

Panelex™



Panelex™ is a lightweight, structurally sound wall panel system which is aesthetically pleasing.

Panels are manufactured by bonding two skins of Colorbond® steel sheet to a core of expanded polystyrene under heat

and pressure using a two part thermosetting polyurethane adhesive.

Dimensions

Panels are standard 1200mm wide in a range of thicknesses from 50mm to 200mm. They are manufactured to any length specification, limited only by transportability.

The rigidity of the lightweight panels coupled with effective tongue and groove jointing system means cost effective installing.

Versatility

The long lengths can be used both internally and externally. Panelex™ is the ideal panel walling system for a range of commercial, industrial, rural and domestic projects especially where a controlled environment is a critical specification.

Technical Information

Thickness mm	R Factor m ² kW #	Temp. Range °C †	Weight kg/m ²	Wall Span m* N1/N2	Wall Span m* N3/N4	Ceiling m
50	1.32	+25/+07	12.1	4.6	3.2	3.3
75	1.97	+10/ 00	12.5	5.6	3.9	4.8
100	2.63	+02/-06	12.9	6.4	4.5	6.7
150	3.95	-06/-23	13.6	7.9	5.5	7.3
200	5.26	-23/-34	14.3	9.1	6.4	7.4

Co-efficient of thermal resistance.

† Interior operating temperatures based on external ambient of 35 °C.

* Maximum span. Subject to Engineer's certification for specific projects.

Safe Simply Supported Spans for Panelex™ Insulated Panels with 0.6mm Steel Skins.

Safe Load 0.96 Kpa point load.

Note:- Span tables are based upon:

1. AS1170 Part 1 - Dead & live load
2. AS1170 Part 2 - N1 = 33m/second - N3 = 50m/second

Fire Resistance

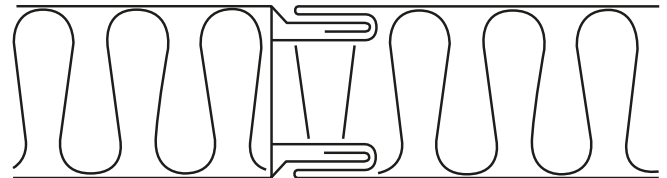
The core is flame retardant modified expanded polystyrene (EPS) complying with AS1366 Part 3. EPS is a closed cell, resilient, lightweight material with long term stability and low toxicity. EPS does not support bacterial growth, nor attract ants, termites or rodents.

Investigations by the CSIRO have shown that the combustion products of EPS are less harmful than those of burning wood and other conventional building materials.

Elevated service temperature maximum recommended continuous operating temperature is 75°C, however panels will be unaffected by temperatures to 85°C for short periods such as hot water cleaning etc.

Complies to the Australian Standards 5637.1: 2015

Joint Detail



Skins

Chemical Resistance

Resistance to acids (except formic and acetic).
Resistance to alkalis (except concentrated ammonia, hydro-oxide).
Resistance to household grease and stains
Resistance to detergents.

Corrosion Resistance

Salt spray (5% neutral salt, ambient temperature)
No adhesion loss after 1000 hours.

Design Page



Skins

Water Vapour Transmission Rate

Vinyl coated steel is impermeable to moisture vapour
Humidity cabinet -no adhesion loss after 3000 hours.
Water immersion (40°C) -unaffected after 480 hours.

Colour

Available in the Colorbond® range of colours produced by Bluescope coated products. STD colours apply.

Scaled to represent 1.2m x 1.2m

Contact Name: _____

Contact Phone: _____