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Eternit

Choosing and Using

Fibre cement profiled sheeting

June 2020

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Profile 3 and Profile 6

Eternit, the UK's only manufacturer of fibre cement roofing and cladding solutions, has been producing profiled sheeting for over 100 years.

Today, we offer two ranges of profiled sheeting - Profile 6 and Profile 3 – to a wide range of customers. The products are differentiated by the size of corrugation in the sheets; Profile 6 having larger corrugations than Profile 3.

Eternit have always worked to improve safety when using our range of roofing and cladding products. Building upon over 100 years experience in the UK roofing industry we have developed a purpose designed, reinforced fibre cement sheet – Profile 6 – that meets the high standards of safety in roofing work set out in the Health and Safety Executive document 'Health and Safety in Roof Work' (HSG 33).

In addition to the Profile 6 sheet, we are proud to be able to offer a complementary range of accessories that meet the same high standards of safety.

Eternit fibre cement profiled sheeting is manufactured in accordance with a quality system registered under BS EN ISO 9001.

The recommendations given in this document are in accordance with BS 8219: 2001 + A1: 2013. For further information on fixing fibre cement sheets and fittings, refer to BS 8219 or contact techuk@etexgroup.com

Which profile?

The decision to use Profile 3 or Profile 6 sheets will depend largely upon the following four criteria:

1 The scale of the building in question.

2 Compatibility with any existing materials.

3 The distance from centre to centre of the horizontal fixing rails or purlins.

4 Whether or not the roofing material is to be classified as non-fragile.

Reference should therefore be made to the sheet sizes, fixing details and product data provided in this brochure before deciding which type of profiled sheeting to use.

Benefits of Eternit semi-compressed fibre cement

Eternit Profile 6 and Profile 3 sheets and complementary fixtures are all made (in the UK) from semi-compressed fibre cement, the optimum material for livestock, storage and smaller buildings. This table gives a quick overview of the key benefits:

Key benefit		Eternit Semi-compressed fibre cement	Fully compressed fibre cement	Metal
Moisture absorption* 	Ability to absorb up to 25% of its dry weight in moisture, minimising condensation. Fully compressed absorbs only 15%	✓	✗	✗
UK Manufacture 	All sheets and fittings manufactured in UK	✓	✗	✓
Single source supply 	Stainless steel P6 coastal fixings designed for semi-compressed sheet	✓	✗	✗
Longevity 	Rust, rot and corrosion resistance in excess of 50 years	✓	✓	✗
Insulation 	The thermal and acoustic properties of fibre cement are better than those of other commonly used single skin sheets, resulting in improved well-being and productivity.	✓	✓	✗
Strength 	Meets highest strength required to BS EN 494	✓	✓	✗

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

Comparison between P6 and P3 profiles

	Profile 6	Profile 3
Advantages		
Easy to install	✓	✓
Fire performance – Class A2 to BS EN 13501-1, SAA and Class 0	✓	✓
Sustainable – able to achieve up to A+ in the Green Guide	✓	✓
Variable pitches	Min. 5° pitch – can be used as vertical cladding	Min. 10° pitch – can be used as vertical cladding
Sheet size availability		
Painted and Natural Grey	1220mm, 1375mm, 1525mm, 1675mm, 1825mm, 1975mm, 2125mm, 2275mm, 2440mm, 2600mm, 2750mm, 2900mm, 3050mm	1525mm 2450mm 3050mm
Anthracite	1525mm, 1675mm, 2440mm, 2750mm 2900mm, 3050mm	n/a
Available painted	✓	✓
E-Luminate	1220mm, 1375mm, 1525mm, 1675mm, 1825mm	1525mm, 2450mm, 3050mm
GRP sheets	For use with P6	n/a
Applications		
	Profile 6 and Profile 3 are used in a wide range of sectors, including: Agriculture, Industrial, Storage, Commercial, Leisure, Housing, and Education	

Colour range

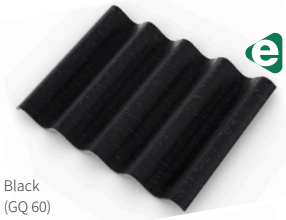
For more information

Please request the Parts List brochure from infouk@etexgroup.com

Painted colour range

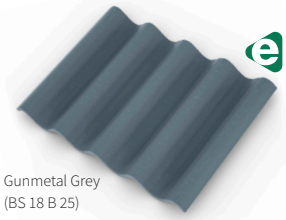
Experience gained over many years has shown that the Eternit colour range will meet the wide ranging design requirements in both rural and urban areas.

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

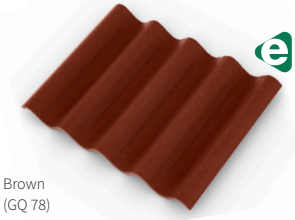


Black
(GQ 60)

Van Dyke Brown
(BS 08 B 29)



Gunmetal Grey
(BS 18 B 25)



Brown
(GQ 78)

Cloud Grey
(GS 92)

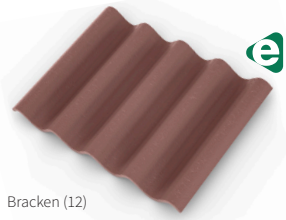
Tawny Brown
(GQ 80)

Slate Blue
(BS 18 B 29)

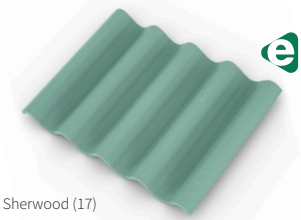
Laurel Green
(BS 12 B 29)

Matt painted colours

These colours are part of the standard colour range but have a matt finish.



Bracken (12)



Sherwood (17)

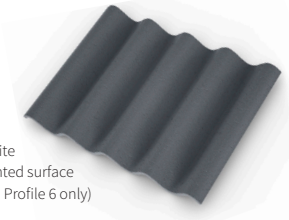
Natural Grey

Natural Grey is the standard unpainted finish for Profile 6 and Profile 3.

Natural Grey

Farmscape Anthracite

Anthracite sheets have a pigmented surface layer. Together with subtle variations in tone inherent in any natural cementitious product, the appearance will blend with almost any landscape from the day the building is erected. Only available for Profile 6.

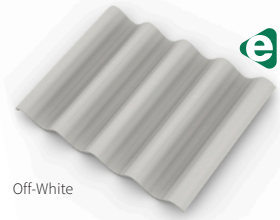


Anthracite
(Pigmented surface
layer on Profile 6 only)

E-Luminate™

The underside of painted sheets can be manufactured with E-Luminate, a special off-white paint colour that enhances interior light. E-Luminate is a premium Painted sheet option.

For further details on E-Luminate, please see pages 8-9.



Off-White

E-Luminate

Brighter working environments – now available in all sizes

Designed to maximise light

The more we can replicate the natural environment inside a livestock or stable building, the better it is for the animals and you.

At Eternit, we have been investigating ways that we can help improve the living conditions for animals whilst retaining the performance of the building and not adding additional overheads like electricity and maintenance. E-Luminate increases natural light reducing energy costs, making a brighter future for brighter working environments.

E-Luminate is a technical product solution which can be used with P6/P3 painted sheet colour options in the following sizes:

P6 1220mm, 1375mm, 1525mm, 1675mm, 1825mm, 1975mm, 2125mm, 2275mm, 2440mm, 2600mm, 2750mm, 2900mm, 3050mm

P3 1525mm, 2450, 3050mm.

Maximum sheet quantities apply per order. POA.

Please call your Area Sales Manager for information.

Without E-Luminate

With E-Luminate

Artist's impression

Applications

- Roofs & Cladding
- Storage
- Garages & Sheds
- Stables

E-Luminate in action

E-Luminate* products feature a special off-white paint coating to a painted sheet underside, researched and designed to increase light to internal livestock areas or agricultural buildings. Standard P6 and P3 painted sheets are now available with E-Luminate (POA).

A recent case study on a new stable build revealed exciting results when independent light tests were taken.

Lumens light measurement increased substantially, increasing natural light in the building by almost double.

The customer commented:

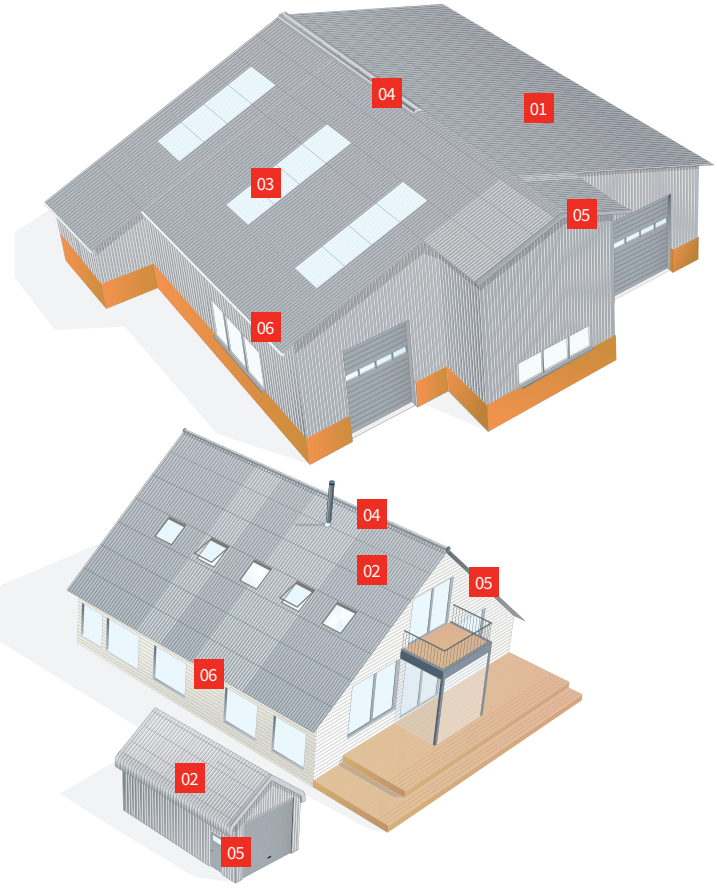
"The increased light will certainly help energy costs whilst also being an eco-friendly solution: 'most importantly Bumble is a happier pony, as an older pony suffering from laminitis, he has to be stabled for longer periods of time. In his new environment he appears more relaxed than before. It gives me the feel good factor to know I have improved his welfare".

Equestrian

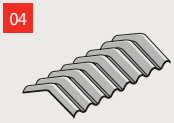
Independent tests proved a higher light measurement both in dark shaded areas and in the centre of the stable block.

*IMPORTANT: E-Luminate is not suitable with non-painted sheets as the permeability of the surface exposed to the weather should not be any less than the permeability of the inner surface, otherwise the sheets could bow excessively as they absorb moisture from rain and possibly cracks could form. Although the specialist paint is vapour permeable, it does reduce the permeability of the products and so, when the underside of fibre cement sheets are painted, the top surface also has to be painted.

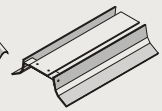
Product selector

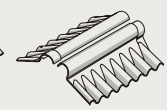


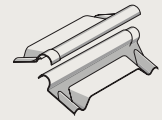
04

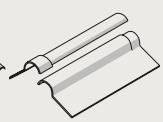

Cranked crown sheet

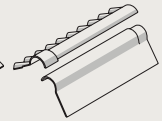

Ventilating cranked crown sheet

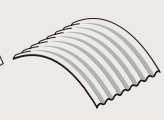

Open protected ridge For agricultural use.


Two piece close fitting ridge

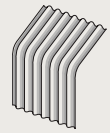

Two piece ventilating ridge

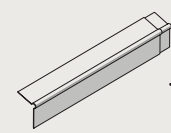

Two piece plain wing ridge

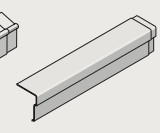

Two piece north light ridge

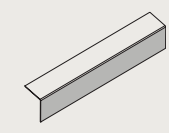

Curved Profile 6

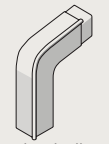
05

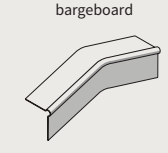

Eaves bend sheet


Roll top bargeboard


Vergeline bargeboard


External corner (or plain wing barge board)


Eaves bend roll top bargeboard


Cranked roll top bargeboard

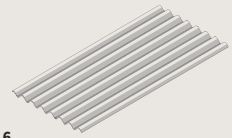

Cranked vergeline bargeboard


Cranked external corner


Hooded two piece ridge finial (to suit roll top barge boards)

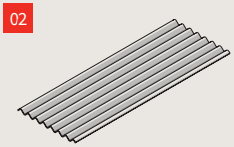

Disc type ridge finial To suit two piece adjustable ridges

01



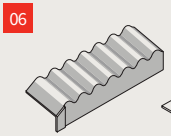
Profile 6
Lengths available: 1220, 1375, 1525, 1675, 1825, 1975, 2125, 2275, 2440, 2600, 2750, 2900, 3050

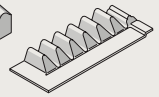
02

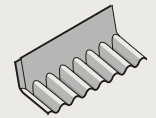


Profile 3
Lengths available: 1525, 2450, 3050

06

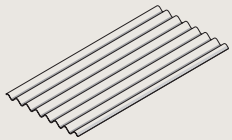

Eaves corrugation closure piece (various back lengths available)


Eaves filler piece


Apron flashing piece


Movement joints

03



GRP translucent sheet
Profile 6 only

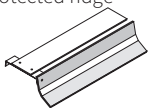
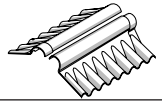
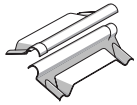
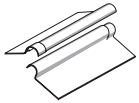
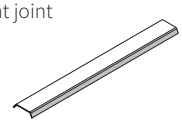
Profiled Sheeting self-drilling fixings

Profiled sheet fixings designed for Steel and Timber sub-structure buildings. See page 18.

This product selector is not exhaustive. See the Profiled Sheeting Parts List for full range of available products.

Fittings

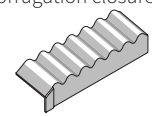
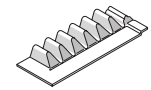
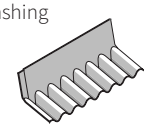
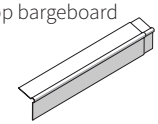
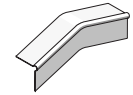
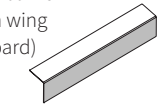
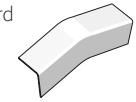
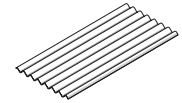
Please refer to the Profiled Sheeting Parts list for our full range of fittings

	Profile 3	Profile 6
Open protected ridge 	n/a	Cover length 2200mm
Cranked crown sheet 	n/a	Girth: 750 or 900mm Standard sizes: 5°, 7.5°, 10°, 12.5°, 15°, 17.5°, 20°, 22.5°
Ventilating cranked crown 	n/a	Girth: 750 or 900mm Standard sizes: 5°, 7.5°, 10°, 12.5°, 15°, 17.5°, 20°, 22.5°
Two piece close fitting ridge 	Cover width: 650.8mm (adjustable)	Cover width: 1016mm (adjustable)
Two piece ventilating ridge 	Cover width: 650.8mm (adjustable)	Cover width: 1016mm (adjustable)
Two piece plain wing ridge 	Cover width: 650.8mm (adjustable)	Cover width: 1016mm (adjustable)
Two piece hooded ridge finial 	n/a	Available
Movement joint 	n/a	Cover width: 1525, 2440, 3000mm

Note: Cover widths indicated make allowance for overlap

Fittings

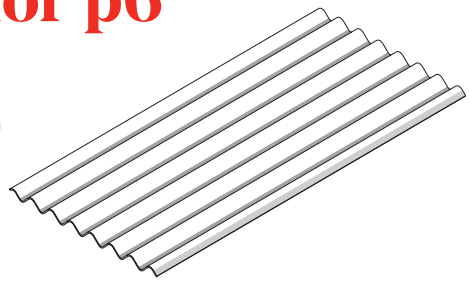
Please refer to the Profiled Sheeting Parts list for our full range of fittings

	Profile 3	Profile 6
Eaves corrugation closure 	Cover width: 650.8mm Size: 75mm back Handed left & right	Cover width: 1016mm Sizes 65, 100, 150, 250mm back
Eaves filler 	Cover width: 650.8mm Handed left & right	Cover width: 1016mm Universal
Apron flashing 	Cover width: 650.8mm Angle: 120° Handed right	Cover width: 1016mm Angle: 124° Handed left
Roll top bargeboard 	Overall lengths: 1525, 2440, 3000mm Available in 200 x 200mm wing dimensions	Overall lengths: 1525, 2440, 3000mm Available in 200 x 200mm wing dimensions
Cranked roll top bargeboard 	Girth: 1050, 1300, 2200mm Available in 200 x 200mm wing dimensions	Girth: 1050, 1300, 2200mm Available in 200 x 200mm wing dimensions
External corner (or plain wing bargeboard) 	Overall lengths: 1800, 2440, 3000mm Available in 200 x 200mm and 300x300mm wing dimensions	Overall lengths: 1800, 2440, 3000mm Available in 200 x 200mm and 300x300mm wing dimensions
Plain cranked crown barge board 	Girth: 1300mm Wing dimension: 200 x 200mm	Girth: 1300mm Wing dimension: 200 x 200mm 300 x 300mm
GRP translucent sheet 	n/a	Overall lengths: 1525, 1675, 1825, 2440, 2750, 2900, 3050mm Overall width: 1086mm

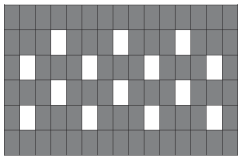
GRP translucent sheets for p6

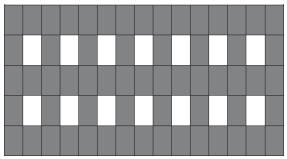
Advantages

- ✓ Good light transmission
- ✓ High impact resistance
- ✓ Easy installation
- ✓ Low levels of expansion and contraction
- ✓ Resistant to chemicals



Typical GRP configurations





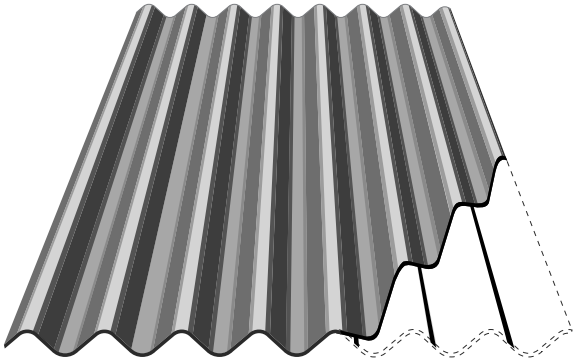
Request a FREE copy

of our comprehensive Profiled Sheeting Parts List

Email: infouk@etexgroup.com

- ✓ Large product range
- ✓ Full range of accessories
- ✓ 12 exciting colours
- ✓ P6 and P3 sheet sizes listed
- ✓ GRP sheets
- ✓ Product selector guide

Profile 6

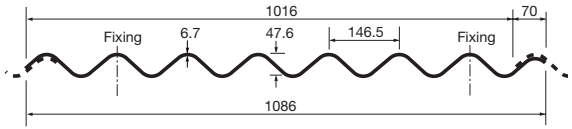


Profile 6 and safety in roof work

Profile 6 is commonly used on all types of building for both roofing and vertical cladding applications. When correctly installed, Profile 6 has been tested and classified as non-fragile, this must be considered when working to the roof safety requirements of HSG 33.

Profile 6 is a high strength fibre cement sheet with polypropylene reinforcement strips inserted along precisely engineered locations which run for the full length of the sheet to provide impact resistance.

The cut-away illustration above shows the location of the polypropylene reinforcement strip inserted in precisely engineered positions in the Profile 6 sheet.



Profile 6 sheet lengths (mm)

1220, 1375, 1525, 1675, 1825, 1975, 2125, 2275, 2440, 2600, 2750, 2900, 3050.

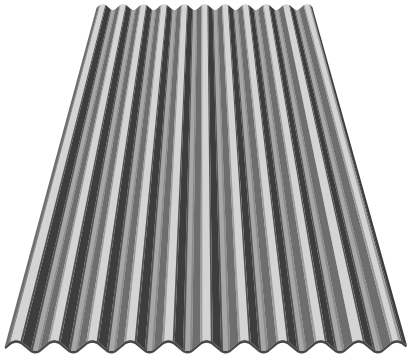
Farmscape lengths (mm)

1525, 1675, 2440, 2750, 2900, 3050.

Other products

In order to ensure full compliance with HSG 33, ridges and rooflights must also be upgraded. Eternit can supply a full range of fittings to ensure that the complete roof is non-fragile – see pages 10 to 13 for details.

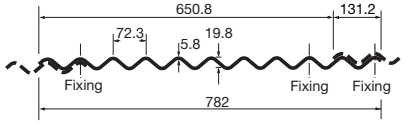
Profile 3



The lower profile of this product makes it particularly suitable for a range of domestic, smaller agricultural and light industrial buildings. It can be laid to a minimum roof pitch of 10°.

Profile 3 sheet lengths (mm)

1525, 2450, 3050



Technical data

	Profile 6	Profile 3
Overall width	1086mm	782mm
Net covering width	1016mm	650.8mm
Thickness (nominal)	6.7mm	5.8mm
Density (nominal)	1450kg/m^3	1450kg/m^3
Pitch of corrugations (nominal)	146.5mm	72.3mm
Depth of profile	47.6 mm	19.8mm
Profile height category	C	A
Side lap	70mm	131.2mm
Minimum end lap	150mm	150mm
Maximum purlin centres	1375mm	925mm
Maximum rail centres	1825mm	1225mm
Maximum unsupported overhang	350mm	250mm
Approx. weight of roof as laid, with 150mm end laps, single skin including fixings	17kg/m^2	14.5kg/m^2
Minimum roof pitch	5°	10°

Profiled sheeting self-drilling fixings

Wood and steel structure fixings for Profiled Sheeting

Suitable for Roofing and Cladding Installations

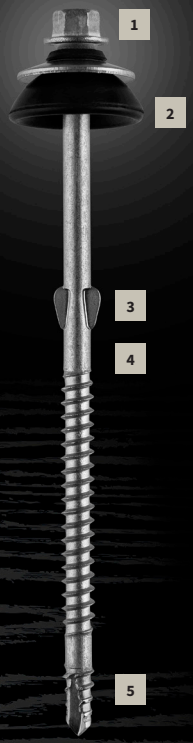
1 **Extra High Head:** ensures a better fit of the bit

2 **Moulded Washer:** 12mm robust rubber washer (25mm dia) acts as a seal preventing water penetration

3 **Shaft Wings:** The wings open up the clearance hole in the fibre cement sheet preventing cracking

4 **Anti-Corrosion:**
Stainless steel – for aggressive environments
Carbon steel – coated for regular applications

5 **Self-Drilling:** Self-drilling screw allows for quick and easy instalment without a pilot hole



Why order from us?

No Downtime
Quantities correct with every sheet order

Direct delivery
Direct delivery available to site with your sheet order

Suitable for roofing and cladding
Providing support clips or a solid base is used when installing vertical P6 sheets as cladding, otherwise like all fixings the sheets will sag down under the weight of the sheets

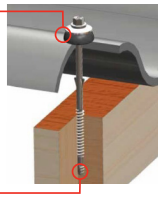
Stainless steel A2 new wood fixing

Our new 130mm wood stainless steel fixing, fills a much needed industry gap and is capable of resisting years of corrosion from salt, chemicals or coastline environments.

This is an exciting, premium product to hit the market which will protect the quality and value of your customers' builds.

Carbon steel 130mm fixing

12mm robust rubber washer (25mm dia) acts as a seal preventing water penetration



Our Carbon Steel fixings for wood are hot-dipped galvanized

Profiled sheeting self-drilling fixings range

Substructure	Fixing types	Code
NEW Timber (P3)	Carbon steel 105mm	4069993
Timber	Carbon steel 130mm	4069994
Timber	Stainless steel 130mm	4069996
NEW Steel*	Carbon steel 105mm	4069999
NEW Steel*	Stainless steel 120mm	4070003
NEW Depth setting drill bit	–	4071041

*Suitable for light gauge steel only

Exposure

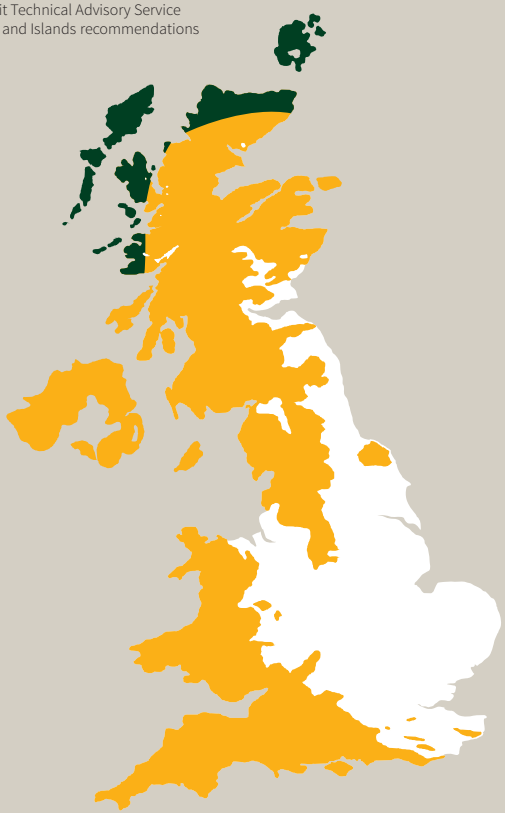
For technical advice email:
techuk@etexgroup.com

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

Exposure zones

Approximate 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



Note: Map taken from BS 8219. When buildings stand above their surroundings or are situated in open country with no windbreaks, including sites on or near the coast, or on hill tops, they must be considered subject to severe exposure.

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 Profile 6: Purlins at 1375mm c/c for wind suctions of 1.89kN/m². Rails at 1825mm c/c for loadings up to 1.40kN/m².

For Profile 3: Purlins at 925mm c/c for loadings up to 1.79kN/m² (multiple span) or 1.49kN/m² (single span). Rails at 1225mm centres for loadings up to 1.02kN/m² (multiple span) or 0.64kN/m² (single span).

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. See page 23 for sealing details.

Sheltered and moderate sites

Less than 56.5 l/m² wind driven rain per spell

Minimum Roof pitch	End lap (mm)	Lap treatment End laps	Side laps
22.5° and over	150	Unsealed	Unsealed
15° and over	300	Unsealed	Unsealed
15° and over	150	Sealed	Unsealed
10° and over	150	Sealed	Sealed

Moderate and severe sites

More than 56.5 l/m² wind driven rain per spell

Minimum Roof pitch	End lap (mm)	Lap treatment End laps	Side laps
25° and over	150	Unsealed	Unsealed
17.5° and over	150	Sealed	Unsealed
15° and over	150	Sealed	Sealed
10° 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. The minimum pitch for Profile 6 is 5°. Where slopes are between 5° and 10° the maximum slope length should be 15m with double sealed end laps and single sealed side laps.

Installation

For technical advice email:
techuk@etexgroup.com

Whilst Eternit profiled sheeting is easy to install, the following guidelines should be observed:

- The sheets should be installed smooth surface up.
- The sheets should be cut with a hand saw or slow speed reciprocating power saw.
- All fixing holes should be drilled, not punched, and should provide adequate clearance for the fastener shank (minimum 2mm).
- There should be two fixings per purlin or rail covered at the fixing points shown on pages 16 and 17.
- When using power tools in a confined area, dust extraction equipment is advisable.
- The dust and swarf generated when working with the sheets does not require any special handling requirements other than normal good housekeeping to maintain a clean working area.

Fixing

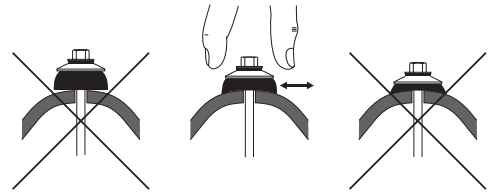
The correct fixing of a sheet is important in order to avoid premature failure, corrosion or leaks in a roof. Many factors influence the fixing of a roof, such as the purlin or rail type and the nature of the roof in question. Particularly important is the type of fastening system used and compliance with the manufacturer's recommendations.

Profiled sheeting self-drilling fixings are generally used to fix Profile 6 sheets on a roof as they provide a quick and effective one step fixing operation. Follow the recommendations of the fastener manufacturer regarding maximum roof pitch, minimum purlin thickness etc. Profiled sheeting self-drilling fixings should be installed using the recommended depth setting power tool to ensure the fasteners are correctly tightened.

Checking the profiled sheeting self-drilling fixings for tightness

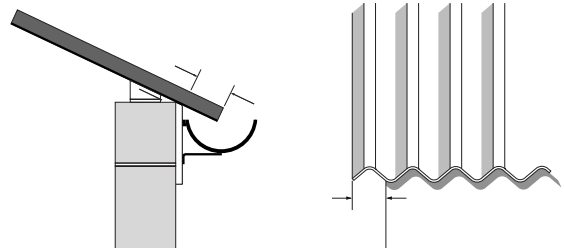
Where profiled sheeting self-drilling fixings are not used, 8mm diameter fasteners are used for Profile 6 and 6mm diameter for Profile 3. The fibre cement sheet must be pre-drilled with a 2mm clearance hole.

If using drive screws, the holes must be located centrally on the purlins, if using hook or crook bolts, the holes should be 4mm upslope of the back edge of the purlin. In all instances, sealed washers and caps should be utilised to ensure adequate weather protection.



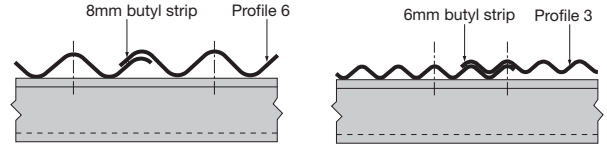
Overhangs

Sufficient overhangs must be allowed at the eaves to ensure that rainwater discharges into the gutter. Verges must be overhung by one complete corrugation unless a bargeboard is used.



Side Laps

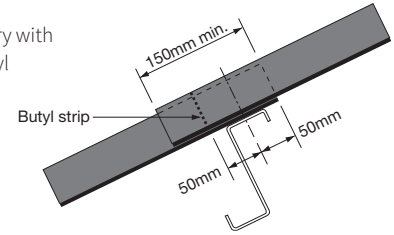
Sealing: Where appropriate, butyl strip sealant should be positioned as shown. Use 8mm diameter butyl strip for Profile 6 and 6mm butyl strip for Profile 3.



End Laps

The minimum end lap for either Profile 3 or Profile 6 is 150mm, fixed as shown in the section below.

Where double sealing is necessary with 300mm endlaps, the second butyl strip should be positioned 100-200mm below the fixing.



10 easy steps to fixing

For technical advice email:
techuk@etexgroup.com

The fixing of a fibre cement roof can be accomplished by most people if they follow these ten easy steps in conjunction with the illustrations opposite. In order to weatherproof the roof, the butyl strip must be installed as described on page 23, and mitres cut to avoid having four thicknesses of sheeting in the same plane at the junctions of side and end laps.

1 Lay sheet number 1 at the eaves without mitring.

2 Lay sheet number 2, mitring bottom right hand corner as per the illustration opposite.

3 Lay sheet number 3, mitring as per step 2. Continue up the roof slope to complete the first tier.

4 Lay sheet number 4 at the eaves of the next tier, mitring the top left hand corner as per the illustration opposite.

5 Lay sheet number 5, mitring both top left hand and bottom right hand corners as per illustration opposite, and continue up the slope until ready to lay sheet number 6 at the ridge.

6 Lay sheet number 6 at the ridge, mitred as per step 2.

7 Repeat the procedure from and including step 4, working across the roof from eaves to ridge, until there is room for only one more tier to be laid, on the right hand edge.

8 Lay sheet number 7, mitring the top left hand corner. If necessary, reduce the sheet width by cutting down the right hand edge. All subsequent sheets in this final tier should be cut accordingly.

9 Lay sheet number 8 as per step 7, continuing up the roof slope until ready to lay the final sheet at the ridge.

10 Lay sheet number 9 at the ridge without mitring to complete the roof.

Notes:

1 On a duo pitch roof start both slopes from the same end of the building. One slope will therefore be sheeted left to right, the opposite slope will be sheeted right to left.

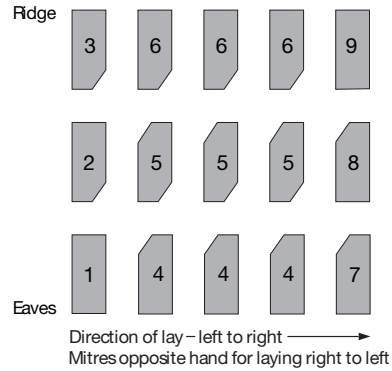
2 The corrugations of sheets must line up at the apex to ensure that the ridge accessories will fit.

3 When cranked crown sheets are used, both top courses of roofing sheets and the cranked crowns themselves must be mitred.

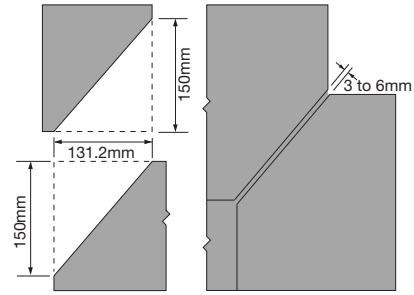
4 Always lay sheets with the correct end and side laps, as detailed elsewhere in this booklet.

5 Do not cut mitres in situ.

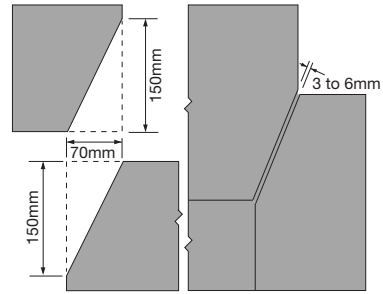
Mitring plan single slope roof



Mitring Profile 3*



Mitring Profile 6*



* Assumes 150mm end lap

Working with P6 and P3

Storage and handling

General: 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 should generally not exceed 1200mm high unless a level concrete base is available, in which case the maximum height is 1500mm. A separate stack should be made of each length of sheet; if this is not possible, stack with longest sheets at the bottom and the shortest at the top. It is important when stacking Profile 6 sheets on site that the smaller 'under rolls' are all on the same side of the stack. Sheets should always be stored weather (smooth) side upwards.

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.

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.

When handling sheets, lift by the ends only.

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 stored under cover at all times, preferably inside a building, but if this is not available they can be stored under a 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.

Working: When cutting fibre cement sheets, try to eliminate the exposure to dust (refer to Eternit Health and Safety data sheet).

Preferably sheets should be cut 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.

Preparation: 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. In particular, a check should be made that the purlins are spaced correctly for the right end lap, and that the eaves purlin provides an overhang into the gutter not exceeding 350mm (Profile 6) and 250mm (Profile 3). 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 and can reduce the width of the flashings.

CDM Regulations: Specifiers have an obligation under the Construction (Design and Management) Regulations 2015 to identify and evaluate the health and safety implications of all products and construction methods required by their design.

Installation

The following guidelines should always be observed:

- Sheets should be installed smooth surface up.
- All fixing holes should be drilled, not punched, and adequate clearance (2mm minimum) provided for the fixing shank.
- There should be two fixings per sheet per purlin or fixing rail at the point shown on pages 16 and 17.
- Always lay the sheets in vertical tiers from the eaves to the ridge.
- Always fix sheets fully before moving on.
- To minimise dust, cut sheets with a handsaw or slow speed reciprocating power saw. The use of angle grinders is not recommended.
- Avoid deflecting a sheet whilst attempting to force a bearing.
- Do not step on side lap corrugations.
- Where regular access is required to reach roof lights, ventilation and service ducts, properly constructed walkways should be provided.

Safety at work

The recommendations of HSG 33 should be followed at all times:

- A safe 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 as fall arrest equipment should always be considered.
- Profile 6 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.

Eternit

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