

INTRODUCING ENVIROCLAD'S ENVIROSPAN ROOFING PANEL

Enviroclad's Envirospan Insulated Structural Roofing Panel is the optimum roofing product for Australians to safely invest in. Our Panels are a lightweight roofing solution with exceptional strength, versatility, and affordability. The low cost and fast hinge lock assembly ensures the most efficient building costs with contemporary architectural appearance and excellent insulation values.

Envirospan is made and manufactured in the Riverland, South Australia and is 100% Australian owned. All the materials are Australian made including the Bluescope Colorbond Steel and Fire Retardant Insulated Core.

With over 35 years' experience, our panels EPS/FR Core is made to the highest standards as it is the backbone of the product and crucial to the panel's structural performance.

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.

Our Envirospan Steel Panel remains the most affordable product of anything in its class, with our efficient low overhead manufacturing facility, Enviroclad will make certain it stays that way.

With the many benefits, we can supply any project large or small delivered direct to your work site or factory.

ENVIROSPAN ROOFING PANEL COLOUR RANGE

TOP SIDE PANEL COLOUR OPTIONS

AVAILABLE NOW



COOLROOM WHITE



CLASSIC CREAM



PAPERBARK



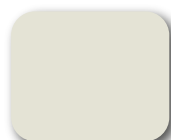
PALE EUCALYPT



SHALE GREY

COMING SOON

UNDERSIDE PANEL COLOUR OPTIONS - AVAILABLE NOW



COOLROOM WHITE



CLASSIC CREAM



PAPERBARK



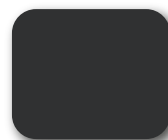
PALE EUCALYPT



SHALE GREY



WOODLAND GREY



MONUMENT



NIGHT SKY

- ✓ INDUSTRIAL
- ✓ COMMERCIAL
- ✓ AGRICULTURAL
- ✓ RESIDENTIAL

FEATURES AND BENEFITS

Fast and Easy Installation

Sleek Architectural
Appearance

Large Spans &
Superior Strength

Long Term Thermal
Performance

Cost Effective with
Design Flexibility

APPLICATIONS

Carports and Veranda's

Insulated Sheds &
Storage Solutions

Cold Storage

Clean Rooms & Clean
Storage Facilities

Industrial & Commercial
Buildings

Agricultural Buildings

Transportable Buildings

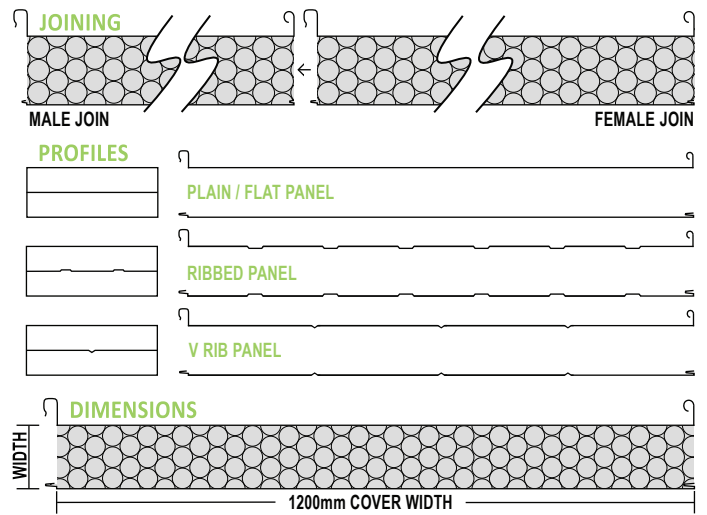
Typical Hobby &
Garden Sheds

FEATURES

CORE:	EPS-FR (EXPANDED POLYSTYRENE WITH FIRE RETARDANT)
SKINS:	BLUESCOPE 0.6MM G300 COLOURBOND STEEL
WIDTH:	1200MM
THICKNESS (mm):	50, 75, 100, 125, 150, 200, 250
LENGTH:	CUSTOM, UP TO 17m (PANEL THICKNESS DEPENDANT)
FINISHES:*	PLAIN, RIBBED, V RIB

* ILLUSTRATIONS OF PROFILE FINISHES HAVE BEEN EXAGGERATED

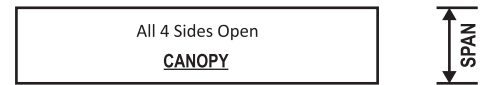
Colorbond®



SPAN TABLES

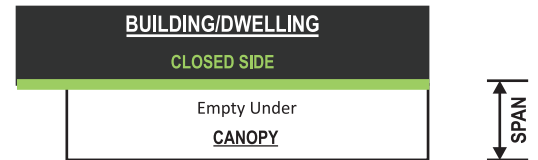
CANOPY: Away from Influence of other Buildings

Condition	Thickness	Description	N1	N2	N3	N4	N5	N6	Cpn
Condition 1	50mm	50 SL x 0.6 BMT	5200	5200	5000	3500	2500	2000	-0.4
Condition 1	75mm	75 SL x 0.6 BMT	6500	6500	6000	4500	3500	3000	-0.4
Condition 1	100mm	100 SL x 0.6 BMT	7000	7000	6500	5000	4000	3000	-0.4



CANOPY: Attached/Adjacent to other Building

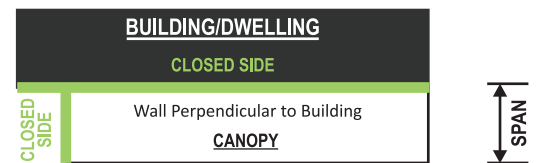
Condition	Thickness	Description	N1	N2	N3	N4	N5	N6	Cpn
Condition 2	50mm	50 SL x 0.6 BMT	5200	5000	3000	1500	500	500	*
Condition 2	75mm	75 SL x 0.6 BMT	6700	6500	4500	3000	1500	500	*
Condition 2	100mm	100 SL x 0.6 BMT	7300	7300	5000	3500	2000	1000	*



*: Cpn varies with span. Cpn highest for short spans. Cpn between -1.5 and -0.42

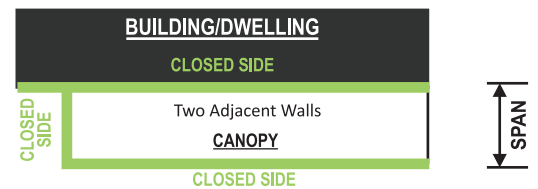
CANOPY: Attached/Adjacent to other Building: Open Adjacent Sides

Condition	Thickness	Description	N1	N2	N3	N4	N5	N6	Cpn
Condition 3	50mm	50 SL x 0.6 BMT	4500	3500	2500	1500	1000	1000	-1
Condition 3	75mm	75 SL x 0.6 BMT	5500	4500	3000	2500	1500	1000	-1
Condition 3	100mm	100 SL x 0.6 BMT	6000	5000	3500	2500	2000	1500	-1



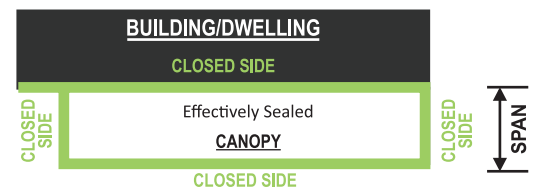
CANOPY: Attached/Adjacent to other Building: Closed Adjacent Sides

Condition	Thickness	Description	N1	N2	N3	N4	N5	N6	Cpn
Condition 4	50mm	50 SL x 0.6 BMT	4000	3000	2000	1500	1000	500	-1.2
Condition 4	75mm	75 SL x 0.6 BMT	5000	4000	3000	2000	1500	1000	-1.2
Condition 4	100mm	100 SL x 0.6 BMT	5500	4500	3000	2500	1500	1000	-1.2



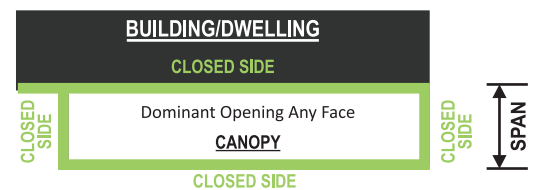
ENCLOSED BUILDING: Sealed

Condition	Thickness	Description	N1	N2	N3	N4	N5	N6	Cpn
Condition 5	50mm	50 SL x 0.6 BMT	4000	3000	2000	1500	1000	500	-1.1
Condition 5	75mm	75 SL x 0.6 BMT	5000	4000	3000	2000	1500	1000	-1.1
Condition 5	100mm	100 SL x 0.6 BMT	5500	4500	3500	2500	1500	1500	-1.1



ENCLOSED BUILDING: Dominant Opening

Condition	Thickness	Description	N1	N2	N3	N4	N5	N6	Cpn
Condition 6	50mm	50 SL x 0.6 BMT	3000	2500	1500	1000	500	500	-1.6
Condition 6	75mm	75 SL x 0.6 BMT	4000	3000	2000	1500	1000	500	-1.6
Condition 6	100mm	100 SL x 0.6 BMT	4500	3500	2500	2000	1000	1000	-1.6



LIVE LOADING

Condition	Thickness	Description	LL
Condition 0	50mm	50 SL x 0.6 BMT	5200
Condition 0	75mm	75 SL x 0.6 BMT	6700
Condition 0	100mm	100 SL x 0.6 BMT	7300

All based on uniform load across entire span

NOTES

- 1) For single wall parallel to dwelling consider as enclosed with dominant opening.
- 2) For two walls perpendicular to dwelling consider as enclosed with dominant opening.
- 3) Custom design for enclosed with dominant opening can reduce pressure coefficients.
- 4) To be free from influence of other buildings, canopy should be clear by distance equal to own height.
- 5) If Canopies are attached then dwelling needs to resist the additional uplift forces.
- 6) Free standing but adjacent to dwelling still subject to conditions 2, 3, 4, 5 or 6.
- 7) Conditions 2,3,4 only valid for roof pitch less than 10 degrees, use enclosed with dominant opening otherwise.

SPAN TABLES CONTINUED

Condition	Cpn	Description
Condition 0	-	Roof Liveload p=0.25 kPa
Condition 1	-0.40	Stand Alone: Free standing clear off other buildings and Empty under Imposed Live loading Typically Controls for wind class N1 to N4
Condition 2	* varies	Attached / Adjacent to other buildings: open 3 sides Cpn varies with width (span) {empty under}
Condition 3	-1.00	Attached / Adjacent to other buildings: open 2 adjacent sides {Wall perpendicular to main building}
Condition 4	-1.20	Attached / Adjacent to other buildings: open 1 side {1 Wall perpendicular to main building + wall parallel to main}
Condition 5	-1.10	Enclosed (1): Sealed no Dominant Openings Typical Housing Components non-cyclonic regions
Condition 6	-1.60	Enclosed (2): 1 Dominant Openings {dominant opening, no venting} {NB: Custom assessment can achieve lower Cpn}

NOTES:

- 1) No Deflection, Serviceability limits considered. Ultimate Strength Only.
- 2) If ultimate strength loads are experiences, deformation is permanent, the structure will need replacing.
- 3) All loads are used with partial load factors for ultimate strength to AS1170 series of standards (ef. 1.2DL+1.5LL)

PRESSURE SPAN TABLE

Maximum Pressure: p [kPa=kN/m²]

Span	50SL0.6	75SL0.6	100SL0.6	150SL0.6	200SL0.6	250VH0.6
mm	kPa	kPa	kPa	kPa	kPa	kPa
500	9.17	12.40	15.64	14.66	16.99	29.04
1000	4.58	6.20	7.82	7.33	8.50	14.52
1500	3.06	4.13	5.21	4.89	5.66	9.68
2000	2.29	3.10	3.91	3.67	4.25	7.26
2500	1.83	2.48	3.13	2.93	3.40	5.81
3000	1.53	2.07	2.61	2.44	2.83	4.84
3500	1.31	1.77	2.23	2.09	2.43	4.15
4000	1.15	1.49	1.86	1.83	2.12	3.18
4500	0.91	1.18	1.47	1.45	1.68	2.51
5000	0.73	0.95	1.19	1.17	1.36	2.03
5500	0.61	0.79	0.98	0.97	1.12	1.68
6000	0.51	0.66	0.83	0.81	0.94	1.41
6500	0.43	0.56	0.70	0.69	0.80	1.20
7000	0.37	0.49	0.61	0.60	0.69	1.04
7500	0.33	0.42	0.53	0.52	0.60	0.90
8000	0.29	0.37	0.46	0.46	0.53	0.79
8500	0.25	0.33	0.41	0.41	0.47	0.70
9000	0.23	0.29	0.37	0.36	0.42	0.63
9500	0.20	0.26	0.33	0.32	0.38	0.56
10000	0.18	0.24	0.30	0.29	0.34	0.51
10500	0.17	0.22	0.27	0.27	0.31	0.46
11000	0.15	0.20	0.25	0.24	0.28	0.42
11500	0.14	0.18	0.22	0.22	0.26	0.38
12000	0.13	0.17	0.21	0.20	0.24	0.35

Greater than 0.69 kPa {Wind Class N1, qzu=0.69 kPa}

CALCULATED THERMAL PERFORMANCE 'R' VALUE

EPS Sandwich Roofing Panel Calculated Thermal 'R' Value

Panel Thickness (mm)	50	75	100	150	200	250
EPS-FR Standard White 'SL' Grade 13.5Kg/m ²	1.47	2.1	2.72	3.97	5.22	6.47
EPS-FR Standard White 'M' Grade 13.5Kg/m ²	1.57	2.24	2.92	4.27	5.62	6.97
EPS-FR Standard White 'H' Grade 13.5Kg/m ²	1.62	2.33	3.03	4.44	5.85	7.26
EPS-FR Standard White 'VH' Grade 13.5Kg/m ²	1.66	2.39	3.11	4.56	6.01	7.46

Material/Density	W/mK
EPS-FR Standard White 'SL' Grade 13.5Kg/m ²	0.04
EPS-FR Standard White 'M' Grade 13.5Kg/m ²	0.037
EPS-FR Standard White 'H' Grade 13.5Kg/m ²	0.0355
EPS-FR Standard White 'VH' Grade 13.5Kg/m ²	0.0345



The above calculations were formulated by the following calculations:

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

Calculation Example based on 100mm SL Panel

'R' = 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

ROOFING PANEL WEIGHT

EPS Sandwich Roofing Panel Weight per m²

Panel Thickness (mm)	50	75	100	150	200	250
EPS-FR 0.6mm Steel Skinned 'SL' Grade Kg/m ²	12.2	12.6	12.9	13.6	14.3	15.0
EPS-FR 0.6mm Steel Skinned 'M' Grade Kg/m ²	12.5	13.0	13.5	14.5	15.5	16.5
EPS-FR 0.6mm Steel Skinned 'H' Grade Kg/m ²	12.8	13.4	14.0	15.3	16.6	17.8
EPS-FR 0.6mm Steel Skinned 'VH' Grade Kg/m ²	13.0	13.7	14.5	15.9	17.4	18.9

The information contained in this brochure is just an overview.
Please contact Enviroclad for comprehensive Engineering and Technical Data.