

E2SC90

Suspended Grid Floor/Ceiling

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside side of frame

System Number	Lining Suffix	Fire Rating	Load Bearing Ability	Noise Control			Lining Requirement
				STC	Rw	IIC	
E2SC90	-F32	90/90/90	LB	53	52	43	2 x 16mm Elephant FireSmart

Floor Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190mm x 45mm and spaced at no more than 600mm centres. Solid strutting is required in accordance with NZS 3604.

Alternatively, a proprietary I-joist system may be used subject to specific structural design and approved by the normal building consent process.

Nogs fixed on the flat to receive the ends of flooring material shall be 90mm x 45mm minimum.

Flooring

Flooring shall be 20mm thick particle board or 17mm thick structural ply, fixed to the joists as per manufacturer's instructions.

Flooring sheet joints must either be formed over framing or have a polypropylene tongue and groove jointer.

Suspension System

Rondo® KEY-LOCK™ steel frame suspension system comprising 2.5mm wire hangers at 1200mm centres supporting top cross rails (part 128) spaced at a max of 1200mm centres and furring channels (part 129) at 600mm centres.

OR

Rondo ScrewFix® steel frame suspension system comprising 2.5mm wire hangers at 1200mm centres supporting F38 strong back channels spaced at a maximum of 1200mm centres and F37 furring channels at 600mm centres.

OR

Alternative suspension systems with equivalent performance characteristics and layout may be used.

Suspended Grid ceiling system to be installed as per manufacturer's specification.

Plasterboard Lining

Two layers of 16mm Elephant FireSmart fixed at right angles to the furring channels. Offset the joints of the outer layer by 600mm from those of the inner layer.

All sheet butt joints must occur on the furring channel. Sheet joints shall be touch fitted.

Fixing of Linings

Fasteners

System Number	1 st Layer	2 nd Layer
	E2SC90-F32	Self-Tapping Drywall Screws
16mm 32 x 6g		16mm 41 x 6g

Fastener Centres

Ceiling sheets shall be fixed at 200mm centres along each furring channel and around the ceiling perimeter. Fix at 150mm centres where butt joints occur.

Place fasteners no closer than 12mm from sheet edges.

Place fasteners no closer than 18mm from sheet ends. However this can be reduced to 12mm if sheet ends occur on furring channels.

Avoid outer layer screws from hitting inner layer screws.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners, taped and filled in accordance with Elephant Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled Elephant Plasterboard Installation Guide.

