

CALCULATING COATING REQUIREMENTS

Every coating company, applicator, contractor and salesman has their own way of determining the number of gallons required to achieve a given TDM (Total Dry Mil) specification. The following formula will aid in minimizing the potential of coating shortages.

The Constant:

One gallon applied over 100 square feet will equal 16 wet mils. (.016 of an inch)

Percentage of SBV (Solids by Volume):

Percent of solids that remain of the liquid after the solvents / carriers have flashed off and or evaporated.

Loss Factor:

The loss factor is that portion of the liquid mass that has been consumed by wind, surface texture, overlap, clean up and waste.

EXAMPLE

Specified dry mil thickness for this job is 30 TDM (Total Dry Mills). The specified coating is 62% SBV (Solids By Volume).

$$\frac{\text{Total Dry Mills required}}{\text{Solids by Volume} \times \text{Constant}} = \text{Gallons required per 100 square feet}$$

$$\frac{30}{62\% \times 16} =$$

$$\frac{30}{.62 \times 16} =$$

$$\frac{30}{9.92} = 3.024 \text{ GPS (Gallons Per Square)}$$

This is the theoretical amount needed to cover 1 square and end up with 30 TDM (Total Dry Mills)

LOSS FACTOR

The loss factor we are using is 15%. Multiplying by 115% eliminates the need for additional computation.

$$3.024 \times 115\% = 3.48 \text{ GPS for the specified Minimum 30 TDM (Total Dry Mills).}$$