EPB
PLASTERBOARD & SHAFTLINER BARRIER
Intertenancy Systems For Terraced Homes

March 2025

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EPB Plasterboard & Shaftliner Barrier Intertenancy Systems for Terraced homes Manual

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Introducing new 10mm EPB FireSmart & 10mm EPB CeilingSmart®

10mm EPB FireSmart is a higher density board compared to10mm EPB Standard and provides enhance fire performance.

10mm EPB CeilingSmart is especially developed to span ceiling battens at 600mm centers providing a light weight and cost effective ceiling lining solution compared to using 10mm Standard Plasterboard at 450mm centres or 13mm Standard Plasterboard at 600mm centre.
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All references made to EPB in this manual means Elephant Plasterboard

Elephant Plasterboard (NZ) Limited Product & System Warranty

EPB Plasterboard wall and ceiling linings are supported by Elephant Plasterboard (NZ) Limited Quality Guarantee. This Warranty covers EPB Plasterboard products and or systems for a minimum of 10 years from the date of the purchase. Elephant Plasterboard (NZ) Limited supplies products which are warranted to be free from defects. Any products found to be defective before or after installation will be replaced and/or repaired, provided installation has been in accordance with EPB Plasterboard's technical literature.

Knauf/USG Boral Partiwall® & IntRwall® Intertenancy Systems

The fire and acoustic performance, durability, maintenance, limitations, conditions of use and installation requirements of Knauf/USG Boral™ products, components or systems do not form a part of this Elephant Plasterboard (NZ) Limited warranty.
For warranty terms & conditions on Knauf/USG Boral™ products & components, visit www.knaufapac.com/en_au/

GIB® Intertenancy Barrier Systems for Terraced Homes

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INTRODUCTION

This manual provides details for construction of Two way Fire Rated intertenancy walls using EPB Plasterboard in combination with 25mm thick shaftliner barrier between the frames. These shaftliner barrier systems are a cost effective solution that provide higher fire protection and noise control performance.

The acceptable shaftliner barrier options listed in this manual are 25mm GIB Barrierline® and 25mm USG Boral Shaftliner™. The instructions provided in this manual are a general description of the installation of the shaftliner barriers, for correct installation, handling and limitations of these products, refer to the latest relevant technical manuals outlined in the table below

Shaftliner barrier used	Reference to be made to
25mm GIB Barrierline®	GIB® Intertenancy Barrier Systems for Terraced Homes Specification & Installation Manual
25mm USG Boral Shaftliner™	Partiwall® Intertenancy Systems Installation Manual IntRwall® Installation Manual USG Boral Fire & Acoustic Systems Manual

Elephant Plasterboard (NZ) Limited has many different combinations of shaftliner barrier systems. It is the responsibility of the specifier to accommodate the required performance of the building they are considering. The specifier should take into consideration both external and internal noise control & fire rating for occupants intended use. Special consideration must be taken in the construction process.

All construction details that have been provided in this manual are generic only and it is important that expert advice is seeked to determine suitability in each individual project

Limitations and Conditions of Use

- EPB Plasterboard is intended for normal conditions of dry internal use.
- EPB Plasterboard must not be used for bracing applications in or around baths and shower areas.
- EPB Plasterboard must not be exposed to liquid water or be installed in situations where extended exposures to humidity above 90% Relative Humidity are to be expected. Bathrooms, kitchens and laundries should have adequate ventilation or heating to avoid condensation build-up.
- A suitable surface finish (e.g. Vinyl wallpaper or gloss and semi-gloss alkyd paints) must be applied to EPB Plasterboard in all areas where liquid water or high humidity can be expected.
- EPB Plasterboard must not be installed over a vapour barrier.
- EPB Plasterboard must not be applied directly to masonry, concrete or solid plaster, unless timber strapping or steel furring channels are used.
- EPB Plasterboard must not be exposed to temperatures of 52ºC or greater for prolonged periods.
- EPB Plasterboard may not be used as an external lining.

New Zealand Building Code (NZBC) Compliance

EPB Plasterboard is manufactured to AS/NZS 2588 and has been specifically formulated to meet New Zealand Building Code requirements. EPB Plasterboard has been marketed internationally since 1975 and the product has established an excellent history of performance for its use in buildings throughout New Zealand and the Asia/Pacific region. Elephant Plasterboard meets the durability requirements of the NZBC and is subject to use, installation and maintenance in accordance with the instructions outlaid in this manual. The Manufacturing plant is International Standard ISO 9001 and ISO 14001 registered.

- **NZBC Clause B1 Structure:**
  Framing material specifications used with EPB Plasterboard Systems must be in accordance with the performance requirements of NZBC Clause B1. Timber framed walls and floors must be installed and meet the requirements of NZS 3604.
- **NZBC Clause B2 Durability:**
  EPB Plasterboard Fire, Noise Control & Bracing Systems have a serviceable life of not less than 50 years and so is in accordance to NZBC B2.3.1.
- **NZBC Clause C1-C6 Protection from Fire:**
  EPB Plasterboard Fire & Noise Control Systems can meet the requirements of providing passive fire protection as per NZBC Clause C1-C6.
- **NZBC Clause F2 Hazardous Building Materials:**
  EPB Plasterboard Systems meet this requirement of NZBC Clause F2 and will not present a health hazard to people.
- **NZBC Clause G6 -Airborne & Impact Sound:**
  EPB Plasterboard Noise Control Systems entitled '**Full Intertenancy**' (STC 55 or greater) systems meet the requirements of NZBC Clause G6.

INTRODUCTION

Fire Resistance Ratings (FRR)

To prevent fire spread or structural collapse, the Acceptable Solutions require building elements to have fire resistance ratings (FRRs). The level of FRR required depends on the risk group of the building. The way to determine the FRR of building elements is by using the standard tests specified in Appendix C of the Acceptable Solutions.

FRR components

An FRR comprises three numbers: these give time values in minutes for structural adequacy, integrity and insulation. Primary and secondary elements required to have an FRR will, depending on their function, need to satisfy one or more of these three criteria as follows:

a) **Structural Adequacy**: usually provided by primary elements within a fire cell. These include building elements which are part of the structure, and those providing support to other elements with an FRR within the same or adjacent fire cells. Examples are: columns, beams, floors and walls (which may also be fire separations). Paragraph 4.3 of the Acceptable Solutions describes special situations where primary elements need not have an FRR.

b) **Integrity**: usually provided by secondary elements. Examples are fire separations, which are internal partitions and floors, areas of external walls not permitted to be an unprotected area, and some areas of roofs when close to another building or crossed by an exit way. Primary elements forming an integral part of a fire separation are also rated for integrity.

c) **Insulation**: applies to fire separations and is required where the transmission of heat through the element may endanger occupants on the other side or cause fire to spread to other fire cells or adjacent buildings. For example, insulation is necessary for fire separations between sleeping spaces, where protecting a safe path or through external walls.

The Fire Rated Systems in this manual meet the requirements of the above clauses and definitions and have numerous systems combinations as outlined in this manual.

The Shaftliner Barrier Systems outlined in this manual are deemed suitable for the specified Fire Resistance Rating (FRR) provided they are designed in alignment with the details provided in this manual. Refer to relevant shaftliner barrier technical manuals.

Internal Lining Surface Finish Properties

EPB Plasterboard internal linings has been tested at BRANZ in accordance with ISO 5660 Reaction to fire tests (Heat release, smoke production and mass loss rate) Part 1: Heat release rate (cone calorimeter method); and ISO 5660 Reaction to fire tests (Heat release, smoke production and mass loss rate) Part 2: Smoke production rate (dynamic measurement).

A Group Number Classification of 1-S was achieved in Fire test FH 5695-TT for all EPB Plasterboard paper faced sheet linings. This classification only applies to EPB Plasterboard paper faced sheet linings without paint or wallpaper finish. Contact the surface finish suppliers for group number information for their products.

'Group Number 1-S' is the highest performance expectation under 'Part 4. Control of Internal Fire and Smoke Spread' clause C/AS2 to C/AS7 of the NZBC. It means an EPB Plasterboard paper faced sheet lining can be specified for use in any risk group application.

Noise Control Walls

EPB Plasterboard Noise Control Systems have been tested on timber & steel frame walls, either as Load Bearing (LB) or Non Load Bearing.

Timber Frame

Stud heights, stud spacings, load and framing dimensions for Load Bearing (LB) or Non Load Bearing (NLB) Timber framed walls are determined by the NZBC, and NZS 3604. Heights greater than what is defined in NZS 3604 will need specific design by a structural engineer.

Steel Frame

Stud heights, stud spacings, load and framing dimensions for Load Bearing (LB) or Non Load Bearing (NLB) Steel framed walls need consultation with the framing supplier or fire engineer for fire design serviceability criteria.

General

Maximum spacing of studs 600mm centres. Wall linings must be mechanically fixed. Glue may not be substituted for mechanical fixing if used in a passive fire system. Screw lengths, spacings and type as defined by this manual must be used. Sheet edges must be fixed over studs when placed vertically or over solid blocking when placed horizontally. All outer layers must be stopped to a minimum level 3 stopping (refer to EPB Plasterboard Installation Guide). Ensure the outer wall sheet is staggered minimum 300mm centres from the first sheet and that it is placed behind an adjacent stud. If a fire rated sealant is used ensure that the sealant is of the same FRR as the specified system in use and that it has been independently tested.

EPB QuickBrace System

The bracing systems specified in the EPB QuickBrace Systems Manual can easily be combined with the systems in this manual by adhering to the details outlined for the relevant Bracing system type.

For Single layered systems, in this manual use the EPB QuickBrace fastening pattern and the required screw length of the system in this manual. For Double layered systems in this manual, the bracing sheet can be either:

- The Inner sheet fixed directly to the framing. Use the EPB QuickBrace fastening pattern and the required screw length of the system in this manual. The inner layer can be left unstopped; or
- The Outer sheet. Use the EPB QuickBrace fastening pattern and the required screw length of the system in this manual.

Cavity Sound Absorber

Any brand of R2.2 (90mm) glass wool insulation may be used. Do not overfill the cavity as this may compromise and reduce the noise control performance of the system.

Acoustic Sealant

In order to achieve the published STC performances in this manual, a bead of acoustic sealant must be placed around the perimeter of the framing or the inner layer and the outer layer is bedded into the bead.

Product & Component Substitution

When a product specified in a system as per this manual is substituted, the performance of the system will be compromised. Therefore the materials specified in the system must not be substituted. Elephant Plasterboard (NZ) Limited does not take any liability if substitution of components are implemented in any EPB Plasterboard Systems without consultation.

Plasterboard Substitution Options

The table below indicates which products can substitute the original plasterboard type specified.

✓ indicates that the FRR performance will be maintained

X indicates that the FRR performance will be lower and so therefore the substitution is not allowed

Original EPB Plasterboard specified	EPB Plasterboard Substitution Options - FRR performance								
	Standard		FireSmart			MultiSmart		AquaSmart	
	10mm	13mm	10mm	13mm	16mm	10mm	13mm	10mm	13mm
10mm Standard	-	✓	✓	✓	✓	✓	✓	✓	✓
13mm Standard	X	-	X	✓	✓	✓	✓	✓[1]	✓
10mm FireSmart	X	✓	-	✓	✓	✓	✓	✓	✓
13mm FireSmart	X	X	X	-	✓	X	✓	X	✓
16mm FireSmart	X	X	X	X	-	X	X	X	X
10mm MultiSmart	X	X	X	✓	✓	-	✓	✓[1]	✓
13mm MultiSmart	X	X	X	X	✓	X	-	X	✓[1]

Note 1 : See table below for STC reduction when substituting

The table below details the reduction in STC performance when substituting original specified plasterboard with AquaSmart

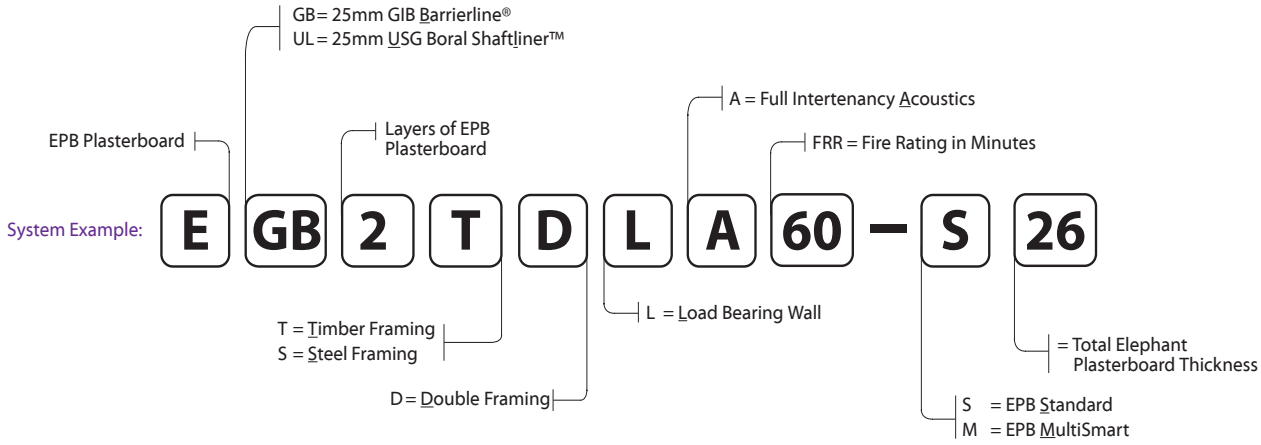
✓ indicates that the FRR & STC performance will be maintained

X indicates that the FRR performance will be lower and so therefore the substitution is not allowed

Original EPB Plasterboard specified		STC performance			
		10mm AquaSmart		13mm AquaSmart/ 13mm FireSmart	
		Single layer One side	Single Layer Both sides	Single layer One side	Single Layer Both sides
10mm	**Standard**	✓	✓	✓	✓
13mm	**Standard**	Reduced by 1 STC	Reduced by 2 STC	✓	✓
10mm	**FireSmart**	✓	✓	✓	✓
13mm	**FireSmart**	X	X	✓	✓
16mm	**FireSmart**	X	X	X	X
10mm	**MultiSmart**	Reduced by 1 STC	Reduced by 2 STC	✓	✓
13mm	**MultiSmart**	X	X	Reduced by 1 STC	Reduced by 2 STC

Nomenclature:

Specification Reference Walls



Full Intertenancy - Fire Rated Walls

System Number	Lining Suffix	Fire Rating	Load Bearing Ability	Noise Control		Lining Requirements	Page
				STC	Rw		
Timber Double Frame Walls with 25mm GIB Barrierline® - Load Bearing							
EGB2TDLA60	-S26	60/60/60	LB	62	61	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side	10
	-M20	60/60/60	LB	64	63	1 x 10mm EPB MultiSmart on One side 1 x 10mm EPB MultiSmart on Other side	10
	-M26	60/60/60	LB	67	66	1 x 13mm EPB MultiSmart on One Side 1 x 13mm EPB MultiSmart on Other Side	10
EGB4TDLA60	-S40	60/60/60	LB	69	68	2 x 10mm EPB Standard on One side 2 x 10mm EPB Standard on Other side	12
Timber Double Frame Walls with 25mm USG Boral Shaftliner™ - Load Bearing							
EUL2TDLA60	-S26	60/60/60	LB	62	61	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side	14
	-M20	60/60/60	LB	64	63	1 x 10mm EPB MultiSmart on One side 1 x 10mm EPB MultiSmart on Other side	14
	-M26	60/60/60	LB	67	66	1 x 13mm EPB MultiSmart on One Side 1 x 13mm EPB MultiSmart on Other Side	14
EUL4TDLA60	-S40	60/60/60	LB	69	68	2 x 10mm EPB Standard on One side 2 x 10mm EPB Standard on Other side	16
Steel Double Frame Walls with 25mm GIB Barrierline® - Load Bearing							
EGB2SDLA60	-S26	60/60/60	LB	61	60	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side	18
	-M26	60/60/60	LB	67	66	1 x 13mm EPB MultiSmart on One Side 1 x 13mm EPB MultiSmart on Other Side	18
EGB3SDLA60	-S39	60/60/60	LB	67	66	1 x 13mm EPB Standard on One side 2 x 13mm EPB Standard to Other side	20
	-M39	60/60/60	LB	69	68	1 x 13mm EPB MultiSmart on One side 2 x 13mm EPB MultiSmart to Other side	20
Steel Double Frame Walls with 25mm USG Boral Shaftliner™ - Non Load Bearing							
EUL2SDA60	-S26	-/60/60	NLB	59	60	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side	22
	-M26	-/60/60	NLB	64	63	1 x 13mm EPB MultiSmart on One Side 1 x 13mm EPB MultiSmart on Other Side	22
EUL3SDA60	-S39	-/60/60	NLB	64	63	1 x 13mm EPB Standard on One side 2 x 13mm EPB Standard to Other side	24
	-M39	-/60/60	NLB	66	65	1 x 13mm EPB MultiSmart on One Side 2 x 13mm EPB MultiSmart on Other Side	24

EGB2TDLA60 Double Timber Frame - 25mm GIB Barrierline® | Load Bearing | Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frame | Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EGB2TDLA60	-S26	60/60/60	LB	62	61	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side
	-M20	60/60/60	LB	64	63	1 x 10mm EPB MultiSmart on One side 1 x 10mm EPB MultiSmart to Other side
	-M26	60/60/60	LB	67	66	1 x 13mm EPB MultiSmart on One side 1 x 13mm EPB MultiSmart to Other side

** The 60/60/60 FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard contribute to the overall STC performance.*

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing partitions. Minimum 90 x 45mm frame dimension.

Minimum Partition Width

Stud Depth	Lining Suffix	Gap Between Frame & Shaftline	Space between frames	Partition Width
90mm	S26 M26	25mm - 40mm	80mm-110mm	286-316mm
90mm	M20	25mm - 40mm	80mm-110mm	280-310mm

25mm GIB Barrierline®

General Installation of 25mm GIB Barrierline® and Components

Reference must be made to the latest GIB® Intertenancy Barrier Systems for Terraced Homes Specification & Installation Manual for installation, handling and limitations of the GIB Barrierline® and relevant components.

The instructions below are a general description of the installation of 25mm GIB Barrierline®, H-Studs, Rondo® 140 Perimeter channels, Wall clips & straps and Laminates.

- 25 - 40mm gap required between the studs and the 25mm GIB Barrierline®.
- Fix the Rondo® 140 Perimeter Channels to the concrete floor at 600mm centres and not more than 50mm from channel ends using steel fasteners - 30mm x 3.5mm or 25mm x 4.0mm concrete nails. Or 40mm x 6mm concrete anchors.
- A gap of 5mm to be allowed between Rondo® 140 Perimeter Channels for any collected rain water to escape.
- Seal the Rondo® 140 Perimeter Channels to the floor on one side using exterior fire/acoustic sealant.
- Install the 25mm GIB Barrierline® at 600mm centres into the H-Studs and cap its ends with Rondo® 140 Perimeter Channels.
- The H-Studs to be offset from wall stud to allow the Wall Clips to attach to both frames. In places where no frame exists, nog as required.
- Wall Clips (one on each side) to be placed at 600mm max below the top of each H- Stud and not more than 3000mm vertically .
- Fix Rondo® 140 Perimeter Channels to both frames at wall ends with Wall Clips or Wall Straps not more than 3000mm vertically.
- Use maximum of two Wall Clips or Wall Straps (one each side) to each 3000mm of H-Stud or Rondo® 140 Perimeter Channels.
- In roof spaces (or where otherwise indicated), fix to one side of 25mm GIB Barrierline®, with either a 13mm GIB Weatherline® or 13mm GIB Fyreline® laminate on a 400mm grid. Use 38mm x 10g laminator screws or 40mm x 8g chipboard screws at not more than 100mm from sheet edges.
- Extend the laminate by minimum of 200mm below ceiling level.
- The 60 minutes FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® laminate in the roof space or where otherwise indicated. If the specification calls for a 30 minutes FRR a 10mm GIB Weatherline® laminate can be used.
- Once installed, protect all the GIB Barrierline® and GIB® laminates from wet weather. Use a suitable sheeting to avoid delays in allowing the board to dry before linings are installed.

Cavity Sound Absorber

Fill both wall cavities between studs of each frame with 90mm thick R2.2 glass wool insulation.

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.

One layer of EPB Plasterboard lining as per specified system above on each side of the timber framing. Sheets shall be touch fitted. Sheet end butt joints must be formed over nogs.

If the wall lining forms part of the structural bracing system, it is necessary for the lining type and fixings to adhere to the specified bracing system. Check requirements for specific bracing element hold down.

Fixing of Linings

Fasteners (As per Specified System Above)

System Number	Side one	Side two
	High Thread Drywall Screws	
EGB2TDLA60-S26 EGB2TDLA60-M26	13mm	13mm
	32 x 6g	32 x 6g
EGB2TDLA60-M20	10mm	10mm
	32 x 6g	32 x 6g

Fastener Centres

Fix plasterboard at 300mm centres at sheet perimeter and on all studs on both sides.

Place fasteners minimum 12mm from sheet edges and sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur.

Service Penetrations

Penetrations are permitted in the cavities on either side of the 25mm GIB Barrierline® for Plumbing and electrical services. Minimum 10mm clearance must be allowed between plumbing or electrical services and the GIB Barrierline®. Back-to-back services and penetrations are allowed within the limitations mentioned below.

Fire-stopping for penetrations are not required for Plumbing services up to 65mm diameter. 6mm max clearance gap around the plumbing services are required for penetrations through plasterboard linings. Gaps to be filled with general purpose flexible sealant. Penetrations of electrical services up to 90 x 50mm do not require fire-stopping. Unprotected service penetrations are limited to two per nominal 600mm wide studs.

For penetrations larger than 90 x 50mm or 65mm in diameter and for penetrations through GIB Barrierline® in the roof space, suitable proprietary fire-stopping is required.

EGB2TDLA60 Double Timber Frame - 25mm GIB Barrierline® | Load Bearing | Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frame | Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EGB2TDLA60	-S26	60/60/60	LB	62	61	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side
	-M20	60/60/60	LB	64	63	1 x 10mm EPB MultiSmart on One side 1 x 10mm EPB MultiSmart to Other side
	-M26	60/60/60	LB	67	66	1 x 13mm EPB MultiSmart on One side 1 x 13mm EPB MultiSmart to Other side

** The 60/60/60 FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard contribute to the overall STC performance.*

Plasterboard lining for Wet Area

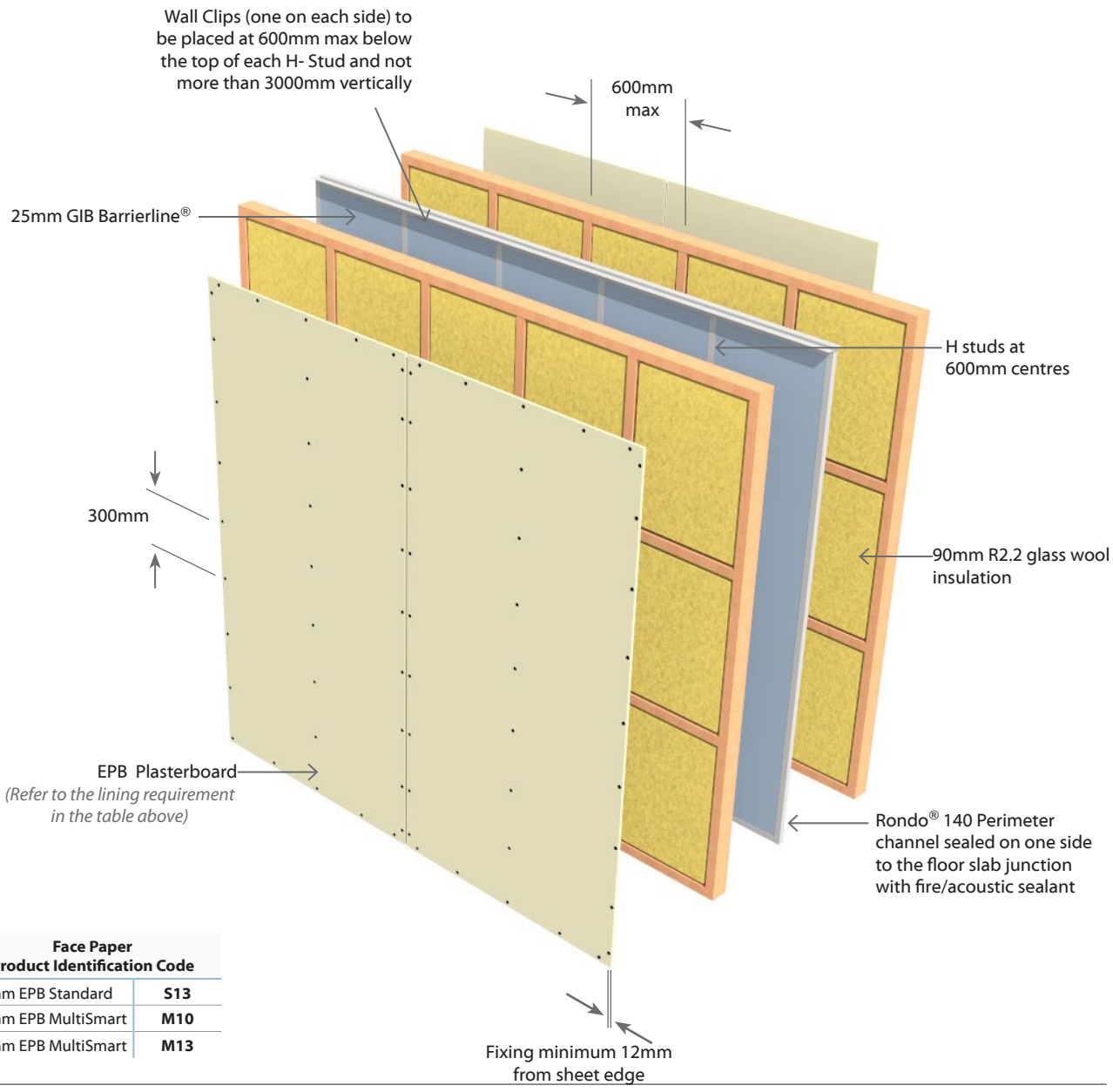
If the 13mm EPB Standard or 10mm EPB MultiSmart is substituted with 10mm EPB AquaSmart, there is a noise control reduction of 1-2 STC/Rw points. When substituted with 13mm EPB AquaSmart the noise control ratings will be retained.

If the 13mm EPB MultiSmart is substituted with 13mm EPB AquaSmart, there is a noise control reduction of 1-2 STC/Rw points.

Jointing

GIB Barrierline®: Unstopped

Elephant Plasterboard: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with Elephant Plasterboard Installation Guide.



Face Paper Product Identification Code	
13mm EPB Standard	**S13**
10mm EPB MultiSmart	**M10**
13mm EPB MultiSmart	**M13**

EGB4TDLA60 Double Timber Frame - 25mm GIB Barrierline® | Load Bearing | Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frame | Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EGB4TDLA60	**-S40**	60/60/60	LB	69	68	2 x 10mm EPB Standard on One side 2 x 10mm EPB Standard to Other side

** The 60/60/60 FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard contribute to the overall STC performance.*

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing partitions. Minimum 90 x 45mm frame dimension.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 255mm.

Stud Depth	Lining Suffix	Gap Between Frame & Shaftline	Space between frames	Partition Width
90mm	S40	25mm - 40mm	80mm-110mm	295-325mm

25mm GIB Barrierline®

General Installation of 25mm GIB Barrierline® and Components

Reference must be made to the latest GIB® Intertenancy Barrier Systems for Terraced Homes Specification & Installation Manual for installation, handling and limitations of the GIB Barrierline® and relevant components.

The instructions below are a general description only of the installation of 25mm GIB Barrierline®, H-Studs, Rondo® 140 Perimeter channels, Wall clips & straps and Laminates.

- 25 - 40mm gap required between the studs and the 25mm GIB Barrierline®.
- Fix the Rondo® 140 Perimeter Channels to the concrete floor at 600mm centres and not more than 50mm from channel ends using steel fasteners - 30mm x 3.5mm or 25mm x 4.0mm concrete nails. Or 40mm x 6mm concrete anchors.
- A gap of 5mm to be allowed between Rondo® 140 Perimeter Channels for any collected rain water to escape.
- Seal the Rondo® 140 Perimeter Channels to the floor on one side using exterior fire/acoustic sealant.
- Install the 25mm GIB Barrierline® at 600mm centres into the H-Studs and cap its ends with Rondo® 140 Perimeter Channels.
- The H-Studs to be offset from wall stud to allow the Wall Clips to attach to both frames. In places where no frame exists, nog as required.
- Wall Clips (one on each side) to be placed at 600mm max below the top of each H- Stud and not more than 3000mm vertically .
- Fix Rondo® 140 Perimeter Channels to both frames at wall ends with Wall Clips or Wall Straps not more than 3000mm vertically.
- Use maximum of two Wall Clips or Wall Straps (one each side) to each 3000mm of H-Stud or Rondo® 140 Perimeter Channels.
- In roof spaces (or where otherwise indicated), fix to one side of 25mm GIB Barrierline®, with either a 13mm GIB Weatherline® or 13mm GIB Fyreline® laminate on a 400mm grid. Use 38mm x 10g laminator screws or 40mm x 8g chipboard screws at not more than 100mm from sheet edges.
- Extend the laminate by minimum of 200mm below ceiling level.
- The 60 minutes FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® laminate in the roof space or where otherwise indicated. If the specification calls for a 30 minutes FRR a 10mm GIB Weatherline® laminate can be used.
- Once installed, protect all the GIB Barrierline® and GIB® laminates from wet weather. Use a suitable sheeting to avoid delays in allowing the board to dry before linings are installed.

Cavity Sound Absorber

Fill both wall cavities between studs of each frame with 90mm thick R2.2 glass wool insulation.

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 10mm EPB Standard plasterboard lining fixed on each side of the frame.

First layer or inner layer on each side of framing to be fixed vertically. Vertical or Horizontal fixing permitted on outer layer only. Use full height or full length sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing. Vertical Joints of the outer layer should be offset by 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

If the wall lining forms part of the structural bracing system, it is necessary for the lining type and fixings to adhere to the specified bracing system. Check requirements for specific bracing element holddown.

Fixing of Linings

Fasteners

System Number	1st Layer	2nd Layer
	High Thread Drywall Screws	
EGB4TDLA60-S40	10mm 32 x 6g	10mm 41 x 6g

Fastener Centres

Fix inner layer at 300mm centres at sheet perimeter and on all studs on both sides. When fixing the outer layer vertically , the board should be offset from inner layer sheet joints. Fix the outer layer at 300mm centres at sheet perimeter. Adhesive fixing at 300mm centres is allowed on the intermediate studs when fixing the outer layer to the inner layer.

When fixing the outer layer horizontally, fasteners placed at 300mm centres on sheet perimeter and the top and bottom plates. In places where horizontal joint crosses, use pair of single fasteners. Adhesive fixing at 300mm centres is allowed on the intermediate studs when fixing the outer layer to the inner layer.

Ensure screws are no closer than 200mm from any adhesive fixing.

Place fasteners minimum 12mm from sheet edges and sheet ends.

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

Avoid outer layer screws from hitting inner layer screws.

Service Penetrations

Penetrations are permitted in the cavities on either side of the 25mm GIB Barrierline® for Plumbing and electrical services. Minimum 10mm clearance must be allowed between plumbing or electrical services and the GIB Barrierline®. Back-to-back services and penetrations are allowed within the limitations mentioned below.

Fire-stopping for penetrations are not required for Plumbing services up to 65mm diameter. 6mm max clearance gap around the plumbing services are required for penetrations through plasterboard linings. Gaps to be filled with general purpose flexible sealant. Penetrations of electrical services up to 90 x 50mm do not require fire-stopping. Unprotected service penetrations are limited to two per nominal

EGB4TDLA60 Double Timber Frame - 25mm GIB Barrierline® | Load Bearing | Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frame | Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EGB4TDLA60	**-S40**	60/60/60	LB	69	68	2 x 10mm EPB Standard on One side 2 x 10mm EPB Standard to Other side

** The 60/60/60 FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard contribute to the overall STC performance.*

600mm wide studs.

For penetrations larger than 90 x 50mm or 65mm in diameter and for penetrations through GIB Barrierline® in the roof space, suitable proprietary fire-stopping is required.

Plasterboard lining for Wet Area

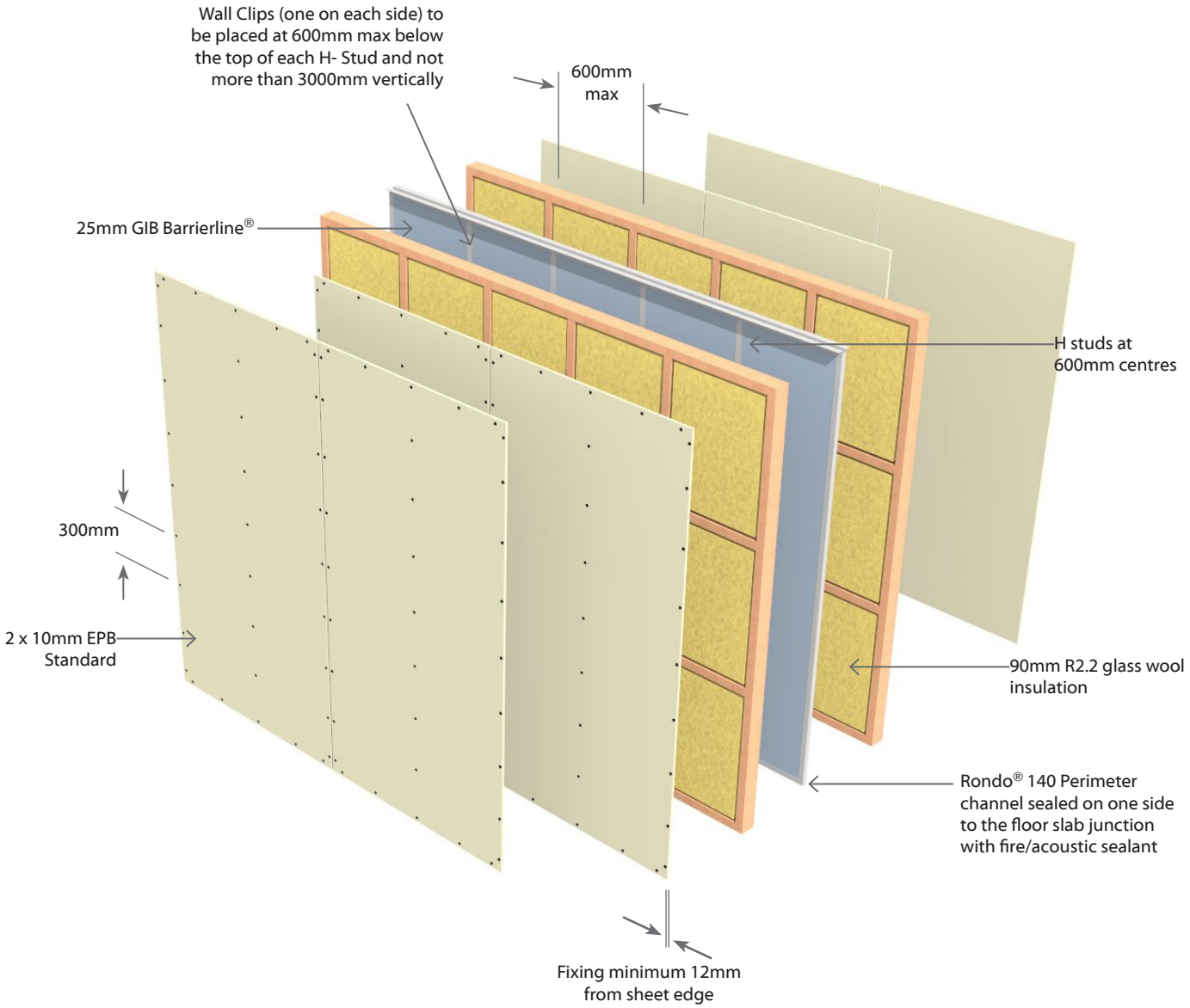
If outer layer of 10mm EPB Standard board is replaced with 10mm EPB AquaSmart, the noise control ratings will be retained.

Jointing

GIB Barrierline®: Unstopped

Elephant Plasterboard Inner Layer: Unstopped.

Elephant Plasterboard Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with Elephant Plasterboard Installation Guide.



Face Paper Product Identification Code	
10mm EPB Standard	**S10**

EUL2TDLA60 Double Timber Frame - 25mm USG Boral Shaftliner™ | Load Bearing | Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frame | Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EUL2TDLA60	-S26	60/60/60	LB	62	61	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side
	-M20	60/60/60	LB	64	63	1 x 10mm EPB MultiSmart on One side 1 x 10mm EPB MultiSmart to Other side
	-M26	60/60/60	LB	67	66	1 x 13mm EPB MultiSmart on One side 1 x 13mm EPB MultiSmart to Other side

** The 60/60/60 FRR is provided by the 25mm USG Boral Shaftliner™ & the 16mm USG Boral Multistop™ 4 when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard do not form part of the fire rating and only contribute to the overall STC performance.*

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing partitions. Minimum 90 x 45mm frame dimension.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 255mm.

Stud Size	Space Between Frames	Partition Width (Excludes Board)
90mm	75mm - 105mm	255-285mm

25mm Shaftliner Barrier

25mm USG Boral Shaftliner™

For correct installation, handling and limitations of the USG Boral Shaftliner™, consult the relevant technical manuals and in particular the Partiwall® Intertenancy Systems Installation Manual and the USG Boral Fire & Acoustic Systems Manual.

Special note: If 25mm USG Boral Shaftliner™ is installed, then only the 16mm USG Boral Firestop® or 16mm USG Boral Multistop™ 4 can be used where indicated and cannot be substituted with other brands of 16mm Fire rated plasterboard e.g. 16mm GIB Fyreline® or 16mm EPB FireSmart.

General Installation of 25mm Shaftliner Barrier

The instructions below are a general description of the installation of 25mm Shaftliner Barrier walls. As mentioned above, specific technical manuals relevant to the 25mm USG Boral Shaftliner™ shall be referred to.

- 25 - 40mm gap required between the timber studs and the 25mm Shaftliner Barrier.
- Fix the Rondo® 140 Perimeter Channels to the concrete floor at 600mm centres and not more than 50mm from channel ends using steel fasteners.
- A min gap of 5mm to be allowed between Rondo® 140 Perimeter Channels for any collected rain water to escape.
- Install the 25mm USG Boral Shaftliner™ at 600mm centres into the H-Studs and cap its ends with Rondo® 140 Perimeter Channels.
- The H-Studs to be offset 100mm minimum from stud wall to allow the Wall Clips to attach to both frames. In places where no frame exists, nogs are required.
- Wall Clips to be placed at 600mm max below the top of each H-Stud on each sides and not more than 2700mm vertically for USG Boral Shaftliner™ installation.
- Fix Rondo® 140 Perimeter Channels at 2700mm max vertically to both timber frames at wall ends with Wall Clips or Wall Straps.
- Maximum of two Wall Clips or Wall Straps to be used for each 3000mm of H-Stud or Rondo® 140 Perimeter Channels.
- Seal the Rondo® 140 Perimeter Channels to the floor on one side using fire/acoustic sealant.
- Refer to the relevant USG Boral technical manuals for the installation of the 16mm USG Boral Multistop™ 4 that is required in the roof space or in other areas.
- Once installed, protect all the 25mm USG Boral Shaftliner™ and 16mm USG Boral Multistop™ 4 from wet weather. Consult the relevant 25mm USG Boral Shaftliner™ technical manuals for handling and limitations.

Cavity Sound Absorber

Fill both wall cavities between studs and nogs with 1 layer of nominal 90mm thick **R2.2** glass wool insulation in each frame.

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.

One layer of EPB Plasterboard lining as per specified system above on each side of the timber framing. Sheets shall be touch fitted. Sheet end butt joints must be formed over nogs.

Fixing of Linings

Fasteners (As per Specified System Above)

System Number	Side one	Side two
	High Thread Drywall Screws	
EUL2TDLA60-S26	13mm	13mm
	32 x 6g	32 x 6g
EUL2TDLA60-M20	10mm	10mm
	32 x 6g	32 x 6g
EUL2TDLA60-M26	13mm	13mm
	32 x 6g	32 x 6g

Fastener Centres

Fix plasterboard at 300mm centres at sheet perimeter and on all studs on both sides.

Place fasteners minimum 12mm from sheet edges and sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur.

Penetrations

Plumbing and electrical services are permitted in the cavities on either side of the 25mm USG Boral Shaftliner™ including back-to-back services and penetrations within the limitations given below. Minimum 10mm clearance must be allowed between plumbing or electrical services and the USG Boral Shaftliner™.

Fire stopping for penetrations are not required for Metal and PVC Plumbing services up to 65mm diameter. 6mm max clearance gap around the plumbing services are required for penetrations through plasterboard linings. Gaps must be filled with flexible sealant.

Penetration of electrical services up to 90 x 50mm do not require fire -stopping. Flush boxes are limited to two per 600mm wide stud bay.

For larger penetrations and penetrations through USG Boral Shaftliner™, suitable fire-stopping is required.

Penetrations through USG Boral Shaftliner™ may reduce the noise control performance of the system.

EUL2TDLA60 Double Timber Frame - 25mm USG Boral Shaftliner™ | Load Bearing | Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frame | Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EUL2TDLA60	-S26	60/60/60	LB	62	61	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side
	-M20	60/60/60	LB	64	63	1 x 10mm EPB MultiSmart on One side 1 x 10mm EPB MultiSmart to Other side
	-M26	60/60/60	LB	67	66	1 x 13mm EPB MultiSmart on One side 1 x 13mm EPB MultiSmart to Other side

** The 60/60/60 FRR is provided by the 25mm USG Boral Shaftliner™ & the 16mm USG Boral Multistop™ 4 when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard do not form part of the fire rating and only contribute to the overall STC performance.*

Plasterboard lining for Wet Area

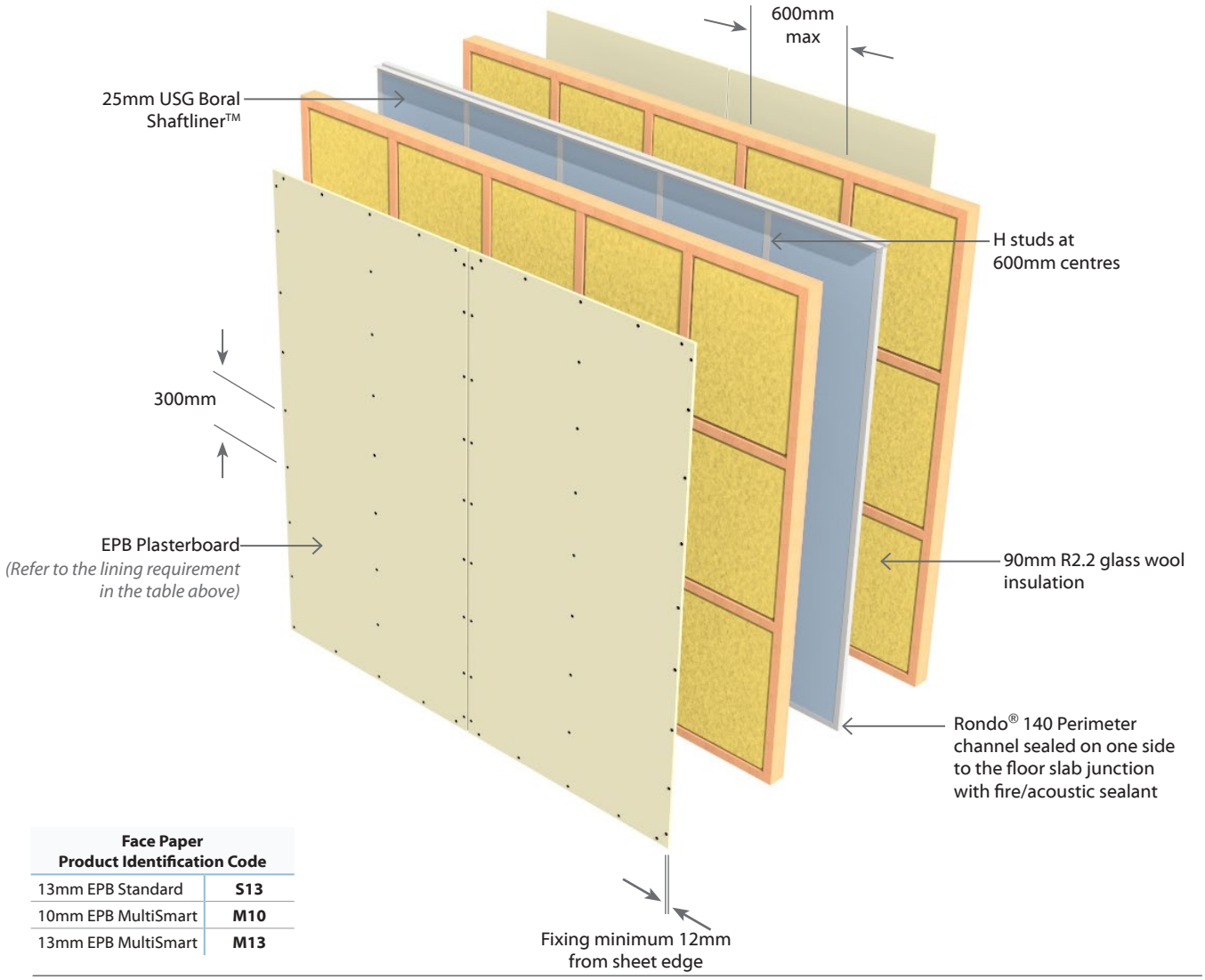
If the 13mm EPB Standard or 10mm EPB MultiSmart is substituted with 10mm EPB AquaSmart, there is a noise control reduction of 1-2 STC/Rw points. When substituted with 13mm EPB AquaSmart the noise control ratings will be retained.

If the 13mm EPB MultiSmart is substituted with 13mm EPB AquaSmart, there is a noise control reduction of 1-2 STC/Rw points.

Jointing

USG Boral Shaftliner™: Unstopped

Elephant Plasterboard: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with Elephant Plasterboard Installation Guide.



Face Paper Product Identification Code	
13mm EPB Standard	**S13**
10mm EPB MultiSmart	**M10**
13mm EPB MultiSmart	**M13**

EUL4TDLA60 Double Timber Frame - 25mm USG Boral Shaftliner™ | Load Bearing | Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frame | Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EUL4TDLA60	**-S40**	60/60/60	LB	69	68	2 x 10mm EPB Standard on One side 2 x 10mm EPB Standard to Other side

** The 60/60/60 FRR is provided by the 25mm USG Boral Shaftliner™ & the 16mm USG Boral Multistop™ 4 when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard do not form part of the fire rating and only contribute to the overall STC performance.*

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing partitions. Minimum 90 x 45mm frame dimension.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 255mm.

Stud Size	Space Between Frames	Partition Width (Excludes Board)
90mm	75mm - 105mm	255-285mm

25mm Shaftliner Barrier

25mm USG Boral Shaftliner™

For correct installation, handling and limitations of the USG Boral Shaftliner™, consult the relevant technical manuals and in particular the Partiwall® Intertenancy Systems Installation Manual and the USG Boral Fire & Acoustic Systems Manual.

Special note: If 25mm USG Boral Shaftliner™ is installed, then only the 16mm USG Boral Firestop® or 16mm USG Boral Multistop™ 4 can be used where indicated and cannot be substituted with other brands of 16mm Fire rated plasterboard e.g. 16mm GIB Fyreline® or 16mm EPB FireSmart.

General Installation of 25mm Shaftliner Barrier

The instructions below are a general description only of the installation of 25mm Shaftliner Barrier walls. As mentioned above, specific technical manuals relevant to the 25mm USG Boral Shaftliner™ shall be referred to.

- 25 - 40mm gap required between the timber studs and the 25mm Shaftliner Barrier.
- Fix the Rondo® 140 Perimeter Channels to the concrete floor at 600mm centres and not more than 50mm from channel ends using steel fasteners.
- A min gap of 5mm to be allowed between Rondo® 140 Perimeter Channels for any collected rain water to escape.
- Install the 25mm USG Boral Shaftliner™ at 600mm centres into the H-Studs and cap its ends with Rondo® 140 Perimeter Channels.
- The H-Studs to be offset 100mm minimum from stud wall to allow the Wall Clips to attach to both frames. In places where no frame exists, nogs are required.
- Wall Clips to be placed at 600mm max below the top of each H-Stud on each sides and not more than 2700mm vertically for USG Boral Shaftliner™ installation.
- Fix Rondo® 140 Perimeter Channels at 2700mm max vertically to both timber frames at wall ends with Wall Clips or Wall Straps.
- Maximum of two Wall Clips or Wall Straps to be used for each 3000mm of H-Stud or Rondo® 140 Perimeter Channels.
- Seal the Rondo® 140 Perimeter Channels to the floor on one side using fire/acoustic sealant.
- Refer to the relevant USG Boral technical manuals for the installation of the 16mm USG Boral Multistop™ 4 that is required in the roof space or in other areas.
- Once installed, protect all the 25mm USG Boral Shaftliner™ and 16mm USG Boral Multistop™ 4 from wet weather. Consult the relevant 25mm USG Boral Shaftliner™ technical manuals for handling and limitations.

Cavity Sound Absorber

Fill both wall cavities between studs and nogs with 1 layer of 90mm thick **R2.2** glass wool insulation in each frame.

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 10mm EPB Standard plasterboard lining fixed on each side of the frame.

First layer or inner layer on each side of framing to be fixed vertically. Vertical or Horizontal fixing permitted on outer layer only. Use full height or full length sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing. Vertical Joints of the outer layer should be offset by min 400mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings

Fasteners

System Number	1st Layer	2nd Layer
	High Thread Drywall Screws	
EUL4TDLA60-S40	10mm 32 x 6g	10mm 41 x 6g

Fastener Centres

Fix inner layer at 300mm centres at sheet perimeter and on all studs on both sides. When fixing the outer layer vertically , the board should be offset from inner layer sheet joints. Fix the outer layer at 300mm centres at sheet perimeter. Adhesive fixing at 300mm centres is allowed on the intermediate studs when fixing the outer layer to the inner layer.

When fixing the outer layer horizontally, fasteners placed at 300mm centres on sheet perimeter and the top and bottom plates. In places where horizontal joint crosses, use pair of single fasteners. Adhesive fixing at 300mm centres is allowed on the intermediate studs when fixing the outer layer to the inner layer.

Ensure screws are no closer than 200mm from any adhesive fixing.

Place fasteners minimum 12mm from sheet edges and sheet ends.

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

Avoid outer layer screws from hitting inner layer screws.

Penetrations

Plumbing and electrical services are permitted in the cavities on either side of the 25mm USG Boral Shaftliner™ including back-to-back services and penetrations within the limitations given below. Minimum 10mm clearance must be allowed between plumbing or electrical services and the USG Boral Shaftliner™.

Fire stopping for penetrations are not required for Metal and PVC Plumbing services up to 65mm diameter. 6mm max clearance gap around the plumbing services are required for penetrations through plasterboard linings. Gaps must be filled with flexible sealant.

Penetration of electrical services up to 90 x 50mm do not require fire -stopping. Flush boxes are limited to two per 600mm wide stud bay.

For larger penetrations and penetrations through USG Boral Shaftliner™, suitable fire-stopping is required.

Penetrations through USG Boral Shaftliner™ may reduce the noise control performance of the system.

EUL4TDLA60 Double Timber Frame - 25mm USG Boral Shaftliner™ | Load Bearing | Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frame | Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EUL4TDLA60	**-S40**	60/60/60	LB	69	68	2 x 10mm EPB Standard on One side 2 x 10mm EPB Standard to Other side

** The 60/60/60 FRR is provided by the 25mm USG Boral Shaftliner™ & the 16mm USG Boral Multistop™ 4 when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard do not form part of the fire rating and only contribute to the overall STC performance.*

Plasterboard lining for Wet Area

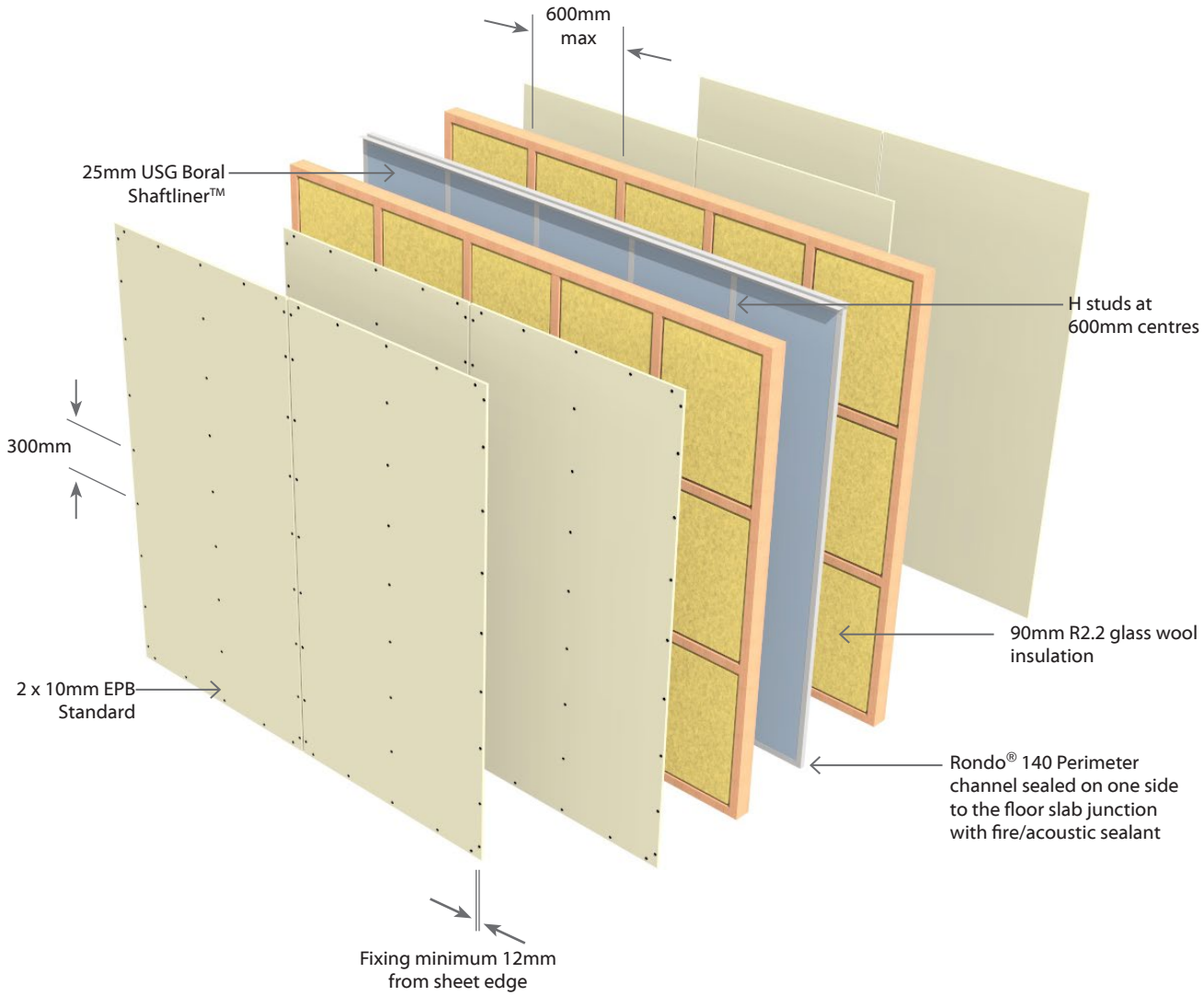
If outer layer of 10mm EPB Standard board is replaced with 10mm EPB AquaSmart, the noise control ratings will be retained.

Jointing

USG Boral Shaftliner™: Unstopped

Elephant Plasterboard Inner Layer: Unstopped.

Elephant Plasterboard Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with Elephant Plasterboard Installation Guide.



Face Paper Product Identification Code	
10mm EPB Standard	**S10**

EGB2SDLA60 Double Steel Frame - 25mm GIB Barrierline® | Load Bearing | Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frame | Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EGB2SDLA60	-S26	60/60/60	LB	61	60	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side
	-M26	60/60/60	LB	67	66	1 x 13mm EPB MultiSmart on One side 1 x 13mm EPB MultiSmart to Other side

** The 60/60/60 FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard contribute to the overall STC performance.*

Framing

Framing to comply with NZBC B1-Structure: Acceptable Solution B1/AS1 Clause 9.1- NASH Standard Part 2: May 2019 Light steel framed buildings, or Verification Method B1/VM1. NZBC B2-Durability: Acceptable Solution B2/AS1.

C section studs with minimum dimensions 90mm x 35mm x 0.75 BMT.

Minimum Partition Width

Stud Depth	Lining Suffix	Gap Between Frame & Shaftline	Space between frames	Partition Width
90mm	S26 M26	25mm - 40mm	80mm-110mm	286-316mm

25mm GIB Barrierline®

General Installation of 25mm GIB Barrierline® and Components

Reference must be made to the latest GIB® Intertenancy Barrier Systems for Terraced Homes Specification & Installation Manual for installation, handling and limitations of the GIB Barrierline® and relevant components.

The instructions below are a general description of the installation of 25mm GIB Barrierline®, H-Studs, Rondo® 140 Perimeter channels, Wall clips & straps and Laminates.

- 25 - 40mm gap required between the studs and the 25mm GIB Barrierline®.
- Fix the Rondo® 140 Perimeter Channels to the concrete floor at 600mm centres and not more than 50mm from channel ends using steel fasteners - 30mm x 3.5mm or 25mm x 4.0mm concrete nails. Or 40mm x 6mm concrete anchors.
- A gap of 5mm to be allowed between Rondo® 140 Perimeter Channels for any collected rain water to escape.
- Seal the Rondo® 140 Perimeter Channels to the floor on one side using exterior fire/acoustic sealant.
- Install the 25mm GIB Barrierline® at 600mm centres into the H-Studs and cap its ends with Rondo® 140 Perimeter Channels.
- The H-Studs to be offset from wall stud to allow the Wall Clips to attach to both frames. In places where no frame exists, nog as required.
- Wall Clips (one on each side) to be placed at 600mm max below the top of each H- Stud and not more than 3000mm vertically .
- Fix Rondo® 140 Perimeter Channels to both frames at wall ends with Wall Clips or Wall Straps not more than 3000mm vertically.
- Use maximum of two Wall Clips or Wall Straps (one each side) to each 3000mm of H-Stud or Rondo® 140 Perimeter Channels.
- In roof spaces (or where otherwise indicated), fix to one side of 25mm GIB Barrierline®, with either a 13mm GIB Weatherline® or 13mm GIB Fyreline® laminate on a 400mm grid. Use 38mm x 10g laminator screws or 40mm x 8g chipboard screws at not more than 100mm from sheet edges.
- Extend the laminate by minimum of 200mm below ceiling level.
- The 60 minutes FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® laminate in the roof space or where otherwise indicated. If the specification calls for a 30 minutes FRR a 10mm GIB Weatherline® laminate can be used.
- Once installed, protect all the GIB Barrierline® and GIB® laminates from wet weather. Use a suitable sheeting to avoid delays in allowing the board to dry before linings are installed.

Cavity Sound Absorber

Fill both wall cavities between studs of each frame with 90mm thick R2.2 glass wool insulation.

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.

One layer of EPB Plasterboard lining as per specified system above on each side of the steel framing.

Vertical or horizontal fixing permitted. For vertical fixing, use full height sheets where possible. For horizontal fixing, all longitudinal sheet joints must be formed over nogs.

Sheet end butt joints must be formed over framing and staggered. Sheets are fixed hard to the floor and shall be touch fitted.

Fixing of Linings

Fasteners

System Number	Side one	Side two
	Self-Tapping Drywall Screws	
EGB2SDLA60-S26 EGB2SDLA60-M26	13mm 25 x 6g	13mm 25 x 6g

Fastener Centres

Fix at 300mm centres up each stud. Place fasteners 12mm from sheet edge and 50mm from sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur.

Service Penetrations

Penetrations are permitted in the cavities on either side of the 25mm GIB Barrierline® for Plumbing and electrical services. Minimum 10mm clearance must be allowed between plumbing or electrical services and the GIB Barrierline®. Back-to-back services and penetrations are allowed within the limitations mentioned below.

Fire-stopping for penetrations are not required for Plumbing services up to 65mm diameter. 6mm max clearance gap around the plumbing services are required for penetrations through plasterboard linings. Gaps to be filled with general purpose flexible sealant. Penetrations of electrical services up to 90 x 50mm do not require fire-stopping. Unprotected service penetrations are limited to two per nominal 600mm wide studs.

For penetrations larger than 90 x 50mm or 65mm in diameter and for penetrations through GIB Barrierline® in the roof space, suitable proprietary fire-stopping is required.

Plasterboard lining for Wet Area

If the 13mm EPB Standard is substituted with 13mm EPB AquaSmart, the noise control ratings will be retained .

If the 13mm EPB MultiSmart is substituted with 13mm EPB AquaSmart there is a noise control reduction of 2 STC/Rw points.

EGB2SDLA60 **D**ouble **S**teel Frame - 25mm GIB Barrierline® | Load Bearing | Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frame | Full Intertenancy **A**coustic

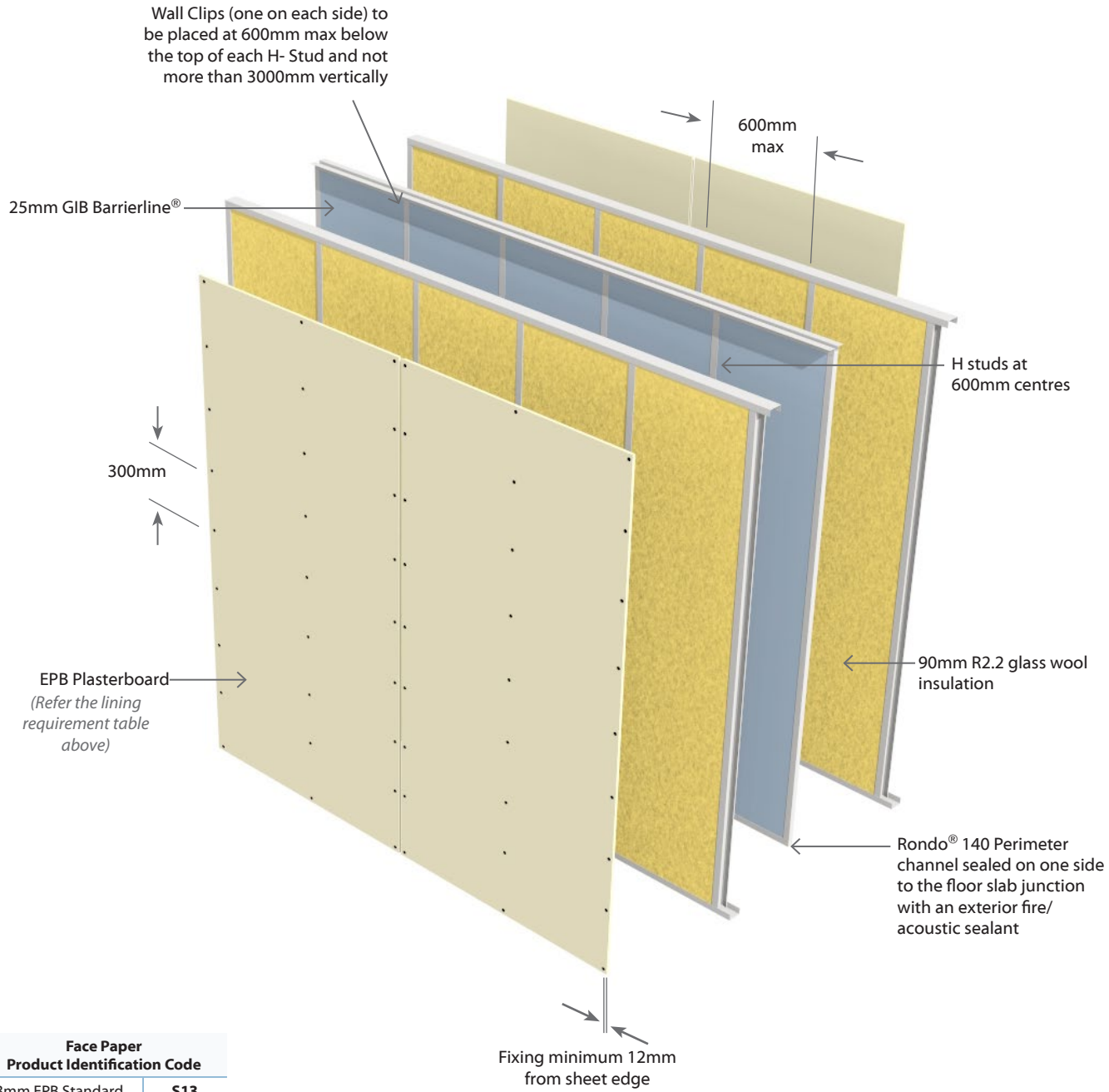
System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EGB2SDLA60	-S26	60/60/60	LB	61	60	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side
	-M26	60/60/60	LB	67	66	1 x 13mm EPB MultiSmart on One side 1 x 13mm EPB MultiSmart to Other side

** The 60/60/60 FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard contribute to the overall STC performance.*

Jointing

GIB Barrierline® : Unstopped

Elephant Plasterboard linings: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with Elephant Plasterboard Installation Guide.



Face Paper Product Identification Code	
13mm EPB Standard	**S13**
13mm EPB MultiSmart	**M13**

EGB3SDLA60 Double Steel Frame - 25mm GIB Barrierline® | Load Bearing | Two Way FRR

3 Layers: 1 Layer of Plasterboard on one side of frame & 2 Layers of Plasterboard on other side of frame | Full Intertenancy Acoustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EGB3SDLA60	-S39	60/60/60	LB	67	66	1 x 13mm EPB Standard on One side 2 x 13mm EPB Standard to Other side
	-M39	60/60/60	LB	69	68	1 x 13mm EPB MultiSmart on One side 2 x 13mm EPB MultiSmart to Other side

** The 60/60/60 FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard contribute to the overall STC performance.*

Framing

Framing to comply with NZBC B1-Structure: Acceptable Solution B1/AS1 Clause 9.1- NASH Standard Part 2: May 2019 Light steel framed buildings, or Verification Method B1/VM1. NZBC B2-Durability: Acceptable Solution B2/AS1.

C section studs with minimum dimensions 90mm x 35mm x 0.75 BMT.

Minimum Partition Width

Stud Depth	Lining Suffix	Gap Between Frame & Shaftline	Space between frames	Partition Width
90mm	S39 M39	25mm - 40mm	80mm-110mm	299-329mm

25mm GIB Barrierline®

General Installation of 25mm GIB Barrierline® and Components

Reference must be made to the latest GIB® Intertenancy Barrier Systems for Terraced Homes Specification & Installation Manual for installation, handling and limitations of the GIB Barrierline® and relevant components.

The instructions below are a general description of the installation of 25mm GIB Barrierline®, H-Studs, Rondo® 140 Perimeter channels, Wall clips & straps and Laminates.

- 25 - 40mm gap required between the studs and the 25mm GIB Barrierline®.
- Fix the Rondo® 140 Perimeter Channels to the concrete floor at 600mm centres and not more than 50mm from channel ends using steel fasteners - 30mm x 3.5mm or 25mm x 4.0mm concrete nails. Or 40mm x 6mm concrete anchors.
- A gap of 5mm to be allowed between Rondo® 140 Perimeter Channels for any collected rain water to escape.
- Seal the Rondo® 140 Perimeter Channels to the floor on one side using exterior fire/acoustic sealant.
- Install the 25mm GIB Barrierline® at 600mm centres into the H-Studs and cap its ends with Rondo® 140 Perimeter Channels.
- The H-Studs to be offset from wall stud to allow the Wall Clips to attach to both frames. In places where no frame exists, nog as required.
- Wall Clips (one on each side) to be placed at 600mm max below the top of each H- Stud and not more than 3000mm vertically .
- Fix Rondo® 140 Perimeter Channels to both frames at wall ends with Wall Clips or Wall Straps not more than 3000mm vertically.
- Use maximum of two Wall Clips or Wall Straps (one each side) to each 3000mm of H-Stud or Rondo® 140 Perimeter Channels.
- In roof spaces (or where otherwise indicated), fix to one side of 25mm GIB Barrierline®, with either a 13mm GIB Weatherline® or 13mm GIB Fyreline® laminate on a 400mm grid. Use 38mm x 10g laminator screws or 40mm x 8g chipboard screws at not more than 100mm from sheet edges.
- Extend the laminate by minimum of 200mm below ceiling level.
- The 60 minutes FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® laminate in the roof space or where otherwise indicated. If the specification calls for a 30 minutes FRR a 10mm GIB Weatherline® laminate can be used.
- Once installed, protect all the GIB Barrierline® and GIB® laminates from wet weather. Use a suitable sheeting to avoid delays in allowing the board to dry before linings are installed.

Cavity Sound Absorber

Fill both wall cavities between studs of each frame with 90mm thick R2.2 glass wool insulation.

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.

One layer of EPB Plasterboard to one side and Two layers of to the other side of the frame as per specified system above.

Vertical or horizontal fixing permitted. For vertical fixing, use full height sheets where possible. For horizontal fixing, all longitudinal sheet joints must be formed over nogs.

Sheet end butt joints must be formed over framing and staggered. Sheets are fixed hard to the floor and shall be touch fitted.

Fixing of Linings

Fasteners

System Number	Side One		Side Two
	1st Layer	2nd Layer	Single Layer
	Self-Tapping Drywall Screws		
EGB3SDLA60-S39 EGB3SDLA60-M39	13mm 25 x 6g	13mm 41 x 6g	13mm 25 x 6g

Fastener Centres

Fix at 300mm centres up each stud. Place fasteners 12mm from sheet edge and 50mm from sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur.

Service Penetrations

Penetrations are permitted in the cavities on either side of the 25mm GIB Barrierline® for Plumbing and electrical services. Minimum 10mm clearance must be allowed between plumbing or electrical services and the GIB Barrierline®. Back-to-back services and penetrations are allowed within the limitations mentioned below.

Fire-stopping for penetrations are not required for Plumbing services up to 65mm diameter. 6mm max clearance gap around the plumbing services are required for penetrations through plasterboard linings. Gaps to be filled with general purpose flexible sealant. Penetrations of electrical services up to 90 x 50mm do not require fire-stopping. Unprotected service penetrations are limited to two per nominal 600mm wide studs.

For penetrations larger than 90 x 50mm or 65mm in diameter and for penetrations through GIB Barrierline® in the roof space, suitable proprietary fire-stopping is required.

Plasterboard lining for Wet Area

If the 13mm EPB Standard is substituted with 13mm EPB AquaSmart, the noise control ratings will be retained .

If the 13mm EPB MultiSmart is substituted with 13mm EPB AquaSmart there is a noise control reduction of 2 STC/Rw points.

EGB3SDLA60 Double Steel Frame - 25mm GIB Barrierline®

Load Bearing | Two Way FRR

3 Layers: 1 Layer of Plasterboard on one side of frame &
2 Layers of Plasterboard on other side of frame

Full Intertenancy **A**coustic

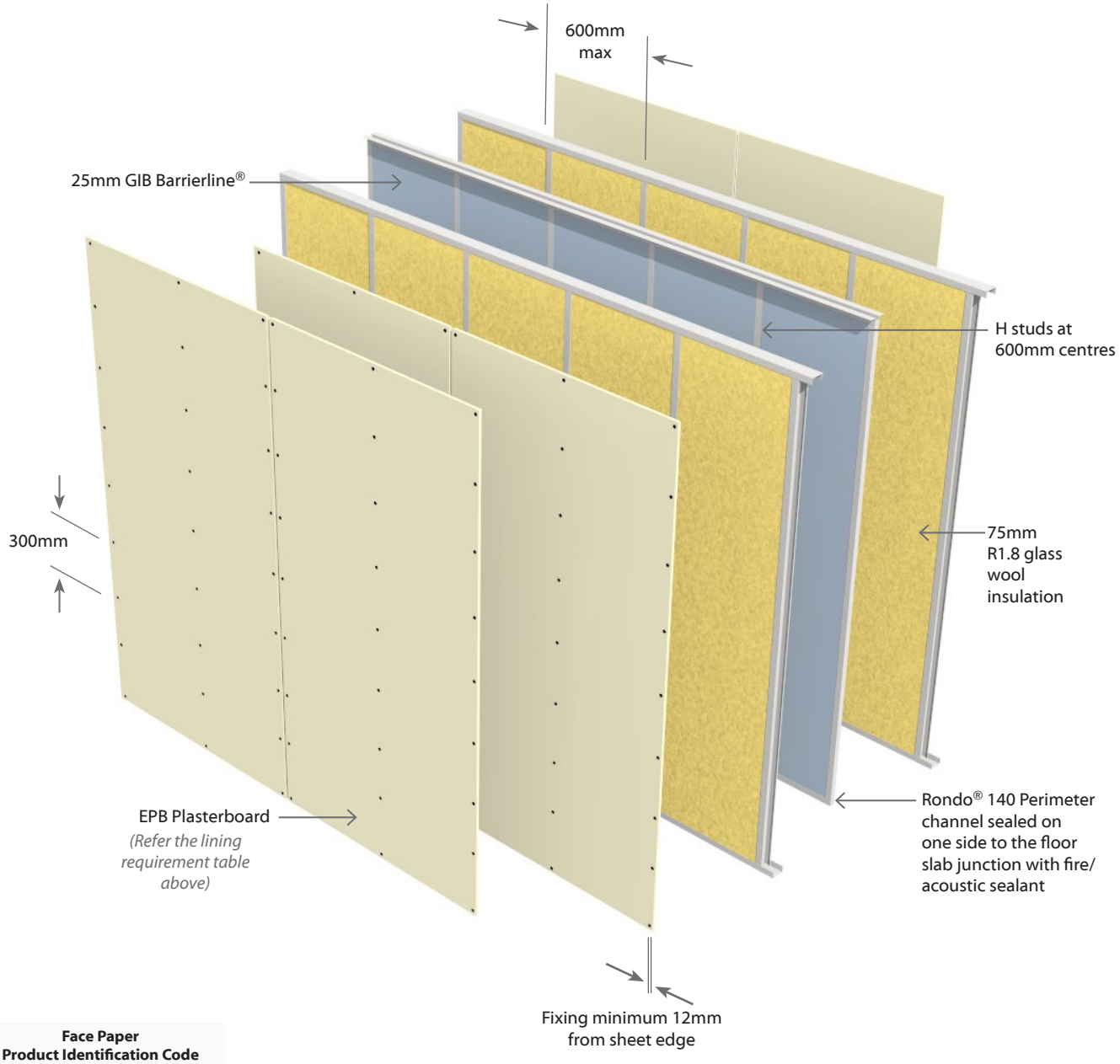
System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EGB3SDLA60	**-S39**	60/60/60	LB	67	66	1 x 13mm EPB Standard on One side 2 x 13mm EPB Standard to Other side
	-M39	60/60/60	LB	69	68	1 x 13mm EPB MultiSmart on One side 2 x 13mm EPB MultiSmart to Other side

** The 60/60/60 FRR is provided by the 25mm GIB Barrierline® & the 13mm GIB Weatherline® or 13mm GIB Fyreline® when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard contribute to the overall STC performance.*

Jointing

GIB Barrierline® : Unstopped

Elephant Plasterboard linings: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with Elephant Plasterboard Installation Guide.



Face Paper Product Identification Code	
13mm EPB Standard	**S13**
13mm EPB MultiSmart	**M13**

EUL2SDA60 Double Steel Frame - 25mm USG Boral Shaftliner™ Non Load Bearing Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frame | Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EUL2SDA60	-S26	--/60/60	NLB	59	58	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side
	-M26	--/60/60	NLB	64	63	1 x 13mm EPB MultiSmart on One side 1 x 13mm EPB MultiSmart to Other side

** The --/60/60 FRR is provided by the 25mm USG Boral Shaftliner™ & the 16mm USG Boral Multistop™ 4 when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard do not form part of the fire rating and only contribute to the overall STC performance.*

Framing

Double Frame - Steel studs with minimum dimensions 64mm x 34mm x 0.50 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.50 BMT and are fixed to floor and ceiling. Studs are placed at 600mm centres maximum with a 15mm expansion gap at top of frame. Studs aligned. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the channel runners. No other fixing is to be used.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Horizontal joints are needed to be formed in the shaftliner barrier for wall heights greater than 3.0m.

Minimum Partition Width

Space between Frames shall be a minimum of 20mm

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 193mm. Increasing the partition width would increase STC performance as per the table below.

Stud Depth	Spaces Between Frames	Partition Width (Excludes Board)	STC Rating
64mm	20mm Min	193mm	+0
64mm	50mm Min	253mm	+4

25mm Shaftliner Barrier

25mm USG Boral Shaftliner™

For correct installation, handling and limitations of the USG Boral Shaftliner™ consult the relevant technical manuals and in particular the Intrwall® Installation Manual NZ and the USG Boral Fire & Acoustic Systems Manual.

General Installation of 25mm Shaftliner Barrier

The instructions below are a general description of the installation of 25mm Shaftliner Barrier walls. As mentioned above, specific technical manuals relevant to the 25mm USG Boral Shaftliner™ shall be referred to.

- Minimum 20mm gap required between the steel studs and the 25mm USG Boral Shaftliner™.
- Fix Rondo® 140 Perimeter Channels to the concrete floor at 600mm centres and not more than 150mm from channel ends using steel fasteners. Seal the channels on one side using fire/acoustic sealant.
- Fix Rondo® 18 Perimeter Angle along one face to the concrete slab above at 600mm centres and not more than 150mm maximum from wall ends using steel fasteners.
- Cap the ends with Rondo® 140 Perimeter Channels. Seal the channels on one side using fire/acoustic sealant.
- Install the 25mm USG Boral Shaftliner™ at 600mm centres into the H-Studs and cap its ends into the Rondo® 140 Perimeter Channels.
- Install final Rondo® 18 Perimeter Angle to top of the wall and the final panel sealed to the 25mm USG Boral Shaftliner™ with a fire/acoustic sealant. Fasten screws as detailed above.
- Refer to the relevant USG Boral technical manuals to determine if the 16mm USG Boral Multistop™ 4 is required, in roof spaces or in other areas
- Once installed, protect all the 25mm USG Boral Shaftliner™ and 16mm USG Boral Multistop™ 4 from wet weather. Consult the relevant USG Boral technical manuals for handling and limitations.

Cavity Sound Absorber

Fill both wall cavities between studs with 1 layer of 75mm thick R1.8 glass wool blanket in each frame.

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.

One layer of EPB Plasterboard lining as per specified system above on each side of the timber framing.

Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over steel framing.

Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing or the inner layer. The perimeter junctions of the wall must be airtight.

Fixing of Linings

Fasteners (As per Specified System Above)

System Number	Side one	Side two
	Self-Tapping Drywall Screws	
EUL2SDA60-S26 EUL2SDA60-M26	13mm	13mm
	25 x 6g	25 x 6g

Fastener Centres

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

Place fasteners 12mm from sheet edge and 20mm clear of the top and bottom channels.

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

Penetrations

Cavities are permitted on either side of the USG Boral Shaftliner™ for Plumbing and electrical services. Minimum 10mm clearance must be allowed between plumbing or electrical services and USG Boral Shaftliner™ for back-to-back services and penetrations.

Fire stopping for penetrations are not required for Metal and PVC Plumbing services up to 65mm diameter. 6mm min clearance gap around the plumbing services are required for penetrations through plasterboard linings. Gaps can be filled with flexible sealant.

Penetration of electrical services up to 90 x 50mm do not require fire -stopping. Flush boxes are limited to two per 600mm wide studs.

For larger penetrations and penetrations through USG Boral Shaftliner™, suitable fire-stopping is required.

Penetrations through USG Boral Shaftliner™ may result in a reduction of noise control performance indicated above.

Plasterboard lining for Wet Area

If the 13mm EPB MultiSmart is substituted with 13mm EPB AquaSmart there is a noise control reduction of 2 STC/Rw points.

If the 13mm EPB Standard is substituted with 13mm EPB AquaSmart, the noise control ratings will be retained .

Jointing

USG Boral Shaftliner™: Unstopped

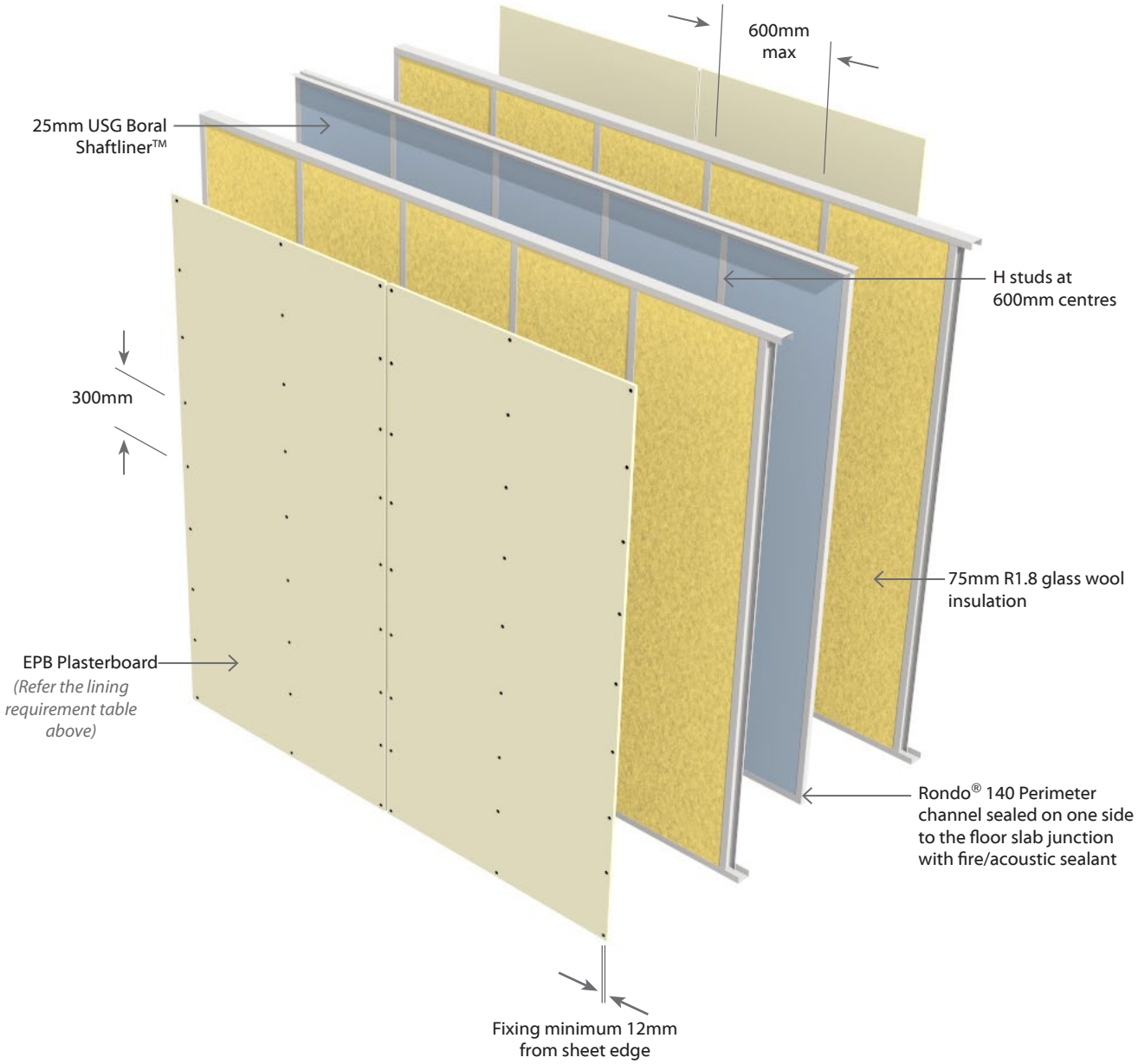
Elephant Plasterboard: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with Elephant Plasterboard Installation Guide.

EUL2SDA60 — **D**ouble **S**teel Frame - 25mm **U**SG Boral Shaft**l**iner™ — Non Load Bearing — Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frame — Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EUL2SDA60	**-S26**	--/60/60	NLB	59	58	1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side
	-M26	--/60/60	NLB	64	63	1 x 13mm EPB MultiSmart on One side 1 x 13mm EPB MultiSmart to Other side

** The 60/60/60 FRR is provided by the 25mm USG Boral Shaftliner™ & the 16mm USG Boral Multistop™ 4 when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard do not form part of the fire rating and only contribute to the overall STC performance.*



Face Paper Product Identification Code	
13mm EPB Standard	**S13**
13mm EPB MultiSmart	**M13**

EUL3SDA60 Double Steel Frame - 25mm USG Boral Shaftliner™ Non Load Bearing Two Way FRR

3 Layers: 1 Layer of Plasterboard on one side of frame & 2 Layers of Plasterboard on other side of frame

Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EUL3SDA60	-S39	--/60/60	NLB	64	63	1 x 13mm EPB Standard on One side 2 x 13mm EPB Standard to Other side
	-M39	--/60/60	NLB	66	65	1 x 13mm EPB MultiSmart on One side 2 x 13mm EPB MultiSmart to Other side

** The --/60/60 FRR is provided by the 25mm USG Boral Shaftliner™ & the 16mm USG Boral Multistop™ 4 when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard do not form part of the fire rating and only contribute to the overall STC performance.*

Framing

Double Frame - Steel studs with minimum dimensions 64mm x 34mm x 0.50 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.50 BMT and are fixed to floor and ceiling. Studs are placed at 600mm centres maximum with a 15mm expansion gap at top of frame. Studs aligned. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the channel runners. No other fixing is to be used.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Horizontal joints are needed to be formed in the shaftliner barrier for wall heights greater than 3.0m.

Minimum Partition Width

Space between Frames shall be a minimum of 20mm

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 193mm. Increasing the partition width would increase STC performance as per the table below.

Stud Depth	Spaces Between Frames	Partition Width (Excludes Board)	STC Rating
64mm	20mm Min	193mm	+0
64mm	50mm Min	253mm	+4

25mm Shaftliner Barrier

25mm USG Boral Shaftliner™

For correct installation, handling and limitations of the USG Boral Shaftliner™ consult the relevant technical manuals and in particular the Intrwall® Installation Manual NZ and the USG Boral Fire & Acoustic Systems Manual.

General Installation of 25mm Shaftliner Barrier

The instructions below are a general description only Of the installation of 25mm Shaftliner Barrier walls. As mentioned above, specific technical manuals relevant to the 25mm USG Boral Shaftliner™ shall be referred to.

- Minimum 20mm gap required between the steel studs and the 25mm USG Boral Shaftliner™.
- Fix Rondo® 140 Perimeter Channels to the concrete floor at 600mm centres and not more than 150mm from channel ends using steel fasteners. Seal the channels on one side using fire/acoustic sealant.
- Fix Rondo® 18 Perimeter Angle along one face to the concrete slab above at 600mm centres and not more than 150mm maximum from wall ends using steel fasteners.
- Cap the ends with Rondo® 140 Perimeter Channels. Seal the channels on one side using fire/acoustic sealant.
- Install the 25mm USG Boral Shaftliner™ at 600mm centres into the H-Studs and cap its ends into the Rondo® 140 Perimeter Channels.
- Install final Rondo® 18 Perimeter Angle to top of the wall and the final panel sealed to the 25mm USG Boral Shaftliner™ with a fire/acoustic sealant. Fasten screws as detailed above.
- Refer to the relevant USG Boral technical manuals to determine if the 16mm USG Boral Multistop™ 4 is required, in roof spaces or in other areas
- Once installed, protect all the 25mm USG Boral Shaftliner™ and 16mm USG Boral Multistop™ 4 from wet weather. Consult the relevant USG Boral technical manuals for handling and limitations.

Cavity Sound Absorber

Fill both wall cavities between studs with 1 layer of 75mm thick R1.8 glass wool blanket in each frame.

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.

One layer of EPB Plasterboard to one side and Two layers of to the other side of the frame as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over steel framing.

Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Fixing of Linings

Fasteners (As per Specified System Above)

System Number	Side One		Side Two
	1st Layer	2nd Layer	Single Layer
	Self-Tapping Drywall Screws		
EUL3SDA60-S39 EUL3SDA60-M39	13mm 25 x 6g	13mm 41 x 6g	13mm 25 x 6g

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

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

Place fasteners minimum 12mm from 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.

Penetrations

Cavities are permitted on either side of the USG Boral Shaftliner™ for Plumbing and electrical services. Minimum 10mm clearance must be allowed between plumbing or electrical services and USG Boral Shaftliner™ for back-to-back services and penetrations.

Fire stopping for penetrations are not required for Metal and PVC Plumbing services up to 65mm diameter. 6mm min clearance gap around the plumbing services are required for penetrations through plasterboard linings. Gaps can be filled with flexible sealant.

Penetration of electrical services up to 90 x 50mm do not require fire -stopping. Flush boxes are limited to two per 600mm wide studs.

For larger penetrations and penetrations through USG Boral Shaftliner™, suitable fire-stopping is required.

Penetrations through USG Boral Shaftliner™ may result in a reduction of noise control performance indicated above.

Plasterboard lining for Wet Area

If the 13mm EPB MultiSmart is substituted with 13mm EPB AquaSmart there is a noise control reduction of 2 STC/Rw points.

If the 13mm EPB Standard is substituted with 13mm EPB AquaSmart, the noise control ratings will be retained .

EUL3SDA60 — **D**ouble **S**teel Frame - 25mm **U**SG Boral Shaft**l**iner™ — Non Load Bearing — Two Way FRR

3 Layers: 1 Layer of Plasterboard on one side of frame & 2 Layers of Plasterboard on other side of frame

Full Intertenancy **A**coustic

System Number	Lining Suffix	Fire Rating *	Load Bearing Ability	Noise Control		Lining Requirement
				STC	Rw	
EUL3SDA60	**-S39**	--/60/60	NLB	64	63	1 x 13mm EPB Standard on One side 2 x 13mm EPB Standard to Other side
	-M39	--/60/60	NLB	66	65	1 x 13mm EPB MultiSmart on One side 2 x 13mm EPB MultiSmart to Other side

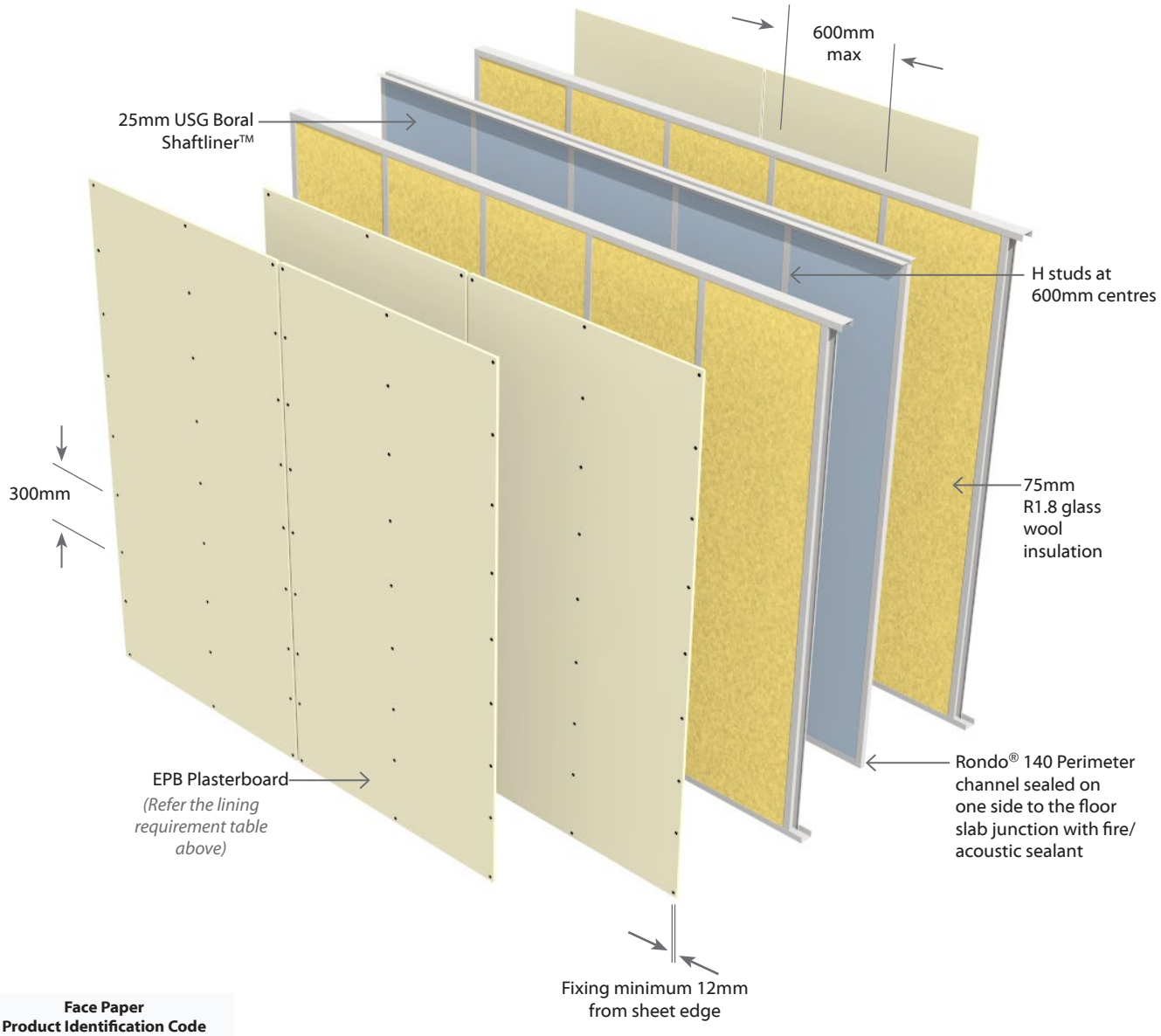
** The --/60/60 FRR is provided by the 25mm USG Boral Shaftliner™ & the 16mm USG Boral Multistop™ 4 when installed as per the manufacturer's instruction. The outer layers of Elephant Plasterboard do not form part of the fire rating and only contribute to the overall STC performance.*

Jointing

USG Boral Shaftliner™: Unstopped

Elephant Plasterboard Inner layer: Unstopped

Elephant Plasterboard Outer or Single layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with Elephant Plasterboard Installation Guide.



Face Paper Product Identification Code	
13mm EPB Standard	**S13**
13mm EPB MultiSmart	**M13**

EPB Plasterboard Product Range

Product Weights and available Lengths

THICK-NESS	EPB PLASTERBOARD PRODUCT RANGE	EDGE TYPE	WIDTH	AVG WEIGHT	LENGTH							
mm			mm	Kg/m²	2.4m	2.7m	3.0m	3.3m	3.6m	4.2m	4.8m	6.0m
10	EPB® Standard	TE/TE	1200	6.9	✓	✓	✓	✓	✓	✓	✓	✓
10	EPB® Standard	**TE/SE**	1200	6.9	✓		✓		✓	✓	✓	✓
10	EPB® Standard - Wide	**TE/SE**	**1350**	6.9					✓		✓	✓
13	EPB® Standard	TE/TE	1200	8.8	✓	✓	✓	✓	✓	✓	✓	✓
10	EPB CeilingSmart®	TE/TE	1200	7.4	✓	✓	✓		✓	✓	✓	✓
10	EPB FireSmart®	TE/TE	1200	7.4	✓	✓	✓		✓	✓	✓	✓
13	EPB FireSmart®	TE/TE	1200	11.7	✓	✓	✓	✓	✓			
16	EPB FireSmart®	TE/TE	1200	14.7	✓	✓	✓					
10	EPB MultiSmart®	TE/TE	1200	8.9	✓	✓	✓		✓		✓	
10	EPB MultiSmart®	**TE/SE**	1200	8.9	✓						✓	
13	EPB MultiSmart®	TE/TE	1200	12.2	✓	✓	✓	✓	✓			
10	EPB AquaSmart®	TE/TE	1200	8.3	✓	✓	✓		✓			
10	EPB AquaSmart®	**TE/SE**	1200	8.3	✓						✓	
13	EPB AquaSmart®	TE/TE	1200	11.7	✓	✓	✓		✓			

TE/TE = Tapered Both Edges
TE/SE = Tapered One Edge, Square the Other

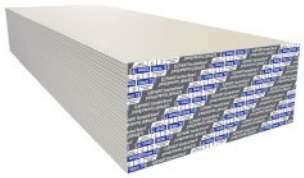
Product Primary Functions*

THICK-NESS	EPB PLASTERBOARD PRODUCT RANGE	EDGE TYPE	WIDTH	Horizontal Fixing	Span 600 Centres on Ceilings	Bracing	Fire Resistance	Noise Control	Impact Resistant	Water Resistant
mm			mm							
10	EPB® Standard	TE/TE	1200			✓	✓			
10	EPB® Standard	**TE/SE**	1200	✓		✓				
10	EPB® Standard -Wide	**TE/SE**	**1350**	✓		✓				
13	EPB® Standard	TE/TE	1200		✓		✓			
10	EPB CeilingSmart®	TE/TE	1200		✓	✓	✓			
10	EPB FireSmart®	TE/TE	1200		✓	✓	✓			
13	EPB FireSmart®	TE/TE	1200		✓		✓			
16	EPB FireSmart®	TE/TE	1200				✓	✓	✓	
10	EPB MultiSmart®	TE/TE	1200		✓	✓	✓	✓		
10	EPB MultiSmart®	TE/SE	1200	✓		✓		✓		
13	EPB MultiSmart®	TE/TE	1200		✓	✓	✓	✓	✓	
10	EPB AquaSmart®	TE/TE	1200				✓	✓		✓
10	EPB AquaSmart®	**TE/SE**	1200	✓						✓
13	EPB AquaSmart®	TE/TE	1200		✓		✓	✓		✓

* The above table details the product's Primary functions.
Some products may perform more than the functions indicated

EPB Plasterboard Product Range

10mm EPB Standard



10mm EPB Horizontal Standard

13mm EPB Standard

10mm EPB FireSmart & CeilingSmart

13mm EPB FireSmart

16mm EPB FireSmart

10mm EPB MultiSmart

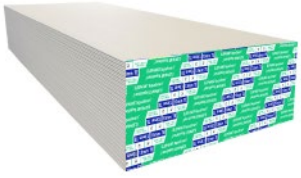
10mm EPB Horizontal MultiSmart

13mm EPB MultiSmart

10mm EPB AquaSmart

10mm EPB Horizontal AquaSmart

13mm EPB AquaSmart



EPB® PLASTERBOARD

FOR MORE INFORMATION

EMAIL info@elephantplasterboard.co.nz

CALL 0800 353 742