



PROPERTIES OF AIR AND GASES

¹ At 60°F and atmospheric pressure (14.7 psia)

To convert to kg/m³ multiply lb/ft³ by 16.02

To convert to kJ/kg multiply Btu/lb by 2.326

To convert to kJ/kg-°C multiply Btu/lb-°F by 4.187

To convert to W/m-°C multiply Btu-in/hr-ft²-°F by 0.1442

PROPERTIES OF AIR¹

Temperature (°F)	Specific Heat (Btu/lb-°F)	Density (lb/ft ³)
0	0.240	0.086
50	0.240	0.078
100	0.240	0.071
150	0.241	0.065
200	0.242	0.060
250	0.243	0.056
300	0.244	0.052
350	0.245	0.049
400	0.247	0.046
450	0.248	0.043
500	0.249	0.041
550	0.250	0.039
600	0.252	0.037
650	0.253	0.035
700	0.254	0.034
750	0.256	0.033
800	0.257	0.032
850	0.258	0.030
900	0.260	0.029
950	0.261	0.028
1000	0.262	0.027
1050	0.264	0.026
1100	0.265	0.025
1150	0.266	0.025
1200	0.267	0.024