E3TRLa60 Single **T**imber Frame with Resilient **R**ail | **L**oad Bearing | Two Way FRR

3 Layers: 1 Layer of Plasterboard to Framing side & 2 Layers of Plasterboard to Rail side | Sub Intertenancy **a**coustic

System Number	Lining Suffix	Fire Rating	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
E3TRLa60	**-MS39**	60/60/60	LB	52	50	Framing Side: 1 x 13mm Elephant MultiSmart Rail Side: 2 x 13mm Elephant Standard
	-M39	60/60/60	LB	52	51	Framing Side: 1 x 13mm Elephant MultiSmart Rail 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 90 x 45mm frame dimension.

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	Rail	Lining Suffix		Plasterboard	Total Partition
90mm	13mm	**S39**	**MS39**	39mm	142mm

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.
Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Rail

The Resilient Rail shall be fixed to the studs at 600mm centres using 32mm x 8g wafer head self-tapping screws through the base flange and into each stud. The base flange to face downwards and resilient edge upwards. Channel may be joined by nesting together with no more than 20mm overlap. Fasten through both channels into stud. Highest resilient channel shall be fixed no more than 75mm from the ceiling line and the lowest channel, 50mm from the floor line.

Plasterboard Lining

One layer of Elephant Plasterboard lining fixed vertically on framing side and Two layers fixed vertically on the furring channel on the other side as per specified system above.

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 rails and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the Elephant Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)

Fasteners (As per Specified System Above)

System Number	Resilient Rail Side		Framing Side
	1st Layer	2nd Layer	Single Layer
	Self-Tapping Drywall Screws		High Thread Drywall Screws
E3TRLa60-MS39 **E3TRLa60-M39**	13mm 25 x 6g	13mm 41 x 6g	13mm 41 x 6g

Fastener Centres

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

Resilient Rail Side: Fix 300mm centres along each resilient rail.

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.

Lining screws to be fastened to the side of the studs and nogs, to ensure that they don't penetrate or touch the framing.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced 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.