

Heatguard

Installation Guide



Euronit's Heatguard is a range of high performance corrugated polycarbonate sheeting offering controlled light transmission and solar gain. Euronit Heatguard can be used to form complete roof coverings or can be incorporated into profiled roofing and cladding.

Euronit Heatguard

These installation instructions relate to the installation of **Euronit Heatguard polycarbonate sheets and Euronit FarmTec** fibre cement sheeting.

Profile







Contents

Mitred Corners	6
Mitring Layout	7
Primary Fixing of Euronit Heatguard Sheet	9
Secondary Fixing of Euronit Heatguard Sheet	10
Correct Fixing Placement	11
Alignment of Euronit Heatguard Sheet	12
Polycarbonate General Guidelines	13
Installation	14

Euronit Heatguard

Roof pitch - Euronit Heatguard sheets must be installed at a minimum pitch of 5°

Thermal movement

For UK & Ireland we recommend a maximum sheet length of 5.3m. For other geographical regions please contact the technical department. Fixing holes and end laps must allow for thermal movement of the Heatguard material. It is very difficult to install longer sheets and still allow sufficient thermal movement around fixings. Saddle washers may need to be used to allow for larger hole sizes while still providing adequate weather proofing.

Safety - Roof access

NEVER walk directly on Euronit Heatguard rooflights. Always use crawler boards placed across several support purlins of the structure.

Safety - Handling

Sheets up to 2m long can be safely handled by one person but larger sheets will require two or more people. Take particular care when handling Euronit Heatguard sheets in windy conditions.

Fastening and sealing

The same fixing used for the fibre cement sheet should be used to secure Heatguard sheets. The primary fixings must secure the sheet, permit thermal movement and provide a weather tight seal. Profiled foam fillers at the fixing positions reduce the risk of distorting the profile. Cross-linked butyl sealing tape is required at both end and side laps to increase protection from wind driven rain and reduce noise from material movement.

Euronit Heatguard sheets must be isolated from the fibre cement sheet with cross linked butyl tape.



Profiled foam fillers





Grommet fastener



Primary fixing with BAZ washer

Warranty

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

Euronit Heatguard

Fixing pattern

corrugation (second wave).

General roof area Fix with primary fixings on every other Perimeter, ridge, verges & eaves Fix with primary fixings on every corrugation.







Primary fixing At every corrugation

Intermediate fixing At every second corrugation

Cutting

Sheets are supplied to project specific lengths and heat sealed at the ends to prevent the ingress of debris, insects or water. If necessary, single sheets are easily cut with an angle grinder fitted with a thin metal slitting disc. Circular saws for hardwood or plastics can be used to cut Euronit Heatguard with a high rotating speed and slow feed rate. Electric jigsaws, handsaws or metal sheers can be used for limited cutting of curved or complex lines. The open ends of the multiwall structure should be sealed with tape or a compatible sealant. Consult the technical department regarding compatible accessories, sealants, and tapes.

Recommended	Circular saw –40/60 Diamond grit blade
Clearance angle	10-15°
Rake angle	0-6°
Cutting speed	1800-2400m/min
Feed speed	19-25m/min



Side laps

Fix with grommet fasteners at maximum 450mm centres





Secondary fixing

Along side laps at maximum 450mm centres

Primary fixing of Euronit Heatguard sheet

In order to allow for thermal expansion, holes should be 6mm greater than the fixing shank for sheet lengths up to and including 5300mm. Clearance holes to be drilled at 12mm. For longer sheet lengths contact technical department for clearance hole requirements. Failure to accommodate thermal movement can result in buckling or tearing around the fixing. Fixings should be complete with BAZ washers to conform to the shape of the profile.

Holes should never be punched through the polycarbonate sheet. All holes should be predrilled as per recommended guidelines. Please ensure to brush away any dust from drilling fibre cement sheets to avoid contact with the polycarbonate sheet.



Secondary fixing of Euronit Heatguard sheet

Side lap

Grommet fasteners to be installed on side lap at maximum 450mm centres.

Do not use metal rivets or standard metal to metal stitching screws. If required consult technical department for full fastener specifications.





Pre-drilling and installation

Step 1

Select 12mm metal drill bit for drilling of oversized hole - primary fixings only.

Step 2

Drill oversized hole at each primary fixing location as per recommended fixing pattern. Attention to be taken to remove all swarf/debris from drilled hole.

Step 3

Please ensure to brush away any dust from the fibre cement sheets to avoid contact with the polycarbonate sheet.



Step 4

Use cross linked butly mastic tape at overlaps to isolate the Euronit Heatguard polycarbonate sheet from the fibre cement sheet.





Step 5

Primary Fixing with BAZ Washer to be placed in the centre of oversized hole to allow adequate space for thermal movement/expansion.





Pre-drilling and installation

10mm Diameter holes should be drilled for grommet fasteners.

Step 1

Select 10mm metal drill bit.

Step 2

Drill hole at each location as per

recommended fixing pattern - maximum 450mm centres. Attention to be taken to remove all swarf from drilled hole.

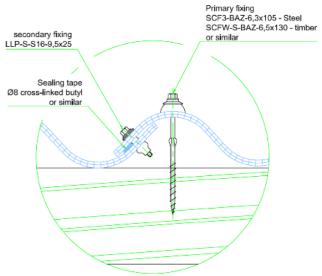




For airtight construction

Apply 9mm x 5mm butyl tape along side laps (on outer edge of the secondary fixings).

Use profiled foam fillers below Euronit Heatguard sheets at ridge and eave purlins.



Step 3

Place grommet fastener in position at each side lap fixing position (max 450mm centres), take care to ensure fixing is fully seated in position prior to engagement.

Step 3

Install grommet fastener using low torque drill setting. Sidelap should be fully closed with additional care taken not to over tighten fastener.

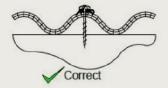




Correct fixing placement

Fasteners must not be over tightened as this will prevent thermal movement of the sheet with changes in temperature. The screws should be tightened moderately to prevent damage to the washer and deforming the gasket, resulting in damage to the sheet.

Correct Fixing Placement Even spread of rubber washer contouring to the shape of the Euronit Heatguard material. Correct placement critical to seal oversized hole.





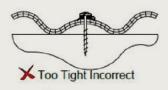
Over tightened Fixing Placement Excessive pressure on rubber washer will cause Euronit Heatguard material to deform. Care to be taken not to over tighten.





Vertical Fixing Placement

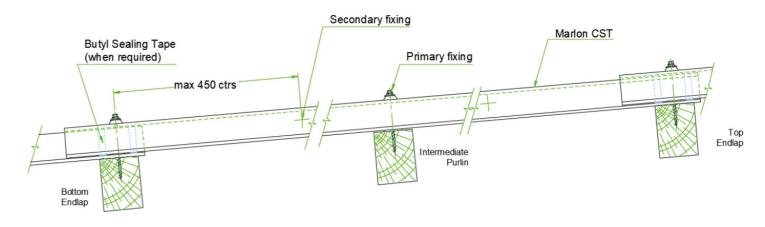
Attention to be taken to ensure correct vertical placement of fixing. Fixings placed otherwise will cause incorrect seating of rubber washer and increase potential of leaking around fastener.





Polycarbonate general guidelines

Panel structure



Minimum roof pitch 5°

Accessories

It is important when installing Euronit Heatguard sheets that all accessories are compatible for use with polycarbonate.

All accessory products should be light in colour, preferably white, to avoid heat absorption that could build up and damage the sheet. Visit our full range of installation accessories are

fully compatible, visit euronit.ie for further details.

Aftercare. maintenance and cleaning

Aftercare, maintenance and cleaning the general condition of Euronit Heatguard and the security of fixings and sealant should be checked periodically as part of the overall maintenance programme for the structure into which they are incorporated. An inspection is recommended every 12-18 months, and a log should be kept of the findings. Care should always be taken to use appropriate scaffolding, lifting devices and equipment when inspecting for damage. When carrying out a maintenance check, also check for debris, dirt retention, mosses or mould growth, local damage and the conditions of the fixings. If these have been damaged they should be replaced immediately, as faulty or badly fitting fixings can cause leakage or rust staining

The high gloss finish of the Euronit Heatguard sheet will retain little dirt, however periodic cleaning will preserve the appearance and ensure optimum performance. Loosen any dried dirt with lukewarm water and wash with lukewarm soapy water using a soft cloth or sponge to gently remove dirt. Never use solvents or alkaline cleaners on Euronit Heatguard and do not scrub the surface with brushes or sharp instruments, as these will mark the surface.

For rapid cleaning of large areas pressure washers can be used. The nozzle should be held at a shallow angle to the sheet surface and not pressed directly onto the sheet. Do not apply the nozzle directly into the sheet laps. Incorrect cleaning which in any way damages the sheet automatically renders void all warranties.



Warning

Care should be taken to observe the following precautions:

- 1. Do not scrub Euronit Heatguard sheets with brushes or sharp instruments.
- 2. Avoid any abrasives or cleaners of a highly alkaline composition.
- 3. It is generally advisable in all instances to test any cleaner on a sample piece of the Euronit Heatguard sheet first and it should also be remembered that cleaners and solvents which state that they are suitable for cleaning polycarbonate may not be safe for use on the UV protective surface of the sheet.

Installation

Euronit recommend that Heatguard is installed with a FarmTec fibre cement frame around the perimeter of the roof as shown in the installation process below.

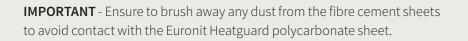
However, it can be installed as a complete roof solution and in this case standard folded metal flashings















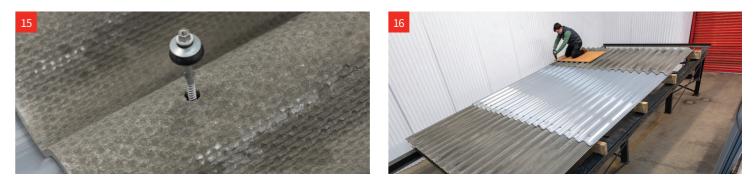












NEVER - walk directly on Euronit Heatguard rooflights, always use crawler boards.







We're here to help

For information call +353 (0)59 863 1316



euronit.ie @euronitireland



Etex Ireland Limited

Kilkenny Road, Athy, Co. Kildare R14 VN84 Ireland

T. +353 (0)59 863 1316 F. +353 (0)59 863 8637 E. info.ireland@etexgroup.com

CI/SfB | | (4-) | Nf9 | | April 2024