

**3 Layers: 3 Layers of Plasterboard to one side of frame (Fire side)**

System Number	Lining Suffix	Fire Rating	Load Bearing Ability	Noise Control		Lining Requirement	Cladding (Required)
				STC	Rw		
<b>E3UW120</b>	<b>-MF45a</b>	120/120/120**	LB	N/A	N/A	1 x 13mm Elephant MultiSmart and 2 x 16mm Elephant FireSmart on One Side	NO Polymeric foam

\*\* N.B. System E3UW120-MF45a achieves the stated fire rating with cladding systems that do not incorporate polymeric foam

**Framing**

Timber or Steel Frame designed to meet durability and structural criteria for strength and serviceability under dead and live loads.

Studs at 600mm centres maximum.

Stud width to be a minimum of 35mm.

Cavity depth to be a minimum of 90mm.

**Wall Height, Load and Framing Dimensions**

Timber frame : Refer to NZS3604 stud tables for height and framing dimensions of load bearing and non-load bearing partitions.

Steel frame : Refer to specific designs.

**Exterior Cladding**

The Exterior wall must be clad with a suitable weathertight material. E.g. Brick Veneer, fibre cement sheeting, timber weatherboards etc.

N.B. Cladding cannot contain polymeric foam .

**Plasterboard Lining (Fire side)**

One layer of 13mm Elephant MultiSmart and Two layers of 16mm Elephant FireSmart lining on one side of the framing.

Vertical or Horizontal fixing permitted. Use full height or full length sheets where possible.

**Inner layer:** The vertical or horizontal sheet joints of the inner layer must be formed over framing.

**Outer layer(vertical fixing):** All sheet joints must be fixed over framing.

**Outer layer(horizontal fixing):** All sheet joints must be fixed over framing except longitudinal sheet joints of the outer layer, which do not need to be formed over framing.

Sheet end butt joints must be formed over framing.

All outer layer joints must be staggered from inner layer joints.

For steel frame, linings are fixed hard to the floor.

Sheets shall be touch fitted.

**Fixing of Linings**

**Fasteners**

System Number	Timber Frame			Steel Frame		
	1 <sup>st</sup> Layer	2 <sup>nd</sup> Layer	3 <sup>rd</sup> Layer	1 <sup>st</sup> Layer	2 <sup>nd</sup> Layer	3 <sup>rd</sup> Layer
	High Thread Drywall Screws			Self-Tapping Drywall Screws		
<b>E3UW120-MF45a</b>	13mm	16mm	16mm	13mm	16mm	16mm
	32 x 6g	51 x 7g	63 x 8g	25x 6g	41 x 7g	63 x 8g

**Fastener Centres**

First and Second Layer: Fix at 300mm centres up each stud.

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

Place fasteners no closer than 12mm from sheet edges and 18mm from sheet ends..

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

Avoid outer layer screws from hitting inner layer screws.

**Jointing**

1st and 2nd Layers: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. All in accordance with Elephant Plasterboard Installation Guide.

