

Geotechnical Testing Journal

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Information for Authors

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SUMMARY OF NUMBERS CHECKED: _____

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E 380 SELECTED CONVERSION FACTORS

To convert from	to	multiply by
atmosphere (760 mm Hg)	pascal (Pa)	1.013 25 x 10 ⁵
board foot	cubic metre (m ³)	2.359 737 x 10 ⁻³
Btu (International Table)	joule (J)	1.055 056 x 10 ³
Btu (International Table)/h	watt (W)	2.930 711 x 10 ⁻¹
Btu (International Table)•in./s•ft ² • °F (<i>k</i> , thermal conductivity)	watt per metre kelvin [W/(m•K)]	5.192 204 x 10 ²
calorie (International Table)	joule (J)	4.186 800*
centipose	pascal second (Pa•s)	1.000 000* x 10 ⁻³
centistokes	square metre per second (m ² /s)	1.000 000* x 10 ⁻⁶
circular mil	square metre (m ²)	5.067 075 x 10 ⁻¹⁰
degree Fahrenheit	degree Celsius	t°C = (t°F - 32)/1.8
foot	metre (m)	3.048 000* x 10 ⁻¹
ft ²	square metre (m ²)	9.290 304* x 10 ⁻²
ft ³	cubic metre (m ³)	2.831 685 x 10 ⁻²
ft•lbf	joule (J)	1.355 818
ft•lbf/min	watt (W)	2.259 697 x 10 ⁻²
ft/s ²	metre per second squared (m/s ²)	3.048 000* x 10 ⁻¹
gallon (U.S. liquid)	cubic metre (m ³)	3.785 412 x 10 ⁻³
horsepower (electric)	watt (W)	7.460 000* x 10 ⁻²
inch	metre (m)	2.540 000* x 10 ⁻²
in. ²	square metre (m ²)	6.451 600* x 10 ⁻⁴
in. ³	cubic metre (m ³)	1.683 706 x 10 ⁻⁵
inch of mercury (60°F)	pascal (Pa)	3.376 85 x 10 ³
inch of water (60°F)	pascal (Pa)	2.488 4 x 10 ²
kgf/cm ²	pascal (Pa)	9.806 650* x 10 ⁴
kip (1000 lbf)	newton (N)	4.448 222 x 10 ³
kip/in. ² (ksi)	pascal (Pa)	6.894 757 x 10 ⁶
ounce (U.S. fluid)	cubic metre (m ³)	2.957 353 x 10 ⁻⁵
ounce-force	newton (N)	2.780 139 x 10 ⁻¹
ounce (avoirdupois)	kilogram (kg)	2.834 952 x 10 ⁻²
oz (avoirdupois)/ft ²	kilogram per square metre (kg/m ²)	3.051 517 x 10 ⁻¹
oz (avoirdupois)/yd ²	kilogram per square metre (kg/m ²)	3.390 575 x 10 ⁻²
oz (avoirdupois)/gal (U.S. liquid)	kilogram per cubic metre (kg/m ³)	7.489 152
pint (U.S. liquid)	cubic metre (m ³)	4.731 765 x 10 ⁻⁴
pound-force (lbf)	newton (N)	4.448 222
pound (lb avoirdupois)	kilogram (kg)	4.535 924 x 10 ⁻¹
lbf/in ² (psi)	pascal (Pa)	6.894 757 x 10 ³
lb/in ³	kilogram per cubic metre (kg/m ³)	2.767 990 x 10 ⁴
lb/ft ³	kilogram per cubic metre (kg/m ³)	1.601 846 x 10
quart (U.S. liquid)	cubic metre (m ³)	9.463 529 x 10 ⁻⁴
ton (short, 2000lb)	kilogram (kg)	9.071 847 x 10 ²
torr (mm Hg, 0°C)	pascal (Pa)	1.333 22 x 10 ²
W•h	joule (J)	3.600 000* x 10 ³
yard	metre (m)	9.144 000* x 10 ⁻¹
yd ²	square metre (m ²)	8.361 274 x 10 ⁻¹
yd ³	cubic metre (m ³)	7.645 549 x 10 ⁻¹

*Exact