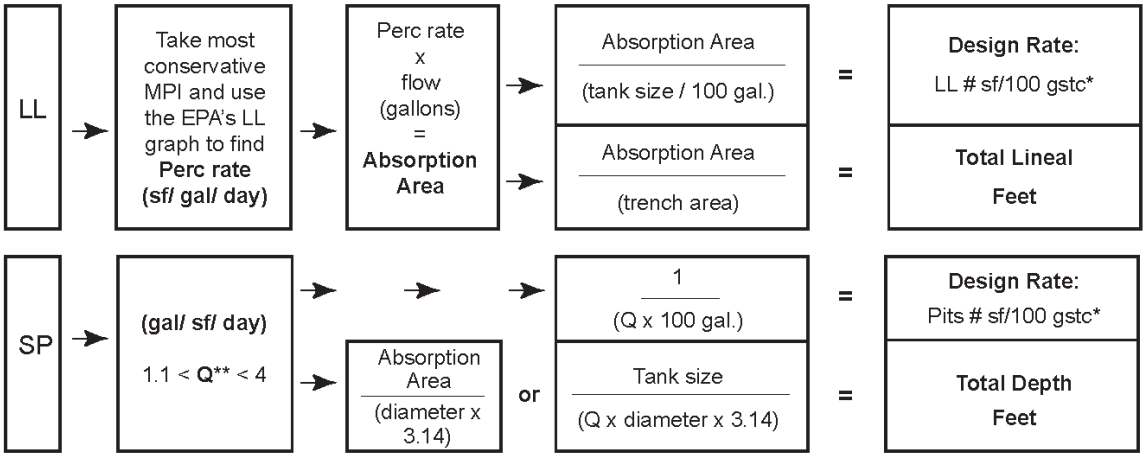
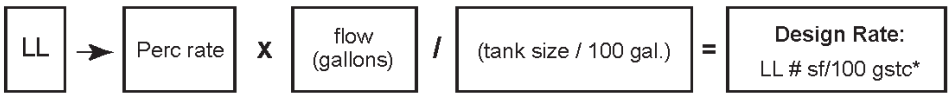
How to Calculate for Design Rates, Absorption Area and Total Feet for Engineers and other Percolation Testing / Septic System Designers

When calculating for Design Rates using Perc Rates and Absorption Area:



LL: (min.) 1.0 < 60 (max.); (min.) 0.6 < Perc rate < 2.26 (max.)
SP: (min.) 1.1 < Q < 4 (max.) [if caving occurred: Q < 3 (max.)]
MPI < 30 (max.) → For Lahontan SP only



* County of San Bernardino Design Rates are expressed in units of square feet (sf) per 100 gallons septic tank capacity (gstc).

** For leach lines, you can use the result of the average MPI subtracted from the most conservative MPI. For seepage pits, it is suggested that you used the most conservative Q that falls within the range of 1.1 to 4. If there are Q values greater than 4, then a Q of 4 gallons per square feet (g/sq) is the fastest value that can be chosen to design your septic system.

When calculating for Absorption Area and Total Feet using Design Rates: