



Standard Practices for Determining Moisture-Related Acceptability of Concrete Floors to Receive Moisture-Sensitive Finishes¹

This standard is issued under the fixed designation E 1907; 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 These practices include both quantitative and qualitative procedures used to determine the amount of water or water vapor present in or emitting from concrete slabs and criteria for evaluating the moisture-related acceptability of concrete slabs to receive moisture-sensitive manufactured finish products, including certain types of resilient flooring (see Terminology F 141), carpet tiles, carpet, and wood flooring, as well as related adhesives.

1.2 Although coatings, films, and paints are not specifically intended to be included in the category of “moisture sensitive finishes” the procedures included in these practices may be useful for evaluating the moisture-related acceptability of concrete slabs for such finishes.

1.3 These practices do not cover the adequacy of a concrete floor to perform its structural requirements.

1.4 These practices do not include procedures to determine the presence of non-moisture related impediments to the application of finishes.

1.5 These practices do not supersede the specific instructions or recommendations of manufacturers for their flooring finishes.

1.6 *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. Referenced Documents

2.1 ASTM Standards:

C 33 Specification for Concrete Aggregates²

C 125 Terminology Relating to Concrete and Concrete Aggregates²

C 168 Terminology Relating to Thermal Insulating Materials³

C 330 Specification for Lightweight Aggregate for Structural Concrete²

C 332 Specification for Lightweight Aggregate for Insulating Concrete²

D 2216 Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock⁴

D 4259 Practice for Abrading Concrete⁵

D 4263 Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method⁵

D 4397 Specification for Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications⁶

E 631 Terminology of Building Constructions⁷

E 1643 Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs⁷

E 1745 Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs⁷

F 141 Terminology Relating to Resilient Floor Coverings⁸

2.2 Other Sources:

BS 5325:1983 British Standard Code of Practice for Installation of Textile Floor Coverings⁹

BS 8203:1987 British Standard Code of Practice for Installation of Sheet and Tile Flooring⁹

CRI 104-1994, Standard for Installation of Commercial Textile Floorcovering Materials¹⁰

Addressing Moisture Related Problems Relevant to Resilient Floor Coverings Installed Over Concrete¹¹

Moisture Guidelines for the Floor Covering Industry¹²

3. Terminology

3.1 Definitions:

3.1.1 For terms used in these procedures, see Terminologies C 168, E 631 and F 141.

¹ These practices are under the jurisdiction of ASTM Committee F06 on Resilient Floor Coverings and are the direct responsibility of Subcommittee F06.40 on Practices.

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² Annual Book of ASTM Standards, Vol 04.02.

³ Annual Book of ASTM Standards, Vol 04.06.

⁴ Annual Book of ASTM Standards, Vol 04.08.

⁵ Annual Book of ASTM Standards, Vol 06.02.

⁶ Annual Book of ASTM Standards, Vol 08.03.

⁷ Annual Book of ASTM Standards, Vol 04.11

⁸ Annual Book of ASTM Standards, Vol 15.04.

⁹ British Standards Institution, 389 Chiswick High Road, London W4 4AL.

¹⁰ The Carpet and Rug Institute, P.O. Box 2048, Dalton, GA 30722-2048, 706/278-3176, 1994.

¹¹ Resilient Floor Covering Institute, 966 Hungerford Drive, Suite 12-B, Rockville, MD 20850 (301) 340-8580, November 1995.

¹² World Floor Covering Association, 2211 E. Howell Avenue, Anaheim, CA 92806 (800) 624-6880 Fax (714) 978-6066, undated but received August 1995.