

PRODUCT SPECIFICATION SHEET

CORE: EPS PROFILE: UNIDECK

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 Unideck roofing is supplied with SL Grade EPS insulation core delivering excellent thermal insulation and an 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)	75	100	125	150	175	200	250
EPS R-Value (m ² K/W) at 15°Celsius	2.10	2.75	3.40	4.05	4.70	5.35	6.65

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

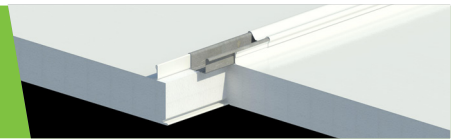
FIRE PERFORMANCE

ASKIN EPS Unideck 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 = 2.2 (m ² / s ² 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) - Very Low (CO, CO ₂)

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MINIMUM PITCH

Refer to ASKIN roof standard details for best installation practice.

Minimum pitch	- 3 Degrees
Standard cut back for gutter	- 75mm
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 - XFLAM 75mm / EPS 75mm	43	37

PHYSICAL PROPERTIES

CRITERIA	PERFORMANCE
Density	13.5 kg/m ³
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

MANUFACTURING TOLERANCES

CRITERIA	MANUFACTURED	TOLERANCE
Length	1,500mm to 18,000mm	+/- 5mm
Width	Standard as 1,200mm	+/- 1mm
Thicknesses	75mm 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.

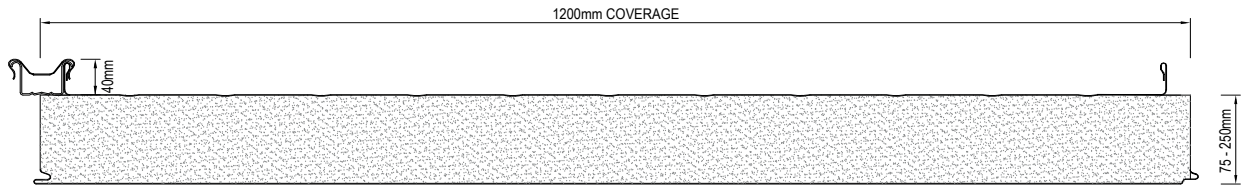
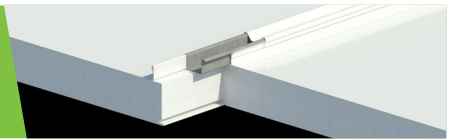
Resource Efficiency

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 18m
- Designer range of colours available
- Reduce noise from rain and hail
- Warranties of 10+ years available

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Unideck Roof with Rib / Flat Profile

UNIDECK PROFILE COMBINATIONS

EXTERNAL SURFACE PROFILES	FLAT	FLAT	RIB (100mm)	RIB (100mm)	SILKLINE	SILKLINE
INTERNAL SURFACE PROFILES	FLAT	RIB (100mm)	FLAT	RIB (100mm)	FLAT	RIB (100mm)

0.6mm EXTERNAL FACE SKIN WITH 0.6mm INTERNAL FACE SKIN

STANDARD STEEL SPECIFICATION

AS/NZS 2728 Paint Coating

AS 1397 Substrate System

External Skin material – 0.6mm Thick G300S Z275 pre-painted steel with superior polyester finish coat or 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)	75	100	125	150	175	200	225	250
Mass (kg / m ²) for Unideck 0.6 / 0.6	12.1	12.4	12.8	13.1	13.5	13.8	14.1	14.5

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
75mm	3.05	2.47	1.89	1.36	1.10	0.70	0.49	0.36	0.28	0.22	0.18
100mm	4.12	3.36	2.59	1.84	1.49	0.95	0.66	0.49	0.37	0.29	0.24
125mm	5.19	4.25	3.24	2.25	1.83	1.17	0.81	0.60	0.46	0.36	0.29
150mm	6.26	5.14	3.89	2.70	2.19	1.40	0.97	0.72	0.55	0.43	0.35
175mm	7.33	6.03	4.54	3.15	2.56	1.64	1.14	0.83	0.64	0.50	0.41
200mm	8.40	6.92	5.19	3.61	2.92	1.87	1.30	0.95	0.73	0.58	0.47
250mm	10.55	8.71	6.49	4.51	3.65	2.34	1.62	1.19	0.91	0.72	0.58

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

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.