



ENGINEERING DATA

Table 01. Physical Properties

CRITERIA	XFLAM	EPS	PIR	MINERAL WOOL
Density	32 kg/m ³	13.5kg/m ³	36-45 kg/m ³	100 kg/m ³
Recyclable	415 µg/m ² .s	218 µg/m ² .s	215 µg/m ² .s	N/A
Workability	Yes	Yes	No	No
Trafficability	Resistant to pedestrian traffic (1 person/m ²)	Resistant to pedestrian traffic (1 person/m ²)	140kg per panel, use load spreaders	No pedestrian Traffic – Crawl boards required

Table 02. Engineered Panel Spans

ASKIN Panel Spanning Capacity – Guide to ASKIN ULS Panel Spanning Capacity (Metres)

	XFLAM				EPS				PIR				MINERAL WOOL			
	0.5 kPa	0.87 kPa	1.0 kPa	1.2 kPa	0.5 kPa	0.87 kPa	1.0 kPa	1.2 kPa	0.5 kPa	0.87 kPa	1.0 kPa	1.2 kPa	0.5 kPa	0.87 kPa	1.0 kPa	1.2 kPa
0.6 Skins	5.7	4.4	4.1	3.3	4.4	3.3	3.2	2.7	4.1	3.9	3.2	3.0	2.9	2.2	2.1	1.8
50mm	7.0	5.5	5.0	4.2	5.5	4.1	3.9	3.3	5.1	4.5	4.0	3.6	4.0	3.1	2.9	2.4
75mm	8.1	6.1	5.7	5.0	6.3	4.8	4.5	3.8	5.9	5.0	4.5	4.1	4.6	3.8	3.5	2.7
100mm	9.9	7.6	6.9	5.8	7.8	5.9	5.5	4.8	6.8	4.2	5.1	4.6	5.2	4.0	4.8	3.4
150mm	11.5	8.9	8.1	6.7	9.0	6.8	9.0	6.8	6.3	4.5	8.3	7.5	5.9	5.5	N/A	N/A
200mm	12.0	9.5	8.7	7.6	10.1	7.6	7.1	6.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
250mm	12.0	10.0	9.1	8.6	11.0	8.3	7.8	6.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
300mm																

0.5 kPa, 0.87 kPa, 1.0 kPa and 1.2 kPa are arbitrary loads which apply to common building applications. The table is designed to give the reader a brief understanding of the panels spanning capabilities.

Table 03. Cyclone Performance

0.6/0.6 XFLAM Panel Span at Load Table Extrapolated from Test Results performed by the University of Adelaide.

Pressures/ Fixing Centres	XFLAM FLAT				XFLAM METRIC			
	6 kPa 600	8 kPa 600	12kPa 400	Impact m/s	6 kPa 200	8 kPa 250	12 kPa 250	Impact m/s
75mm (Extrapolated)	1.6	1.4	0.8		1.8	1.5	0.9	
100mm (Certified)	1.8	1.5	1.2	39	2.4	2.0	1.2	40
150mm (Extrapolated)	2.2	1.8	1.4		3.5	2.9	1.7	

*100mm EPS Panel has been impact tested successfully to 38 m/s

Table 04. Peel Strength

Average N/mm	XFLAM	EPS	PIR
Initial Peel	1.27	2.4	.074
Propagation	0.31	0.59	0.16

Table 05. Manufacturing Tolerances

	XFLAM	EPS	PIR	MINERAL WOOL
Length	+5mm (T=5mm)	+5mm (T=5mm)	+/-5mm (T=10mm)	+5mm (T=5mm)
Width	+/-1mm (T=2mm)	+/-1mm (T=2mm)	+/-2mm (T=4mm)	+/-1mm (T=2mm)
Thickness < 100mm	+/-1mm (T=2mm)	+/-1mm (T=2mm)	+/-2mm (T=4mm)	+/-1mm (T=2mm)
Thickness > 100mm	+/-1mm (T=2mm)	+/-1mm (T=2mm)	+/-4mm (T=8mm)	+/-1mm (T=2mm)
Flatness	+/-2mm (T=4mm)	+/-2mm (T=4mm)	+/-3mm (T=6mm)	+/-2mm (T=4mm)

T= Total Variance