

# STANDARD PDCA P10-04



## MEASUREMENT OF SURFACE AREA FOR ESTIMATING PAINTING AND DECORATING WORK

### 1. Scope

- 1.1. The purpose of this standard is to establish consistent procedures for estimating and bidding Painting and Decorating work.
- 1.2. It is also the intent of this standard to prevent misunderstandings and conflicts when Painting and Decorating work is bid on a unit cost basis by clearly defining methods used by the professional Painting and Decorating estimator for measuring surface area.

### 2. Significance and Use

- 2.1. Because there is a relationship between surface area and the amount of labor and materials required for Painting and Decorating work, methods used to measure surface area during the estimating process must be consistent to be meaningful. When consistent methods are used to measure surface area, then labor production rates and material spread rates may be accurately determined from past Painting and Decorating work and used as a basis for estimating labor and material requirements for bidding future painting work.
- 2.2. Consistent methods in measuring surface area of work to be painted, as defined by this standard, should be used to determine quantities of Painting and Decorating work bid on unit cost basis.

### 3. Reference Documents and Standards

- 3.1. PDCA, Estimating Guide, Volume 1, Practices and Procedures
- 3.2. PDCA, Estimating Guide, Volume 2, Rates and Tables, 2001.
- 3.3. PDCA, Standard P9-04- Definition of Trade Terms.
- 3.4. PDCA, Painting and Decorating Craftsman's Manual and Textbook, 1995, 8<sup>th</sup> edition.
- 3.5. MPI, The Master Painters Glossary- Painting and Decorating Terminology, 1997.
- 3.6. Methods of Measurement of Construction Works. Canadian Institute of Quantity Surveyors, 7<sup>th</sup> edition, 2000.
- 3.7. Webster's New World Collegiate Dictionary, 4<sup>th</sup> Edition, 2002.
- 3.8. If there is a conflict between any of the references and this standard, the requirements of this standard shall prevail.

### 4. Definitions

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- 4.1. ACCESSIBILITY:** The relative ease or difficulty required to reach an item to be painted. [PDCA, P9-04]
- 4.2. ADJACENT:** An item that is touching or in close proximity. [PDCA, P9-04]
- 4.3. CLOSELY-FABRICATED:** Characteristic of an item consisting of interwoven components, such as chain-link fencing. [PDCA, P9-04]
- 4.4. CONTRACTING ENTITY:** The general contractor, owner of the property, construction manager, developer or other entity legally responsible for the agreement or authorized agent of any of the above. [PDCA, P9-04]
- 4.5. PAINTING AND DECORATING CONTRACTOR:** The individual or company contracted to apply paints, coatings, wallcoverings and other decorative finishes. [PDCA, P9-04]
- 4.6. SURFACE:** 1) The substrate to which paints, coatings, or wallcoverings are applied. 2) The finish obtained after the coating work has been completed. [Craftsman's]
- 4.7. SURFACE AREA:** The measurement of the area of surface to be finished determined in accordance with the methods, procedures and standards as defined by PDCA's, Estimating Guide "Professional Estimating Procedures for Painting Contractors". [PDCA, P9-04]
- 5. Standard Specification**
- 5.1.** No object is considered less than one linear foot wide and shall be measured as one square foot per linear foot.
- 5.2.** Pipes, rods, structural steel, lumber and other items to be finished whose circumference or perimeter is less than one foot is measured as one foot, otherwise the actual measurement is used.
- 5.3.** Items having similar surface, finishes, application methods and accessibility may be grouped together and an appropriate production rate may be applied to the entire group.
- 5.4.** When items that do not have all grouping factors in common are adjacent, they should be listed separately on the quantity take-off and measured at no less than one square foot per linear foot.
- 5.5.** When items having equivalent surface, finishes, application method and accessibility change direction at sharp angles and continue for a significant distance in the new direction, then measurement of the object increases by the length of the new direction, but usually not less than ½ of a square foot per linear foot.
- 5.6.** When measuring non-uniformly shaped and curved items, the added length of the surface due to its curvature, change of direction or non-uniformity must be measured.
- 5.7.** Closely fabricated items, such as chain-link fence, open web joists and grating, should be measured as being solid. If both sides of a closely fabricated item

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are finished, double the surface area. When a closely fabricated item is attached to framework, measure the framework separately as described in 5.2.

- 5.8.** When a small opening interrupts a continuous surface, the opening is disregarded and considered part of the continuous surface. Any openings extending from floor to ceiling and exceeding five feet in width shall be deducted. All openings 100 square feet or larger are deducted.
- 5.9.** Cabinets, tubs, showers and other items that restrict movement or access shall not be deducted from the measurement of total surface area.

### 6. Comments

- 6.1.** PDCA's "Estimating Guide" Volumes 1 and 2 contain supplemental information regarding the correct use of these standards. This information includes appropriate applications and examples.
- 6.2.** PDCA has published estimating guidelines for the Painting and Decorating industry since the late 1930's. The standards stated in Section 5 represent uniform estimating practices used by PDCA members for many decades.
- 6.3.** When requesting proposals for Painting and Decorating on a unit-cost basis, requests should include sufficient descriptive information (*e.g.*, surface, finishes, application methods and accessibility) to price such work. Items that vary in surface, finishes, application

method, accessibility and/or production rate should be priced separately.

- 6.4.** Estimating Painting and Decorating cost involves specific measurement of color placement since it affects Painting and Decorating costs. Refer to PDCA, Standard P3-04, Designation of Paint Colors for pertinent information.
- 6.5.** This standard clarifies areas of responsibility. Improved communication reduces misunderstandings.
- 6.6.** This standard is a nationally recognized consensus document for the Painting and Decorating industry's work practices.

### 7. Disclaimer of Liability

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