



XBR-SS - / 90 / 90M

FIRE AND ACOUSTIC RATED METAL STUD EXTERNAL BOUNDARY WALL SYSTEM

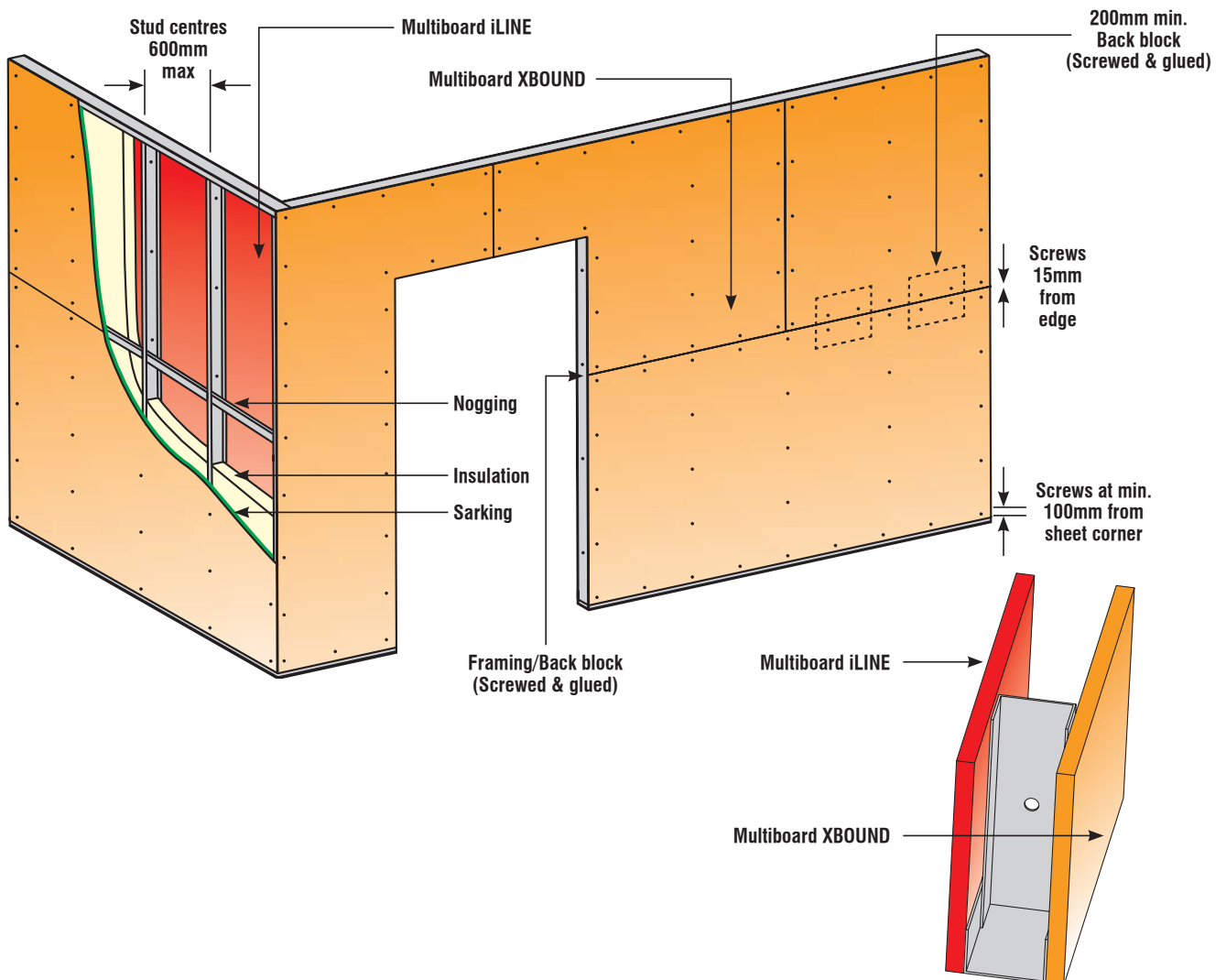
Multiboard is ideally suited to fire and acoustically rated boundary walls. Single layer applications can achieve an FRL up to 90 minutes and acoustic ratings $R_w + C_{tr}$ of 43db.

The following construction detail and its performance is one example of a Multiboard Fire and Acoustic Wall System: Please use the specification detail in this brochure in conjunction with the XBOUND installation manual, iLINE installation manual and internal applied finishes specification.

All literature is available on request or can be downloaded from the Multiboard website www.multiboard.com.au

Fire and Acoustic Specification Single Metal Stud

| 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 |
|-------------|-----------------------|-----------------------|---|------------------------------------|-------|----------------|----------------|--|---|
| Single Stud | N/A | -/90/90 | 1 layer of 15mm XBOUND (external side) and 1 layer of 15mm iLINE (internal side) of the stud wall | 50mm 10kg/m ³ glasswool | 51 | 41 | 107mm | 76 by 35 stud and 76 by 35 top and bottom plates | 14.7kg/m ² (XBOUND) 14.7kg/m ² (iLINE) |



Framing and Wall Height

76mm x 35mm Rondo stud. Stud spacing at 600mm maximum.

Loadbearing framing dimensions and height as determined by AS1684 stud tables for loadbearing bearing walls.

Internal Lining (Refer iLINE Installation Manual)

Apply 1 layer of 15mm Multiboard iLINE to the internal side of the stud wall.

Both vertical fixing and horizontal fixing is recommended.

Sheet joints must be formed over framing or back blocked (screwed and glued). Back blocks are recommended to be a minimum 200mm wide and 400mm wide for but joints.

A 6mm gap should be left between the iLINE sheets and the floor. All gaps must be sealed with a fire and / or acoustic rated sealant aligned to the wall rating.

Fasteners

30mm x 8g countersinking screws, at 300mm centres for internal Multiboard iLINE.

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 Installation Manual)

Apply 1 layer of 15mm XBOUND to the external side of the stud wall.

XBOUND can be direct fixed to the wall frame or installed over metal battens. Multiboard recommends the use of 50mm (min) light gauge steel top hats be installed which allows for the system layout to be independent of the wall frame stud spacing.

Only horizontal fixing is recommended. Sheet joints must be formed over framing or back blocked (screwed and glued). Back blocks are recommended to be a minimum 200mm wide and 400mm wide for but joints. Vertical sheet joints are required to be staggered across the wall.

Fasteners

35mm x 8g self-drilling countersinking screws installed at 200mm centres for external Multiboard XBOUND sheets.

Control Joints

In all XBOUND applications, vertical control joints are required at maximum 4.8m intervals (max). Horizontal relief maximum 3m (max) / control joints are required at floor and ceiling joist levels. All control joints, construction joints, relief joints must be filled with a fire rated flexible acrylic sealant.

Joint and Decorative Coating Systems

Propriety joint/coating systems applied to XBOUND must be able to withstand the stresses across the joints. Therefore the most suitable coating systems for XBOUND 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 rebated joints followed by an additional layer across the entire surface of the installation.

Sarking

Vapour permeable sarking between XBOUND and the framing must be installed at all times. All warranties are void without the installation of sarking. The use of reflective sarking will enhance the insulation properties of the cladding system.

Insulation

Sound control insulation shall be a minimum of 100mm 10kg/m³ glasswool 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, acts of God 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.