



Heatguard 50 Polycarbonate Roof Sheets



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**Not sure exactly what you need?
Speak to our technical department.**



Heatguard 50

Briarwood Heatguard 50 Polycarbonate Roof Sheets offer an innovative and durable solution in the British agricultural roofing market. The sheet's high reflective pigment repels harmful infrared rays from penetrating the farm building's roof while simultaneously allowing increased daylight to enter.





These features ensure that building brightness is maximised while maintaining a stable temperature at all times.

Heatguard, available in our Big 6 profile, features a triple-wall

interior providing stability and added insulation. Additionally, brightness levels can be adjusted by selecting from three different pigment specifications.

For optimal strength, it is recommended to frame the building's roof with Big 6 fibre cement sheeting around the full perimeter before completing the remainder of the roof with clear sheets.

Advantages

-  **Heat reduction** Our sheets are designed to reflect and filter sunlight, reducing heat buildup underneath. This is particularly useful in buildings where controlling the temperature is crucial.
-  **Light transmission** Despite our sheets heat-blocking properties, they will still allow a good amount of natural light to pass through the roof. This means a bright environment can be created without the full intensity of the sun's heat.
-  **UV Protection** Our Heatguard 50 sheets provide protection against harmful UV rays, preventing them from penetrating through the roof.
-  **Energy efficiency** By blocking out significant portions of solar heat while letting light in, these sheets can help reduce the need for artificial lighting and air conditioning, potentially lowering energy costs.

Fixing patterns

General roof area

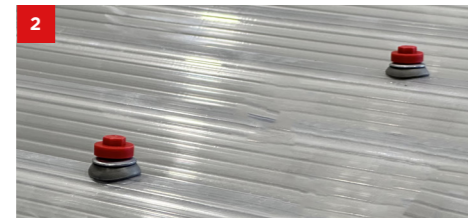
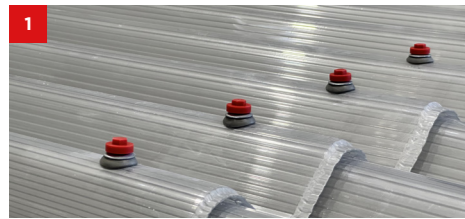
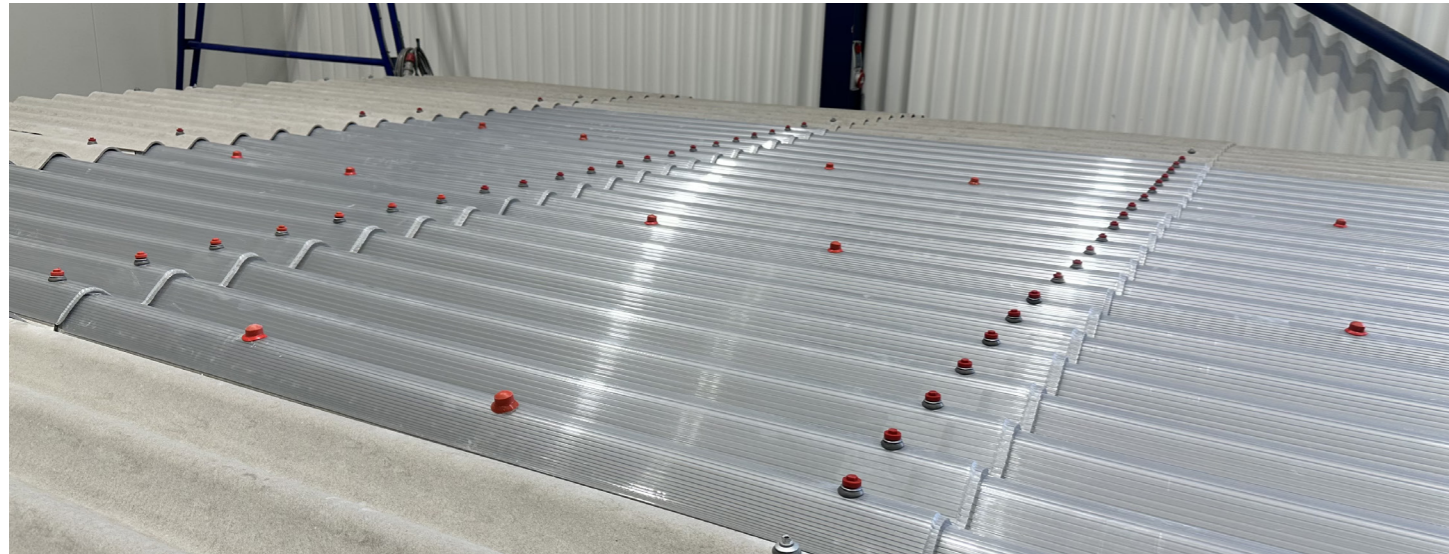
Fix with primary fixings on every other corrugation (second wave).

Perimeter, ridge, verge & eaves

Fix with primary fixings on every corrugation.

Side laps

Fix with grommet fasteners at maximum 450mm centres



Primary fixing

Pre-drill 12mm hole at every corrugation with primary fixing.

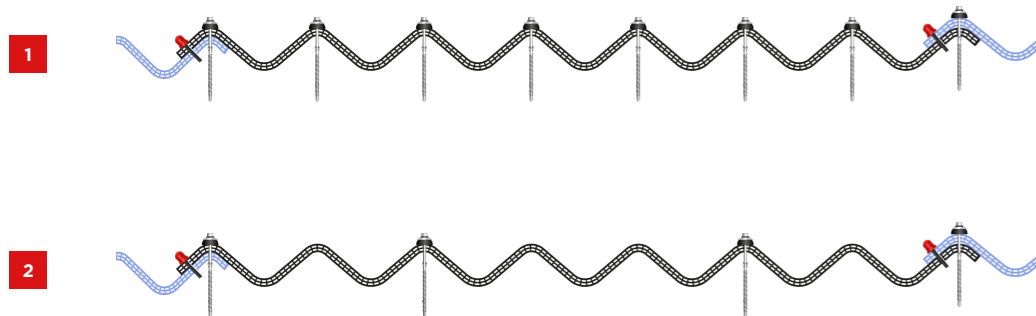
Intermediate fixing

At the first, third, sixth and eighth corrugation, and fix with screw and BAZ washer.

Secondary fixing

Pre-drill 10mm and fix along side laps at maximum 450mm centres.

TECHNICAL FIXING POSITIONS



Primary fixing

The primary fixing should be positioned at every corrugation and fixed using our recommended screws with BAZ washers.

Intermediate fixing

The intermediate fixing should be positioned at the first, third, sixth and eighth corrugations using our recommended screws with BAZ washers.

Installation

Heatguard 50 should be installed on roofs pitched between 5 to 22.5 degrees.

Thermal movement

For the UK, we suggest a maximum sheet length of 3 metres. Fixing holes and overlaps need to accommodate the thermal expansion of the Heatguard material. Installing longer sheets can be challenging as it is difficult to maintain adequate thermal movement around the fixings. Saddle washers might be required to cater to larger hole sizes while ensuring proper weatherproofing.

Safety

Roof access

You should **NEVER** step or walk directly on our Heatguard 50 Polycarbonate Roof Sheets. Always utilise crawler boards positioned across multiple support purlins of the structure.

Handling

Sheets up to 2 metres in length can be safely managed by one person, but longer sheets will need two or more people. Be especially cautious when handling the sheets in windy conditions.

Warranty

To maintain BRIARWOOD's product warranty, installation must comply with the recommendations contained within this document.

Fastening and sealing

The same fasteners used to secure our Big 6 fibre cement sheets can be utilised. The main fixings should secure the sheet, allow for thermal expansion, and ensure a weatherproof seal. Using profiled foam fillers at the fixing points helps prevent profile distortion. Cross-linked butyl sealing tape should be applied at both end and side laps to enhance protection against wind-driven rain and minimise noise from material movement.



Profiled foam fillers



Cross-linked butyl sealing tape



Grommet fastener



Primary fixing with BAZ washer

Mitring guidance

Mitring our Heatguard 50 Polycarbonate Roof Sheets is important because it eliminates the build-up of layers upon installation. The sheets will always sit flush with each other and stop the risk of leaks caused from unnecessary layering.

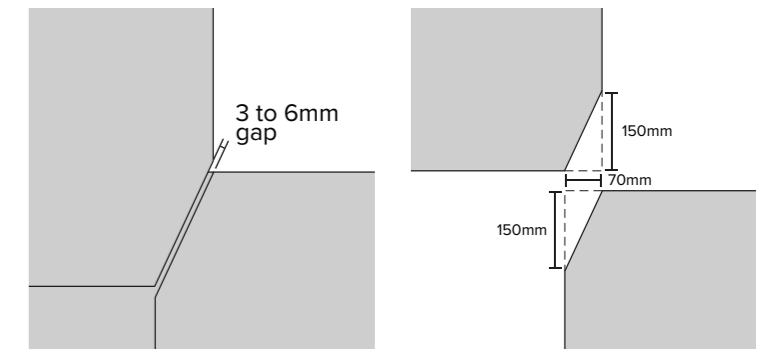
IMPORTANT NOTICE

Do not cut on the roof

You should never cut the mitre on the roof. It is recommended to layout your roof on a clear floor space and mitre them individually.

Tools to use

We advise to use a reciprocating saw in order to mitre the sheeting. We do not recommend the use of angle grinders or using handsaws because of the pressure which can build up whilst cutting through the sheet.



Dimensions to cut

The mitre should be cut using the dimensions referenced in the figure above. These measurements are 150mm on the longitudinal side, and 70mm on the horizontal side.

Setting out the roof

Before carrying out the works

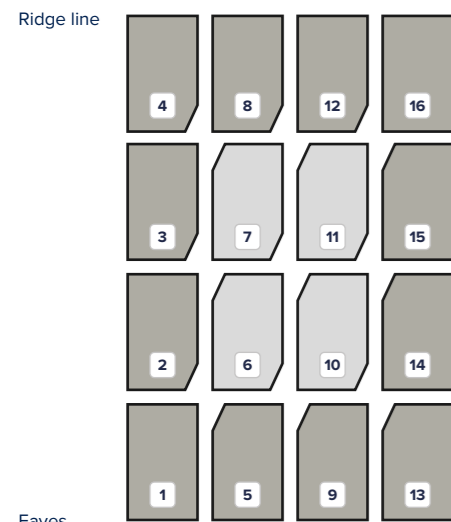
Before all work is commenced, the structure must be checked to make sure that all supporting purlins and side rails are the correct level and spaced correctly according to the relevant purlin centres table. You must also ensure that all components are securely fixed and have the correct amount of torque.

Maximum purlin centres	1375mm
Maximum side lap fixing centres	450mm
Minimum roof pitch	5 Degrees

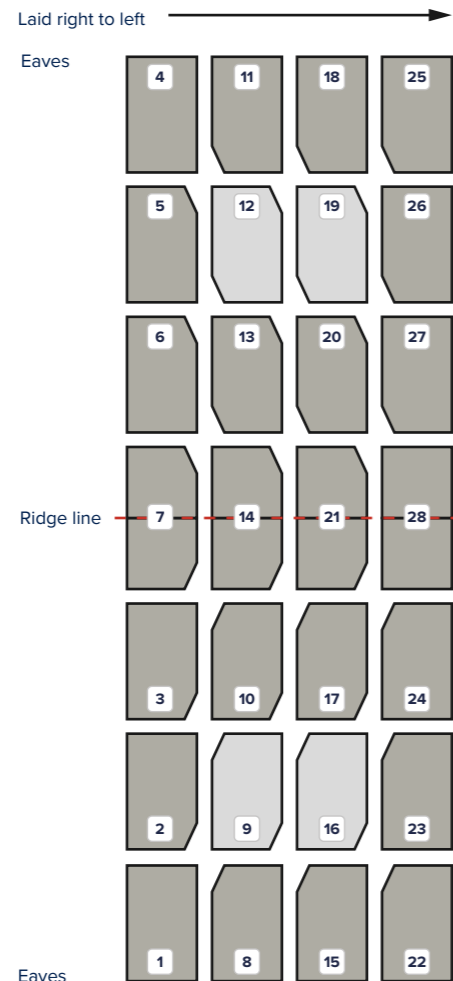
Recommended mitring and layout pattern

When using Heatguard 50 for the roof, the Ridge course must always be a fibre cement roof sheet to ensure that the polycarbonate roof sheet is truly square.

 Represents Fibre Cement Sheets
 Represents Heatguard 50



Lay left to right
 Mitres must be on the opposite hand when laying right to left
 This mitring plan is designed for a mono pitch roof.



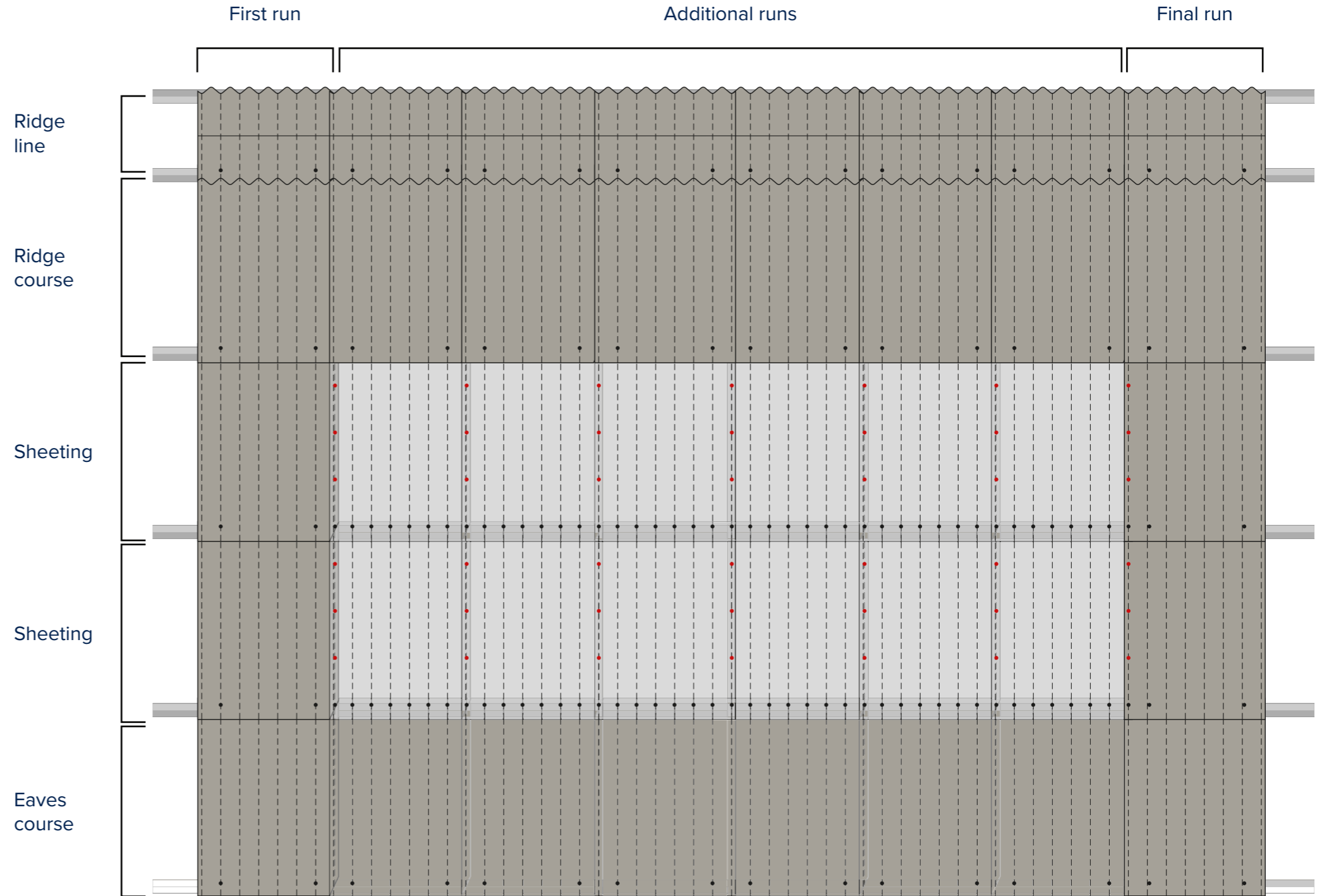
Laid right to left
 Mitres must be on the opposite hand when laying right to left
 This mitring plan is designed for a duo pitch roof.

Why should I use fibre cement sheets on the ridge course, eaves course, and on the first and last run?

Big 6 fibre cement profiled sheeting must be used on the ridge course and the first and last run in order to ensure that the Heatguard 50 polycarbonate roof sheets stay truly square when being installed.

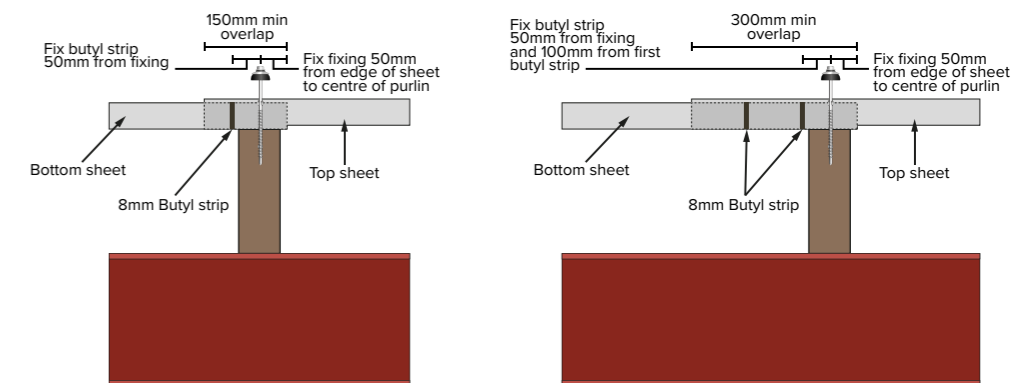
Vertically cladding Heatguard 50

When using Heatguard 50 sheets, it is perfectly okay to use them to clad the exterior of your structure. To ensure strength, we advise to use fibre cement sheets as well as Heatguard 50, but it is okay to have the cladding as purely Heatguard 50.



Measurements for positioning the sheeting on top of the structures purlins

Please see the references on the right which showcase how Heatguard 50 should be positioned on top of the structures purlins, as well as all appropriate measurements regarding centres and where butyl strips should be laid.



These diagrams show the end lap detail for a 15° roof pitch.

Warranty

To maintain BRIARWOOD's product warranty, installation must comply with the recommendations contained within this document.

To understand whether you need to use one or two butyl strips, please see our Fibre Cement Design Guide which can be found on www.briarwoodproducts.co.uk/documents

Visual installation



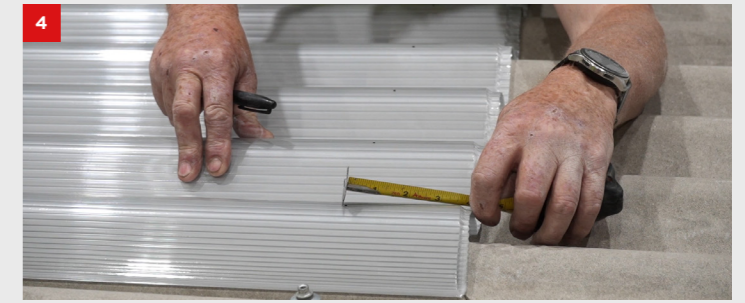
Lay the first run using our Big 6 fibre cement profiled sheeting.



Pre-drill 12mm hole at every corrugation with primary fixing.



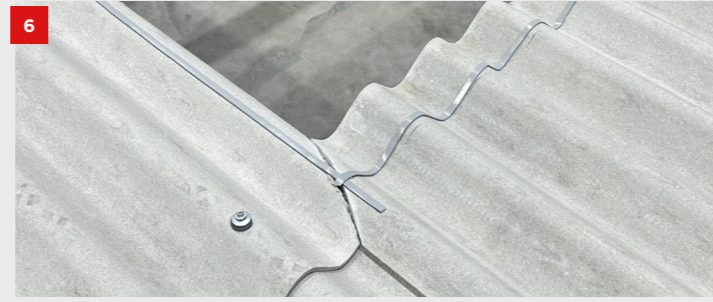
Once you have laid the first run, the first sheet of the next run should be our Big 6 fibre cement profiled sheeting.



When laying our Heatguard 50, you should measure 100mm from the bottom of the sheet and mark on each corrugation. This will determine where to fix the primary fixings into.



The secondary fixings should be positioned at 450mm between each fixing on the side lap corrugation.



Place mastic sealing strips along the sides and the bottom of the roofing sheets underneath where the Heatguard 50 sheet will be laid.



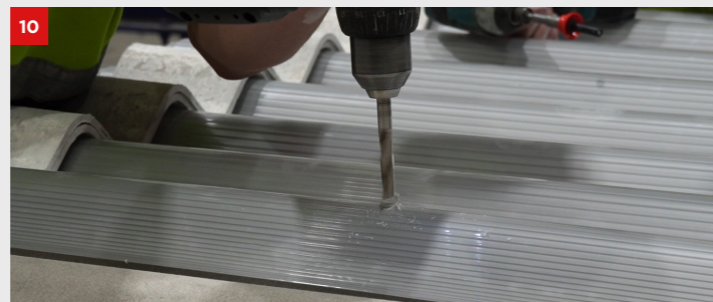
Place the first sheet on top of the fibre cement sheets whilst using a small fibre cement jig to ensure that the Heatguard 50 sits truly square when laid.



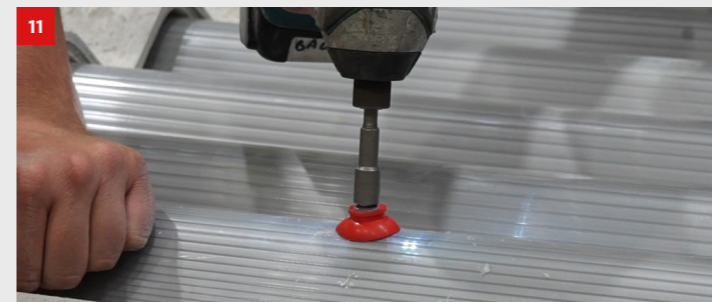
Make sure to mitre the appropriate corners depending on the direction which you are laying the sheeting. The mitre measurements will be the same as if it was a fibre cement sheet.



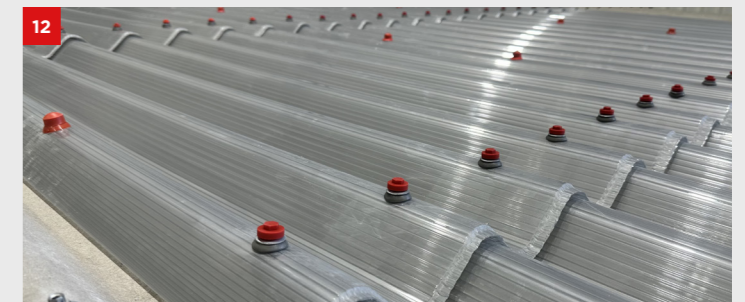
The primary fixings must be secured first and fixed into every corrugation peak.



Pre-drill the hole for the secondary fixings which were marked prior to laying the Heatguard 50 sheet.



Once pre-drilled, secure the secondary fixings in-place.



After you have fixed the primary and secondary fixings, you should put red caps on top of the fixings.



Continue to install the Heatguard 50 sheets accordingly.



The entire ridge course should be laid using fibre cement sheets to ensure that the Heatguard 50 sheets are truly square to the fibre cement profile. These sheets should be fixed in accordance to the design guide.



Similar to the first run, the last run should be laid using fibre cement sheets and fixed in accordance to the design guide.

Need help?

Our team of technical experts can help and assist you with answering common questions about Heatguard 50 sheets, as well as solving queries you may have whilst installing the product.

Reach out by emailing sales@briarwoodproducts.co.uk or by calling 01934 641 446.

FOLLOW US



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