



Standard Test Method for pH of Chemically Cleaned or Etched Concrete Surfaces¹

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1. Scope

1.1 This test method covers the procedure for determining the acidity or alkalinity of concrete surfaces prepared by chemical cleaning or etching prior to coatings.

1.2 *This standard does not purport to address all of 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. Terminology

2.1 Definitions:

2.1.1 *pH*—a measure of the hydrogen ion concentration and indicates whether a solution is acidic, alkaline, or neutral.

3. Significance and Use

3.1 Chemical cleaning or etching is used to prepare concrete for coating.

3.2 Residual chemicals not removed by water rinsing may adversely affect the performance and adhesion of coatings applied over prepared concrete surfaces. It is the intent of this test method to determine that residual chemicals have been removed by measuring the acidity or alkalinity of the final rinsed surface.

4. Apparatus

4.1 *pH Test Paper*, with a minimum range from 1 to 11 pH

units with a capability of measuring in increments of 0.5 pH units.

5. Materials

5.1 *Potable Water*, for rinsing chemically cleaned or etched concrete surfaces.

5.2 *Wet Concrete Surface*, following the final water rinse and before the rinse water has completely drained off the surface.

6. Procedure

6.1 Tear off a strip of test paper, wet with test water and after the color develops, compare with color chart to determine pH.

6.2 The pH of the water used for rinsing shall be determined to establish acceptance criteria. Readings shall be taken at the beginning and end of the final rinse cycle.

6.3 At least two surface pH readings shall be taken for each 500 square feet or portion thereof. Readings shall be taken at randomly selected locations immediately following the final rinse and before all the rinse water has drained off the surface.

6.4 Unless otherwise specified, tests shall be conducted in accordance with this procedure.

7. Acceptance Criteria

7.1 The pH readings following the final rinse shall not be more than 1.0 pH lower or 2.0 points higher than the pH of the rinse water (see 6.2) unless otherwise specified.

8. Keywords

8.1 etched concrete surface; pH

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