



Designation: D 6083 – 97a

Standard Specification for Liquid Applied Acrylic Coating Used in Roofing¹

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1. Scope

1.1 This specification covers a liquid-applied water-dispersed 100 % acrylic elastomeric latex coating used as a protective coating for roofs.

1.2 This specification does not provide guidance for application.

1.3 The values stated in inch-pound units are to be regarded as the standard. SI units used are in parentheses. The values given in parentheses are for information only.

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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

- C 794 Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants²
- D 16 Terminology Relating to Paint, Varnish, Lacquer, and Related Products²
- D 471 Test Method for Rubber Property-Effect of Liquids³
- D 522 Test Method for Mandrel Bend Test of Attached Organic Coatings⁴
- D 562 Test Method for Consistency of Paints Using the Stormer Viscometer⁴
- D 624 Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomer³
- D 903 Test Method for Peel or Stripping Strength of Adhesive Bonds⁵
- D 1079 Terminology Relating to Roofing, Waterproofing, and Bituminous Materials⁶
- D 1644 Test Method for Nonvolatile Content of Varnishes⁴

D 1653 Test Method for Water Vapor Transmission of Organic Coated Films⁴

D 2196 Test Methods for Rheological Properties of Non-Newtonian Materials by Rotational (Brookfield) Viscometer⁴

D 2370 Test Method for Tensile Properties of Organic Coatings⁴

D 2697 Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings⁴

D 4798 Test Method for Accelerated Weathering Test Conditions and Procedures for Bitumen Materials (Xenon-Arc Method)⁶

3. Terminology

3.1 For definitions of terms used in this specification, see Terminologies D 16 and D 1079.

4. Packaging and Materials

4.1 Shipping containers shall be marked with the name of the material, the stock number, lot number, ASTM designation number and year of issue, quantity therein, shelf-life date, and the name of the manufacturer or supplier.

5. Materials and Manufacture

5.1 *Composition*—The product, as manufactured, shall be in liquid form for application to the roof surface by brushing, squeegeeing, rolling, or spraying. The product shall be composed of a water-based 100 % acrylic elastomeric emulsion polymer, to which various pigments and other additives have been added to give the required physical properties.

6. Liquid and Physical Properties

6.1 Although the product is supplied as a liquid, its performance is based on the functional properties of the dried material in film form. The coating is formed into a film fully adhered to the substrate surface.

6.2 *Liquid Property Requirements*—The liquid coating shall comply with the property requirements in Table 1.

6.3 *Film Physical Property Requirements*—Specimen preparation (dry time) films are prepared by applying two coats, with a minimum of a 4 h drying period between coats, to a fluorinated ethylene-propylene (FEP) sheet substrate (see Test Method D 2370) to give a total dry film thickness of 20 ± 2 mils (0.50 ± 0.05 mm). The film is allowed to thoroughly dry

¹ This specification is under the jurisdiction of ASTM Committee D08 on Roofing, Waterproofing, and Bituminous Materials and is the direct responsibility of Subcommittee D08.18 on Nonbituminous Organic Roof Coverings.

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² *Annual Book of ASTM Standards*, Vol 04.07.

³ *Annual Book of ASTM Standards*, Vol 09.01.

⁴ *Annual Book of ASTM Standards*, Vol 06.01.

⁵ *Annual Book of ASTM Standards*, Vol 15.06.

⁶ *Annual Book of ASTM Standards*, Vol 04.04.