EJRH2SL60 EPB & RAB™ Board with selected James Hardie Fibre Cement Cladding | Two Way FRR

External Wall - Steel Frame | Load Bearing

System Number	Lining Suffix	FRR	Insulation	Noise Control STC	Lining Requirement
EJRH2SL60	**-F26**	60/60/60	Hardie™ Mineral	51- 54	2 x 13mm EPB FireSmart on Internal side James Hardie RAB™ Board with selected James Hardie 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 c/c
- Maximum nogs / dwangs spacing 800mm c/c
- 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 / Underlay

RAB™ Board

One layer of James Hardie RAB™ Board fixed to entire framing.

RAB™ Board must be used to achieve fire ratings

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

Refer to the table below for the type of cavity batten required for the selected James Hardie system.

James Hardie Cladding System	Cavity Batten type
ExoTec™	Top Hat System
EasyLap™	CLD Structural Cavity Batten
Stria™ (Horizontally fixed)	
Axon™	

CLD™ Structural Cavity Batten:

Use 70 x 19mm CLD™ Structural Cavity Batten.

CLD™ Structural Cavity battens to be installed according to the selected type of James Hardie cladding and as per the relevant technical specification, refer page 29 of this manual.

ExoTec™ Top Hat System:

For ExoTec™ Top hat system installation instructions, refer to ExoTec™ Facade Panel Top Hat Rainscreen Technical Specification

James Hardie Fibre Cement Cladding

One layer of selected James Hardie Fibre Cement cladding to one side of the framing. See list below for allowable James Hardie claddings.

Selected Cladding Type
ExoTec™
EasyLap™
Stria™ (Horizontally fixed)
Axon™

Refer to page 29 of this manual for the above mentioned James Hardie cladding's relevant technical literature.

Also refer to James Hardie Fire & Acoustic Design Manual.

Wall Insulation

Insulation must be installed between studs and nogs. Use Hardie™ Mineral insulation.

EPB Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB MultiSmart lining to internal side of the steel framing.

Vertical fixing only permitted. Use full height sheets where possible. All vertical sheet joints must be fixed over framing. Vertical joints of the outer layer should be offset to those of the inner layer. Where sheet end butt joints are unavoidable, the inner layer joints must be formed over nogs. Stagger the outer layer butt joints from the inner layer by minimum 100mm. The layers are fixed hard to the floor. Sheet shall be touch fitted.

Fixing of EPB Plasterboard Internal Linings

Fasteners

System Number	1st Layer	2nd Layer
	Self-Tapping Drywall Screws	
EJRH2SL60-F26	13mm 25 x 6g	13mm 41 x 6g

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top and bottom track sections.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom track sections.

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

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Jointing and Finishing of EPB Plasterboard

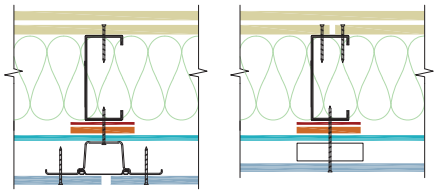
Inner Layer: Unstopped

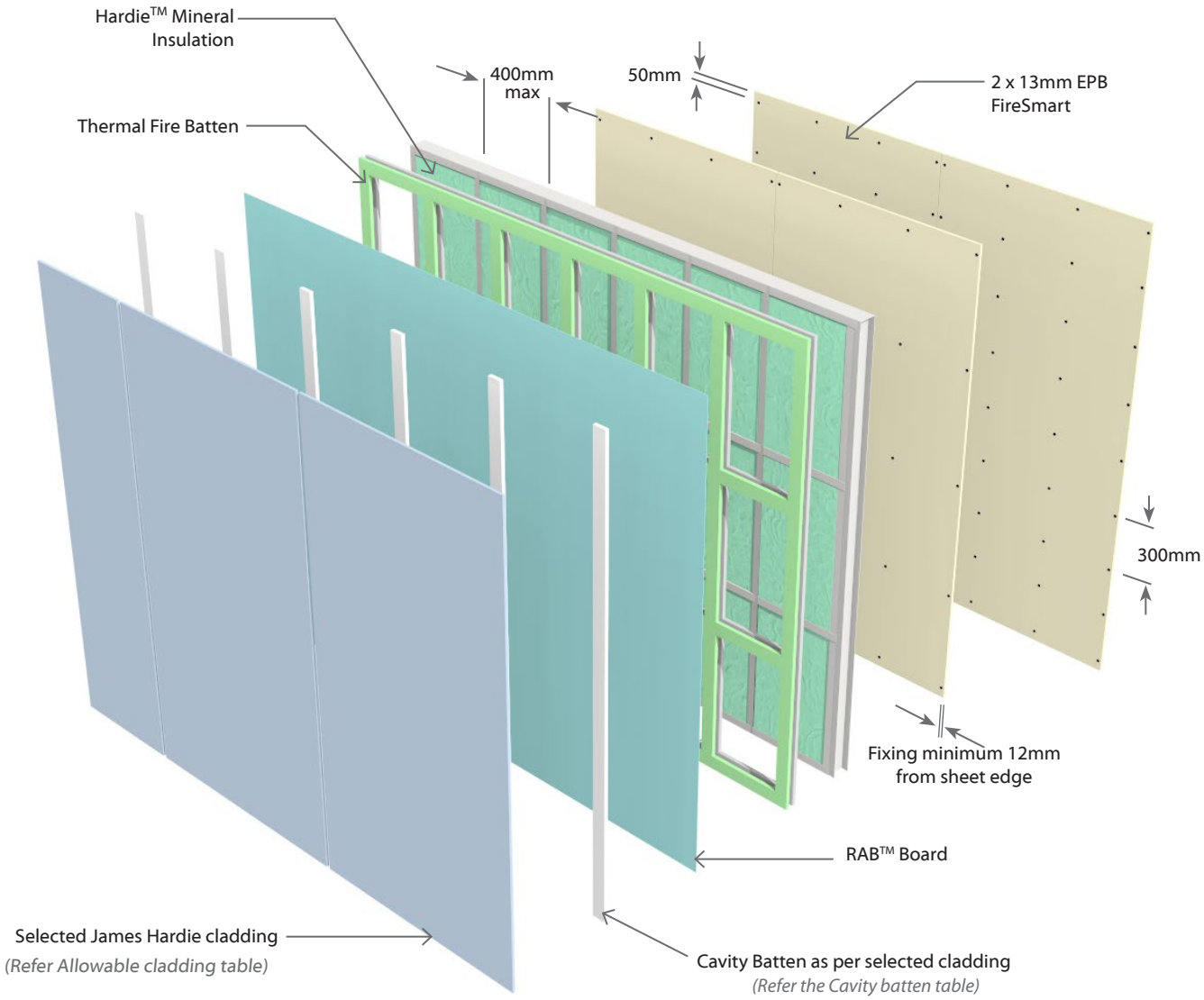
Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. All in accordance with Elephant Plasterboard Installation Guide.

EJRH2SL60 EPB & RAB™ Board with selected James Hardie Fibre Cement Cladding | Two Way FRR

External Wall - Steel Frame | Load Bearing

System Number	Lining Suffix	FRR	Insulation	Noise Control STC	Lining Requirement
EJRH2SL60	**-F26**	60/60/60	Hardie™ Mineral	51- 54	2 x 13mm EPB FireSmart on Internal side James Hardie RAB™ Board with selected James Hardie cladding to External side





Face Paper Product Identification Code	
13mm EPB FireSmart	**F13**

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