EJRN1SL30 EPB & James Hardie RAB™ Board & a Weathertight Cladding

Two Way FRR

External Wall - Steel Frame

Load Bearing

System Number	Lining Suffix	Fire Rating	Insulation	Noise Control STC	Lining Requirement
EJRN1SL30	-M13	30/30/30	Hardie™ Mineral	42	1 x 13mm Elephant MultiSmart on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side
	-F16	30/30/30	Hardie™ Mineral	43	1 x 16mm Elephant FireSmart on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side

Framing, Wall Height, Load and Framing Dimension

Steel framing for fire rated walls must be in accordance with NASH standard for residential and low rise buildings and AS/NZ 1170 standards. The framing shall also meet the following;

- Steel sections shall be galvanized/zinc coated and have a base metal thickness (BMT) 0.55mm minimum for non-load bearing walls and 0.75mm minimum for load bearing walls and 1.6mm maximum
- The minimum size for steel stud framing to be used in external walls shall be minimum 89mm deep x 36mm wide
- Maximum stud spacing 400mm centres
- Maximum nogs / dwangs spacing 800mm centres
- Steel frame must comply with the durability requirements of NZBC
- The fire rated walls built close to boundary are also required to achieve post fire stability in either direction as per SED in accordance with the NZBC verification method B1/VM1, paragraph 2.2.4

Thermal Fire Batten

Fire battens are used on all FRR steel stud systems and must be used between James Hardie Cladding and steel framing face.

Refer to section 4.6 of James Hardie Fire & Acoustic Design Manual for installation detail.

Pre-Cladding

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 Home RAB™ Pre-Cladding & RAB™ Board Installation Manual.

Cavity Batten

Cavity battens to be installed according to the selected type of Cladding and its manufacturer's relevant 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 Hardie™ Mineral insulation.

Elephant Plasterboard Lining

One layer of Elephant Plasterboard lining as per specified system above to internal side of the steel framing. Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over steel framing. Where sheet end butt joints are unavoidable, they must be formed over nogs. The layer is fixed hard to the floor. Sheet shall be touch fitted.

Fixing of Elephant Plasterboard Internal Linings

Fasteners (As per Specified System Above)

System Number	Single Layer
	Self-Tapping Drywall Screws
EJRN1SL30-M13	13mm
	32 x 6g
EJRN1SL30-F16	16mm
	32 x 6g

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm from the sheet edge and 50mm 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.

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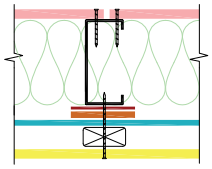

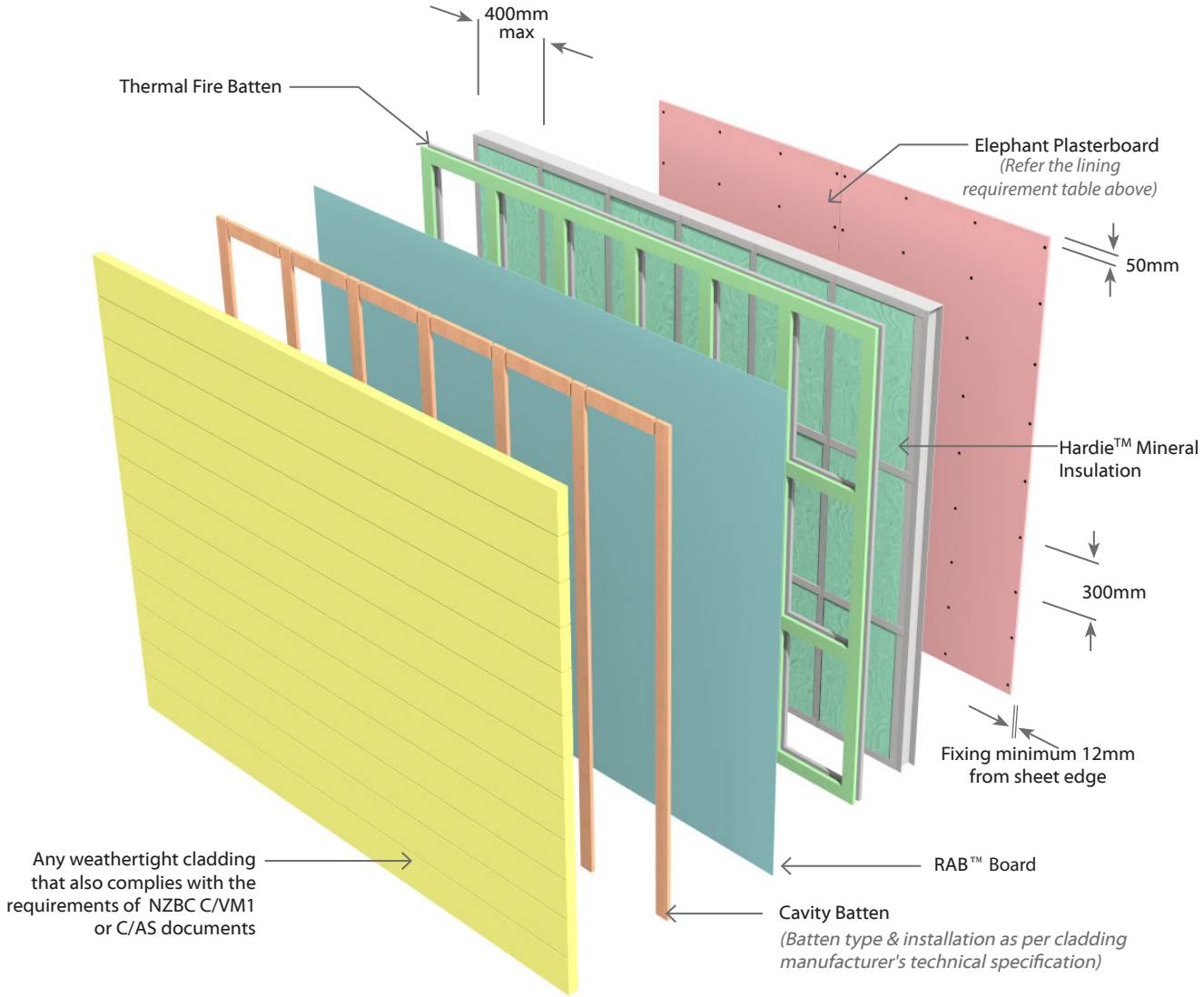

N.B. The above drawings are for illustrative purposes only.