

Now in flex
formulation for curved
walls, arches, vaulted ceilings
and around beams and columns!

CI/SfB
(41) RJ9

October 2014

Cembrit PB

BUILDING BOARD
BASEBOARD FOR EXTERNAL RENDER
AND WET AREA TILING



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Cembrit PB

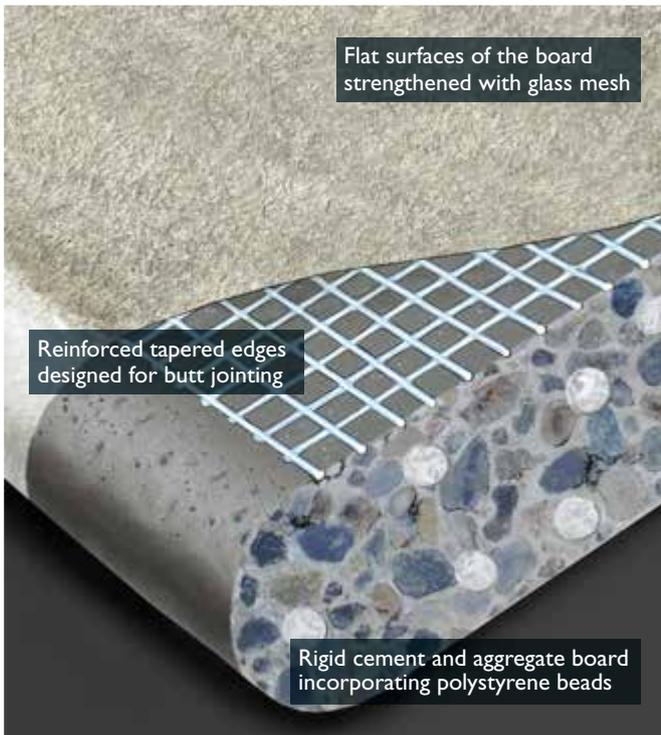
Reinforced, lightweight, water resistant cement board with tapered edges to facilitate invisible butt joint installation. Ideal for use on external applications, such as rendering, brick slips or stone cladding. Suitable as backing board in internal wet areas where ceramic tiles will be used as the decorative finish.

Contents

1. Cembrit PB cement board
2. Alkali resistant glass-fibre reinforcing mesh over butt joint
3. Polymer modified base coat embedded with mesh
4. Polymer modified base coat finish
5. Render primer
6. Render top coat

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Product Specification



Composition

Rigid cement and aggregate board incorporating polystyrene beads. Reinforced tapered edges designed for butt jointing. Flat surfaces of the board strengthened with glass mesh.

Appearance

Dark grey flat surfaces with grid texture indicating presence of strengthening mesh. Tapered edges with lighter grey cement colour.

Installation

- Easy to lift and work. Unlike other cementitious or calcium silicate boards no specialist blades or fixings required.
- Easily cut by scribing and breaking. Cut edges are generally clean and do not require sanding. No need for mechanical cutting tools, or dust extraction equipment.
- Can be nail or screw fixed close to reinforced tapered edges.
- Can be used in commercial and domestic wet rooms.



Compatibility

When used as a render backer it is important to only use render finishes that have been tested and approved as suitable for use with Cembrit PB. The following renders are suitable for use;

Terracoat

Terraco

Addagrip House, Bell Lane Industrial Estate
Uckfield, East Sussex TN22 1QL

Tel: +44 (0)1825 761333 Fax: +44 (0)1825 768566

www.terraco.co.uk

K Rend

Kilwaughter Chemical Co. Ltd.

9 Starbog Road, Larne, N. Ireland BT40 2TJ

Tel: 028 2826 0766 Fax: 028 2826 0136

www.K-Rend.co.uk

Wethertex UK,

Wetherby Stone Ltd.

Bleakhill Way, Mansfield, Nottinghamshire, NG18 5EZ.

Tel: 0115 8883 552

www.wethertex.co.uk

Permarend

Permarock Products Ltd.

Jubilee Drive, Loughborough, Leicestershire LE11 5TW

Tel: +44 (0)1509 262924 Fax: +44 (0)1509 230063

www.permarock.com

PAREXDIRECT & PAREX THERM Render Systems

Parex Ltd

Holly Lane Industrial Estate, Atherstone

Warwickshire CV9 2QZ

Tel: 01827 711755 Fax: 01827 711330

www.parex.co.uk

Product Specification

Dimensions	Pallet quantity	Weight
1200mm x 2400mm x 12mm	33	14.4 Kg/m ² (41.47 Kg per panel)

Product Specification – PB flex

1200mm x 2000mm x 12mm	40	14.4 Kg/m ² (34.56 Kg per panel)
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Minimum radius for 90° corners 150mm

On concave surfaces flex must be installed with smooth face exposed.

Specific Properties

Density	1200 Kg/m ³
Maximum operating temperature	105°
Modulus of elasticity	0.4GPa
Flexural strength	>5MPa
Moisture movement	0.5 mm/m

Fire Resistance

EN 13501-1:2005:E reaction to fire	Class A1
BS 476 Parts 6 & 7	Class 0

Installation - general principles

Installed over sheathing board scribed with hand tools and snapped.
Fixed with stainless steel or corrosion resistant nails or screws.

Fixing Cembrit PB to studwork

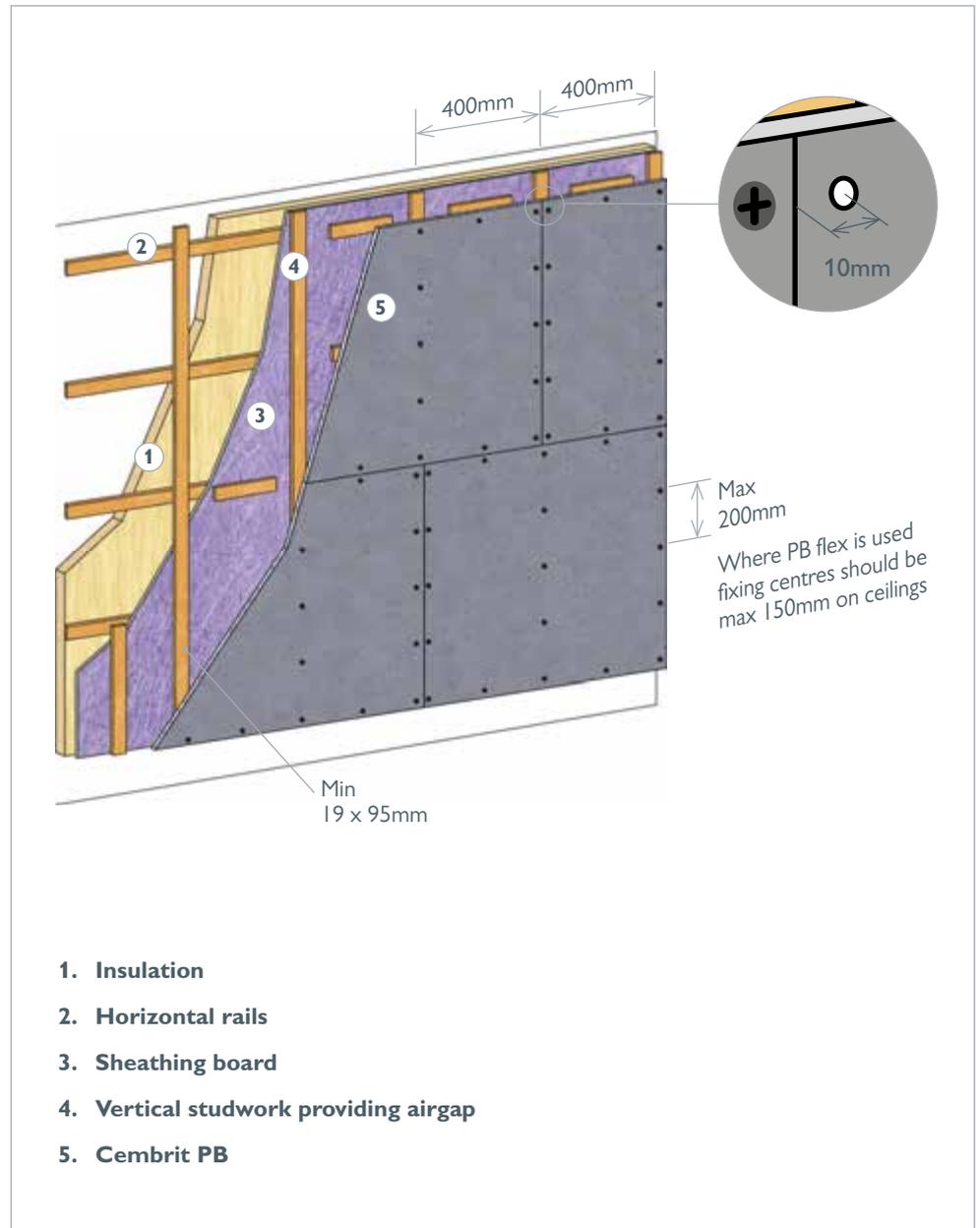
Maximum 400mm centres.
Steelwork should be 20 gauge (or heavier) galvanized steel. Stagger boards on successive courses.
Weatherproof membrane must be used on external applications to protect sheathing board.

Where PB flex is used studwork should be at maximum 200mm centres (150mm centres on ceilings).

Fixings – Do not use conventional plasterboard, nails, jointing tape or jointing compound. For timber studwork 37.5mm stainless steel or corrosion resistant screws or PB corrosion resistant 31mm to 47mm S12 type screws for 20 gauge or heavier steel frames.

Tools – To avoid damaging mesh while screwing use a “dry wall” screw gun with a depth sensitive nosepiece e.g. Dewalt DW255.

Joints – Treat joint with latex-cement mortar or dry set (thin set) mortar. Use PB mesh tape on all edges and cuts. 50mm wide for internal applications, 100mm wide for external applications. Fill joints in external applications with bonding material and immediately embed 100mm alkali resistant fibre glass mesh tape into bonding material.



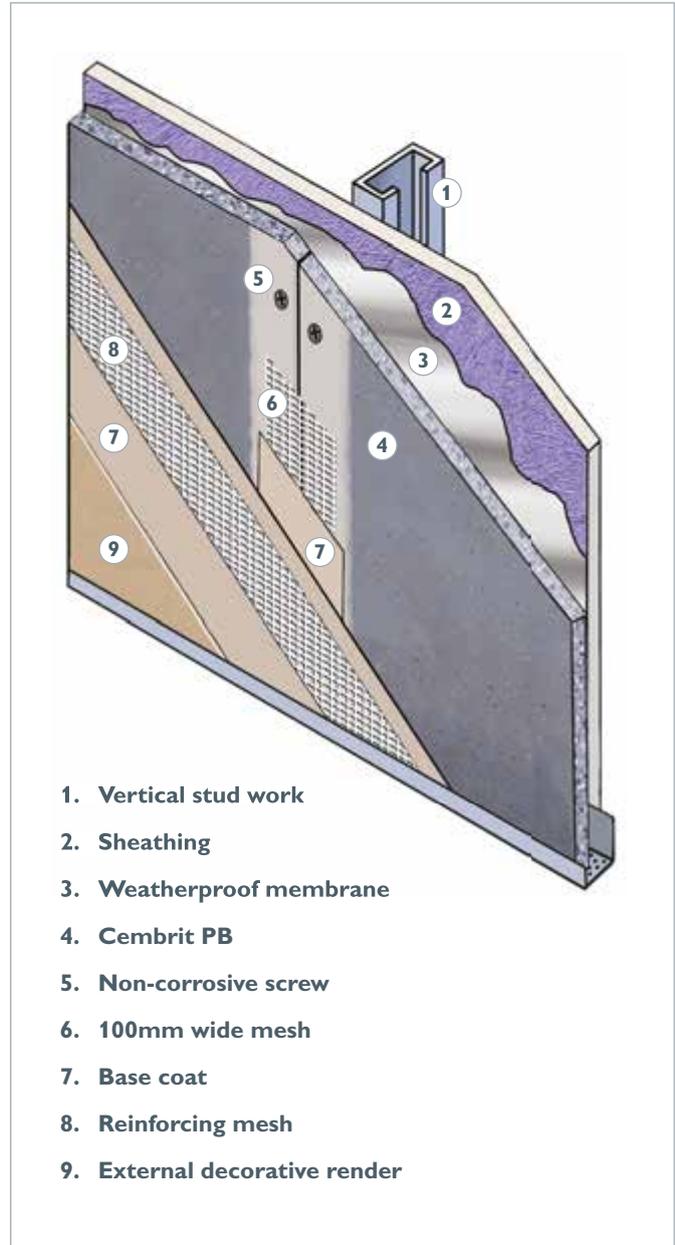
Render backer

Unique reinforced chamfered edge for accurate butt jointing and better quality surface finish.

In external applications strength and stability are necessary to avoid impact damage and cracking of the decorative coating.

Used in conjunction with sheathing board, incorporating reinforcing mesh embedded in the base coat, this system will provide a uniform joint free appearance in any number of coloured and textured finishes with excellent impact and weather resistance. Dimensional stability and rigidity are crucial to avoid cracking and delamination of the exterior finish. The rapid installation of liquid finishes is another advantage. With PB flex it is possible to render onto curves such as columns, spiral staircases and archways.

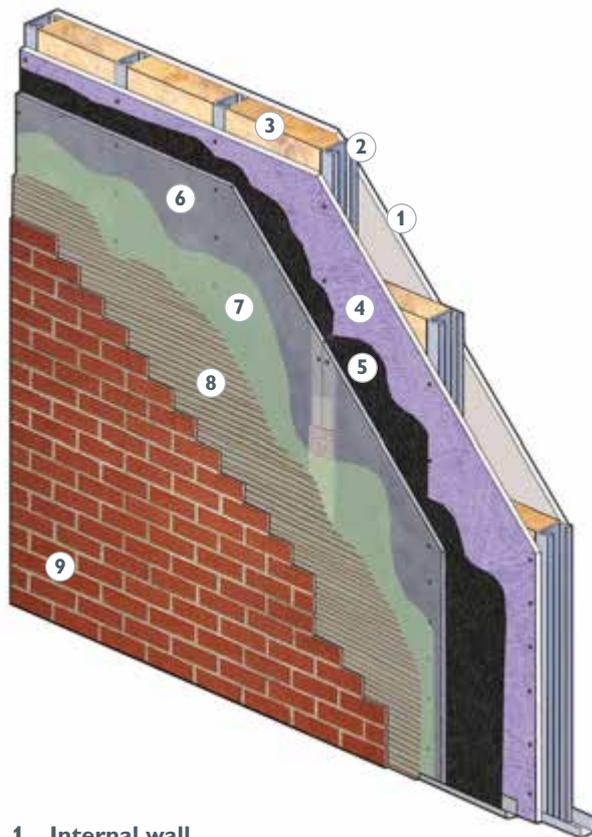
Linear variation due to change in moisture content 0.05%. Freeze/thaw (cycles) per ANSI A118.9 = 100.



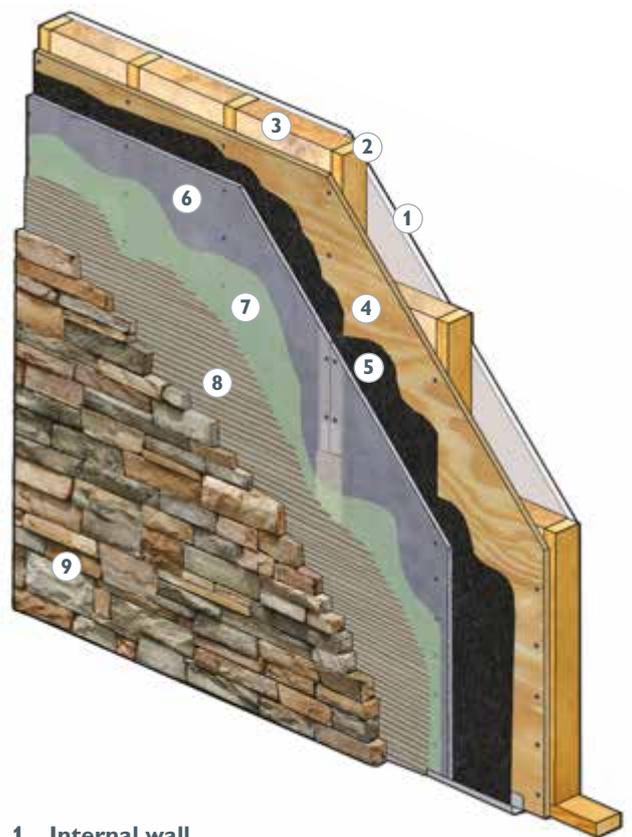
Brick slip or stone faced cladding backer

Low water absorption, high production tolerances and dimensional stability make a solid base for rigid facings.

Such claddings require consistently flat surfaces for durable bonds. Cembrit PB complies with ASTM C 1325. Used in conjunction with sheathing board and coated with a water resistant barrier Cembrit PB low water absorption means that the polymer modified adhesive mortar will provide good adhesion with stone faced or ceramic decorative cladding. Flexural strength = 750 psi.



1. Internal wall
2. Vertical stud work
3. Insulation
4. Sheathing
5. Weatherproof membrane
6. Cembrit PB
7. Liquid water resistant barrier
8. Polymer modified adhesive mortar
9. Brick slip

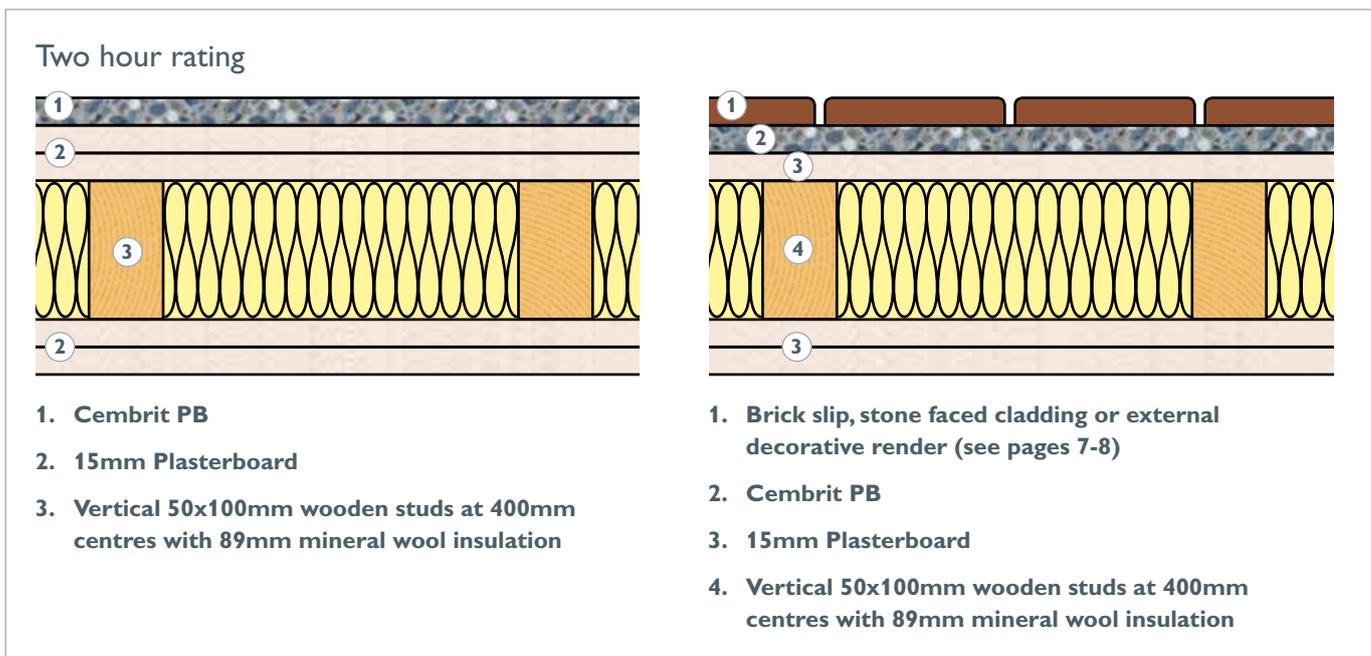
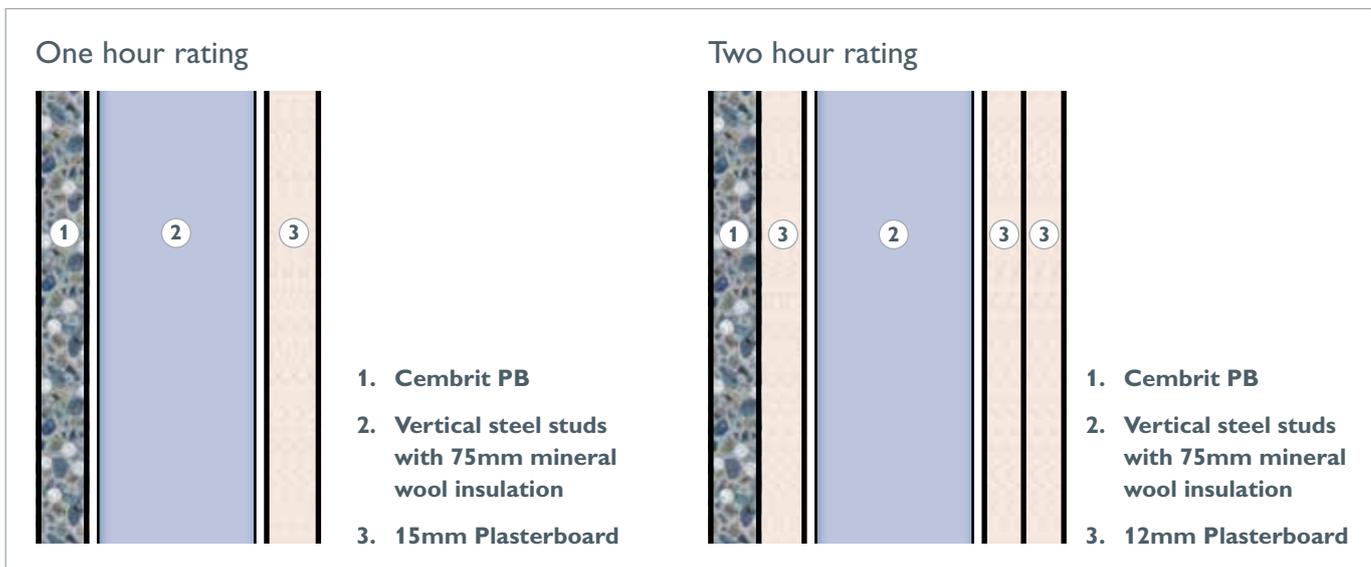


1. Internal wall
2. Vertical stud work
3. Insulation
4. Sheathing/ exterior grade OSB or plywood
5. Weatherproof membrane
6. Cembrit PB
7. Liquid water resistant barrier
8. Polymer modified adhesive mortar
9. Stone faced cladding

Fire rated walls

Building elements combining Cembrit PB with mineral wool insulation and plasterboard will achieve 1 or 2 hour fire rated walls or ceilings.

Cembrit PB has been tested and approved in a variety of assemblies for both 1 hour and 2 hour rated walls. Cembrit PB is a class 0 rated board, tested to BS 476 parts 6 & 7. When used in steel stud partition walls Cembrit PB is incorporated in a system with fire shield wallboards and mineral fibre insulation. When used in timber stud partition walls Cembrit PB is incorporated in assemblies with fire shield wallboards and either ceramic tiles, render, brick slip or plain finishes and mineral fibre insulation

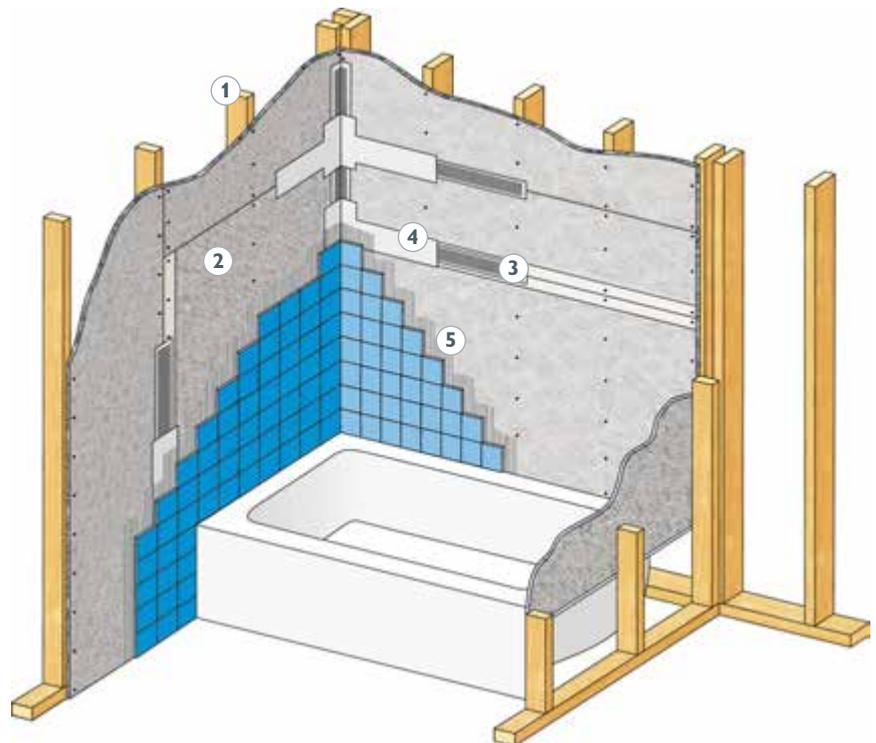


Tilebacker

Resistance to moisture and mould growth makes for a durable and stable support for ceramic tiles.

Of crucial importance in wet areas is the ability to resist water absorption and mould growth. Water absorption by weight in % over 24 hours is less than 8%.

Use Cembrit PB in conjunction with sheathing/lining board. Butt edges, but do not force together. Joints – Treat joint with latex-cement mortar or dry set (thin set) mortar. Use PB mesh tape on all edges and cuts. 50mm wide. Stagger end joints in successive courses. Fix PB board at 200mm centres (150mm for ceilings). Commence fixing PB at centres working towards edges. Edges should be permanently supported. Tile backer board resists mould growth achieving the highest ratings for resistance to fungus according to ASTM G 21 (no growth) and in laboratory tests to ASTM D 3273 mould growth on surface (Score of 10). With PB flex it is possible to create curved substrates for locations such as showers, steam-rooms, radiused benches and plinths. On concave surfaces the smooth face of the board should be exposed.



1. Vertical stud work
2. Cembrit PB
3. 50mm wide mesh
4. Cement or dry set mortar
5. Ceramic tile adhesive

Storage

Protect from the elements particularly moisture, store undercover in a well ventilated building.

Store panels flat and off ground on bearers. Support centres and ends of panels without sagging.

Do not stack more than 8 pallets high.

2 people should lift rather than slide panels from stack. 2 people should carry on edge (rather than flat) to avoid sagging.

Cembrit Ltd. offers various qualities of building board including Cempanel a class "0" cement particle board used as a sheathing (inner leaf of external wall) board.

Perma
BASE[®]
BRAND
Cement Board
By National Gypsum



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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 PB 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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