

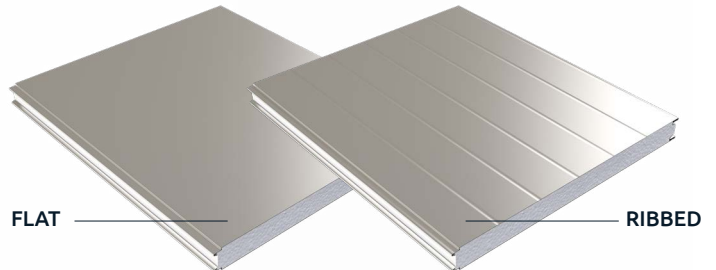
## PRODUCT DESCRIPTION

Arctic Flushline FR-EPS panel is a sandwiched insulated panel with a Self Extinguishing (FR) Expanded Polystyrene (EPS) foam between sheets of pre-painted galvanised steel skins. All panels comply with high standards, certified by Insulated Panel Council Australasia (IPAC).

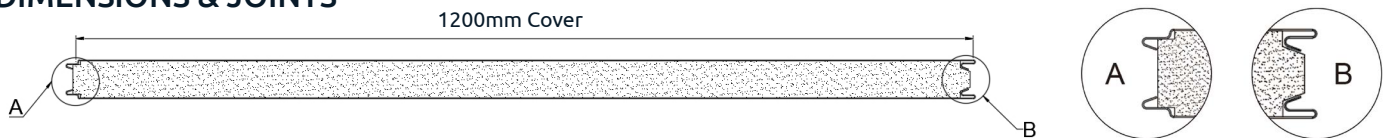
Panel skins are 0.6mm thick G300S Z275 steel coated with anti-bacterial paint – proven to inhibit the growth of surface bacteria that causes odours, food poisoning, allergies and staining.

ALL Panels have an interlocking roll-formed tongue and groove edge for easy join and installation.

## PROFILES



## DIMENSIONS & JOINTS



## FEATURES & BENEFITS

- Fire retardant
- Resistance to moisture
- Anti-bacterial skins
- Cost-efficiency
- Good strength-to-weight ratio
- Long spanning capability
- Excellent thermal insulation (high R values)
- Lifetime durability
- Recyclable and reuseable
- Proven acoustic insulation

## APPLICATIONS

- Cool rooms and freezers
- Industrial and commercial storage
- Pharmaceuticals and laboratories
- Site office and accommodation rooms
- Portable buildings
- Home extensions
- Temperature controlled environments
- High-tech clean rooms

## FIRE TEST CERTIFICATE

Arctic FR-EPS Panels satisfied the criteria given by NCC and were classified as Group 1 Materials in AS 5637.1 as per BRANZ Certificate No 374 ISSUE 2 and Fire Assessment Report 2489 ISSUE 3.

## PANEL SPECIFICATIONS

Steel Skins	0.6mm Thick G300 Z275	
Core Material	AS1366.3 1992 SL Grade EPS	
Adhesive	Two parts heat polymerising adhesive	
Max. Skin Temperature	75°C	
Core Density	FR-EPS: 14kg/m <sup>3</sup>	
0.6mm skin Panel Weight (kg/m <sup>2</sup> )	50mm	10.6
	75mm	11.0
	100mm	11.2
	125mm	11.8
	150mm	12.3
	175mm	12.8
Thermal Conductivity	175mm	12.8
	200mm	13.4
	0.037W/mK @22.5°C (AS 1366.2)	
	50mm	1.42
	75mm	2.03
	100mm	2.64
R Value (m <sup>2</sup> K/W) @22.5°C	125mm	3.25
	150mm	3.86
	175mm	4.47
	200mm	5.08
	250mm	6.30
	Sheet Coverage (mm)	1200
Length (mm)	Cut to length	
Length Tolerance	± 5mm	
Thickness (mm)	50, 75, 100, 125, 150, 175, 200, 225, 250	

## SPAN TABLE

## ALLOWABLE SPANS FLUSHLINE FR-EPS PANEL - 0.6MM THICK STEEL SKIN

Panel Thickness (mm)	Wall(m)		Ceilings (m)
	Coolroom	Freezer	
50	5.1	-	3.5
75	5.5	-	5.1
100	8.0	6.5	5.8
150	9.5	8.5	7.1
200	10.6	9.6	8.0
250	12.0	10.5	9.0

## Notes:

1. A deflection limit of span/150 has been used for horizontal and vertical load-deflection calculation, according to AS1170.0-Table C1 Serviceability Limit State Criteria.
2. Panel spans do not include foot traffic, wind, snow, cyclone or any other loading.

## SERVICEABILITY LIMIT STATE WIND PRESSURE (KPA) - 0.6MM FR-EPS PANEL

Thickness (mm)	Span (m)									
	2.0	2.4	3.0	3.6	4.0	5.0	6.0	7.0	8.0	9.0
50	1.8	1.3	0.9	0.7	0.5	0.4	-	-	-	-
75	2.9	2.3	1.8	1.4	1.0	0.7	0.5	-	-	-
100	5.8	5.0	3.5	2.4	2.1	1.4	0.9	-	-	-
150	7.2	6.0	4.6	3.5	2.8	1.9	1.2	0.9	0.7	-
200	8.8	7.6	5.8	4.5	3.6	2.7	1.7	1.3	1.0	0.8

## Note:

1. A deflection limit of span/150 has been used for horizontal and vertical load-deflection calculation, according to AS1170.0-Table C1 Serviceability Limit State Criteria, single span.