

# FEATURES AND BENEFITS

Fast and easy installation Large spans and superior strength Long term thermal performance Cost Effective with Design flexibility

## **APPLICATIONS**

Clean Rooms and Storage Facilities Industrial and Commercial Builds Agricultural Buildings **Transportable Buildings** Wall Partitions Typical Hobby and Garden Sheds **Residential Skillion** 



# INSULATED STRUCTURAL PANEL

Enviroclad's Enviropanel Insulated Structural Panel is the optimum product for Australians to safely invest in. Our Panels are an extremely light weight building product with exceptional strength and versatility. The low cost and fast assembly ensures the lowest building costs with sharp architectural appearance and excellent insulation values.

Enviropanel is made and manufactured by a 100% Australian owned company. All the materials are of the highest quality including G3000 CRP Grade Colorbond Steel with a Fire Retardant EPS Core and standard white EPS to reach an elite performing 'R' Value.

Our panel contains a Expanded Polystyrene Core that is manufactured on site with the a Fire Retardant coating. When exposed to flame the EPS-FR will melt away from the flame and self-extinguish when the flame is removed.

With the technology of the Flame Retardant EPS core, and the specific modern construction methods, our Arctic Steel Panels are an extremely safe and cost effective building solution for whatever your project or ambition. The panels can be used for any construction within its limitations that is not required to be a fire wall.

Our Enviropanel remains the most affordable product of anything in its class and with a low overhead processing facility, Enviroclad will make certain it stays that way. With the many benefits, we can supply any enterprise large or small.

Applications include wall and ceiling installations for internal and external builds, all with a one step double sided finish selected from a vast range of Colorbond colours, Including Coolroom White.

# ENVIROPANEL INSULATED STRUCTURAL PANEL COLOUR RANGE















COOLROOM WHITE

CLASSIC CREAM PAPERBARK PALE EUCALYPT

SHALE GREY

WOODLAND GREY

NIGHT SKY



**INDUSTRIAL** 



AGRICULTURAL





RESIDENTIAL

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FEATURES   CORE: EPS-FR (EXPANDED POLYSTYRENE WITH FIRE RETARDANT).   SKINS: BLUESCOPE 0.6MM, 0.4MM G300 COLOURBOND STEEL   WIDTH: 1200MM (TOLERANCE +/- 1mm).   THICKNESS (mm): 33, 50, 75, 100, 125, 150, 200, 250 (TOLERANCE +/- 1mm).   LINGTH: 1,800mm TO 17,000mm (TOLERANCE +/- 5mm).   INISHES: PLAIN, RIBBED, V RIB.   * Illustrations of profile finishes have been exaggerated *	Image: state stat
BlueScope PRESSURE S	-
0.4MM PANEL NON-CYCLONIC REGION A&B (WALL APPLICATION ONLY) SL Grade EPS-FR Core / 0.4 Steel Skins. Maximum uniformity distributed ultimate wind load (kPa) for the given span:	0.6MM PANEL NON-CYCLONIC REGION A&B (WALL APPLICATION ONLY) SL Grade EPS-FR Core / 0.6 Steel Skins. Maximum uniformity distributed ultimate wind load (kPa) for the given span:
Span (mm)   Span (mm)     1500   2000   2500   3000   3500   4000   4500   5000   6500   7000   7500   8000     Single Span - Wind Pressure Acting Inwares / Outwards     50   2.95   2.06   1.73   1.43   1.05   0.80   0.64   0.51   0.45   0.38	Span (mm)     (mm)   1500   2000   2500   3000   3500   4000   4500   5000   6500   6000   7500   8000     Single Span - Wind Pressure Acting Inwares / Outwards     9   50   3.35   2.34   1.97   1.62   1.19   0.91   0.76   0.62   0.51   0.43
75   4.43   3.09   2.60   2.14   1.66   1.30   1.03   0.83   0.69   0.58   0.49   0.43   0.37     100   5.90   4.11   3.46   2.85   2.22   1.74   1.37   1.11   0.92   0.77   0.66   0.57   0.49   0.43   0.43     125   7.38   5.14   4.33   3.57   2.77   2.17   1.37   1.11   0.92   0.77   0.66   0.57   0.49   0.43     126   7.38   5.14   4.33   3.57   2.77   2.17   1.37   1.11   0.92   0.77   0.66   0.57   0.49   0.43     126   8.85   6.17   5.19   4.28   3.33   2.61   2.06   1.50   0.78   0.79   0.82   0.71   0.62   0.54     200   11.80   8.36   6.17   5.19   4.28   3.33   2.61   2.06   1.38   1.65   1.42   1.29 </td <td>75   5.03   3.51   2.95   2.43   1.89   1.48   1.17   0.95   0.78   0.66   0.56   0.48   0.42     95   100   6.71   4.68   3.93   3.24   2.52   1.98   1.56   1.26   1.05   0.88   0.75   0.65   0.48   0.42     96   125   8.38   5.85   4.92   4.05   3.15   2.47   1.95   1.58   1.31   1.10   0.94   0.81   0.70   0.62     97   150   10.06   7.01   5.90   4.86   3.78   2.96   2.34   1.90   1.57   1.31   1.10   0.94   0.81   0.70   0.62     96   10.06   7.01   5.90   4.86   3.78   2.96   2.33   1.91   1.70   0.97   0.84   0.71     90   13.41   9.30   3.12   2.53   3.09   3.16   2.00   1.76   1.87   1.61   1.41   1.24</td>	75   5.03   3.51   2.95   2.43   1.89   1.48   1.17   0.95   0.78   0.66   0.56   0.48   0.42     95   100   6.71   4.68   3.93   3.24   2.52   1.98   1.56   1.26   1.05   0.88   0.75   0.65   0.48   0.42     96   125   8.38   5.85   4.92   4.05   3.15   2.47   1.95   1.58   1.31   1.10   0.94   0.81   0.70   0.62     97   150   10.06   7.01   5.90   4.86   3.78   2.96   2.34   1.90   1.57   1.31   1.10   0.94   0.81   0.70   0.62     96   10.06   7.01   5.90   4.86   3.78   2.96   2.33   1.91   1.70   0.97   0.84   0.71     90   13.41   9.30   3.12   2.53   3.09   3.16   2.00   1.76   1.87   1.61   1.41   1.24
Span (mm)   Span (mm)     1500   2000   2500   3000   3500   4000   4500   5000   6500   7000   7500   8000     Single Span - Wind Pressure Acting Inwares / Outwards   50   2.36   1.65   1.39   1.24   0.98   0.89   0.72   0.58   0.45   0.31	Span (mm)   Span (mm)     1500   2000   2500   3000   4500   5000   6500   7000   7500   8000     Single Span - Wind Pressure Acting Inwares / Outwards   50   2.68   1.87   1.57   1.41   1.11   1.01   0.82   0.66   0.60   0.52   0.35   5
50   5.50   1.61   1.60   1.61   1.60   1.61   1.61   1.61   1.61   1.61   1.61   1.61   1.61   1.61   1.61   1.61   1.61   1.61   1.61   1.61   1.62   1.63   1.61   1.62   1.62   1.63   1.61   1.61   1.62   1.62   1.64   1.62   1.61   1.62   1.62   1.64   1.62   1.61   1.62   1.62   1.64   1.62   1.65   1.62   1.62   1	50   1.02   2.81   2.10   1.11   1.11   1.10   0.02   0.03   0.05   0

#### COLD STORAGE SPAN TABLES

0.4MM COLD STORAGE SPAN TABLE - INTERNAL COLD STORAGE SL Grade EPS-FR Core / 0.4 Steel Skins, Maximum Span (mm):

Single Span, internal cold storage 0 degrees or more

Application	Panel Thickness (mm)								
Application	50	75	100	125	150	200	250		
Walls (Non-Load Bearing)	-	5200	6500	7700	8500	10000	11100		
Walls (Load Bearing)	-	4300	5500	6400	7000	8400	9500		
Ceilings	-	4500	5600	6600	7200	8500	9100		

#### Multi Span, internal cold storage 0 degrees or more

Application	Panel Thickness (mm)								
Аррисации	50	75	100	125	150	200	250		
Walls (Non-Load Bearing)	-	6000	7000	8100	8300	9800	10800		
Walls (Load Bearing)	-	5100	5800	6500	7300	8500	9800		
Ceilings	-	5000	5500	6300	6900	8200	9100		

				vv	EIGH	
EPS Sandwich Panel Calculated The	rmal F	Perfor	manc	e 'R' \	/alue	
Panel Thickness (mm)	50	75	100	150	200	250
EDS ED Standard White (SI' Grade 12 5 kg/m <sup>2</sup>	1 47	21	2 7 2	3 97	5 22	6.47

EPS Sandwich Panel Weight										
Panel Thickness (mm)	50	75	100	150	200	250				
EPS-FR Panel 0.6mm Steel Skinned kg/m <sup>2</sup>	11.3	11.6	12	12.7	13.2	14.12				
EPS-FR Panel 0.4mm Steel Skinned kg/m <sup>2</sup>	7.88	8.18	8.58	9.28	9.88	10.7				

SL Grade EPS-FR Core / 0.6 Steel Skins, Maximum Span (mm): Single Span, internal cold storage 0 degrees or more

0.6MM COLD STORAGE SPAN TABLE - INTERNAL COLD STORAGE

Application	Panel Thickness (mm)								
Application	50	75	100	125	150	200	250		
Walls (Non-Load Bearing)	-	5600	7000	8200	9100	10700	11800		
Walls (Load Bearing)	-	5100	6500	7500	8100	9500	10600		
Ceilings	-	5300	6500	7700	8300	9500	9700		

#### Multi Span, internal cold storage 0 degrees or more

Application	Panel Thickness (mm)								
Application	50	75	100	125	150	200	250		
Walls (Non-Load Bearing)	-	6400	7400	8700	8900	10400	11500		
Walls (Load Bearing)	-	6000	6800	7600	8300	9700	800		
Ceilings	-	5800	6500	7400	8000	9300	9700		

### WEIGHTS AND 'R' VALUES

EPS Sandwich Panel Calculated Thermal Performace 'R' Value Calculations

The calculations were formulated by the following calculations:

EPS-FR Standard White 'SL' Grade 13.5kg/m² has a thermal conductivity figure of = 0.04 W/mk

Calculation Example based on 100mm SL Panel

- = Panel thickness = 0.1mtr
- Conductivity Figure 0.032 W/mk
- 'R' = 3.125 + .22 ('R' Value of Coil and Adhesive)
- 'R' Value @ 23 Degrees Celcius = 3.345





'R'

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