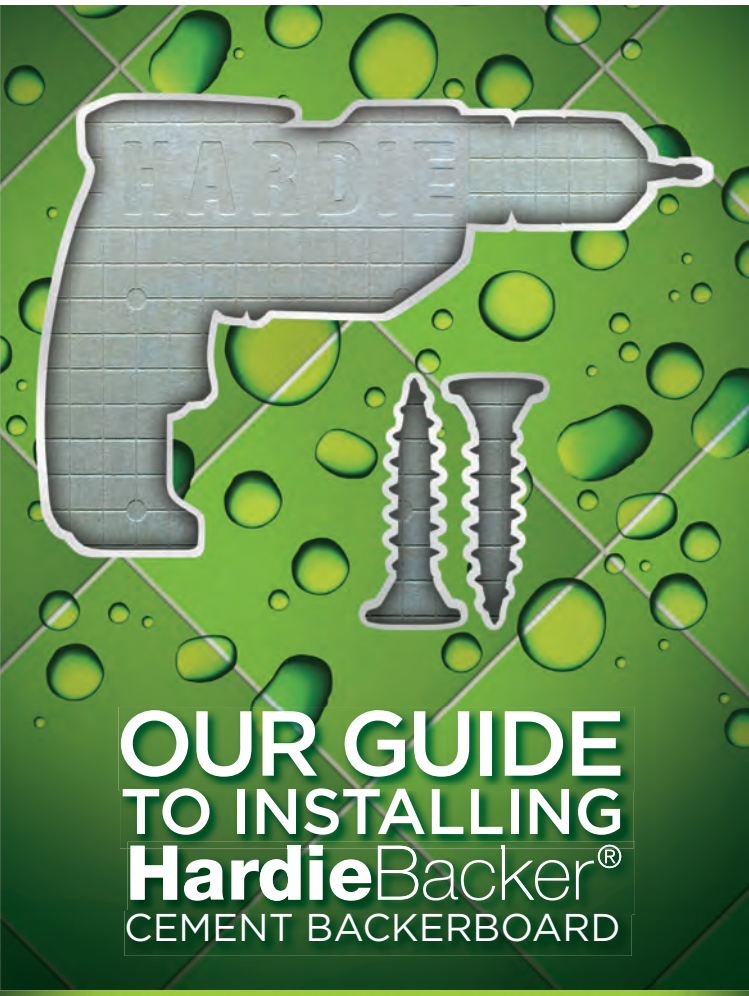
HardieBacker®

CEMENT BACKERBOARD
FOR TILE AND STONE

INSTALLATION GUIDE



OUR GUIDE TO INSTALLING HardieBacker®

CEMENT BACKERBOARD

DO IT ONCE, DO IT RIGHT.™

WATER RESISTANT

MOULD RESISTANT

STRONGEST ON MARKET

EASY TO INSTALL

WHAT IS HardieBacker® CEMENT BACKERBOARD FOR TILE AND STONE?

Hardiebacker® is a Cement Backerboard for tile and stone, to be used as an alternative to plasterboard or plywood. It is available in both 6mm and 12mm sheets. Hardiebacker® is dimensionally stable and won't warp, swell, rot, or deteriorate even in the wettest conditions. HardieBacker® EZ Grid® 6mm Cement Backerboard has a recessed fastener pattern to make installation even easier. HardieBacker® Cement Backerboard is the No. 1 cement board in the world.

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	DIMENSIONS	PIECE WEIGHT	PALLET QUANTITY	PALLET WEIGHT
HardieBacker® EZ Grid® 6mm Cement Backerboard	1500 x 900 x 6mm 1200 x 800 x 6mm	12.5 kg 9 kg	60 pcs 60 pcs	790 kg 540 kg
HardieBacker® 12mm Cement Backerboard	1200 x 800 x 12mm	13.8 kg	50 pcs	740 kg

FLOOR INSTALLATION (INTERIOR ONLY)

HardieBacker® EZ Grid® 6mm is recommended for floor applications, unless the HardieBacker® 12mm thickness is required.

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.

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.

2. DETERMINE LAYOUT OF **Hardie**Backer®

CEMENT BACKERBOARD

- Stagger all HardieBacker® Cement Backerboard 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 cutouts.

FLOOR INSTALLATION (CONTINUED)

3. INSTALL **Hardie**Backer® CEMENT BACKERBOARD TO SUBFLOOR

- Apply a gap filling bed of non-flexible tile adhesive to the subfloor using a 6mm notched trowel.
- Embed HardieBacker® Cement Backerboard with a sliding motion firmly and evenly in the wet tile adhesive.
- Use the EZ Grid® fastener pattern as a guide. Fasten HardieBacker® Cement Backerboard 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.

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® Cement Backerboard delivers more compressive and flexural strength than any other board on the market.

WALL INSTALLATION

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.

2. DETERMINE LAYOUT OF **Hardie**Backer® CEMENT BACKERBOARD

- 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 cutouts.

3. INSTALL **Hardie**Backer® 12MM CEMENT BACKERBOARD TO FRAMING

- See applicable building regulations regarding vapor 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.

MASONRY WALL INSTALLATION

HardieBacker® EZ Grid® 6mm Cement Backerboard should be used on top of masonry walls. Maximum load carrying weight is 100kg/m2.

1. ENSURE WALL IS SOUND, CLEAN, DRY AND READY TO RECEIVE **Hardie**Backer® EZ GRID® 6MM CEMENT BACKERBOARD

- The rear of HardieBacker® EZ Grid® 6mm must be wiped down to remove dust.
- All existing old dry lining should be removed as it has 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 **Hardie**Backer® EZ GRID® 6MM CEMENT BACKERBOARD WITH MASONRY ANCHORS

- Fasten HardieBacker® 6mm EZ Grid® with 9 (min 6mm x 60mm) masonry anchors with self-embedding head. 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 anchor; it must be flush with the face of the HardieBacker® EZ Grid® 6mm.

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.

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.

CIRCLES CUTS:
Score the desired hole size, score an x creating a weak point in the center 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.

ACCESSORIES:
HardieBacker® Cement Backerboard for tile and stone accessories help get that perfect finish you desire.

HARDIEBACKER® SCORE-AND-SNAP KNIFE

The Tungsten Carbide tipped scoring knife is long lasting and simple to use. It is the best tool for cutting HardieBacker® to size.

HARDIEBACKER® SAW BLADE

Specially designed by James Hardie® to reduce dust levels with high speed circular saws. The diamond tipped edges increase blade life. Available in 160mm, 190mm, 205mm and 305mm diameters. Fits most 30 & 20mm bore saws. (Should be used in conjunction with an FFP2/3 dust mask.)

SCREWS

HardieBacker® screws for wood frames. 5.0 x 32mm, ø head 10 mm. P2 head. 30mm galvanized roofing nails can be used in place of screws.

FIBATAPE

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

INSTALLATION FAQ'S

1. **DO I NEED TO PRIME HardieBacker® CEMENT BACKERBOARD BEFORE I TILE ONTO IT?**
   No. HardieBacker® Cement Backerboard 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® CEMENT BACKERBOARD USING A DOT AND DAB TECHNIQUE?**
   No. HardieBacker® Cement Backerboard is not suited to this type of fixing application. Please view the masonry wall installation instructions.

3. **CAN I USE HardieBacker® CEMENT BACKERBOARD FOR MULTI-FUEL OR LOG BURNING STOVES?**
   Yes. 12mm HardieBacker® Cement Backerboard can be used on masonry walls as a finish to the fire opening or as a reference plate up the chimney itself. HardieBacker® Cement Backerboard 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

4. **CAN I USE HardieBacker® CEMENT BACKERBOARD IN CONJUNCTION WITH UNDER FLOOR HEATING?**
   Yes. HardieBacker® Cement Backerboard 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® Cement Backerboard 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® Cement Backerboard 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® CEMENT BACKERBOARD OUTSIDE?**
   No. HardieBacker® Cement Backerboard 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® CEMENT BACKERBOARD BE USED IN A WETROOM?**
   Yes. HardieBacker® Cement Backerboard must be tanked with a suitable waterproofing system prior to tiling.

8. **CAN I PUT HardieBacker® CEMENT BACKERBOARD DIRECTLY ONTO CONCRETE?**
   No. The primary function of HardieBacker® Cement Backerboard 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® CEMENT BACKERBOARD 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® CEMENT BACKERBOARD WITH ANYTHING OTHER THAN TILE?**
    Yes, HardieBacker® Cement Backerboard 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:

BEST
- Score-and-snap

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

GOOD
- Dust reducing circular saw with HardieBlade®

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 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, HardieGuillotine®, 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 or call James Hardie®.

PREVENTS
MOISTURE DAMAGE
MOULD GROWTH &
TILE FAILURE

WATER
RESISTANT

MOULD
RESISTANT

STRONGEST
ON MARKET*

EASY
TO INSTALL

*Can hold up to 100kg m².

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Use HardieBacker® Cement Backerboard for tile and stone

For further information on HardieBacker® Cement Backerboard for tile and stone please contact our customer service on

0800 068 3103

or **info.europe@jameshardie.com**

To locate a dealer visit
www.jameshardie.co.uk/dealers

JamesHardie

CE BBA