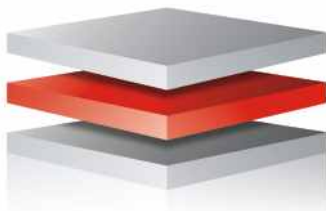


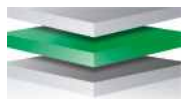


LINE

WALL LINING BOARD INSTALLATION MANUAL



MULTIBOARD
www.multiboard.com.au



MULTIBOARD
MGO
PERFORMANCE
WALLS

iNTERIOR iNTELLIGENCE



PRODUCT DESCRIPTION

iLine is a versatile, glass fibre-reinforced recycled wood fibre and magnesium cement based lining board.

Fabricated from a combination of recycled timber materials (50%), mineral fibres and the latest fire retardant chemicals, **iLine** is a lightweight but exceptionally strong board that provides a solid substrate for applied decorative finishes. **iLine** has exceptional fire and acoustic resistance.

PRODUCT APPLICATIONS

iLine is suitable in the construction of fire and acoustically rated internal walls, and can be used as wet area linings, tile underlay, ceilings and in high traffic/high impact areas.

ILINE Thickness in mm	10	13	15
Eaves & Soffits	✓	✓	✓
Fire Protection to beams & steel		✓	✓
Fire Rated Walls	✓	✓	✓
Acoustic Partitions		✓	✓
Internal Linings	✓	✓	✓
Wet Area Wall Linings	✓	✓	✓
Tile Backing Board	✓	✓	✓
High Impact Resistance	✓	✓	✓
Wind Bracing	✓	✓	✓
Curved Walls	✓	✓	✓

PRODUCT INFORMATION

Compliance with AS2908.2

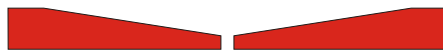
iLine sheets conform to the requirements of AS/NZS2908.2: Cellulose-Cement Products Part 2: Flat Sheets. 10mm **iLine** products are classified Type A, Category 3, in accordance with AS2908.2 'Cellulose-Cement Products'.

Appearance

iLine has a smooth glass fibre-reinforced face. **iLine** comes with a 55mm rebate edge along all four sides.

Edge Details

Recessed Edge



Dimensions

iLine is readily available in 10mm, 13mm and 15mm thicknesses in the following sizes:

ILINE				
Width (mm)	Length (mm)	Thickness (mm)	Approx Weight (kg/m ²)	Weight (kg)
1200	2400	10	11.0	31.68kg
		13	14.3	41.18kg
		15	16.5	47.52kg
	2700	10	11.0	35.64kg
		13	14.3	46.33kg
		15	16.5	53.46kg
3000	10	11.0	39.60kg	
	13	14.3	51.48kg	
		15	16.5	59.40kg

iLine is dimensionally stable. The manufacturing tolerances for **iLine** are as follows:

- Width (+/- 01.5mm)
- Length (+/- 01.5mm)
- Thickness (+/- 0.25mm)

Fire Resistance

iLine 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:

Ignitability Index	0	Range 0-20
Spread of Flame Index	0	Range 0-10
Heat Evolved Index	0	Range 0-10
Smoke Developed Index	0-1	Range 0-10

iLine was tested to AS 3837 and found to have a Group 1 classification and average specific extinction area >0.1m²/kg.

When Multiboard **iLine** is to be used in fire and acoustic wall applications, please refer to the particular fire & acoustic wall specifications. Specification sheets are available on request or can be downloaded from Multiboard's website www.multiboard.com.au. The **iLine** installation manual is to be used in conjunction with the fire and acoustic specification.

MULTIBOARD PROPERTIES

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

	Moisture Resistant Tested to ASTM E 514-03 Standard test Method for Water Penetration & Leakage through Masonry.
	Termite Resistant 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. FRL AS 1530.4
	Strength / Impact Resistance Tested to the strict requirements of AS2908.2.
	Lightweight Over 30% lighter than traditional cement sheeting.

	100% Safe to Use No harmful crystalline silica or asbestos. No special requirements required when cutting with power tools. Tested as safe.
	Acoustic Requirements Can achieve the required Rw + Ctr > 50db in a single layer system.
	Environmentally Friendly 50% recycled bamboo / wood fibre, 40% less embodied energy to produce than fibre cement.

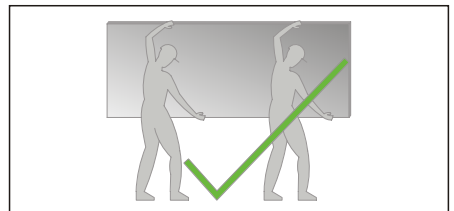
HANDLING & STORAGE

iLine should be kept dry, and be stored in a covered area.

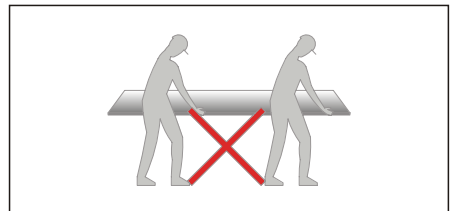
If stored externally, **iLine** must be stacked flat, and raised off the ground. The Panels should be supported on level ground and must be protected from the weather.

Care should be taken to avoid damage to the products edges, ends and surfaces. If the product becomes wet, the product must be allowed to dry before fixing.

iLine should be stacked and handled carefully to avoid damage.



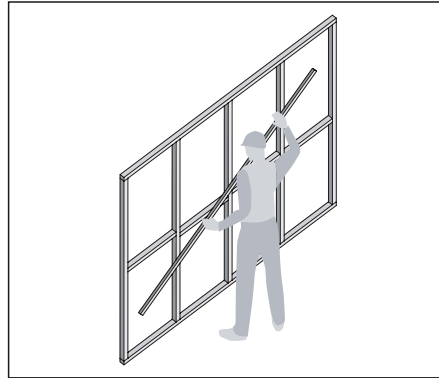
Boards should be lifted from the pallet by sliding sideways and carried on its long edges.



SHEET CUTTING

Smooth Cutting	
	For smooth cuts, use a circular saw.
Sawing and Planing	
	iLine can also be cut easily using a normal hand saw.
	The edge of iLine can be planed or smoothed with an electric planer, rasp or file, or conventional papers if sanding is required.
Drilling	
	For making holes in the board, use a standard drill tip. Do not use

Always check the alignment of all framing with a long straight edge before any installation is conducted. The maximum out of alignment should not exceed 4mm over 3000mm, 3mm over 1200mm or 2mm over 600mm. This should be checked both horizontally and vertically.



Excessive misaligned framing may contribute to an uneven surface after the coating has been applied. Multiboard will not be held responsible for this should it occur.

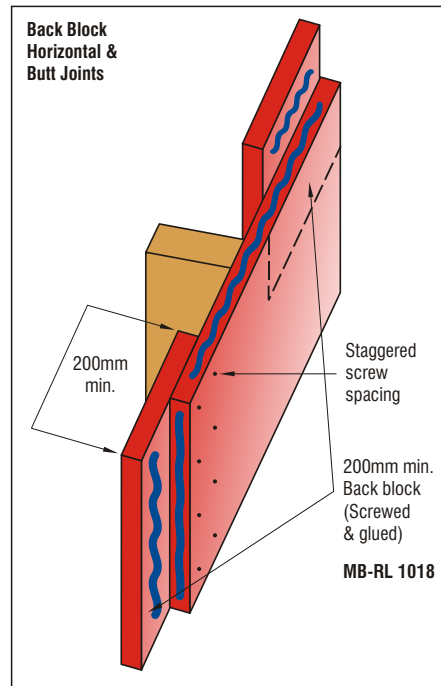
Please note: fixing to uneven surfaces or water saturated framing will void any warranty.

Fixing

Multiboard recommends iLine butt joined off stud and back blocked. The edge of the sheet to be supported by the top and bottom plate when installed horizontally.

Back block off stud fixing be glued with MB RL 1018 or similar and screwed, using a minimum of 200mm wide iLine.

All joints are to be glued and back blocked except where movement control joints are required.



iLine sheets must not be fixed directly to drawn steel or hot-rolled steel sections. If iLine is to be installed on these members, then either 42mm (min) wide timber battens must be used or 50mm (min) wide light-gauge metal top-hats must be used.

iLine sheets may be fixed either horizontally or vertically. In most residential applications however, horizontal fixing is found to be the most efficient method of application.

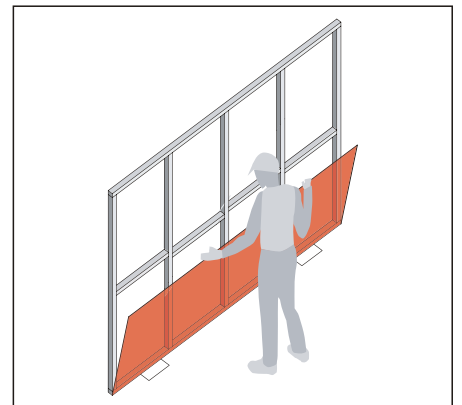
Maximum fixing spacing of iLine is 300mm. Do not place fixings closer than 15mm from sheet edges, or closer than 100mm from the iLine sheet corners.

The sheet must be held firmly against the framing when fixing to ensure breakout does not occur at the back. Fixing is recommended from the centre of the sheet and work outwards, to ensure sheets are hard against the frame, to avoid drumminess.

In horizontal applications, start with the bottom sheet first and work upwards, always leaving a 6mm gap on the bottom of the sheet. Vertical joints must be staggered by at least 600mm (max).

In horizontal and vertical applications, always allow a 6mm gap between the sheet and the floor.

Refer Fig A and B on page 6.

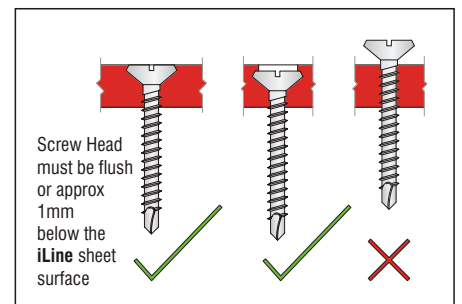


Fasteners

When fastening iLine linings, use Multiboard (STF 40-8-C4) or (SMF 30-8-C4) fasteners. Where fasteners are to be countersunk, the depth must be controlled by a gauge to restrict the fasteners head depth.

Generic stud adhesive can be used in conjunction with the specified screw fixing.

Fasteners must not be overdriven, as this can reduce the holding capacity of the sheet.



FRAMING & FIXING

General

iLine is suitable for use with both timber and lightweight steel framing.

- Framing must be constructed to comply with the relevant building regulations and standards.
- The framing must be set to a true plane to ensure a straight finish to the wall.
- Studs must be spaced at a maximum of 600mm centres.
- Noggings must be spaced at a maximum of 1350mm centres when iLine is installed vertically and at a maximum of 1200mm centres when iLine is installed horizontally (sheet widths are a maximum of 1200mm).
- Noggings need to be installed flush with the outside face of the studs and in line with the sheet joint.

Timber Framing

Timber framing must comply with AS1684.2 and 3: 1999 Residential Timber - Framed Construction.

iLine cannot be fixed to wet framing. Kiln dried timber/seasoned timber must be used. If sheets are fixed to wet framing, it is likely that problems will occur at a later date due to excessive timber shrinkage. Please note all warranties will be void if this is the case.

Unseasoned timber must not be used as it is prone to shrinkage, and can cause undue stresses on sheet joints due to excessive movement between the timber frame and the sheets.

Steel Framing

Metal framing must comply with AS3623 - 1993 Domestic Steel Framing.

iLine can be fixed directly to lightweight metal framing, of thickness between 0.5mm and 1.6mm (BMT).

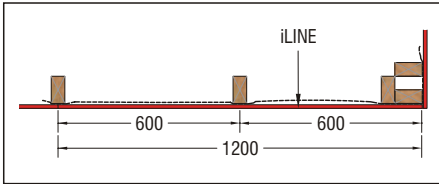
SHEET LAYOUT & INSTALLATION

Planning the sheet layout is very important, as this minimises wastage and also the number of sheet joints required.

Orientation

iLine can be installed vertically or horizontally, with the first sheet commencing from a corner.

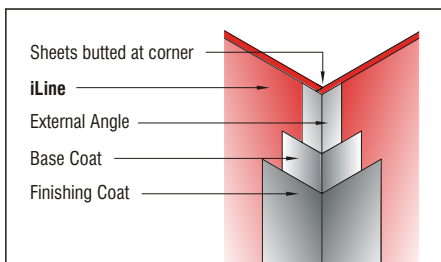
Vertical installation of **iLine** facilitates vertical joints which minimises the effects of glancing light. Material wastage is minimised if the stud spacing is 600mm wide as this suits **iLine's** 1200mm width.



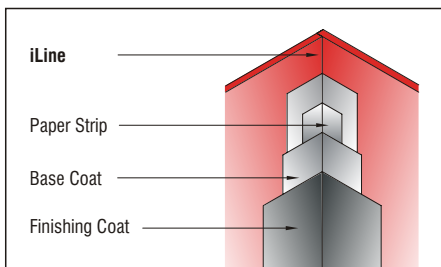
Corners

External corners of **iLine** are required to be glued with MB RL 1018 or similar. The joint must finish flush, leaving no gaps. The sheet should be both recessed or straight-edged.

Plasterer's steel corner beads are installed at the corner prior to filling and plastered according to the instructions shown, before the coating system is applied. Perforated paper tape must not be used in this instance. Please refer to the coating manufacturer's recommendations before application.

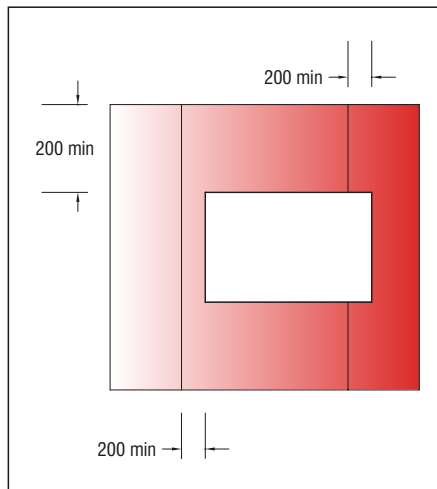


At an internal corner, use paper reinforcing tape and flush set using traditional plastering compounds.



Window & Door Openings

To reduce the incidence of cracks appearing in the jointing, **iLine** sheets should be cut in a minimum of 200mm around window and door openings.



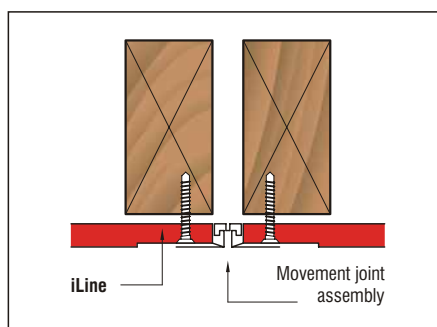
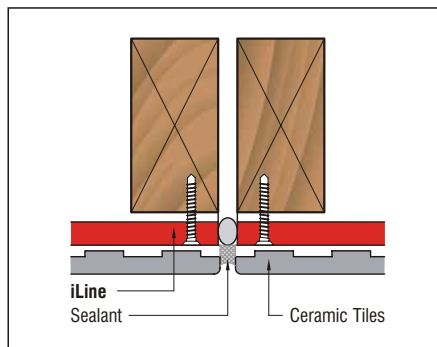
If a sheet must coincide with the corner of an opening, or cutting in sheets around openings is not possible, the use of relief joints is highly recommended to control any cracking around these openings.

Control Joints - Wall & Ceilings

Vertical Control Joints - Direction A

Control joints are required when a continuous wall spans longer than 7200mm in untiled areas and 4200mm in tiled areas. These joints are designed to allow for any structural movement between the **iLine** sheets and the building frame.

In untiled areas, the use of propriety movement joint accessories are recommended. For tiled areas, the control joint must carry through the tile, **iLine** sheeting and frame. The 6mm minimum gap is then filled with sealant.



Horizontal Control Joints - Direction B

Horizontal control joints must be located at 3.0m maximum and also in between floor joist levels and at gable ends.

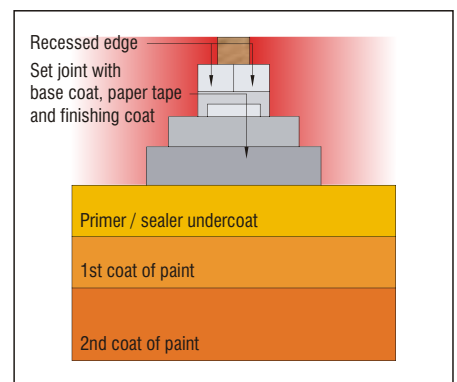
JOINT & COATING SYSTEMS

Base Coat **iLine**

The proprietary joint coating system applied to **iLine** must be able to withstand the stresses across the joint. Multiboard recommended Tec7, or CSR Gyprock wet area base coat or similar to all base coat applications.

DO NOT use self adhesive paper tape or fibreglass mesh tapes.

It is the applicator's responsibility that all coatings are applied and maintained in accordance with the joint/coating instructions.



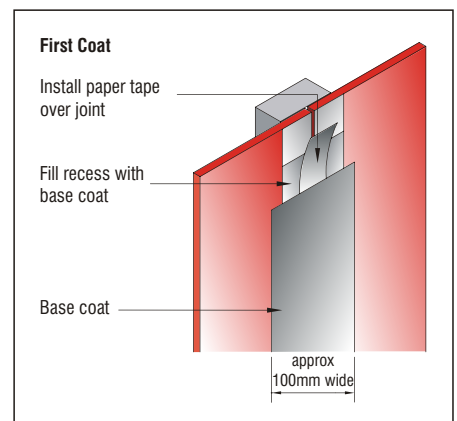
Set Joints (Recessed)

Preparation: The joint and coating system must be applied to dry, clean sheets only.

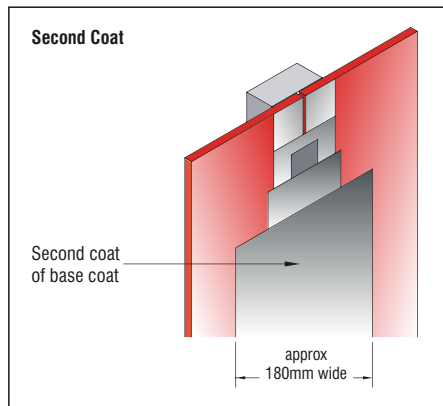
1st Coat: Apply base coat to fill the recessed edge, making sure that the base coat fills any gaps within the board (if present). Whilst still wet, apply the paper tape centrally over the joint using a 150mm wide broad-knife.

Under no circumstances is self adhesive tape (or mesh) to be used.

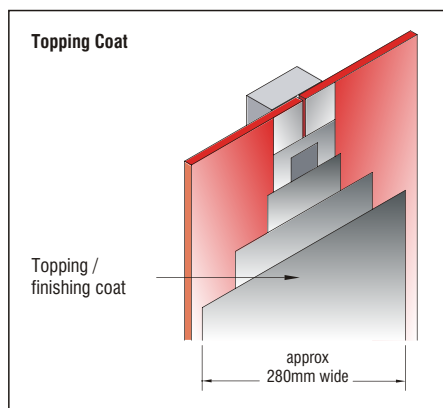
Another layer of base coat is then applied to cover the paper tape and the joint edges are feathered out to about 100mm. Ensure that there are no voids beneath the paper tape/joint and remove any excess base coat around the joint. Apply base coat to all fastener heads that are not located within the set joint.



Second Coat: When the first coat is fully dry, apply a second coat of base coat, using a 200mm wide trowel. The set joint should be approximately 180mm wide, with feathered edges. Apply another coat of base coat over all fasteners.



Finishing Coat: When the base coat is fully dry, apply top coat using 280mm wide trowel. The set joint should be approximately 260mm wide and all edges feathered out to produce an unobtrusive joint. Apply top coat to all fasteners.



After 24 hours, sand the set joint to achieve a similar level of finish to **iLine**.

Topping/finishing coat must not be used on joints that are going to be tiled.

Butt Joints (Non-recessed)

For joints which are butt jointed (non-recessed edges) the above installation applies, except for the finishing coat. For non-recessed butt joints, the finishing coat/top coat should be applied approximately 500mm wide and all edges feathered out. Allow to fully dry prior to sanding.

Finishes & Maintenance

iLine can be finished with either, paint, tiles or wallpaper. The installation and maintenance for any of these applications must be adhered to the manufacturer's specifications.

Painting

The level of finish required is dependent upon the type of decoration. Multiboard recommends the use of polyurethane or epoxy based primer coating systems for all wet areas. The paint manufacturer's recommendation for paint suitability, application and maintenance must be followed. Spray applications are not recommended.

Multiboard's internal applied finishes specification is available on request or can be downloaded from www.multiboard.com.au

Tiling

When **iLine** is to be used as a substrate for tiles, framing must be supported at all sheet edges, whether **iLine** is installed vertically or horizontally.

Screw fix **iLine** sheets at 200mm centres along the edges and within the body of the sheet.

The fixing of tiles must be as per the manufacturer's instructions. Multiboard only recommends the use of flexible tile adhesive for tile applications.

Glancing Light / Level of Finish

In some circumstances, due to light conditions within a room, set joints may be noticeable when **iLine** recessed lining boards are used, especially when coatings with a high gloss are used.

Vertical installation of **iLine** facilitates vertical joints which minimises the effects of glancing light. It is important for designers/architects to give consideration to the level of finish required and to try and minimise potential problems caused by critical lighting/glancing light. The Australian Standard AS2589-1997 details the levels of finish of lining boards for residential and light commercial buildings.

Maintenance

No specific maintenance is required when **iLine** is installed in accordance with this written literature. General checks of the tiling system in wet areas are required regularly to ensure watertightness. The coating system must be cleaned and maintained in accordance with the manufacturer's recommendations.

HEALTH & SAFETY

iLine is manufactured from woven glass fibre, recycled wood fibres (50%), magnesium cement, and additives which catalyse the cementing action. 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, respirator and safety glasses.

No special safety precautions are necessary when handling or working with **iLine**.

For further information refer to the Materials Safety Data Sheet available from the website www.multiboard.com.au

WARRANTY

iLine (Multiboard) warrants for a period of ten (10) years ("the warranty period") from the date of purchase that all **iLine** 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.

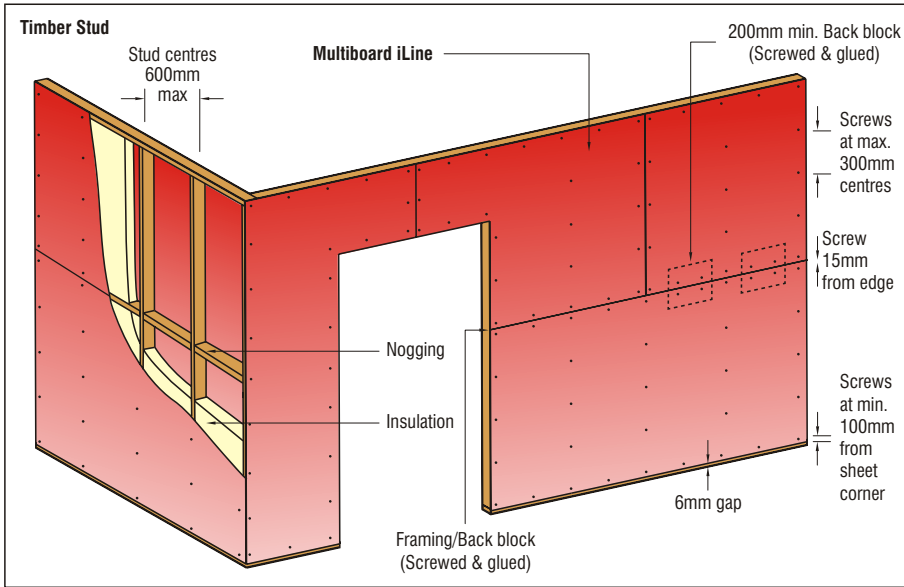


Fig A

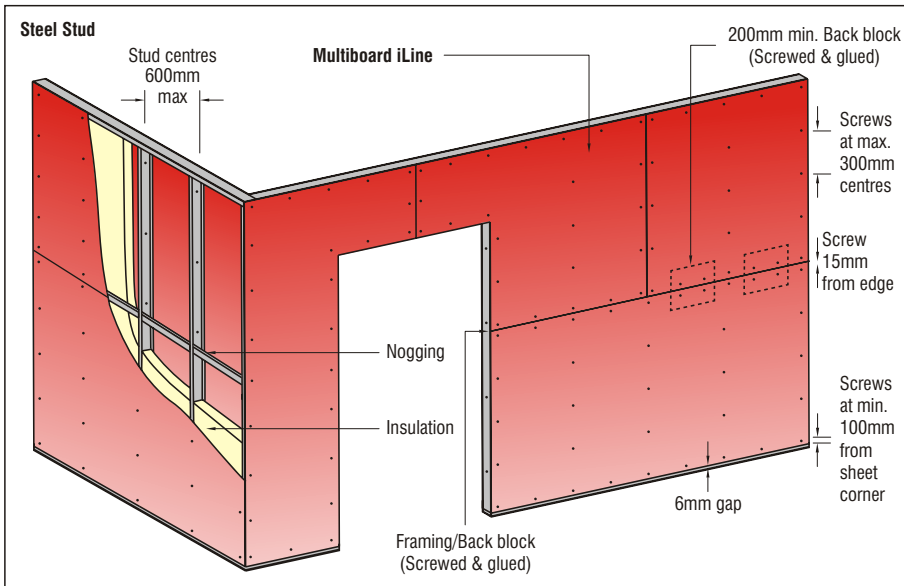


Fig B

