

**EFJ2DFsA60** Direct Fixed Clip Floating James Hardie Secura™ Floor - Steel Joists

Load Bearing

**2** Layers: 2 Layers of Plasterboard to underside of frameFull Intertency  
Acoustic

System Number	Lining Suffix	Fire Rating	Load Bearing Ability	Noise Control			Lining Requirement
				STC	Rw	IIC*	
EFJ2DFsA60	-FM29	60/60/60	LB	67	66	56-76	1 x 16mm Elephant FireSmart And 1 x 13mm Elephant MultiSmart

**Floor Framing**

A specifically designed steel floor structure with C-section steel floor joists of 190mm minimum depth and with 45mm flanges with a steel gauge of 1.55mm. Joist spacing's at no more than 600mm centres.

**Initial Floor**

19mm thick James Hardie Secura™ Interior Flooring laid at right angles to the steel joists in a staggered pattern. Flooring sheet joints must have a tongue and groove jointer or be formed over framing. 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.

Suitable Adhesive options are:

- Bostik Seal n Flex-1 or
- Holdfast 220LM or
- Sikaflex 11FC

**Fasteners****Initial Secura Floor Layer**

Fix Secura™ Interior Flooring across the joists using 8-10g x 40-45mm wing tek min. class 3 coating screws.

**Floating Secura Floor Layer**

Fix Secura™ Interior Flooring across the Acoustic Channels using 50mm x 10g self-tapping steel screws.

**Fastening Centres (Both flooring layers)**

Fix at 200mm centres along each joist or channel. Fasteners to be placed at 25mm min at long sheet edges and 12mm from transverse edges. Fastener edge distance of 50mm to be maintained at sheet corners.

**Flooring Void**

James Hardie Acoustic Cradles are to be positioned on the James Hardie Secura™ Interior Flooring at 450mm centres max starting from the edge of the room. The Acoustic Cradles need not be aligned with the steel floor joists and can be laid in either direction.

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

James Hardie Acoustic Floor Channels to be placed inside the Acoustic Cradles. Acoustic Channels are spaced at 450mm centres maximum.

**Flooring Void Sound Absorber**

Install Sound Absorber between the James Hardie Acoustic Floor Channels. Use 50mm thick R1.2 glass wool blanket with a minimum density of 9.6kg/m<sup>3</sup>.

**Floating Floor**

James Hardie Secura™ Interior Flooring to be laid at right angles to the Acoustic Channels and fixed at 200mm centres along the channel. Lay the sheets in a staggered pattern. Flooring edges other than tongue and groove must be supported by channels.

Allow 5-8mm gap between Secura™ Interior Flooring and the external/internal walls. Fill the gaps with an 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 30mm x 10g Drill-Point 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 Sound Absorber between the joists above the metal ceiling battens. Use minimum 75mm thick R1.8 glass wool blanket with a minimum density of 9.6kg/m<sup>3</sup>.

**Elephant Plasterboard Ceiling Lining**

One layer of 16mm Elephant FireSmart and One layer of 13mm Elephant MultiSmart 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	1 <sup>st</sup> Layer	2 <sup>nd</sup> Layer
	Self-Tapping Drywall Screws	
EFJ2DFsA60-FM29	16mm	13mm
	32 x 6g	41 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 James Hardie Secura Interior Flooring Installation Manual and the James Hardie Fire and Acoustic Floor System Installation Manual for additional information about covering general and wet area installation and penetrations and control joints.

**\*Impact Insulation Class (IIC)**

IIC of 56 is achieved with a bare floor.

IIC of 57 is achieved with loose laid Vinyl.

IIC of 75 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

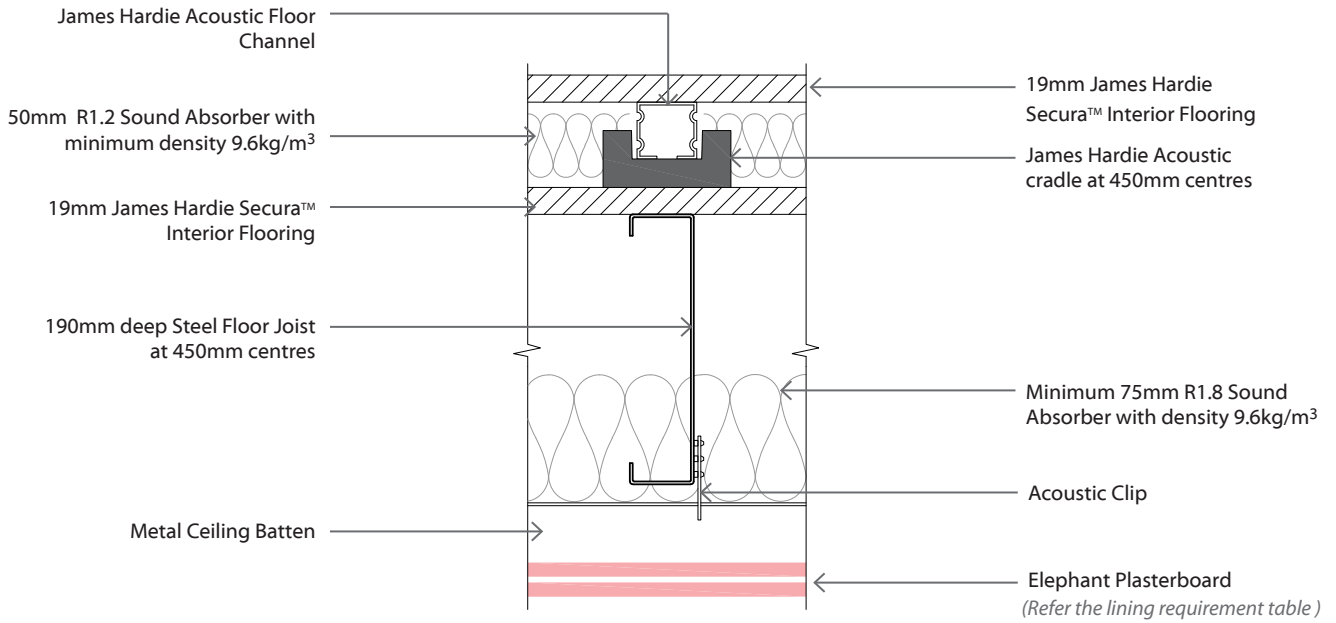
IIC of 76 is achieved with 40oz loop pile carpet on waffle underlay.



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Full Intertency  
Acoustic



ENS-313

