

Corotherm[®]

Polycarbonate Insulating Roofing Sheet

AVAILABLE IN
A RANGE OF TINTS
RESISTANT TO IMPACT
**10 YEAR
GUARANTEE**



Corotherm polycarbonate sheet is a lightweight impact resistant glazing and roofing material.

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Whether you are installing a veranda, canopy or carport Corotherm multiwall polycarbonate sheet is the ideal choice. This lightweight impact resistant glazing material is easy to handle, cut and install. For use in projects around the home and garden Corotherm sheets are available in a range of thicknesses in light transmitting and solar controlling tints.

- Available in clear, bronze, opal, bronze opal and heatguard opal
- Wide range of thicknesses and sheet sizes
- Very strong and resistant to impact
- Fire rated 'Class 1' for safety
- Minimum condensation risk
- UV protected for durability
- Largely self-cleaning
- Guaranteed 10 year warranty



IMPORTANT

These instructions are guidelines only and do not include all the appropriate equipment which should be used in accordance with safety regulations.

Energy Efficiency - Relative U-Values*

Sheet Thickness (mm)	Corotherm	Single Glass	Double Glass	Argon Filled Cavity
6 (Twin)	3.7	5.7	2.65	1.6
10 (Twin)	3.2	5.6	2.65	1.6
16 (Triple)	2.4	5.4	2.65	1.6
25 (Seven)	1.4	–	2.68	1.6

* A lower U-value indicates increased energy efficiency and thermal insulation

1

Preparation

For a lean-to installation you will need these materials.

- Corotherm Polycarbonate Sheet
- Corotherm Glazing Bar
- Corotherm Side Flashing
- Corotherm End Caps
- Corotherm Super Fixing Buttons
- Corotherm Breather Tape
- Corotherm Aluminium Sealing Tape
- Flashing Tape
- Wood Screws
- Silicon Lubricant Spray
- Low Modulus Neutral Cure Silicon Sealant

Begin the project by installing the flashing tape to provide a watertight seal between the wall and roof.



2

Glazing Bar Preparation

Glazing bars are installed on each of the rafters. Before installing the glazing bars, you will first need to insert the seals either side of the bar base. The use of silicone lubricant can make the installation of the seals easier.

Install the seals and avoid stretching.

Installing on Rafters

You will need to pre-drill the glazing bar in preparation for fixing to the rafters - at approximately 400mm centers staggered on alternate sides.

Installing on Purlins

Screw the bottom half of the glazing bar to every purlin. Ensure the purlin spacing is not greater than 1,500mm.

Screws should be sealed in waterproof silicone sealant, wiping off any surplus after driving the screws.

Use the 'F profile' upside down so that it forms an up stand which can be sealed to the wall with flashing tape.



3

Sheet Preparation

If you need to size the polycarbonate sheets to suit the structure, Corotherm can be easily cut to size and will not crack or shatter.

When cutting parallel to the flutes a sharp knife can be used but when cutting across the flutes a fine toothed saw is required. For cutting curves use a fine-toothed jigsaw.

Set the correctly sized sheet into position allowing a sufficient expansion gap at the top end of the sheet and mark a hole centrally at the lower end of the sheet for a fixing button. This fixing will prevent the sheet from moving once installed.

Remove the sheet to the bench to drill where you have marked. Remember all Corotherm sheets must have an expansion allowance of 3mm around all fixings.

Any swarf from cutting or drilling should be removed by vacuuming.

Next peel back the protective film from all edges of the Corotherm sheet on both sides

Fix the sealing tape at the top end of each piece of Corotherm and the perforated breather tape at the bottom making sure tapes are not creased or torn.



4

Installation of the Sheet

With the silver sealing tape at the top of the slope and the breather tape at the bottom, push the sheet into position between the glazing bars. Ensure that the printed film is facing upwards. At least one vertical rib of each Corotherm sheet should engage with the glazing bar at each side, again leaving a 3mm expansion gap.

Flashing tape forms a completely watertight seal at the top of the sheet.

With the sheet now in the correct position, secure into place using the Corotherm Fixing Button in the pre-drilled hole.

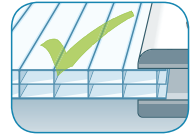
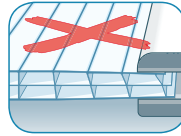


4 Installation of the Sheet (contd)

Starting at the downslope end, line up the ends of the cap and base and tap home with a rubber mallet until the edge seals have flattened against the sheet.

Over driving the glazing bar cap may cause damage to sheets over time as they expand and contract with temperature changes.

Continue laying sheets and glazing bar caps in this way.



5 Fitting the F-Profile

Finish the edge of the roof with an F-profile which can be secured to the rafter or barge board with screws.

Fit the final glazing bar cap and complete the run of flashing.



6 Fitting End Caps U-Profiles

To protect the breather tape, fit end caps or U-Profiles to the end of the sheet.

The U-Profile should be cut into sections to fit between rafters. Run a bead of sealant along the top edge of the end cap to prevent water penetration. Fit U-Profile into place with the drip detail leading into the gutter. Wipe off any excess sealant.

Once the U-Profiles are in place, fit the glazing bar end caps.

Finally, remove all protective film.



10 Year Warranty

Illumex Limited undertakes to supply a replacement free of charge for any Corotherm Polycarbonate Sheet that proves to have discoloured, in normal weather conditions during a period of 10 years from the date of purchase due to a manufacturing defect. This Warranty is only valid providing the Corotherm has been fixed in accordance with the manufacturer's instructions and does not extend to the cost of re erection or other consequential loss, which claims are expressly excluded. NOTE: All roofing materials may be prone to damage in areas exposed to particularly high winds or if fitted to structures which enhance the effects of prevailing wind. It is important therefore, that professional advice is taken before erection concerning prevailing winds and the structure planned. This Warranty is offered as an extra benefit and does not affect your statutory rights.

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CONSERVATORIES
EXTENSIONS
CAR PORTS
PORCHES
SWIMMING POOL COVERS
ROOFLIGHT FEATURES



Checklist

- Make sure UV protected side of sheet is facing outwards.
- Allow minimum of 10° roof slope for drainage.
- Rafter glazing bars should be fully supported by rafters.
- Use only low modulus neutral cure sealant and cross-linked butyl flashing tape.
- The lines of the flutes on the sheet must only run from the top to the bottom of the slope. They cannot be run from side to side.
- Sheets cannot be joined top to bottom.
- Glazing bars/F section cannot be joined but must be used as a continuous section.
- When using F section run a suitable low modulus silicone sealant down the inner top face of the enclosure before inserting the sheet.
- Cleaning: Corotherm can be easily and quickly washed with luke warm soapy water and a soft cloth or sponge. Do not use brushes or sharp objects and avoid any abrasives or cleaners of a high alkaline nature

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