

IBS FIBRE® Groove

Design & Installation Guide



January 2025





SUSTAINABLE BUILDING PRODUCTS

Welcome to Independent Building Supplies (IBS), your trusted partner in the New Zealand building industry. Since our inception in 1993, IBS has been dedicated to sourcing and providing the highest quality building materials from around the globe. As a family business with four generations active in the building industry in New Zealand, we bring a wealth of experience and a deep commitment to excellence.


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 IBS

At IBS, we recognise that the foundation of any great building project lies in the quality of the materials used. That's why we meticulously select our suppliers, ensuring that every product meets our stringent standards for durability, performance, and sustainability. Our extensive range of offerings includes everything from plywood and panels to flooring and cladding, all tailored to meet the diverse needs of the New Zealand market.





*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.

- **IBS RigidRAP®**
- **IBS RigidRAP®- XT**
- **EUROFloor**
- **EUROLine**
- **IBS FIBRE® Range**
- **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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Contact us for more information or to talk to our team.

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1. Introduction

This document is intended for designers and installers to ensure that IBS FIBRE® Groove is specified and installed correctly.

1.1 Introduction

IBS FIBRE® Groove fibre cement board has a thickness of 7.5mm, featuring a 2.5mm deep, 5mm wide V-shaped groove at 100mm centres, mimicking the traditional tongue and groove style of paneling. The sheets are available in widths of 1200mm and lengths of either 2400mm or 2700mm. It is made from Portland cement, finely ground sand, softwood cellulose fibres, additives, and water.

Manufactured to meet the standards of AS/NZS 2908.2: 2000, it is classified as Type B, Category 3. IBS FIBRE® Groove can be utilised as an internal wall lining or as eave and soffit cladding, provided it is not directly exposed to the weather.

The following application guide offers basic recommendations for interior applications. For more information or specific requirements, please reach out to our Technical Department.

1.2 Scope

IBS FIBRE® Groove is suitable for use in wind zones up to and including extra high, as defined in NZS 3604:2011, or in areas with a wind design pressure (ULS) of 2.5kPa. It can be used in all corrosion zones as specified in NZS 3604:2011, and in conjunction with a primary structure that complies with the NZ Building Code, or where the designer and/or installer has determined that the existing structure is suitable for the intended building work. Additionally, it is suitable for use as an external soffit and eave lining, as well as an internal lining.

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

1.3 What is IBS FIBRE® Groove?

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

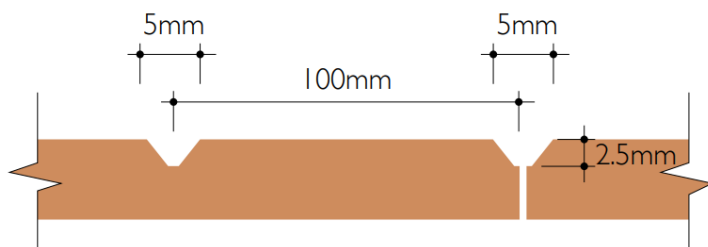


Figure 1
IBS FIBRE® Groove profile

1.4 Sizes & Applications

IBS FIBRE® Groove Technical Specifications

TABLE 1 - IBS FIBRE® Groove Technical Specifications			
Length (mm)	Width (mm)	Thickness (mm)	Weight per m2 of sheet (kg/m2)
2400	1200	7.5	32.6
2700	1200	7.5	37.3

1.5 Benefits

- Resistant to the attack of termites, insects and other vermin
- Moist, mould and water resistant
- Gives a great paint finish
- Impact resistant
- Dimensionally stable
- Easy to work and install

1.6 Intended Use

- Ceiling Linings
- Internal lining
- Eaves
- External soffit and eave lining
- Fascia Systems
- Interior Feature Walls

1.7 Supporting Info & Documents

This document must be read in conjunction with the:

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

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

2. Best Practice

2.1 Health & Safety

IBS FIBRE® Groove 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® Groove 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® Groove 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® Groove 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

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 2,3) 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.



Figure 2
Fibre cement blade.



Figure 3
Fibre cement blade.

2.4 Drilling

Drilling IBS FIBRE® Groove 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.

2.5 Service Penetration

Very often apertures need to be cut within a board in order to allow for penetration of services such as switchboxes, lights, access panels etc. Therefore, the following procedures would serve as general guidelines to achieve this requirement.

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.

3. Durability

3.1 Compliance

Similar to other products containing quartz (such as concrete and clay), IBS FIBRE® Groove 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 installed in an exterior application all edges must be sealed prior to installation.
- It is recommended that using best practice you should seal the back face of the sheet with one coat of paint prior to installation.
- It is required that a minimum of 150mm in from the edge around all sides including any cut outs are sealed on the back of the sheet.
- Always install IBS FIBRE® Groove ensuring that any external framing meets the requirements of B2/AS1.
- Always install IBS FIBRE® Groove on timber with a maximum moisture content of 18%

- Refer to NZS3602 for details around the allowable moisture content for your specific installation.
- 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 flashings for waterproofing. 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 deflections.

3.4 Prohibited Uses

Specifiers, designers and installers must ensure that any time that IBS FIBRE® Groove 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.

3.5 Defects

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

3.6 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.

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 Board Preparation

Ensure boards are dry to equilibrium moisture content before fixing. Damp boards should not be installed as they are prone to shrinking, which may lead to joint failure.

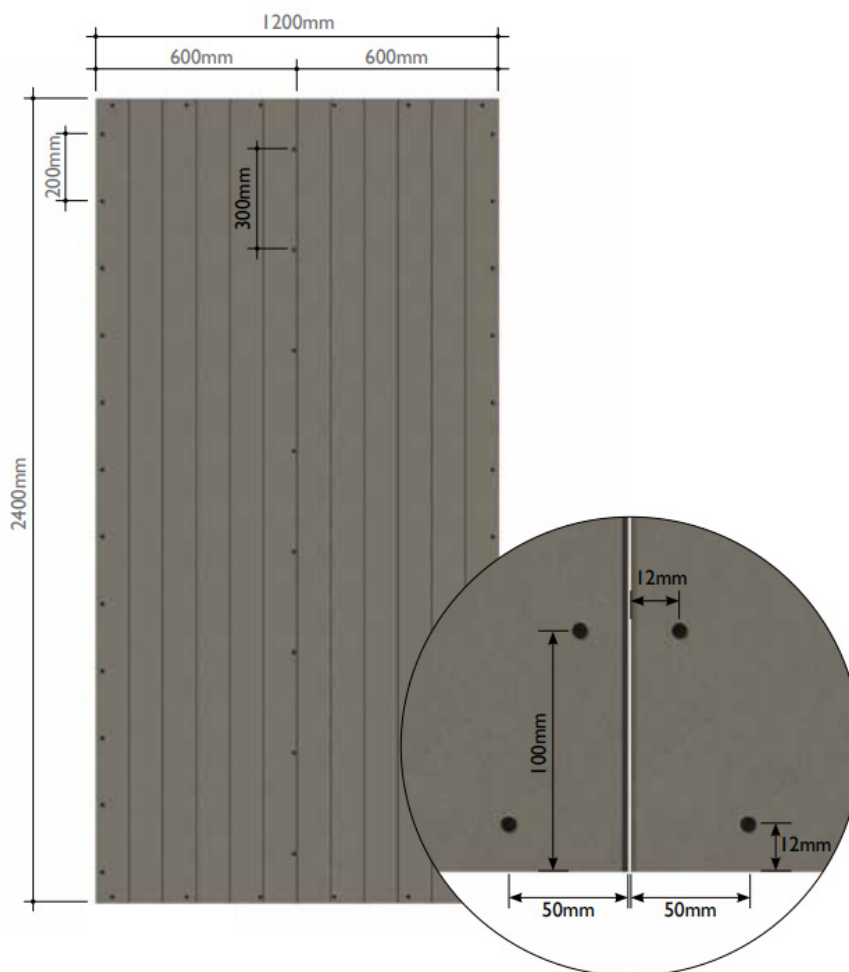


Figure 4
Boards pattern

IBS FIBRE® Groove may be fixed to timber or light gauge steel framing (0.5mm to 1.15mm gauge).

Framing centres must be:

- 600mm maximum for stud/joist spacing.
- 1200mm maximum for noggin or dwang spacing.
- 45mm minimum support face width for timber framing or 36mm minimum support face width for steel framing.
- Check the substrate is level and true.

4.3 Masonry Wall Installation

To install IBS FIBRE® Groove over new or existing masonry, lightweight steel or timber battens should be installed at a maximum vertical spacing of 600mm.

When placing the battens, make sure to use a damp proof course to separate them from the concrete surface. Secure the battens with masonry nails, screws, or light gauge nylon frame anchors, ensuring a maximum spacing of 300mm.

Then, install the IBS FIBRE® Groove panels as illustrated.

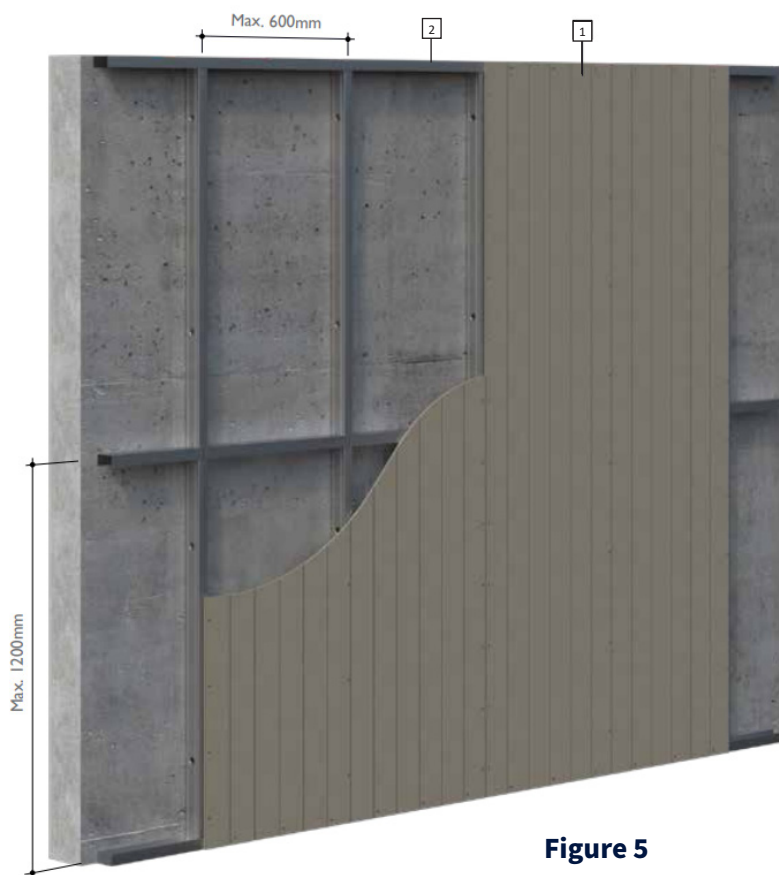


Figure 5

Masonry wall installation

1. IBS FIBRE® Groove board
2. Timber or steel battens 35mm x 45mm

5. Installation

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

5.1 Timber Framing Installation

To install IBS FIBRE® Groove over new or existing timber framing, ensure that the vertical studs are spaced a maximum of 600mm apart. Before installation, verify that the frame is plumb and true, with a moisture content not exceeding 18%. Proceed to install the IBS FIBRE® Groove panels as indicated.

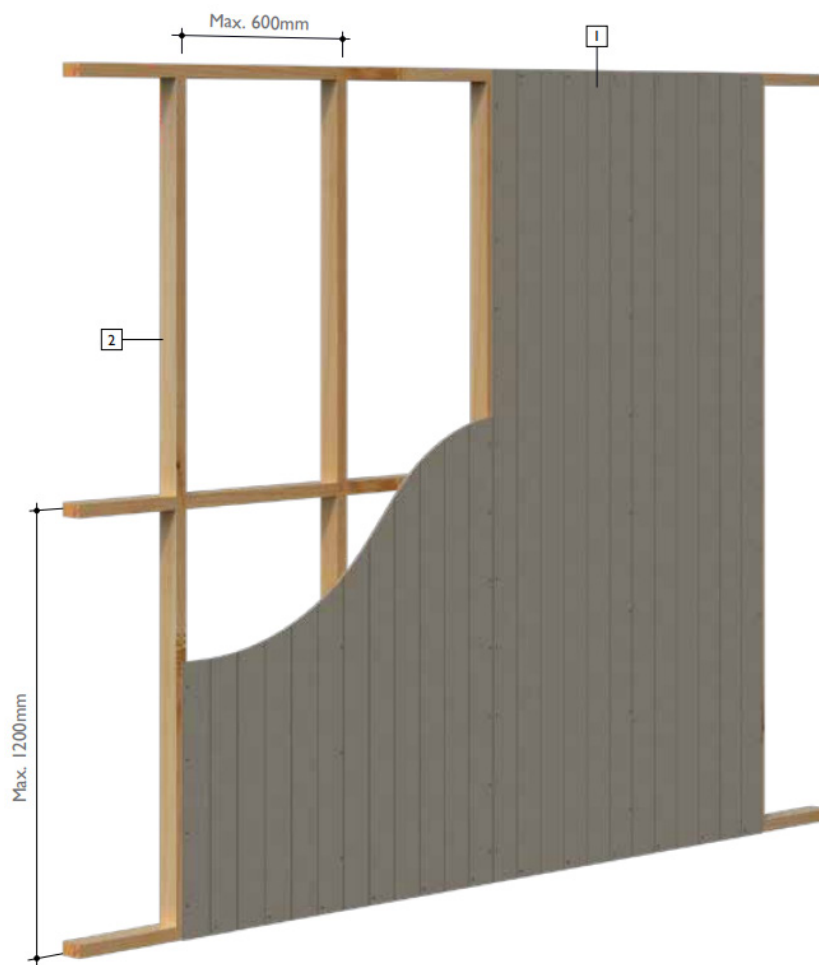


Figure 6

Timber framing installation

1. IBS FIBRE® Groove
2. Timber studs at 600mm centres

Framing centres must be:

- 600mm maximum for stud/joist spacing.
- 1200mm maximum for noggin or dwang spacing.
- 45mm minimum support face width for timber framing or 36mm minimum support face width for steel framing.
- Check the substrate is level and true.

You must use the following framing:

Horizontal timber framing support will depend on roof framing centres or ceiling joists. However, we recommend maximum spacings of 600mm centres.

IBS FIBRE® Groove cement boards are suitable for horizontal and racking soffits.

Horizontal framing fixing width:

- Timber: 40mm minimum
- Steel: 38mm minimum

Where required, the edge width can be increased by using trimpacking to the side of the horizontal support.

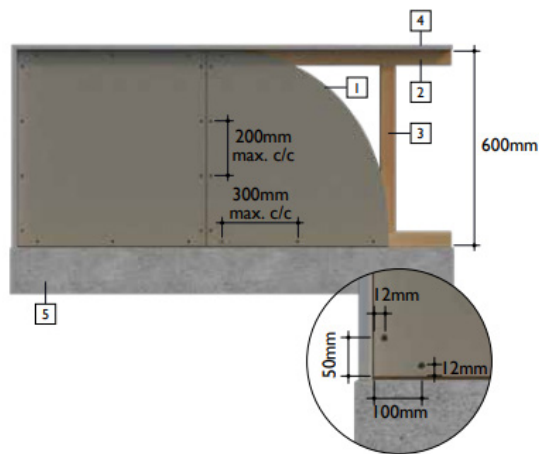


Figure 18

Ceiling board installation

1. IBS FIBRE® Groove cement boards
2. Timber battens at 600mm max. c/c
3. Timber rafter at 600mm max. c/c
4. Fascia board
5. Perimeter wall



Figure 8
First Sheet

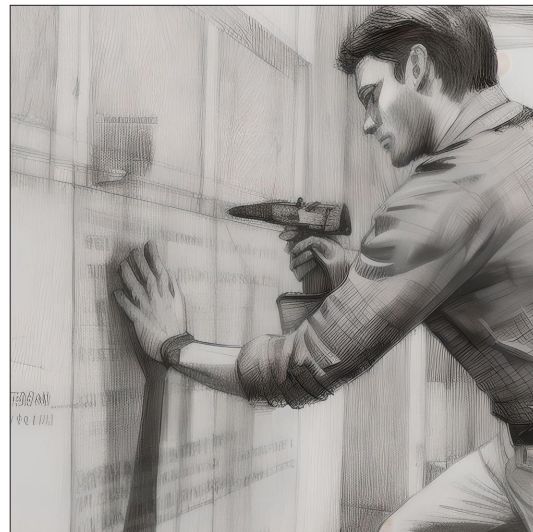


Figure 9
Fixing remaining sheets

5.2 IBS FIBRE® Groove Soffit Lining

For framing and fixing schedules, refer to Section 5.8 and Table 2.

All sheet edges must be supported by framing or a fascia board. Fixings should be spaced 200mm apart on all framing (see Figure 6 on Section 5).

IBS FIBRE® Groove Lining, with a maximum width of 600mm, can be jointed up to 150mm off the ceiling/soffit batten when using uPVC jointers.

Note:

Sheets can be jointed as per Section 5.6, Page 19.

Drip Edge

All soffit linings must be installed with either a grooved fascia (see Figure 15 Section 5.4) or exterior cladding that creates a minimum 15mm drip edge below the soffit. Typically, soffit linings are fitted into a recess in the fascia board to form the drip edge.

Structural Ceiling Diaphragms

- IBS FIBRE® Groove is suitable for use in structural ceiling diaphragms according to NZS 3604.

Notes:

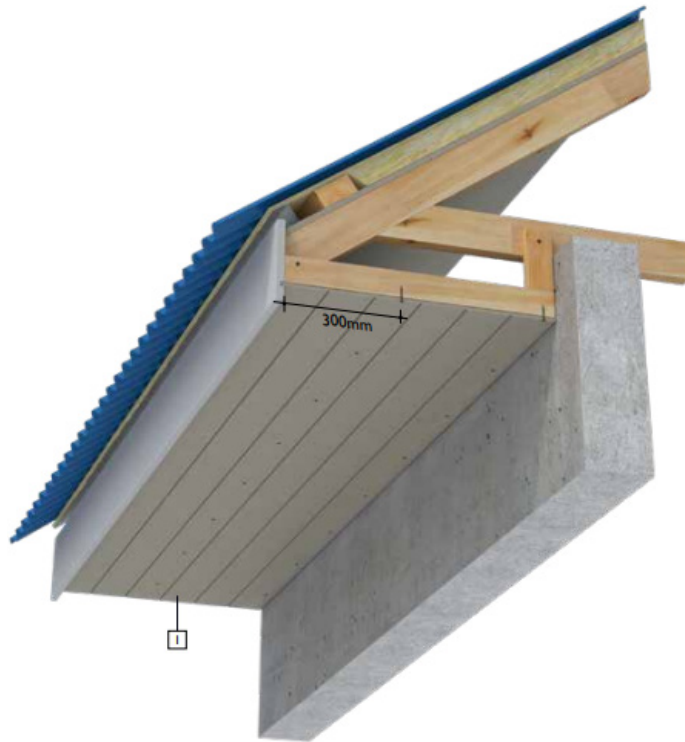
1. Avoid placing nails or screws within 100mm of adhesive daubs.
2. Always glue and use mechanical fixings when installing as a ceiling lining.
3. Use stainless steel fasteners in sea spray zones.
4. Use 40x2.8 galvanised nails or 50x2.87 Hot Dipped Galv D Head gun nails or 8x40mm galvanised wood or steel screws.

Fasteners should be flush with the sheet surface, or screws 0.5mm below and stopped. In steel framing, fasteners should be placed close to stud corners to prevent deflection.

5.3 Eave and Soffit Fixing

IBS FIBRE® Groove can be used as a soffit lining. It is compatible with all fascia boards, including uPVC and metal, as long as the groove can accommodate 7.5mm.

If the fascia groove is narrower, the leading edge of the IBS FIBRE® Groove can be chamfered for clearance. The soffit lining should be supported with fixings spaced a maximum of 300mm apart.



Note:

To achieve a concealed joint, butt the long edges together (half grooved). Refer to Figure 19 Section 5.6.

Figure 15

Eave and Soffit fixing

1. IBS FIBRE® Groove

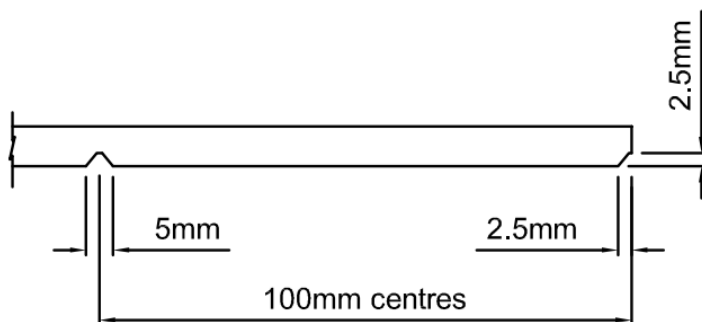


Figure 16

Sheet edge and groove detail

5.4 Ceiling Lining

IBS FIBRE® Groove can be utilised as an interior or exterior ceiling lining. Conceal the fixings by using countersunk screws, filled with epoxy filler and sanded flush. Fixing centers may be reduced if a compatible adhesive is used; support or partially install fixings until the adhesive has cured.

Proceed to install the IBS FIBRE® Groove panels as illustrated.

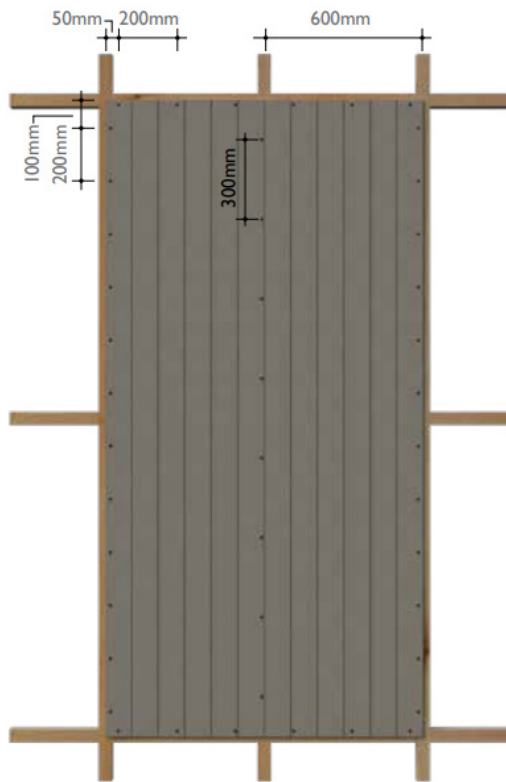


Figure 17
Fixing along joist

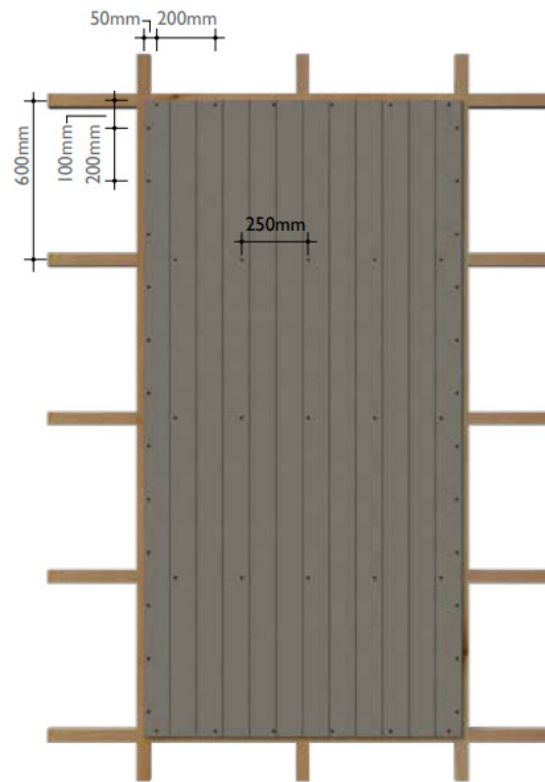


Figure 18
Fixing across joist

Note

For ceiling lining for v-groove products. When installing this product horizontally on ceilings, please be aware that the alignment of the V-grooves may not line up perfectly between sheets. This is due to the way the product is manufactured—with the groove pattern optimized for vertical (wall) installation, where consistent alignment is more critical and commonly expected.

While this does not affect the structural integrity or performance of the panel, it may result in a visible offset when panels are butted together horizontally on ceilings. If precise groove alignment is essential for your design intent, we recommend reviewing panel layout prior to installation or considering an alternate orientation or panel size that better suits the visual outcome.

5.5 Jointing

IBS FIBRE® Groove Sheets can be jointed in a number of ways to achieve different panelised look of the walls.

Joint details

IBS FIBRE® Groove Sheets could have the following types of joints.

Flush-jointed narrow strip soffits around buildings, ceilings over verandahs, porches, and entryways, uPVC-jointed ceilings, sealant-filled for a smooth finish, and framing-supported edges.

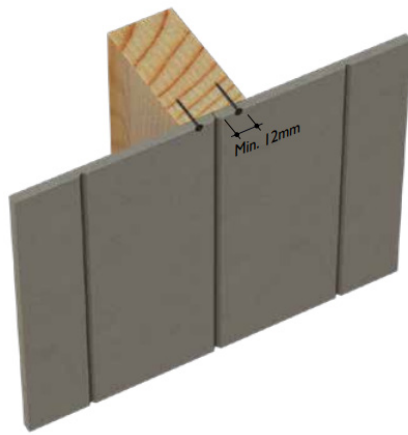


Figure 19
Butt joint

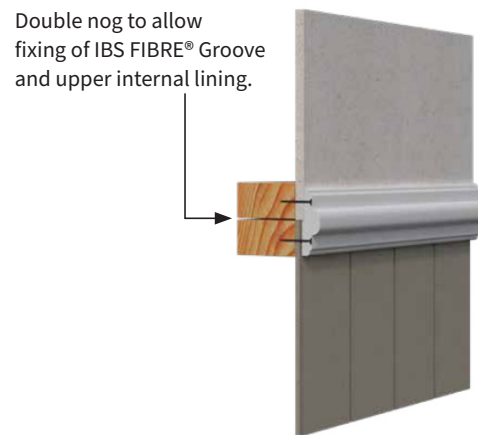


Figure 20
Dado fixing

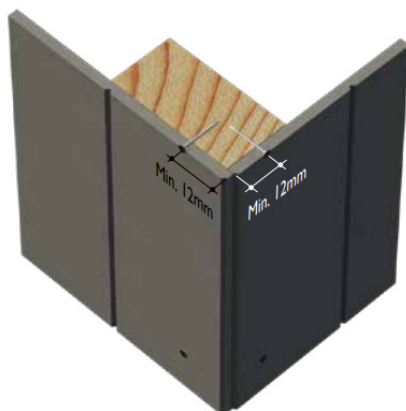


Figure 21
External corner joint

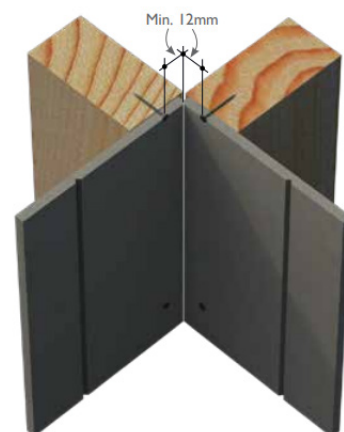


Figure 22
Internal corner joint

5.6 Control Joints

Control joints are necessary in long runs of IBS FIBRE® Groove Lining soffits/ceilings to allow for structural movement. They must also be included where the soffits change direction, level, at construction joints in framing, or where soffits continue into passageways. Refer to Section 5.6 for a typical control joint detail.

Jointing Options

- Flush-jointed narrow strip soffits around buildings
- Ceilings over verandahs, porches, and entryways
- Expressed, uPVC-jointed, and sealant-filled ceilings for a smooth finish
- Framing-supported edges.

Vertical Joint

IBS FIBRE® Groove Sheets could have the following types of vertical joints.

Note:

1. Self embedding head screws should be used with 6mm thick panels above.
2. The 3mm minimum gap is for a sealed joint if required.
3. IBS FIBRE® Groove fibre cement boards are fixed with standard fibre cement screws and nails.
4. All fixings shall be selected in accordance with environmental conditions and durability requirements as specified Sec.4, NZS3604:2011.

Horizontal Joint

As the walls will be interior you can use either an H PVC jointer moulding or you can use a flexible sealant to join the sheets.

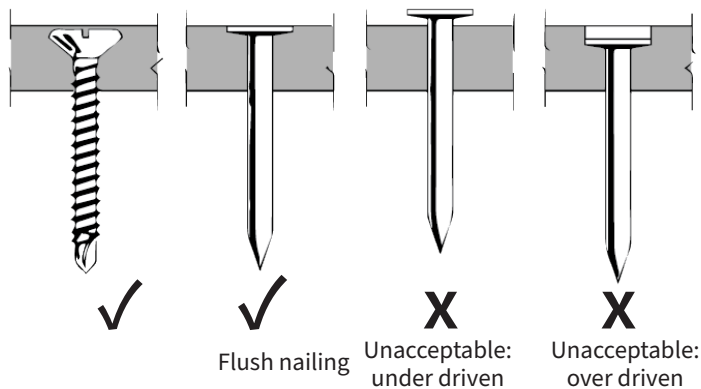
Another option is also to use a timber moulding to highlight the join such as a 40mm x 10mm timber moulding

5.7 Fixing Requirements for IBS FIBRE® Groove

IBS FIBRE® Groove 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.

All sheet edges must be sealed prior to installation. The sheet edges must also be sealed around window/door openings and other penetrations e.g. meter boxes etc.
IBS FIBRE® Groove Sheet must be primed 150mm across back face from edges.

TABLE 2 - Fixing to Timber Studs		
Walls	IBS FIBRE® Groove 7.5mm	30mm x 2.8 Galvanised or Stainless Steel FC nails
	Fixing to Steel Studs (0.55mm to 1.6mm BMT)	
Walls	IBS FIBRE® Groove 7.5mm	No. 8 x 30mm Countersunk head screw
Ceiling / Soffit	40x2.8 galvanised nails or 50x2.87 Hot Dipped Galv D Head gun nails or 8x40mm galvanised wood or steel screws	



Fixing requirements

- Screws can be countersunk.
- Nails should be flush with the IBS FIBRE® Groove surface.
- Do not punch the nails.

Figure 24

Position of fasteners

Fixing for External Use

Ensure the project is within the product's specified scope of use, and that the selected fixings are appropriate for the site's exposure zone.

IBS FIBRE® Groove sheet joints must be supported by timber or lightweight steel members.

IBS FIBRE® Groove can be fixed directly to supporting framing made of timber or light gauge steel.

6. Finishing

6.1 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.
- Install a thermal break on all external steel wall framing where IBS FIBRE® Groove fibre cement boards are used on the external envelope.
- All edges and a min of 150mm around all sides on the back of the board must be sealed prior to installation.

6.2 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.

6.3 Coating

Use only quality exterior paints complying with AS 3730. Manufacturer's specification for the selected paint must be followed. Note that some paints require undercoat before applying the finish coat. Prior to coating, the surface should be examined to ensure it is clean, dry and free of any dust or contaminants. When using uPVC flashings, the light reflective value (LRV) for the colour must not be less than 40%.

All exposed faces, including the top edges under the sills and bottom edges of IBS FIBRE® Groove Sheet must be finished with an exterior paint system. Paints with a low LRV will absorb more solar heat and could cause the components used in the wall to expand or contract.

This combined with glossy paints and wet timber used at construction stage, could lead to increased chances of fastener read through as is common with any other building material.

For best aesthetic results a low sheen paint is recommended. Enamel — based paints can be used, utilising a three-coat system. Refer to the paint manufacturer for details before commencing the coating work. Paint must not be applied when the temperature is below 10° C.

7. Care & Maintenance

7.1 Care & Maintenance

Regularly inspect the sheets for any signs of damage or wear. Clean the surface with mild soap and water, and touch up paint as needed to maintain the protective coating.

If water damage does occur to an area where IBS FIBRE® Groove 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 paint 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. (Minimum 1x per year)
- Ensuring the paint or plaster 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® Groove (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:

- 1.1 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).
- 1.2 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 the applicable pass™ (warranted performance).

2. Date warranty valid:

- 2.1 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.

- 2.2 All enquiries relating to this warranty must (in the first instance) be directed to the place of purchase, the supplier or the installer.
- 2.3 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.

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

- 3.1 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).
- 3.2 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.
- 3.3 IBS reserves the right to supply other comparable materials or products should the warranted Product no longer be supplied by IBS.

4. This warranty is subject to the following:

- 4.1 Receipt of evidence of the date of purchase of the Product.
- 4.2 Evidence satisfactory to IBS of failure of the Product.
- 4.3 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.
- 4.4 The claim must include full details of the alleged defect in the Product.

- 4.5 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.
- 4.6 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, mildew, fungi, bacteria or any organism on any Product, or acts or omissions of a third party over whom IBS has no control.
- 4.7 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.
- 4.8 Normal wear and tear, including non- performance related changes, are excluded from this warranty.
- 4.9 All relevant information relating to the Specifications is uncontrolled in printed format and is available from IBS (refer to www.ibs.co.nz).

5. Limitations

- 5.1 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.

- 5.2 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.
- 5.3 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.
- 5.4 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® Groove is fiber cement board made of cement, quartz sand, and cellulose fibre, with process of slurring, forming, autoclaving and etc. The surface of IBS FIBRE® Groove is with V-shape grooves, which could provide a similar appearance of groove & tongue structure decoration style.

Table 6 - IBS FIBRE® Groove Technical Properties		
Parameter	Value	Standard
Apparent Density	> 1300kg/m ³	AS/NZS 2908.2
Tolerance on Length, Width and Thickness	Length: $\leq \pm 2\text{mm}$ Width: $\leq \pm 2\text{mm}$ Thickness $\leq 10\%$	AS/NZS 2908.2
Straightness of Edges	$\leq 1\text{mm/m}$	AS/NZS 2908.2
Squareness of Edges	$\leq 1\text{mm/m}$	AS/NZS 2908.2
Bending strength (Type A, category 3)	$\geq 10\text{MPa}$	AS/NZS 2908.2
Moisture content	8-13%	ASTM C1185
Water adsorption	$32 \pm 2\%$	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	0	AS 1530 Part 3:1999
Spread of Flame Index	0	
Heat Evolved Index	0	
Smoke Development Index	0-1	

10. Additional Resources

10.1 Compliance and Information

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

- IBS Product Specification
- IBS CAD drawings
- IBS Maintenance and Warranty of IBS FIBRE® Groove
- 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 are the recommended safety precautions when installing IBS FIBRE® Groove sheets?

- A. Ensure to work in a well-ventilated area, use dust masks and eye protection when cutting or sanding the sheets. Follow all safety guidelines provided in the technical literature.

Q. How should IBS FIBRE® Groove sheets be stored prior to installation?

- A. Store the sheets flat and off the ground in a dry, covered area to prevent warping and damage.

Q. What tools and materials are required for the installation of IBS FIBRE® Groove sheets?

- A. You will need standard carpentry tools, including a high-speed cutting tool, drill, screws or nails, tape measure, level, and appropriate personal protective equipment.

Q. Can IBS FIBRE® Groove sheets be painted, and if so, what type of paint should be used?

- A. Yes, IBS FIBRE® Groove sheets can be painted. Use a high-quality, exterior-grade acrylic paint suitable for cement-based materials.

Q. What are the guidelines for cutting and drilling IBS FIBRE® Groove sheets to ensure durability?

- A. Use a carbide-tipped blade for cutting and pre-drill holes for fasteners to prevent cracking. Follow the manufacturer's guidelines for specific cutting and drilling instructions .

Q. How do you ensure proper alignment and spacing when installing IBS FIBRE® Groove sheets?

- A. Use a chalk line or laser level to mark guidelines on the substrate. Maintain the recommended gap between sheets for expansion and contraction, as specified in the installation guide.

Q. Are there any specific environmental conditions to consider when installing IBS FIBRE® Groove sheets?

- A. Consider the local climate, such as humidity and temperature, and follow the manufacturer's guidelines for installation in various environmental conditions.

Q. How do you handle and dispose of waste materials during the installation of IBS FIBRE® Groove sheets?

- A. Collect offcuts and dust in a designated area and dispose of them according to local regulations. Avoid creating dust and dispose of waste responsibly .

Q. What maintenance is required after the installation of IBS FIBRE® Groove sheets to ensure longevity?

- A. Regularly inspect the sheets for any signs of damage or wear. Clean the surface with mild soap and water, and touch up paint as needed to maintain the protective coating.

12. Limitations

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

- IBS FIBRE® Groove should not be installed on timber framing where the moisture content is greater than 18%.
- The below installation areas are considered critical to the successful installation of IBS FIBRE® Groove. 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® Groove 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.

The information contained in this document is current as at January 2025 and is based on data available to IBS Sustainable Building Products at the time.

All photographic images are intended to provide a general impression only and shall not be relied upon as an accurate example of IBS FIBRE® Groove products installed in accordance with this document.

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. You can call 0800 367 759 or visit www.ibs.co.nz to obtain current information.

IBS has used all reasonable endeavours to ensure the accuracy and reliability of the information contained in this document. However, to the maximum extent permitted by law, IBS assumes no responsibility or liability for any inaccuracies, omissions, or errors in this information, nor for any actions taken in reliance on this information.

13. Installation checklist

Items to be checked		✓ Tick <input type="checkbox"/>	Notes
Framing			
1	Health & Safety: Ensure to work in a well-ventilated area, use dust masks and eye protection when cutting or sanding the sheets.	<input type="checkbox"/>	
2	Handling & Storage: Store the sheets flat and off the ground in a dry, covered area to prevent warping and damage.	<input type="checkbox"/>	
3	Cutting: Use a carbide-tipped blade for cutting and pre-drill holes for fasteners to prevent cracking.	<input type="checkbox"/>	
4	Drilling: Use preferred and more efficient tungsten carbide-tipped drills with point angles of 60° to 80°.	<input type="checkbox"/>	
5	Service Penetration: Follow the recommended procedures for cutting apertures for services such as switch boxes and lights. minimum.	<input type="checkbox"/>	
6	Compliance: Ensure all designs and constructions comply with appropriate and relevant requirements of current legal building codes, regulations, and standards.	<input type="checkbox"/>	
7	Conditions: Seal all edges before installation, and ensure the back face of the sheet is sealed with one coat of paint.	<input type="checkbox"/>	
8	Check the Substrate: Ensure boards are dry to equilibrium moisture content before fixing.	<input type="checkbox"/>	

Items to be checked		✓ Tick <input type="checkbox"/>	Notes
Flexible underlay			
9	Timber Framing Installation: Ensure vertical studs are spaced a maximum of 600mm apart and the frame is plumb and true, ensure that the moisture content is below 18%.	<input type="checkbox"/>	
10	Soffit Lining: Install with either a grooved fascia or exterior cladding that creates a minimum 15mm drip edge below the soffit.	<input type="checkbox"/>	
Flashings			
11	Ceiling Lining: Conceal the fixings by using countersunk screws, filled with epoxy filler and sanded flush.	<input type="checkbox"/>	
12	Jointing: Follow the recommended jointing methods to achieve different panelised looks of the walls.	<input type="checkbox"/>	
13	Control Joints: Include control joints in long runs of IBS FIBRE® Groove Lining soffits/ceilings to allow for structural movement.	<input type="checkbox"/>	
Sheet fixing and set out			
14	Fixing Requirements: Ensure the project is within the product's specified scope of use, and that the selected fixings are appropriate for the site's exposure zone.	<input type="checkbox"/>	
15	Finishing: Use only quality exterior paints complying with AS 3730 and follow the manufacturer's specification for the selected paint.	<input type="checkbox"/>	

Notes:

[illegible]



IBS FIBRE® Groove

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 FIBRE® Groove documents.

✉ info@ibs.co.nz

🌐 www.ibs.co.nz