

Conversion of Lab Results

Results for lead samples collected in areas measured in inches must be converted to be compared to clearance and hazard standards.

To compare dust results to the standard, the result must be in micrograms per square foot. You will often have measurements in inches that must be converted. Multiply the length and width to get the square inches of the sample area. Put the lab result over the square inches and multiply by the **conversion factor**.

A dust sample is collected from a window trough in an area measuring 3 inches by 24 inches. The lab returns results on the sample of 205 µg.

$$\frac{205 \mu\text{g}}{72 \text{ in}^2} \times \frac{144 \text{ in}^2}{\text{ft}^2} = \frac{205 \mu\text{g}}{72 \cancel{\text{in}^2}} \times \frac{144 \cancel{\text{in}^2}}{\text{ft}^2} = \frac{410 \mu\text{g}}{\text{ft}^2}$$

A dust sample is collected from a window sill using a template measuring 2 inches by 18 inches. The lab returns results on the sample of 63 µg.

$$\frac{63 \mu\text{g}}{36 \text{ in}^2} \times \frac{144 \text{ in}^2}{\text{ft}^2} = \frac{63 \mu\text{g}}{36 \cancel{\text{in}^2}} \times \frac{144 \cancel{\text{in}^2}}{\text{ft}^2} = \frac{252 \mu\text{g}}{\text{ft}^2}$$

Formula:

$$\frac{\text{Lab result } (\mu\text{g})}{\text{Length(in) X width (in)}} \times \frac{144 \text{ in}^2}{\text{ft}^2} = \text{Converted Result } (\mu\text{g/ ft}^2)$$