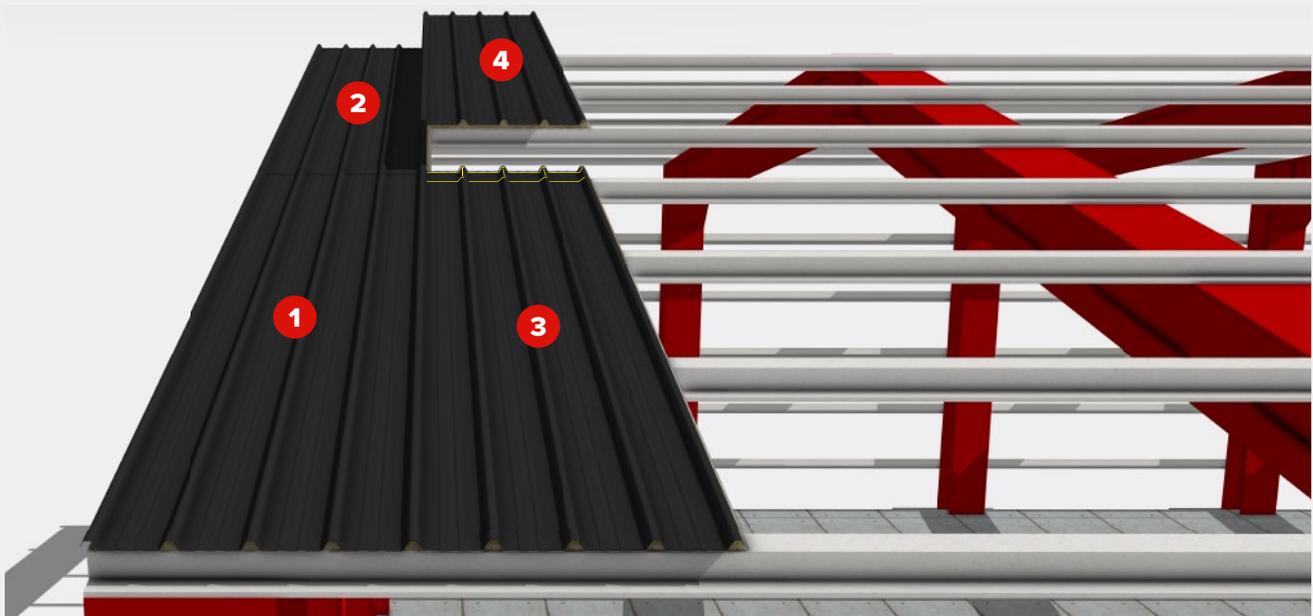


INSTALLATION GUIDE

Roof assembly sequence

The panels should be installed from the eaves up to the ridge, and they can be laid from either right to left or left to right as required. In this example, the panels are shown laid from left to right. Install the panels in the sequence indicated: 1, 2, 3, and 4.



Important safety information

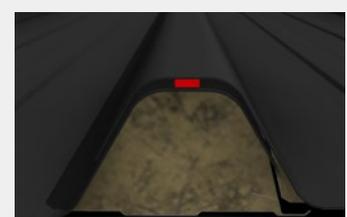
Our insulated roof and cladding panels should be handled by two people and it is important for installers to wear safety equipment such as gloves to prevent any accidental injuries.

Fixings guide

When installing the panels from left to right, begin by securing fixings at position (1). Once the panel is stable, continue fixing inside each corrugation valley point (2, 3 and 4). After securing the first panel, position the next sheet along the sidelap side and peel the cover from the mastic under the sidelap corrugation. Once the sheet has been placed down, 22mm Stitcher fixings (ST) should be fixed on the sidelap corrugation ever max 400mm centres.

Our recommended fixings

Insulation thickness	Purlin material	Recommended fixing
10mm	Timber	Ø 6.5 x 75mm
	Metal	Ø 6.5 x 70mm
30mm	Timber	Ø 6.5 x 100mm
	Metal	Ø 6.5 x 100mm
40mm	Timber	Ø 6.5 x 100mm
	Metal	Ø 6.5 x 100mm
80mm	Timber	Ø 6.5 x 150mm
	Metal	Ø 6.5 x 150mm



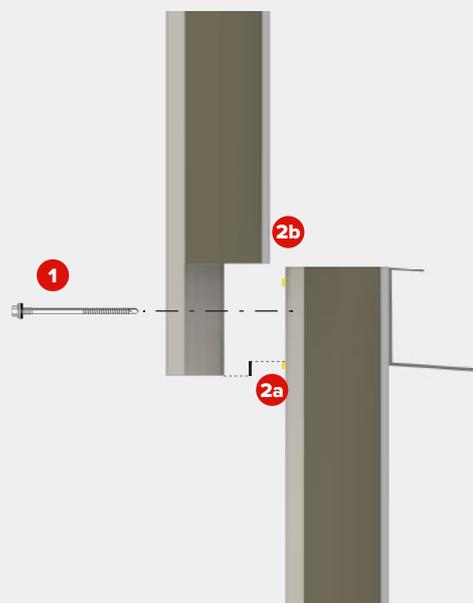
Vertical wall assembly sequence

For vertical wall applications, the panels should be installed from the bottom to the top and can be laid either from left to right or right to left, as needed. In this example, the panels are shown installed from left to right. Place the panels in the sequence indicated, ensuring a secure and uniform installation.



Endlap fixing

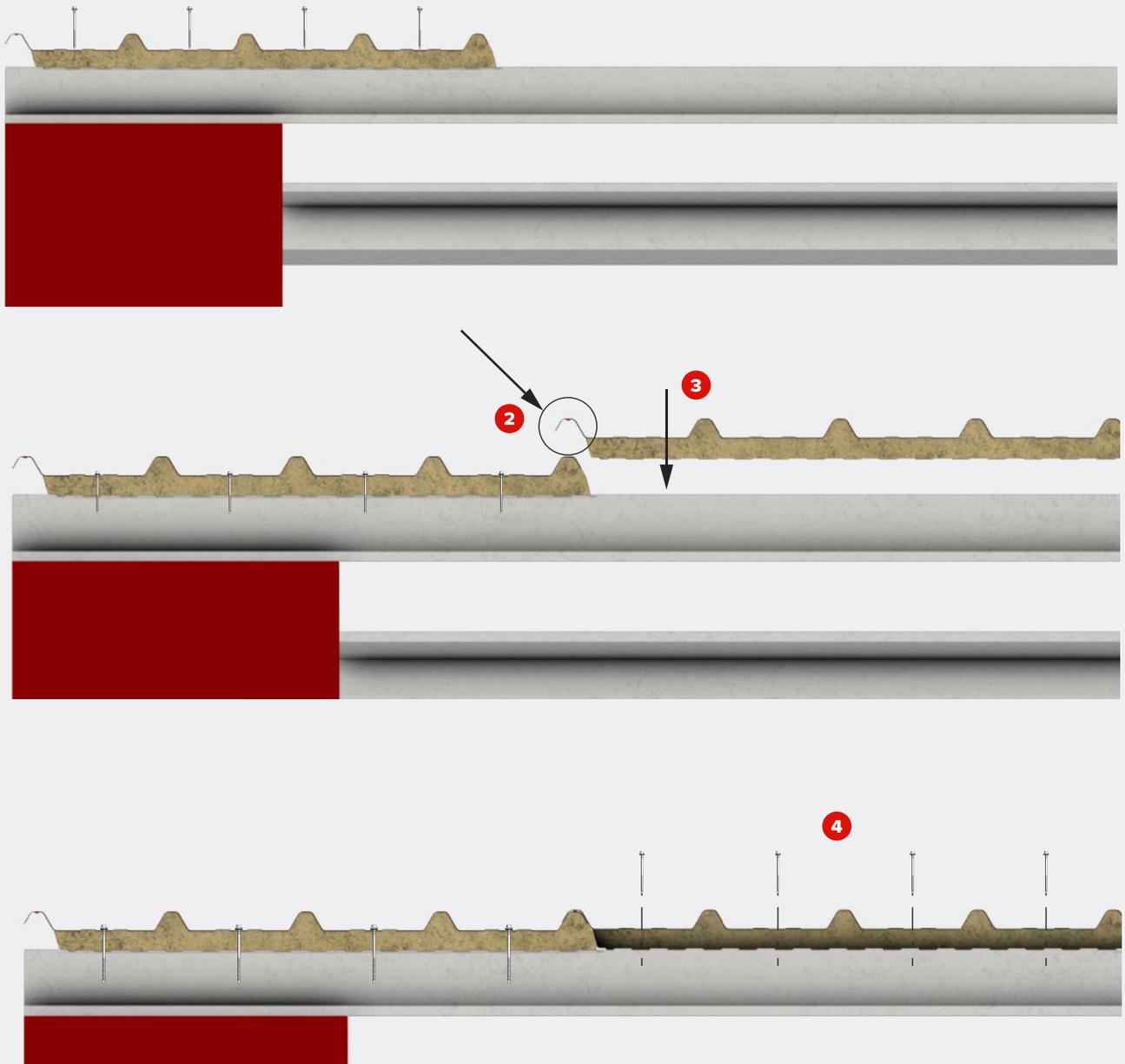
For secure installation, the primary fixing should be centred on the purlin and positioned at least 50mm from the edge of the cutback (referenced above at mark (c)). This placement ensures that the fixing provides optimal hold and stability for the panels while preventing undue stress on the cutback edge. Proper alignment and spacing of the fixings are crucial for maintaining the integrity and performance of the insulation system.



Fix the Panel: Fix the first panel in accordance with the visual below (marked as step 1 in the visual guide).

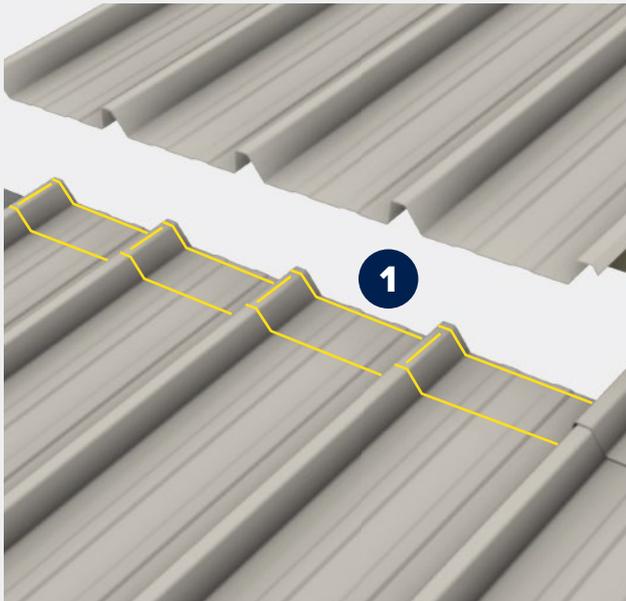
Slot the Sidelap Corrugation: Peel the cover of the mastic tape off which is underneath the side lap corrugation (step 2). Place the next sheet down and overlap the side lap corrugation across the first panel which has already been fixed in place (step 3).

Secure the Panel: Once satisfied with the alignment, fix the panel in place by securing it into each of the corrugation valleys as shown (step 4).



Endlap sealing

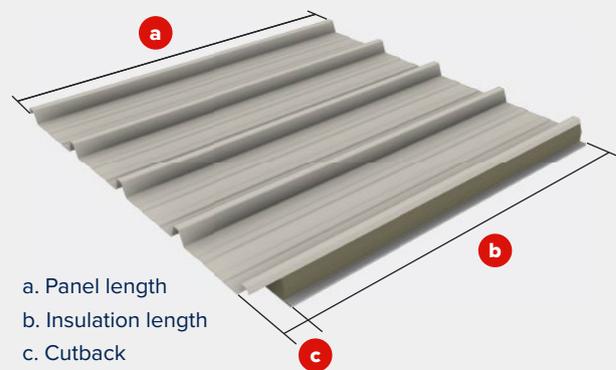
To ensure a secure seal, apply two strips of 9x3mm butyl mastic where the endlap will be positioned. For added reinforcement, it is recommended to place additional strips along the length of the endlap (or cutback), directly on top of the corrugations. Refer to position (1) for guidance on placement. Butyl strips should be placed 10mm from the edge of the endlap or foam.



Cutbacks

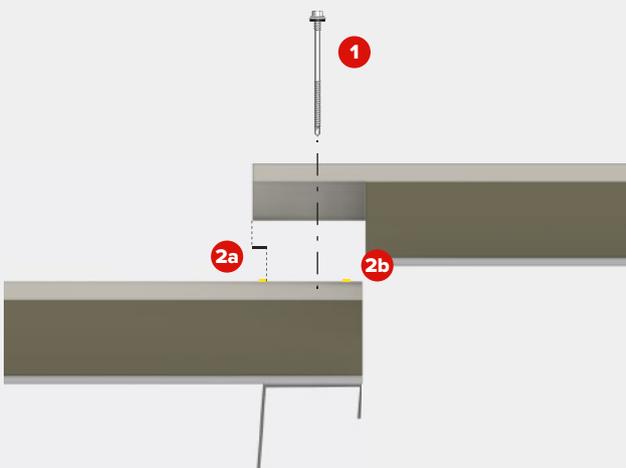
For optimal performance and water tightness, our insulated roofing and cladding panels are manufactured with a standard 75mm cutback (endlap). This dimension is specifically designed to meet Class A water permeability standards, in line with EN 14509:2013, making it suitable for challenging conditions.

The 75mm endlap ensures effective sealing and simplifies installation. We advise to double seal on roof pitches near the **minimum of 4 Degrees to prevent water ingress.**



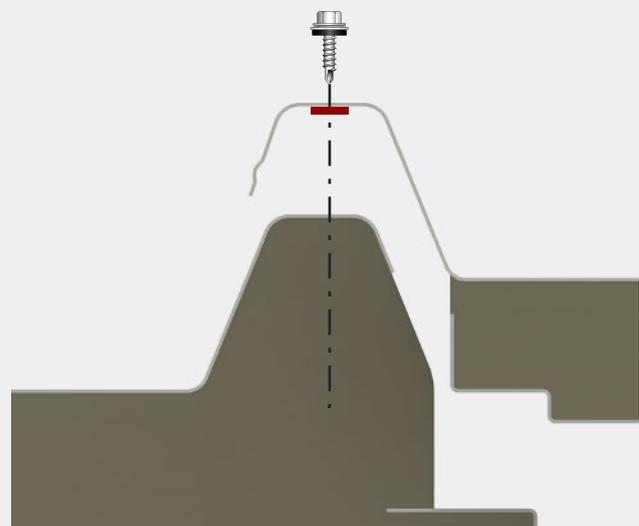
Endlap fixing

For secure installation, the primary fixing should be centred on the purlin and positioned at least 50mm from the edge of the cutback (referenced above at mark (c)). This placement ensures that the fixing provides optimal hold and stability for the panels while preventing undue stress on the cutback edge. Proper alignment and spacing of the fixings are crucial for maintaining the integrity and performance of the insulation system.



Sidelap fixing

The sidelap between panels should be secured with 22mm stitcher screws, placed at the top of each corrugation and spaced no more than 400mm apart. To enhance the seal, apply a 9x3mm butyl mastic strip along the sidelap.



What is the difference between cutback and no cutback?

A cutback, as shown in Fig. 1, is when the metal covering on the roof panel is trimmed back at the edge, exposing a small section of the insulation. This design helps panels overlap more easily and allows sealant to be applied for a secure, weatherproof connection.

In contrast, no cutback, as shown in Fig. 2, means the metal covering extends fully to the edge of the panel, completely enclosing the insulation. This gives the panel a clean, finished look and is often used for walls or situations where overlapping isn't necessary.

In summary, cutback panels are ideal for overlapping and sealing, while no cutback panels are better for a smooth, finished appearance.

Fig.1

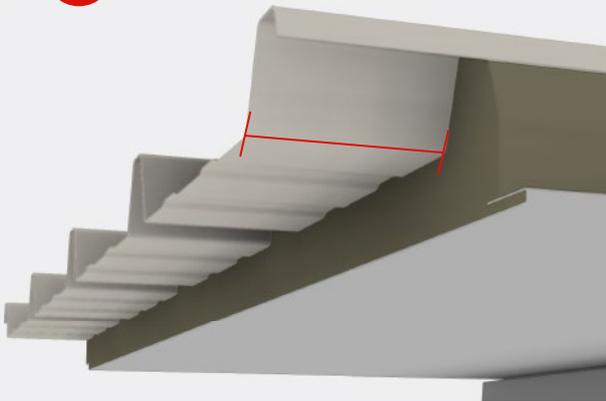
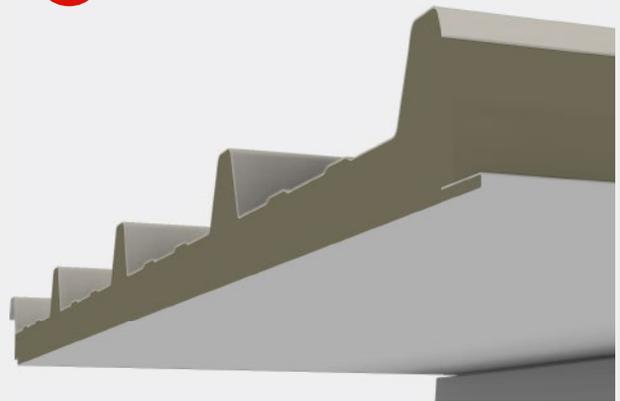


Fig.2



Accessories

Foam fillers

Foam fillers enhance weatherproofing and thermal insulation by sealing gaps, preventing air and water ingress, and reducing heat loss. They also offer sound insulation, dampening external noise, and protect against pests and debris. Additionally, foam fillers provide structural support to panels, helping to maintain integrity and improve the installation's appearance.



Butyl mastic and sealants

Butyl mastic and sealants are essential for creating watertight and airtight seals in installations. They prevent water, air, and dust from entering joints and seams, improving weather resistance and reducing the risk of leaks. They help enhance insulation by preventing heat loss, contributing to better energy efficiency and durability in various weather conditions.



STORAGE AND HANDLING GUIDE

Storage

Metal roof elements are designed for stackable storage to minimize space. However, care should be taken to prevent surface damage during stacking. Packages should always be elevated from the ground, using supports made of wood or foam plastic materials. The support surface should match the package shape, ensuring proper alignment and preventing water stagnation.

For optimal storage conditions, use closed, lightly ventilated rooms free from humidity and dust. Ensure a stable support surface that prevents water stagnation. Avoid placing packages near work activities that might cause damage. If materials have a protective film, remove it within thirty days from the preparation date, ensuring the packages are stored in a shaded, covered, and ventilated location. For storage durations, it's advised not to exceed six months indoors and sixty days outdoors. Always protect materials from direct sunlight.

Figure A. The packs of insulated panels should be inclined to allow all water and condensation dews to run-off (especially when stored outside).

Figure B & C. Care should also be taken to prevent electrochemical corrosion when different metals come into contact, especially during storage. Additionally, be mindful of contraction and thermal expansion effects, which can cause the panels to become convex or concave.

Figure D. It's recommended to avoid stacking packages on top of each other. However, if their weight allows for stacking, use wooden or foam plastic spacers between them. Ensure these spacers have a broad support base and are placed close to the supports of the underlying packages.

Protective film

Briarwood delivers the product with an adhesive polyethylene protective film to shield pre-painted metal supports. This film should be fully removed during installation or within 30 days of material setup. Panels with this protective film shouldn't be exposed to direct sunlight.

If a customer specifically asks for it, BRIARWOOD can provide the product without the protective film. However, in such cases, Briarwood won't be responsible for any potential damage to the metal support's paint layer.

(A)



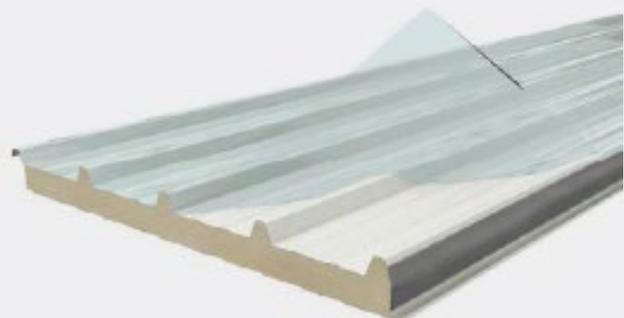
(B)



(C)



(D)



Handling

Packages should always be lifted at two points, spaced at least half the length of the package. Use synthetic fabric belts for lifting, ensuring they distribute the load without causing deformations. Use special spacers made of sturdy materials to prevent direct belt-to-package contact.

For panels up to 6 meters, use cranes with two gripping points. For longer panels, use cranes with sling bars and three gripping points. Ensure the positioning of spacers and straps prevents crushing or damage. Always ensure slings and supports remain stable during lifting and handling.

Inside the premise to be covered, only deposit packages on surfaces suitable in terms of strength and safety. For forklift truck handling, ensure the lift forks are equipped with guards or widths that don't damage the panels. Always secure packages stored at height.

Manual handling should always be done with appropriate Personal Protective Equipment (PPE). Ensure the equipment and protective gloves are clean and won't damage the products.

Figure 1. The length of the batton should exceed the package's width by a minimum of 5 cm on both sides. Additionally, its overall width should be at least 30 mm more than the strap's width, with a groove that's its size plus an extra 10 mm.

Figure 2. When lifting and maneuvering panels that are up to 6 metres in length, it's advisable to utilize cranes equipped with straps that have two grip points.

Figure 3. For panels exceeding 6 metres, it's suggested to employ cranes equipped with sling bars and straps that have three grip points.

Figure 4. When using forklift trucks for lifting and handling, it's advised to use a single vehicle for panels up to 6 metres long. For panels exceeding 6 metres, two vehicles should be employed, while adhering to guidelines related to crane, strap, and sling bar usage. Always ensure the forklift's blades are equipped with guards or are of a width that won't harm the panel's surface upon contact.

Figure 5. When manually handling individual pieces, always lift them without dragging across the element below and position them on their side next to the package. Depending on the panel's size and weight, at least two individuals should transport it, ensuring the panel remains on its side throughout.

