Tray Width

Tray Height

Discussion:

To estimate coating a cable tray, it is necessary to factor in an allowance for both waste (over-spray and filling up pump lines) as well as an additional allowance for the irregular surface of the cable bundle surface. The example shown below is based upon coating the cables top and bottom. A factor of 1.5 has been applied to the tray area to compensate for the cables. While a nominal 20% waste factor for overspray and filling up pump lines is shown, this factor will vary according to the amount of spray being applied, operator skill, and accessibility of the cable tray. The following formula and example are based upon applying a uniform 1/16th inch thick dry coating thickness. A minimum of a 20% waste factor is suggested over and above the figure shown below.

Formula:

$$\text{Area to be coated} = \frac{(\text{cable tray width} + \text{cable tray height}) \times 2}{12} \times \text{length of tray}$$

Example:

24" tray with 4" side rails, total length 100' = 467 sq. ft.

Multiple this number by irregular surface factor of 1.5 = 467 x 1.5 = 700.5 sq. ft.

Spray coverage is 18.5 sq. ft. @ 1/16" dry film thickness. 700.5 ÷ 18.5 = 38 Gal.

Apply a 20% waste factor for overspray and pump lines. 38 x 1.2 = 45.6 Gal. required.