

**EJA1TL30**

**EPB & James Hardie Axon™ Panel**

**Two Way FRR**

**External Wall - Timber Frame**

**Load Bearing**

System Number	Lining Suffix	Fire Rating	Insulation	Noise Control STC	Lining Requirement
<b>EJA1TL30</b>	<b>-S10</b>	30/30/30	R2.2 glass wool	41	1 x 10mm Elephant Standard-Plus on One side James Hardie Axon™ Panel to Other side

**Framing, Wall Height, Load and Framing Dimension**

Timber framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability. Timber framing must be in accordance with NZS3604 stud tables for load bearing or non-load bearing partitions. Furthermore;

- Minimum framing dimension is 90 x 45mm.
  - Nogs must be in place at a maximum of 800mm centres.
  - Maximum stud spacing's are 600mm centres.
  - The fire rated walls built close to boundary are also required to achieve post fire stability in either direction in accordance with the NZBC verification method B1/VM1, paragraph 2.2.4
- Refer to latest James Hardie Fire & Acoustic Design Manual figures and tables for further detail.

**Underlay**

For the type of allowable underlay refer to table below.

	EH Wind Zone	Other Wind Zone
<b>Buildings &lt;10m</b>	RAB	Flexible Underlay
<b>Buildings &gt;10m</b>	RAB	RAB

**Fire Retardant Flexible Underlay**

Install any Fire Retardant Flexible Underlay beneath the claddings, that complies with Table 23 of E2/AS1 and has a flammability index not exceeding 5.

**RAB™ Board**

One layer of James Hardie RAB™ Board fixed to entire framing.  
 6mm RAB™ Board : Use 40 x 2.8mm fibre cement nail at 200mm centres  
 9mm RAB™ Board : Use 50 x 2.8mm fibre cement nail at 200mm centres  
 Fixing to be 12mm from sheet edges  
 Reference to be made to the James Hardie Rigid Air Barrier Installation Manual.

**Cavity Batten**

When Cavity Batten is required, use a nominal 20mm Timber Cavity Batten. Refer to Axon™ Panel Timber Cavity Batten Technical Specification. When Cladding is allowed to be directly fixed without a cavity batten then a fire retardant flexible underlay must be used. Refer to Axon™ Panel Direct Fixed Technical Specification.

**James Hardie Axon™ Panel Cladding**

James Hardie Axon™ Panel cladding to external side of the timber framing. Consider the nail length required depending on the type of fixing i.e. Cavity fixing or Direct fixing. Refer to both Axon™ Panel Timber Cavity Batten Technical Specification AND the James Hardie Fire & Acoustic Design Manual for information regarding fixing and finishing.

**Cavity Insulation**

Wall cavity must be filled with Cavity Insulation between studs and nogs. Use 90mm thick R2.2 glass wool insulation.

**Elephant Plasterboard Lining**

One layer of 10mm Elephant Standard-Plus lining to internal side of framing. Vertical fixing only permitted. Use full height sheets where possible when fixing vertical. All sheet joints must be fixed over solid timber framing. Sheets shall be touch fitted.

**Fixing of Elephant Plasterboard Internal Linings**

**Fasteners**

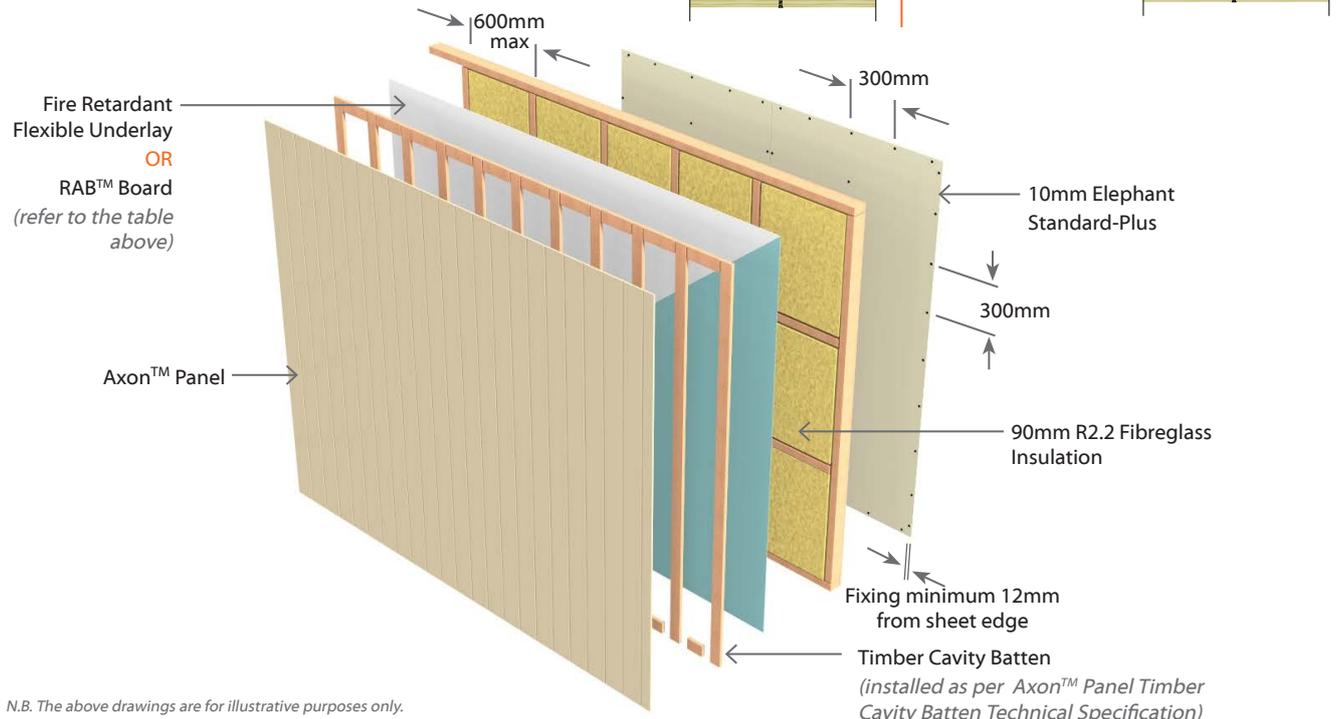
41mm x 6g High Thread Drywall Screws

**Fastener Centres**

Fix at 300mm centres around sheet perimeter and up all intermediate studs. Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections. Place fasteners no closer than 12mm from the sheet edges and 18mm from sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur.

**Jointing and Finishing of Elephant Plasterboard**

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



N.B. The above drawings are for illustrative purposes only.

