

# Installation Instructions

- Refer to Safety Recommendations.
- Installations must comply with the applicable building code.
- **For Safety precautions we recommend the use of safety mesh for installations above 3m.**
- We do not recommend the collection of drinking water from any roof without appropriate precautions and filtration. Check with your local water authority for further advice.

**Table 1.**  
**Rafter and Purlin Nominal Spacing (mm)**

Gauge	Sheet Width	Rafter Centres	Purlin Centres
8mm	700	720	1200*
8mm	1050	1070	1200*
10mm	980	1000	1200*

**\*Required for high wind areas only.<sup>2</sup>**

<sup>2</sup>Special High Wind installation instructions apply. Please refer to Makrolon® Sheet website or customer service for further details.

**1** Install sheets with the ribs (flutes) running vertically in the direction of the fall on a roof with a minimum pitch of 5°. Having sufficient fall allows natural weather action to assist in keeping the sheets clean and minimises leaking.

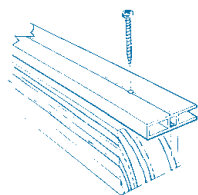
**2** Check recommendation for rafter and purlin spacing in Table 1.

**3** Makrolon® Multiwall sheets can be cut using a sharp knife, hand saw or circular saw with a fine tooth blade suitable for plastics. Sawdust (swarf) should be cleared from the channels with compressed air (or vacuumed) and edges should be free of notches.

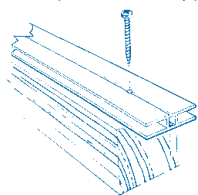
If the width of the Makrolon® Multiwall sheets needs to be reduced, trim them as close as possible to the last rib so that optimum clamping action of the glazing bar is ensured.

**4** Peel some of the masking back from the ends of the sheet and apply Breather Tape to the top and Sealing Tape to the bottom ends.

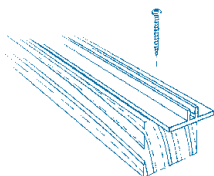
**5** Place the first measured and cut Edge Bar down squarely on the structure (screw side up).



**One Piece H-Bar System**  
Place the first measured and cut H-Bar down squarely on the structure (screw side up).



**Two Piece H-Bar System**  
Place the first measured and cut base glazing bar on the structure.

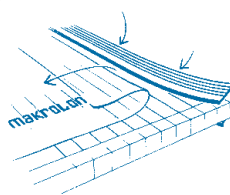


**The maximum end overhang is 50mm.**

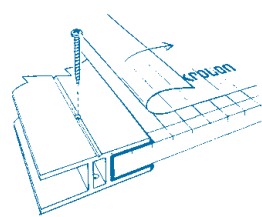
**6 One Piece H-Bar System**  
Secure the H-Bar to the rafter with a screw (gauge not exceeding 12g) at no greater than 1200mm apart.

**Two Piece H-Bar System**  
Fasten the Base Glazing Bars to the rafter with Ripple Tek screws (10 gauge - 16 tpi) at no greater than 500mm apart by fixing through the centre of the base glazing bar and securing it firmly onto the supporting structure. (Ripple Tek's for Wood are 30mm long; Ripple Tek's for Metal are 21mm in length)

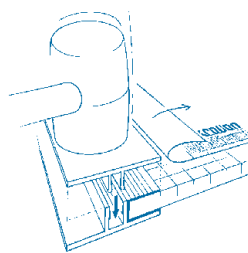
**7** Pull the masking back on the sides of the sheet and place the H-Bar gasket along the whole length of both sides of the sheet.



**8 One Piece H-Bar System**  
Place the next H-Bar on the other side and secure it to the support structure.



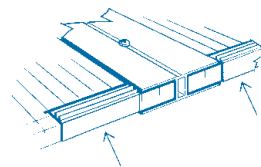
**Two Piece H-Bar System**  
Place the sheet between the secured glazing bars. Position the first top glazing bar in line with the base. Secure the two bars using a rubber mallet.



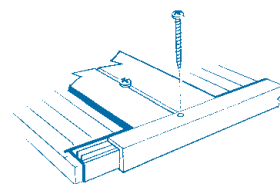
It is recommended that the top glazing bar is secured to the rafter with a screw (gauge not exceeding 12g) at no greater than 1200mm apart. Once the next sheet is installed the second and subsequent top glazing bars can be fitted.

**9** Repeat steps 6-8 until all sheets are in position.

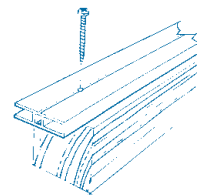
**10** When using Aluminium End Caps, place the end gasket along the end of the Multiwall sheet only, stopping at the H-Bar.



**11** Fasten the Aluminium End Cap with a screw to the H-Bar. On the underneath of the Aluminium End Cap drill a small weep hole where it meets the H-Bar.



**12** Use the Edge Bar to finish the assembly on the final rafter.



## Safety Recommendations

- **Never walk on or apply a load or your weight directly to sheeting. Use walking boards along rafters at all times.**
- Always exercise extreme care when walking on a roof.
- Consider all safety requirements when working at heights above 2m.
- Use appropriate personal protective equipment (PPE) such as safety footwear, safety glasses and gloves.
- All safety practices must comply with the applicable building and/or work cover code(s).

## 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 Makrolon® Multiwall accessories to complete your project and help protect your structure, without the need for sealants.

**Thermal Expansion** – When inserting sheet into glazing sections allowance must be made for expansion.