

EXTERIORS

External Walls & Facades

XFLAM Vivid



ASKIN XFLAM is a patented Australian made syntactic phenolic foam that meets and exceeds all the performance requirements for rigid insulation material. XFLAM External Wall systems have been tested for thermal performance, weatherproofing, fire and wind loadings.

XFLAM Panel is a Group 1 material that meets Factory Mutual requirements for internal, external, and roofing applications. XFLAM has achieved FM 4882 that certifies the insulated panels for smoke sensitive occupancies.

XFLAM Vivid 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 AS 9705 2003 Room test as stipulated in AS 5637.

Fire Performance

Criteria	Performance
AS/NZS 1530.3: 1999(R 2016) (Test for Flammability of materials)	Flame Spread 0 Smoke Dev. 2 Heat Evolved 0 Ignition 0
AS 5637.1: 2015 Compliance to C2D11(1)(b) AS ISO 9705: 2003 (R 2016)	Group 1, SMOGRA < 100 (m ² / s ² x 1000)
Factory Mutual (FM Global) Approval	FM 4880 - Unlimited Height FM 4881 - Exterior wall systems FM 4882 - Smoke Sensitive Occupancies

Features & Benefits

 Clean architectural finish	 Warranties up to 15 years	 FM Approved	 Extremely thermally efficient (Product R-Values up to 6.9)
 Lengths up to 13.8m and is fast to install	 Concealed (secret) fixing	 Designer Range of Colours	 Architectural low, medium and high profiled ribs

0.6 or 0.7 mm External Face Skin with 0.6mm Internal Face Skin

Standard Steel Specification

External skin material – 0.7mm Thick G300S AM100 high performance steel with pre-painted superior polyester finish coat of 25 microns.

Internal skin material – 0.6mm Thick G300S Z275 prepainted Colorbond® Intramax® steel with superior polyester finish coat of 25 microns. Colorbond® Intramax® steel is specifically designed for temperature-controlled environments.

Panel Weight (m²)

Panel Thickness (mm)	50	75	85	100	125	150
Weight (kg/m ²) 0.6/0.6	12.1	13.0	13.3	13.8	14.5	15.5
Weight (kg/m ²) 0.7/0.6	13.0	13.9	14.1	14.7	15.4	16.4

*AS/NZS 2728 Paint Coating. AS 1397 Substrate System

Span table: ULS Allowable Pressure (kPa)

Panel Thickness (mm)	Panel Span (m)									
	2.0m	2.4m	3.0m	3.6m	4.0m	5.0m	6.0m	7.0m	8.0m	
50	2.34	2.08	1.69	1.30	1.04	0.85	0.65	0.45	0.25	
75	2.73	2.43	1.97	1.52	1.22	1.00	0.78	0.56	0.35	
85	2.88	2.56	2.09	1.61	1.29	1.06	0.84	0.61	0.38	
100	3.11	2.77	2.25	1.74	1.40	1.16	0.92	0.68	0.44	

Span table: SLS Allowable Pressure (kPa)

Panel Thickness (mm)	Panel Span (m)									
	2.0m	2.4m	3.0m	3.6m	4.0m	5.0m	6.0m	7.0m	8.0m	
50	1.87	1.60	1.18	0.77	0.49	0.38	0.28	0.17	0.07	
75	2.03	1.81	1.48	1.15	0.93	0.74	0.55	0.35	0.16	
85	2.09	1.89	1.60	1.31	1.11	0.88	0.65	0.42	0.19	
100	2.18	2.02	1.78	1.54	1.38	1.09	0.81	0.53	0.25	

Span table: SLS Allowable Pressure (kPa)

Panel Thickness (mm)	Panel Span (m)									
	2.0m	2.4m	3.0m	3.6m	4.0m	5.0m	6.0m	7.0m	8.0m	
50	-1.46	-1.31	-1.09	-0.87	-0.72	-0.6	-0.48	-0.36	-0.24	
75	-1.46	-1.35	-1.18	-1.01	-0.89	-0.75	-0.61	-0.46	-0.32	
85	-1.46	-1.36	-1.21	-1.06	-0.96	-0.81	-0.65	-0.50	-0.35	
100	-1.47	-1.39	-1.27	-1.15	-1.07	-0.90	-0.73	-0.56	-0.39	

Uniformly distributed ultimate limit state short term Wind load as derived from AS/NZS 1170.2. Capacities derived from NATA approved structural testing in accordance with AS 4040.2. Serviceability limit state deflection limited to span/200. Thermal deflection and required stress relief cuts should be considered for controlled environments by a suitably competent person. See ASKIN connection details for sun exposed applications or fire rated stress relief cuts.

Panel is assumed to be fixed from outside into a suitable structure inside. Fixings, number and type should be considered by a suitably competent person. For FM approval requirements, please refer to specific test certificates available for download on our website. Loadings noted within span tables do not include the self-weight of the panel. Self weight will need to be applied when panel is used in a horizontal application (i.e. a roof or a ceiling).

Span table: Wind Classification (AS 4055)

Panel	Panel Span (m)								
Thickness (mm)	2.0m	2.4m	3.0m	3.6m	4.0m	5.0m	6.0m	7.0m	8.0m
50	N1r	N1r	-	-	-	-	-	-	-
75	N2r	N1r	N1r	-	-	-	-	-	-
85	N2r	N2r	N1r	-	-	-	-	-	-
100	N2r	N2r	N1r	-	-	-	-	-	-

Notes:

Limited by strength at corners within 1200mm of both edges.

Wind Classifications for ultimate strength and serviceability pressures from the net pressure coefficients given in AS 4055 Tables 3.5(A) & 3.5(B).

Panels are installed over minimum 3-supports (double-span).

Colour Range

A full range of colours are available depending on Minimum Order Quantities and warranties. Site specific Solar absorbance as required by the NCC is available from ASKIN.

Environment

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 lifetime energy savings from using XFLAM will amount to hundreds of times the energy required to produce the product.

Zero ODP

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

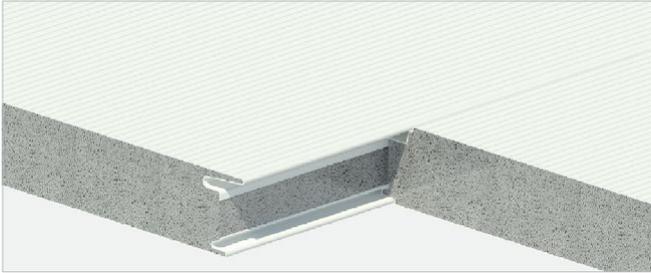
XFLAM Vivid has met the performance requirements of weatherproofing by tested to AS4284:2008, as required by the verification method NCC 2022 Volume 1 AMDT 2 F3 P1 and Volume 2 AMDT Two H2P2

Weather Proofing

Criteria	Performance
AS 4284: 2008 Water Ingress Test	NCC Vol 1 Compliant to F3 P1 F3 D2 NCC Vol 2 Compliant to H2P2 H2V1

External Wall & Facade Profile Combination

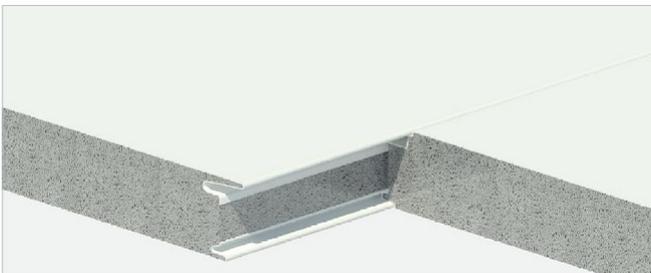
Internal Profiles



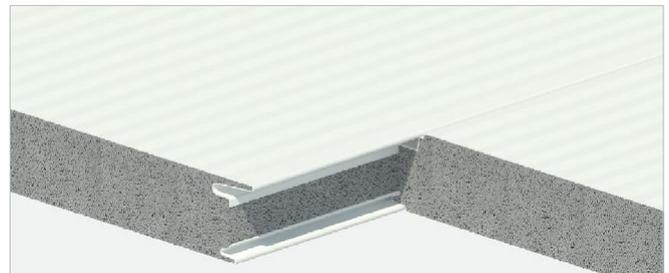
XFLAM Vivid Ambience Joint



XFLAM Vivid Transform Joint



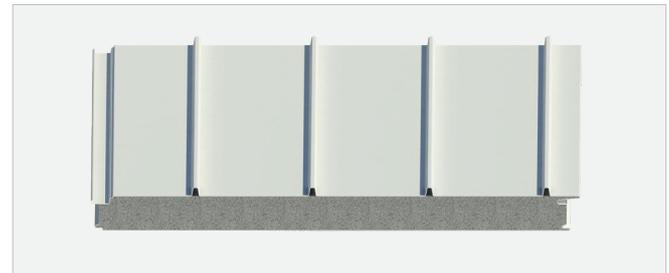
XFLAM Vivid Seamless Joint



XFLAM Vivid Silkline Joint



XFLAM Vivid Infinite



XFLAM Vivid Transform

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

Acoustics

Criteria	R_w	$R_w + C_{tr}$
ASKIN XFLAM Panel 75mm	25	23

Physical Properties

Criteria	Performance
Core Density	36 +/- 4kg/m ³
Recyclable	100% Recyclable
Workability	Excellent. No requirement for protection

Manufacturing Tolerances

Criteria	Manufactured	Tolerance
Length	2,000mm to 22,000mm	+/- 5mm
Width	Standard as 1,200mm	+/- 1mm
Thicknesses	50mm to 250mm in multiples of 25mm	+/- 1mm

Though predominantly installed vertically, ASKIN Performance Panels can also be installed horizontally or diagonally for aesthetic or practical reasons.

Long panels or panels passing structural elements can be butt jointed with negative detail top hat sections. These can be supplied with fixing concealing caps. ASKIN Performance Panels can be fastened with a range of hardware available from ASKIN, including hidden fixings, Tek screws, mushroom head threaded rods, dome nut bolts, coach screws, suspension brackets and spring fixings. Please contact your ASKIN representative for more information.

Installation Tolerances

Panel Length	Installation Tolerance
0mm to 4,000mm	+2/-1mm
+4,000mm	+3/-1mm
Panel Joints	+2/-2mm

*ASKIN recommend the use of clamps for ensuring minimum variable tolerance.

Thermal Performance

Product Material Properties					Total System R-Values	
Panel Nominal Thickness (mm)	Product U-Value (W/m ² K) at 23°C	Product R-Value (m ² K/W) at 23°C	Product R-Value (m ² K/W) at 15°C	Product R-Value (m ² K/W) at 0°C	Heat Flow Out (Winter)	Heat Flow In (Summer)
50	0.71	1.40	1.40	1.50	1.60	1.50
75	0.45	2.05	2.10	2.20	2.30	2.10
100	0.34	2.75	2.80	2.95	3.00	2.80
125	0.29	3.45	3.50	3.70	3.70	3.50
150	0.24	4.15	4.25	4.45	4.40	4.20
175	0.21	4.85	4.95	5.20	5.10	4.90
200	0.18	5.55	5.65	5.95	5.80	5.50
250	0.14	6.90	7.05	7.40	7.20	6.90

Total R-Values for the building element as required by the Energy Provisions of the National Construction Code, calculated in accordance with AS/NZS 4859.2 2018. ASKIN XFLAM is manufactured, tested and packaged in conformance with AS/NZS 4859.1: 2018

*All information correct at time of printing. Check with your ASKIN representative for latest information.