

**EJRN2TL60**

**EPB & James Hardie RAB™ Board & a Weathertight Cladding**

**Two Way FRR**

**External Wall - Timber Frame**

**Load Bearing**

System Number	Lining Suffix	Fire Rating	Insulation	Noise Control STC	Lining Requirement
<b>EJRN2TL60</b>	<b>-MS20</b>	60/60/60	JH Mineral	46	1 x 10mm Elephant MultiSmart & 1 x 10mm Standard-Plus on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side
	<b>-S26</b>	60/60/60	JH Mineral	47	2 x 13mm Elephant Standard on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side
	<b>-M20</b>	60/60/60	JH Mineral	47	2 x 10mm Elephant MultiSmart on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External 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 instructions.

**Underlay**

**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 150mm centres

9mm RAB™ Board : Use 50 x 2.8mm fibre cement nail at 150mm centres

Fixing to be 12mm from sheet edges

Reference to be made to the James Hardie Rigid Air Barrier Installation Manual.

**Cavity Batten**

Cavity battens as per cladding manufacturer's technical specification.

**Weathertight Cladding**

The Exterior wall must be clad with a suitable weathertight material. Cladding fixed as per manufacturer's technical specification.

**N.B:** It is important to consider the fire properties of the external cladding is in accordance with NZBC C/VM1 or C/AS documents.

Refer to Table 5.1 of Section 5.4 of C/AS1 and Table 5.5 of Section 5.8.1 of C/AS2 for the information about various risk groups to identify

the external fire spread safety requirement applicable to the exterior surface finishes.

**Wall Insulation**

Insulation must be installed between studs and nogs. Use 90mm thick James Hardie Mineral insulation.

**Elephant Plasterboard Lining**

Two layers of Elephant Plasterboard lining to internal side of framing as per specified system above. First layer or inner layer to be fixed vertically. Vertical or Horizontal fixing permitted on outer layer only. Use full height or full length sheets where possible. All sheet joints must be fixed over solid timber framing. Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs. Offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

**Fixing of Elephant Plasterboard Internal Linings**

**Fasteners**

Inner layer: 41mm x 6g High Thread Drywall Screws

Outerlayer: 51mm x 7g High Thread Drywall Screws

**Fastener Centres**

Inner Layer: Fix at 600mm centres at sheet perimeter and all studs.

Outer Layer: Fix at 300mm centres at sheet perimeter and all studs.

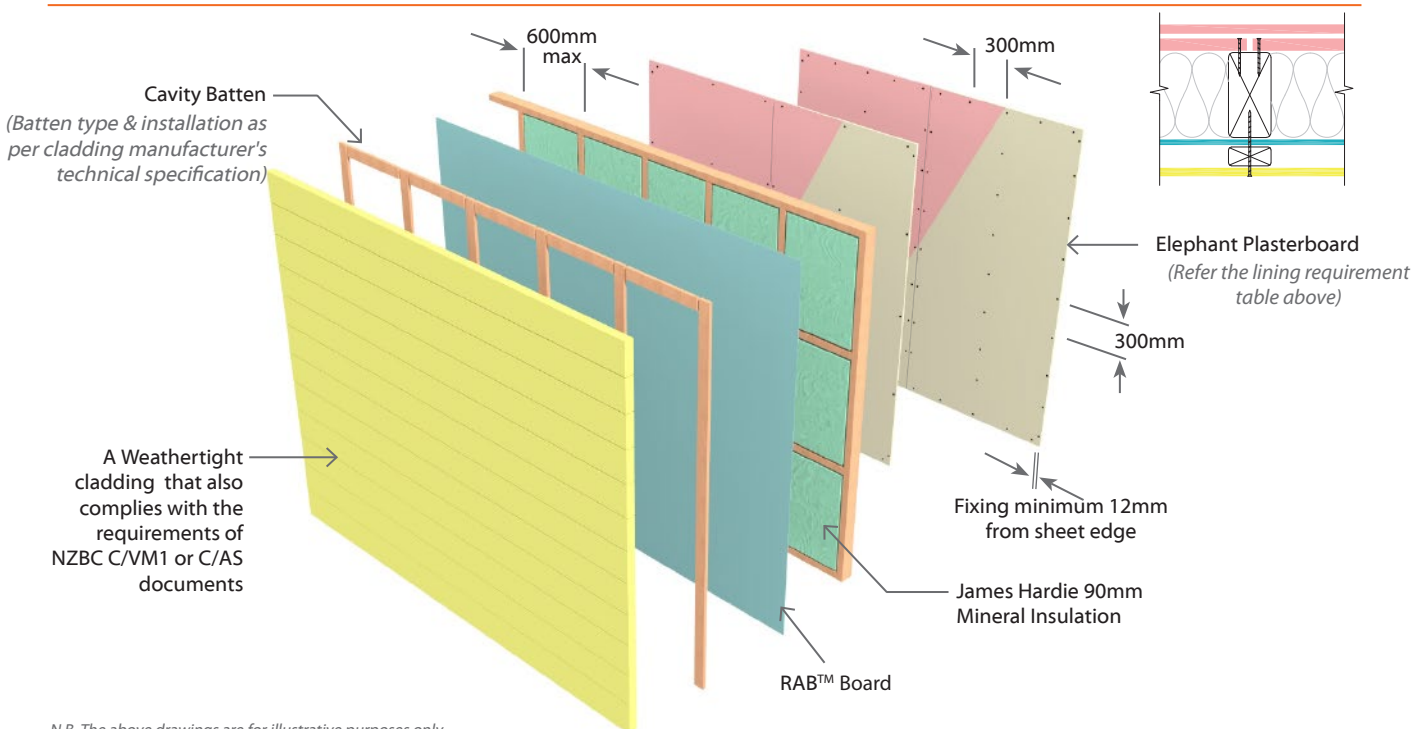
Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners no closer than 12mm from the sheet edges and 18mm from sheet ends. Avoid outer layer screws from hitting inner layer screws.

**Jointing and Finishing of Elephant Plasterboard**

Inner Layer: Unstopped.

Outer Layer: 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.*

