



Core Material Comparisons

CORE MATERIAL	Expanded Polystyrene with Fire Retardant		Thermosetting Phenolic Composite		Mineral Wool	
	EPS-FR		TPC		MW	
ACOUSTIC CHARACTERISTICS						
Frequency: 50mm Panel -STC	24		24		25	
Frequency: 125mm Panel -STC	23		25		26	
CORE CHARACTERISTICS						
Core Density	13.5kg/m ³		36kg/m ³		100kg/m ³	
THERMAL CONDUCTIVITY						
W/mK @ 23C	0.0442		0.0394		0.0365	
ENERGY PERFORMANCE						
	Winter (15°C)	Summer (23°C)	Winter (15°C)	Summer (23°C)	Winter (15°C)	Summer (23°C)
R Value: 50mm Panel	1.36	1.33	1.25	1.20	1.90	1.85
R Value: 75mm Panel	1.94	1.89	1.90	1.80	2.65	2.45
R Value: 100mm Panel	2.51	2.44	2.55	2.40	3.85	3.75
R Value: 150mm Panel	3.60	3.51	3.85	4.00	N/A	N/A
FIRE PERFORMANCE INFORMATION						
C1.1 Non Combustible C1.9e	Combustible		Combustible		Non-Combustible	
Early fire hazard properties (A.S. 1530.3 1999)	Ignitability - 0		Ignitability - 0		Ignitability - 0	
	Spread of Flame - 0		Spread of Flame - 0		Spread of Flame - 0	
	Heat Evolved - 0		Heat Evolved - 0		Heat Evolved - 0	
	Smoke Developed - 2		Smoke Developed - 1		Smoke Developed - 2	
AS/ISO 9705 classification	Group 1		Group 1		Group 1	
Factory Mutual (FM Approved)	-		-		-	
SMORGA (m2/S2 x 1000)	3.8		2.2		N/A	
Non Load Bearing Wall (AS 1530.4:2014)	N/A		N/A		-/60/120	
PHYSICAL INFORMATION						
Panel Weights: 0.6mm skins at 100mm core	11.6kgs/m ²		14.2kgs/m ²		20.25kgs/m ²	
Recyclability	Yes		Yes		Limited	
Safety handling requirements	Safety Data Sheet		Safety Data Sheet		Safety Data Sheet	

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