



Designation: D3805/D3805M – 16 (Reapproved 2023)

Standard Guide for Application of Aluminum-Pigmented Asphalt Roof Coatings¹

This standard is issued under the fixed designation D3805/D3805M; 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 guide covers the application methods for Specification **D2824/D2824M** Aluminum-Pigmented Asphalt Roof Coatings, Nonfibered, and Fibered without Asbestos, 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. The fibered version of these coatings excludes the use of asbestos fibers.

1.2 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in nonconformance with 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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.* Specific precautionary statements are given in Section 4.

1.4 *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

D2824/D2824M Specification for Aluminum-Pigmented As-

phalt Roof Coatings, Nonfibered, and Fibered without Asbestos

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

2.2 Other Documents:

Asphalt Roofing Manufacturers Association/Roof Coatings Manufacturers Association Guidelines for Evaluating and Preparing Modified Bitumen Roofing for the Application of Surface Coatings³

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 50 °C [120 °F]. (**Warning—**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.)

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

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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 Document Summary page on the ASTM website.

³ Available from Roof Coatings Manufacturers Association (RCMA), Center Park, Suite 404, 4041 Powder Mill Road, Calverton, MD 20705.