

E4SLa90

Single Steel Frame

Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frame

Sub Intertency acoustic

System Number	Lining Suffix	Fire Rating	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
E4SLa90	-F64	90/90/90	LB	53	52	2 x 16mm Elephant FireSmart on One side 2 x 16mm Elephant FireSmart to Other side

Framing

Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum.

Frame heights as determined by specific design.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

Two layers of 16mm Elephant FireSmart linings fixed to each side of the steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. 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 st Layer	2 nd Layer	1 st Layer	2 nd Layer
Self-Tapping Drywall Screws				
E4SLa90-F64	16mm	16mm	16mm	16mm
	32 x 6g	51 x 7g	32 x 6g	51 x 7g

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from 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 acoustic sealant is required around the perimeter of the framing and the single layer is bedded into 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.

