

**E4TLa45**

## Single Timber Frame

## Load Bearing

## Two Way FRR

**4** Layers: 2 Layers of Plasterboard to each side of frameSub Intertency acoustic

System Number	Lining Suffix	Fire Rating	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
<b>E4TLa45</b>	<b>-S40</b>	45/45/45	LB	45	44	2 x 10mm Elephant Standard-Plus on One side 2 x 10mm Elephant Standard-Plus to Other side

**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.

**Wall Sound Absorber**

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

**Plasterboard Lining**

Two layers of 10mm Elephant Standard-Plus lining on each side of timber framing.

First layer or inner layer on each side of framing to be fixed vertically.

Vertical or Horizontal fixing permitted on outer layer only.

Use full height sheets where possible.

Inner layer joints on opposite side of frame should be offset.

All sheet joints must be fixed over solid timber framing.

Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs 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**

System Number	Side One		Side Two	
	1 <sup>st</sup> Layer	2 <sup>nd</sup> Layer	1 <sup>st</sup> Layer	2 <sup>nd</sup> Layer
<b>E4TLa45-S40</b>	High Thread Drywall Screws			
	10mm	10mm	10mm	10mm
	41 x 6g	51 x 7g	41 x 6g	51 x 7g

**Fastener Centres**

Inner Layer: Fix at 600 centres on vertical studs and 600mm centres horizontally on top and bottom plates.

Outer Layer: Fix at 300mm centres at sheet perimeter and 300mm centres up each stud.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

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.

