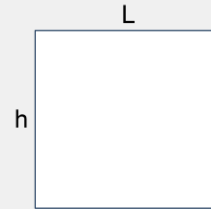


HANDY CALCULATIONS - VOLUME SOLIDS AND SPREADING RATE

WHAT'S THE AREA OF THAT SHAPE?

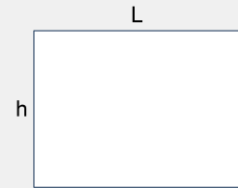
SQUARE

$$\begin{aligned} \text{Area} &= \text{Length (L)} \times \text{Width (h)} \\ &= L^2 \end{aligned}$$



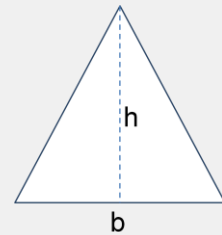
RECTANGLE

$$\text{Area} = \text{Length (L)} \times \text{Width (h)}$$



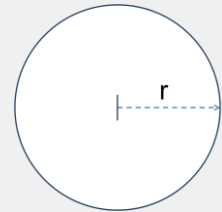
TRIANGLE

$$\text{Area} = 0.5 \times \text{base (b)} \times \text{Perpendicular Height (h)}$$



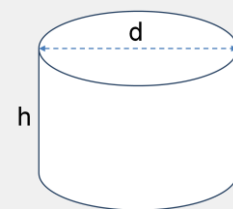
CIRCLE (TANK BASE OR ROOF)

$$\begin{aligned} \text{Area} &= \pi \times \text{Radius (r)} \times \text{Radius (r)} \\ &= \pi (r)^2 \end{aligned}$$



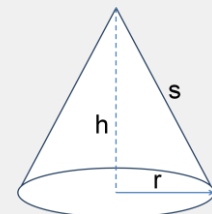
CYLINDER (TANK WALLS, PIPE, ETC)

$$\begin{aligned} \text{Area} &= \pi \times \text{Diameter (d)} \times \text{Height (h)} \\ &= \pi dh \end{aligned}$$



CONE (HOPPER WALLS, ETC)

$$\begin{aligned} \text{Base (Circle) Area} &= \pi (r)^2 \\ \text{Curved surface Area} &= \pi rs \\ \text{Total} &= \pi (r)^2 + \pi rs \end{aligned}$$



SPHERE

$$\text{Area} = 4\pi (r)^2$$

