

Thermal conductivity conversion chart

W/(m·K), BTU/(h·ft·°F). Factors are given to 7 significant figures; open the converter for full precision and the worked solution.

Conversion factors to watts per metre kelvin (W/(m·K))		
UNIT	IN W/(M·K)	1 W/(M·K) IN UNIT
watt per metre kelvin (W/(m·K))	1 W/(m·K)	1 W/(m·K)
watt per centimetre kelvin (W/(cm·K))	100 W/(m·K)	0.01 W/(cm·K)
BTU per hour foot °F (BTU/(h·ft·°F))	1.730735 W/(m·K)	0.5777893 BTU/(h·ft·°F)
BTU inch per hour square foot °F (BTU·in/(h·ft²·°F))	0.1442279 W/(m·K)	6.933472 BTU·in/(h·ft²·°F)
kilocalorie (IT) per hour metre °C (kcal_IT/(h·m·°C))	1.163 W/(m·K)	0.8598452 kcal_IT/(h·m·°C)
calorie (th) per second centimetre °C (cal_th/(s·cm·°C))	418.4 W/(m·K)	0.002390057 cal_th/(s·cm·°C)

W/(m·K) → BTU/(h·ft·°F)	
W/(M·K)	BTU/(H·FT·°F)
0.1 W/(m·K)	0.05777893 BTU/(h·ft·°F)
0.5 W/(m·K)	0.2888947 BTU/(h·ft·°F)
1 W/(m·K)	0.5777893 BTU/(h·ft·°F)
2 W/(m·K)	1.155579 BTU/(h·ft·°F)
5 W/(m·K)	2.888947 BTU/(h·ft·°F)
10 W/(m·K)	5.777893 BTU/(h·ft·°F)
20 W/(m·K)	11.55579 BTU/(h·ft·°F)
25 W/(m·K)	14.44473 BTU/(h·ft·°F)
50 W/(m·K)	28.88947 BTU/(h·ft·°F)
100 W/(m·K)	57.77893 BTU/(h·ft·°F)
250 W/(m·K)	144.4473 BTU/(h·ft·°F)
500 W/(m·K)	288.8947 BTU/(h·ft·°F)
1,000 W/(m·K)	577.7893 BTU/(h·ft·°F)

BTU/(h·ft·°F) → W/(m·K)	
BTU/(H·FT·°F)	W/(M·K)
0.1 BTU/(h·ft·°F)	0.1730735 W/(m·K)
0.5 BTU/(h·ft·°F)	0.8653673 W/(m·K)
1 BTU/(h·ft·°F)	1.730735 W/(m·K)
2 BTU/(h·ft·°F)	3.461469 W/(m·K)
5 BTU/(h·ft·°F)	8.653673 W/(m·K)
10 BTU/(h·ft·°F)	17.30735 W/(m·K)
20 BTU/(h·ft·°F)	34.61469 W/(m·K)
25 BTU/(h·ft·°F)	43.26837 W/(m·K)
50 BTU/(h·ft·°F)	86.53673 W/(m·K)
100 BTU/(h·ft·°F)	173.0735 W/(m·K)
250 BTU/(h·ft·°F)	432.6837 W/(m·K)
500 BTU/(h·ft·°F)	865.3673 W/(m·K)
1,000 BTU/(h·ft·°F)	1,730.735 W/(m·K)

Formula: $BTU/(h·ft·°F) = W/(m·K) \times 0.5777893165$