grey

Composite Panels & Built up on Site—Goosewing grey

Standing Seam & Secret Fix—Metallic silver.

With the exception of the PVC coated post other colours are available to order at additional cost subject to availability and lead time. Further details are available upon request.

Principally there are 5 generic types of roofing systems in the market for which Latchways has a solution;



NB: Solar panel frame and M12 stainless steel fixings by others.

Installation and training

The Latchways Solar Panel Support Post can be installed by a trained competent person or via Latchways registered installers. Where training is required, Latchways has developed a number of tailored training packages, details of which are available upon request.

Where a ManSafe fall protection system is required these products can only be installed by a Latchways registered installer. Such companies are fully trained and able to offer a complete service package to the customer including initial design advice, pricing, installation, maintenance, and the correct future annual inspection and re-certification of the system.

Product quality and recyclability

As an ISO 14001 Environmental Management Standard accredited company, Latchways understand the importance of using products that can be recycled whilst offering long term durability. Therefore, the main constituent parts used to manufacture the Latchways Solar Panel Support Post are aluminium and marine grade stainless steel.





ManSafe®