CLAY COUNTY
PUBLIC HEALTH CENTER

800 Haines Drive
Liberty, MO 64068
p. 816-595-4350
clayhealth.com

POOL FORMULAS

AMOUNT CONVERSIONS

Ounces to Pounds   Ounces/16=Pounds
Fluid Ounces to Gallons   Fluid Ounces/128=Gallons

DISTANCE CONVERSIONS

Yards to Feet   Yards X 3 = Feet
Meters to Feet   Meters X 3.28 = Feet

SURFACE AREAS

Radius   Diameter/2 = Radius
Rectangle   Length x Width = Square Feet
Circle $3.14 \times \text{Radius}^2$ = Square Feet

POOL VOLUME

Average Depth   (Shallow depth + Deep depth)/2 = Avg Depth
Rectangle   Length x Width x Avg Depth x 7.48 = Gallons
Circle $3.14 \times \text{Radius}^2 \times$ Avg Depth x 7.48 = Gallons

TURNOVER/FLOW

Turnover Rate   Pool Volume/ (flow rate x 60) = Hours
Flow Rate   Pool Volume/ (turnover x 60) = Gallons/min.

FILTER SURFACE AREA

Flow Rate/Filtering Rate = Square Feet

HEATER SIZING

Pool Volume x 8.33 x Temperature Adjustment = BTU

BATHER LOAD

Shallow Area/15 + Deep Area/30 = Bather Load Limit (number of persons)

The mission of the Clay County Public Health Center is to deliver the essential public health services of prevention, promotion and protection to the communities of Clay County.

Revised: 3/15