



DOUBLE STUD, TIMBER FRAME SYSTEM (DBS 90 / 120 / 90T)

EXTERNAL FIRE AND ACOUSTIC RATED BOUNDARY WALL SYSTEM

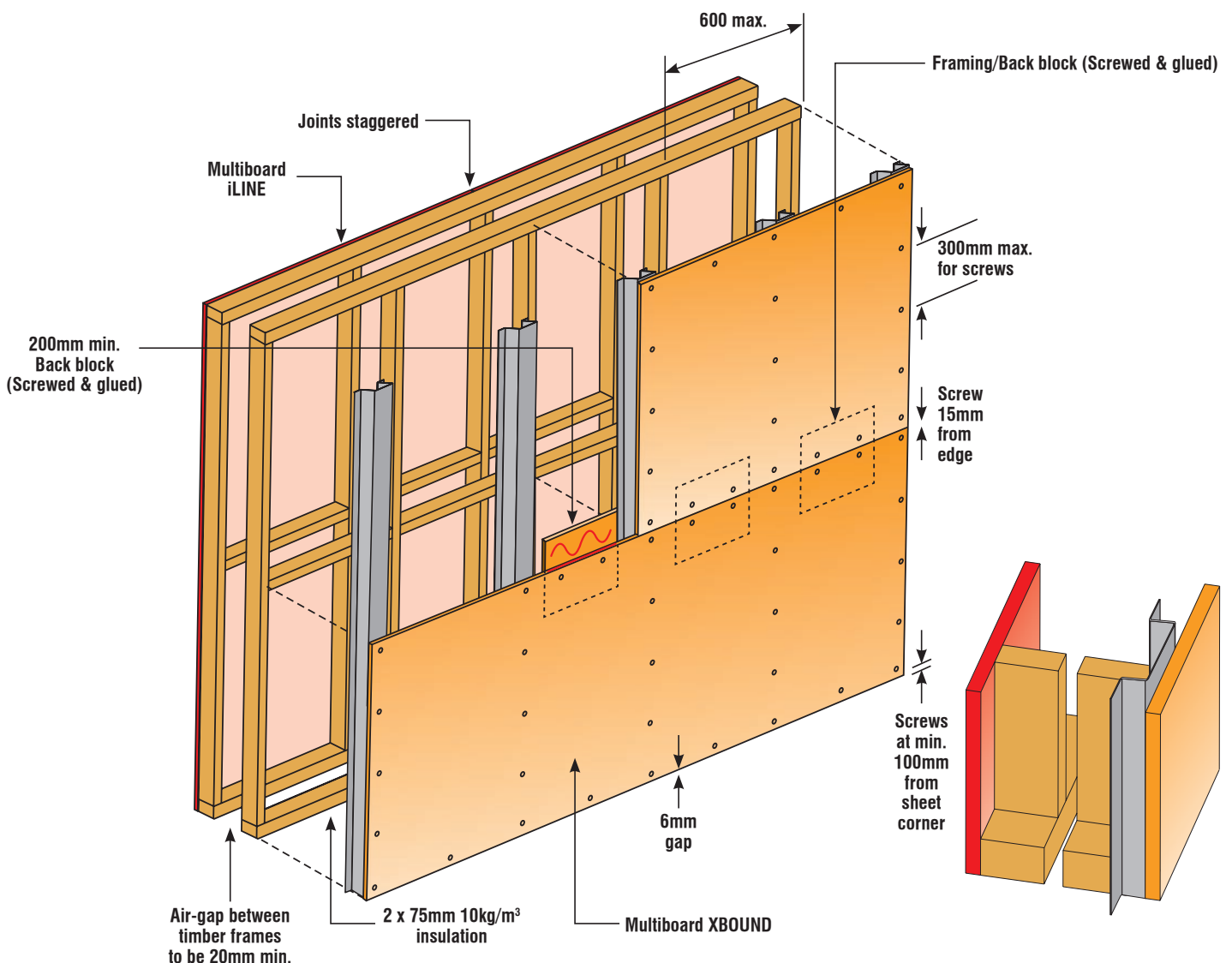
Multiboard's range of MgO performance walls are ideally suited to fire and acoustically rated boundary walls.

The table below is an example of what can be achieved with a Multiboard MgO performance wall system:

Please Note: Use the specification details in this brochure in conjunction with the XBOUND (XBR/XBS) and the iLINE installation manuals and the Internal Applied Finishes Specification guide. All literature can be downloaded from the Multiboard website www.multiboard.com.au

Double Timber Stud Fire and Acoustic Specification

Wall Type	Load Bearing Capacity	Fire Resistance Level	Cladding / Lining Requirements	Insulation	R _w	R _w + C _{tr}	Wall Thickness	Framing Size	Weight of Boards
Double Stud	N/A	90/120/90	1 layer of 15mm XBOUND (external side) and 1 layer of 15mm iLINE (internal side) of the stud wall	50mm 10kg/m ³ glasswool	62	52	230mm	90 by 45 stud and 90 by 45 top and bottom plates	14.7kg/m ² (XBOUND) 14.7kg/m ² (iLINE)



Framing and Wall Height

F5 or MGP10 framing. Stud spacing at 600mm maximum.

Non load-bearing framing dimensions and height as determined by AS1684 stud tables for non load-bearing walls.

Internal Lining (refer to iLINE installation manual)

Apply one layer of 15mm Multiboard iLINE to the internal side of the stud wall.

Both vertical and horizontal fixing is recommended, along with an offset of vertical joints between sheets on opposite sides of the frame. Offset to be a minimum of 300mm.

Sheets must be back-blocked (diagram on Page 3 of the iLINE installation manual) unless the joints are located on the studs. Back-blocks are to be a minimum 200mm wide for iLINE rebated-edge joints.

A 6mm gap is required between the iLINE boards and the floor. All gaps must be sealed with a fire and or acoustic rated sealant suitable to the FRL required.

Fasteners - Internal

Use Multiboard (STF 40-8 C4) screws at 300mm centres to fasten the iLINE to the studs.

Jointing

All fastener heads stopped and all sheet joints tape reinforced and stopped using wet area base coat in accordance with our standard procedures of iLINE. Self-adhesive tape or mesh tape is not to be used in stopping the joints. Refer to manufacturers recommended instructions to stopping and finishing of iLINE.

External Cladding (refer XBOUND (XBR/XBS) installation manual)

Apply one layer of 15mm Multiboard XBOUND to the external side of the stud wall.

Multiboard recommends the minimum use of 50mm light-gauge steel top hats to be installed. This allows for the external cladding system to be independent of the structural wall frame.

Sheets must be back-blocked (diagram on Page 4 of the XBOUND (XBR/XBS) installation manual) unless the joints are located on the top hats. Back-blocks are to be a minimum 200mm wide for rebated-edge joints and 400mm wide for square-edge joints. It is recommended all vertical sheet joints be staggered across the wall.

Fasteners - External

Use Multiboard (STF 40-8 C4) screws for timber battens or (SMF 30-8 C4) screws for metal top hats at 200mm centres for fastening of XBOUND.

Joint and Decorative Coating Systems

Propriety joint/coating systems applied to xBOUND must be able to withstand the stresses across the joints. The most suitable coating systems for XBOUND (XBR) are 100% acrylic based or elastomeric high-build texture coatings. All coatings must be applied and maintained in accordance with the coating manufacturer's instructions.

Multiboard recommends that alkaline-resistant 5mm weave fibre-glass mesh (160g/m²) be used on all high-build texture coatings. The mesh installation is required on all XBOUND (XBR) rebated joints followed by an additional layer across the entire surface of the installation.

Control Joints

In all XBOUND applications, vertical control joints are required at maximum 4.8m intervals. Horizontal control joints are required at floor and ceiling joist levels. All control joints, construction joints and relief joints must be filled with a fire-rated flexible acrylic sealant.

Sarking

A vapour permeable sarking between metal top hats and wall frames must be installed. The use of reflective sarking will enhance the insulation properties of the cladding system. All warranties are void without the installation of sarking.

Insulation

Sound control insulation shall be a minimum of 100mm (contradicts table), 10kg/m³ glass wool installed between the studs.

WARRANTY

Multiboard warrants for a period of seven (7) years ("the warranty period") from the date of purchase that all XBOUND and 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 joining 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 or materials to which the product is attached, incorrect design of the structure. In the event of natural disasters including 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.