

Laserlite® Industrial Polycarbonate Installation Guide

Carefully read all installation instructions before you start.

CAUTION: Always exercise extreme care when working on the roof. Use walking boards along purlins. Never walk directly on the sheeting.

1. Always wear safety glasses when operating drills or saws. Ensure that your roof pitch allows adequate water run off (recommended minimum 3°)
2. Allow for ventilation, particularly at the highest point, to minimize heat build-up and provide air circulation. Good ventilation will also minimize condensation in cold weather.
3. Purlin spacing should be no more than those shown in Fixing & Purlin Spacing Table. Curving is not recommended for industrial profiles. Alsynite NZ Purlin Barrier strips must be installed between the translucent sheets and the safety mesh.
4. Read the label to ensure that the UV protected side faces the sun. If the label has been removed, the ink jet marking on the side of the sheet represents the side that should face the sun. When installed as a wall cladding, the life of the sheet may be shortened and discoloration may occur due to the unprotected side being exposed to UV radiation. Facing the protected side in the direction of most sun can slow this process.
5. The sheet can be easily cut with a pair of shears, a fine-toothed handsaw or a circular saw with either a cut-off blade suitable for plastic or a fine tungsten tipped blade.
6. Industrial profiles are to be fixed on all purlins at every rib. As a guide, you will need approximately 7 fixings per lineal meter. This may vary depending on your purlin spacing and wind conditions. Fix the sheet through the rib for roofing and through the pan for walls.
7.
 - a. Matching Profile Support Foam is to be placed on every purlin, fix through the sheets and through the foam supports.
 - b. Fit Lap-seal tape at the top of the 2 outside iron roofing ribs the translucent is to lap over, the lap-seal tape is to run continuously along the full length of the ribs. For Industrial 7 and 5 Rib profiles use 20mm x 3mm x 20m FI75R and for Industrial Supaclad use 26mm x 6mm x 12m FISC
8. Alsynite recommends the use of a 12g x 65mm Unitite screw, GM40 washer with a 36mm EPDM. Pre-drill 10mm oversize fixing holes to allow for expansion and contraction. Ensure that the sealing washer is adequate to cover the expansion hole. Adequate expansion holes will help prevent buckling.

Laserlite® Industrial Polycarbonate

Installation Guide

9. Fix the sheet through the centre of the pre-drilled holes, perpendicular to the purlins. Only tighten the fixings enough to prevent rattling. Over tightening may cause distortion or undue stress with possible failure resulting. Use only EPDM washes as these are designed to be compatible with polycarbonate. Any failure of the sheet due to washes made from materials other than EPDM will not be covered by warranty.
10. End overlaps should be a minimum of 200mm. Position the lap over the purlin, it is recommended that the bottom of the lapped sheet be within 50mm of the lower side of the purlin. Seal between the sheets with two evenly spaced rows of Alsynite Lap-seal Tape or MS Crystal Clear sealant to reduce the ingress of water and wind driven grime.
11. Where spans exceed data displayed in the Load Span graph, mid span supports should be installed at appropriate intervals. They should be of a length to allow them to extend a minimum of 0.400m under the adjacent metal roofing sheets. Mid span supports are not designed to support foot traffic. Mid span supports shall not be used where more than two translucent sheets are to be laid side by side.

Important

Sealants, these instructions are designed to prevent leaking and alleviate the requirement for sealants. Sealants, especially silicone, are incompatible with polycarbonate. They will damage the sheet, restrict expansion and contraction and void the warranty. Use the appropriate foam seals to complete your project. If a sealant must be used, ensure that the manufacturer recommends the sealant for polycarbonate. Any damage to the sheet that occurs as a result of sealant use will not be covered by warranty. It is the responsibility of the installer to ensure that Laserlite Industrial Polycarbonate sheets are installed to the requirements of the relevant Building Code.

Storage and Handling

1. Laserlite Industrial Polycarbonate sheets should be stored on a flat surface in a protected and shaded area, out of direct sunlight. Stacked sheets stored in the sun will cause heat build-up and possibly distortion, even if covered. If damage occurs in this situation you will void your warranty.
2. Prevent moisture getting between stored sheets as this may cause whitening.
3. Clean sheets with warm soapy water (mild detergent) and a soft sponge. Take care not to scratch the sheet. Hose down thoroughly.