

E4S120

Single Steel Frame

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frame

System Number	Fire Rating	Load Bearing Ability	Noise Control		Lining Requirement
			STC	Rw	
E4S120-F52	-/120/120	NLB	45	44	2 x 13mm EPB FireSmart® on One side 2 x 13mm EPB FireSmart® to Other side
E4S120-F58	-/120/120	NLB	46	45	1 x 16mm EPB FireSmart® and 1 x 13mm EPB FireSmart® on One side 1 x 16mm EPB FireSmart® and 1 x 13mm EPB FireSmart® to Other side

E4S120-F52

Framing

Steel studs with minimum dimensions 92mm x 34mm x 0.75 BMT with 6mm return.

Bottom tracks to be minimum dimensions 92mm x 30mm x 0.75 BMT and Top tracks to be minimum dimensions of 92mm x 50mm x 0.75BMT.

Top & bottom tracks are fixed to the floor & ceiling in true alignment. Studs are placed at 600mm centres maximum.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs cannot be directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Height

Recommended maximum height is 3.0m. For higher walls refer to steel stud height table below.

Stud Dimentions (mm)	Base Metal Thickness (mm)	Stud Centres (mm)	Max Wall Heights (mm)	Expansion Tolerance at top of studs (mm)
92 x 34	0.75	600	3000	15
		400	3400	15
150 x 34	0.75	600	4400	20*
		400	5000	25*
	1.15	600	5000	25*
		400	5700	30*

E4S120-F58

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.50 BMT with 6mm return.

Tracks to be minimum dimensions 64mm x 30mm x 0.50 BMT.

Top & bottom tracks are fixed to the floor & ceiling in true alignment. Studs are placed at 600mm centres maximum.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs cannot be directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Height

Recommended maximum height is 3.0m. For higher walls refer to steel stud height table below.

Stud Dimentions (mm)	Base Metal Thickness (mm)	Stud Centres (mm)	Max Wall Heights (mm)	Expansion Tolerance at top of studs (mm)
64 x 34	0.50	600	3000	15
		400	3200	15
76 x 34	0.55	600	3200	15
		400	3800	20*
	0.75	600	3600	20*
		400	4200	20*
92 x 34	0.75	600	4200	20*
		400	4800	25*

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 EPB FireSmart® lining on each side of the steel framing as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible.

Vertical Fixing- the vertical sheet joints must be offset on the opposite side of the frame.

Sheet end butt joints- must be formed over framing and staggered. Offset joints from opposite side of the frame.

All outer layer joints must be staggered from inner layer joints.

All sheet joints must be formed over framing. The layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings

Fasteners

System Number	Side One		Side Two	
	1 st Layer	2 nd Layer	1 st Layer	2 nd Layer
	Self-Tapping Drywall Screws			
E4S120-F52	13mm	13mm	13mm	13mm
	32 x 6g	41 x 6g	32x 6g	41 x 6g
E4S120-F58	16mm	13mm	16mm	13mm
	32 x 6g	41 x 6g	32x 6g	41 x 6g

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixing to top or 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 and min 20mm clear of top and bottom tracks.

Place fasteners at 200mm centres where sheet end butt joints occur. Avoid outer layer screws from hitting inner layer screws.

Fasteners may be placed at 18mm from sheet ends along top and bottom tracks, provided the fasteners do not connect the stud to the track. If floor deflections need to be considered, do not fix any linings to top track.

Jointing

Inner Layer: Unstopped

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



E4S120

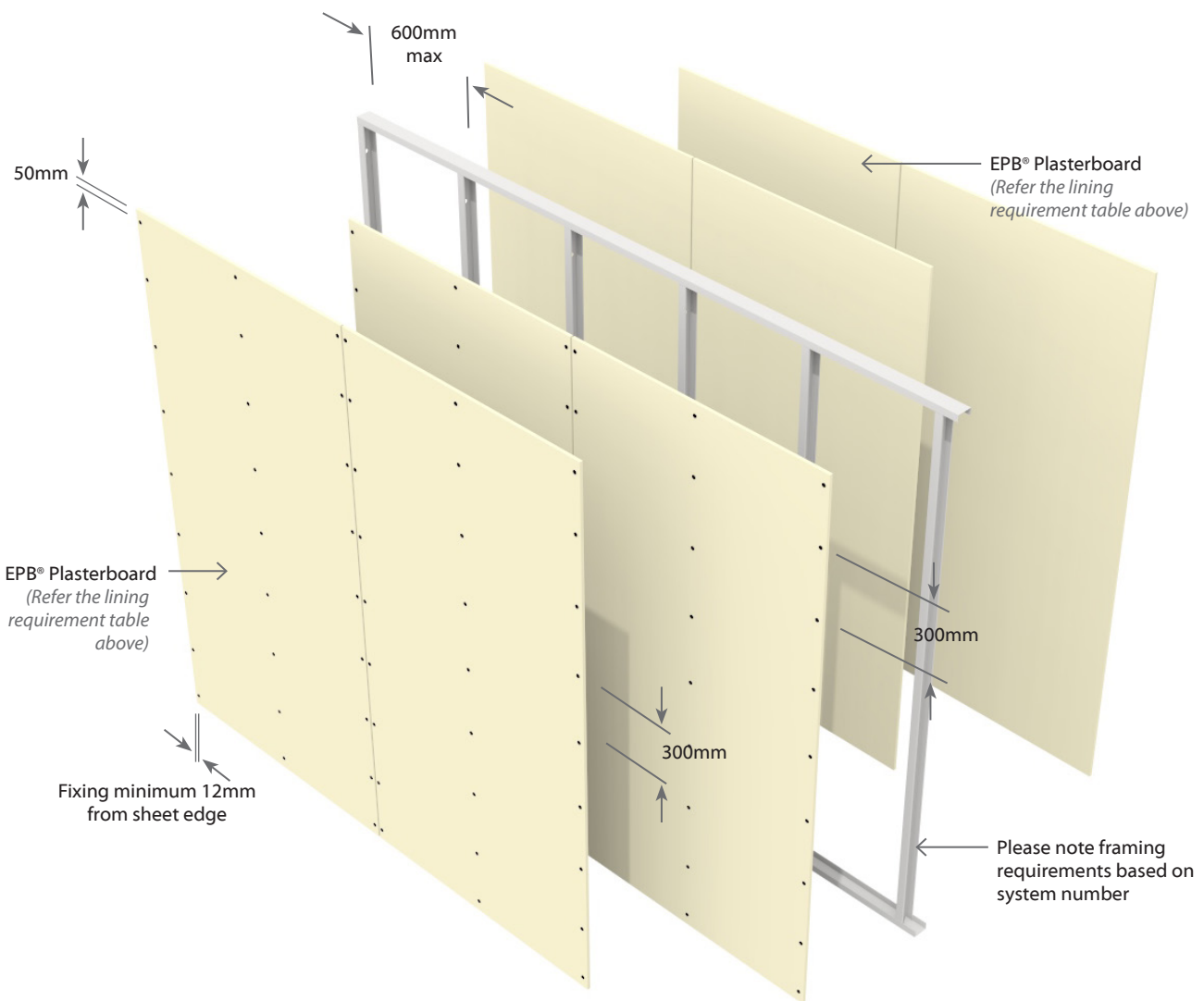
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E4S120-F58	-/120/120	NLB	46	45	1 x 16mm EPB FireSmart® and 1 x 13mm EPB FireSmart® on One side 1 x 16mm EPB FireSmart® and 1 x 13mm EPB FireSmart® to Other side



Face Paper Product Identification Code	
13mm EPB FireSmart®	F13
16mm EPB FireSmart®	F16

