INSTALLATION GUIDE

LASERLITE® 2000+ TWINWALL

Impack Pratama

15 YEARS

Planning the Supporting Structure

- Install the sheets with the flutes parallel to rain flow and with a minimum pitch of at least 5°. In roof and wall type applications always ensure that the flutes are positioned vertically.
- We recommend supporting beams should be at a minimum of 30mm wide to ensure good stability of sheets and fastening accessories.
- Laserlite Twinwall sheets should normally be fixed to rafters, purlins or studs at a maximum of 610mm centres. In areas exposed to high wind areas, spacing should be reduced to 400mm centres.
- For an arched/curved structure, ensure it meets the required cold bending radius - 6mm = 1050mm and 8mm = 1400mm.
- It is important that all Building Regulations are met and/or a qualified professional/builder checks and approves the structure before installing Twinwall.

Preparing the Supporting Structure

- Complete all the metal/timber work and painting before installation of Laserlite Twinwall sheets.
- Check dimensions on site, and plan the roofing requirements before ordering Laserlite products for the project.

Preparing the Sheets

Alsynite can cut your sheets to any size for you. If you would rather do this yourself we recommend using a sharp stanley knife or fine tooth circular saw. When cutting the LENGTH of the sheet cut down the middle of the flute this will ensure the flutes remain sealed. Note: Laserlite Twinwall sheets will expand and contract (approx 3-5mm in length and 2mm in width).

- Fold back the printed sheet protection film 100mm on each side. Attach Laserlite Twinwall Anti-Dust Tape to the bottom (breathable tape) and top (solid tape) ends of the sheets.
  Note: It is essential to use Polycarbonate End Caps in conjunction with the Laserlite Twinwall Anti-Dust Tape to prevent the adhesive in the tape from drying up (unless tape is encapsulated by a glazing system).

Preparing the Laserlite Profiles, End Caps & "F" Sections (Side Profile)

Use a sharp stanley knife or circular saw to cut the Laserlite Twinwall End Caps and Snap H Joiner into sections to match the length of your sheets..
Note: Laserlite Snap H joiner will expand and contract (approx 3-5mm in length and 2mm in width). If cutting sheets with a circular saw, ensure the flutes of the sheets are clear of saw dust (air gun is the ideal method).

Polycarbonate End Caps are used to protect both the upper and lower edge of the sheets.

- Use a Stanley knife or saw to cut the Polycarbonate End Caps into sections matching the width of sheets.
- Fix the Polycarbonate End Caps to the sheet with the short side on top of the sheet. Ensure you allow a 2-3mm gap to prevent condensation – do not fix the Polycarbonate End Cap flush with the Laserlite Twinwall sheets.
- Using a metal saw, cut the "F" Sections (Side Profiles) into sections matching the length of sheets. The "F" Sections (Side Profiles) are to finish off the ends of your roof/wall if applicable.
  Note: "F" Sections can be installed with blade facing upwards or downwards depending on flashing requirements.

Sheets Installation

Laserlite 2000+ Twinwall sheets are UV coated on both sides of the sheets so they can be installed either side up.

1. Slide the Base Profile underneath the sheet flank and use self drilling screws to secure Base Profile to the structure. The Base Profile should be fixed at every 400mm into the rafter or every purlin intersection. Ensure that at lease one flute of the Laserlite 2000+ Twinwall in secured in the Snap H Joiner.
2. Position the top section of the Snap H Joiner in place and use a rubber mallet to connect the bottom section of the Snap H Joiner.
3. Continue to add sheets and Snap H Joiner until your roof/wall is complete and remove the remainder of the protective film from the Laserlite Twinwall sheets.
4. Fix the Laserlite Twinwall sheets at every 400mm with Laserlite Twinwall Fixings through the rafters or purlins that do not have a Laserlite Snap H Joiner and every 300mm for the bottom end near the gutter.

Finishing & Fixing Reinforcements

- Place fixing screws with neo washer through the bottom section of the Snap H Joiner into the support rafters or beams.
- Allow an extra 2mm than the fixing size when fixing through the sheet for thermal expansion and contraction of the sheet
- Ensure the fixings are fixed perpendicular to the sheet to ensure a weather-tight seal.
- Ensure the screws are not over-tightened..