

CI/SfB

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January 2019

CENBRIT

B5 for garages,
equestrian and other
single storey buildings

Corrugated sheet and accessories



CEMBRIT

Building Better Days

Cembrit companies have been manufacturing corrugated sheets since 1910. With nearly a century of production in fibre cement roofing and cladding, we are able to draw on experience of installation across the whole of Europe.

Incorporating the latest technological advances, the fully accredited system of sheets allows designers to clad equestrian or sectional buildings in a Class A2 fire rated, rust and rot-proof material that has been in our built environment for decades and is available, ex-stock, in the UK. Manufactured using Portland cement, together with a formulation of superior blended synthetic and cellulose fibres and available with superior colouration systems, B5 is produced to the highest European standards.

Quality Assurance

B5 corrugated sheets are manufactured in accordance with a quality assurance system to BS EN 9001:2015 and to the requirements of BS EN 494:2012.

Environment

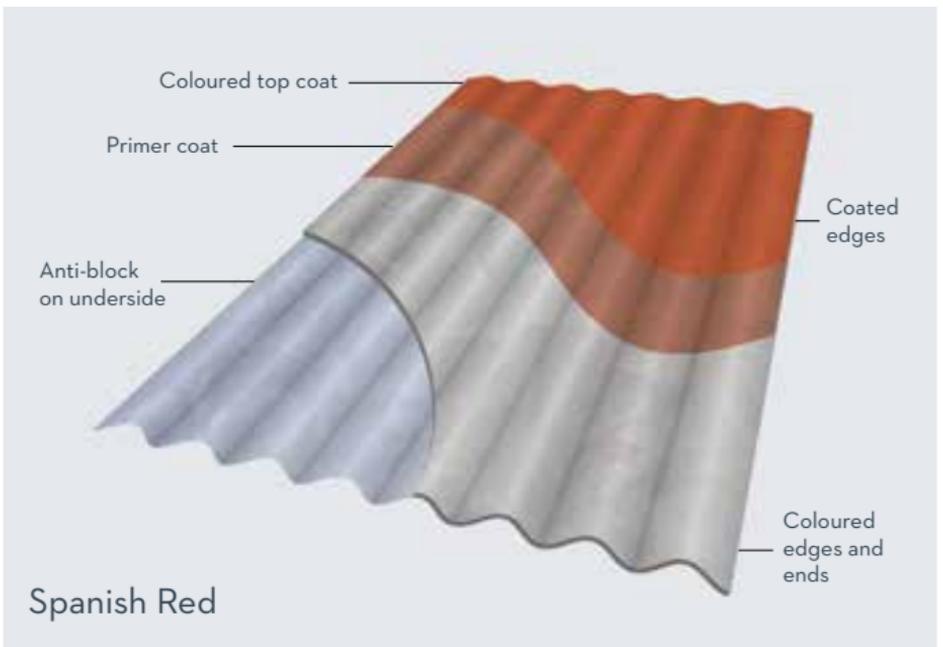
B5 corrugated sheets are manufactured in accordance with the requirements of BS EN 14001:2015.



Equestrian buildings

B5 Corrugated Sheet

B5 Fibre-cement corrugated sheet is a replacement for the standard 3 inch profile corrugated sheet.



The B5 metric corrugation profile is a more modern profile than the traditional 3 inch profile so can be used to a lower pitch and with smaller overlaps. The sheets are approximately 40% wider, offering a better coverage per sheet. B5 is available in 11 lengths from 4' 6" to 10'. B5 can be used to refurbish buildings clad in 3 inch sheets utilising 'existing purlin centres'. All existing 3 inch sheets need to be removed, it is not possible to replace individual 3 inch sheets with B5.



Chalets, garages, halls and sheds

Product Range Lengths

B5 corrugated fibre-cement sheets and matching translucent sheets

| | | |
|------------------------------|-------------------------------|------------------------------|
| 1375mm (4' 6") | 1525mm (5') (Translucent) | 1675mm (5' 6") |
| 1825mm (6') (Translucent) | 1975mm (6' 6") | 2125mm (7') (Translucent) |
| 2275mm (7' 6") | 2600mm (8' 6") | 2750mm (9') (Translucent) |
| 2900mm (9' 6") | 3050mm (10') (Translucent) | |

Colour Options



Tile Red



Spanish Red



Olive Green



Mocca



Black



Blue/Black



Natural Grey



Residential buildings

Accessories

Cranked Crown Ridge

One piece close fitting ridge

Available in 300 x 300 wing in 5°, 12.5°, 20°

Length: 1020mm

Net cover: 910mm



Two-piece Close Fitting Ridge

Two piece ridge fitting adjustable to roof pitches not covered by standard cranked crown ridge.

320mm wing

Net cover: 910mm



Plain Wing Angle Ridge

Can be used to create high level ventilation

300 x 300 wing

5° to 60° in 5° increments

Length: 1200mm

Net cover: 1080mm



Cemsix Barge Board

Used to close verge at gable ends.
Nominal 200mm wing for single skin constructions and 300mm x 300mm for double skin.

Lengths: 2400 and 3000mm



Cemsix Roll Top Bargeboard

Used to close verge at gable ends.
Nominal 200mm wing for single skin constructions and 300mm x 300mm for double skin.

Lengths: 1800mm
(300mm x 300mm only),
2500 mm and 3000mm



One-piece Finial

Closes verge apex when plain wing bargeboard is used.

320mm x 370mm



Two-piece Roll Top Finial

Closes verge apex when roll-top bargeboard is used.

200mm wing x 360mm deep
300mm wing x 500mm deep



Mitring scheme

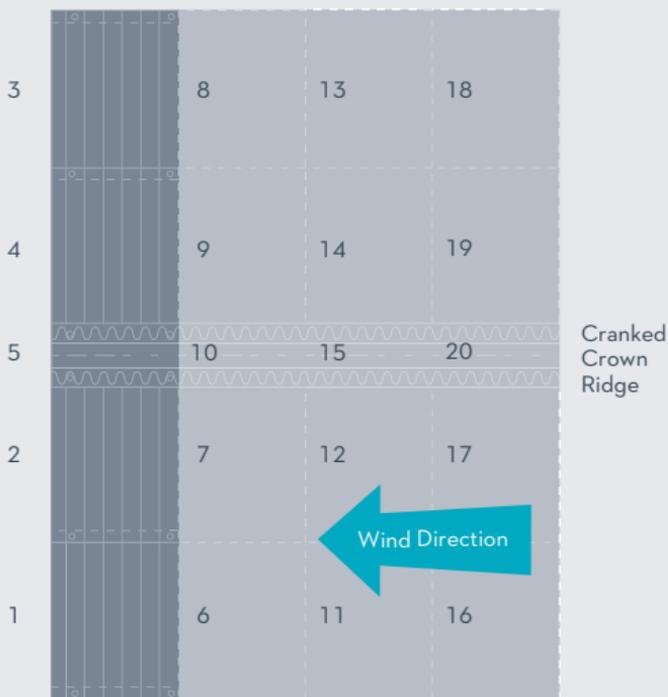
To avoid having 4 layers of overlapping roof sheets, the corners of two sheets must be mitred.

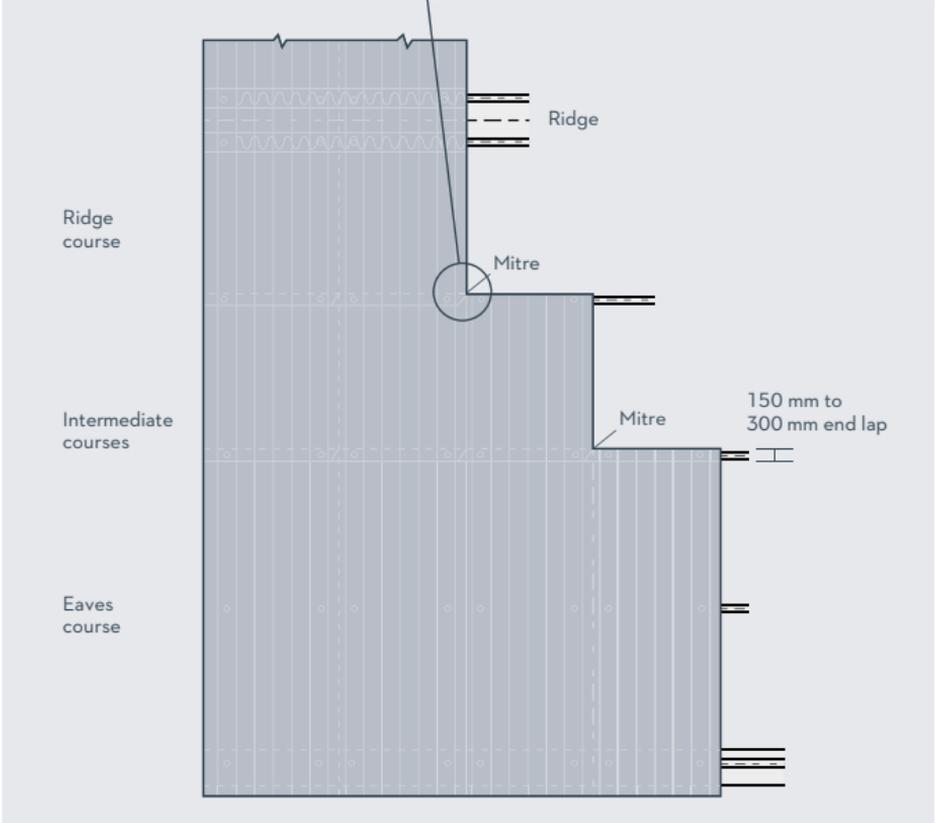
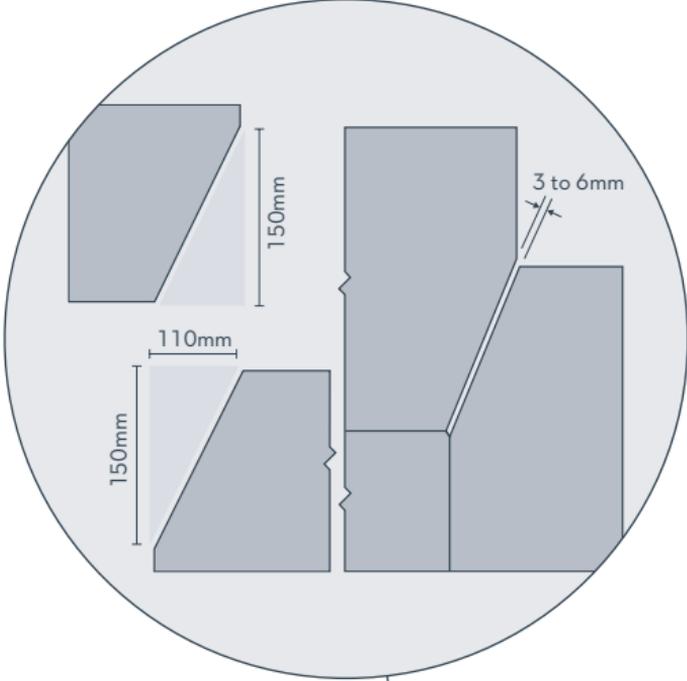
Each mitre must be cut straight and cleanly either by hand or by power saw. The angle and size of mitre is governed by the end and side lap dimensions. It is recommended that a good quality butyl mastic strip is used to seal the overlapping sheets to provide a weatherproof joint. Two corners of opposing sheets should be mitred the equivalent of the head and side lap (i.e. maximum 110mm x 150mm) with a gap between sheets of 3 – 6mm.

Sheets on the perimeter of the roof will have one mitre (except the first and last sheets which remain complete), all other sheets will therefore have two mitres.

Sheets are laid from eaves to ridge one column at a time, with the side lap corresponding to the prevailing wind direction. On duo pitched roofs opposing columns of sheets should be installed sequentially to assist in locating the cranked crown ridge (see below).

Laying Sequence

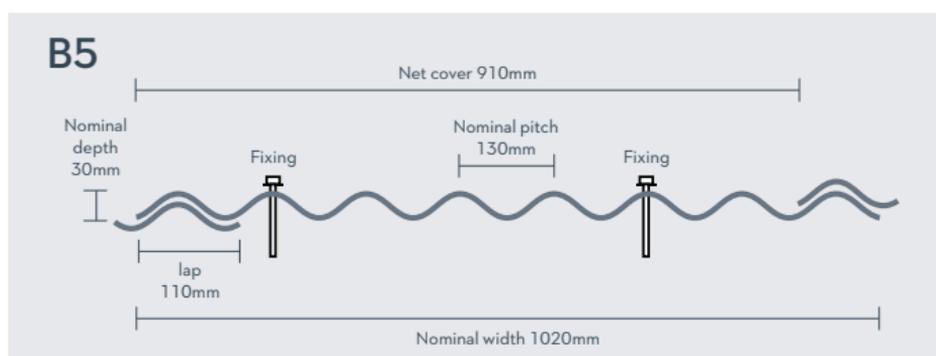




Installation & sealing end laps

Profile specification comparison

| | Existing 3" profile | New B5 profile |
|---|--|---|
| Cover width | 651mm | 910mm |
| Width | 782mm | 1020mm (+10) |
| Side lap | 131mm | 110mm |
| Min. end lap | 150mm | 150mm |
| Max. purlin centres | 925mm | 1200mm |
| Overhang | 250mm | 250mm |
| Thickness | 5.8mm | 6mm (+0.6) |
| Density | 1400kg/m ³ | 1400kg/m ³ |
| Weight of roof (with 150mm end laps) | 14.5kg/m ² | 13kg/m ² |
| Pitch of Corrugations |  72.3mm |  130mm (+2) |
| |  25.6mm |  36mm (+2) |
| Min. pitch* | 10° | 5° (see below) |
| Fixing points | 2 nd and 9 th corrugation | 2 nd and 6 th corrugation |



Fixings

For timber construction, fixings should be at least 90mm long and 6mm diameter drilled at least 40mm into purlin.

For steel construction, fixings should be at least 90mm long and 5.5mm diameter.

All fixings should be used with an aluminium or EPDM washer and bituminous gasket or plastic cap.

Maximum purlin centres – 1200mm

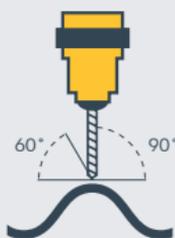
* Minimum pitch – for small roof areas such as domestic garages pitches below 10° can be accommodated. End laps need to be extended to 300mm and be double sealed with mastic strips

Pre-drilling

(Every sheet should be twice fixed at each purlin)



It is extremely important that the correct roof purlins/rail system, type of fixing and washers are selected, to eliminate leakage/corrosion and the general deterioration of the construction. It is recommended that a self-drilling Top-Fix screw is adopted. This simple method offers a fast, low-cost fixing solution. Using a high-speed screw gun, drive in the fixing. The fixing system is only suitable for roofs up to and including 30° pitch.



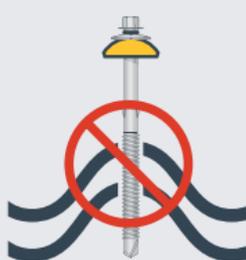
Using a tungsten carbide tipped drill at 90° angle to the sheet, drill a hole 2mm larger than the selected fixing. The drill point should be no less than 60° to the sheet. Always drill at the 'apex' of the profile. Do not fix a sheet in the 'valley' or on a 'slope' of the profile.



To achieve a watertight and weathertight seal, it is important to confirm that the sealing washer is correctly tightened. Not over tight, not too loose. After a period of time, when the material has settled, the fixings may require re-tightening with hand tools. Be sure to use roof ladders to avoid walking on the roof sheets.



NEVER hammer fixing through the sheet. This will invalidate the guarantee. Fibre-cement sheets will shatter under impact and subsequently allow water to penetrate the apparent fixing. ALWAYS pre-drill.



NEVER fix through 2 thicknesses of sheet as this prevents thermal movement and will cause sheets to crack.

Note: Where B5 is used as a vertical cladding, sheets should be fixed in the valley of the 1st corrugation in from the overlap.

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The company's policy is one of continuous improvement. Cembrit Limited therefore reserves the right to alter specifications at any time and without notice.

As with all manufactured materials, colours and textures of corrugated sheets and accessories may vary according to light and weather conditions. It is advisable to ask for samples of sheets prior to specification and purchase. Owing to this and limitations of the printing process, colours of sheets in this brochure may only be taken as indicative.

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