

# HardieBacker<sup>®</sup>

CEMENT BACKERBOARD  
FOR TILE AND STONE

PRODUCT & INSTALLATION GUIDE



**PREVENTS**  
MOISTURE DAMAGE  
MOULD GROWTH &  
**TILE FAILURE**

DO IT ONCE, DO IT RIGHT.™



**WATER**  
RESISTANT



**MOULD**  
RESISTANT



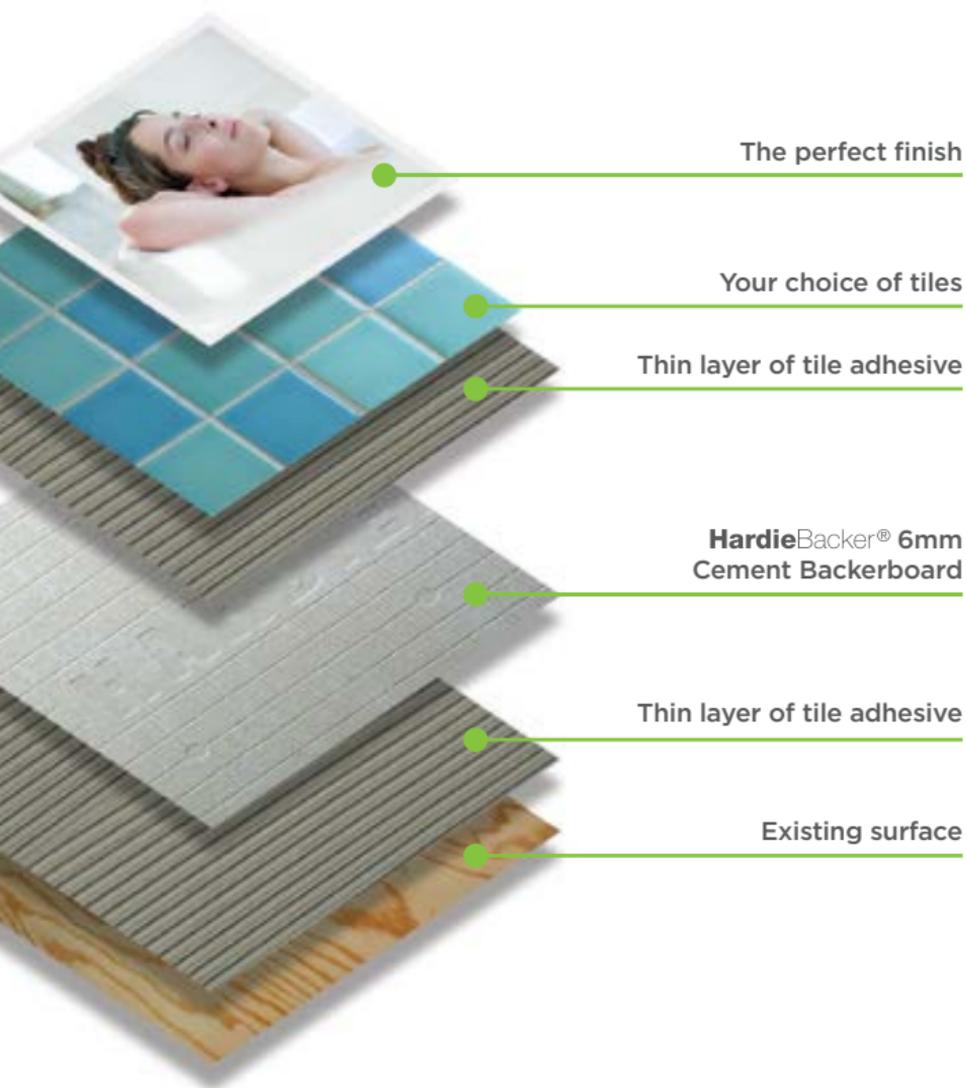
**STRONGEST**  
ON MARKET



**EASY**  
TO INSTALL

# What is HardieBacker® Cement Backerboard?

HardieBacker® is a cement backerboard for tile and stone to be used as a replacement for plasterboard or plywood. It contains Mouldblock™ Technology, giving you superior moisture and mould resistance. HardieBacker® provides a dimensionally stable cement bonding surface that won't warp, swell, rot, or deteriorate even in the wettest conditions. It is available in 6mm and 12mm sheets and provides the best bonding surface for cement based tile adhesive. HardieBacker® 6mm with EZ Grid® has a recessed fastening pattern to make installation even easier. HardieBacker® is the #1 cement board in the world.



## Where should HardieBacker® Cement Backerboard be used?

HardieBacker® should be used anywhere in your home where tile is applied; on floors, walls and even countertops. It should be used especially in wet areas such as bathrooms and kitchens, where walls and floors are particularly exposed to moisture. Typically, 6mm is used on the floors and 12mm on the walls.

**DO IT ONCE, I**

# Why do you need HardieBacker® Cement Backerboard?

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When it comes to durability, strength and moisture resistance, there is no question that HardieBacker® outperforms other tile substrates.

Plasterboard and plywood can contribute towards tile failure that can be very expensive to fix. Avoid these costly repairs by installing HardieBacker® on your next project.

## Avoid costly repairs by using HardieBacker®

### Cracked tiles

Moisture can cause other substrates to move and crack tiles.

### Mould growth

Other substrates can promote mould growth, which can cause health issues for your family.

### Perished plasterboard

Plasterboard can disintegrate with continuous exposure to water, which can mean having to do the job again.

### Rotting wood

Moisture causes wood to expand and contract. This loosens tile adhesive bond, stresses tile, and can cause tile and grout to crack.



# Who should use HardieBacker® Cement Backerboard?

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Any homeowner, builder, tiler, plumber, carpenter or dryliner who wants their tile installation to last. Professionals use HardieBacker® as it is trusted for its durability, workability and proven performance history.



## How will HardieBacker® Cement Backer

The durable cement formulation of HardieBacker® provides superior water resistance and its proprietary Mouldblock™ Technology offers additional protection against mould. A low level of mould spores in your home isn't abnormal but if left untreated, mould can colonise and release millions of airborne breathable spores. Potential health effects and symptoms associated with mould exposure may include allergic reactions, asthma and other respiratory complaints.



**WATER**  
RESISTANT

Won't rot, swell or warp when exposed to moisture.



**MOULD**  
RESISTANT

Mouldblock™ Technology protects the job from dangerous mould growth.



## board protect your family and home?

Beyond its potential health effects, mould can also pose a threat to the value of your home. Once mould has established itself, it could be very expensive to clean up, could cause the market value of your home to decrease and could require you to move out until the mould is properly cleaned. Help protect your home and family from moisture that can lead to mould growth before it starts - request your builder uses HardieBacker<sup>®</sup> Cement Backerboard for tile and stone.



**STRONGEST**  
ON MARKET

Can hold 100kg m<sup>2</sup> while conventional plasterboards claim to hold up to 32kg m<sup>2</sup>.



**EASY**  
TO INSTALL

No primer required.  
Easy to score and snap.

\*([http://www.british-gypsum.com/pdf/WB09\\_Tiling\\_07.pdf](http://www.british-gypsum.com/pdf/WB09_Tiling_07.pdf))



## HardieBacker®

### PRODUCT INFORMATION

#### Approved product

HardieBacker® cement backerboard is CE and BBA approved with certificate no. 04/4100. The product meets the EN 12467 standard and has a class A1 non combustibility rating.

#### Warranty

HardieBacker® cement backerboard is protected by a 10-year limited product warranty.



#### Product availability

PRODUCT	DIMENSION	PIECE WEIGHT	PALLET QUANTITY	PALLET WEIGHT
HardieBacker® EZ Grid® 6mm	1200 x 800 x 6mm	9 kg	60 pcs	540 kg
HardieBacker® 12mm	1200 x 800 x 12mm	13.8 kg	50 pcs	740 kg

## Cutting the sheets:

#### Score-and-snap

##### Straight cuts:

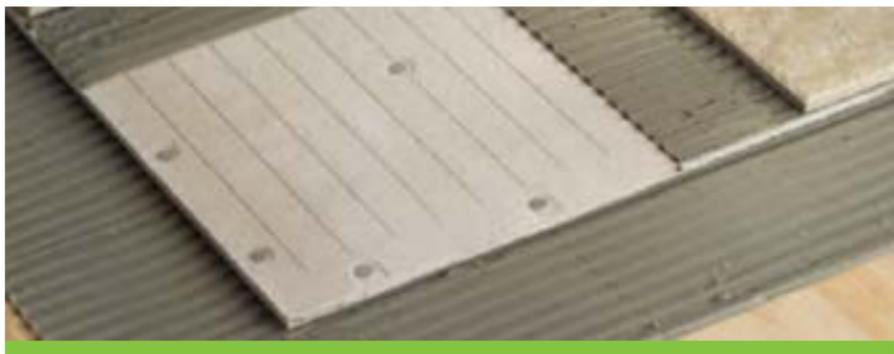
Sheets are easily cut using the carbide tipped scoring knife. Score the board firmly using a straight edge as a guide and pull the board edge upwards to snap the board.



##### Circular cuts:

Score the desired hole size, score an x creating a weak point in the centre of the circle, then tap it out with a hammer. Alternative method is to use a masonry hole-saw or a jig saw fitted with a fibre cement board blade.





## HardieBacker®

### FLOOR INSTALLATION (Interior Only)

HardieBacker® 6mm is recommended for floor applications to minimize transitions between rooms. If additional height is needed, HardieBacker® 12mm can be used.

#### 1. Ensure subfloor is structurally sound on existing floors:

- Ensure subfloor is not damaged. Replace any loose, warped, uneven or damaged sections of the floor.
- Make certain the subfloor has a clean and flat surface.

#### 2. For all floors:

- Use minimum 15mm WBP plywood or minimum 18mm T&G flooring grade chipboard. Ensure floor satisfies requirements of local building regulations and does not deflect more than L/360 for ceramic tiles and L/720 for natural stone. Excessive flex will cause the tiled floor to crack.
- Joist spacing not to exceed 600mm centres.

#### 3. Determine layout of HardieBacker®

- Stagger all HardieBacker® joints in a broken bond or brick pattern. Do not align with subfloor joints.
- Never allow all four corners of boards to meet at one point.
- Leave a 3mm gap between floor and wall edges, vanities, baths etc. and fill with a good quality bathroom sealant.
- Score-and-snap boards to required sizes and make necessary cut-outs.

#### 4. Install HardieBacker® to subfloor

- Apply a gap filling bed of non-flexible tile adhesive to the subfloor using a 6mm notched trowel.
- Embed HardieBacker® with a sliding motion firmly and evenly in the wet tile adhesive.
- Use the EZ Grid® fastener pattern as a guide. Fasten HardieBacker® with specified nails or screws every 200mm over the entire surface. Keep fixings between 15mm from board edges and 50mm from board corners.
- Set heads of fixings flush with the surface without overdriving.

#### 5. Tape joints prior to tiling

- Prior to setting the tiles, embed 50mm alkaline resistant Fibatape across joints and feather tile adhesive to leave a 150mm wide joint.



## HardieBacker®

### WALL INSTALLATION

HardieBacker® 12mm is recommended for wall application for thickness transition with other products.

#### 1. Ensure framing is structurally sound

- Must comply with local building regulations.
- Max stud centres = 400mm. Ensure that all corners are adequately blocked with suitable timber.
- All existing old dry lining should be removed as it has potential to fail further.

#### 2. Determine layout of HardieBacker®

- Boards may be installed vertically or horizontally.
- Ensure all vertical joints are made on the centre of the studs.
- Score-and-snap boards to required sizes and make necessary cut-outs.

#### 3. Install HardieBacker® 12mm to framing

- See applicable building regulations regarding vapour barrier requirements.
- Use HardieBacker® screws or 30mm galvanised roofing nails when using timber studs.
- Install boards 6mm above the floor, bath, and shower tray. These floor and wall joints should be filled with a 6mm bead of high quality wet area sealant.
- Keep fixings 15mm from board edges and 50mm in from sheet corners.
- Set heads of fixings flush with the surface, without overdriving.

#### 4. Tape joints prior to tiling

- Prior to setting the tiles, embed 50mm alkaline resistant Fibatape across joints and feather tile adhesive to leave a 150mm wide joint.



## HardieBacker®

### MASONRY WALL INSTALLATION

HardieBacker® 6mm or 12mm can be used on top of masonry walls when space is limited.

#### 1. Ensure wall is sound, clean and dry and ready to receive HardieBacker®

- The rear of HardieBacker® must be wiped down to remove dust.
- All existing old dry lining should be removed as it has the potential to fail further.

#### 2. Use a high strength gap filling adhesive

- Place 3 vertical 10-12mm beads of high strength, single part, gap filling cartridge adhesive, evenly down the back of the board.
- Press board firmly against the wall into the desired position.

#### 3. Fasten HardieBacker® 6mm with masonry anchors

- Fasten HardieBacker® with 9 (6mm x 60mm) stainless steel screws into brown wall plugs. Screws should remain 100mm from the top and bottom edges and 50mm from the left and right edges. Ensure min 50mm embedment into the wall.
- Do not overdrive the screw; it must be flush with the face of the HardieBacker®.

#### 4. Tape joints prior to tiling

- Prior to setting the tiles, embed 50mm alkaline resistant Fibatape across joints and feather tile adhesive to leave a 150mm wide joint.

Is up to 100kg/m<sup>2</sup>

# Frequently asked questions

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## 1. Do I need to prime HardieBacker® before I tile onto it?

No. HardieBacker® is ready to tile once installed, just wipe down with a damp sponge to remove any dust prior to tiling.

## 2. Can I fix HardieBacker® using a dot and dab technique?

No. HardieBacker® is not suited to this type of fixing application. Please view the masonry wall installation instructions.

## 3. Can I use HardieBacker® for multi-fuel or log burning stoves?

Yes. 12mm HardieBacker® can be used on masonry walls as a finish to the fire opening or as a reference plate up the chimney itself. HardieBacker® is not a fire protection board and should not be used as a hearth. Clearance to combustibles must be in accordance with the relevant building regulations. Please view the installation instructions for multi fuel and log burning stoves at [www.jameshardieEU.com](http://www.jameshardieEU.com).

## 4. Can I use HardieBacker® in conjunction with under floor heating?

Yes. HardieBacker® is suitable for under floor heating. It should always be placed between the structural timber floor and the heating element. Never place heating under HardieBacker® as there is a risk of damaging the system when fixing down the backerboard.

## 5. What is the purpose of taping the joints?

The 50mm wide alkaline resistant tape will tie the sheets of HardieBacker® together, helping to disperse any movement of the substrate, decreasing the probability of popping or cracking tiles along the seams.

## 6. Can I use HardieBacker® outside?

No. HardieBacker® is not suitable for external use; however we do manufacture other products suitable for exterior use. Please contact our UK customer service on 0800 068 3103.

## 7. Can HardieBacker® be used in a wetroom?

Yes. HardieBacker® must be tanked with a suitable waterproofing system prior to tiling.

## 8. Can I put HardieBacker® directly onto concrete?

No. The primary function of HardieBacker® is to provide a water resistant flat surface over timber substrates to tile onto; it is not designed for use over concrete.

## 9. Which side of HardieBacker® should be tiled on?

Either is acceptable, but we recommend the EZ grid® side of the 6mm board, and the smooth side of the 12mm board.

## 10. Can I finish HardieBacker® with anything other than tile?

Yes. HardieBacker® can be painted, plastered, and even wallpapered.

# Health & safety instructions

## James Hardie recommended cutting practices

### Outdoors

- Position cutting station so that wind will blow dust away from user or others in working area.
- Use one of the following methods based on the required cutting rate:

#### Good

- Dust reducing circular saw with HardieBlade®.

#### Better

- Dust reducing circular saw equipped with HardieBlade® and HEPA vacuum extraction.

#### Best

- Score-and-snap.

### Indoors

- Cut only using score-and-snap.
- Position cutting station in a well ventilated area.
- NEVER use a power saw indoors.

- NEVER use a circular saw blade that does not carry the HardieBlade® logo.
- NEVER dry sweep – use wet suppression or HEPA Vacuum.

IMPORTANT NOTE: For maximum protection (lowest respirable dust production), James Hardie recommends always using 'Best'-level cutting methods where feasible.

EU-OSHA approved respirators can be used in conjunction with above cutting practices to further reduce dust exposures. Additional exposure information is available at [www.jameshardieeu.com](http://www.jameshardieeu.com) to help you determine the most appropriate cutting method for your job requirements. If concern still exists about exposure levels or you do not comply with the above practices, you should always consult a qualified industrial hygienist or contact James Hardie for further information.

## Health warning – avoid breathing dust

James Hardie® products contain crystalline silica. This mineral is found everywhere in the world - often in the form of sand - and, therefore, commonly used in many construction products (for example brick, concrete, glass wool and abrasives). The mineral itself is inert, but certain building practices such as drilling, high speed cutting and abrading can release fine particulate dust which may constitute a health hazard. Excessive or protracted inhalation of fine particle silica dust can lead to a lung disease called silicosis. There is also some evidence that it may increase the risk of lung cancer if inhaled for prolonged periods. Smoking may also exacerbate this risk. Like smoking, the risk from fine particle silica dust is time and concentration dependent.

### Control:

To suppress or to reduce excessive inhalation of fine particle silica dust the following steps should be taken to protect operatives who work with products containing silica dust:

- During fabrication operate outdoors or in a well ventilated space in a separate area if available or away and down-wind from other operatives;
- Use low speed, low dust cutting tools – Score-and snap-knife, HardieBlade® fitted to a circular saw connected to a dust extraction HEPA filter vacuum cleaner (see James Hardie® tools);
- When cutting, drilling or abrading always wear a FFP2/3 dust control or full face mask adjusted and fitted in conformity with regulatory recommendations and affixed with CE marking and/or fully certified to the relevant EN standards if applicable;
- Keep the working environment clean and remove debris as soon as possible;
- At the end of the operation remove dust from clothes, tools and work area with a HEPA filter vacuum cleaner or damp with water to suppress the dust before sweeping. Remember, James Hardie® products are no more dangerous than many other building materials containing crystalline silica sand. We hope through this information to engage in effective education of the construction industry and build upon the requirements of national health and safety regulations. For more information, see our installation instructions on [www.jameshardieeu.com](http://www.jameshardieeu.com) or call James Hardie®.

**DO IT ONCE, DO IT RIGHT.™**

# Use **HardieBacker®** Cement Backerboard for Tile and Stone

## Don't forget...

HardieBacker® accessories to make the install quicker and easier.



### **HardieBacker® SCORE-AND-SNAP KNIFE**

Cutting of boards can be performed by scoring a line and snapping the board upwards using a straight edge.



### **HardieBlade® FIBRECEMENT SAW BLADE**

Specially designed to produce only a low amount of dust. The diamond tipped edges increase blade life. Available in 160 mm, 190 mm, 254 mm and 305 mm diameters.



### **SCREWS**

HardieBacker® screws for wood frames.  
5.0 x 32 mm,  
P2 head 10 mm.  
5.0 x 25 mm,  
P2 head 10 mm.  
PZ2 head for floors.



### **FIBATAPE**

Fibatape  
50 mm x 15m,  
alkaline-resistant,  
glass-fibre mesh  
reinforcing tape.

For further information on HardieBacker® please contact our customer service team on:

**0800 068 3103**

or [info.europe@jameshardie.com](mailto:info.europe@jameshardie.com)

To locate a dealer visit

[www.jameshardie.co.uk/dealers](http://www.jameshardie.co.uk/dealers)



**JamesHardie**

