RULES OF THUMB FOR PAINTING AND ESTIMATING

"Rules of Thumb" are general guidelines and are often used for the purposes of estimating. These do not always give "exact" numbers but are intended to provide a good working number.

Definitions: **R** – Radius; **D** – Diameter; **LF** – Lineal Feet, **SF** Square Feet;
W – Width; **H** - Height

Estimating Square Footage:

To get Square footage on

Caged Ladder	Mutiply **LF** by	10
Handrails	Mutiply **LF** by	4
Grating	Mutiply **LF** by	4
Stairs with 1 Hand Rail	Mutiply **LF** by	10
Stairs with 2 Hand Rails	Mutiply **LF** by	15
Walkway with 1 Hand rail	Mutiply **LF** by	15
Walkway with 2 Hand Rails	Mutiply **LF** by	20
Solid Floor Plate	Mutiply **LF** by	15
Cylinder	Mutiply **LF** by	**D** x 3.142
Sphere	Mutiply	**D** x **D** x 3.142
Circle	Mitiply	**R** x **R** x 3.142
PIPING		
1/2 " to 3"	Mutiply **LF** by	1.00
4	Mutiply **LF** by	1.19
6	Mutiply **LF** by	1.74
8	Mutiply **LF** by	2.26
10	Mutiply **LF** by	2.81
12	Mutiply **LF** by	3.34
14	Mutiply **LF** by	3.665
16	Mutiply **LF** by	4,19
18	Mutiply **LF** by	4.71
20	Mutiply **LF** by	5.24
24	Mutiply **LF** by	6.28
28	Mutiply **LF** by	7.33
30	Mutiply **LF** by	7.85
34	Mutiply **LF** by	8.90
36	Mutiply **LF** by	9.425
42	Mutiply **LF** by	10.10
Other Shapes		
Joists (Treat as solid surface)	Mutiply **LF** by	2 x **H**
Stacks	Mitiply **H**	Average **D** *3
Corrugated Metal 2 ½"	Mutiply **LF** by	1.08 x **H**
Corrugated Metal 1 ¼"	Mutiply **LF** by	1.11 x **H**

Estimated Losses: Brush or Roller: 10%; Airless Spray: 20%; Conventional Spray: 30%

PAINT CLACULATIONS

Theoretical Coverage
1 mil of 100% Solids Coating covers 1604 ft^2/WFT

Practical Coverage
Theoretical Coverage x % Loss

Dry Film Thickness = DFT in mils
Wet Film Thickness = WFT in mils
All % are by volume and expressed as a decimal
i.e. 60% = .60

DFT = WFT x (% Solids)

$$DFT = WFT\left(\frac{\%\,Solids}{(1+\%Thinner)}\right)$$

$$WFT = \frac{DFT}{\%Solids}$$

$$WFT = \frac{DFT}{\left(\frac{\%Solids}{100\% + \%Thinner}\right)}$$

SURFACE CONTAMINATION CLACULATIONS

If you are measuring the salts using a conductivity meter

ppm = µS * 0.7 (This is the most common value however I have seen numbers from 0.67 tp 0.85)

$\mu g/cm^2$ = ppm x ml water / Area Measured