



PRODUCT SPECIFICATION SHEET

CORE: **XFLAM** PROFILE: **UNIDECK**

XFLAM CORE

XFLAM is a syntactic phenolic composite closed cell foam that provides excellent thermal and fire performance. XFLAM uses natural encapsulated air to ensure a stable thermal performance for the lifetime of the material. This patented material ensures that off gassing does not occur.

THERMAL PERFORMANCE

XFLAM Panel insulation core minimises thermal transfer through its patented syntactic foam core. With a major focus on energy efficiency, ASKIN's easy slip-joint facilitates a sealed panelised construction. In Roofing applications, this air tight seal provides a highly efficient building envelope.

R-VALUES

PANEL THICKNESS (mm)	75	100	125	150	175	200	250
XFLAM R-Value (m ² K/W) at 15°C	2.50	3.30	4.10	4.84	5.63	6.41	7.97

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

FIRE PERFORMANCE

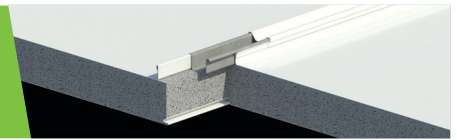
XFLAM panel is a safe material in a fire situation which does not generate flaming droplets, has very low smoke generation and virtually no hazardous nitrogen based compounds. XFLAM panel holds best in class FM Approvals for Internal Walls and Ceilings, External Walls and Panel Roofing in addition to BCA Group 1 materials classification, as tested in accordance with ISO 9705. Additionally XFLAM panel holds various AS approvals for fire rated walls and ceilings.

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)

PRODUCT SPECIFICATION SHEET

CORE: XFLAM

PROFILE: UNIDECK



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 XFLAM Panel 75mm	25	23
ASKIN Dual Panel Roof - XFLAM 75mm / EPS 75mm	43	37

PHYSICAL PROPERTIES

CRITERIA	PERFORMANCE
Density	32 kg/m ³
Recyclable	100% Recyclable
Workability	Excellent. No requirement for protection
Trafficability (As per NCC / BCA)	Resistant to maintenance traffic (Up to 1 person per panel)
Peel Strength ASTM D1976 - Initial	1.27 N/mm

MANUFACTURING TOLERANCES

CRITERIA	MANUFACTURED	TOLERANCE
Length	2,000mm 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

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

Resource Efficiency

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

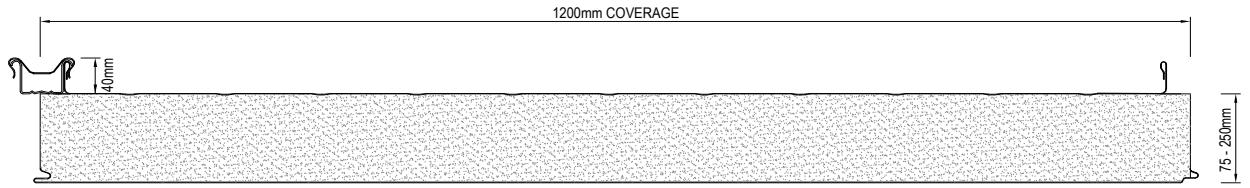
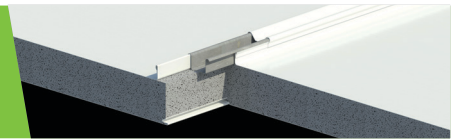
FEATURES & BENEFITS

- Fire Resistant
- Great Trafficability (140kg as per NCC/ BCA)
- Warranties of 10+ years available
- All in one ceiling and roofing system
- Extremely thermally efficient (R Values up to 8)
- Long lengths available up to 18m
- Reduced structural steel
- Fast to install
- Superior spanning capability
- Concealed fix roof system

PRODUCT SPECIFICATION SHEET

CORE: XFLAM

PROFILE: UNIDECK



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	13.5	14.3	15.1	15.9	16.7	17.5	18.3	19.1

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	12.0
75mm	3.05	2.47	1.89	1.49	1.28	0.92	0.68	0.50	0.38	0.30	0.24	0.20	0.16
100mm	4.12	3.36	2.59	2.06	1.79	1.31	0.92	0.68	0.52	0.41	0.33	0.27	0.23
125mm	5.19	4.25	3.29	2.64	2.31	1.63	1.13	0.83	0.64	0.50	0.41	0.34	0.28
150mm	6.26	5.14	4.00	3.23	2.84	1.95	1.36	1.00	0.76	0.60	0.49	0.40	0.34
175mm	7.33	6.03	4.71	3.82	3.37	2.28	1.58	1.16	0.89	0.70	0.57	0.47	0.40
200mm	8.40	6.92	5.42	4.41	3.90	2.60	1.81	1.33	1.02	0.80	0.65	0.54	0.45
250mm	10.55	8.71	6.85	5.59	4.96	3.25	2.26	1.66	1.27	1.00	0.81	0.67	0.56

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.