



Designation: D6223/D6223M – 21

Standard Specification for Atactic Polypropylene (APP) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements¹

This standard is issued under the fixed designation D6223/D6223M; 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 specification covers prefabricated modified bituminous sheet materials reinforced with a combination of polyester fabric and glass fiber, with or without granules, that use atactic polypropylene (APP) as the primary modifier and are intended for use in the fabrication of multiple ply roofing and waterproofing membranes.

1.2 This specification is intended as a material specification only. Issues regarding the suitability of specific roof constructions or application techniques are beyond the scope of this specification.

1.3 The specified tests and property limits used to characterize the sheet materials covered by this specification are intended to establish minimum properties. In-place roof system design criteria such as fire resistance, field strength, impact/puncture resistance, material compatibility, uplift resistance, the need for field applied coatings, and others, are factors beyond the scope of this material specification.

1.4 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.

1.5 *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.*

1.6 *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 Recom-*

mendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 *ASTM Standards:*²

D1079 Terminology Relating to Roofing and Waterproofing
D5147/D5147M Test Methods for Sampling and Testing
Modified Bituminous Sheet Material

D5636/D5636M Test Method for Low Temperature Unrolling of Felt or Sheet Roofing and Waterproofing Materials

3. Terminology

3.1 *Definitions:*

3.1.1 For definitions of terms used in this specification, refer to Terminology **D1079**.

4. Classification

4.1 Type I and II modified bituminous sheet materials reinforced with a combination of polyester fabric and glass fiber reinforcements are covered by this specification (see **Table 1**).

4.2 The following grades are used to describe the material surfacing:

4.2.1 *Grade G*—Granule surfacing.

4.2.2 *Grade S*—Smooth surfacing.

5. Material and Manufacture

5.1 In the process of manufacture, the reinforcement is saturated with APP-modified asphalt and is impregnated and coated on both sides with an APP-modified bituminous coating. The APP-modified bituminous coating shall be permitted to be compounded with a mineral stabilizer.

5.2 *Grade G* materials are surfaced on the weather side with mineral granules, except for any selvage. To prevent sticking in the roll, the reverse side and any selvage shall be permitted to

¹ This specification is under the jurisdiction of ASTM Committee **D08** on Roofing and Waterproofing and is the direct responsibility of Subcommittee **D08.04** on Felts, Fabrics and Bituminous Sheet Materials.

Current edition approved Dec. 1, 2021. Published December 2021. Originally approved in 1998. Last previous edition approved in 2016 as D6223/D6223M – 16. DOI: 10.1520/D6223_D6223M-21.

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.