



PSYCHROMETRIC CHART

PSYCHROMETRIC CORRECTIONS FOR ALTITUDE

BAROMETRIC PRESSURE

Altitude Feet	Pressure In. Hg
-1000	31.02
-500	30.47
Sea Level	29.92
500	29.38
1000	28.86
2000	27.82
3000	26.82
4000	25.84
5000	24.90
6000	23.98
7000	23.09
8000	22.22
9000	21.39
10000	20.58

Dew Point Humidity for a Given Temperature:
(Humidity @ Altitude) = (Humidity @ S.L.) x $\frac{29.92}{\text{Baro. Press.}}$

Relative Humidity for a Given Humidity Ratio:
(R.H. @ Altitude) = (R.H. @ S.L.) x $\frac{\text{Baro. Press.}}{29.92}$

Specific Volume for a Given Temperature & Humidity Ratio:
(Sp. Vol. @ Altitude) = (Sp. Vol. @ S.L.) x $\frac{29.92}{\text{Baro. Press.}}$

Enthalpy for a Given Temperature & Humidity Ratio:
(Enthalpy @ Altitude) = (Enthalpy @ S.L.)

PSYCHROMETRIC CONVERSION FACTORS

TEMPERATURE

$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$
 $^{\circ}\text{C} = (^{\circ}\text{F} - 32) / 1.8$
 $^{\circ}\text{K} = ^{\circ}\text{C} + 273$
 $^{\circ}\text{R} = ^{\circ}\text{F} + 460$

HUMIDITY RATIO

1 Gram/Kg = 7 Grains/lb
1 lb = 7000 Grains
1 Grain/Std. Ft³ = 13.34 Grains/lb

AIRFLOW

1 M³/Min = 35.31 ACFM
1 nM³/Min = 38.01 SCFM
1 nM³/Hr = 0.633 SCFM

