

TECHNICAL DATA

Core Comparisons.

Table 1
FIRE PERFORMANCE

• Specific construction system required.

CRITERIA	EPS	XFLAM	PIR	MW
AS 1530.3: – Steel Ext / Int. face Determination of Flame propagation & smoke Development	Flame Spread 0 Smoke Dev. 2	Flame Spread 0 Smoke Dev. 2	Flame Spread 0 Smoke Dev. 2	Flame Spread 0 Smoke Dev. 2
AS 1530.4 / BS 476 pt22-24 / LPS 1208 and equivalents Fire rating of elements.	- / 240 / 0 (100mm panel)	- / 120 / 30 (100mm panel)	- / 120 / 30 (100mm panel)	- / 60 / 60 (100mm panel)
ISO 9705 BCA Classification	Group 1 Steel flashing	Group 1 Steel flashing	Group 2 Aluminium flashing	Group 1 Non-combustible
Toxicity (combustion gases)	Low (CO, CO ₂ , C)	Very Low (CO, CO ₂)	Moderate (HCN, HCl, CO)	Non Flammable

Table 2
ENGINEERING
DETAILS

(Core material only unless otherwise stated).

CRITERIA	EPS	XFLAM	PIR	MW
Density	13.5 kg/m ³	32 kg/m ³	32 kg/m ³	100 kg/m ³
Water absorption W/V% AS 2498.8 1991	1.1%	1.0%	2.4%	NA
Water vapour transmission rate AS2498.5 1993	337 µg/m ² .s	180 µg/m ² .s	199 µg/m ² .s	
Recyclable	Yes	Yes	No	No
Workability	Excellent, no requirement for protection. Resistant to pedestrian traffic (1 person/m ²)	Excellent, no requirement for protection. Resistant to pedestrian traffic (1 person/m ²)	Protective clothing and dust masks essential. 140kg per panel, use load spreaders.	Protective clothing and dust masks recommended. No pedestrian traffic – crawl boards required.
Friability ASTM C 421	2.9	2.4	33.6	NA

Table 3
ENGINEERED
PANEL SPAN

Maximum Span Metres												
CRITERIA	EPS			XFLAM			PIR			MW		
	Wall 0.50 kPa	Ceiling 0.75 kPa	Roof 1.00 kPa	Wall 0.50 kPa	Ceiling 0.75 kPa	Roof 1.00 kPa	Wall 0.50 kPa	Ceiling 0.75 kPa	Roof 1.00 kPa	Wall 0.50 kPa	Ceiling 0.75 kPa	Roof 1.00 kPa
50	5.0	4.0	3.5	5.7	4.6	4.1	4.1	3.5	3.2	2.9	2.4	2.1
75	5.9	4.9	4.4	7.0	5.7	5.0	5.2	4.3	4	4.0	3.3	2.9
100	6.9	5.6	5.0	8.1	6.6	5.7	5.9	4.9	4.5	5.0	4.1	3.5
150	8.5	7.0	6.1	9.9	8.1	7.0	6.9	5.5	5.1	6.4	5.3	4.6
200	9.6	8.0	7.0	11.5	9.4	8.1	8.3	6.7	5.9	NA	NA	NA
250	10.5	8.8	7.8	12.8	10.5	9.1	NA	NA	NA	NA	NA	NA

Table 4
THERMAL
RESISTANCE
(R Value at 15° C)

(R values are conservative and are based on core properties alone).

	EPS	XFLAM	PIR	MW
50mm	1.2	1.61	2.4	1.2
75mm	1.8	2.42	3.6	1.83
100mm	2.4	3.22	4.8	2.44
150mm	3.6	4.84	7.1	3.66
200mm	4.8	6.45	9.1	NA
250mm	6.5	8.06	NA	NA