IBS FIBRE® WAB

Wet Area Board Design & Installation Guide







BS SUSTAINABLE BUILDING PRODUCTS

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One of the key aspects that set IBS apart is our commitment to innovation. We are constantly on the lookout for new and improved building materials that can enhance the efficiency and effectiveness of construction projects. Our team of experts works closely with suppliers to bring cutting-edge products to the New Zealand market, ensuring that our customers have access to the latest advancements in building technology.

But our commitment to excellence doesn't stop at our products. At IBS, we pride ourselves on providing unparalleled customer service. Our knowledgeable and friendly team is always on hand to offer expert advice and support, helping you choose the right materials for your project.

ABOUT ES

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We seek to develop the most innovative, professional and profitable experience for our clients. Our passion is for providing our customers with the best products, the best service, and the best experience

In addition to our exceptional product range and customer service, IBS is also dedicated to sustainability. We recognise the importance of protecting our environment and are committed to sourcing eco-friendly building materials. Our sustainable product offerings help reduce the environmental impact of construction projects, allowing our customers to build responsibly without compromising on quality or performance.

IBS is more than just a supplier of building materials; we are a partner in your success. Our comprehensive range of services includes everything from product sourcing and logistics to technical support and training. We work closely with our customers to understand their unique needs and provide tailored solutions that help them achieve their objectives.

Join the countless builders, contractors, and homeowners who trust IBS for their building material needs. Discover the difference that quality, innovation, and exceptional service can make in your next project. Choose Independent Building Supplies – your partner in building excellence for over 30 years.

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- IBS Structural Ply
- IBS Builders Grade[®] Ply
- IBS Formply

- IBS Decorative Ply
- IBS Panel Line[®]
- IBS Showerline
- Softboard
- Hardboard
- Peg Board
- IBS Acoustic Panels
- IBS Mini Panels

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NZBN 9429000097253

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1. Introduction

This document is intended for designers and installers to ensure that IBS FIBRE® WAB Wet Area Board is specified and installed correctly.

1.1 Introduction

IBS FIBRE® WAB fiber cement board is an excellent choice for wet areas and high-traffic environments in dry construction. IBS FIBRE® WAB features a smooth, sanded surface and rebated edges, allowing for a high-quality finish. Resistant to long-term moisture exposure, IBS FIBRE® WAB fiber cement board does not support or encourage mould growth in humid conditions.

IBS FIBRE® WAB fiber cement board also has very low moisture movement, making it a stable and durable substrate for ceramic and stone tiling, painting, or other wall finishes. The board will not warp or deform during use.

The following application guide offers basic installation recommendations for interior applications. For more detailed information or specific inquiries, please reach out to our technical department.

1.2 Scope

IBS FIBRE® WAB fiber cement board can be used in buildings where the structure supports the intended work, in areas prone to water splashes, as a tile substrate over existing or new reconstituted wood floors (such as plywood, particle board, OSB, and tongue-and-groove timber), as wet area lining in bathrooms, kitchens, laundries, and high-humidity internal rooms, and in conjunction with an approved firewall design.

This document is intended for use by architects, builders, designers, and specifiers involved in the specification of IBS FIBRE[®] WAB.

1.3 What is IBS FIBRE® WAB

IBS FIBRE[®] WAB fiber cement board is ideal for wet areas and high-traffic applications in dry construction. With a smooth, sanded surface and rebated edges down 2 long sides, IBS FIBRE[®] WAB allows for a high-quality finish. It resists long-term moisture and does not promote mold growth in humid environments. IBS FIBRE[®] WAB also has low moisture movement, providing a stable substrate for ceramic and stone tiling, painting, or other finishes, without warping or deforming.

Various IBS FIBRE® WAB Sheet details are provided in the Details section of this document.

1.4 Sizes & Applications

TABLE 1 - IBS FIBRE [®] WAB Technical Specifications				
Length (mm)	Width (mm)	Thickness (mm)	Weight per m2 of sheet (kg/m2)	
2400	1200	7.5	± 36.8 kg	

1200

IBS FIBRE® WAB Technical Specifications

Note: 6mm & 12mm available to special order

1.5 Benefits

2700

- Resistant to the attack of termites, insects and other vermin
- Moisture, mould and water resistant
- Traffic lining for dry construction applications

1.6 Intended Use

- Partitions in wet areas like Industrial kitchens, labs, washrooms and bathing areas
- High traffic locations of hospitals, corridors, shopping centres and schools
- Substrate for Tiles

1.7 Supporting Info & Documents

This document must be read in conjunction with the:

- IBS Product Specification for IBS FIBRE® WAB
- IBS Maintenance and Warranty for IBS FIBRE® WAB

CAD details and all other information including any updates are available at www.ibs.co.nz.

Impact resistant

7.5

- Dimensionally stable
- Easy to work and install

± 41.4 kg

- High impact resistant
 drywall linning
- Great alternative to plaster board
- Internal and external ceiling panel

2. Best Practice

2.1 Health & Safety

IBS FIBRE® WAB complies with section 9.7.2 of 'E2/AS1'. The information in this document is consistent with the requirements outlined in NZBC Acceptable Solution 'E2/AS1'. Visit www.ibs.co.nz for more information.

For further information on Health & Safety, refer to:

- The Absolutely Essential Health and Safety Toolkit
- Worksafe New Zealand Quick Guide.

2.2 Handling & Storage

Loading and Unloading

IBS FIBRE[®] WAB cement boards are usually supplied on pallets suitable for forklift. If crane offloading by slings is envisaged, special notification must be made in advance or upon placing orders.

All pallets and crates can be safely handled by using a barge lift or hoisting equipment and straps. Steel cables should not be used as it will damage both the pallet and the panels within.

Transport to Site

Always drive the delivery vehicle as close as possible to the location where the panels are to be installed. When transporting the panels, it is essential to firmly secure the pallets to prevent the panels from sliding or moving while in transit.

Storage

IBS FIBRE[®] WAB fibre cement boards are supplied with protective plastic sheeting wrapped around the timber crates. This protection should not be removed until site and structural conditions are prepared and ready for panel installation.

All IBS FIBRE[®] WAB fibre cement boards must be stored flat on pallets and placed inside in covered and dry conditions, optimising protection for stored panels against exposure to weather and other unfavourable conditions.

Before installation please check panels for defects.

Site considerations:

- Selection of the right equipment for working from a height
- Safe working with ladders and stepladders
- Maintain a clear unobstructed work area

2.3 Cutting/ Drilling

The method of cutting depends on the volume of cutting required. Panels can be cut using stationary table saws, circular saws, or jigsaws. Cutting should be performed in a dry environment, and dust control measures must be in place.

It is recommended that fibre cement saw blades (see Figure 1,2) are used to cut the panels on site. These blades have been designed especially for fibre cement and when correctly employed, a high level of finish can be achieved. The blade is uniquely designed with vibration damping composite body construction and diamond tipped teeth shaped to give a tear-free edge.

When small amounts of cutting are required on site, an alternative to the recommended fibre cement saw blade is a carbide-tipped flat trapezoidal tooth blade. This has limited life and will need regular changing.



Use the following method to cut 9mm IBS FIBRE® WAB Lining:

Best

- Knife
- Hand guillotine
- Fibreshear

Better

Dust reducing circular saw equipped with a Blade Saw Blade and connected to a M Class or higher vacuum.



During Cutting:

- Ensure good ventilation in the area.
- Position the cutting station to direct dust away from yourself and others.
- Rotate employees on cutting tasks during the shift.
- Use a Blade Saw Blade (or equivalent) with a dust-reducing circular saw connected to an M Class or higher vacuum.
- When sawing, sanding, rebating, drilling, or machining: Wear a P1 respirator or higher, fitted according to manufacturer instructions.
- Keep people at least 2 meters away from the cutting station.
- If not clean-shaven, use a powered air respirator with a loose-fitting head top.
- Wear safety glasses and hearing protection.
- Ensure others nearby follow the same safety measures.
- Clean up carefully; never dry sweep. Use water, wet wipes, or an M Class or higher vacuum.

Drilling IBS FIBRE[®] WAB cement boards should be drilled using preferred and more efficient tungsten cubicle tipped drills with point angles of 60° to 80° rather than the usual 120° type.

2.4 Service Penetration

For smooth, clean cut circular holes:

- Mark the centre of the hole on the board.
- Pre-drill a hole to be used as a guide.
- Cut hole to the required diameter using a hole saw fitted to a electric drill where the central bit is inserted into the pre-drilled hole.



For small irregular holes:

- Small rectangular apertures can be achieved by forming a series of small holes around the perimeter of the opening.
- Tap out with a chisel and clean up with sand paper or a rasp.



When cutting indoors :

- Avoid using a circular saw indoors.
- Set up the cutting station in a well-ventilated area.
- Cut ONLY with a Knife, hand guillotine, or fiber shears (manual, electric, or pneumatic).
- Clean up thoroughly, but never dry sweep. Always hose down with water or use a wet wipe, or employ an M Class or higher vacuum.

If you still have concerns about exposure levels or are unable to implement the suggested practices, please consult a qualified industrial hygienist for further guidance.

Safe Working Practices :

- Never use power saws indoors or in poorly ventilated areas.
- Never dry sweep; always use an M Class vacuum or dampen dust first.
- Never use grinders.
- Always use a dust-reducing circular saw with a suitable blade, connected to an M Class vacuum.
- Warn others before cutting to minimise dust exposure.
- Always follow tool manufacturers' safety guidelines.
- Expose only the necessary blade depth for the material thickness.
- Always wear a properly fitted dust mask or respirator (P1 or higher).
- Rotate personnel on cutting tasks to limit silica exposure.



3. Durability

3.1 Compliance

Similar to other products containing quartz (such as concrete and clay), IBS FIBRE[®] WAB can release dust containing quartz particles when mechanically processed (e.g., cutting, sanding, drilling). Inhalation of high concentrations of this dust may irritate the respiratory system and could also cause irritation to the eyes and skin. Prolonged or high-level exposure to respirable quartz dust can lead to lung disease (silicosis) and increase the risk of lung cancer.

To minimise risk:

Use cutting tools equipped with dust extraction or suppression features whenever possible. Ensure proper ventilation in the work area. Protect against dust exposure by wearing suitable personal protective equipment, including safety goggles, protective clothing, and an approved respirator, such as a dust mask of at least type P2.

For additional safety information, please refer to the relevant Product Data Sheet, available upon request.

3.2 Responsibility

Designers and/or contractors responsible for the intended project should follow the details and recommendations specified in this manual.

It is also wise to keep in mind that all designs and constructions should comply with appropriate and relevant requirements of current legal building codes, regulations and standards, both domestic and international.

*The information provided in this installation guideline is valid at the time of publication. IBS reserves the right to change the information contained in this document without prior notice. It is your responsibility to ensure that you have the most up-to-date information available, including at the time of applying for a building consent.

3.3 Conditions

- When used on the floor, Install over an existing substrate, such as Plyfloor, OSB flooring, or particle board flooring.
- When using IBS FIBRE® WAB, you should apply a waterproofing system prior to installing tiles.
- Ensure the exsiting substrate is level using a straight edge and is not out of level by more than 1mm over 1 metre length.
- Ensure the substrate is clean, dry, and free from dust or debris before installation.
- Allow adequate curing time for any adhesives or compounds used before laying tiles
- Maintain a consistent temperature and humidity level during installation to ensure optimal performance.

3.4 Defects

Before Installation, please ensure you check the panels for defects or damage.

3.5 Differing Installation

To ensure the warranty on the product remains valid, it is crucial to follow the design and installation guidelines provided. Failure to adhere to these instructions may result in the warranty being voided.

- Follow manufacturer guidelines for expansion joints and movement accommodation
- Inspect the IBS FIBRE[®] WAB for any damage before installation; replace any damaged sheets.
- Walls shall include those provisions as required by the NZBC Acceptable Solution 'E2/AS1' 'External Moisture'. In addition all wall openings, penetrations, junctions, connections, window sills, heads and jambs must incorporate appropriate fashings for waterproofng. The other materials, components and installation methods used to manage moisture in external walls, must comply with the requirements of relevant standards and the NZBC.
- For further information on designing for weathertightness refer to BRANZ Ltd and the Ministry of Business Innovation and Employment (MBIE) updates on the following websites respectively, www.branz.co.nz and www.building.govt.nz.
- For timber frame walls longer than 12m, it is best practice to allow for construction joints to accommodate movements generated due to timber shrinkage or defections.

3.6 Prohibited Uses

Specifiers, designers and installers must ensure that any time that IBS FIBRE[®] WAB is installed that it is only used when all conditions are met in relation to the local requirements as well as E2/AS1 and the current Building Code.

4. Design

4.1 Check the Substrate

- The framing must also fully support all sheet edges. It must be rigid and not rely on the cladding sheet for stability. All timber framing sizes must be as specified in this installation guide.
- They must also comply with the NZBC or be suitable for the intended building work.
- Timber framing must be in accordance with framing manufacturer's specification.
- Lightweight steel framing must be in accordance with Nash Design and NZS 3404 Steel Structures Standard.

4.2 Framing

In order to achieve an acceptable wall finish, it is imperative that framing is straight and true. Framing tolerances must comply with the requirements of NZS 3604. All framing shall be made flush or can be installed vertically or horizontally.

Specific requirements for framing must be determined by a design engineer as per prevalent building codes prior to installation.

Galvanized steel or timber may be used. Dimensions (gauge and web depth) will depend on the partition's height and local requirements.

Structure must be sound and aligned and comply with the local regulations. In any case, maximum expected deflections cannot be bigger than L/360.

Minimum width of timber or flange of metal studs must offer minimum 35mm to fix the boards. Refer to Figures 3 and 4.

All the edges of the boards must be properly supported by means of noggins or dwangs or stiffeners. The maximum stud's separation between centres cannot be bigger than 600mm.

Refer to Figure 8 on page 17 for fastening position.

4.3 Frame Tolerances

Make sure the frame is square and start from a central datum line. The frames should be straight and level to ensure a flush surface for the sheeting.



4.4 Timber

Timber framing must meet at least the requirements set out in NZS 3604, "Timber Framed Buildings." Additionally, the treatment and moisture content of the timber framing must comply with NZS 3602 standards.

4.5 Steel

The minimum size for steel stud framing should be 64mm deep by 35mm wide, with a minimum base metal thickness (BMT) of 0.55mm. Steel framing must meet the minimum stiffness requirements outlined in NZS 3604. For additional guidance on steel framing, refer to the NASH 3405 document or consult your steel framing supplier. Steel sections should be appropriately galvanized and zinc-coated to meet the durability requirements of the NZBC. Consult the framing manufacturer for more information. Joints must not have studs less than 35mm wide. For tiled applications, it is advisable to use 0.75mm thick steel framing to ensure the necessary rigidity and stiffness.

4.6 Masonry Substrate

Always allow sufficient time for the substrate to dry before installing IBS FIBRE[®] WAB fibre cement boards. The wall surface must be clean, dry, and free of any materials that could affect the alignment of the battens. See 5.8 for further details.



5. Installation

Below is the recommended process for IBS FIBRE® WAB, please make sure you follow the below steps in order.

5.1 Panel Fixing In Wall Applications

Fix IBS FIBRE [®] WAB across the framing (at right angles to the studs). IBS FIBRE[®] WAB boards can be installed vertically or horizontally, but only in a staggered pattern.

All joints must coincide with the centre of the studs and noggins. Care should be taken that no joints are located directly above the jamb of window or door openings unless constructed as a vertical movement control joints. The joints must be located at least 200mm in from the jamb, and away from any area of great stress. Refer to Figure 5 below.

- 1. IBS FIBRE [®] WAB fibre cement boards
- 2. Thermal insulation

- 3. Timber batten
- 4. Building underlay membrane if applicable







Figure 6 Vertical alignment



Figure 7 Horizontal alignment

5.2 Panel Fixing Requirements

IBS FIBRE[®] WAB Sheets must be kept dry and under cover whilst in storage or during installation. Framing moisture contents must not exceed the maximum limit specified in NZS3602 prior to sheet installation. Every endeavour must be made to keep framing dry once sheet fixing commences.

Table 2 - Fixing to Timber Studs		
Fixing to Timber Studs		
IBS FIBRE [®] WAB 9mm board	30mm x 2.8 Galvanised or Stainless Steel FC nails	
Fixing to Steel Studs (0.55mm to 1.5mm BMT)		
IBS FIBRE [®] WAB 9mm board	No. 8 x 30mm Countersunk head screw	

5.3 Fasteners

Fasteners must be durable and compatible with all materials to ensure assembly integrity. For timber frames, use collated screws for quick installation of IBS FIBRE® WAB Linings.

Alternatively, fix with stainless steel screws, 40 x 2.8mm nails, or 40 x 2.87mm RoundDrive gun nails. For 0.55–1.0mm BMT steel framing, use 30mm Buildex[®] FibreZip[®] Class 3 collated screws, avoiding sea spray zones.

Nails should be flush, while screws can be 0.5mm below the surface for the desired finish. In steel framing, place fasteners near stud corners to prevent flange deflection.





5.4 Fixing IBS FIBRE[®] WAB panel

Any gaps between panels for vertical and horizontal joints must be filled with the base coat flushing compound before bedding in a 50mm wide alkaline resistant fibre glass mesh tape. Finish flushing the joints as per normal trade practice for fibre cement sheet.



- 1. 50mm Alkali resistant fiberglass mesh tape
- 2. IBS FIBRE® WAB

Figure 9 Joint treatment

For fastener selection and spacing, avoid fixing sheets to the bottom chord of roof trusses. Instead, use ceiling battens or furring channels, which provide more secure support, better load distribution, and improved alignment. This method also makes maintenance easier and ensures a more stable and reliable installation.



STEP 1 Fix sheet to the open side of flange



- 1. Place 6mm packers along the floor to provide temporary support for the sheets, accommodating any frame movement or shrinkage.
- 2. Position the sheets as shown in Figure 11, ensuring they are properly aligned.
- 3. Ensure the sheet is level by starting from the center and working outward to avoid drumming. Regularly check the level as you go.
- 4. Leave a 1-2mm gap between IBS FIBRE[®] WAB Lining sheets at all vertical, horizontal, and corner joints. This gap allows for expansion and contraction of the material.





Figure 11 First Sheet

Figure 12 Fixing remaining sheets

Finally, secure the remaining sheets following the same sequence as in Figure 12 for consistent alignment and a smooth installation.

5.5 Tiled And Untiled Wall Application

Fix IBS FIBRE® WAB across the framing (at right angles to the studs). IBS FIBRE® WAB boards can be installed vertically or horizontally, but only in a staggered pattern.

All joints must coincide with the centre of the studs and noggins. Care should be taken that no joints are located directly above the jamb of window or door openings unless constructed as a vertical movement control joints. The joints must be located at least 200mm in from the jamb, and away from any area of great stress. Refer to Figure 8 on page 17 for fastening position.

Untiled walls

Where IBS FIBRE® WAB Lining will remain untiled, the sheets can be fixed using fasteners or a combination of fasteners and adhesive. Please refer to Figures 14 and 15 for guidance.



- 1. All surfaces to receive adhesive must be clean, free of dust, oil, etc.
- 2. Ensure daubs of adhesive never coincide with permanent fastener points, as adhesive shrinkage may cause fastener head protrusion.

Tiled walls

Where IBS FIBRE[®] WAB Lining will be finished with tiles, the sheets must be fixed using fasteners only, as shown in Figure 8 page 17.

For tiled wall applications, stud spacing should be between 400mm to 600mm centers for 9mm IBS FIBRE® WAB Lining.

For more details, refer to Figure 15 below.



- 1. Install IBS FIBRE[®] WAB Lining horizontally for tiled applications.
- 2. Apply waterproofing membranes to wet area walls before tiling, following manufacturer guidelines.
- 3. Finish recessed edges with a Base Coat (top coat not needed behind tiles) and seal square sheet joints with flexible sealant.
- 4. Ensure full perimeter sheet support and fixing when installed horizontally; stagger vertical sheet joints.
- 5. Do not stagger fixings at joints (see Figure 15).
- 6. Use fixings at a maximum of 200mm centers for untiled applications and 150mm centers for tiled applications.

5.6 Fixing to Ceilings/ Masonry/ Concrete wall

For ceiling applications, we recommend the fastener/adhesive method. Refer to Figure 16 for details.



- 1. Do not install tiles on ceilings.
- 2. Use adhesive and fasteners; don't rely on adhesive alone.
- 3. Ensure surfaces for adhesive are clean and dust-free.
- 4. Avoid adhesive at fastener points to prevent head protrusion
- 5. Flush stopping of joints is recommended for recessed edge IBS FIBRE® WAB Lining.
- 6. If nogs or dwangs are missing, support sheet edges with a 300-400mm IBS FIBRE® WAB Lining strip adhered to the rear and centered over the joint.
- 7. 40mm screws galv or stainless steel 1/2 tube glue per 2400 x 1200 sheet screws installed at 200mm crs.

5.7 Fixing to Masonry/Concrete wall

IBS FIBRE® WAB Lining can be installed over masonry, concrete, and Aerated Autoclaved Cement (AAC) substrates by adhering to the guidelines outlined below.

5.8 Timber Batten & Furring Channel Fixing

- This method accommodates uneven and misaligned substrates, allowing for adjustments to large surface variations.
- Timber battens can be fixed directly to walls, or metal furring channel anchor clips can be used first.
- A 35mm deep timber batten is recommended for full structural support.
- Use deeper furring channels if services run over walls.
- Use appropriate masonry fasteners to secure timber/steel battens or recessed furring channels (see Figure 17).
- Pack behind battens as needed for a flat surface.
- Ensure all IBS FIBRE[®] WAB Lining edges are supported on the wall.



- 1. This method works for both tiled and untiled applications.
- 2. Use timber battens or proprietary steel battens; recessed furring channels are best where space is limited.
- 3. Follow the manufacturer's guidelines for spacing and fixing anchor clips.
- 4. Sheets can be fixed vertically using this method.
- 5. Ensure timber batten depth matches the fastener length.
- 6. Use fixings at a maximum of 200mm centers for untiled applications and 150mm centers for tiled applications.

5.9 Firewall

Because IBS FIBRE[®] WAB cement boards are a non-combustible material they can be designed to be used in conjunction with a fire rated wall system that meets the performance requirements of the NZBC C2-C6 Protection from fire.

A fire wall is a full system, designed with specific components to meet the purpose of the intended use of the building and the area within or external to the building requiring protection.

5.10 Flashing

Before installing IBS FIBRE[®] WAB fibre cement boards, ensure that all waterproofing membranes or treatments are completed in accordance with local regulations and building codes, paying particular attention to:

- External corners
- Internal corners
- Windows and door openings
- Areas where pipes or wiring penetrate the panels

5.11 Wet Area Application

IBS FIBRE® WAB cement boards are ideal for wet area applications. In shower installations, IBS FIBRE® WAB Lining must be covered with a waterproofing membrane before tiling.

Note: Paints are not suitable for wet area applications (splash zones) and should not be relied upon for waterproofing.

5.12 Wet Area Penetration

Sealing penetrations as per BRANZ Good Tiling Practice.

Movement Joints

Although IBS FIBRE® WAB is dimensionally stable, it is however, recommended and important to include appropriate movement joints. This will help to prevent bowing, cracking or formation of peaks at joints due to contractions and expansions generated by thermal, moisture and structural variations.

A range of different types of movement joints for use in construction are shown as follows:



Fixing spacing along all edges is nominal. 200mm centre and should be between 12mm and 20mm from the edge, 50mm from corner and nominal 300mm centres in the body of the sheet. Do not fix to top and bottom plates or noggins. For tiles areas fixing in the body of the board should be no more 200mm apart.



Figure 22 Movement joint details

- 1. Column/wall
- 2. Mineral wool
- 4. Z corner bead
- 5. IBS FIBRE® WAB
- 6. Timber stud



- Install sheets vertically on the inner face of external walls with cavity battens, ensuring nogs or dwangs are fixed at a maximum of 800mm centers.
- Use sheets with two long edges recessed, and support all sheet edges with framing.

Figure 19 Fastening position

IBS FIBRE® WAB Maximum Control Joint Spacing

TABLE 3 Maximum Control Joint Spacing			
Wall Finishes	Steel framing	Timber framing	
General walls	6000mm (< 0.75mm BMT) 9000mmm (0.8-1.6mm BMT)	7200mm	
Tiled walls	4800mm	4200mm	

Control Joints

Control joints are installed at along the long length of the walls or ceilings. Control joints need also to be constructed whenever there are changes in ceiling directions and wall intersections. Control joints must coincide with a joint between the tiles which is filled with elastic caulking material such as silicone or polyurethane. Refer to Table 3 for control joint spacing and Figure 20.



Figure 20 Control joint details

- 1. Building wrap (If applicable)
- 2. IBS FIBRE® WAB
- 3. Tile adhesive
- 4. Control joint

Relief Joints

Control joints are installed at along the long length of the walls or ceilings. Control joints need also to be constructed whenever. Refer to Figure 21 for Relief joint details.



- 1. Building wrap (If applicable)
- 2. IBS FIBRE® WAB
- 3. Tile adhesive
- 4. Expansion joint
- 5. Control joint

Figure 21 Relief joint details

6.3 Waterproofing Membrane

A waterproofing membrane must be applied to IBS FIBRE® WAB Lining when used in wet or water splash areas. A reinforcing fiberglass band should be installed at corners and where walls meet the floor.

Always follow the recommendations of the waterproofing membrane manufacturers.

BRANZ-appraised waterproofing membranes are recommended for this application.

Additionally, it is advisable to use H3.1 treated timber framing and ceiling battens to improve durability, given the high levels of condensation.

Areas of use for IBS FIBRE[®] WAB

- **Laundry Rooms:** Ideal for areas exposed to moisture and splashes.
- **Kitchens:** Suitable for splash zones around sinks and cooking areas.
- **Outdoor Shower Areas:** Excellent for wet environments where durability is needed.
- **Commercial Kitchens:** Can be used in food preparation areas due to its moisture resistance.
- **Saunas and Steam Rooms:** Appropriate for high-humidity spaces.
- **Basements:** Effective in areas prone to moisture exposure.
- **Poolside Areas:** Useful for surroundings of swimming pools, providing durability and moisture resistance.
- **Public Restrooms:** Ideal for high-traffic areas that require moisture-resistant materials.
- **Dry Wall Linning:** As a high impact high quality internal dry wall linning.

6. Finishing

6.1 Jointing

IBS FIBRE® WAB Lining joints are finished with proprietary jointing compounds and reinforced with perforated paper tape, suitable for recessed edge, square edge, and butt joints. The installer is responsible for joint performance, which depends on installation practices and workmanship. IBS recommends the best practices outlined in Table 6 to minimize joint cracking and other issues.

Factors affecting joint performance include framing, movement, installation quality, vibrations, moisture, humidity, and temperature. Installers and designers must consider these factors when positioning joints.

6.2 Set recessed edge joints

Make sure the recesses are clean and free from dust and contaminants. Seal the sheet edges with Multiplast[®] Resin waterproofing admixture or a similar product before stopping. In hot and dry conditions, dampen the area around the joint before proceeding.



Step 1- Preparation

Make sure recesses are clean and free of dust. Seal sheet edges with Multiplast[®] Resin waterproofing admixture or similar products before stopping. If conditions are hot and dry, dampen the area around the joint beforehand.



Step 2 - First coat

Apply Base Coat to fill the recess with a 150mm broad knife.



Step 3 - Embed tape

Firmly press the perforated paper tape or mesh into the joint with a 50mm broad knife, ensuring there are no voids underneath and removing any excess compound.



Step 4- Thin layer

Quickly fill the joint covering tape with a layer of Base Coat using a 150mm broad knife.



Step 5 - Second coat (untiled walls only)

Once the first coat is dry, use a 200mm trowel to apply a second coat of Base Coat, about 180mm wide, over the recess, feathering the edges.



Step 6 - Finishing coat (untiled walls only)

Make sure the second coat is completely dry. Using a finishing trowel, apply a 280mm-wide coat of Top Coat centrally over the joint, blending the edges. Let it dry fully before sanding.



Step 7 - Fastener heads (untiled walls only)

Apply a finishing coat of Base Coat to the fastener heads, blending the edges. Let it dry completely before sanding.

6.3 Waterproofing Membrane

A waterproofing membrane must be applied to IBS FIBRE® WAB Lining when used in wet or water splash areas. A reinforcing fiberglass band should be installed at corners and where walls meet the floor. Always follow the recommendations of the waterproofing membrane manufacturers. BRANZ-appraised waterproofing membranes are recommended for this application.

6.4 Preparation

Before you install the panels, check the framing structure is square and true.

- The framing must also fully support all sheet edges. It must be rigid and not rely on the cladding sheet for stability.
- All timber framing sizes must be as specified in this installation guide. They must also comply with the NZBC or be suitable for the intended building work.
- Timber framing must durable and be in accordance with framing manufacturer's specification.
- Lightweight steel framing must be in accordance with Nash Design and NZS 3404 Steel Structures Standard.

6.5 Sealants

All sealants must meet the relevant requirements of the NZBC. Their application usage must be in accordance with manufacturer's instructions. Check with sealant manufacturer prior to coating over sealants. Some sealant manufacturers do not recommend coating over their product.

6.6 Paint Finishes

Before applying paint finishes, remove any sanding dust and ensure the surface is prepared for painting. Always follow the paint manufacturer's guidelines for suitability, mixing, and application.

Note: It is advisable to use a sealer coat or preparation undercoat.

6.7 Tiled Applications

Before starting tiling, it is advisable to consult the BRANZ "Good Tiling Practice" guide to ensure proper substrate preparation and installation. Control joints must be included to accommodate thermal and framing movement, as well as stresses that may occur over the building's lifespan. These control joints should extend through the tiles to the exterior face. IBS recommends using flexible tile adhesive for tile applications; please check with the adhesive manufacturer for suitability and application details.

7. Care, Maintenance

7.1 Care & Maintenance

Under normal conditions, IBS FIBRE® WAB cement boards will not need maintenance, as long the tiles paint system is maintained.

If water damage does occur to an area where IBS FIBRE[®] WAB cement boards has been used, first remove the protective paint layer. Then make sure the area is allowed to dry before replacing the protection.

Maintain the finish in accordance with the manufacturer's requirements.

This will depend on the finish chosen, but will typically include:

- Regularly washing or wiping clean protective surfaces.
- Ensuring the paint system is maintained.



8. Warranty

Independent Building Supplies Limited (IBS) supplies sustainable building products, which when used and installed in accordance with all relevant instructions and specifications, will be fit for purpose.

As part of our commitment to performance, IBS provides a warranty in respect of IBS FIBRE® WAB (Product) in accordance with the following terms and conditions.

These terms and conditions must be read in conjunction with all product specific relevant and applicable technical documentation, information and guidelines published or referenced by IBS from time to time (Specifications) in relation to the Product.

1. IBS warrants that:

- i. At the time of delivery to the merchant or site (where applicable) the IBS supplied Product will:
 - a. Be free from freight related defects;
 - b. Be free from defects that may have arisen through defective factory workmanship or materials; and
 - c. Conform to the performance characteristics listed on the applicable pass[™] (warranted condition).
- ii. Once installed properly and in accordance with all appropriate Specifications the Product will continue to meet the relevant provisions of the building code as described on t he applicable pass[™] (warranted performance).

2. Date warranty valid:

- i. IBS warrants:
 - a. The warranted performance for 15 years from proven date of purchase or dispatch from IBS whichever date is the earlier; and
 - b. The warranted performance for the durability period as specified by the NZ Building Code.

The durability period begins from the date the product is first installed or two months after the date of delivery, whichever is the earlier.

ii. All enquiries relating to this warranty must (in the first instance) be directed to the place of purchase, the supplier or the installer.

i. By submitting a claim under the warranty, you grant IBS and its agents, consultants and contractors full rights of access, at no cost and at any reasonable time, to the relevant building to inspect the Product and the installation method for the purpose of determining the validity of the claim.

1. In the event a breach of the warranty is proven, the following applies:

- i. For any valid and accepted breach of a warranty, IBS will, in its sole discretion, either:
 - a. Repair, replace or rectify the defective Product; or
 - b. Refund the purchase price of the defective Product. Where applicable the value will be reduced pro-rata, based on the remaining life of the Product (as set by the relevant durability requirements of the NZ Building Code).
- ii. Any action taken by IBS in satisfaction of a warranty claim shall constitute full and final settlement of all claims and IBS's total liability related to a breach of the warranty is limited to the direct cost to IBS of performing either of the above options.
- iii. IBS reserves the right to supply other comparable materials or products should the warranted Product no longer be supplied by IBS.

2. This warranty is subject to the following:

- i. Receipt of evidence of the date of purchase of the Product.
- ii. Evidence satisfactory to IBS of failure of the Product.
- iii. Receipt of a written claim from the claimant either within 30 days of when the defect or failure of the Product would have become reasonably apparent or, if the defect was reasonably apparent prior to installation, then the claim must be made prior to installation.
- iv. The claim must include full details of the alleged defect in the Product.
- v. Evidence satisfactory to IBS that all design, storage, transport, installation and maintenance requirements for the Product have been met or carried out in accordance with the Specifications and in terms of best building practice and the building code.
- vi. The warranty does not cover failure or problems caused by defective use, failure relating to improper design of the project structure, structural failure, settlement, movement of materials to which the Product is attached or dependent on, acts of God including but not limited to earthquakes, cyclones, floods or other severe weather conditions, inadequate maintenance, growth of mould, mil dew, fungi, bacteria or any organism on any Product, or acts or omissions of a third party over whom IBS has no control.

- vii. The warranty does not cover failure or loss arising from the failure to follow all relevant IBS advice and requirements or failure to adhere to the Specifications.
- viii. Normal wear and tear, including non- performance related changes, are excluded from this warranty.
- ix. All relevant information relating to the Specifications is uncontrolled in printed format and is available from IBS (refer to www.ibs.co.nz).

3. Limitations

i. IBS will not be liable for a warranty claim unless:

the use of the Product meets the installation, storage, transport, use and maintenance requirements and Specifications in respect of the Product and the customer is responsible to ensure these are received and understood; and (b) the claim procedure set out in these terms is correctly followed and the required information is provided.

- ii. IBS will in no circumstances be liable for:
 - a. Any damage or loss caused by a person other than IBS, or by any other factor outside IBS's reasonable control, including without limitation fire, moisture, lightning, liquid, strike or lockout, chemicals, insects or animal;
 - b. Any damage or loss caused or contributed to by incorrect or improper use or a failure to comply with all Specifications and all applicable building codes, regulations and legislation;
 - c. Neglect, abuse, misuse, growth of mould/ mildew/fungi/bacteria or other organism; or
 - d. Any direct or indirect loss, or consequential loss or damage, of any kind.
- iii. All warranties, conditions, liabilities and obligations implied by law or custom (other than the warranties in these terms) are excluded to the fullest extent permitted by law, and without limitation, where the Product is provided for the purposes of trade, the provisions of the Consumer Guarantees Act 1993 shall not apply.
- iv. Except as provided in these terms, IBS will not be liable (under legislation, contract, tort, or otherwise including in equity) in respect of any defects in the Product or for any other cost, expense or liability caused by or related to the use of the Product.

9. Technical Properties

IBS FIBRE® WAB fibre cement board is an excellent choice for wet areas and high-traffic lining in dry construction applications. It features a smooth, sanded surface and rebated edges, allowing for a high-quality finish. Resistant to long-term moisture exposure, IBS FIBRE® WAB does not support mould growth in humid environments. Its delamination strength can be up to 70% higher than that of water-resistant plasterboard. IBS FIBRE® WAB also exhibits very low moisture movement, making it a stable and robust substrate for ceramic and stone tiling, painting, or other wall finishes. The board will not bow or deform during use.

TABLE 6 IBS FIBRE [®] WAB General Technical Properties				
Parameter	Value	Standard		
Apparent Density	>1300kg/m ³	AS/NZS 2908.2		
Tolerance on Length, Width and Thickness	Length: ≤±2mm Width: ≤±2mm Thickness: ≤10%	AS/NZS 2908.2		
Straightness of Edges	≤: 1mm/m	AS/NZS 2908.2		
Squareness of Edges	≤: 1mm/m	AS/NZS 2908.2		
Bending strength (Type A, category 3)	≥10MPa	AS/NZS 2908.2		
Moisture content	8-13%	ASTM C1185		
Water adsorption	32±2%	ASTM C1185		
Moisture movement	<0.25%	AS/NZS 2908.2		
Water permeability	No formation of drops of water on the underside of the specimen after 24h	AS/NZS 2908.2		
Warm water	Passed(Li=0.95)	AS/NZS 2908.2		
Freeze-thaw	Passed(50 cycles)	AS/NZS 2908.2		
Heat rain	Passed(50 cycles)	EN12467:2012		
Soak-dry	Passed(50 cycles)	EN12467:2012		
Reaction to fire	Class A1	EN12467:2012		
Combustion performance	Non-Combustible	AS 1530 Part 3:1999		
Fire Hazard Properties Ignitability Index Spread of Flame Index Heat Evolved Index Smoke Development Index	0 0 0 0-1	AS 1530 Part 3:1999		

IBS FIBRE® WAB General Properties

IBS FIBRE® WAB Component Properties

TABLE 5 IBS FIBRE [®] WAB Component Properties				
Component Name	CAS Number	UN Number	EINECS	
Portland Cement(Calcium Silicate)	66997-15-1	Not a hazardous material	AS/NZS 2908.2	
for shipping purposes	266-043-4	<60%	AS/NZS 2908.2	
Quartz Sand	Straightness of Edges	≤: 1mm/m	AS/NZS 2908.2	
(Crystalline Silica)	14808-60-7	Not a hazardous material	AS/NZS 2908.2	
for shipping purposes	238-878-4	<30%	AS/NZS 2908.2	
Wood pulp (Cellulose)	9004-34-6	Not a hazardous material	ASTM C1185	
for shipping purposes	232-674-9	<10%	ASTM C1185	
Other non-hazardous ingredients(pigments, fillers, and surface coatings)		<5%		

10. Additional Resources

10.1 Compliance and Information

For compliance & information of IBS FIBRE® WAB refer to:

- IBS Product Specification
- IBS Maintenance and Warranty of IBS FIBRE® WAB
- www.ibs.co.nz
- 0800 367 759

10.2 Designing outside of scope

If you're designing or installing a product that deviates from these specifications or the guidelines in this design and install guide, please note that this will void any warranty claims unless specifically approved by IBS prior to any works stating.



11. Frequently Asked Questions

Q. What is IBS FIBRE® WAB board?

A. It's a fibre cement board designed for wet area and high traffic lining in dry construction applications, offering low moisture movement and high stability.

Q. What are the uses of IBS FIBRE® WAB board?

A. It can be used as an internal dry wall, ceiling panel, floor and wall substrate lining, especially in wet areas.

Q. Is IBS FIBRE® WAB board moisture resistant?

A. Yes, it is immune to long-term moisture exposure, making it a stable substrate for tiling, painting, or wall finish.

Q. Can IBS FIBRE[®] WAB board be used for tiling?

A. Absolutely, it provides a very stable and robust substrate for ceramic and stone tiling.

Q. Is IBS FIBRE[®] WAB board suitable for high traffic areas?

A. Yes, it's designed for high traffic lining and is immune to long-term moisture exposure.

Q. How does IBS FIBRE[®] WAB board contribute to a building's structural integrity?

A. Its low moisture movement ensures it remains stable and robust, contributing to the overall structural integrity of the building.

Q. What sizes does IBS FIBRE® WAB board come in?

A. It is available in various sizes, including 2400 x 1200 x 9mm and 2700 x 1200 x 9mm.

Q. How does IBS FIBRE® WAB board impact the installation process?

A. Its stability and moisture resistance streamline the installation process, providing a reliable substrate for further finishing.

Q. Can IBS FIBRE[®] WAB board be used in kitchens and bathrooms?

A. Yes, it's ideal for partitions in wet areas like kitchens, bathrooms, and industrial settings.

Q. What makes IBS FIBRE® WAB board different from other lining boards?

A. Its resistance to moisture and low moisture movement make it a superior choice for wet area or drywall applications.

Q. How does IBS FIBRE® WAB board handle impact and abrasion?

A. It is designed to withstand knocks, bumps, and abrasion, making it suitable for areas prone to such damage.

Q. Is IBS FIBRE® WAB board termite resistant?

A. Yes, it is resistant to the attack of termites, insects, and other vermin.

Q. Can IBS FIBRE WAB board be used for external applications?

A. While primarily for internal use, it can also be used for external ceiling panels.

Q. What finishing options are available for IBS FIBRE WAB board?

A. It can be finished with paint, wallpaper, tiles, stone or vinyl to provide a variety of looks.

Q. 15. Where can I purchase IBS FIBRE WAB board?

A. It is available from major suppliers of building materials and hardware.

12. Limitations

When you are specifying and installing IBS FIBRE® WAB the Installation Guide must be followed.

IBS FIBRE[®] WAB should not be installed on timber framing where the moisture content is greater than 18%.

Tiles must be installed with a flexible tile adhesive that's also compatible with IBS FIBRE® WAB. Talk to your preferred adhesive manufacturer for recommendations.

When used as a wall lining ensure stud centres do not exceed 600mm.

The below installation areas are considered critical to the successful installation of IBS FIBRE® WAB. Using this sheet as a checklist during installation will aid in problem free product installation and long term product durability post construction.

IMPORTANT NOTES:

All sections of this checklist should be completed in full.

Careful adherence to technical specification literature is critically important for completing IBS FIBRE[®] WAB cement construction. The construction shall comply with requirements of building consent. Any variations made should be approved by the BCA prior to work being undertaken.



13. Installation checklist

Installation checklist for IBS FIBRE® WAB board based on the information available:

	Items to be checked	√ Tick	Notes
	1. Pre-Installation Checks		
1	Verify the moisture content of timber framing is less than 18%.		
2	Ensure the panels are fully supported by a rigid flooring material when used as a flooring substrate.		
	2. Handling and Storage		
4	Handle boards with care to avoid damage.		
5	Store boards flat and off the ground, covered to protect from weather and onsite damage.		
	3. Cutting and Drilling		
6	Use appropriate tools for cutting and drilling the boards to avoid damage.		
7	Always follow safety guidelines for dust and debris control.		
	4. Installation		
8	Install boards in accordance with the IBS FIBRE® WAB Installation Guide.		
9	Use the correct fasteners and adhesives compatible with IBS FIBRE® WAB.		
	5. Board Fixing		
10	Fix boards firmly to the framing, ensuring they are properly aligned and spaced.		
11	Pre-drill holes for screws to prevent cracking.		
	6. Jointing and Finishing		
12	Use recommended jointing compounds and tapes.		
13	Finish joints smoothly to prepare for painting or tiling.		

	Items to be checked	√ Tick	Notes
	7. Tiling, Painting, and Finishing		
14	Ensure the surface is clean and dry before tiling or painting.		
15	Follow manufacturer's recommendations for adhesives and finishes.		
	8. Post-Installation		
16	Inspect the installation to ensure all boards are securely fixed and finished.		
17	Address any issues before proceeding with further construction or decoration.		
	9. Maintenance		
18	Regularly check for any signs of damage or wear.		
19	Repair or replace damaged boards as necessary to maintain integrity.		
	10. Health and Safety		
20	Always use personal protective equipment (PPE) when handling, cutting, and installing the boards.		
21	Follow all health and safety guidelines to prevent accidents.		



AND MANY

Wet Area Board



Design & Installation Guide

January 2025

3 Zelanian Drive, East Tamaki Auckland, New Zealand 2013 Contact Us for General Inquiries: & Phone: 0800 367 759



Scan the QR code to view all **IBS ShowerLine documents.**

