EFP2DFA60 Direct Fixed Clip - Floating Particle Board Floor - Timber Joists

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside of frame

Full Intertenancy
Acoustic

System Number	Lining Suffix	Fire Rating	Load Bearing Ability	Noise Control			Lining Requirement
				STC	Rw	IIC*	
EFP2DFA60	**-MS26**	60/60/60	LB	64	63	55-72	1 x 13mm Elephant MultiSmart 1 x 13mm Elephant Standard
	-M26	60/60/60	LB	65	64	56-72	2 x 13mm Elephant MultiSmart

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190mm x 45mm and spaced at no more than 600mm centres. Nogs or framing is required at the perimeter of the Fire Rated ceiling.

Alternative Framing

Alternatively, a proprietary I-joist system with a minimum depth of 190mm and spaced at no more than 600mm centres may be used subject to specific structural design and approved by the normal building consent process. Consult the joist manufacturer regarding construction of the solid blocking contained in the floor/ceiling to wall junctions.

Initial Floor

20mm Tongue & groove Particle board Flooring laid at right angles to the timber joists in a staggered pattern in accordance to the Particle board manufacturer's Technical Manuals. Flooring sheet joints must have a tongue and groove jointer or be formed over framing. No nogs required to support the edges of longitudinal sheets. When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Adhesive Requirement (Both flooring layers)

A continuous 6mm bead of Adhesive to be applied over the joists or channels before laying the flooring materials. Apply a 2mm bead along the tongue of the Tongue and Groove panels as they are laid. Suitable Adhesive options are:

- Bostik Seal n Flex-1 or
- HB Fuller-Sturdi Bond
- Holdfast 220LM or
- Sikaflex 11FC

Fasteners

Initial 20mm Tongue & Groove Particle Board Flooring Layer

Fix 20mm Tongue & groove Particle board Flooring across the joists using angular grooved galvanised or stainless steel 60 x 3.15mm gun nails or can be screw fixed using a 45mm x 8g timber thread self-drilling screw (corrosion resistant).

Floating 20mm Tongue & Groove Particle Board Flooring Layer

Fix 20mm Tongue & groove Particle board Flooring across the Acoustic Channels using 45mm x 8g timber thread self-drilling screws (corrosion resistant).

Fastening Centres (Both flooring layers)

Fix at 200mm centres along each joist or channel. Fasteners to be placed at 15mm min at long sheet edges and from transverse edges. Fastener edge distance of 50mm to be maintained at sheet corners.

Flooring Void

AcoustiFlor™ Acoustic Cradles are to be positioned on the tongue & groove particle board flooring at 450mm centres max starting from the edge of the room. The Acoustic Cradles need not be aligned with the timber floor joists and can be laid in either direction.

The Cradles are not to be fixed down to the bottom flooring layer.

AcoustiFlor™ Structural Battens to be placed inside the AcoustiFlor™ Acoustic Cradles at 400mm centres maximum.

Flooring Void Sound Absorber

Install 50mm thick R1.2 sound absorber with a minimum density of 9.6kg/m^3 between the AcoustiFlor™ Structural Battens.

Floating Floor

The 20mm Tongue & groove Particle board Flooring is to be laid at right angles to AcoustiFlor™ Structural Batten and fixed at 200mm centres along the batten. Lay the sheets in a staggered pattern. Flooring edges other than Tongue and groove to be supported by battens.

When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Allow 5mm gap where Particle board flooring sheet edges butt into external/internal walls. Fill the gap with fire retardant acoustic sealant.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum and no less than 900mm centres to support the metal ceiling battens which are spaced at 600mm centres maximum. Use 3 x 32mm x 8g Wafer Head screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Void Sound Absorber

Install minimum 75mm thick R1.8 sound absorber with a minimum density of 9.6kg/m^3 between the joists above the metal ceiling battens.

Elephant Plasterboard Ceiling Lining

Two layers of Elephant Plasterboard as per specified system above fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing of Elephant Plasterboard Internal Linings

Fasteners (As per Specified System Above)

System Number	1st Layer	2nd Layer
	Self-Tapping Drywall Screws	
EFP2DFA60-MS26	13mm	13mm
EFP2DFA60-M26	32mm x 6g	41mm x 6g

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

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.

Additional Reference Material

Refer to Particle board Manufacturer's Technical Manuals for additional information about covering general and wet area installation and penetrations.

***Impact Insulation Class (IIC)**

IIC of 55 is achieved with a bare floor.

IIC of 56 is achieved with loose laid Vinyl.

IIC of 70 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 72 is achieved with 40oz loop pile carpet on waffle underlay.

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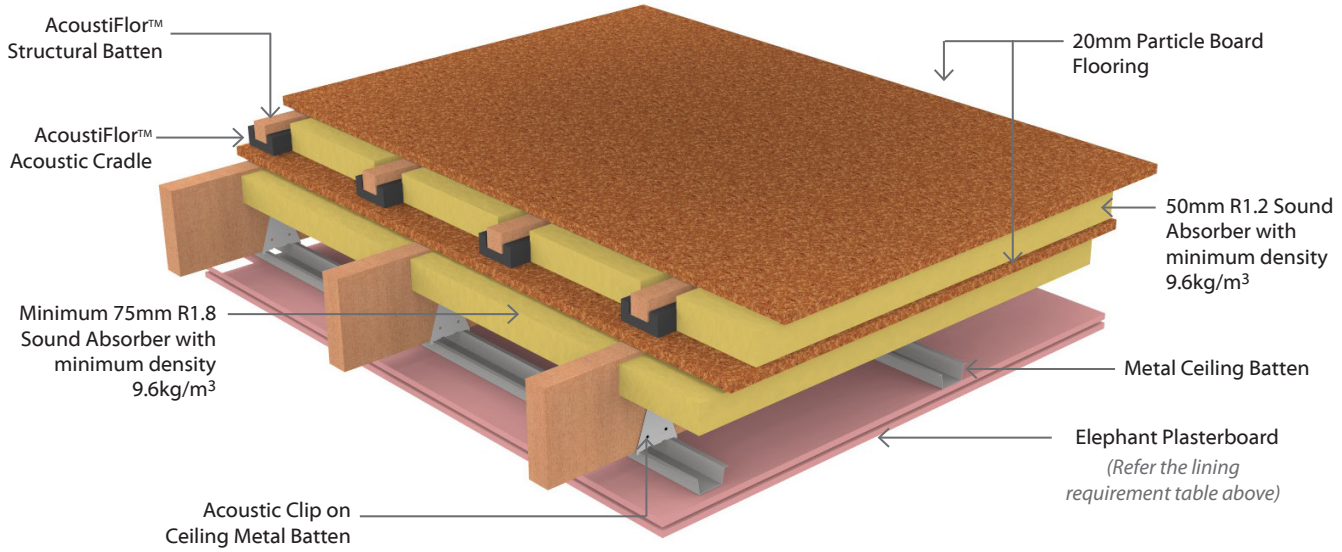

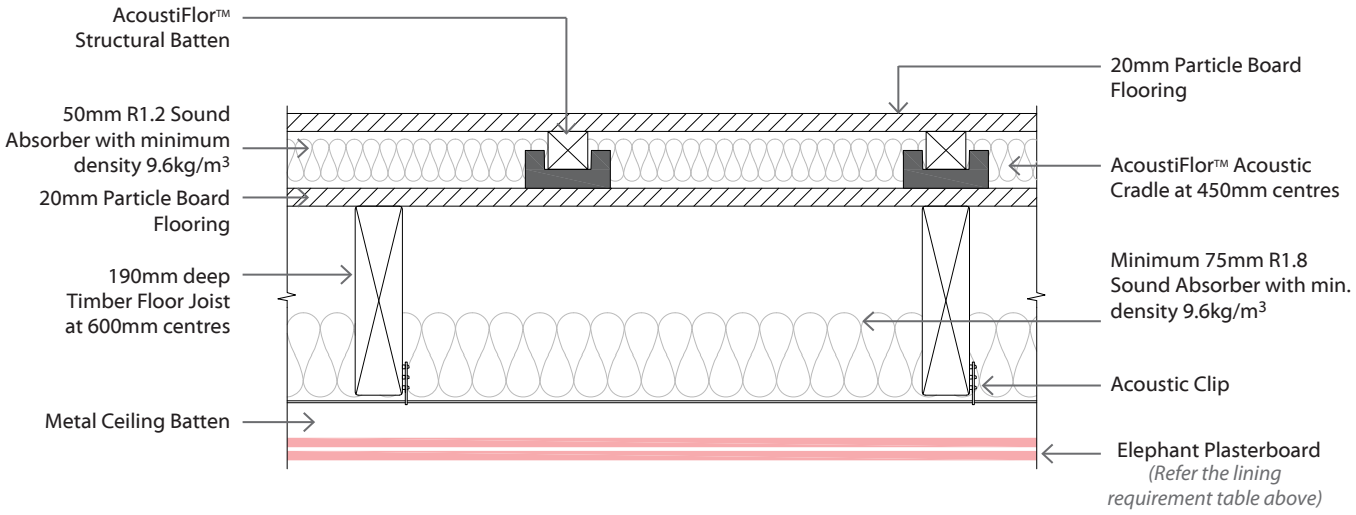

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