

## Makrolon® multi UV

Tips for installing multiwall sheets.

# Brilliantly.

## Various options for your ideas.

**Makrolon® multi UV polycarbonate sheets help you to realise your dream projects around the home, whether large or small. They make it easy to roof your carport, patio or swimming pool. Building a conservatory, greenhouse or wind break are further options.**

### 10-year guarantee

Wherever you decide to use Makrolon® multi UV, the sheets have a long service life. Each Makrolon® multi UV sheet is provided with high-quality UV protection. We give you a 10-year guarantee on this highly effective shield against exposure to weather.

### Ease of installation

This folder explains in simple terms the steps to be taken during installation. The instructions given here apply to roofing. All you need to install the sheets is a commercially available glazing system. The glazing bars shown in the instructions are examples of the systems available on the market.

### Please note!

When using Makrolon® multi UV, observe

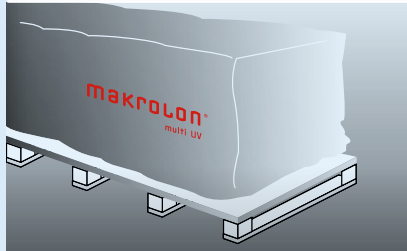
- the regional building regulations
- the guarantee provisions that apply in your country
- other technical regulations.

### Exolon Group – your professional partner

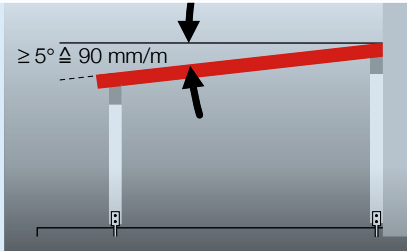
The innovative Makrolon® multiwall UV sheets are developed and manufactured by Exolon Group, a company with decades of experience in the production and distribution of polycarbonate and polyester sheets.



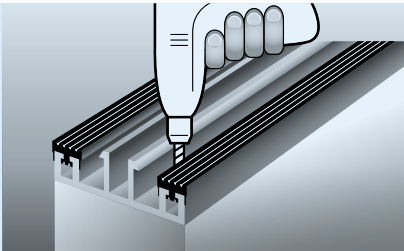
# Thorough preparation. Installing the sheets on roofs.



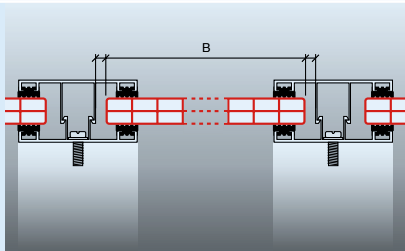
**1** | The sheets should be stored flat and indoors, wherever possible. If stored outside, cover the Makrolon® multi UV sheets with white polyethylene (PE) sheeting. The chosen supporting structure must be non-warping. Laminated timber beams or metal supporting structures with longitudinal rafters, on which the glazing bars are mounted, are the ideal choice.



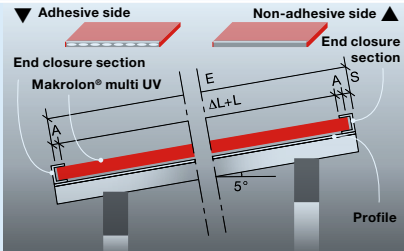
**2** | We recommend a roof pitch of at least 5° (Δ90 mm/m) to allow rain-water to flow off better. This has the benefits of maintaining seal integrity and the sheets are naturally cleaned by the rain.



**3** | Install the base section of the glazing bar to the rafter. The edge section seals the sheets at the sides of the roof.



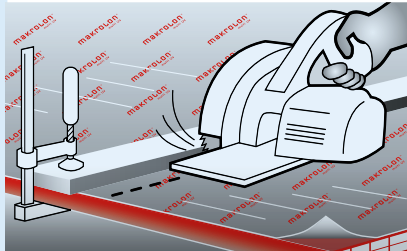
**4** | The clear width or sheet width (B) of Makrolon® multi UV sheets is calculated from the rafter spacing, the dimensions of the chosen glazing bars and the required allowance for expansion (3 mm/m for polycarbonate).



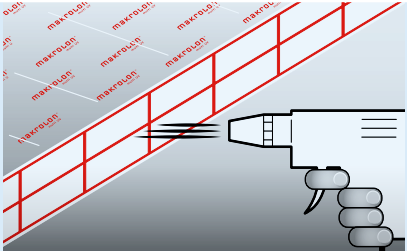
**5** | The correct order length (L) of Makrolon® multi UV sheets can be simply and safely determined, bearing in mind the following:

- E = maximum clearance in mm between the lower stop and the upper limit.
- A = length in mm added by the lower end-closure section (if also used at upper end, add to A).
- ΔL = longitudinal tolerance according to sales range.
- S = allowance for expansion (3 mm/m for Makrolon® multi UV).

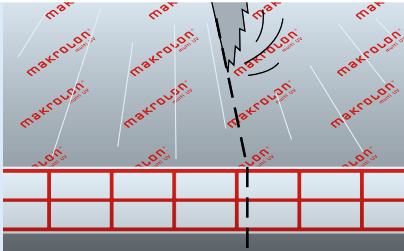
## Optimum installation.



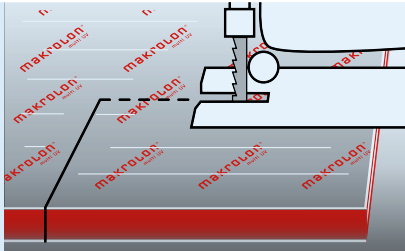
**6** | Marking should be done with a soft crayon on the masking film, which should be left on the sheet during machining and until the sheet has been installed. For cutting, use conventional circular saws with unset, multi-tooth carbide-tipped blades. Always work with a stop.



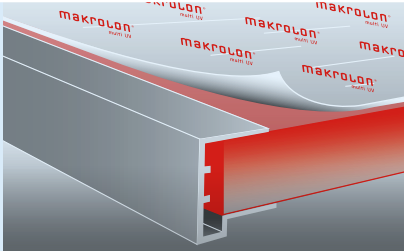
**7** | Swarf that has entered the sheet chambers can be blown out with compressed air or removed using a vacuum cleaner.



**8** | If the sheet width of Makrolon® multi UV sheets has to be reduced, please cut as close as possible to the next web to ensure the best clamping action of the glazing bar.



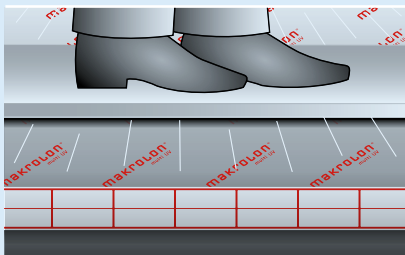
**9** | Corner cutouts are often required (e.g. for pipes, ventilation etc.). Use a jig saw without pendulum action. Drilling can be performed with twist drills (point angle φ 110°-130°), conical or step drills.



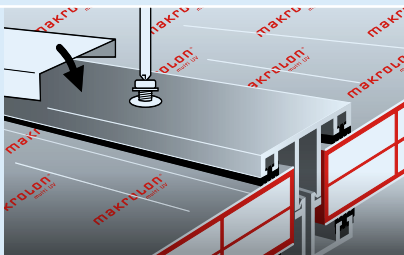
**10** | When sealing sheet ends there is a simple, but very important, rule to follow which keeps condensation to a minimum: seal as tightly as possible at the top (e.g. seal edges with aluminium tape and if necessary affix an aluminium-end profile, possibly with seal), and as tight as necessary at the

bottom (e.g. seal with anti dust filter tape and affix an aluminium end profile). Any water penetrating the end-closure section from outside must be allowed to flow off (without pooling).

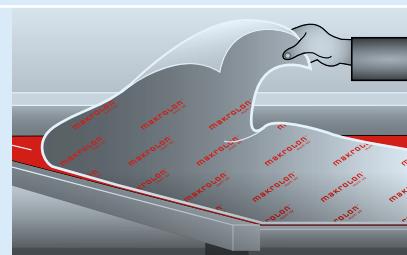
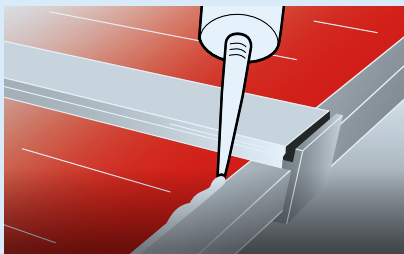
# Safe assembly.



**11** | Place the Makrolon® multi UV sheets on the purlins. It is important to place the side with UV protection facing outwards or upwards. This side is marked on the masking film and stamped along the sheet edge. Avoid walking on the sheets. If necessary, place a thick plank across the sheet.



**12** | Peel back the masking film and fasten the upper sections of the glazing bars using the recommended screws with washers. Depending on the glazing system, a cover section is then clipped on.



**13** | Finally, remove the masking film from the Makrolon® multi UV sheets. It should not be exposed to weathering for more than 24 hours.

**14** | Seal the upper sealing strip of the end-closure section with silicone rubber that is compatible with Makrolon® and smoothen it out so that no water can enter.

## Important note.

Please consult the individual product descriptions of the Makrolon® multi UV sheet for the maximum spacing distances at the given assumed load.

Condensation may form in the sheet chambers in unfavourable weather conditions. This is a physical process that is usually of short duration. It does not affect the function and service life of the sheets as defined by our guarantee statements.





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