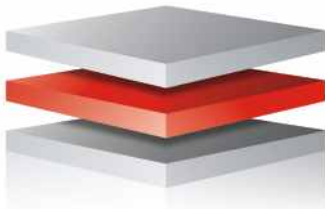
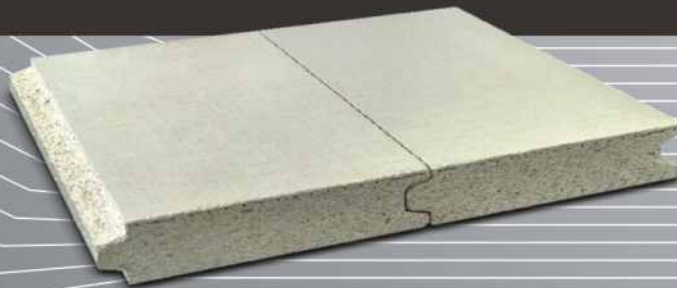


**1<sup>st</sup> FLOOR**



**LIGHT-WEIGHT FLOORING SYSTEM INSTALLATION MANUAL**



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MGO  
PERFORMANCE  
WALLS

**i**NTERIOR **i**NTELLIGENCE **E**XTERNAL **E**XCELLENCE



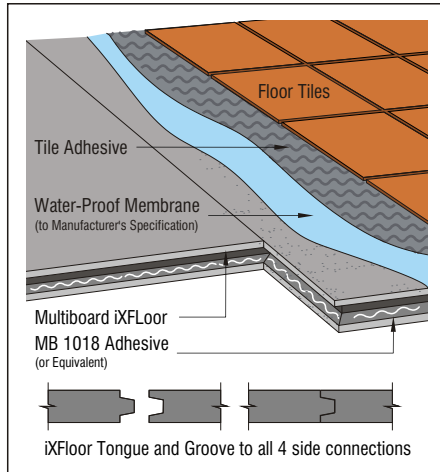
# INTERNAL & EXTERNAL LIGHT-WEIGHT iX FLOOR INSTALLATION MANUAL

## INTRODUCTION

Multiboard **iXFloor** 19mm is a versatile, glass fibre-reinforced recycled wood fibre and magnesium cement based flooring system for internal and external applications. **iXFloor** can be used in both dry and wet areas as a substrate for both carpet and tiles and is suitable for domestic and residential activities for self-contained dwellings.

Fabricated from a combination of 50% recycled timber materials, mineral fibres and the latest in fire retardant chemicals, **iXFloor** is a lightweight but exceptionally strong board that provides a solid substrate for most residential and some commercial applications.

**iXFloor** is also a relatively lightweight solution with ease of installation, making it an excellent alternative product to plywood/particleboard flooring and fibre cement.



It is essential that the installer, specifier and or party responsible for the use of **iXFloor** has undertaken the project with applicable and intended use as detailed by Multiboard in this documentation. All external applications used in conjunction for to this substrate board comply with requirements of the Building Code of Australia (BCA) and all other relevant standards and regulations. Wet area applications must comply with the requirements of our wet area and waterproofing recommendations and that of the waterproofing product application specifications.

## PRODUCT ADVANTAGES

- Approximately 15% lighter than similar FC applications
- Greater water resistance
- Contains no harmful substances such as crystalline silica in its composition
- Has a high fire-resistance - non-combustible
- Uses conventional wood-working tools to cut and shape
- Contains no Portland cement - Magnesium Cement is used, which is an eco-friendly and harmless substance

## PRODUCT INFORMATION

Multiboard products are safe to handle and easy to use. The board contains no harmful crystalline silica, asbestos or formaldehyde in its composition. There are no special tools or precautions required, unlike

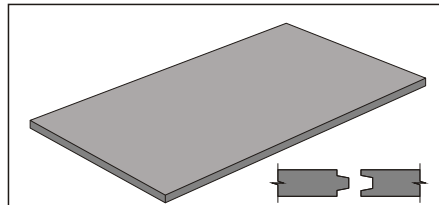
fibre cement, **iXFloor** can be cut and machined using common wood working tools.

## Compliance with AS2908.2

Multiboard **iXFloor** conform to the requirements of AS/NZS2908.2: Cellulose-Cement Products Part 2: Flat Sheets.

The 19mm Multiboard **iXFloor** sheets are classified Type A, Category 3, in accordance with AS2908.2 'Cellulose-Cement Products'.

## Multiboard iXFloor Sheet Size and Mass



Width (mm)	Length (mm)	Thickness (mm)	Mass (kg)
570	2700	19	38kg

## Appearance

**iXFloor** has a smooth glass fibre-reinforced face and comes with a rebated tongue and groove edge along the lengths (two sides only) of each board. **iXFloor** is dimensionally stable, allowing it to be an excellent external substrate flooring panel.

The manufacturing tolerances for **iXFloor** are as follows:

- Width (+/- 1.5mm)
- Length (+/- 1.5mm)
- Thickness (+/- 0.25mm)

**iXFloor** is classified as non-combustible and has been tested in accordance with AS1530.1.

When tested in accordance with AS1530.3, the Early Fire Hazard Indices are as follows:

**iXFloor** was tested to AS 3837 and found to have a Group 1 classification and average specific extinction area >0.1m<sup>2</sup>/kg.

## MULTIBOARD PROPERTIES

**iXFloor** outperforms other building boards in many important ways including the following:

<b>Moisture Resistant</b>	Tested to ASTM E 514-03 Standard test Method for Water Penetration & Leakage through Masonry.
<b>Termite Resistant</b>	Laboratory tested by Termimesh Australia.

## Ease of Use and Installation



Conventional woodworking equipment required to cut and shape Multiboard.

## Fire Resistant



Non combustible. Tested to AS 1530.1.

## Strength / Impact Resistance



Tested to the strict requirements of AS2908.2.

## Lightweight



Over 30% lighter than traditional cement sheeting.

## 100% Safe to Use



Contains no harmful crystalline silica or asbestos. Tested as safe.

## Acoustic Requirements



High acoustic performance.

## Environmentally Friendly



50% recycled bamboo / wood fibre, 40% less embodied energy to produce than fibre cement.

## HEALTH AND SAFETY WORKING PRACTICE

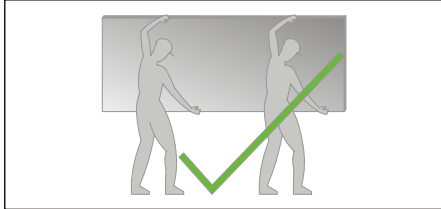
**iXFloor** is manufactured from woven glass fibre, recycled wood fibres (50%), magnesium cement. As manufactured, the product will not release airborne dust, however during drilling and sanding operations, glass fibres and fine dust may be released.

When using power saws in a confined space, dust extraction equipment is recommended to control dust levels. If power tools are used externally, wear an approved P1 or P2 dust mask, respiratory and safety glasses.

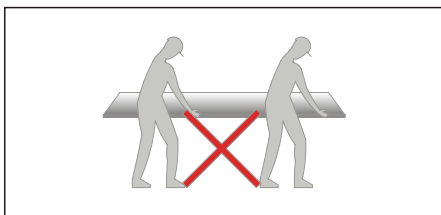
## HANDLING AND STORAGE

Multiboard **iXFloor** boards must be stored in a dry and covered area. If stored externally, **iXFloor** must be stacked flat, and raised off the ground. The panels should be supported on level ground and must be protected from the weather. Care should be taken to avoid damage to the products edges and surfaces. If the product becomes wet, the product must be allowed to dry before fixing.

Multiboard endorses safe lifting practices. Boards should be handled by two people and carried on its edges to avoid damage to the product and most importantly to one's self. Boards should be lifted from the pallet by sliding sideways and carried on its side along edges. Individual boards should be stacked and handled carefully to avoid damage.



Boards should be lifted from the pallet by sliding sideways and carried on its long edges.



## HOLE FORMING

For smooth cut circular holes:

- Mark the centre point of the hole on the sheet
- Pre-drill pilot outline
- Using a heavy duty electric drill fitted with a hole-saw, cut the hole to the applicable diameter

## SHEET CUTTING

On-site cutting can easily be achieved in a specially prepared area, when it is not possible to produce pre-cutting of panels off-site.

It is recommended that a good quality wood working blade is employed to cut the panels. The saw is to be used in conjunction with a mountable guide with appropriate dust extraction attached for optimal results.

Set the correct speed relative to the recommended saw size and ensure the blade is no greater than 5mm below the panel thickness to elevate chipping the board edge. Only cut one panel at a time.

## FRAMING

Multiboard requires framing members to have a minimum fixing face width of 45mm for durable timber and corrosion resistant light gauge steel frames. If the frame members do not meet the minimum width recommended, a double joist must be provided at the sheet joint. Framing should be true, plumb, flat and level prior to installing Multiboard iXFloor.

The floor joist spacing for 19mm thick iXFloor is to be a maximum of 450mm centres. All sheet square edges (including movement joints) must be continuously supported by framing.

Timber framing must be in accordance with AS 1684 Residential Timber-Framed Construction and framing manufacturers' specifications.

Metal framing must be in accordance with AS 3623 Domestic Metal Framing construction and framing manufacturers' specifications.

## FIXING

Using Multiboard A class 4 finish Phillips-Head 8g x 32mm collated screws at spacing of 270mm centres.

Item	Fastener Selection		
	Timber joist	Steel joist 0.75-1.6mmBMT	Steel joist Over 1.6mmBMT
First Layer			
Multiboard A class 4 finish Phillips-Head 8g x 32mm collated Stock Code: SMF 30-8 C4		✓	✓
Brad nail Paslode C50/SS or DA2150/SS	✓		
Multiboard A class 4 finish Phillips-Head 8g x 40mm collated Stock Code: STF 40-8	✓		

## WATERPROOFING & FINISHES

Any third party, good quality waterproofing and tiling system may be used over Multiboard iXFloor flooring. To maintain the third party warranty, ensure the waterproofing system is carefully prepared and installed in accordance with the manufacturer's specifications. It is recommended to make all iXFlooring not only water resistant but waterproofed, to be as water tight as possible (i.e. water penetrations be minimised) as it can lead to damage the sub frame, such a timber to dry rot.

## LOADING

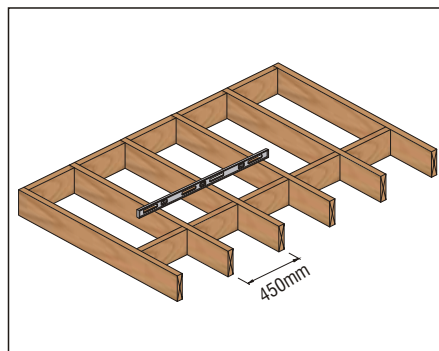
Multiboard iXFloor is structurally designed to withstand the domestic and residential activities for self-contained dwellings (Category A1) of Table 3.1 of AS/NZS 1170.1 - 'Structural design actions - Permanent, imposed and other actions' of 1.8kN concentrated load and a UDL (Uniformly Distributed Load) capacity of 2kPa at the floor joist spacing, outlined in Table 1.

## FALL FOR EXTERNAL APPLICATIONS

All external flooring must have a fall to facilitate water drainage and to avoid water ponding on the floor surface. The flooring must have a minimum fall of 1 in 100 away from the building.

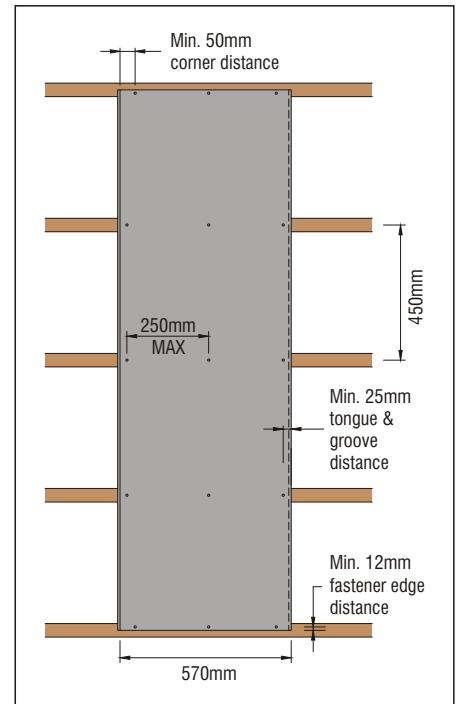
## INSTALLATION

Measure floor joist centres at 450mm centres and ensure they are level for internal applications or have a minimum 1 in 100 fall for external applications (away from the building).

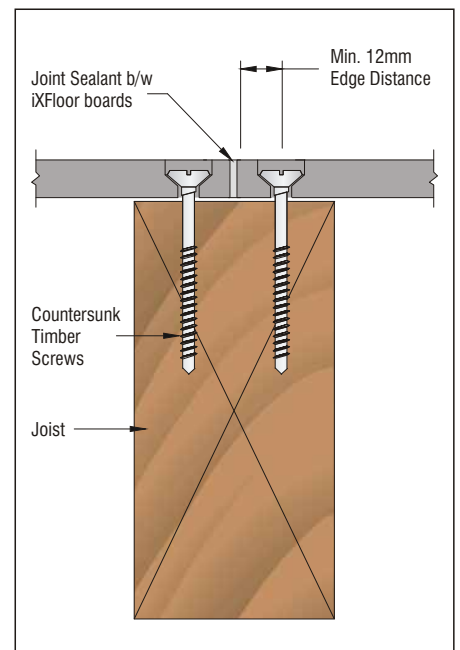
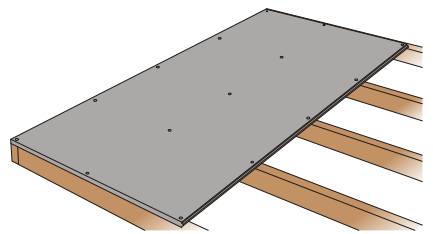


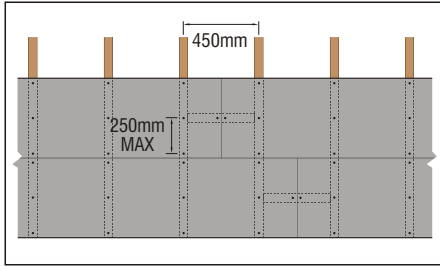
Provide a continuous bead of MB RLA 1018 PU Adhesive to the top of all joists prior to laying the iXFloor panels.

Begin laying the iXFloor sheets ensuring their layout pattern is staggered, to minimise the risk of any water penetration/ingress and to minimise movement cracks forming along the joints.

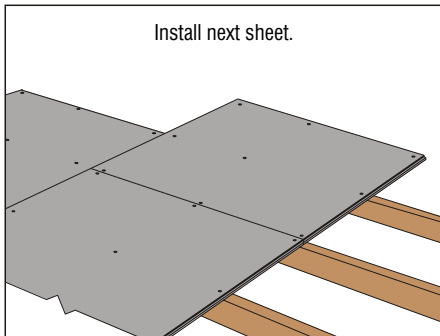


Screw-fix the first iXFloor sheet to the floor joists.



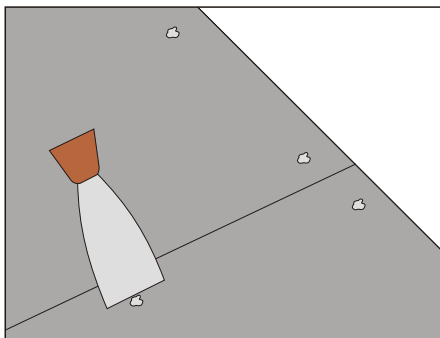


Apply Multiboard PU Construction (MB RLA 1018) Adhesive to all board edges prior to butt jointing the boards together.



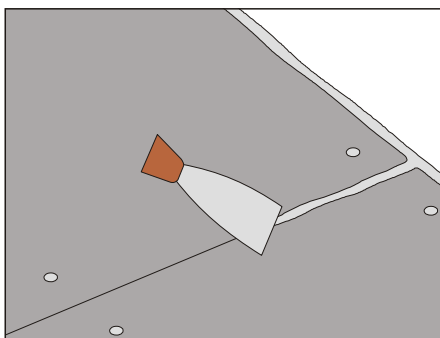
If ixFloor is fixed to a steel sub-frame, we recommend Multiboard Class 4 finish Phillips-Head 8g x 32mm collated fasteners for steel joists or 8g x 40mm for timber joists. No pre drilling of the sheets is required and screws are installed at a maximum of 250mm centres.

Ensure all screw holes are filled with Multiboard T7 patch fitter.



Remove any excess joint sealant with a spatula and clean board surface with a damp cloth in preparation for tiling or other surface application.

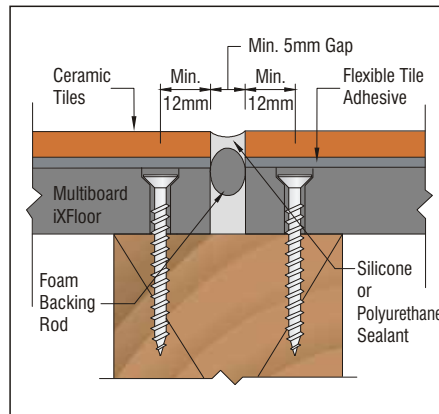
Apply waterproof membrane (if required) in preparation of the finishing layer (ie: tiles) according to manufacturer's specification.



## TILING

Tiles may be fixed directly to the Multiboard ixFloor using a proprietary tile adhesive conforming to the AS 2358 'Adhesives for fixing ceramic tiles' and AS 3958.1 'Ceramic Tiles Part 1 Guide to the installation of ceramic tile'. Generally a two-part polymer modified cement is utilised for floor applications.

Ensure movement joints are created through both the ixFloor panels and tiles, spaced at a maximum of 5 metres. The control joint is to be 5mm in width and filled with a polyurethane sealant over a foam backing rod. Provide movement joints where ixFloor sheets adjoin another flooring substrate (i.e. timber flooring or a concrete slab).



## TERMITE RESILIENCE

Multiboard MgO board is termite resistant and has been laboratory tested and will not be affected by this pest. Consideration must be made for the selection of all sub-frames and the possibility of termite ingress through other areas of the building construction.

Further details can be obtained from the BCA, as3660 or local building authorities.

## FIRE RESISTANCE AND NON COMBUSTIBILITY

Multiboard's high fire performance boards are tested to strict requirements of AS 1530.4. All Multiboard products are non-combustible, tested to strict requirements of AS1530.1 and are high performance tested for ignitability, flame, propagation, heat and smoke release as per the strict requirements of AS 1530.3. The smoke release safe methods of all Multiboard products are also tested to strict requirements of AS 3837.

## WARRANTY

ixFloor (Multiboard) warrants for a period of ten (10) years ("the warranty period") from the date of purchase that all ixFloor products ("the product") will be free from defects due to faulty manufacture or materials, and will be resistant to cracking, rotting, fire and damage to the extent set out in Multiboard's published literature current at the time of installation, and strictly subject to the conditions set out below.

Nothing in this document shall exclude or modify any legal rights of any person under the Trade Practices Act or otherwise which cannot be excluded or modified at law.

Conditions of Warranty:  
The Warranty is strictly subject to the following conditions:-

1. The product, and any other products including fasteners and jointing systems, applied to or used in conjunction with the product must be used and installed strictly in accordance with the recommended installation methods at the time of installation.
2. Under no circumstances will Multiboard be liable for defects arising from:-
  - (a) A failure to use and/or install the product, or any products, strictly in accordance with the product manual.
  - (b) Defective materials not supplied by Multiboard; or
  - (c) Impact.
3. Multiboard will not be liable for breach of Warranty, and no breach of Warranty claim will be accepted, unless the Claimant makes a written claim and provides proof of purchase within 30 days of the alleged defect becoming apparent.
4. This Warranty is not transferable under any circumstances without the prior written consent of Multiboard.
5. A Claimant's sole remedy for breach of Warranty is (at Multiboard's option) that Multiboard will either replace or repair the defect, supply replacement product, or pay for the cost of replacement or rectification of the affected product.
6. Under no circumstances shall Multiboard be liable for any consequential loss, property damage or personal injury, economic loss or loss of profits, arising in Contract or negligence or howsoever arising. Without limiting the foregoing, Multiboard will not be liable for any claims, damages or defects arising from or in any way attributable to poor or defective workmanship, defective materials or poor design or detailing, settlement or structural movement and/or movement of materials to which the product is attached, incorrect design of the structure, in the event of but not limited to earthquakes, cyclones, floods or other severe weather conditions or unusual climatic conditions, normal wear and tear, or growth of any organism on any product surface.
7. The express warranties set out above are in lieu of all other representations, warranties or conditions, express or implied including but not limited to implied warranties or conditions of merchantable quality and fitness for a particular purpose, and those arising by statute or otherwise in law or from a course of dealing or use of trade and which are excluded to the fullest extent permitted by law.



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