E1FC45

<u>F</u>loor/<u>C</u>eiling

Load Bearing

# <u>1</u> Layer: 1 Layer of Plasterboard to underside side of frame

	System Number	Lining Suffix	Fire Rating	Load Bearing Ability	Noise Control			Lining Requirement
						Rw	IIC	
	E1FC45*	-M13	45/45/45	LB	39	38	32	1 x 13mm Elephant MultiSmart

# **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 NZS3604.

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

## Flooring

Minimum flooring shall be nominal 20mm thick particle board or minimum 17mm thick structural plywood, fixed to the joists as per manufacturers' instructions.

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

#### **Ceiling Framing**

Nogs shall be 70mm x 45mm minimum, fixed on the flat in between joists to receive the Elephant Plasterboard lining. They are spaced at 600mm centres for joist at 600mm centres or at 1200mm centres for joists at 450mm centres.

Nogs or framing is required at the perimeter of the fire rated ceiling.

#### Alternative Framing

In situations where  $\rm NZS3604$  allows for 140mm deep joists a 70mm x 45mm ceiling batten and nog can be used to build up the joist depth.

The 45mm x 45mm nog is required under all joists that are spaced at 600mm centres or under all joists which are at 450mm centres and the battens are spaced at 600mm centres.

Where joists are at 400mm centres or joists are at 450mm centres and the battens are at 450mm centres, then nogs are required at 1200mm centres.

Also in situations where ceiling battens have been fixed over the 190mm x 45mm joists instead of nogged within the joists, the alternative framing method can be used to ensure that the fire integrity is maintained.

Nogs or framing is required at the perimeter of the fire rated ceiling.

## **Plasterboard Lining**

One layer of 13mm Elephant MultiSmart fixed at right angles directly to the underside of floor joists.

All joints must occur on joists and solid blocking.

Sheets to be touch fitted.

# Fixing of Linings

Fasteners

System Number	Single Layer						
System Number	High Thread Drywall Screws						
545645 M43	13mm						
E1FC45-M13	51 x 7g						

#### **Fastener Centres**

Place fasteners 150mm centres around the perimeter of each sheet. 200mm centres across each joist and at the centre of each nog. Place fasteners no closer than 12mm from sheet edges and 18mm from sheet ends.

### 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

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

### \*Note: For 30/30/30 FRR

If the actual FRR required is 30/30/30, reference can be made to either E1BC30 or E1FC30.

