



Designation: ~~D4258 – 05 (Reapproved 2012)~~ D4258 – 05 (Reapproved 2017)

Standard Practice for Surface Cleaning Concrete for Coating¹

This standard is issued under the fixed designation D4258; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice includes surface cleaning of concrete to remove grease, dirt, and loose material prior to the application of coatings. Procedures include broom cleaning, vacuum cleaning, air blast cleaning, water cleaning, detergent water cleaning, and steam cleaning.

1.2 This practice is not intended to alter the surface profile of the concrete but to clean the surface.

1.3 The values stated in inch-pound units are to be regarded as standard. No other units of measurement are included in this standard.

1.4 *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~~ safety, health, and ~~health~~ environmental practices and determine the applicability of regulatory limitations prior to use.* For specific hazard statements, see Section 5.

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

D4259 Practice for Abrading Concrete

D4260 Practice for Liquid and Gelled Acid Etching of Concrete

D4262 Test Method for pH of Chemically Cleaned or Etched Concrete Surfaces

D4263 Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method

D4285 Test Method for Indicating Oil or Water in Compressed Air

2.2 *Other Standard:*

ACI-308 Guide to Curing Concrete³

3. Summary of Practice

3.1 Surface cleaning is intended to provide a clean, contamination-free surface without removing concrete from intact, sound surfaces.

3.2 Acceptable surfaces shall be free of oil, grease, loosely adhering concrete, and other contamination. Fins and projections shall be corrected prior to surface cleaning.

3.3 Air, water cleaning, scrubbing, sweeping, or vacuuming are acceptable cleaning methods. Cleaning agents may also be used to remove oil and grease spots followed by a fresh water rinse.

3.4 Any one or a combination of the listed cleaning procedures may be used to achieve acceptably cleaned surfaces.

4. Significance and Use

4.1 Surface cleaning is used to prepare concrete surfaces for applying coatings intended for light-duty service.

¹ This practice is under the jurisdiction of ASTM Committee D33 on Protective Coating and Lining Work for Power Generation Facilities and is the direct responsibility of Subcommittee D33.05 on Application and Surface Preparation.

Current edition approved May 1, 2017. Published May 2017. Originally approved in 1983. Last previous edition approved in 2005 as ~~D4258 – 05 (2012)~~ D4258 – 05 (2012). DOI: ~~10.1520/D4258-05R12~~ 10.1520/D4258-05R17.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the ~~standard's~~ standard's Document Summary page on the ASTM website.

³ Available from American Concrete Institute (ACI), P.O. Box 9094, Farmington Hills, MI 48333-9094, <http://www.concrete.org>.