

Profiled Sheeting Using solar panels on corrugated sheets

TECHNICAL
NOTE
Et-01/10/en/v3

We offer the following advice when considering fixing solar PV panels on a fibre cement profiled sheet roof.

- Fibre cement profiled sheets should always have 2 fasteners per sheet width per purlin, the fixing positions being in the first full corrugation on each side of the side lap. There should be no additional fasteners fixing the sheets to the purlins. The fasteners should be fixed through 2mm oversize holes in the sheet to allow for expansion/contraction and differential movement.
- The roof structure should be designed for the additional loading of the PV system, and for possible additional snow loadings as the PV panels could increase the build-up of snow. It has been shown that there may also be an increase in wind loadings after PV panels have been fitted to a roof.
- The additional loading on top of the profiled sheet will increase the downslope loadings on the fasteners and rotation of the purlins. Can the fasteners withstand this loading? Where Zed purlins are used, is the purlin thickness adequate to prevent the fasteners rotating downslope? Is the purlin restraint system adequate to withstand the additional down slope movement/rotation?
- The installers must work from crawling boards to minimise damage to the sheets and to avoid walking on a fragile roof. As fibre cement embrittles with age, existing roofs will be more vulnerable to damage from foot traffic and when working on the roof.
- There should be no foot traffic directly on the sheet surface when cleaning the PV panels. If access onto the roof surface is required, crawling boards or roof ladders should be used.

Disclaimer

The information in this Material Information Sheet is correct at time issuing. However, due to our committed program of continuous material and system development we reserve the right to amend or alter the information contained therein without prior notice. Please contact your local Etex Exteriors Sales Organization to ensure you have the most current version. All figures contained in this document are illustrations and should not be used as construction drawings. This information is supplied in good faith and no liability can be accepted for any loss or damage resulting from its use. This document is protected by international copyright laws. Reproduction and distribution in whole or in part without prior written permission is strictly prohibited. Eternit and logos are trademarks of Etex NV or an affiliate thereof. Any use without authorisation is strictly prohibited and may violate trademark laws.