AUSTRALIAN OWNED & MADE

NATSPEC ProductPartner

ISO 9001 International Standards Certifications

Colorbond®

IPCA Ltd.- PANEL CERTIFICATION SCHEME

AMPELITE

Roofing

ASKIN™

PRODUCT SPECIFICATION SHEET

CORE: EPS PROFILE: METRIC

EPS CORE

EPS-FR core has been tried and tested for over half a century. This cost effective construction solution has an impressive strength to weight ratio, is 100% recyclable and because of its low density, it can provide further saving in the cost of foundations, framing and auxiliary insulation. This BCA Group 1 product contains a Flame-retardant (FR) making it self-extinguishing.

THERMAL PERFORMANCE

ASKIN EPS Metric roofing is supplied with SL Grade EPS insulation core delivering excellent thermal insulation at a price unmatched by any total integrated roof and ceiling system. The high R-Value of ASKIN cellular foam EPS is derived by the insulation value of air filled cells making up 98% of the product volume giving a safe and natural insulation to the building.

R-VALUES

PANEL THICKNESS (mm)	50	75	100	125	150	175	200	250
EPS R-Value (m² K/W) at 15°Celcius	1.54	2.18	2.81	3.45	4.09	4.72	5.36	6.63

Metric Panel with Air Films (Zones 1-6, wind speed <7m/s)
NCC Specification J1.2-2, AS 2498.1: 1993

FIRE PERFORMANCE

ASKIN EPS Metric roofing comprises an EPS cellular foam core sandwiched between sheets of steel. The panel system has been tested in the rigorous testing regime for surface linings prescribed in the National Construction Code (NCC). Encapsulation of the insulation material by the steel skins has been successfully proven to comply with the highest interior linings level of fire protection being NCC Group 1 classification.

CRITERIA	PERFORMANCE
AS 1530.3: 1993 (Test for Flammability of materials)	Flame Spread 0 Ignitability 0 Heat evolved 0 Smoke Dev. 1
Compliance to C1.10 - AS5637.1 AS ISO 9705:2003	Group 1, SMOGRA = 3.8 (m² / s² x 1000)
CP4 requires materials and assemblies to resist spread of fire and limit the generation of smoke and toxic gases during evacuation	Toxicity (Combustion gases) - Low (CO, CO2)

MINIMUM PITCH

Refer to ASKIN roof standard details for best installation practice.
Minimum pitch of 3 degrees.

3 Degrees to 6 Degrees	- (Butyl tape required)	Standard cut back for gutter	- 75mm
6+ Degrees	- (No tape required)	Standard lap at joint	- 200mm

ACOUSTIC

ASKIN® Panel achieves the following ratings for panel tested in accordance with AS 1191-2002 and assessed against AS/NZS ISO 717.1: 2004

PANEL THICKNESS	RW	RW + Ctr
ASKIN EPS-FR Panel 75mm	23	21
ASKIN Dual Panel Roof - 50mm EPS / 50mm EPS	37	NA
ASKIN Dual Panel Roof - 75mm XFLAM / 75mm EPS	43	37

PHYSICAL PROPERTIES

CRITERIA	PERFORMANCE
Density	13.5 kg/m³
Recyclable	100% Recyclable
Workability	Excellent. No requirement for protection
Trafficability (As per NCC / BCA)	Resistant to maintenance traffic (1 person per panel) *
Peel Strength ASTM D1976 - Initial	2.4 N/mm

* Refer to spanning guidelines

MANUFACTURING TOLERANCES

CRITERIA	MANUFACTURED	TOLERANCE
Length	1,500mm to 25,000mm	+/- 5mm
Width	Standard as 1,000mm	+/- 1mm
Thicknesses	50mm to 250mm in multiples of 25mm	+/- 1mm

COLOUR RANGE

A full range of colours are available depending on Minimum Order Quantities and warranties. Please contact your ASKIN representative as each project needs clarification on Solar Absorbance as stated in the NCC.

ENVIRONMENTAL

ZERO ODP

EPS foam insulation manufacturing does not use Ozone Depleting Substances such as CFCs, HCFCs or HFCs.

Resource Efficiency

As a low density insulation product EPS uses very little natural resources by volume to manufacture. This, coupled with the high insulation performance, mean that the energy savings from using EPS will amount to hundreds of times the energy required to produce the product.

FEATURES & BENEFITS

- Lightweight & fast to install
- Extremely Thermal efficient (R-values up to 6.7)
- 'All in one' ceiling and roofing system
- Low maintenance & easy to clean
- Versatile and simple construction
- Large spans in excess of 10m +
- Long lengths available up to 25m
- Designer range of colours available
- Reduce noise from rain and hail
- Warranties of up to 25 years

Roofing

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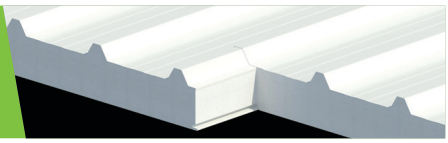

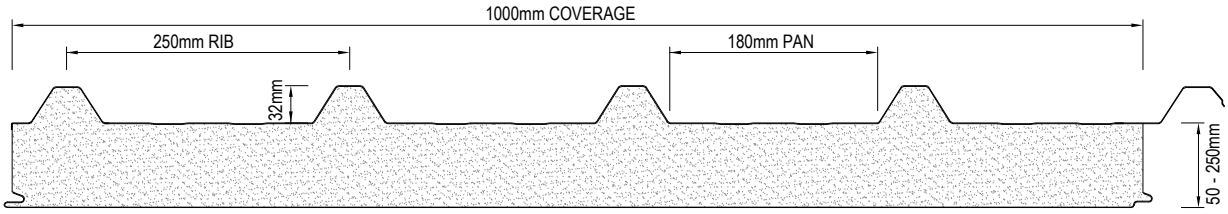

Metric Roof with Mesa / Flat Profile

METRIC PROFILE COMBINATIONS

EXTERNAL SURFACE PROFILES	MESA (50mm)	MESA (50mm)
INTERNAL SURFACE PROFILES	FLAT	RIB (100mm)

Roofing

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0.5mm EXTERNAL FACE SKIN WITH 0.4mm INTERNAL FACE SKIN

STANDARD STEEL SPECIFICATION

AS/NZS 2728 Paint Coating AS 1397 Substrate System

External Skin material – 0.5mm Thick G300S AM100 high performance steel with pre-painted superior polyester finish coat of 25 microns.

Internal Skin material – 0.4mm Thick G300S Z275 pre-painted off-white (Permagard®) steel with superior polyester finish coat of 25 microns and antibacterial protection.

PANEL WEIGHT

PANEL THICKNESS (mm)	**50**	**75**	**100**	**125**	**150**	**175**	**200**	**225**	**250**
Mass (kg / m²) for 0.5 / 0.4	9.1	9.4	9.8	10.2	10.6	10.9	11.3	11.7	12.1

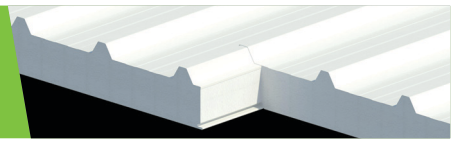
PANEL SPAN (m)

Allowable UDL accounting for ULS SLS Span/200 single or multiple span condition (kPa)

PANEL THICKNESS	**2.0**	**2.4**	**3.0**	**3.6**	**4.0**	**5.0**	**6.0**	**7.0**	**8.0**	**9.0**	**10.0**	**11.0**
50mm	1.74	1.40	0.89	0.62	0.50	0.32	0.22	0.16	0.13	0.10	0.08	0.07
75mm	2.57	2.09	1.61	1.16	0.94	0.60	0.42	0.31	0.23	0.19	0.15	0.12
100mm	3.40	2.76	2.11	1.67	1.45	0.95	0.66	0.49	0.37	0.29	0.24	0.20
125mm	4.29	3.50	2.70	2.16	1.88	1.33	0.93	0.68	0.52	0.41	0.33	0.28
150mm	5.19	4.25	3.29	2.65	2.32	1.72	1.23	0.90	0.69	0.55	0.44	0.37
175mm	6.08	4.99	3.89	3.14	2.76	2.06	1.59	1.19	0.91	0.72	0.58	0.48
200mm	6.97	5.74	4.48	3.63	3.20	2.41	1.88	1.46	1.12	0.88	0.72	0.59
250mm	8.72	7.18	5.61	4.55	4.01	3.03	2.36	1.88	1.52	1.25	1.03	0.86

Span data generated in accordance with AS/NZS 1170: 2011
Based on 5% LPL 80% Confidence

>0.87 kPa Minimum Exterior
>0.5 Minimum Internal
<0.5 kPa Special Design



0.6mm EXTERNAL FACE SKIN WITH 0.6mm INTERNAL FACE SKIN

STEEL SPECIFICATION

AS/NZS 2728 Paint Coating AS 1397 Substrate System

External Skin material – 0.6mm Thick G300S AM100 high performance steel with pre-painted superior polyester finish coat of 25 microns.

Internal Skin material – 0.6mm Thick G300S Z275 pre-painted off-white (Permagard®) steel with superior polyester finish coat of 25 microns and antibacterial protection.

PANEL WEIGHT

PANEL THICKNESS (mm)	50	75	100	125	150	175	200	225	250
Mass (kg / m²) for 0.6 / 0.6	11.7	12.1	12.5	12.9	13.2	13.6	14.0	14.4	14.7

PANEL SPAN (m)

Allowable UDL accounting for ULS SLS Span/200 single or multiple span condition (kPa)

PANEL THICKNESS	2.0	2.4	3.0	3.6	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0
50mm	1.76	1.44	1.13	0.83	0.67	0.43	0.30	0.22	0.17	0.13	0.11	0.09	0.07
75mm	2.61	2.13	1.65	1.33	1.16	0.80	0.55	0.41	0.31	0.25	0.20	0.17	0.14
100mm	3.45	2.82	2.18	1.75	1.52	1.12	0.85	0.65	0.50	0.39	0.32	0.26	0.22
125mm	4.34	3.56	2.77	2.24	1.96	1.46	1.13	0.89	0.69	0.55	0.44	0.37	0.31
150mm	5.24	4.31	3.37	2.73	2.40	1.81	1.41	1.12	0.90	0.73	0.59	0.49	0.41
175mm	6.13	5.05	3.96	3.22	2.85	2.16	1.70	1.36	1.11	0.91	0.76	0.64	0.54
200mm	7.03	5.80	4.56	3.72	3.29	2.51	1.98	1.60	1.31	1.09	0.91	0.77	0.65
250mm	8.78	7.25	5.70	4.65	4.12	3.15	2.49	2.02	1.66	1.38	1.15	0.98	0.83

Span data generated in accordance with AS/NZS 1170: 2011
Based on 5% LPL 80% Confidence

>0.87 kPa Minimum Exterior
>0.5 Minimum Internal
<0.5 kPa Special Design

Roofing

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Disclaimer

Information provided here for design guidance only. Designers are encouraged to seek advice from a suitably qualified professional. All data is subject to change without notice.