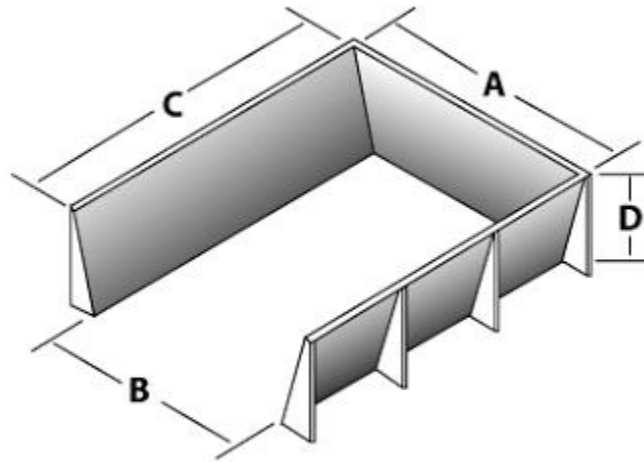


## Calculating Grain Bunker Volume and Capacity

Following is an illustration that can assist you in determining how many bushels of grain will fit in a grain bunker or planned flat storage grain area. Note: All volume is in cubic feet. All capacities are in bushels.

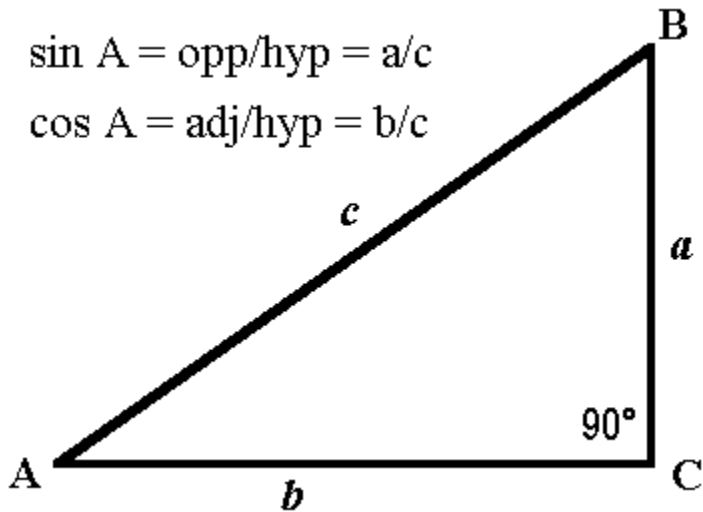
$$\text{Bunker volume} = \frac{(A + B)}{2} \times C \times D$$



$$\text{Capacity} = \frac{\text{Volume} \times .8}{3}$$

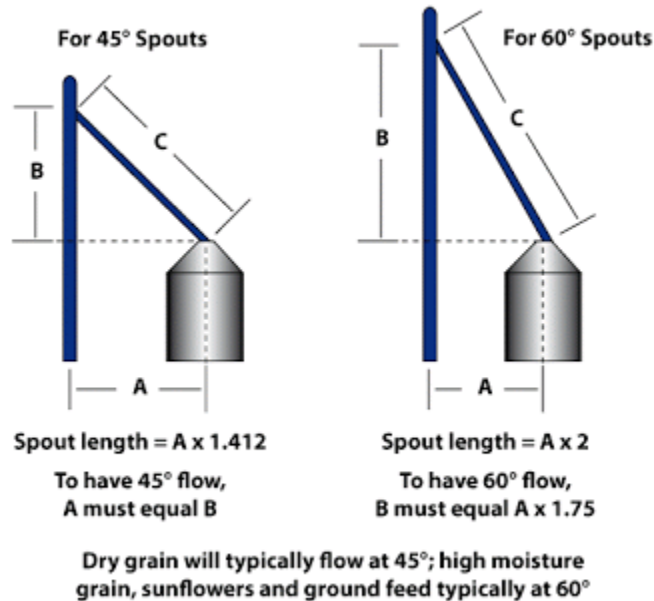
$$\sin A = \text{opp/hyp} = a/c$$

$$\cos A = \text{adj/hyp} = b/c$$



## Calculating Bucket Elevator Spout Length

Dry grain typically flows in a spout at an angle of 45° or more. High moisture grain, sunflowers and ground feed generally require spouts at a minimum angle of 60°. To calculate spout length, the following calculations apply:



## Bushels Per Hour to Tons Per Hour Formula

This is the formula you use to convert bushels per hour to tons per hour:

BPH x 1.25 = Cubic Feet Per Hour

Cubic Feet Per Hour x Pounds Per Cubic Feet = Pounds Per Hour

Pounds Per Hour / 2000 = Tons Per Hour

Common Assumed Per Cu Ft Weights:

Corn = 45 lbs per cubic ft

Feed = 35 lbs per cubic ft

Wheat = 48 lbs per cubic ft

Pellets = 55 to 60 lbs per cubic ft

(I highly recommend you VERIFY the weight of the material you will be conveying)