February 2023

Two Way FRR

#### EJOh1TL60 EPB & James Hardie Linea<sup>™</sup> Oblique<sup>™</sup> Weatherboard - Horizontal

# External Wall - Timber Frame

External Wall - T	Load Bearing					
System Number	Lining Suffix	Fire Rating	Insulation	Noise Control STC	Lining Requirement	
EJOh1TL60	-M13	60/60/60	R2.2 glass wool	47	1 x 13mm Elephant MultiSmart on Internal side James Hardie Linea™ Oblique™ Weatherboard horizontal 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 detail.

## Underlay

For the type of allowable underlay refer to table below.

	EH Wind Zone	Other Wind Zone
Buildings <10m	RAB	Flexible Underlay
Buildings >10m	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<sup>™</sup> Board**

One layer of James Hardie RAB<sup>™</sup> Board fixed to entire framing. 6mm RAB<sup>™</sup> Board : Use 40 x 2.8mm fibre cement nail at 200mm centres 9mm RAB<sup>™</sup> 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 Home RAB<sup>™</sup> Pre-Cladding & RAB<sup>™</sup> Board Installation Manual.

## **Cavity Batten**

Use a nominal 20mm Timber Cavity Batten. Refer to Linea<sup>™</sup> Oblique<sup>™</sup> Horizontal Installation Technical Specification for installation instructions.

## Linea<sup>™</sup> Oblique<sup>™</sup> Weatherboard Cladding - Horizontal

James Hardie Linea<sup>™</sup> Oblique<sup>™</sup> Weatherboard cladding fixed horizontally to external side of the timber framing. Refer to both Linea<sup>™</sup> Oblique<sup>™</sup> Horizontal Installation Technical Specification AND the James Hardie Fire & Acoustic Design Manual for information regarding fixing and finishing.

## Wall Insulation

Insulation must be installed between studs and nogs. Use 90mm thick R2.2 glass wool insulation.

## **Elephant Plasterboard Lining**

One layer of 13mm Elephant MultiSmart 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

When using RAB™ Board

#### **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.

When using Fire Retardant Flexible Underlay

