

# Speedpanel Technical Data Sheet

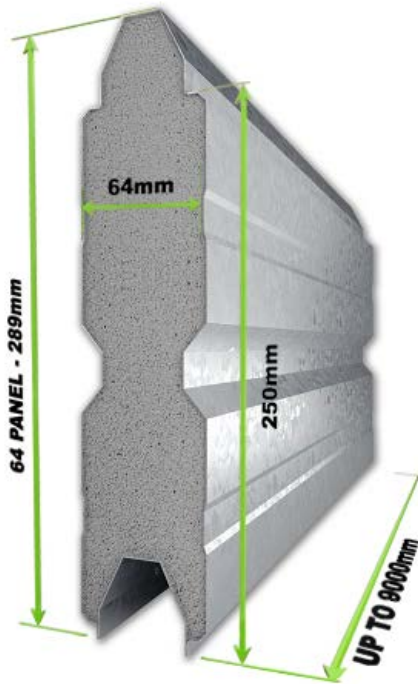


Speedpanel is an innovative, time saving fire and acoustic rated wall system. The cutting edge pre-fab panel system is comprised of a roll-formed steel outer shell filled with an aerated cement core.

The **64mm thick Speedpanel** will achieve an FRL of -/90/90. A highly versatile system, it can be used throughout a variety of applications in multiple building sectors.

The lightweight, easy to handle system adds significant value to a building project by improving program speed and providing a robust, easy to construct wall system.

Common applications within high-rise buildings for the 64mm Speedpanel include shaft and riser walls and intertenancy walls.



PANEL PROPERTIES						
Series <sup>^</sup>	435	550	650	750	850	950
Weight per 1m (kg) <sup>W1</sup>	9.1	10.8	12.3	13.8	14.5	16.7
Weight per m <sup>2</sup> (kg) <sup>W2</sup>	36.5	43.3	49.2	55.1	58.1	66.9
Shell material	0.4 BMT galvanised steel					
Core material	Lightweight aerated cement					

WALL SYSTEMS		
Profile		
Fire rating	-/90/90	
Direction of fire rating	Both ways	
Panel orientation	Vertical	Horizontal
Max. span between structural connections	5.0m	3.0m
Max. wall length (single span)	Unlimited	3.0m
Max. wall height (single span)	5.0m	5.0m
Max. wall length (multiple structural connections)*	N/A	Unlimited
Max. wall height (multiple structural connections)**	14.0m	N/A

## DESIGN CONSIDERATIONS

Fire	All Speedpanel Systems have been tested to AS1530.4 to determine their fire resistance performance and tested to AS1530.1 to confirm their non-combustible product properties. Speedpanel utilises assessments issued by 3rd party NATA certified test laboratories to extend the scope of application of its tested systems.
Acoustics	Speedpanel Systems have been tested by NATA certified laboratories in accordance with AS 1191 for acoustic ratings of the panels, and by Speedpanel proprietary acoustic systems. Furthermore, all acoustic data has been modelled by qualified acoustic engineers to produce bespoke higher acoustic rating systems.
Wind loading / Deflection	All wind loading deflection testing has been undertaken by NATA registered laboratories in accordance with AS 4040.2-1992 (non-cyclone regions).
Air Infiltration	Speedpanel can be used as a fire rated pressurised plenum or shaft that needs to be air tight. Panels have been tested in accordance with AS/NZS 4284:2008 using NATA accredited laboratory equipment.

<sup>^</sup> Series label based on 435, 550, 650, 750, 850 & 950 kg/m<sup>3</sup> Speedpanel densities, +/- manufacturing tolerances.

<sup>W1 & W2</sup> Published weight per lineal metre and per square metre values are strictly indicative only. Panel weight subject to change based on, residual moisture, exposure to environmental factors and storage. Speedpanel strongly recommends seeking advice from a suitably qualified professional such as a engineer and/or other design consultant(s) when considering Speedpanel in project design.

\* Intermediate fire rated structure between "Max. wall length" panel dimensions.

\*\* Based on 600 kg/m<sup>3</sup> density panel core. Reduced density may result in reduced height.

For more information please contact our office on +61 3 9115 6666.

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## 64mm SPEEDPANEL ACOUSTIC SOLUTIONS

System No.	Rw Rating	Rw +Ctr	System Composition	Footprint	Application
SP64001	35	32	64mm Speedpanel 500kg/m <sup>3</sup> density	64mm	-
SPOP014	DnTw	59	13mm std plasterboard, 16mm furring channel, 64mm Speedpanel 435kg/m <sup>3</sup> density, 40mm air gap, 64mm steel stud, 100mm 14kg/m <sup>3</sup> polyester insulation, 13mm std plasterboard	210mm	Intertenancy
SP64006	59	51	13mm std plasterboard, 16mm steel batten, 64mm Speedpanel 750kg/m <sup>3</sup> density, 50mmx15kg/m <sup>3</sup> glasswool insulation, 20mm air gap, 51mm steel stud, 13mm wet area plasterboard	177mm	Intertenancy
SPOP013	DnTw	53	13mm std plasterboard, 16mm furring channel, 64mm Speedpanel 435kg/m <sup>3</sup> density, 28mm furring channel on clips to create 40mm cavity, 50mm 14kg/m <sup>3</sup> polyester insulation, 13mm std plasterboard	146mm	Corridors
SPOP016	DnTw	48	64mm Speedpanel 600kg/m <sup>3</sup> density, 16mm furring channel, 30mm 14kg/m <sup>3</sup> polyester insulation, 13mm std plasterboard	93mm	Shafts & Risers
SPOP008	50	41	64mm Speedpanel 600kg/m <sup>3</sup> density, 64mm steel stud or 28mm furring channel on clip, 50mm 14kg/m <sup>3</sup> glasswool insulation, 13mm std plasterboard	141mm	Shafts & Risers

Please visit our website or contact our office for alternative Speedpanel Acoustic Systems: [www.speedpanel.com.au](http://www.speedpanel.com.au)

## WIND LOADING DATA

Span (m)	ULS	L/150 (Kpa)	L/200 (Kpa)	L/250 (Kpa)	L/300 (Kpa)
2.0	7.66	7.66	6.20	4.96	4.13
2.5	4.90	4.12	3.18	2.54	2.12
3.0	3.40	2.41	1.84	1.47	1.22
3.5	2.49	1.53	1.16	0.92	0.77
4.0	1.91	1.03	0.77	0.62	0.51
4.5	1.50	0.73	0.54	0.43	0.36
5.0	1.22	0.53	0.39	0.31	0.26

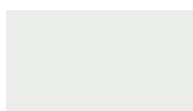
## AIR INFILTRATION DATA

Pressure (Pa)	Unsealed (L/m <sup>2</sup> .s)	Sealed (L/m <sup>2</sup> .s)
+300	0.81	<0.1
-300	-0.85	<-0.1
+750	N/A	+0.1
-750	N/A	-0.1
+1000	N/A	+0.1
-1000	N/A	-0.2
+1500	N/A	+0.2
-1500	N/A	-0.3

## SPEEDPANEL COLOUR OPTIONS



EBONY



OFF WHITE



SLATE GREY



GULL GREY



MERINO



A wide variety of colours are available for products within the Speedpanel range. Colour options may incur minimum order quantity requirements, upfront deposit and additional fees. Colours shown above are to be used as a guide only. For exact matching, an official colour swatch from steel manufacturer should be used. Contact Speedpanel for further information.