



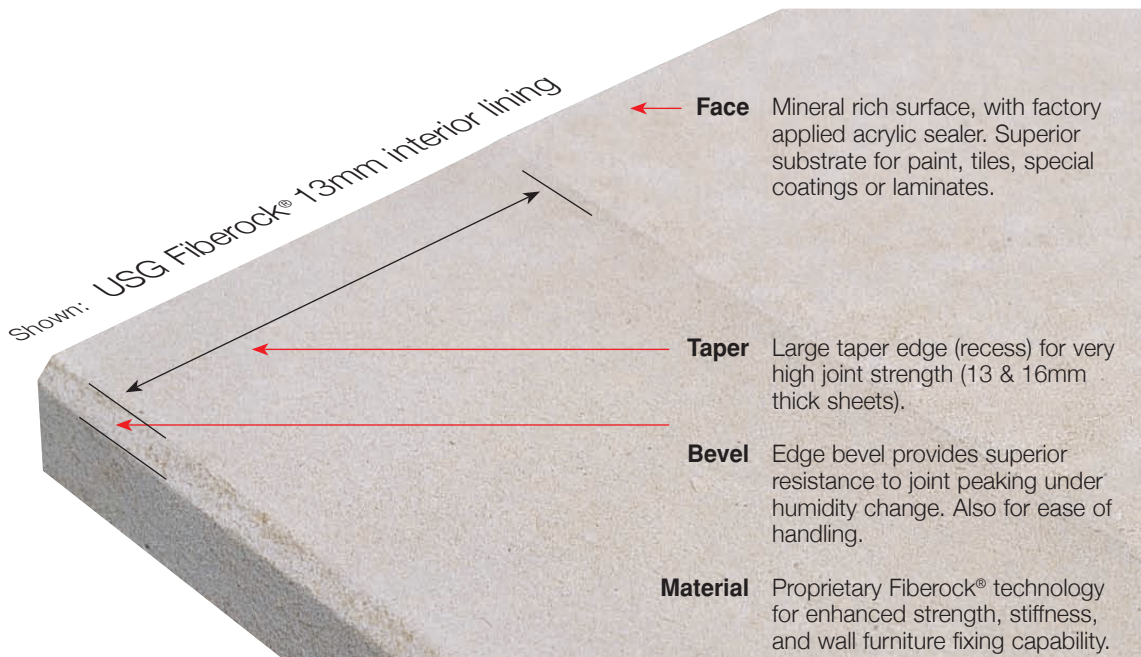
POWERSCAPE

Fiberock® Aqua-Tough

Introduction

Imagine working with wallboards that possess the impact toughness of masonry, combined with the design and installation convenience of plasterboard. This elusive ideal, together with leading ecological and health properties, have long been sought by designers, and all those responsible for keeping walls looking good longer.

Now it is reality. Called USG Fiberock® these linings create an entirely new class of highly desirable and durable indoor environments.



This breakthrough interior lining technology turns dreams into reality in four key ways:



Healthy

Caring for your health by resisting moisture, mould, noise transmission and being free from carcinogenic crystalline silica dust risk.



Quiet & Safe

Keeping noise and fire within or from entering.



Durable

Keeping indoor environments looking good longer, and reducing ongoing maintenance.



Eco-Preferred

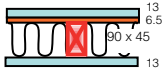
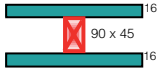
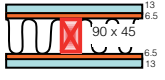
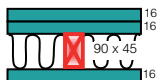
95% recycled, demountable and reusable, leaving more wilderness, desert, and forest to sustain earth ecology and for future generations to enjoy.

Available in Australia since late 2004, Fiberock linings are now the preferred interior lining solution with many leading designers and builders. Application is widespread in buildings for education, health, justice, and aged care. Also in community facilities and eco-offices. More recently, as knowledge of the benefits of this new technology has spread, application has commenced in luxury and eco-homes, and in apartment tenancy and corridor walls.

This brochure is designed to help you understand the unique attributes of Fiberock interior linings, and to provide the information needed for design, specification, BCA (Building Code of Australia) compliance, installation, and when no longer required - demounting for subsequent reuse.

Wall System Specifications - Timber Stud

Specification: Single Timber Studs

Specification number	Load bearing capability	Fire resistance level	Lining requirements	R _w	R _w + C _{tr}	Framing Size
PRTL30SiE 	LB	30/30/30	1 layer of 13 mm USG Fiberrock® lining each side & 1 layer of 6.5 mm USG Fiberrock® lining on one side	46	41	90 by 45 or larger
PRTL60SiA 	LB	60/60/60	1 layer of 16 mm USG Fiberrock lining each side	39	32	90 by 45 or larger
PRTL60SiF 	LB	60/60/60	1 layer of 13 mm USG Fiberrock® lining & 1 layer of 6.5 mm USG Fiberrock® lining on each side	49	45	90 by 45 or larger
PRT120SiB 	NLB	-/120/120	2 layers of 16 mm USG Fiberrock® lining each side	45	40	90 by 45 or larger

Framing and Wall Height

F5 or MGP 10 framing. Stud spacing at 600 mm maximum. Nogs at 800 mm centres maximum for vertical fixing or 1200mm centres maximum for horizontal fixing.

Non loadbearing partitions framing dimensions and height as determined by AS1684 stud tables for non loadbearing walls.

Loadbearing partitions framing dimensions and height as determined by AS1684 stud tables for loadbearing walls.

Lining

Vertical or horizontal fixing is permitted. Sheet joints must be formed over framing.

Sheets shall be touch fitted.

Offset joints between sheets by 600 mm on opposite sides of the frame.

When sheet end butt joints are unavoidable, they shall be formed over noggings with the same cross-sectional dimensions of the studs.

Fasteners

51 mm x 7 g plasterboard Head High Thread Drywall screws at 300 mm centres or 50 x 2.8 mm plasterboard nails at 200 mm centres.

Services

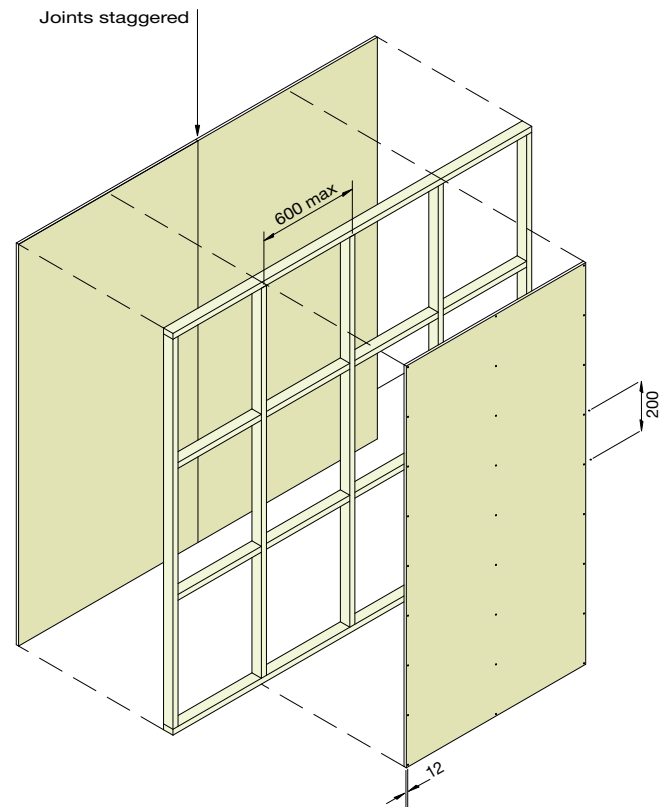
Holes may be drilled to allow installation of electrical service lines and plumbing supply pipes.

Jointing

All fastener heads stopped and all sheet joints tape reinforced and stopped in accordance with the standard procedures for plasterboard.

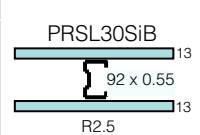
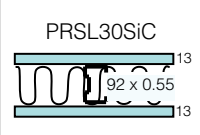
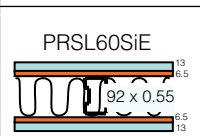
Insulation

Sound control insulation when shown above shall be a minimum of Tasman Insulation R2.0 glasswool or polyester blanket, or equivalent, installed between the studs.



Wall System Specifications - Steel Stud

Specification: Single Steel Stud

Specification number	Load bearing capability	Fire resistance level	Lining requirements	R _w	R _w + C _r	Framing Size
 <p>PRSL30SiB R2.5</p>	LB	30/30/30	1 layer of 13 mm USG Fiberock® lining each side. No Insulation	41	37	92 mm deep by 0.55 mm or larger steel studs
 <p>PRSL30SiC</p>	LB	30/30/30	1 layer of 13 mm USG Fiberock® lining each side	48	39	92 mm deep by 0.55 mm or larger steel studs
 <p>PRSL60SiE</p>	LB	60/60/60	1 layer of 13 mm USG Fiberock® lining & 1 layer of 6.5 mm USG Fiberock® lining on each side	56	48	92 mm deep by 0.55 mm or larger steel studs

Framing

Channel runners are fixed to the floor and ceiling in true alignment.

Stud spacing at 600 mm maximum.

Place studs to allow a 15 mm expansion gap at the top of the frame.

The studs are held in place by the "grip" of the channel runners. Light locating fasteners that fail at high temperatures, such as single aluminium rivets, may be used. Otherwise positive fixing to either channel must be avoided.

Non Loadbearing – Place studs to allow a 15 mm expansion gap at the top of studs. Recommended maximum height of 3000mm, higher walls are subject to specific design.

Loadbearing - The steel frame must be designed to meet the structural criteria for service ability and strength under dead and live loads. Frame height as determined by specific design.

Lining

Vertical or horizontal fixing is permitted. Sheet joints must be formed over framing. Sheets shall be touch fitted. Offset joints between sheets by 600 mm on opposite sides of the frame.

When sheet end butt joints are unavoidable, they shall be formed over noggings with the same cross-sectional dimensions as the studs.

Fasteners

25 mm x 7 g plasterboard high thread drywall screws at 200 or 300 mm centres. No fixing to top and bottom channel sections.

Services

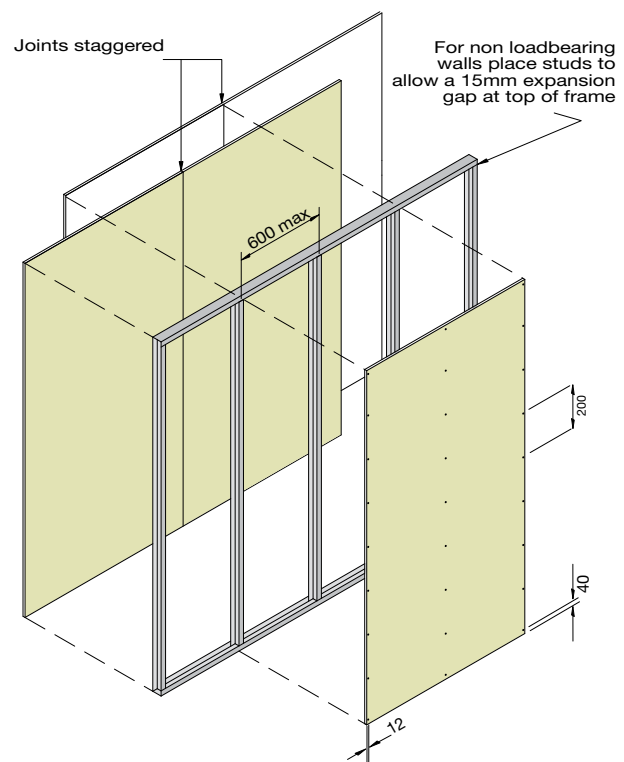
Holes may be drilled or pre-punched in the metal studs to allow installation of electrical service lines and plumbing supply pipes.

Insulation

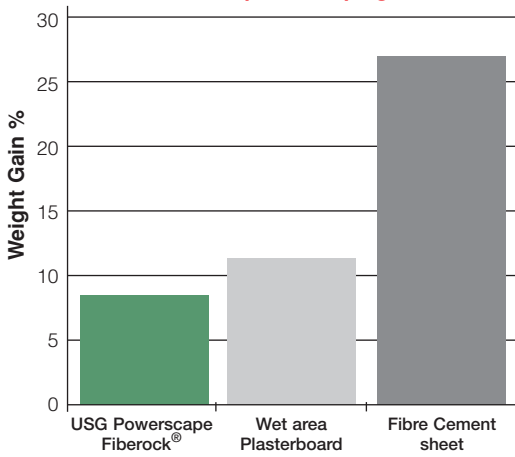
Sound control insulation when shown above shall be a minimum of Tasman Insulation R2.0 (except PRSSiB R2.5), glasswool or polyester blanket, or equivalent, installed between the studs.

Jointing

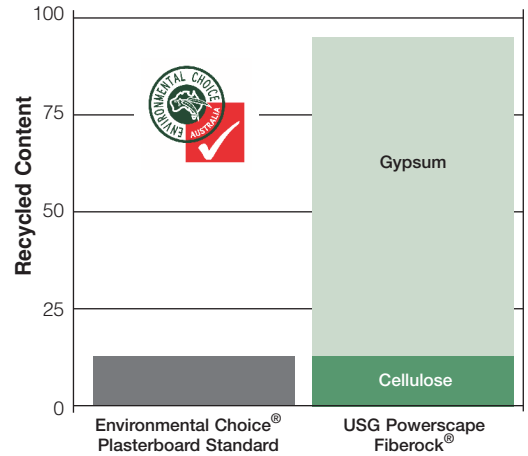
All fastener heads stopped and all sheet joints tape reinforced and stopped in accordance with the standard procedures for plasterboard.



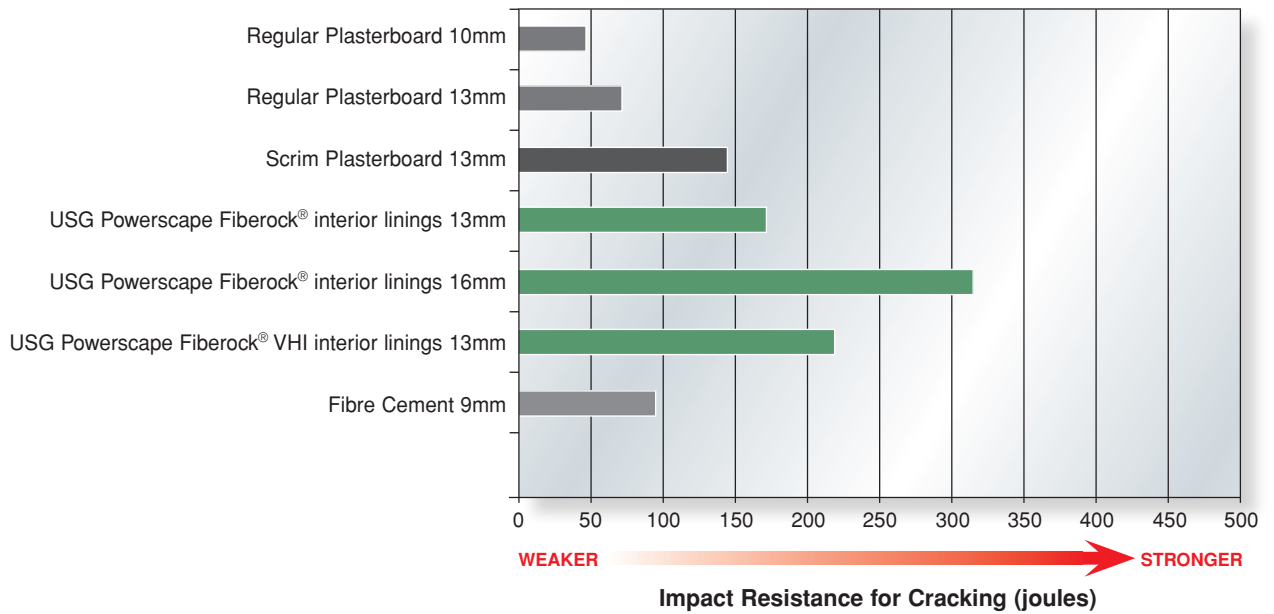
Weight gain % after 24 hour soak in water
USG Powerscape Fiberock® resists severe water soak absorption, keeping home drier.



Recycled Content of Gypsum Wallboard in Australia
USG Powerscape linings 'Clean-up' the field.



First surface cracking, soft body, steel frame
USG Powerscape Fiberock® can handle twice the impact and still look good



Product Range, and Key Properties and Main Applications

The principle nominal properties of the range of USG Powerscape Fiberock® products are documented below. Also shown are main applications for each product.

USG Fiberock Range & Applications

Product Name	Thickness mm	Size mm	Edge TE/SE	Density Kg/m ³	Weight Kg/m ²		Main Applications (both dry and wet areas)
Fiberock®	13	1200 x 3000	TE	950	12	✓	Interior wall and ceiling linings - widely used in education, medical, aged care, institutions, office, and in quality residential.
Fiberock® VHI	13	1200 x 3000	TE	950	12	-	Interior linings where ultra high impact resistance is needed - containment ceilings, institutional walls.
Fiberock®	16	1200 x 3000	TE	950	15	✓	Interior wall and ceiling linings- especially apartment tenancy & corridor walls.
Fiberock®	10	1200 x 2700	SE	1000	10	✓	Tile backer wall lining; Lining of eaves, and canopies; Acoustic underlay on framed floors.
Fiberock®	6.5	900 x 1800	SE	1200	8	-	Inner layer lining for acoustic walls - especially aged care timber frame structures; Stabilizer layer on framed floors under tiles etc.

Key Product Features - USG Powerscape Fiberock®

- Four product thicknesses and suitable for interior linings in wet and dry areas.
- Exceptional impact resistance; USG Fiberock is at least as strong as 9mm fibre cement and scrim reinforced plasterboard, and twice the strength of same thickness regular plasterboard. Fiberock VHI, much stronger again, is in a class of its own.
- Joins easily to provide monolithic finishes.
- Screws, nails, glues and staples easily. Cut to size virtually dust free with multi-score and snap. Hand tools and powered standard wood working tools can also be used when using a dust mask.
- Two way fire rated systems up to 60 minutes (single layer) and 120 minutes (2 layers).
- High mass gives superior noise control, including inter-tenancy rated systems.
- Excellent substrate for paint and tiles, and a number of abrasion resistant coatings.



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