

CEMBRIT

CI/SfB
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Cembrit HD

Rainscreen cladding/building board for external applications





Garden offices, equipment storage buildings, shelters and stockades

Cembrit HD fibre cement boards for high impact resistance

Cembrit HD (Heavy Duty) is a Class A2-s2, d0 fire rated high density building board comprising cement, cellulose and mineral fillers. Cembrit HD is impact resistant and can be left exposed without additional treatment. HD is a versatile multi-use board, sheets vary in shade and will dull over time. They can be used as partitioning and are popular in offsite and SIPS construction as well as internal applications.

Sanding is not necessary if Heavy Duty is to be painted but the surface must be dry and free of dust. The board should be installed and left for two weeks to acclimatise before paint is applied. Alkali resistant paint or standard emulsion applied over a cement sealer are suitable finishes.

Fixings

Internal applications: Timber studs 40x2.3mm nail, Steel frame 35x4.2mm counter sunk cutting head screw, always pre-drill holes before fixing.

Fittings

Fittings are easily attached, results will depend on the weight of the object and type of fastener used. Heavy attachments should be centered on internal studwork or should be reinforced with a backing piece behind the board.





Balcony panels, Rainscreen cladding, External infill panels

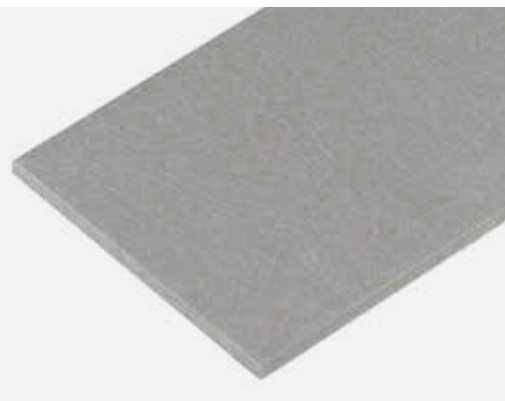
Technical Information

Heavy Duty

Thickness (mm)	3.2	6	8	10
Dimension (mm)	2440 x 1218	2500 x 1250	2500 x 1250	2500 x 1250
Weight per sheet (kg)	18.13	35.3	47.19	59.1
No. sheets per pallet	70	50	40	30
Mechanical resistance Bending strength ambient condition	Ambient with grain : 26 MPa Ambient across grain: 22 Mpa			
Apparent density	$\geq 1,55 \text{ g/cm}^3$	$\geq 1,55 \text{ g/cm}^3$	$\geq 1,55 \text{ g/cm}^3$	$\geq 1,55 \text{ g/cm}^3$
Modulus of elasticity (GPa)	Ambient E-module with grain GPa 21 Ambient E-module across grain GPa 20 Wet E-module with grain GPa 13 Wet E-module across grain GPa 9			
Fire resistance	8 and 10mm Heavy Duty is Classified as A2-s2, d0 – EN 13501-1:2002 Reaction to fire			
Guarantee	30 years durability			
Accreditation	EN 12467: 2012 NT A3 I			

Colour and weathering

HD boards are a homogeneous cement based composition. Boards will vary randomly in grey shade from board to board. The shade of grey will also differ from batch to batch. HD will naturally effloresce in the same way as other building materials with a mineral salt content.



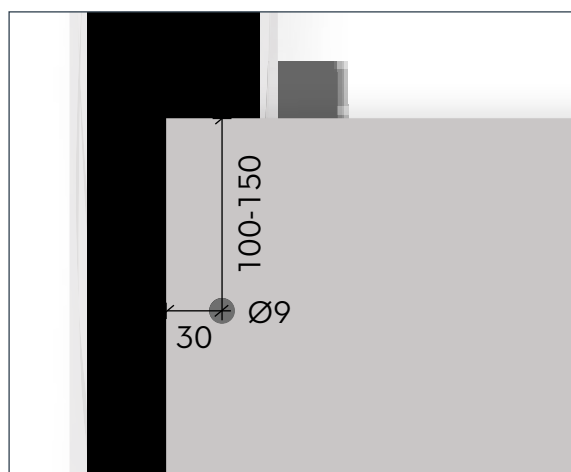
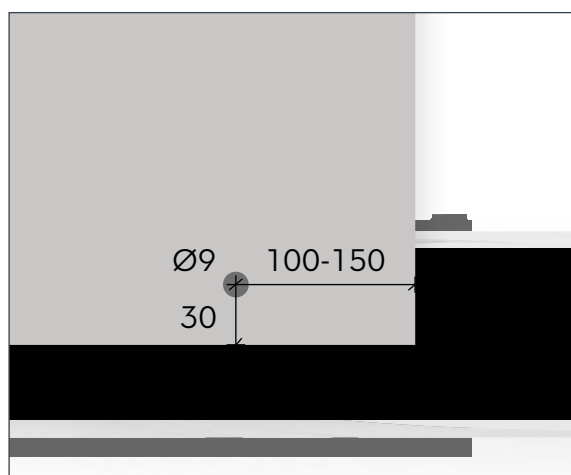
Installation of Cembrit HD as a rainscreen cladding

The gap between the boards should be equal to or greater than the board thickness.

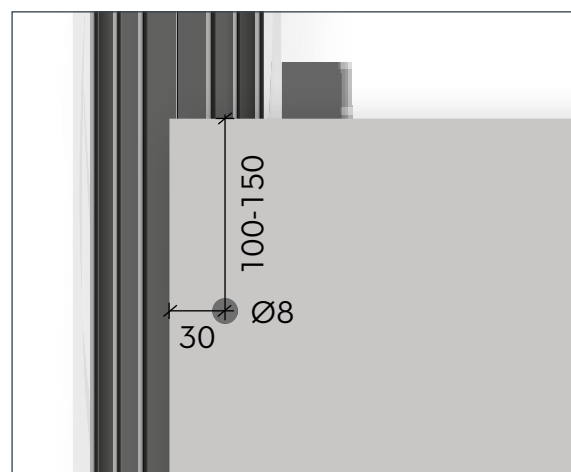
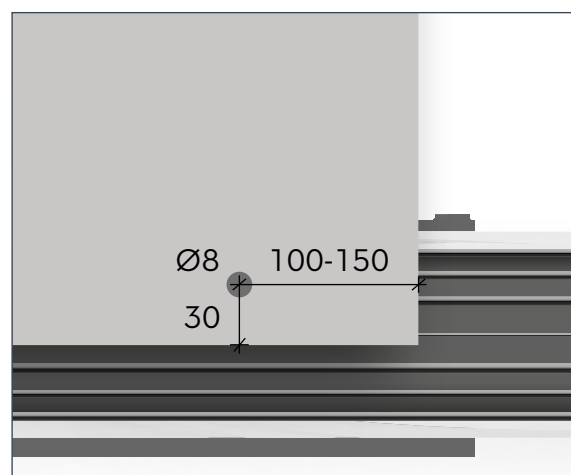
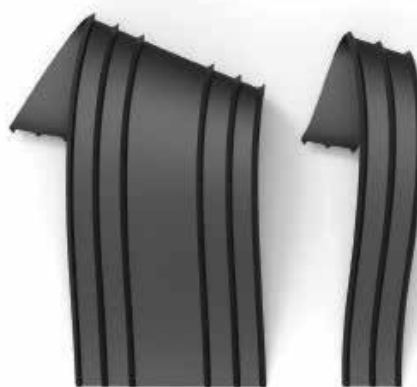
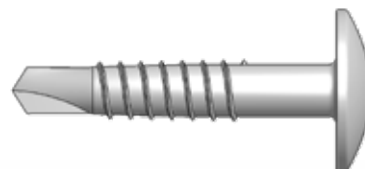
Aluminium or steel



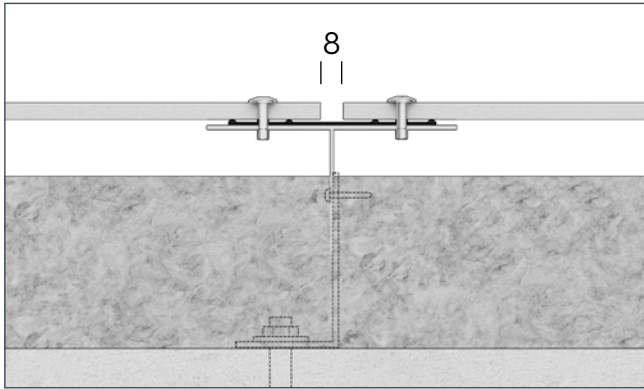
Anti-rattle tape



Steel

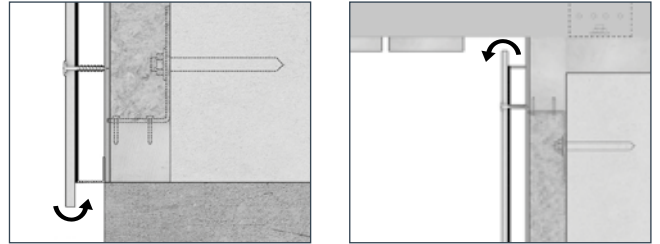


Joints



Ventilation

An airgap of minimum 25mm is required behind Cembrit HD. The system should incorporate a mesh at bottom and top of the facade to prevent vermin and debris entering the airspace



Fixing point steel and aluminium

Full size boards should be installed with 2 fixed points in order to stabilise the board during installation.

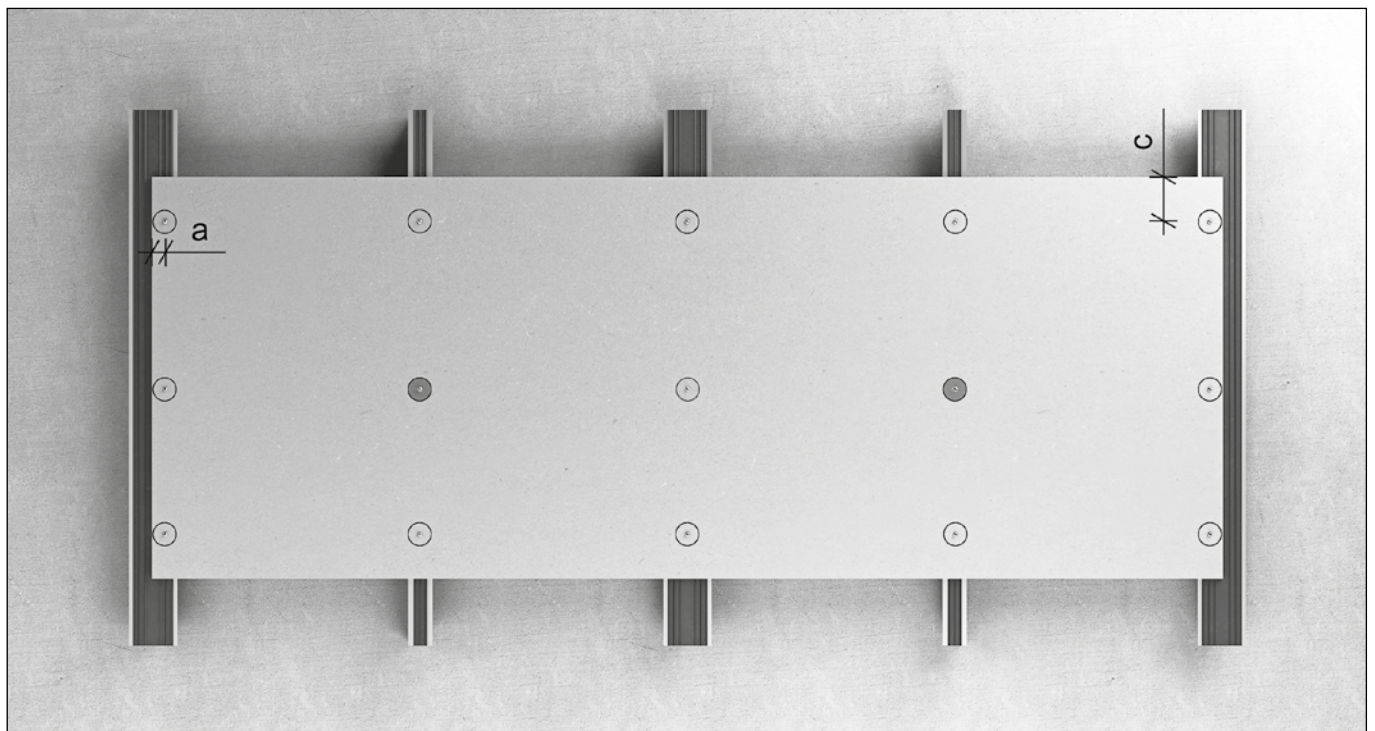
Fix point steel screw: Pre-drill Ø 5mm

Fix point steel rivet: Sleeve 4.9x5.5x8.8mm

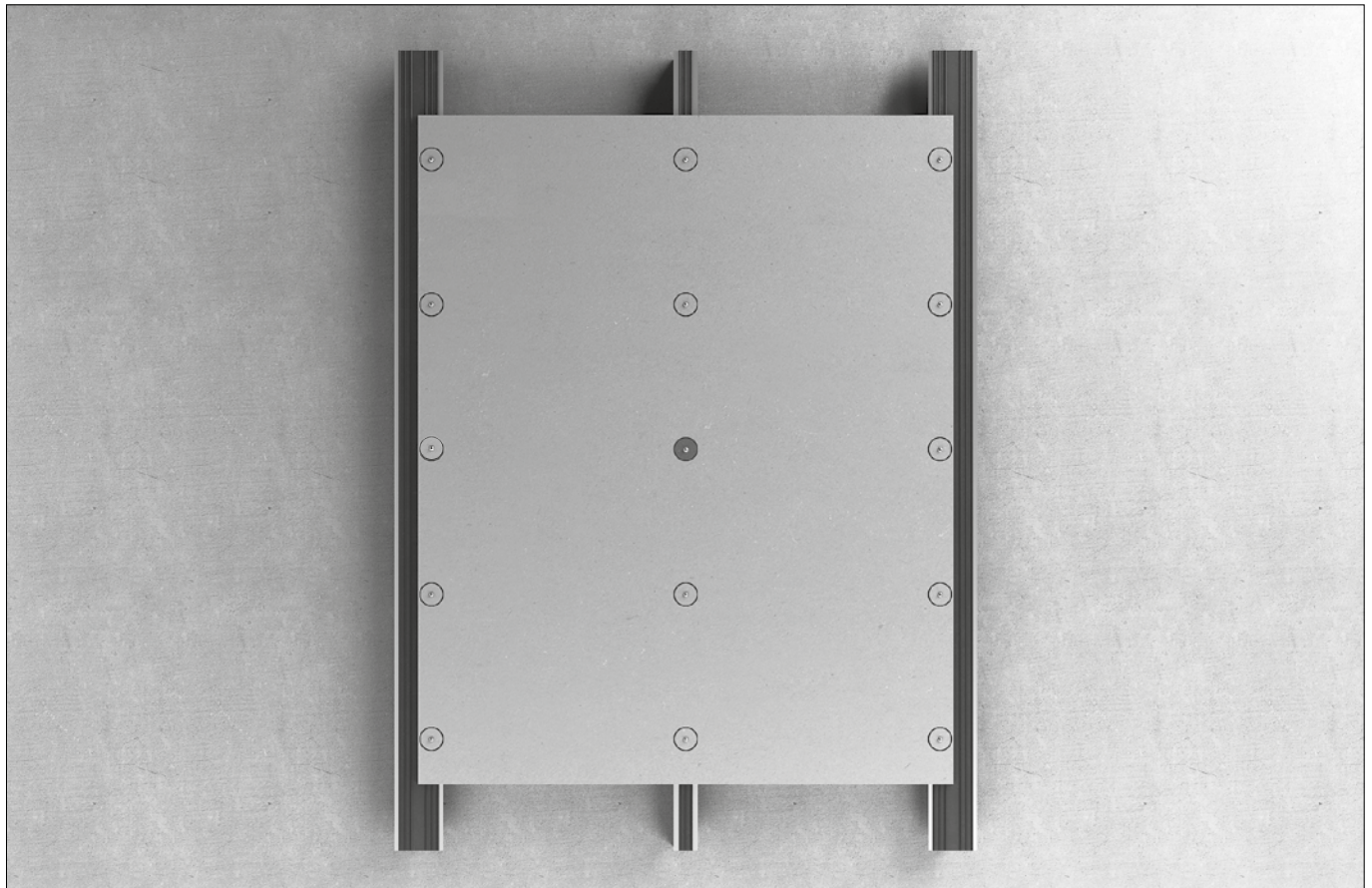
Fix point alu: Sleeve 4.1x5.5x8.8mm



- Fix point
- Sliding point

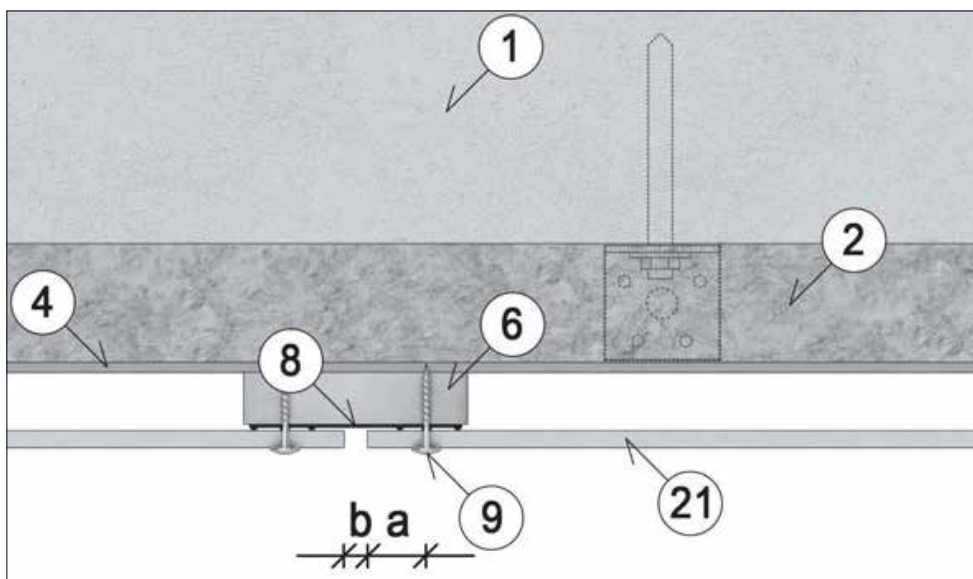


- Central fixing
- Peripheral fixing



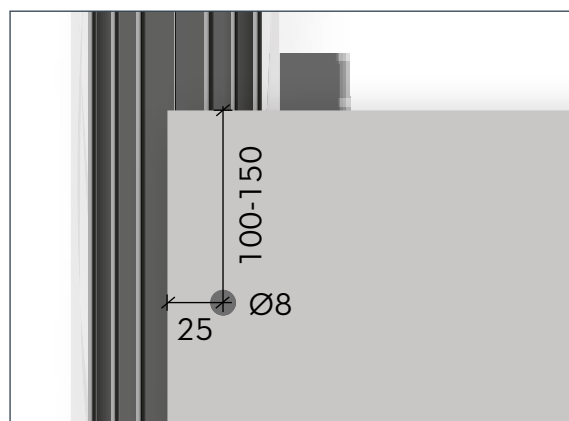
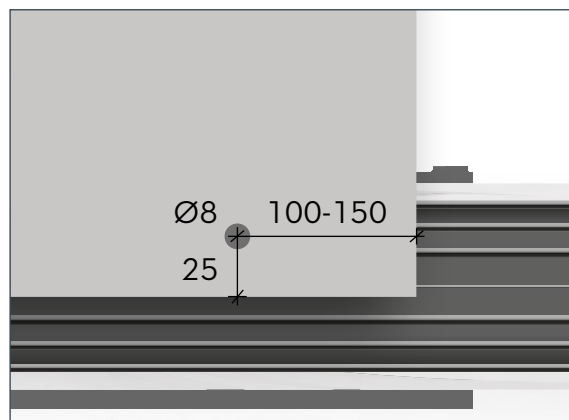
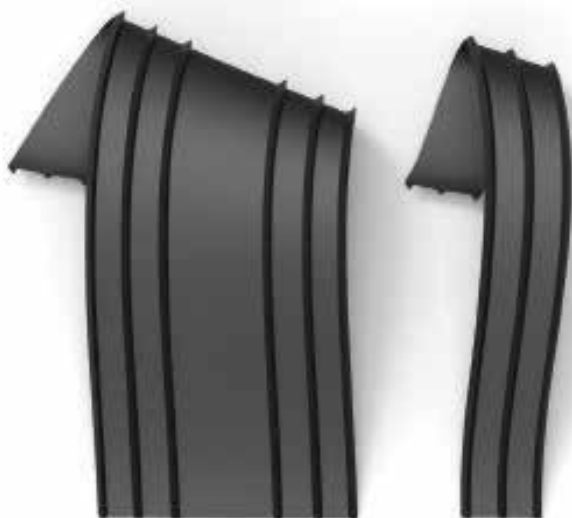
● Central fixing ○ Peripheral fixing

Wood



- 1 Load bearing wall
- 2 Insulation
- 4 Wind break
- 5 Air gap min 25 mm
- 6 Batten min 25 x 125 mm
- 8 EPDM underlay 90 mm
- 9 Facade screw 4.5 x 36/41
- 21 Facade board
- a Edge distance min 30 mm
- b Joint width 8 mm

EPDM gasket strips should be applied to all rails to prevent cracking of boards, protect the rails from weathering and create a visually pleasing joint



1 Item number 47290069 Circular Saw Blade DIA 160x2.4x20 mm

2 Item number 47290052 Dyvel Drill HM 8x35/70 mm

3 Item number 47290043 Drill 8 mm Irwin for Screws



Storing and handling of Cembrit products

Cembrit products are delivered with plastic protection. If undamaged the plastic cover provides good protection against weather during transportation.

Transport and warehousing

Cembrit products should ideally be stored in dry conditions under cover and always on a flat and dry, level surface on pallets or timbers at max 500 mm centres.

Stacking pallets

Flat boards: max 2 pallets.

On site

The plastic cover is for dust protection only. If, on arrival on site, the pallets are to be stored outside, the plastic cover should be removed and replaced with a tarpaulin permitting ventilation of the products.

It is very important that there is ventilation all around the tarpaulin and also on top of the pallet under the tarpaulin. This is done to make sure that condensation is reduced as much as possible.

If to be stored more than 2-3 weeks, the pallets should be kept inside in dry, ventilated conditions. Boards should never be installed damp.

Lifting products off pallet

The products must be lifted upwards off the pallet and not slid across the board below, as this can cause scratches and damage to the surface of the board.

Boards should be carried by 2 people on their long edge to avoid bending. Keep the pallets covered with a tarpaulin during storage.

Cutting boards

- circular saw with dust cover and collector
- keyhole saw/jigsaw for cutting large holes
- universal saw for cutting small quantities
- hole saw for drilling holes with sockets
- hand-scriber with hard metal point
- carbide tipped masonry drill
- face masks are recommended when there is no vacuum extractor or when large areas of boards are being cut

When using hand tools, the boards should be cut with the bottom face uppermost.

When using stationary saw equipment, the boards should be cut with the top face uppermost (the saw blade must always approach the board from the top face).

The periphery speed of the circular saw should be 40-50 m/s. Cutting depth 10-15 mm beyond the board.

Holes are drilled through the top face with a hard metal drill at 1500 rpm. Always place a layer beneath the Cembrit boards- e.g. woodchip - to achieve neat drilling holes.

Cembrit recommends carbide tipped saw blades.



Other Cembrit ranges

Glendyne natural slate

Best quality natural slate, guaranteed and with multiple international accreditations.

Popular on listed buildings and where Festinniog Welsh slate (which is no longer available) is specified.



Fibre cement slate

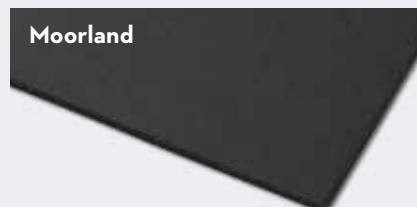
Lightweight, easy to cut and fix with hand tools, no need for dust suppression – fibre cement slates are more natural looking than concrete tiles yet faster to install than natural slates.



Jutland



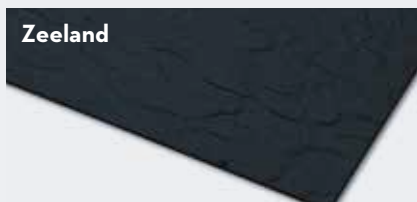
Moorland



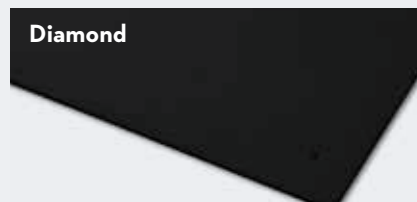
Westerland



Zeeland



Diamond



Other Cembrit ranges

Rainscreen cladding

Cembrit offers four compositions of rainscreen cladding in a total of 61 colour options to provide a beautiful and durable facade to any building.

Cembrit Solid



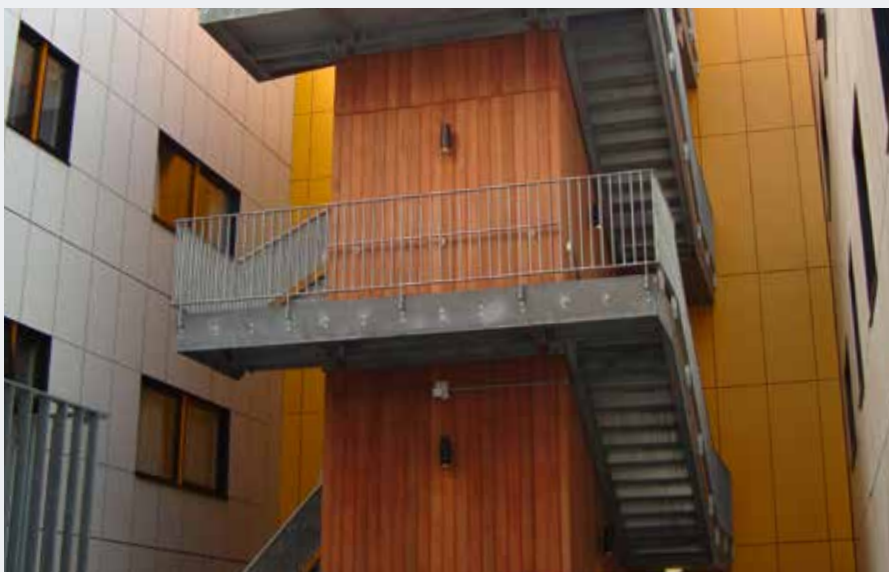
Cembrit Cover



Cembrit Patina



Cembrit Transparent



Corrugated sheet

Cembrit offers two corrugated sheet profiles to suit commercial, large agricultural, industrial and smaller equestrian or domestic applications.

Cembrit Cemsix



Cembrit B5



Plank

Cembrit Plank is the ideal alternative to timber weatherboarding, but does not require preservative treatment and is not susceptible to fire. Smooth or textured options give you the choice of surface finish together with a colour to make your projects almost unique.



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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, appearance of Cembrit HD 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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