



1. Solid baffle

$$B = 0.75 D$$

$$\text{Baffle area} = 0.60 WH$$

2. Angular baffle

$$B = D + 6"$$

$$\text{Baffle area} = 0.60 WH$$

3. Split baffle or filters

$$B = D + 6"$$

$$\text{Baffle area} = 0.75 WH$$

Air spray design data

Any combination of branch ducts and baffles may be used.

$$W = \text{work size} + 12"$$

$$H = \text{work size} + 12"$$

$$C = 0.75 W \text{ or } H, \text{ whichever is larger}$$

$$Q = 200 \text{ cfm/ft}^2 (200 WH) - \text{for face area up to } 4 \text{ ft}^2$$

$$= 150 \text{ cfm/ft}^2 - \text{for face area over } 4 \text{ ft}^2$$

$$h_e = 1.78 VP_s + 0.25 VP_d (\text{baffles})$$

$$= \text{dirty filter resistance} + 0.25 VP_d (\text{filters})$$

$$\text{Duct velocity} = 2000 \text{ fpm}$$

Airless spray paint design data

$$Q = 125 \text{ cfm/ft}^2 (125 WH) - \text{for face area up to } 4 \text{ ft}^2$$

$$= 100 \text{ cfm/ft}^2 - \text{for face area over } 4 \text{ ft}^2$$

Notes:

1. Baffle arrangements shown are for air distribution only.
2. Paint arresting filters usually selected for 100 - 500 fpm, consult manufacturer for specific details.
3. For construction and safety, consult NFPA (Reference 10.75.1).



TITLE

SMALL PAINT BOOTH

FIGURE

VS-75-02

DATE

1-91