Building Board

Baseboard for external render
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.

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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
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 fire rated internal wall partition assemblies.
Product Specification

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;

**Weberend MT**
Weber SAINT-GOBAIN,
Dickens House, Enterprise Way,
Maulden Road, Flitwick,
Bedford MK45 5BY
Tel: 08703 330070  Fax: 0800 0142995

**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

**Wetherby Building Systems Ltd.**
1 Kid Glove Road, Golborne Enterprise Park, Golborne,
Greater Manchester WA3 3GS.
Tel: 01942 717100  Fax: 01942 717101
www.wbs-ltd.co.uk

**PermaRock Exterior Render System**
PermaRock Products Ltd.
Jubilee Drive, Loughborough, Leicestershire LE11 5TW
Tel: 01509 262924  Fax: 01509 230063
www.permarock.com

**PAREXDIRECT & PAREXTHERM Render Systems**
Parex Ltd.
Holly Lane Industrial Estate, Atherstone
Warwickshire CV9 2QZ
Tel: 01827 711755  Fax: 01827 711330
www.parex.co.uk

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**Product Specification**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Pallet quantity</th>
<th>Weight</th>
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<tbody>
<tr>
<td>1200mm x 2400mm x 12mm</td>
<td>36</td>
<td>14.4 Kg/m²</td>
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<tr>
<td></td>
<td></td>
<td>(41.47 Kg per panel)</td>
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</tbody>
</table>

**Product Specification – PB flex**

<table>
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<th>Dimensions</th>
<th>Pallet quantity</th>
<th>Weight</th>
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<tbody>
<tr>
<td>1200mm x 2000mm x 12mm</td>
<td>40</td>
<td>14.4 Kg/m²</td>
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<tr>
<td></td>
<td></td>
<td>(34.56 Kg per panel)</td>
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</table>

Minimum radius for 90° corners 150mm
On concave surfaces flex must be installed with smooth face exposed.

**Specific Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Density</td>
<td>1200 Kg/m³</td>
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<tr>
<td>Maximum operating temperature</td>
<td>105°</td>
</tr>
<tr>
<td>Modulus of elasticity</td>
<td>0.4 GPa</td>
</tr>
<tr>
<td>Flexural strength</td>
<td>&gt;5 MPa</td>
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<tr>
<td>Moisture movement</td>
<td>0.5 mm/m</td>
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</table>

**Fire Resistance**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Classification</th>
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<tr>
<td>EN 13501-1:2005 E fire resistance</td>
<td>Class A1</td>
</tr>
<tr>
<td>BS 476 Parts 6 &amp; 7</td>
<td>Class 0</td>
</tr>
</tbody>
</table>
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.

1. Insulation
2. Horizontal rails
3. Sheathing board
4. Vertical studwork providing airgap
5. Cembrit PB
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.

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.

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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

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One hour rating

1. Cembrit PB
2. Vertical steel studs with 75mm mineral wool insulation
3. 15mm Plasterboard

Two hour rating

1. Cembrit PB
2. Vertical steel studs with 75mm mineral wool insulation
3. 12mm Plasterboard

Two hour rating

1. Cembrit PB
2. 15mm Plasterboard
3. Vertical 50x100mm wooden studs at 400mm centres with 89mm mineral wool insulation

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1. Brick slip, stone faced cladding or external decorative render
2. Cembrit PB
3. 15mm Plasterboard
4. Vertical 50x100mm wooden studs at 400mm centres with 89mm mineral wool insulation
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.

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

EU Construction Products Regulation and PB flex.

There is currently no harmonised European Norm for flexible boards. PB flex therefore does not carry a CE mark.

Cembrit Ltd. offers various qualities of building board including Cempanel a class “O” cement particle board used as a sheathing (inner leaf of external wall) board and Cembrit Windstopper Extreme a 1 hour fire rated sheathing and partition board.

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, 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.

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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