Timber or Steel Frame
-/240/240
NLB

Two Way FRR – Steel Frame

JANUARY 2006

SPECIFICATION NUMBER	LOADBEARING CAPACITY	FIRE RESISTANCE RATING	LINING REQUIREMENTS	SOUND TRANSMISSION CLASS	SYSTEM WEIGHT APPROX
GBS 240	NLB	-/240/240	4 layers 19mm GIB Fyreline®	STC 44 (STC 55 with one layer 75mm Fibreglass Batts)	65kg/m² Steel Frame

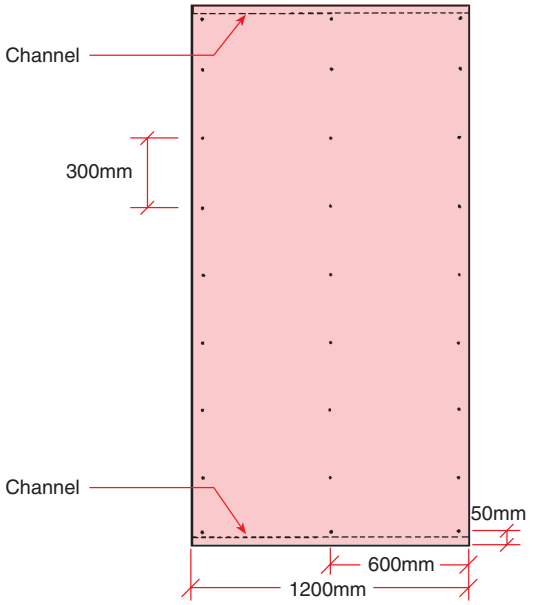
FRAMING AND WALL HEIGHT

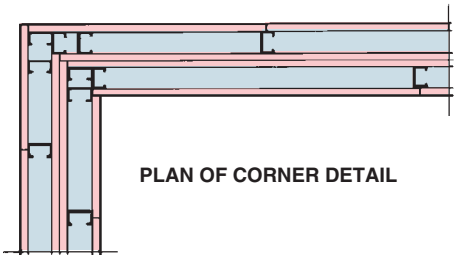
Steel stud dimensions to be 63 x 34 x 0.55mm nominal with a 6mm return.
Steel channel dimensions to be 63 x 30 x 0.55mm nominal.
Channel runners are fixed to the floor and ceiling in true alignment.

Double frame (refer to details overleaf)

- Frame 1. Studs at 600mm centres maximum.
- Frame 2. Studs at 600mm centres maximum and staggered by 300mm from frame 1.
- Place studs to allow a 15mm expansion gap at the top of the frame.
- The studs are held in place by the "grip" of the channel runners. No other fixing may be used.
- Tested height of partition is 3600mm.

Note: *If 0.50mm BMT steel studs are used, verification of performance must be obtained from the supplier of the framing system.*





PLAN OF CORNER DETAIL

LINING

2 layers of 19mm GIB Fyreline® to one side of Frame 1. (refer to details overleaf).
1 layer of 19mm GIB Fyreline® to the outside faces of both Frames 1 and 2.
Vertical fixing only permitted.
Sheets shall be touch fitted.
Offset joints between sheets by 300mm minimum as shown in the sheet layout.
When sheet end butt joints are unavoidable, they shall be formed over nogs.
All sheet joints must be formed over framing.
Linings are fixed hard to floor.

FASTENING THE LINING (STEEL FRAME)

Fasteners

INNER LAYER FRAME 1: 32mm x 6g GIB® Grabber® Drywall Self Tapping Screws.
SECOND LAYER FRAME 1: 51mm x 7g screws as above.
OUTSIDE FACES FRAMES 1 AND 2: 32mm x 6g screws as above.

Fastener Centres

INNER LAYER FRAME 1: 3 fasteners only fixed to each longitudinal sheet edge. One below and above the top and bottom channels respectively and one at the centre.
ALL OTHER LAYERS: 300mm centres up each stud.
Place fasteners 12mm from sheet edges generally and 50mm from sheet ends.

JOINTING

Double layer between frames unstopped.
OUTSIDE LAYERS: All fastener heads stopped and all sheet joints tape reinforced and stopped in accordance with the publication entitled "GIB® Site Guide".

ACOUSTIC SEALANT

To achieve the stated sound transmission class (STC), a bead of acoustic sealant must be placed around the perimeter of the inner layer on Frame 1, the outer layer is then bedded on to the bead.

TIMBER FRAMED ALTERNATIVE

Framing to comply with,

- NZBC B1 – Structure: AS1 Clause 3 – Timber (NZS 3604) or VM1 Clause 6 – Timber (NZS 3603)
- NZBC B2 – Durability: AS1 Clause 3.2 – Timber (NZS 3602).
- Framing to be set out as described for GBS 240.
- Nogs are not required except where sheet end butt joints occur.

FASTENING THE LINING (TIMBER FRAME)

As detailed in GBS 240 except that:
(a) Fasteners for the second layer on Frame 1 shall be 63mm x 8g GIB® Grabber® Self Tapping Screws.
(b) Fasteners for all other layers shall be 41mm x 6g GIB® Grabber® High Thread Drywall Screws.
System weight: approx 70kg/m²

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In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.