



PRODUCT SPECIFICATION SHEET

CORE: XFLAM INTERNAL WALLS AND CEILINGS

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.

FIRE PERFORMANCE

XFLAM Panels meet and exceed all the requirements of the National Construction Code with NATA approved testing and approvals. XFLAM Panel is a Factory Mutual (FM Approved) product meeting the rigorous international guidelines for fire compliance. XFLAM is a multi-layered product thus needs to satisfy the ISO AS9705 2003 Room test as stipulated in AS5637. ASKIN XFLAM meets a Group 1 system as a mechanically fixed install including concealed bracket. The panel has achieved a number of Fire Resistance Levels (FRL).

CRITERIA	PERFORMANCE
AS 1530.3: 1993 (Test for Flammability of materials)	Flame Spread 0 Ignitability 0 Heat evolved 0 Smoke Dev. 1
C1.1 Fire Resisting Construction AS 1530.4 (FRL)	- / 120 / 30 (100mm Panel) - / 120 / 115 (250mm Panel) - / 90 / 60 (100mm Panel + 13mm Fyrchek Plasterboard) - / 60 / 30 (100mm Panel Ceiling)
Factory Mutual (FM Approved) Unlimited Height	FM 4880 - Interiors FM 4881 - Exterior
Compliance to C1.10 - AS5637.1 AS ISO 9705:2003	Group 1, SMOGRA = 3.8 (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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THERMAL PERFORMANCE

XFLAM Panels' insulation core minimises thermal transfer through its patented syntactic foam. With a major focus on energy efficiency, ASKIN's easy slip-joint facilitates a sealed panelised construction. In internal construction, this seal assists with controlled temperature and cool storage applications. This controls the air flow in and out of a building enabling efficient heating and cooling of the internal environment.

R VALUES

NCC Specification J1.2-2, AS 2498.1: 1993 Methods of testing rigid cellular plastic materials

PANEL THICKNESS (mm)	50	75	100	125	150	175	200	250
XFLAM R-Value (m ² K/W) at 15°Celsius	1.72	2.50	3.30	4.10	4.84	5.63	6.41	7.97

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 System- XFLAM 75mm/ EPS 75mm	43	37

PHYSICAL PROPERTIES

CRITERIA	PERFORMANCE
Density	34 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	1.27 N/mm

MANUFACTURING TOLERANCES

CRITERIA	MANUFACTURED	TOLERANCE
Length	1,500mm to 22,000mm	+/- 5mm
Width	Standard as 1,200mm	+/- 1mm
Thicknesses	50mm to 250mm in multiples of 25mm	+/- 1mm

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 Rated and FM Approved
- Moisture resistant
- Warranties of 10+ years available
- Extremely thermally efficient (R Values up to 8+)
- Food safe anti-bacterial skins
- Long lengths available up to 22m
- Superior spanning capability
- Fast to install
- 100% Recyclable
- 1200mm wide modules

Interiors

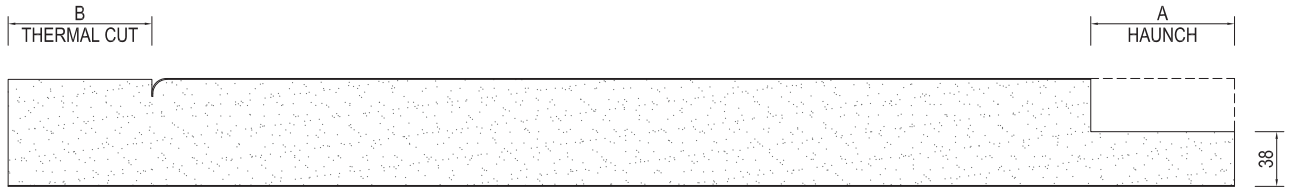
ASKIN™

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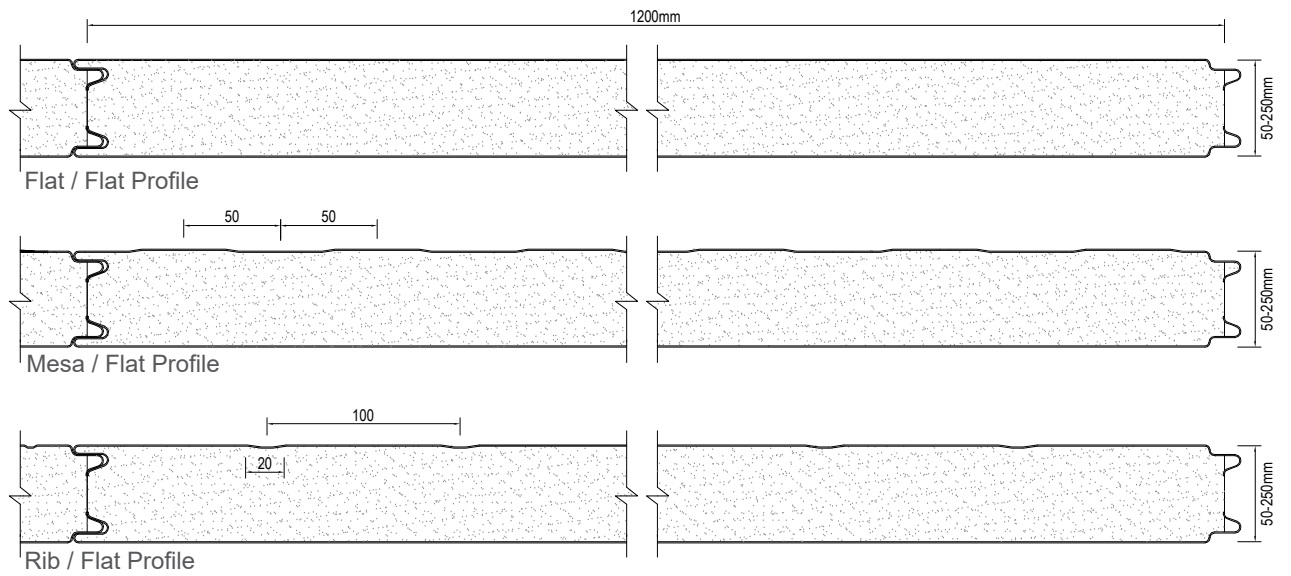
HAUNCHES & THERMAL CUTS

ASKIN has the ability to manufacture on-line haunches for wall to ceiling joints and thermal cuts for low temp rooms. The standard cuts range from 50mm to 225mm in multiples of 25mm and significantly assist onsite installation speed as well as the reduction of site waste. Custom cut lengths are available subject to request.



COLOUR RANGE

A full choice of colours are available subject to Minimum Order Quantities (MOQ) and warranties. Please contact your ASKIN sales representative.



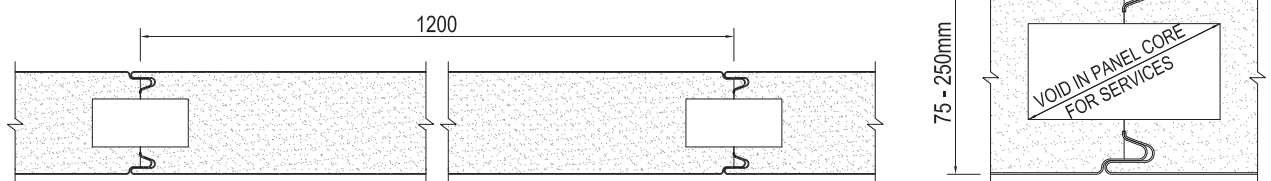
INTERNAL WALL AND CEILING PROFILE COMBINATIONS

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

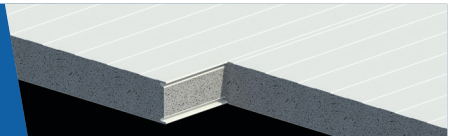
Note: Other profile combinations available dependant on application.

SERVICES

ASKIN can produce in-line services voids for special requirements. Please contact your ASKIN representative for further information.



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0.5mm EXTERNAL FACE SKIN WITH 0.5mm INTERNAL FACE SKIN

STANDARD STEEL SPECIFICATION

AS/NZS 2728 Paint Coating

AS 1397 Substrate System

External & Internal Skin materials – 0.5mm Thick G300S Z275 pre-painted off-white (Permagard®) steel with superior polyester finish coat of 25 microns and antibacterial protection.

Note: A range of substrates and colours without anti-bacterial protection are available, subject to application and MOQ.

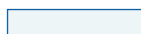

PANEL WEIGHT

PANEL THICKNESS (mm)	50	75	100	125	150	175	200	225	250
Mass (kg / m ²) for 0.5 / 0.5	10.0	10.8	11.7	12.5	13.4	14.2	15.1	15.9	16.8

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	2.15	1.72	1.28	0.95	0.77	0.49	0.34	0.25	0.19	0.15	0.12	0.10	0.08
75mm	3.29	2.65	2.01	1.46	1.18	0.76	0.52	0.39	0.30	0.23	0.19	0.16	0.13
100mm	4.45	3.62	2.77	1.94	1.57	1.01	0.70	0.51	0.39	0.31	0.25	0.21	0.18
125mm	5.62	4.59	3.50	2.43	1.97	1.26	0.87	0.64	0.49	0.39	0.31	0.26	0.22
150mm	6.78	5.56	4.20	2.92	2.36	1.51	1.05	0.77	0.59	0.47	0.38	0.31	0.26
175mm	7.95	6.53	4.90	3.40	2.75	1.76	1.22	0.90	0.69	0.54	0.44	0.36	0.31
200mm	9.11	7.50	5.60	3.89	3.15	2.02	1.40	1.03	0.79	0.62	0.50	0.42	0.35
250mm	11.45	9.44	7.00	4.86	3.94	2.52	1.75	1.29	0.98	0.78	0.63	0.52	0.44

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

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

0.6mm EXTERNAL FACE SKIN WITH 0.6mm INTERNAL FACE SKIN

STANDARD STEEL SPECIFICATION

AS/NZS 2728 Paint Coating

AS 1397 Substrate System

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

Note: A range of substrates and colours without anti-bacterial protection are available, subject to application and MOQ.

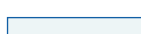


PANEL WEIGHT

PANEL THICKNESS (mm)	50	75	100	125	150	175	200	225	250
Mass (kg / m ²) for 0.6 / 0.6	11.6	12.5	13.3	14.2	15.0	15.9	16.7	17.6	18.4

PANEL SPANS (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	2.55	2.02	1.63	1.13	0.92	0.59	0.41	0.30	0.23	0.18	0.15	0.12	0.10
75mm	3.93	3.11	2.52	1.75	1.42	0.91	0.63	0.46	0.35	0.28	0.23	0.19	0.16
100mm	5.25	4.15	3.36	2.33	1.89	1.21	0.84	0.62	0.47	0.37	0.30	0.25	0.21
125mm	6.56	5.18	4.20	2.91	2.36	1.51	1.05	0.77	0.59	0.47	0.38	0.31	0.26
150mm	7.87	6.22	5.04	3.50	2.83	1.81	1.26	0.93	0.71	0.56	0.45	0.37	0.31
175mm	9.18	7.25	5.88	4.08	3.31	2.12	1.47	1.08	0.83	0.65	0.53	0.44	0.37
200mm	10.49	8.29	6.72	4.66	3.78	2.42	1.68	1.23	0.94	0.75	0.60	0.50	0.42
250mm	13.12	10.36	8.39	5.83	4.72	3.02	2.10	1.54	1.18	0.93	0.76	0.62	0.52

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

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

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.