



Designation: D 3805 – 97

Standard Guide for Application of Aluminum-Pigmented Asphalt Roof Coatings¹

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1. Scope

1.1 This guide covers the application methods for Specification D 2824 Aluminum-Pigmented Asphalt Roof Coatings, Non-Fibered (Type I), Asbestos Fibered (Type II), and Fibered without Asbestos (Type III), for application on asphalt built-up roof membranes, modified bitumen roof membranes, bituminous base flashings, concrete surfaces, metal surfaces, emulsion coatings, and solvent-based coatings. This guide does not apply to the selection of a specific aluminum-pigmented asphalt roof coating type for use on specific projects.

1.2 The values stated in inch-pound units are to be regarded as the standard.

1.3 *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.* Specific precautionary statements are given in Section 4.

2. Referenced Documents

2.1 ASTM Standards:

D 1079 Terminology Relating to Roofing, Waterproofing, and Bituminous Materials²

D 2824 Specification for Aluminum-Pigmented Asphalt Roof Coatings, Non-Fibered, Asbestos Fibered, and Fibered Without Asbestos²

D 4263 Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method³

2.2 Other Documents:

Asphalt Roofing Manufacturers Association/Roof Coatings Manufacturers Association, Guidelines for Evaluating and Preparing Modified Bitumen Roofing for the Appli-

cation of Surface Coatings⁴

3. Significance and Use

3.1 Asphalt-based, solvent-type, fibered or nonfibered, aluminum-pigmented roof coatings are used as a protective coating for solar reflection to prolong the life of roofing materials or where decorative qualities are desired.

3.2 Suitable application of aluminum-pigmented asphalt roof coatings is an important factor in achieving a successful long-term coating. Suitable application is, in part, dependent upon appropriate specifications to guide the work. This guide can be useful in facilitating development of an appropriate specification for surface preparation and application of the roof coating.

3.3 Designers/specifiers of coatings may use this guide in preparing the application portion of their specification. Contractors working directly for the building owner, may also use this guide.

3.4 This guide is not all-inclusive. Manufacturer's application instructions should be consulted and geographical "area practices" considered. Consult membrane manufacturer and coating manufacturer for acceptability of procedures and products.

4. Storage

4.1 The container should be tightly sealed to prevent solvent evaporation and to keep out moisture. The coatings should not be stored at temperatures above 120°F (50°C).

NOTE 1—**Caution:** When re-sealing a container, exercise caution to avoid trapping or incorporating water into the container. Water can react with aluminum pigment producing hydrogen gas, a potential explosion hazard.

5. Equipment for Application of Coating

5.1 *Brush*—A three-knot or four-knot roofer's brush or other suitable brush.

5.2 *Roller*—A medium nap roller cover, suitable for use with asphalt-based, solvent-type coatings.

5.3 *Spray*—Equipment capable of spraying coating in a controlled manner to achieve desired application rate.

¹ This guide is under the jurisdiction of ASTM Committee D-8 on Roofing, Waterproofing, and Bituminous Materials and is the direct responsibility of Subcommittee D08.05 on Solvent-Bearing Bituminous Compounds for Roofing and Waterproofing.

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² *Annual Book of ASTM Standards*, Vol 04.04.

³ *Annual Book of ASTM Standards*, Vol 06.02.

⁴ Available from Roof Coatings Manufacturers Association (RCMA), Center Park, Suite 404, 4041 Powder Mill Road, Calverton, MD 20705.