E4TMLA90 Single Timber Frame with Resilient Mount | Load Bearing | Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frame | Full Intertenancy Acoustic

System Number	Lining Suffix	Fire Rating	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
E4TMLA90	**-M52**	90/90/90	LB	63	62	Framing Side: 2 x 13mm Elephant MultiSmart Mount Side: 2 x 13mm Elephant MultiSmart

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 130mm.

Stud Depth	Mount + Channel	Lining Suffix	Total Plasterboard thickness	Total Partition Width
90mm	40mm	**M52**	52mm	182mm

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

Two layers of 13mm Elephant MultiSmart lining fixed vertically on each side of the timber framing.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings

Fasteners

System Number	Furring Channel Side		Framing Side	
	1st Layer	2nd Layer	1st Layer	2nd Layer
	Self-Tapping Drywall Screws		High Thread Drywall Screws	
E4TMLA90-M52	13mm	13mm	13mm	13mm
	25 x 6g	41 x 6g	41 x 6g	51 x 7g

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Mount Side: Fix 300mm centres along each furring channel.

Place fasteners minimum 12mm from sheet edges and sheet ends.

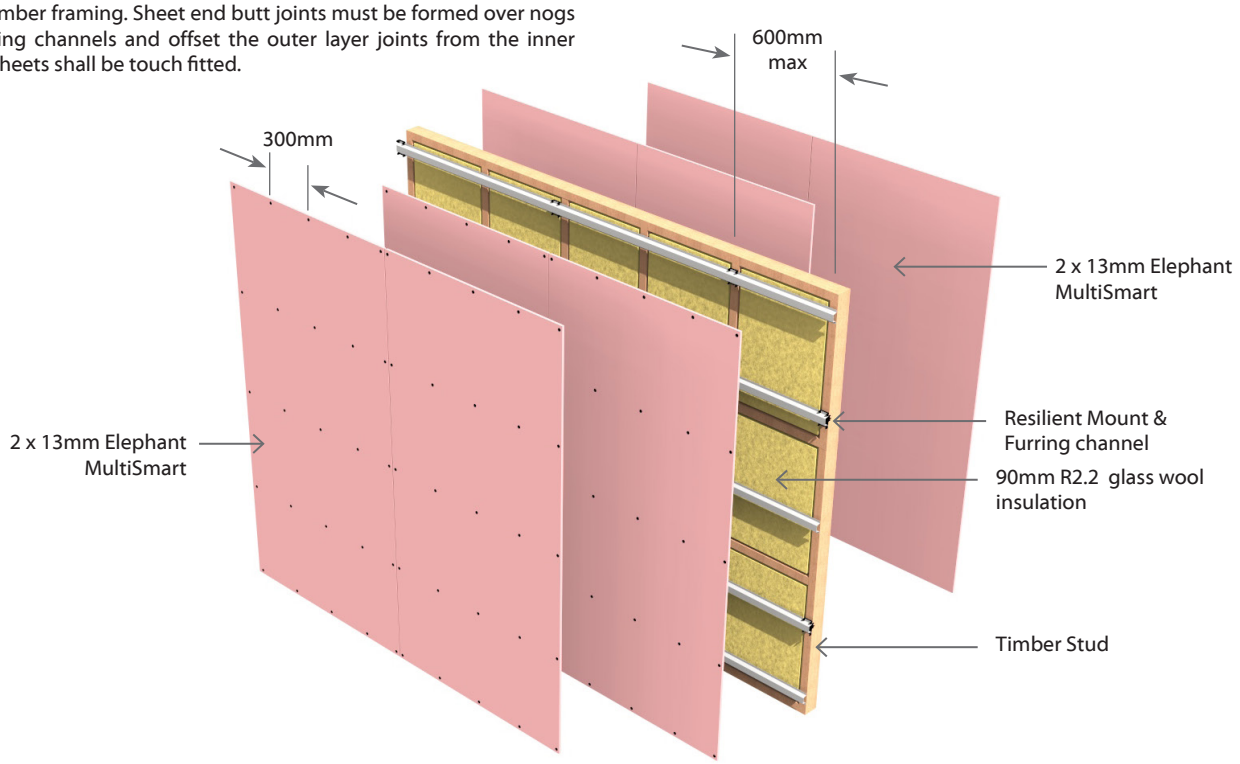
Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with Elephant Plasterboard Installation Guide.