

Eternit

UrbanPro Fixing Guide

Fibre cement profiled sheeting



A close-up photograph of several overlapping sheets of UrbanPro fibre cement roofing. The sheets are light grey with a wavy, corrugated profile. They are set against a clear, bright blue sky with a few wispy clouds. The lighting is bright, highlighting the texture of the material.

UrbanPro

UrbanPro is a semi-compressed fibre cement sheet which is easy to handle and suitable for small structures in the equestrian, industrial and domestic sectors such as housing, garages, general purpose sheds and smaller buildings.

**Request a sample of UrbanPro
at www.eternit.co.uk**



Contents

5	Safety at work	24	Checking the structure
6-7	Product Selector	25-27	Fixing information
8-9	Fittings	28	Laying the sheets
10	Colour range	29	Mitring
11	Benefits of Eternit semi-compressed fibre cement	30-31	Sealing the sheets
12-13	Product composition and production method	32-33	Bargeboards
14-15	UrbanPro technical information	34-37	UrbanPro duo pitch ridge
16-18	Working with the material	38-39	Two-piece plain wing ridge
20-21	Exposure	40	Hips
22-23	Highlands and Islands specification	41	Valley
		42	Profile filler blocks
		43	Ridge Roll

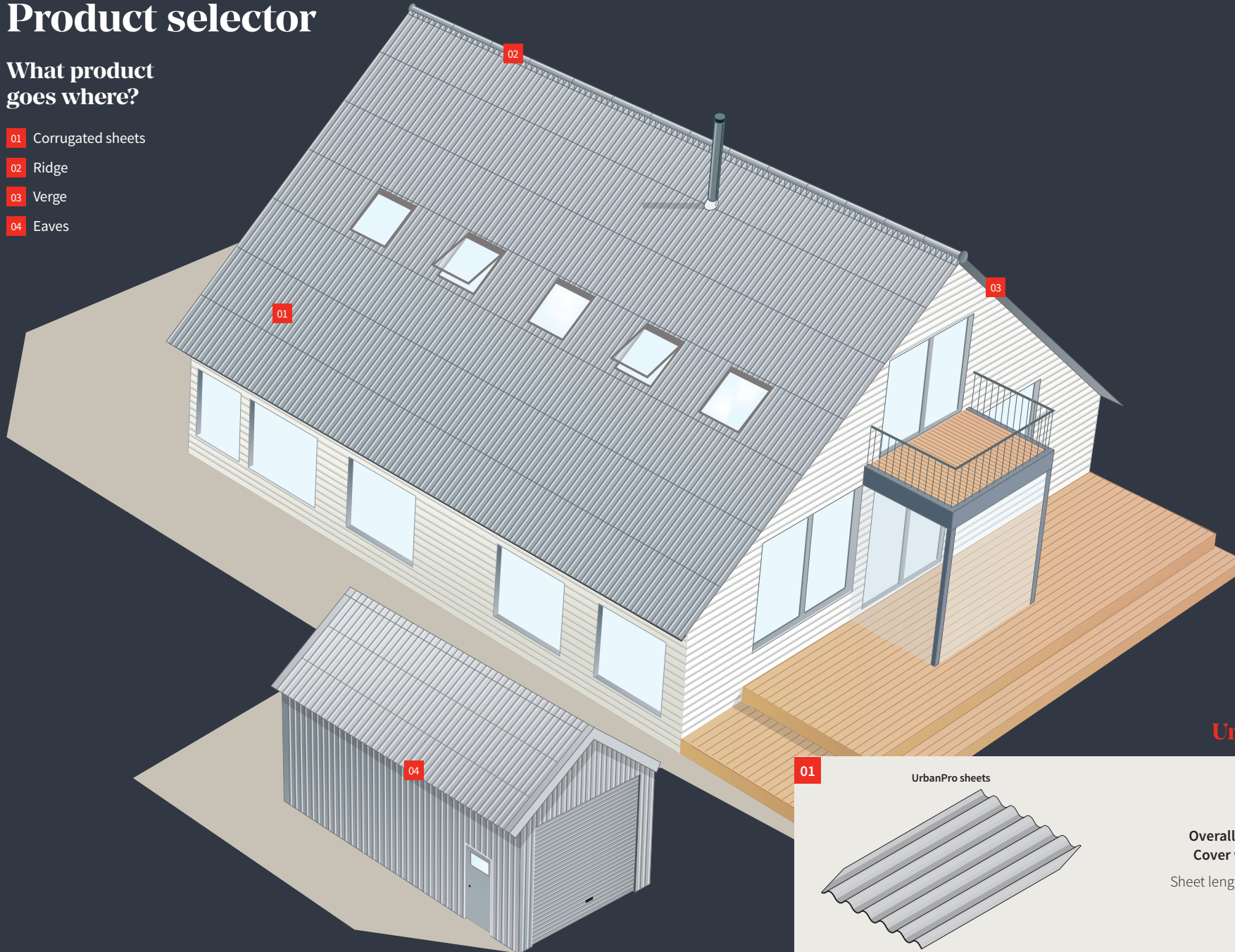
The recommendations of HSG 33 should always be followed:

- A safe and well-ventilated place of work should be provided.
- Health and Safety Provisions should comply with current regulations and be suitable for working at height. The use of safety nets and fall arrest equipment should always be considered.
- Eternit sheets, when new and first installed in accordance with our recommendations, can be classified as a non-fragile Class C roof assembly in accordance with ACR[M]001. Once the roof has been completed and the netting/scaffolding removed, if any subsequent access is required on the roof, the sheets should be treated as a fragile assembly.
- Always use HSE recommended roof access systems whenever required.
- Use crawling boards or similar when installing sheets to spread the load of the installer(s) plus the sheet being carried to prevent damage of the sheets just laid.
- Where regular access is required to reach rooflights, ventilation and service ducts, properly constructed walkways should be provided.
- Sheets must not be less than four corrugations wide.

Product selector

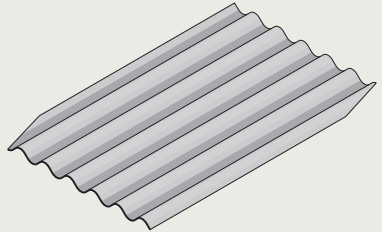
What product goes where?

- 01 Corrugated sheets
- 02 Ridge
- 03 Verge
- 04 Eaves



UrbanPro

01 UrbanPro sheets



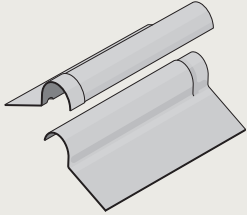
Overall width - 1130mm
Cover width - 1050mm
Sheet lengths: 1250, 1750, 2500

Fittings

UrbanPro

02

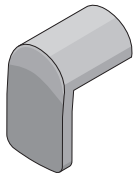
Two piece plain wing ridge



Cover width - 1050mm
Wing - 310mm

02

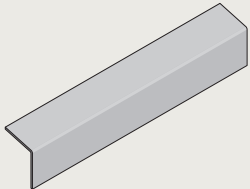
Finial



Overall width - 220mm
Cover length - 395mm

03

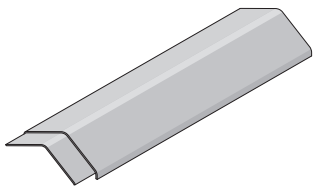
External corner



Overall length - 2500mm
Wing - 300mm

02

Duo pitch ridge



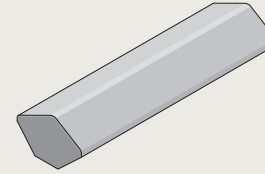
Cover width - 900mm
Leg length - 190mm
Degrees - 25°, 30°, 35°, 45°

Fittings

UrbanPro

02

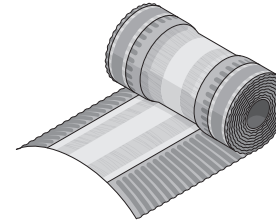
Duo pitch ridge stop end



Cover width - 900mm
Leg length - 190mm
Degrees - 25°, 30°, 35°, 45°

02

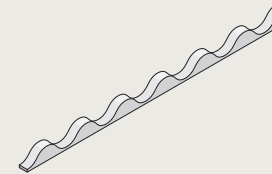
Ventilated ridge roll



300mm wide

04

Polyethylene foam filler block



Overall length - 1050mm

Topfix fastener



Timber purlins (50x75mm)
6.5x130mm Carbon Steel
6.5x130mm Stainless Steel

Colour range

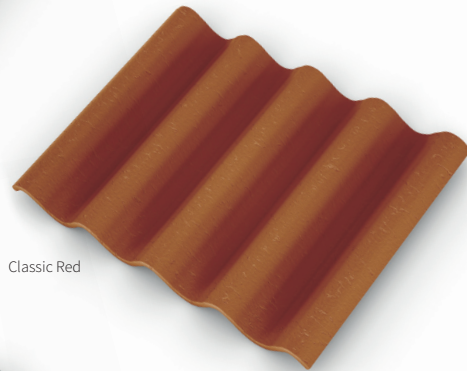
Product composition

Experience gained over many years has shown that the Eternit colour range will meet the wide ranging design requirements in both rural and urban areas.

All the colours have been chosen for their ability to harmonise with the most commonly used building materials – brick, slate, stone, concrete and timber.



Black



Classic Red



Natural Grey

Benefits of Eternit semi-compressed fibre cement

Eternit sheets and complementary fixtures are all made from semi-compressed fibre cement, the optimum material for equestrian, industrial and domestic buildings.

This table gives a quick overview of the key benefits:

Key benefits

	Moisture absorption* Ability to absorb up to 25% of its dry weight in moisture, minimising condensation.
	Single source supply Stainless steel coastal fixings designed for semi-compressed sheet.
	Longevity Eternit sheets have a life expectancy in excess of 50 years when installed to our fixing recommendations.
	Fire rating Class A2-s1, d0 Fire classification when tested against the EN13501-1, is A2-s1-d0.
	Lightweight With the use of reinforcing fibres, allows for a light weight roof covering per m ² .

*Absorbency percentages are subject to normal wear and tear over product life

Product composition and production method

Product composition

Eternit UrbanPro fibre cement corrugated sheets are manufactured from cement, cellulose and manmade fibres which contains the following components:

Portland cement

This is the main component of the corrugated sheets and ensures the hydraulic bonding of the mixture.

Cellulose and man-made fibres

To help the cement bind and form the sheets shape.

Mineral additives

These are added to obtain the typical high quality product characteristics.

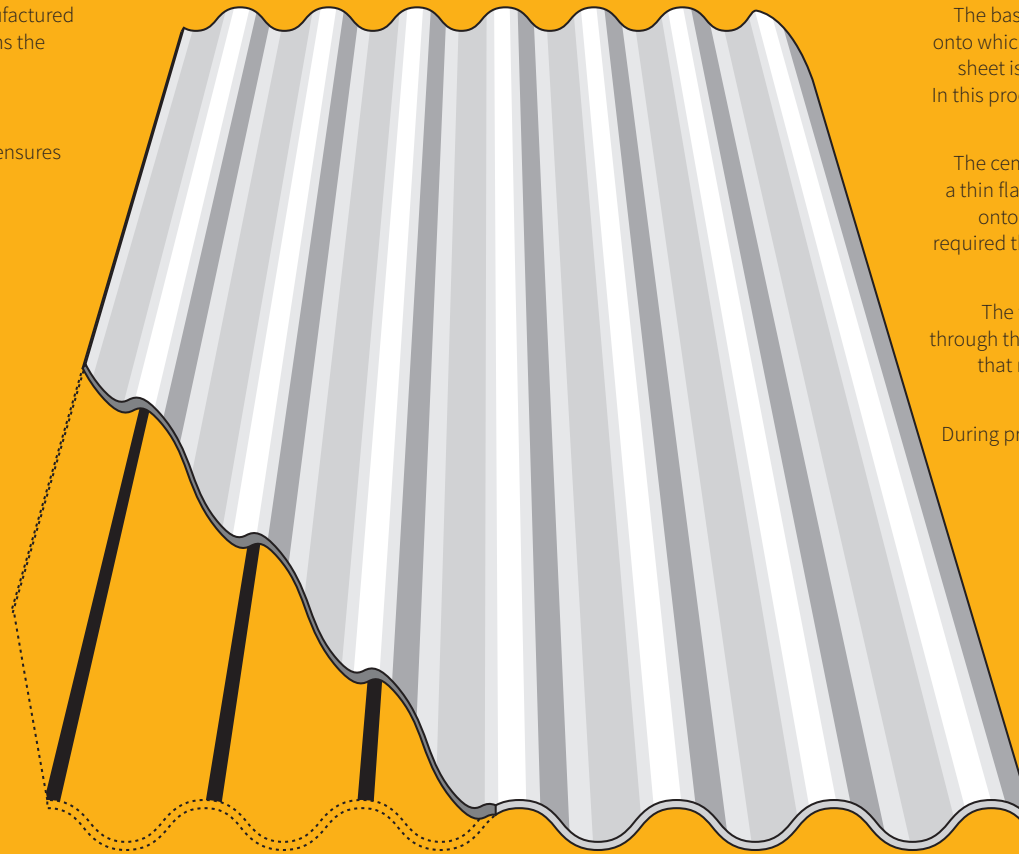
Manufacturing process

The manufacturing process is predominantly a filtration process. In order to optimize the filterability of the mixture, additives, primarily of cellulose fibres are added.

Reinforcement fibres

The mechanical characteristics of the fibre cement corrugated sheets are primarily defined by the interaction between the reinforcement fibres and the cement matrix.

With this in mind, high-quality natural and synthetic organic fibres are used.



UrbanPro corrugated sheets with polypropylene strips.

Production method

The basis of the corrugated sheets is a profiled fibre cement slab, onto which a finishing layer is later applied. This profiled base plate sheet is manufactured in accordance with the Hatschek process. In this process, an aqueous solution of the components is collected in a central mixer.

The cement and fibres are collected by a filtering process to form a thin flat continuous layer of fibre cement that is then transferred onto a drum that is continually building up the layers until the required thickness is obtained. This is then passed down the line as a flat panel. The drum then starts its process again.

The typical sinuous shape of the corrugated sheet is obtained through the still pliable flat panel, by being placed on a steel former that replicates the shape of the sheet being made. This is then allowed to harden before being removed.

During production, they add a polypropylene strip between two of the laminations to one side of each corrugation.

Standard fitting of reinforcement strips

The presence of reinforcement strips does not imply that the corrugated sheets can be walked on. They're included to help with impact and handleability.

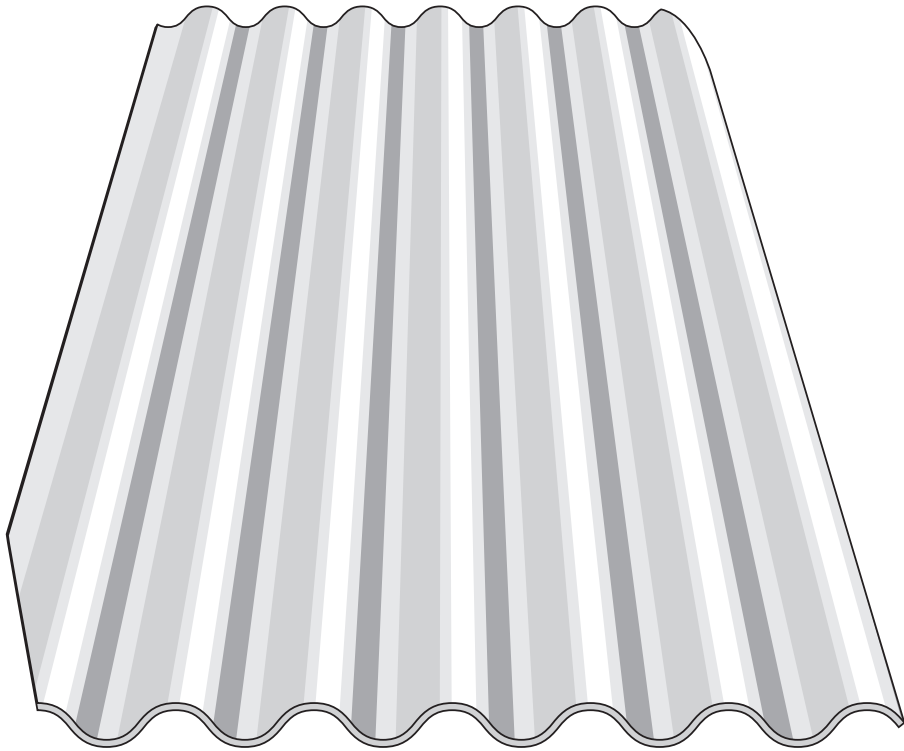
For safety, both during, and after installation of the corrugated sheets, the requirements must be followed, as specified in the HSG 33.

UrbanPro

UrbanPro having a lower profile is the perfect scale for the domestic, equestrian, light industrial and commercial sectors.

With the best cover width available on the fibre cement market installation can be faster, with the sheets being pre-mitred and more cost effective than ever. Comparatively light weight at only 15.2kg/m² and with a class A2-d1,s0 reaction to fire it offers a very wide design scope.

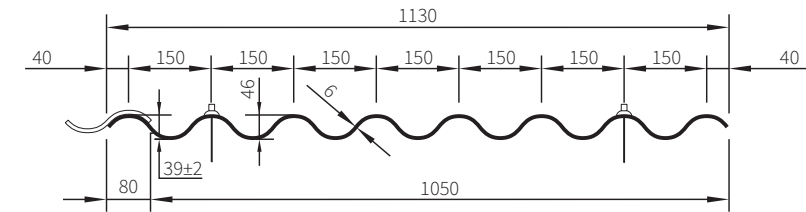
UrbanPro could be the ideal material for your building project.



UrbanPro sheet lengths (mm)

1250, 1750, 2500

UrbanPro sheet dimensions (mm)



Technical data

	UrbanPro
Overall width	1130mm
Net covering width	1050mm
Thickness (nominal)	6.0mm
Density (nominal)	≥ 1400kg/m ³
Pitch of corrugations (nominal)	150mm
Depth of profile	40mm
Profile height category	B
Side lap	80mm
Minimum end lap	150mm
Maximum purlin centres	1000mm
Maximum rail centres	1350mm
Maximum unsupported overhang	250mm
Approx. weight of roof as laid, with 150mm end laps, single skin including fixings	15.2kg/m ²
Minimum roof pitch	7°

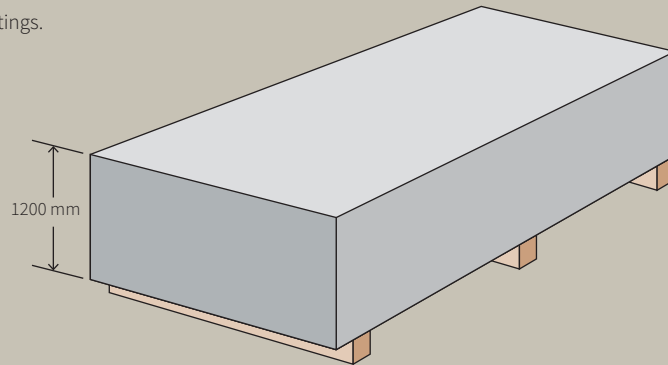
Working with the material

Stacking

Profiled sheets should be stored as close as practically possible to the area of works, on a firm level base, using the profiled bearers (on which the sheets are delivered) to raise the sheets off the ground.

Sheeting stacks may only be at a maximum of 2 delivered pallets high, a separate stack should be made of each length of sheet; if this is not possible, stack with the longest sheets at the bottom and the shortest at the top.

Sheets should always be stored weather (smooth) side upwards. Do not stack pallets of fittings.



Packaging and storage

Stacks of sheets should not be stored in full sun during the summer months as the differential temperature across the sheets can result in unacceptable stresses in the sheets and can lead to edge cracking.

They should be stored in a ventilated and frost-free space where there is no risk of condensation at low temperatures.

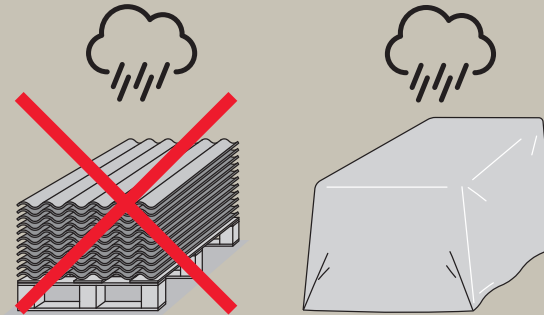
If sheets are to be retained in the packs for more than 3 months, they should be stored inside a building where they can be protected from extreme variations in temperature and moisture.

Ingress of moisture into packs of profiled sheets may cause efflorescence staining, bowing during installation or permanent distortion.

Natural Grey sheets: The plastic wrapping should be retained for as long as possible to control the environment around the sheets. Once the pack has been opened, or if the wrapping is damaged and allowing the ingress of water, the sheets should be stored under cover.

Coloured sheets: Coloured sheets should be always stored under cover, preferably inside a building, but if this is not available, they can be stored under a coloured tarpaulin. The tarpaulin should be spaced off the top and sides of the sheets to allow effective air circulation and avoid condensation.

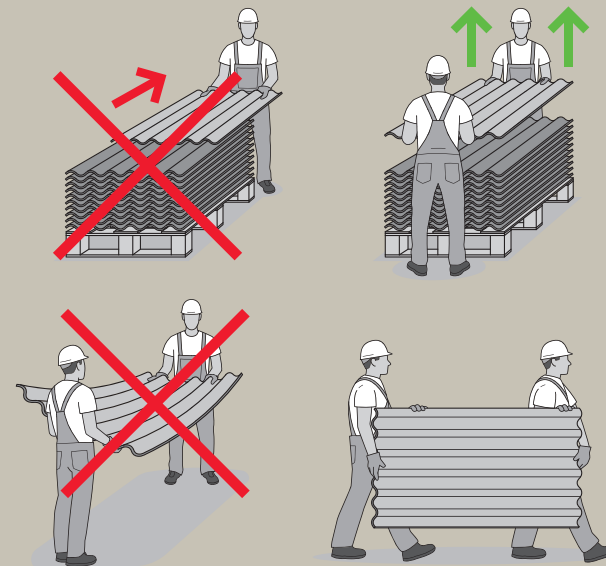
The plastic wrapping on coloured sheets is only designed to protect the sheets in transit. It should be removed and carefully disposed of as soon as possible.



Handling

When handling the Eternit sheets, lift by the ends only, lifting them up from the sheet beneath. (Do not drag over the sheet below)

- Carry the Eternit sheets on their side to prevent bowing



Working with the material

During the installation process of the sheets, dust may be released which can be irritating for the airways and eyes. Accordingly, correct breathing apparatus/mask and eye protection should be worn. Following the recommendations of the HSG 33, minimum grade dust mask is FFP2.

Please refer to the COSHH data sheet for further information.

Cutting

The sheets must be cut using equipment suitable for fibre cement materials, in a well-ventilated area at ground level on suitable rigid supports using hand or powered saws. Powered saws should be of the reciprocating saw type and NOT disc or circular blade devices. Experience has shown that hand or powered saw blades having 3-3.5mm tooth pitch are most suited.

- To minimise dust, cut sheets with a handsaw or slow speed reciprocating power saw. The use of angle grinders is not recommended.
- Sheets should be laid so they are flat and in one plane. For cranked ridge units do not distort or twist when installing. The requirement for the crowns to be twisted is an indication that the corrugations of the two roof elevations being joined by the ridge unit are not aligned. Sheet alignment must be corrected.

Drilling

- For holes, a rotating drill bit for fibre cement products.
- For larger holes, such as flues, windows etc, a reciprocating saw or saw holes for fibre cement products can be used.

Important

Any cutting dust must be wiped off the sheets and fittings immediately using a dry cloth. If not removed this could cause spots and stains.

Note: Please request the safety data sheet from our technical department for further information regarding health and safety when working with the Eternit sheets.



Exposure

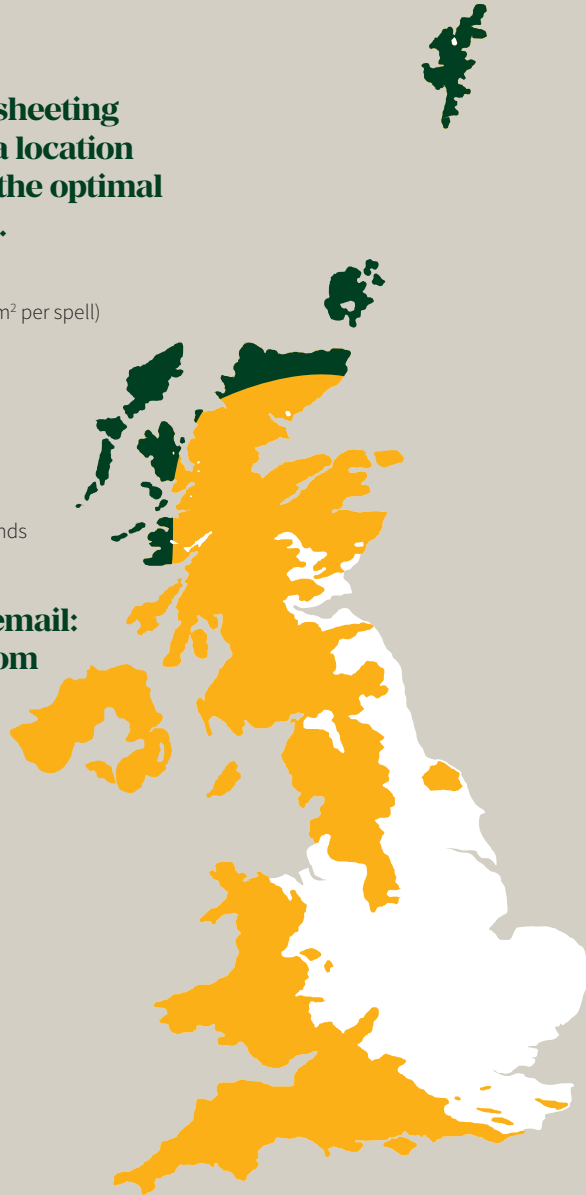
When using profiled sheeting the wind loadings of a location are critical to ensure the optimal sealing requirements.

Exposure zones

Appropriate wind driven rain (litres/m² per spell)

- less than 56.5
- equal to or greater than 56.5
- contact the Eternit Technical Advisory Service for the Highlands and Islands recommendations

For technical advice email: techuk@etexgroup.com



Note: Buildings that stand above their surroundings or are in an area with no wind breaks within 1km, such as coasts or hilltops, should be considered areas of exposure one category above their geographic area.

Lap

This describes how much one sheet overlaps another at either the end (end lap) or the side (side lap).

Pitch

This describes the degree to which the roof slopes.

Guidance procedure

Step 1: Exposure

Determine the expected degree of exposure by examining the adjacent map.

Step 2: Centres of support:

For UrbanPro:

Purlins at 1000mm c/c for wind loads up to 2.44 kN/per m²
 Rails at 1350mm for windloads up to 1.8 kN/m² with Eternit topfix fasteners.

Step 3: Lap and seal:

Establish requirement for lapping and sealing by reference to the exposure zones map of the UK and the table below.

Sheltered and moderate sites

Less than 56.5 l/m² wind driven rain per spell.

Minimum Roof pitch	End lap (mm)	End Lap Treatment	Side Lap Treatment
22.5° and over	150	Unsealed	Unsealed
15° and over	300	Unsealed	Unsealed
15° and over	150	Sealed	Unsealed
7° and over	150	Sealed	Sealed

Moderate and severe sites


More than 56.5l/m² wind driven rain per spell.

Minimum Roof pitch	End lap (mm)	End Lap Treatment	Side Lap Treatment
22.5° and over	150	Unsealed	Unsealed
15° and over	150	Sealed	Unsealed
15° and over	150	Sealed	Sealed
7° and over	300	Sealed	Sealed

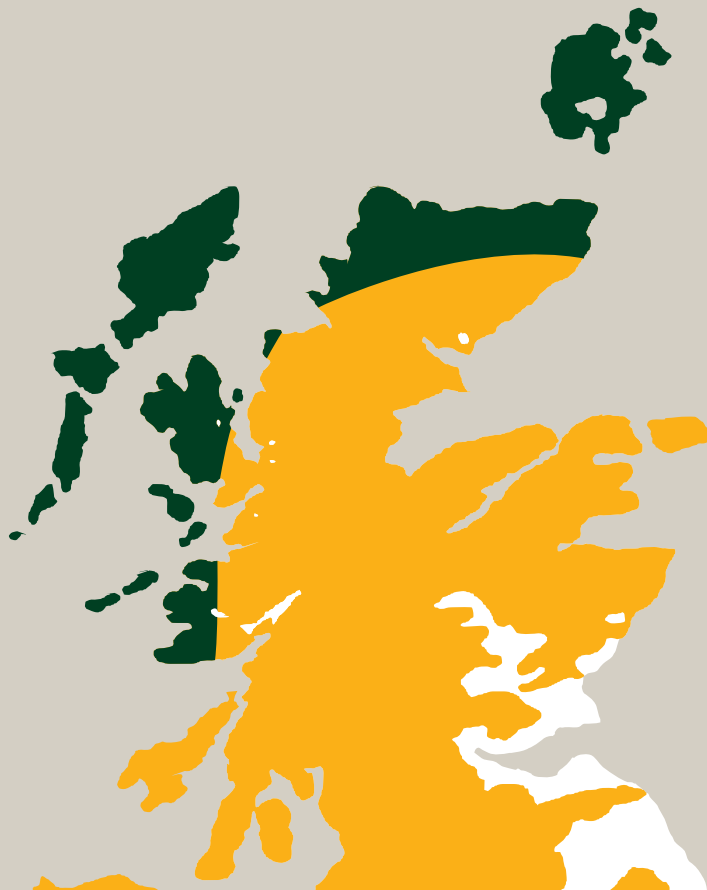
On roofs over 10° pitch where parapets might allow snow build up, 300mm double sealed end laps and single seal side laps are recommended.

Highlands and Islands specification

For users in the north and west of Scotland and the Isles, for wind loads over 2.44 kN/m² with Eternit topfix fasteners, we recommend the following:

 Indicated by shading

Due to the exceptionally high wind loads which are experienced on the Scottish Islands and exposed Coasts, specific recommendations are required for the use of fibre cement profiled sheets as detailed below. These recommendations should be considered as the minimum requirements for fixing sheets in the shaded area of the map and / or where design wind loads exceed 2.44 kN/m².



lap and sealing requirements

Minimum Pitch	Minimum Lap (mm)	End Lap Treatment	Side Lap Treatment*
>22.5°	150	Sealed	Sealed
>15° to 22°	300	Sealed	Sealed
>12° to 15°	300	Double sealed	Sealed
>7° to 12°	300	Double sealed	Sealed

*Maximum roof slope of 15m for 7° to 10° roof pitch

Please note: there should always be 2 fixings per sheet width per purlin.

UrbanPro can be fixed to purlins at 675mm maximum centres providing curved diamond washers, together with diamond felt washers are used under the head of the fasteners to increase the bearing area and therefore prevent the sheets lifting over the fasteners. The diamond washers are used in addition to the standard sealing washers.

Please note that commercially available diamond washer should be checked to ensure that the curvature is correct for the UrbanPro sheets, these may need to be manipulated to suit.

Checking the structure

Before sheeting is commenced, the structure should be checked to ensure that all purlins and rails are in a true plane, correctly spaced and securely fixed and adequately restrained.

Profiled sheets are fixed to purlins on a roof and rails on walls. There are 3 general types of purlins and rails:

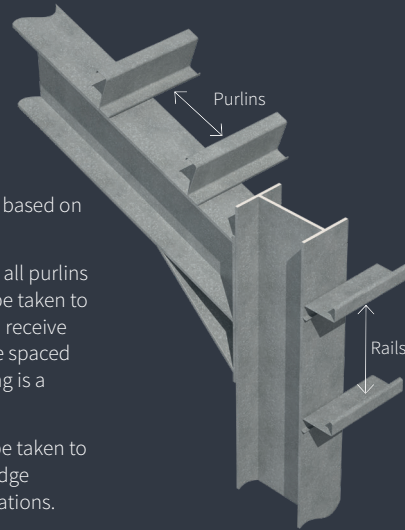
- Timber – 50 x 75mm Minimum
- Cold rolled steel - 1.2 – 3mm
- Hot rolled steel - > 3mm thick

Centres of support

For UrbanPro: purlin centres are at a maximum 1000mm, based on wind suctions up to 2.44 kN/m².

Prior to sheeting, a responsible person should check that all purlins and rails are connected securely. Measurements should be taken to ensure that the structure and purlins are true and level to receive the sheeting. A check should be made that the purlins are spaced correctly for the right end lap, and that the eaves overhang is a maximum of 250mm.

When the sheeting layout is being planned, care should be taken to ensure that the verge sheets are cut so that the outside edge coincides with a crown rather than a trough in the corrugations. This enhances the weather protection.



UrbanPro can be installed vertically, please contact our technical team for further information on 01283 501 505

Fixings general guidance

All sheets must be fixed in accordance with the recommendations of BS 8219.

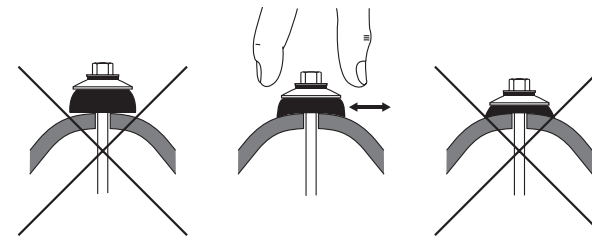
The selection of the correct sheet fastener is extremely important for the integrity of the roof covering. The type of purlin or rail system and weatherproofing with washers and caps all must be considered to avoid premature failure, corrosion, or a leaking roof.

Eternit Topfix fasteners

Self-drilling, self-tapping 'Topfix' fasteners are generally used to fix UrbanPro sheets to the purlins. The Topfix fasteners are suitable for roof pitches up to 30°. For roof pitches over 30° use in conjunction with two support clips per sheet.

These fasteners drill through the UrbanPro sheet, creating a 3mm oversized hole and self-tap into the purlin. It is important that the fasteners are installed using the correct power tools, which should have an adjustable depth setting device to ensure the washers are seated correctly. The fasteners typically have different drill points to suit the different purlin types.

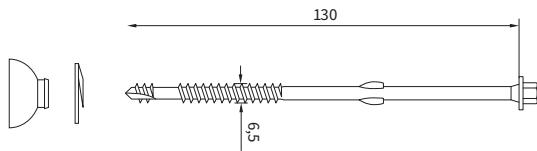
Checking the profiled sheeting self-drilling fixings for tightness



Eternit Topfix fasteners

Timber purlins

Product Number	Dimensions (mm)	Material	Application
4069994	6,5x130	Carbon Steel	on min 50x75mm
4069996	6,5x130	Stainless Steel	on min 50x75mm

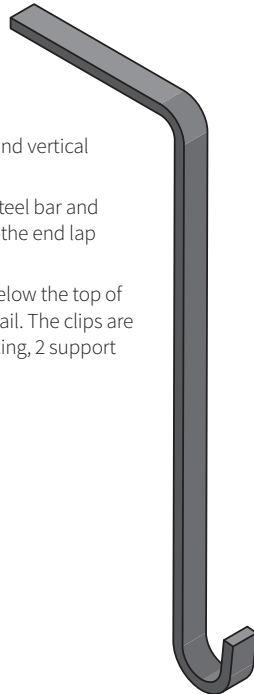


Support clips

Support clips are required for roof pitches above 30° and vertical application when fixing through the crest of the sheet.

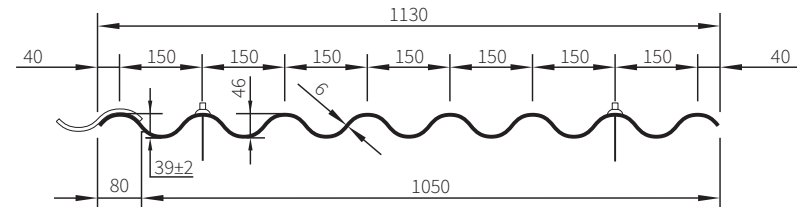
Support clips are typically fabricated from 10 x 3mm steel bar and are galvanised. Their length should be determined by the end lap of the sheeting.

The top of each course of sheets should finish 5mm below the top of the rail so the support clip can bear on the top of the rail. The clips are positioned in the valley corrugation adjacent to the fixing, 2 support clips are required per sheet.



Fixing position

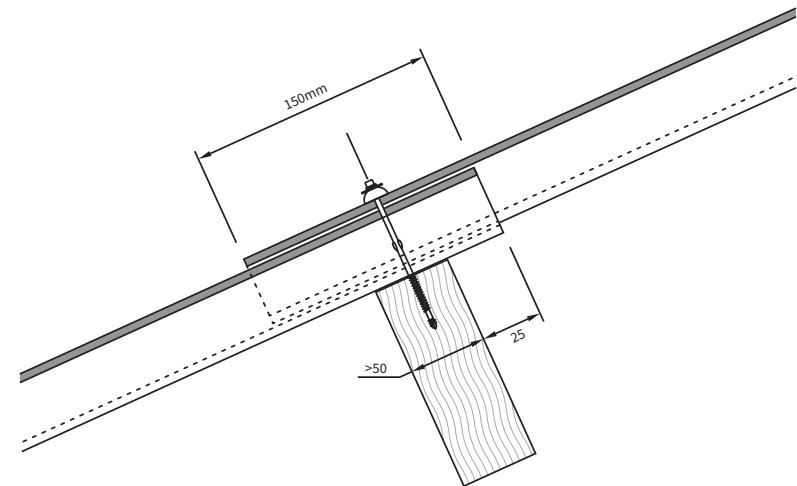
Profiled sheeting should always be fixed with 2 fasteners per sheet per purlin, no more and no less. The fixing position for UrbanPro is corrugation 1 & 6.



Fasteners should be installed perpendicular to the plane of the roof.

With some types of insulated cladding, or where sealant has been used, sheet settlement can take place. It may be necessary to retighten the fixings after a suitable period.

- Fixing is central on the purlin
- 50mm from the top edge of the under sheet, 100mm up from the bottom of the top sheet when using a min 150mm head lap



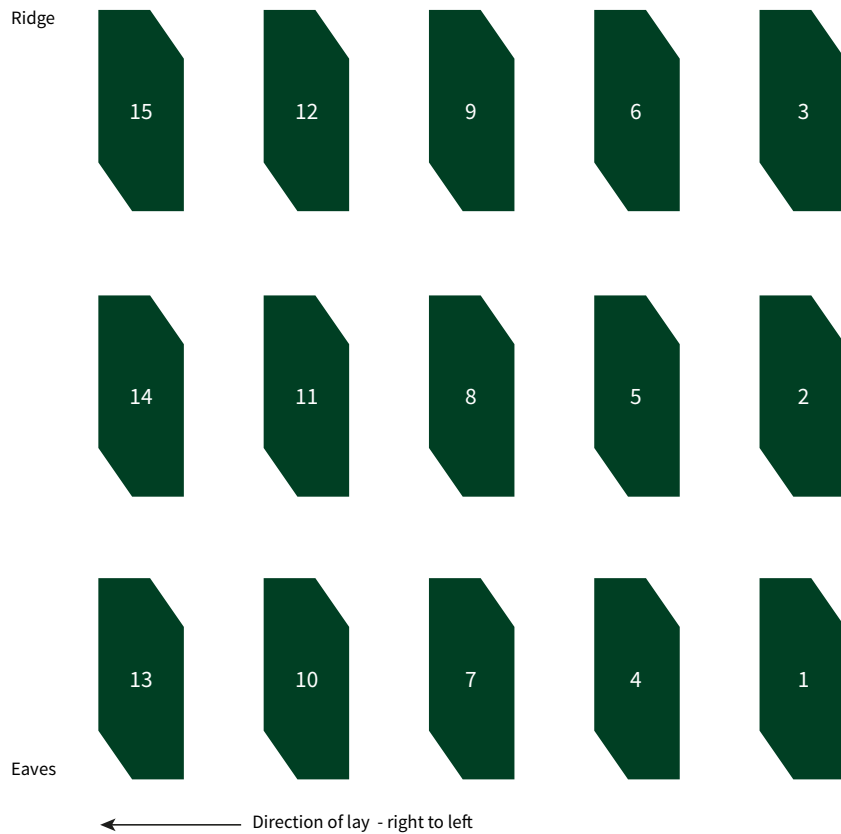
Note: When fixing to timber purlins, BS 5268: Structural use of Timber, recommends that the minimum edge distance of the fixing should be five times the fixing diameter to avoid undue splitting of the timber

Laying the sheets

All UrbanPro sheets are pre-mitred ready for sheeting right to left only.

Roof sheeting for UrbanPro sheets should commence from the right hand side of the building at eaves level, rising in vertical tiers, one sheet wide, from eaves to ridge.

The end laps of each row of sheets should form a continuous straight line from gable to gable and must not be staggered. Similarly, the side laps should be aligned from eaves to ridge.



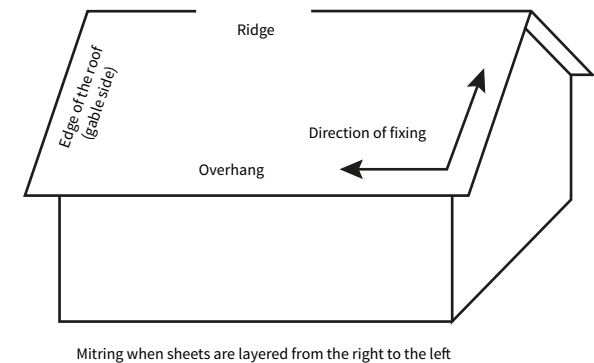
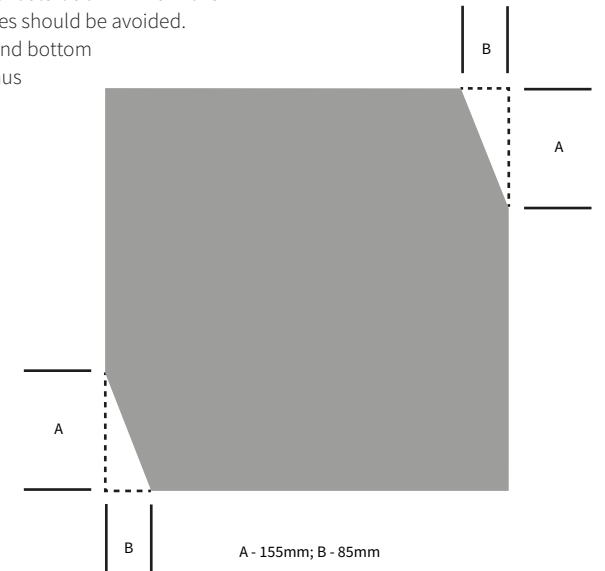
Mitring

UrbanPro sheets are factory mitred, meaning the sheets can only be laid right to left on both roof slopes. Mitring is required to avoid four thicknesses of sheeting at the junctions of side and end laps, it is necessary for two of the sheets at each junction to be mitred at the corners so that they lie in the same plane.

Mitres on UrbanPro sheets should be cut from a point 155mm up the vertical edge from the corner (or the amount of the end lap) to a point 85mm along the horizontal edge, i.e., the width of the side lap by the length of the end lap.

Ideally, the gap between mitres should be a minimum of 3mm to a maximum of 6mm. Box mitres should be avoided. The mitred joint is covered top and bottom by the other two sheets and is thus weatherproof and unseen.

(See typical mitring details below.)



Sealing the sheets

When installing corrugated sheets on a roof a sealing cord must be applied if required. It is used for the sealing of end and side laps of the Eternit UrbanPro corrugated sheets.

For best results, BS 8219 recommends a pre-formed 8mm diameter mastic ribbon of butyl or a polyisobutylene based material, which has a rubbery, tacky consistency, and which will adhere to both surfaces when sheets are overlapped and never sets hard.

Please refer to the lap and sealing requirements table on page 20-23.

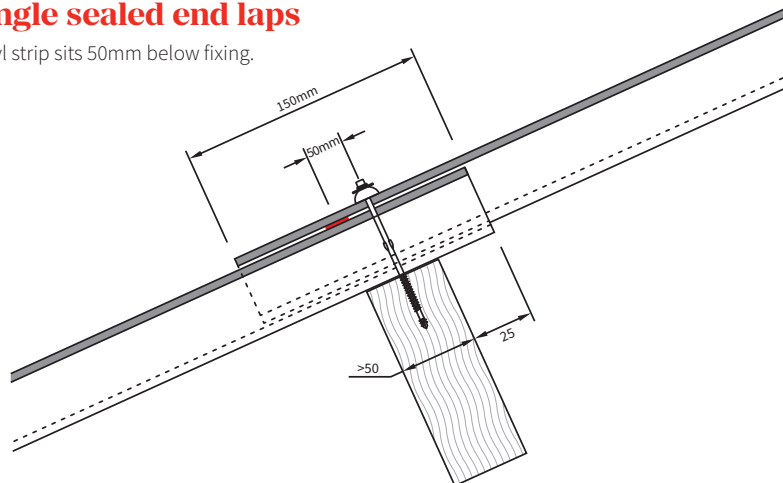
Application

The surface of the sheet where the sealing cord is to be applied must be dust and grease free. The sealing cord must be applied without stretching and following the corrugations when being applied transversally. When placing the top sheet over the sealing cord it must be placed in the correct position as sliding the sheet to correct its position will not be possible. Press the top sheet down firmly onto the sealing cord before installing the fixings.

As the sealant may ease during the time of the installation a final check of the fixings for tightness should be carried out at the end of the installation. The Sealing cord will work better when warm so keeping it in warm areas during the colder periods will make it easier to install.

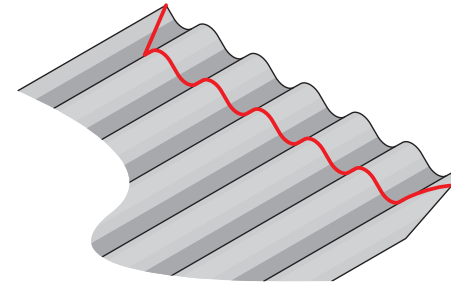
Single sealed end laps

Butyl strip sits 50mm below fixing.



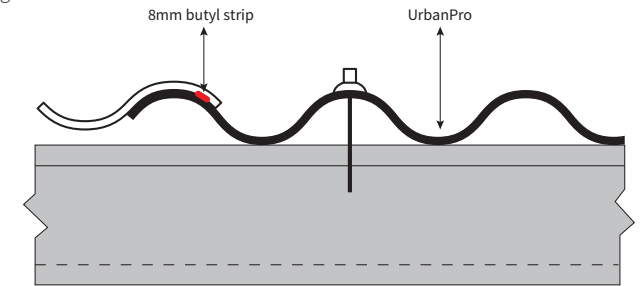
Mitres

In order not to obstruct the water drainage, the sealing cord must be drawn through along the chamfered corner up to the two panel corners.



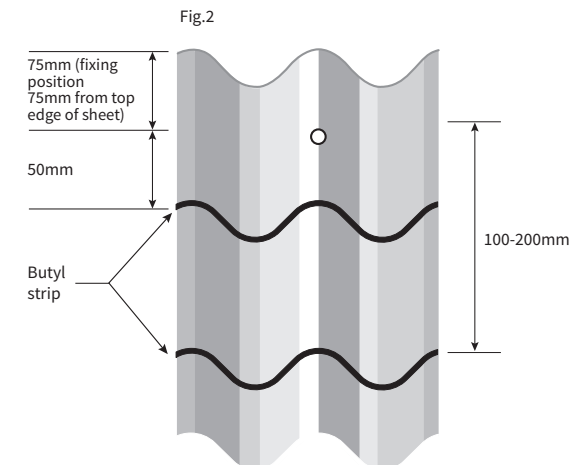
Single sealed side laps

The sealing cord is applied 5-10mm from the top side of the upturned corrugated wave.



Double sealed end laps with a 300mm head lap

Where double sealing is necessary, with a 300mm end lap, the second butyl strip should be positioned 100 to 200mm below the fixing, as shown in Fig. 2



Bargeboards

The profiled sheeting bargeboard provides a weatherproof finish to the verges of a building. With each bargeboard, one leg extends across the roof sheeting while the other covers the top of the masonry wall or vertical cladding.

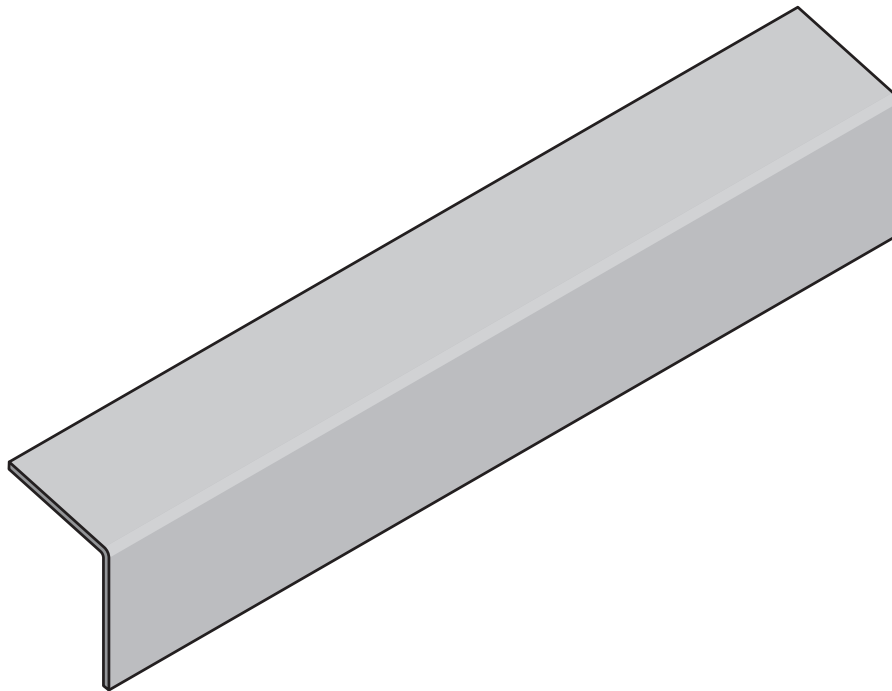
Plain wing bargeboard

Wing: 300x300mm

Length: 2500mm

Handing of Bargeboard

Plain wing bargeboards are universal.



Fixing bargeboards

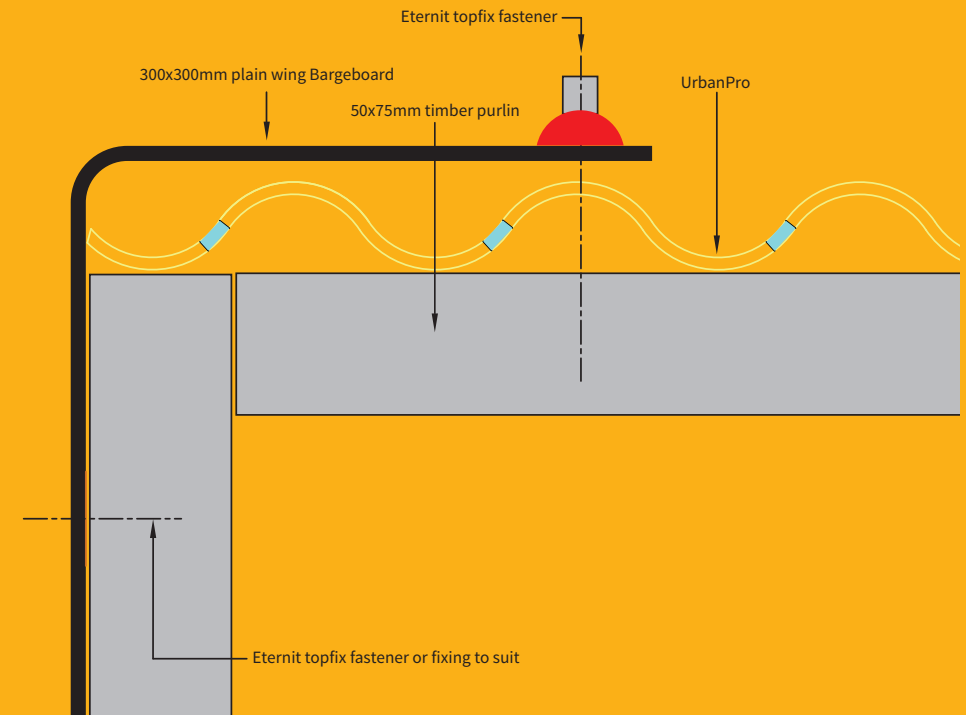
Note: Care must be taken to ensure there is at least 2 wave corrugations beneath the bargeboard.

Bargeboards are fixed with the sheet fasteners into the purlins through the sheets and screwed to the wall or vertical cladding. The sheets should project at least two crest corrugations under the bargeboard to provide optimum weather protection.

Intermediate fixings, such as laplok bolts, should be introduced as necessary to ensure that the bargeboard fixings are at 750mm maximum centres.

Bargeboards should be positioned so that their lap is directly below the end lap of the sheeting, with the top of the underlapping bargeboard close to the tail of the sheet in the course above.

When the gable is brick or block, position the bargeboard 25mm clear of the face of the wall by placing a spacer batten 25 to 30mm up from the bottom edge of the vertical leg. Fix both legs of the bargeboard to the building using the Topfix fasteners, laploks and appropriate fixings for the spacer battens at maximum 750mm c/c. Minimum fixing edge distance is 30mm from the center of the fixing to the edge of the bargeboard.



Note: As the verge is the part of the roof that is often the most vulnerable to wind damage, more fastenings are required there to ensure that bargeboards in general and the ends of the bargeboards are always securely fixed.

UrbanPro duo pitch ridge

Fibre cement dry fixed ridge for domestic application

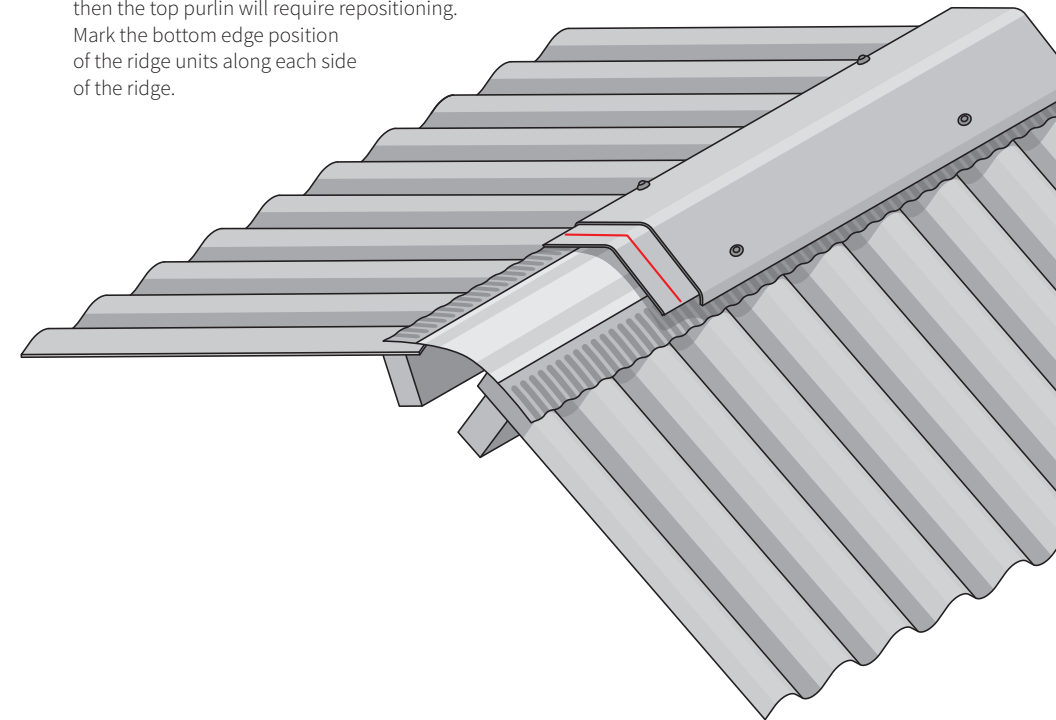
Eternit fibre cement ridge units and stop ends are designed with a socket for a simple fix by drilling and screwing to the top ridge purlin at the apex. Fixings are the Topfix fasteners as used for the main UrbanPro sheets. An alkali-resisting, non-oil based 8mm diameter butyl strip should be used to seal across the socket, 50mm from the end of the socket.

- 1) Fix the underlay (if being used) along the roof apex.
For LR Membranes overlap to the opposite roof slopes by 300mm, for HR membranes stop the membrane 20 – 30mm short of the apex / ridge boards on each roof elevation.
- 2) Fix the top purlin to suit the fixing location of the ridge units such that the fixing is 50mm up from the bottom edge of the ridge unit. See the table below for the dimensions for the location of the top edge of the purlin.

Purlin depth mm	Roof pitch - °						
	Pressed metal ridge required			UrbanPro duo-pitch ridge			
	15	20	40	25	30	35	45
75	103	90	27	76	61	44	2
100	96	81	4	64	46	26	-
125	90	72	-	53	32	9	-
150	83	63	-	41	17	-	-

Only suitable for roofs without membranes

- 3) Ensure that the UrbanPro sheets are at least 50mm above the centre line of the purlins and that the gap between the sheets of each roof elevation is no less than 50mm.
- 4) If the top edge of the UrbanPro sheets needs trimming at the ridge, then there is no need to replicate the mitres.
- 5) Install the UrbanPro sheets to both elevations aligning the corrugations of each side and fix to all purlins except the ridge purlins.
- 6) The ridge units can be fixed as the sheets progress or installed after the sheeting of the roof elevations is finished. If installed after then access over the UrbanPro sheets should be by appropriate access equipment, the UrbanPro sheets must not be walked over.
- 7) Place an UrbanPro ridge unit centrally on the apex of the roof and mark the bottom edge location on the sheets either side, then remove and set aside. Check that the centre of the top purlin is 50mm up from this line on each roof elevation, if this is not correct then the top purlin will require repositioning. Mark the bottom edge position of the ridge units along each side of the ridge.



8) Next install the ridge roll strip centrally between these two marks removing the protective layer from the mastic on the underside of each corrugated skirt. Use the applicator tool to feed the ridge roll into each trough without stretching it, adhere the ridge roll to the sheets on either side of the ridge. The skirt of the ridge roll must remain corrugated through the roof length.

9) Place a ridge stop end at one end, so that the spigot points towards the direction of the prevailing winds. Mark each fixing position, 50mm up from the bottom edge of the ridge unit and 125mm in from the ends of the ridge (spigot not included.)

The fixing must pass through a crest of a corrugation, and therefore the 125mm dimension can be reduced to no less than 100mm.

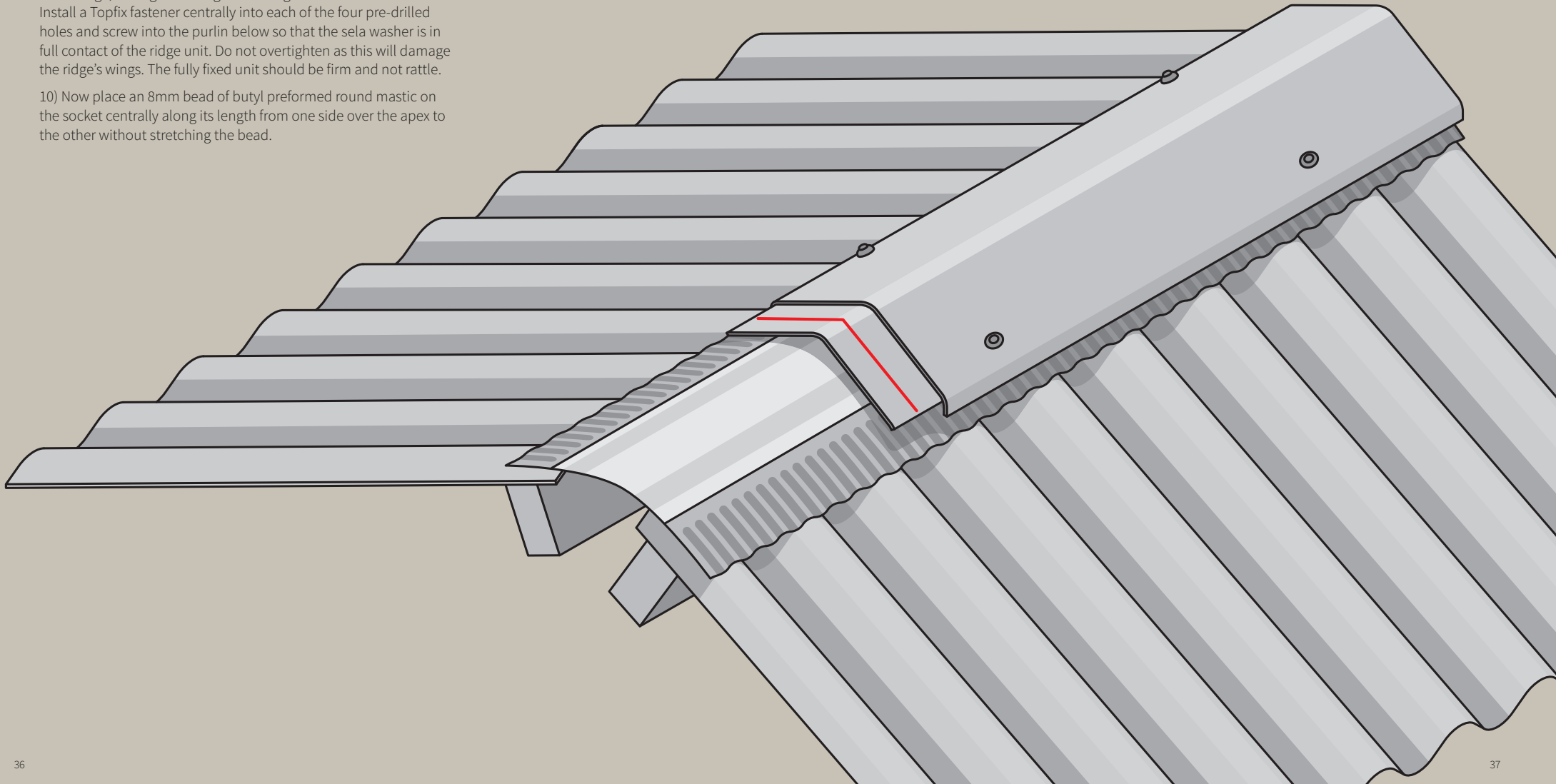
Predrill 10mm holes at these locations perpendicular to the wing of the ridge, through the wing and corrugated sheet below.

Install a Topfix fastener centrally into each of the four pre-drilled holes and screw into the purlin below so that the sela washer is in full contact of the ridge unit. Do not overtighten as this will damage the ridge's wings. The fully fixed unit should be firm and not rattle.

10) Now place an 8mm bead of butyl preformed round mastic on the socket centrally along its length from one side over the apex to the other without stretching the bead.

11) Repeat the application of ridge units installing the ridge roll as you progress. If a cut section is required for the length of the ridge, preferably this should be installed centrally on the roof. If any cut length is to be less than 250mm (not including the spigot) it will require two or three units to be cut to equal lengths. The two end units must be full length. The last unit installed will be a stop end unit with only the spigot cut off. All units must have four fixings, two in each wing at the locations given in step 9 above.

12) Drilling dust must be removed immediately especially on painted items. Any dust left on the painted ridges or sheets can adhere to the items after getting damp or wet and then may not be able to be completely removed.



Two-piece plain wing ridge

Two-Piece adjustable ridges are used to close off the ridge and can be used on roof pitches from 10° to 45°.

(Width = 1130mm / Cover width = 1050mm)

Used for ventilating the roof ridge and hip. Positioning can be left to right as well as right to left.

Fixing

The two-piece ridges to suit UrbanPro can be installed from either end of the building. i.e. – laid left to right or right to left.

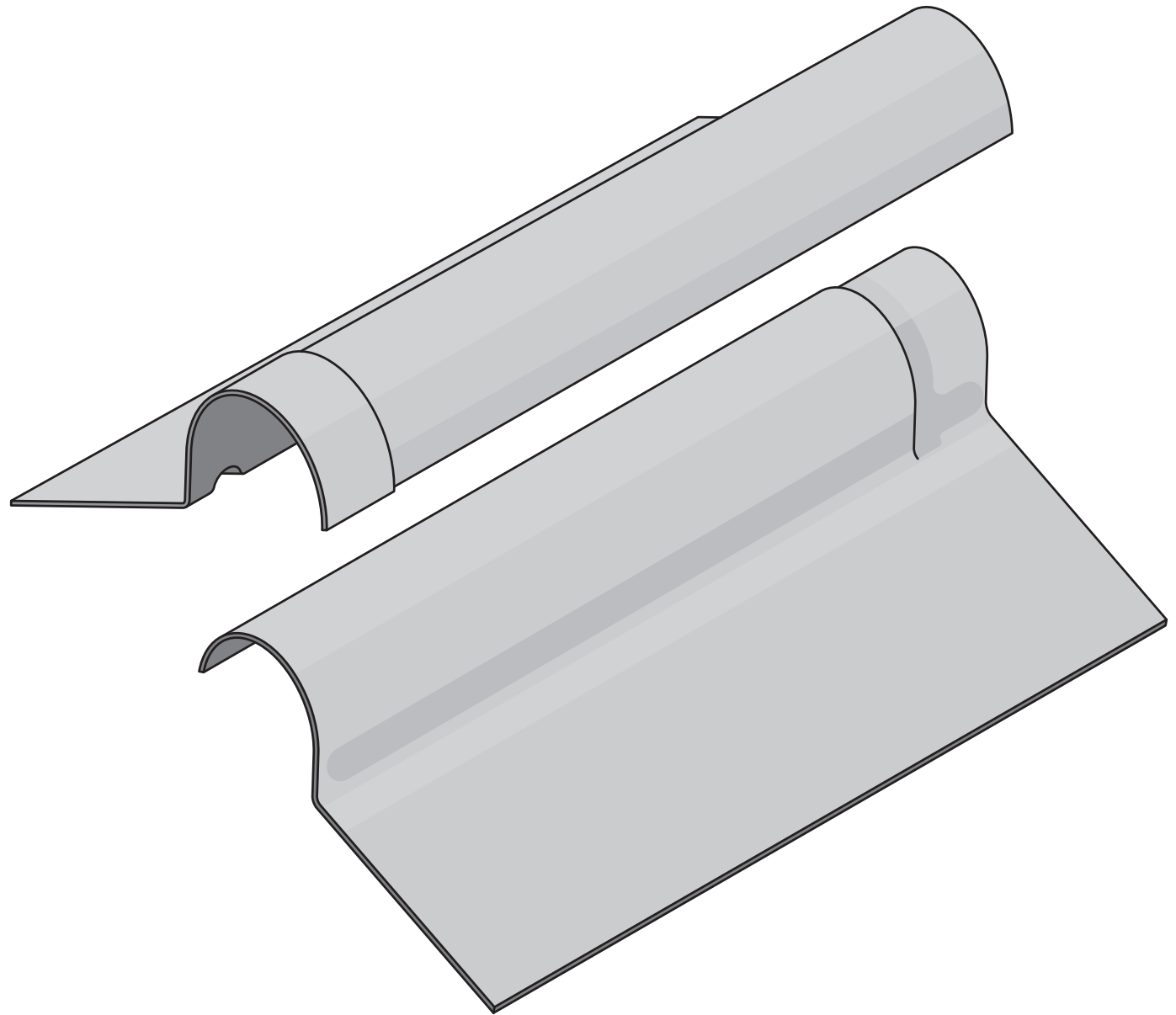
Any cut sheets should be at the ends of the building (Minimum sheet width is 4 corrugations), this is replicated in the 2pc plain wing ridges.

The inner roll of the ridge should be positioned and fixed first before the outer roll is installed.

Please see below chart advising the position of the top purlin when installing the UrbanPro sheeting with plain wing ridges:

The dimensions in the chart below are based on the measurement from the apex of the roof to the top edge of the purlin where it sits either on top of the counter battens or rafters. We advise to use a minimum size of 50mm x 75mm deep purlin, so on this basis for the distance to the center of the purlins add 25mm to the figures below.

Based on a 50mm wide purlin, the sheeting should finish 25mm up slope from the top edge of the purlin to give a 50mm distance from the top edge of the sheet to the fixing position.



Dimension from apex to edge of purlin									
Pitch	7°	10°	15°	20°	25°	30°	35°	40°	45°
Purlin depth 75mm	201	194	185	173	161	148	133	117	99

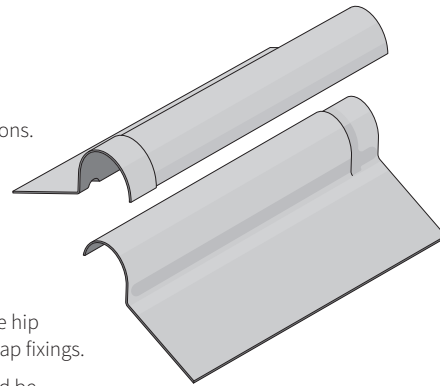
Mitring

Two-Piece Plain wing ridges are not required to be mitred and the top of the UrbanPro sheets adjoining the ridges are also not required to be mitred.

Hips

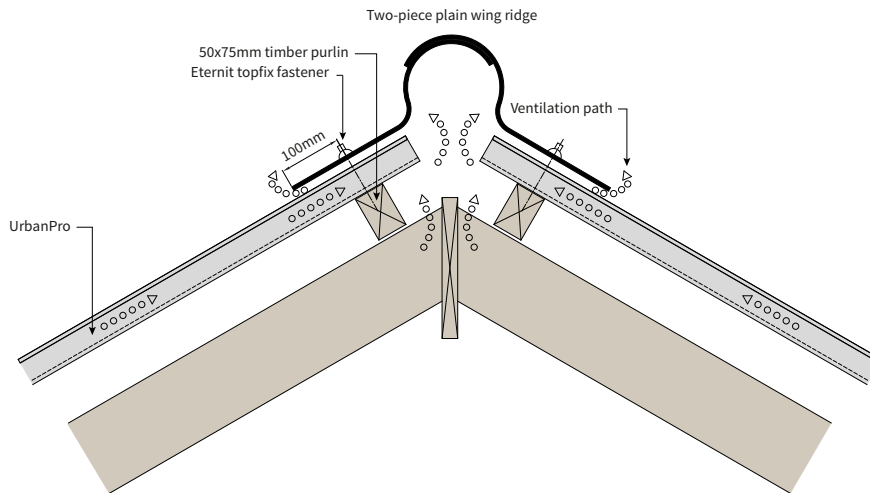
A fibre cement option for the hip is the two-piece plain wing ridge. This ridge sits across the tops of the corrugations.

Alternatively, you can also use a pressed metal plain wing ridge. (The wider the better).



Fixing

1. Fix a 50 x 75mm trimmer batten to run parallel with the hip to accept the fixing for the Profiled sheet and the hip cap fixings.
2. To prevent water ingress, the open corrugations should be closed by splay cut profile filler blocks (we suggest you should take advice from the filler block suppliers regarding their products on this type of application), or a ventilating ridge roll.
3. Fixing position for the ridge piece is 150mm up from the bottom edge of the ridge and 100-150mm in from the end of the ridge unit such that the fixing is at the crest of the sheet corrugation (please see drawing below).



Finishing a ridge hip junction:

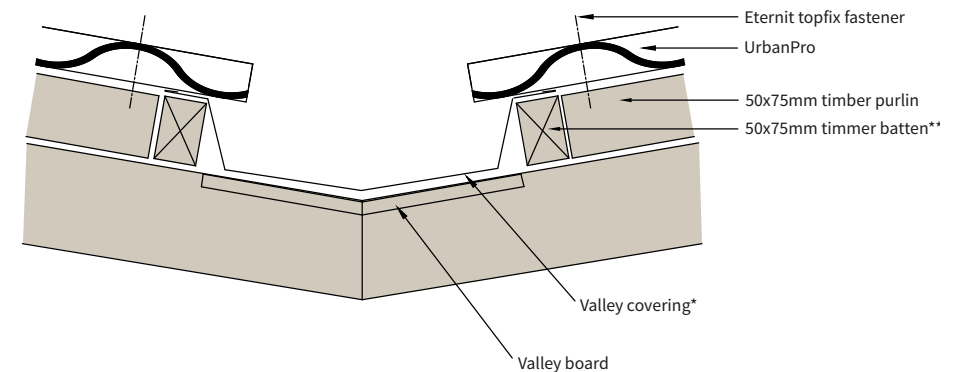
Finishing a ridge hip junction, a lead soaker (or other materials are available) is to be placed underneath the ridges at the hip, as you cannot get a weather tight joint where the ridge and hip covering meet. Then a neat cut will need to be made to finish off the ridge.

A pressed metal flashing or lead would be best dressed over the junction to give a neat weather tight finish.

Valley

Fixing

1. Fix support noggins to the inside of each rafter face at a level to receive individual valley boards between the rafters.
2. Nail valley boards to lay flush with the tops of the rafters. Minimum width valley gutter is 150mm. But the amount of water flowing off the roof into the valley gutter services needs to be calculated to ensure the gutter is deep enough or wide enough. The critical point is the lowest point of the valley gutter.
3. Fix 50 x 75mm trimmer batten to run parallel with the valley. Maximum unsupported overhang is 250mm for UrbanPro Sheets.
4. Fix the lead valley gutter lining over the valley boards and dress over the trimmer batten. Form welted edges on the sides of the valley gutter lead lining, to return minimum 15mm.
5. Centre the Profile sheets, before fixing down, ensuring a clear gutter to maintain an uninterrupted flow of water from the roof.



Notes: Corrugations should be closed with splay profile filler blocks or comb fillers.

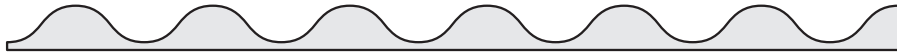
*Valley covering options GRP, Lead, Pressed Metal.

**This batten is to run parallel with the valley.

Profile filler blocks

Applications include:

- Sealing eaves and ridge
- Sealing hips and valleys
- Sealing and supporting rooflights



Fixing:

When installing the profile filler blocks, these should be positioned to ensure the fixing passes through the center of the filler block, to hold the filler block in place.

Material information:

Material	Polyethylene
Length	1050mm
Colour	Black
Thickness	25mm
Density kg/m ³	min. 30
Service temp	-70°C - 100°C

Ridge roll

Ridge Roll is designed to help provide a ventilated and weathertight means of securing the fibre cement duo pitch ridge or two-piece ridge at the ridges or hips.

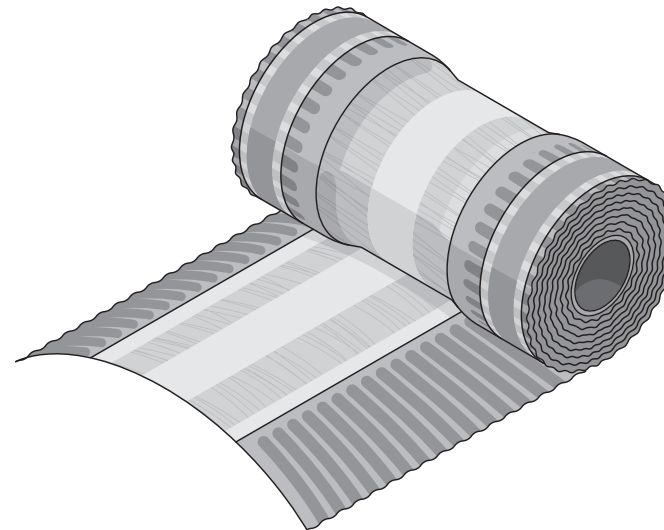
Fixing:

Fix centrally along the ridge line while removing the protective layer from the mastic on the underside of each corrugated skirt. Using the applicator tool, feed the ridge roll into each trough without stretching it. Adhere the ridge roll to the UrbanPro sheets on either side of the ridge or hip.

The skirt of the ridge roll must remain corrugated through the roof length.

Material information:

Product composition	Aluminum edges and synthetic mid-section. Adhesive is butyl
Length	5000mm
Width	300mm
Stretchability	30%





Telephone 01283 501555
Email infouk@etexgroup.com
or visit eternit.co.uk

Etex (Exteriors) UK, Wellington Road,
Burton-upon-Trent, Staffordshire, DE14 2AP

Visit our website to see UrbanPro

- Case Studies & Inspiration
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