

Leila [redacted] 5th May 11, 2023

1. If we need to cover the entire area in 2 inches of mulch (with an extra 1" needed at the rain garden area), how much mulch do we need in cubic feet? In cubic yards?

12 in = 1 ft ; 3 ft = 1 yd ; 36 in = 1 yd ; Use $27 \text{ ft}^3 = 1 \text{ yd}^3$

The area of the garden is... 564 ft^2
 $11'-6'' \times 26'-8'' \approx 12' \times 27' = 324 \text{ ft}^2 + 240'$
 $11'-9'' \times 20'-0'' \approx 12' \times 20' = 240 \text{ ft}^2 = 564 \text{ ft}^2$
 the volume of mulch is... $564 \text{ ft}^2 \times \frac{1}{6} \text{ ft} = 94 \text{ ft}^3 + 15 \text{ ft}^3 = 109 \text{ ft}^3$
 $109 \text{ ft}^3 \div 27 \frac{\text{ft}^3}{\text{yd}^3} = 4 \text{ yd}^3$
 + the extra inch for the rain garden.

2. If 1 cubic yard of mulch costs \$85.00, how much will it cost us to buy the mulch we need?

$\begin{array}{r} \$85.00 \\ \times \quad 4 \\ \hline \$340.00 \end{array}$

