CEMBRIT

CI/SfB (4-) Nf9

January 2019

B5 for garages, equestrian and other single storey buildings

Corrugated sheet and accessories





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.

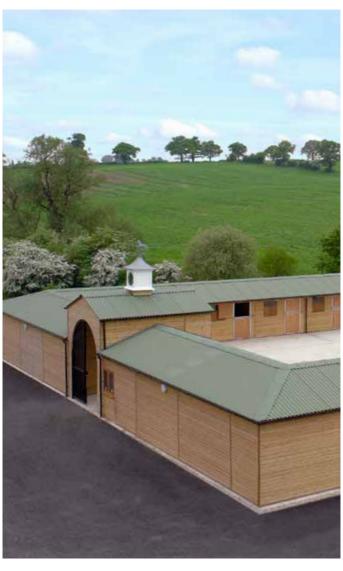
Incorporating the latest technological advances, the fully accredited system of sheets allows designers to clad equestrian or sectional buildings in a Class A2 fire rated, rust and rot-proof material that has been in our built environment for decades and is available, ex-stock, in the UK. Manufactured 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.



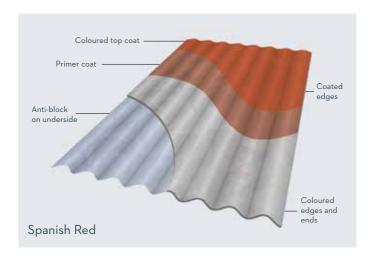




Equestrian buildings

# **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





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

to roof pitches not covered by standard cranked crown ridge.



#### Plain Wing Angle Ridge

Can be used to create high level ventilation

 $300 \times 300 \text{ wing}$ 

 $5^{\circ}$  to  $60^{\circ}$  in  $5^{\circ}$  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 3000 mm



#### 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



#### **Design Specifications**

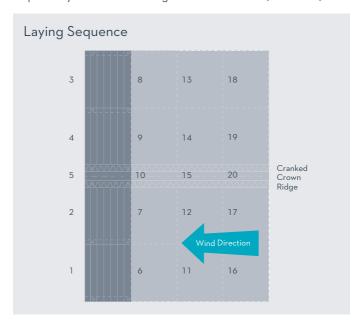
# Mitring scheme

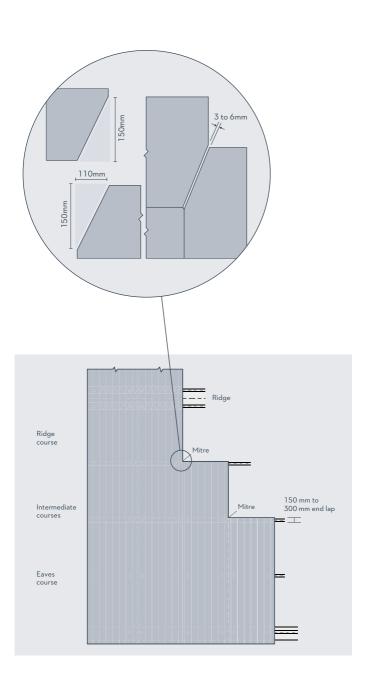
# To avoid having 4 layers of overlapping roof sheets, the corners of two sheets must be mitred.

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 join. 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 (see below).



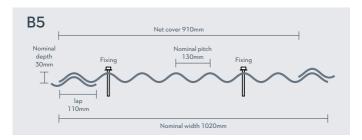


#### **Design Specifications**

# Installation & sealing end laps

#### Profile specification comparison

	Existing 3" profile	New B5 profile
Cover width	651mm	910mm
Width	782mm	1020mm (*10/-5)
Side lap	131mm	110mm
Min. end lap	150mm	150mm
Max. purlin centres	925mm	1200mm
Overhang	250mm	250mm
Thickness	5.8mm	6mm (*0.6)
Density	1400kgm/m <sup>3</sup>	1400kgm/m <sup>3</sup>
Weight of roof (with 150mm end laps)	14.5kgm²	13kgm²
Pitch of Corrugations	72.3mm	130mm (*²²)
	✓/I 25.6mm	36mm (*2)
Min. pitch*	10°	5° (see below)
Fixing points	2 <sup>nd</sup> and 9 <sup>th</sup> corrugation	2 <sup>nd</sup> and 6 <sup>th</sup> 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

<sup>\*</sup> 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.

The information contained in this publication and otherwise supplied to users of the company's products is based on the company's general experience, best knowledge and belief. However, because of factors beyond the company's knowledge and control, which can affect the use of the products, no warranty is given or implied with respect to such information.

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.

Please ensure that you have the latest version of this datasheet by checking that the publication date on the top right of the front cover corresponds with the downloadable version on our website.

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