



Standard Practice for Preparation of Paint Brushes for Evaluation¹

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1. Scope

1.1 This practice describes the preparation of paint brushes for evaluation.

1.2 This practice is applicable to paint brushes 2 to 4 in. (50 to 100 mm) in width.

1.3 *This standard does not purport to address the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*

D 3924 Specification for Standard Environment for Conditioning and Testing Paint, Varnish, Lacquer, and Related Materials²

3. Summary of Practice

3.1 Using a paint chosen for the evaluation, the brush to be tested is repeatedly loaded with this paint and brushed out over a specified area in a specified application time.

4. Significance and Use

4.1 Until a paint brush is fully wetted with paint, only part of the paint loaded onto the brush can be transferred to the surface being painted. By properly preparing the brush before using, the amount of paint delivered to the surface can be made more uniform and reflect real use.

5. Apparatus

5.1 *Container*, to hold paint, for example, a quart can.

5.2 *Test Brush*, 2 to 4 in. (50 to 100 mm) in width.

6. Materials

6.1 *Test Paint*.

6.2 *Brush-Out Panels*, or other typical panels to be used.³

6.3 *Masking Tape*, to secure the panel to a flat surface.

7. Procedure

7.1 All tests are to be conducted in an atmosphere having a temperature of $73.5 \pm 3.5^{\circ}\text{F}$ ($23 \pm 2^{\circ}\text{C}$) and a relative humidity of $50 \pm 5\%$ (see Specification D 3924).

7.2 Secure the brush-out panel with masking tape to a flat, smooth, horizontal surface.

7.3 Dip the test brush into the specified paint to the depth shown below:

Brush Width, in. (mm)	Depth, in. (mm)
2 and 2½ (50 and 62.5)	1½ (38)
3 and 3½ (75 and 87.5)	1¾ (45)
4 (100)	2 (50)

7.4 Hold the brush at the specified depth in the paint for 10 s. Remove and hold the brush vertically for 30 s allowing any excess paint to drain.

7.5 After the drain period, immediately apply paint to the specified initial area on the brush-out panel as indicated below:

Brush Width, in. (mm)	Initial Area, cm ²
2 and 2½ (50 and 62.5)	250
3 to 4 (75 to 100)	500

7.6 Application time shall be 15 s for 2 and 2½-in. (50 and 62.5-mm) brushes and 20 s for 3 to 4-in. (75 to 100-mm) brushes.

7.7 Repeat this procedure three times.

7.8 Maintain the level of paint in the container. Keep the angle of the handle and displacement of the filaments of the test brush uniform throughout the entire series. When applying paint, always displace the test brush filament about one third to one half of the filament length and maintain the handle perpendicular to the paint-out surface.

7.9 When applying paint, always start in the middle of the area to be painted with each loading. This leaves the excess paint in the middle where it is easiest to spread to the area

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² *Annual Book of ASTM Standards*, Vol 06.01.

³ Any smooth type panel, for example, upson boards, can be used.

being covered and will result in a more uniform coverage (see Fig. 1).

8. Keywords

8.1 brush preparation

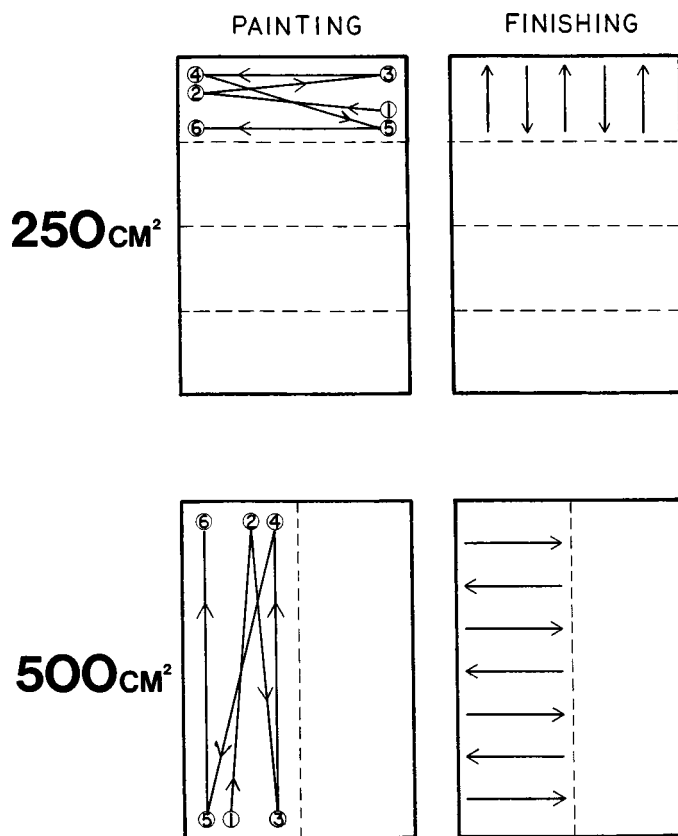


FIG. 1 Paint Application

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