

Specification

The Translucent Sheeting shall be Ampelite Dualroof Premium Insulated Skylight System consisting of Solasafe SS40 Industrial Polycarbonate top Sheet and Lexan Multiwall bottom sheet as supplied by Ampelite (NZ) Limited. The thickness of the SS40 top sheet shall be 1.2mm in an Opal colour and the thickness of the bottom Lexan Multiwall sheet shall be 10mm in a clear colour. SS40 has its own unique profile with a cover of 1000mm. SS40 will side lap onto most of the commercial roofing profiles commonly available in New Zealand. SS40 Industrial Polycarbonate sheeting comes in standard lengths of 4.0, 5.0, 6.0 and 8.0 mtr. The sheet lengths for the Lexan Multiwall are 4.0, 5.0, 6.0 and 7.0 mtr.

Warranty

A protective co-extruded layer on the outer surface of the SS40 Industrial Polycarbonate sheet forms a barrier which is resistant to the detrimental effects of UV light, minimizing long term yellowing and maintaining mechanical properties. Both the SS40 Industrial Polycarbonate and Lexan Multiwall sheeting carry a 15 year warranty in respect of light transmission and water transmission.

Installation

The Ampelite Dualroof Premium system shall be installed in accordance with Ampelite fixing instructions and with AS/NZS 1562.3:1996, Design and installation of sheet roof and wall cladding, Part 3: Plastic, the requirements of the NZ building code and the NZ Metal Roofing Manufacturers Association Code of Practice.

FOR FULL INSTALLATION DETAILS PLEASE DOWNLOAD A COPY OF OUR INSTALLION GUIDE:

Please note these additional important requirements:

Dualroof Premium shall be installed using the fastening length applicable to the main roof. The sheeting must be installed by pre-drilling 12mm oversize holes to allow for

expansion and contraction. The fixing screws shall be located in the centre of the rib must not be over tightened to an extent that the sheet buckles, allowing water penetration at the seal or sheet overlap. Fixing should be made at every crest at both ends of the sheet, and every crest at intermediate purlins and midspan supports if used. SS40 Polycarbonate sheeting shall only be installed using the unique SS40 Metal profiled washer along with a EPDM washer which ensures the fixings remain watertight.

To ensure accuracy when install fasteners into the SS40 top sheet Ampelite recommends the following:

- 1- Install screws into the SS40 sheeting in the same manner as metal.
- 2- When completed, remove fixings from the SS40 sheet.
- 3- Using the existing screw hole as a guide, re drill over sizing the hole.
- 4- Re install the fixing screw. (Note how the screw is centrally located in the hole.)
- 5- Do not over tighten the screw putting undue pressure on the SS40 sheet.

Purlin Protection

Safety mesh must be incorporated under the Dualroof Premium system. Where the bottom Lexan Multiwall sheeting passes over safety mesh sitting on the supporting purlin, an Ampelite fiberglass purlin protection strip must be placed directly under the sheeting. The SS40 sheet is then installed on top of the Lexan Multiwall sheeting and a profiled foam strip must be placed directly under the SS40 sheeting. This profile strip will protect both the SS40 and Lexan Multiwall sheet from damage and support the SS40 profile when fastened.

Side laps

SS40 has its own profile with an effective cover of 1000mm, which will side lap with most 40mm steel profiles commonly sold in NZ. The metal roof sheets need be laid with the correct spacing's left for the skylights. Each individual SS40 sheet is manufactured to overlap and be supported by the adjacent roof or wall cladding. With some steel profiles a 25x5mm compressive foam tape may need to be applied at the side laps between the steel and SS40 sheeting

End Laps

All end laps must have a minimum of 300mm overlap. Ampelite recommend the use of a bead of sealant at the top and bottom of the fastening point. Use a co-polymer sealant specifically formulated for use with polycarbonate. Incompatible sealants weaken the sheeting and their use voids the warranty. End lapping should only be applied to roofs with a minimum pitch of 3 degrees. The Lexan Multiwall can be butt jointed on the purlin with a 10mm gap left between sheets to allow for expansion and contraction.

Mid Span Supports

Where the Dualroof Premium system is to be used as a skylight placed between metal roofs sheets, the system sheet may be installed on purlin spacing's that exceed Ampelite's maximum span limitations for the sheet by using a mid span

support. Where two or more skylights are laid side by side purlin spacing's must be reduced to suit the maximum span stated in the Ampelite spanning chart.

Sealing at flashings

The use end stops are required to prevent wind driven water from running past the flashing and into the building. Typically a metal angle is folded and riveted onto the end of the SS40 sheet. A polycarbonate compatible sealant is then applied where the SS40 sheet meets the metal angle. Alternatively a closed foam strip matching the SS40 profile sheeting can be bonded to the pans or valleys of the sheet with A polycarbonate compatible sealant. Ideally the strip should be fitted at least 100mm behind the turn down of the flashing.

End Closure Strip

Foam filler strip is available to suit most profiles. This strip should be installed at the ends of the sheets to exclude dirt, birds and vermin.

Cutting

Should cutting of the SS40 or Lexan Multiwall sheet onsite be necessary the use of a circular saw with a small tooth blade suitable for plastic sheeting is recommended. Care should be taken to achieve a cut with minimal damage to the sheet.

Storage

The sheeting should always be stored in a dry and fire safe area. Do not store heavy materials on top of sheets as they may fracture.

Recycling and disposal

Both the Solasafe SS40 and Lexan Multiwall sheeting are recyclable or alternatively they can be disposed of in a land fill.

Non-trafficable

The Dualroof Premium system is not designed to be walked on and is therefore Non-Trafficable. Sheets should be handled with care to avoid damage to the surface coating. Guarantees will not apply to sheeting that has been damaged in handling, or mechanical damage as a result of foot traffic.