

Useful Formulas and Equations

Area of a Rectangle = Length × Width

$$\text{Area of a Triangle} = \frac{\text{Length} \times \text{Width}}{2}$$

$$\text{Area of a Circle} = \frac{\text{Diameter}^2}{4} \times 3.14$$

$$\text{Area of a Half Circle} = \frac{\text{Diameter}^2}{8} \times 3.14$$

$$\text{Square Yards} = \frac{\text{Square Feet}}{9}$$

$$\text{Cubic Yards} = \frac{\text{Square Yards} \times \text{Thickness (inches)}}{36}$$

Total HMA Tons = Thickness (inches) × Square Yards × 0.056

Total Liquid AC / Emulsion = Application Rate × Square Yards

$$\text{Liquid AC / Emulsion Application Rate} = \frac{\text{Starting Gallons} - \text{Finished Gallons}}{\text{Square Yards}}$$

$$\text{Equivalent Annual Cost} = \frac{\text{Price per Square Yard}}{\text{Expected Life Extension (years)}}$$