Pressure, Atmospheric

Atmospheric pressure exerted by the earth's atmosphere. The normal pressure measured by a barometer at sea level is equivalent to a column of mercury 29.92 inches high or 14.696 psia.

The following formula can be used to calculate the atmospheric pressure for a given elevation:

For elevation greater than 50 feet:

$$P_{atm} = -5.385001 \times 10^{-4} \times (Elev) + 8 \times 10^{-9} \times (Elev^2) + 14.69595$$

For elevation < 50 ft, use Patm = 14.696 psia