



Designation: C 1315 – 00

Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete¹

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1. Scope

1.1 This specification provides requirements for membrane-forming liquids suitable for use as curing compounds and sealers on freshly placed concrete and as sealers on hardened concrete. These membranes have special properties, such as, alkali resistance, acid resistance, adhesion-promoting qualities, and resistance to degradation by UV light.

1.2 The values stated in SI units are to be regarded as the standard. (Inch pound units are shown in parentheses).

1.3 The following precautionary caveat pertains only to the test methods portion, Section 8, of this specification. *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 156 Test Method for Water Retention by Concrete Curing Materials²
- D 56 Test Method for Flash Point by Tag Closed Tester³
- D 869 Test Method for Evaluating Degree of Settling of Paint⁴
- D 1308 Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes⁴
- D 1309 Test Method for Settling Properties of Traffic Paints During Accelerated Storage⁴
- D 1544 Test Method for Color of Transparent Liquids (Gardner Color Scale)⁵
- D 1734 Practice for Making Cementitious Panels for Testing Coatings⁴
- D 2369 Test Method for Volatile Content of Coatings⁵
- D 2371 Test Method for Pigment Content of Solvent Reducible Paints⁵

D 3723 Test Method for Pigment Content of Water-Emulsion Paints by Low-Temperature Ashing⁵

D 4541 Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers⁴

E 1347 Test Method for Color and Color-Difference Measurement by Tristimulus (Filter) Colorimetry⁵

G 53 Practice for Operating Light- and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials⁶

2.2 Other Standards:

ANSI A136.1–1992 Type I Organic Adhesives for Installation of Ceramic Tile⁷

RFCI Specification ADH-1 Type III, Class 3⁸

3. Classification

3.1 The following types of liquid membrane-forming compounds are included:

- 3.1.1 *Type I*—Clear or translucent, and
- 3.1.2 *Type II*—White pigmented.

3.2 The curing compound shall conform to one of the following classes:

3.2.1 *Class A* curing compounds conform to the requirements of 6.4.1, and are essentially non-yellowing,

3.2.2 *Class B* curing compounds conform to the requirements of 6.4.2, where moderate yellowing is not prohibited, and

3.2.3 *Class C* curing compounds are not restricted with regard to yellowing or darkening, and are for use where the color changes are acceptable.

NOTE 1—Polymer materials known to satisfy the durability requirements of this document include, but are not limited to, chlorinated rubbers, styrene-acrylate and styrene-butadiene copolymers. These polymers have demonstrated their durability by their ability to adhere to concrete and not be affected by the alkalis from cement.

NOTE 2—Pigmented colors other than white, or other special attributes, are beyond the scope of this specification and are subject to negotiation between the purchaser and the supplier.

4. Ordering Information

4.1 The purchaser shall include the following information in

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² *Annual Book of ASTM Standards*, Vol 04.02.

³ *Annual Book of ASTM Standards*, Vol 05.01.

⁴ *Annual Book of ASTM Standards*, Vol 06.02.

⁵ *Annual Book of ASTM Standards*, Vol 06.01.

⁶ *Annual Book of ASTM Standards*, Vol 14.02.

⁷ American National Standard Specifications for the Installation of Ceramic Tile, 1992, Tile Council of America, P.O. Box 1787, Clemson, SC 29633-1787.

⁸ Resilient Floor Covering Institute RFCI Specification ADH-1, Resilient Floor Covering Institute, 966 Hungerford Dr., Suite 12B, Rockville, MD 20850.