



- PIR Insulation Core
- Fire Resistant
- Superior Insulation
- Environmentally Friendly
- Light Weight
- Easy to Install
- Cost Effective

WALLSPAN

Insulated Panels for a
Clean World



INSULATED SANDWICH PANELS

WALLSPAN PANELS

INDUSTRIAL PANEL AUSTRALIA

Industrial Panel Australia (IPA) are producers and suppliers of the 'SPAN Panels' range of lightweight, fire-resistant, steel faced composite insulated panels with PIR foam cores.

Our state of the art manufacturing facility uses the latest in European technology and with offices nationally you can have full peace of mind when choosing IPA 'SPAN Panels' for your next project.

WALLSPAN PANELS

WALLSPAN is an FM certified lightweight, fire-resistant and energy efficient solution for external - internal walls suitable for commercial, industrial and residential applications.

WALLSPAN panels are a single component, factory controlled pre-engineered system that combines aesthetic finish, insulation, weather sealing and simple installation in one product. With PIR foam core and 0.60mm external and 0.50mm internal steel facings, WALLSPAN is available in a wide range of thicknesses, profiles, colours and is supplied cut to length ready for installation.

WALLSPAN panels are available in lengths up to 11.85m (longer lengths are available in some instances) and in thicknesses between 50mm and 100mm. Thermal performance (R values) ranges from 2.3810W/m²K to 4.7619W/m²K providing various levels of thermal, fire and span performance to meet different requirements and the most stringent design criteria.

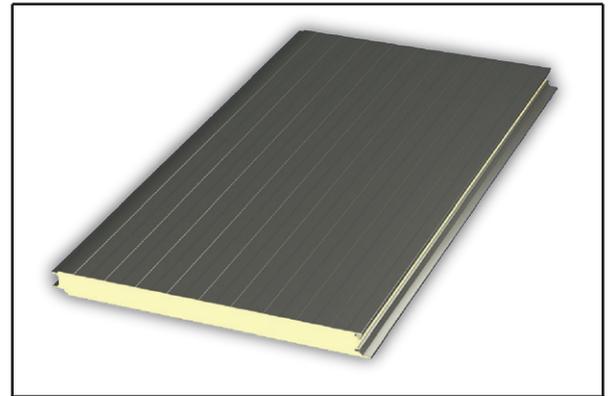
WALLSPAN panels use a secret fix joining system, can be laid vertically or horizontally and used as a cladding on a self-supporting metal frame. Like all 'SPAN Panels', WALLSPAN is FM approved.

WALLSPAN Ultra - is a new generation external cladding product with 0.70mm thick flat external facings. WALLSPAN Ultra features the sleek simplicity of a flat facade. WALLSPAN Ultra can add the ultimate finishing touch and highlights to modern building design. Available in a wide variety of colours and finishes and in lengths up to 7m.

WHAT IS PIR

Polyisocyanurate (PIR) is a rigid polyurethane foam, made as all rigid polyurethanes are, by mixing two chemical streams (Isocyanate and Polyol) with appropriate catalysts and a blowing agent. PIR is one of the highest rating commercially available materials in terms of insulation and fire-resistance for buildings.

WALLSPAN Panels are manufactured using n-pentane as the blowing agent because it has zero ozone-depleting potential.



WALLSPAN



INSULATED SANDWICH PANELS

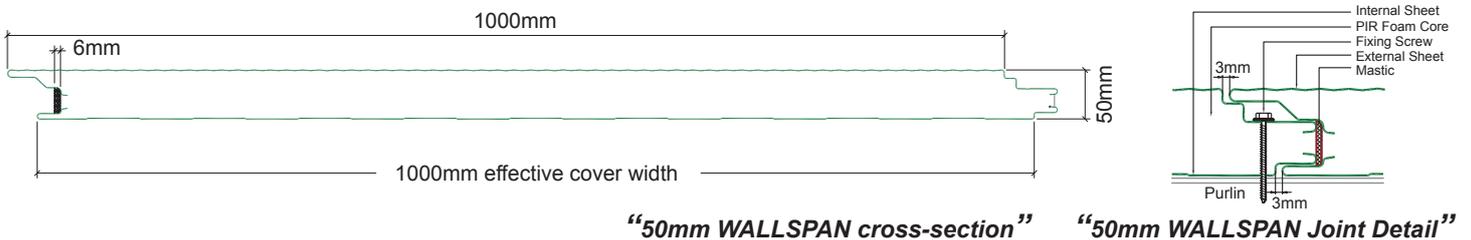
WALLSPAN PANELS

WALLSPAN PANELS AT A GLANCE

- ✔ 1000mm effective cover width
- ✔ 11850mm max length
- ✔ 1500mm min length

- ▶ WALLSPAN is an FM approved, cost effective, fire-resistant commercial and industrial wall insulation system designed and manufactured for Australian conditions
- ▶ WALLSPAN is produced using G300 grade 0.60mm external and 0.50mm internal coil coated steel facings
- ▶ WALLSPAN is available in core thicknesses of 50mm, 75mm and 100mm (other thicknesses available on request) providing various levels of thermal, fire and span performance to meet different requirements and the most stringent design criteria
- ▶ WALLSPAN provides a uniform insulating value throughout your building thanks to the state of the art production facilities and the latest production methods
- ▶ WALLSPAN provides an elegant and seamless finish unmarred by screw heads with a variety of face profiles to choose from
- ▶ WALLSPAN is an environment friendly building element which uses n-Pentane as the blowing agent with zero ozone depleting potential and has no carbon emission

PANEL CROSS-SECTION



PRODUCT SPECIFICATIONS

Insulation core is rigid cellular fire-resistant “polyisocyanurate” (PIR) foam with 95% closed-cell content, $40 \pm 2 \text{ kg/m}^3$ density, applied in a continuous-line laminator with foam laydown technology and $\lambda = 0.021 \text{ W/mK}$ thermal conductivity.

Blowing agent is environment-friendly n-Pentane 95 gas (Zero ODP).

External and internal metal facings are 0.60mm/0.50mm thick corona treated, hot-dip galvanized G300 grade carbon steel with AZ150 protective coating.

Top finish is 5+20 microns thick, RAL9002 coloured Polyester coating, applied with coil-coating technology (different coating options and colours available upon request).

External profile Micro Wave is standard with Low Rib, Groove and Micro Line as options.

Internal profile Low Rib is standard with Micro Wave, Groove and Micro Line as options.

APPLICATIONS

Widely used in the construction of warehouses, retail outlets, commercial, industrial, agricultural, educational, residential, offices and mix use developments.

INSULATED SANDWICH PANELS WALLSPAN PANELS

FIRE PROPERTIES

WALLSPAN Panels are certified to FM Approvals Standards 4880 and 4881 as Class 1 without height restriction. WALLSPAN panels have passed vigorous testing including:

- ✓ 16ft High Parallel Panel Test
- ✓ Large Scale Room Fire Test
- ✓ Flame Spread Test
- ✓ Surface Burning Characteristics

When exposed to a real fire situation, WALLSPAN panels;

- ✓ Do not spread flame.
- ✓ Give off minimal smoke
- ✓ Preserve their insulation properties
- ✓ Preserve their structural integrity
- ✓ Self-extinguish when the fire source is removed



PACKAGING & DELIVERY

WALLSPAN panels come stacked horizontally and shrink wrapped. The number of panels in a pack depends on panel thickness and the typical pack height is 1200mm.

All deliveries to the project site (unless arranged otherwise) will be by containerised road transport for safety, security and ease of handling.

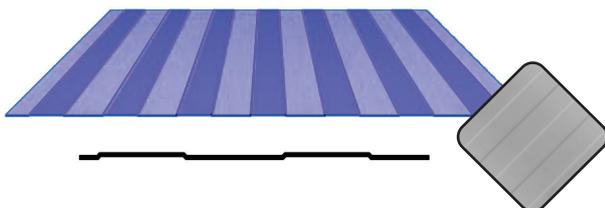
PEACE OF MIND

WALLSPAN Panels are available with a conditional up to 25 year thermal and structural performance warranty.

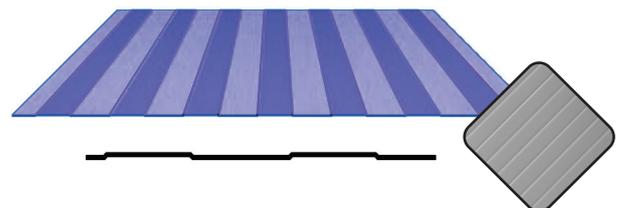
EXTERNAL & INTERNAL PROFILES

WALLSPAN panels have Micro Wave profile on the external side and Low Rib profile in the internal side as standard however these profiles are also available.

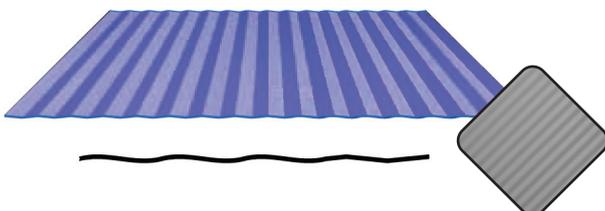
Low Rib Profile



Groove Profile



Micro Wave Profile



Micro Line Profile



ACOUSTICS

WALLSPAN panels have a predicted single figure weighted sound reduction value of $R_w = 24\text{dB}$.

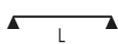


INSULATED SANDWICH PANELS WALLSPAN PANELS

THERMAL PERFORMANCE AND WEIGHT TABLE

Panel Type	Panel Thickness (mm)	Panel Width (mm)	Outer Sheet (mm)	Outer Sheet Material	Inner Sheet (mm)	Inner Sheet Material	Thermal Performance		Weight (kg/m ²)
							U (W/m ² K)	R (m ² K/W)	
WALLSPAN Wall Panel	50	100	0.60	Steel	0.50	Steel	0.4200	2.3810	11.612
	75		0.60	Steel	0.50	Steel	0.2800	3.5714	12.612
	100		0.60	Steel	0.50	Steel	0.2100	4.7619	13.612

LOAD / SPAN TABLE

Span Condition	Core Thickness	Load Type	Uniformly Distributed Loads (kN/m ²) Span L in Meters						
			2.00	2.50	3.00	3.50	4.00	4.50	5.00
Single-span 	50 mm	Downwards	3.43	2.38	1.65	1.21	0.87	0.62	0.45
		Upwards	2.40	1.53	1.07	0.79	0.60	0.48	0.38
	75 mm	Downwards	3.84	3.07	2.47	1.83	1.40	1.11	0.90
		Upwards	3.62	2.32	1.61	1.18	0.91	0.72	0.58
	100 mm	Downwards	4.25	3.40	2.83	2.43	1.88	1.48	1.20
		Upwards	4.85	3.10	2.15	1.58	1.21	0.96	0.78
Multi-span 	50 mm	Downwards	2.73	1.78	1.23	0.90	0.69	0.54	0.45
		Upwards	2.64	1.83	1.27	0.93	0.72	0.56	0.46
	75 mm	Downwards	4.18	2.68	1.86	1.36	1.05	0.82	0.67
		Upwards	4.14	2.77	1.93	1.42	1.08	0.85	0.69
	100 mm	Downwards	5.60	3.58	2.49	1.83	1.40	1.11	0.89
		Upwards	5.70	3.71	2.58	1.89	1.45	1.14	0.93

* Calculations have been based on panels with 0.60mm/0.40mm thick steel facings.

* Calculations have been based on L/150 deflection value.

* Calculations have been based on commercial grade carbon steel.

* For intermediate span values linear interpolation may be used.

THE IPA 'SPAN PANELS' RANGE

Environmentally friendly 'SPAN Panels' provide a cost effective and lightweight alternative to traditional building solutions. All 'SPAN Panels' ROOFSPAN – WALLSPAN – COLDSPAN with their steel facings and PIR foam cores, are available with FM Approvals certification and comply with Australian building regulations.

'SPAN Panels' offer cost effective insulated wall and roof solutions for a wide range of projects including warehouses, supermarkets, bulky goods, retail outlets as well as controlled environments, commercial, industrial, educational and housing developments.

Please refer to IPA corporate and product brochures for further information.





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**Industrial Panel Australia also have offices in
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