

Fibreglass sheeting Installation

Bulletin AFG3



IMPORTANT

The following installation procedures are recommended by the product manufacturers – Ampelite Australia Pty Ltd.

These recommendations closely follow the Australian Standard: Design and installation of Sheet Roof and Wall Cladding, Part 3: Plastic. AS1562.3:2006

Where wire safety mesh is incorporated under the fibreglass sheeting and over a purlin, a protective purlin strip must be installed to prevent fracturing. Ampelite manufacture a 65 mm wide self-adhesive fibreglass strip which, when viewed from below is not visible.

In roofing applications, fixings shall be fitted through the crest of any profile. Oversize screw holes from 10 mm up to 15 mm must be drilled at all points of fixing. Only 32 mm 'Weatherlok' seals should be used. These seals are large enough to cover the oversize hole and are sufficiently flexible to contour to any corrugation (or rib) when medium pressure is applied. Medium pressure means that the 'Weatherlok' seal is contoured to the shape of the corrugation (or rib), but it must retain its shape without any sign of buckling.

Contractors must make sure that the fixing is located in the centre of the oversize hole, or the benefit of the larger hole is lost.

To ensure accuracy, Ampelite recommends the following:

1. Fasten fibreglass sheeting in the same manner as metal.
 2. When Job is complete, remove fasteners on fibreglass section.
 3. Using the existing screw hole as a guide, drill an oversize hole, swap neoprene washer (used in step 1) with 'Weatherlok' seal and reinstall the fastener.
- Alternatively, Ampelite recommends the use of Fibreglass Tekes or Clearfix industrial fasteners which drill an oversize hole as they fix.

Ampelite design and recommend the fibreglass sheets to be installed on top of metal roofing on both sides.

The sheet rib can still go over and under when the fibreglass sheets are installed side by side.

Where fibreglass sheets are end lapped including those with dissimilar materials, two lines of Lapseal Tape or a flexible sealant shall be placed across the full width of sheet. Each strip is placed approximately 150 mm apart with one line located 25 mm from the end of the fibreglass sheet. Ampelite recommends the use of 25 mm Lapseal Tape as silicone sealants can harden and cure due to exposure to daylight. The over-lapping sheets then become locked together as one sheet, effectively stopping movement between the sheets possibly causing buckling. With decking profiles install Lapseal Tape in the tray only or use a flexible sealant.

Long or steep roof runs, concave and convex curved roofs or sheets installed below the minimum required pitch can affect a translucent sheets ability to remain water tight under heavy rainfall. The installer may find it necessary to use Lapseal Tape along the transvers laps to ensure a water tight installation is achieved.

Fibreglass sheeting is not easily reshaped after manufacture, and will require special weather seals to be provided at all flashing and capping points. Typically, a foam closure strip matching the profile of the fibreglass sheet should be bonded to the pans or valleys with a flexible weatherproof sealant. Ideally it should be fitted at least 100 mm behind the turn down of the flashing.

Ampelite fibreglass sheeting (with the exception of Webglas GC) is a non-trafficable material.

Sheets should be handled with care to avoid damage to the surface coating which is either Melinex film or Gel Coat according to the grade. Guarantees will not apply to sheeting that has been damaged in handling, or mechanical damage due to foot traffic.

Furthermore, unless the above instructions are strictly adhered to, Ampelite Australia Pty Ltd cannot accept any responsibility for consequent leakage problems, caused by sheets buckling or "ocean waving".

Further information can be obtained from an Ampelite office in your area.