

**Designation: D6222/D6222M - 11** 

# StandardSpecification for Atactic Polypropylene (APP) Modified Bituminous Sheet Materials Using Polyester Reinforcements<sup>1</sup>

This standard is issued under the fixed designation D6222/D6222M; 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 ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This specification covers prefabricated modified bituminous sheet materials reinforced with polyester fabric, 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.

Note 1—Many modified bituminous sheets are currently marketed with polyester mat reinforced with glass yarns to improve processing in the manufacture of the finished modified bitumen product and to reduce distortions that may be introduced during production. These glass yarns are typically a small percentage of the reinforcement and do not contribute to the physical properties of the finished product so much as to make these products be classified by Specification D6223.

- 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 non-conformance with the standard.
- 1.5 The following precautionary statement pertains only to the test method portion, Section 9, 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:<sup>2</sup>

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

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

D6223 Specification for Atactic Polypropylene (APP) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements

# 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 polyester fabric, 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. Materials 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

<sup>&</sup>lt;sup>1</sup> 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 Jan. 1, 2011. Published January 2011. Originally approved in 1998. Last previous edition approved in 2008 as D6222-08. DOI:  $10.1520/D6222\_D6222M-11$ .

<sup>&</sup>lt;sup>2</sup> 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.