

THERMO BOARDTM

	SIMILAR PRODUCTS - COMPARISON			Thermo Board Advantage
	Thermo Board	Calcium Silicate Board	Cement Board	
Basic Raw materials Used	Natural earth minerals perlite, glass fiber, wood fiber (Mgo) + (Mgcl)	Wood chips, Refined sand Cellulose Additives Cement	Portland Cement Aggregate, water, Additives, Chemicals	Light weight non-flammable, Natural earth minerals used which are non contaminating
Density	1000 kg/m ³	1300 kg/m ³	1250kg/m ³	Lighter weight for comparable strength, and more flexible
Fire Resistance & Combustibility	Rated Class 1 through fire resistance test Non-Combustible	Not available Not rated	Not available Not rated	Non-Combustible, highly fire resistance, tested for fire rating for 1 Hour with 12mm boards.
Thermal Conductivity	0.216 W/mK	0.35 W/mK	0.22 W/mK	More energy efficient and Mgo also has good heat refraction properties.
Bending Strength	20 N/mm ²	Dry 29N/mm ² Wet 17N/mm ²	12 N/mm ²	Stronger and more flexible
Modulus of Elasticity	6045 N/mm ²	6000 N/mm ²	5500 N/mm ²	More Rigid , yet flexible
Stability of Thickness Swelling after 24 hrs in Water	0.20% (Maximum even after 7 days in water)	0.78%	1.80% Cement board form Malaysia	Moisture resistant, lower swelling rate, won't degrade in water over time.
Dry Shrinkage (Heating & Cooling when dry)	< 0.08 %	< 0.09 %	< 0.17%	Greater dimensional stability, Less expansion /Contraction, Resistance to Cracking
Moisture Content	10%	10%	12%	Relatively lower moisture Content
Sound Attenuation	48db ave.vol. reduction with 29mm (3\8*) board and 90mm batts metal partition	Not Available No Test	Not Available No Test	dB reduction increase by thickness and /or by adding layers sandwiched with acoustical goo.
Surface Alkalinity	PH \ 10	PH \ 13	PH between 11 - 13	Relatively lower alkalinity Content