



Standard Specification for Asphalt Based Protection Board for Below-Grade Waterproofing¹

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1. Scope

1.1 This specification covers an asphalt based protection board used for protecting the integrity of below grade or below wearing surface waterproofing. The protection board protects the waterproofing system from backfill, surfacing, construction activities, and weathering conditions prior to backfilling or applying surfacing.

1.2 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

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.*

2. Referenced Documents

2.1 ASTM Standards:

D 545 Test Methods for Preformed Expansion Joint Fillers for Concrete Construction (Nonextruding and Resilient Types)²

D 994 Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type)²

D 5147 Test Methods for Sampling and Testing Modified Bituminous Sheet Material³

E 154 Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover⁴

3. Classification

3.1 *Two Classes of Product are Covered in This Specification:*

3.1.1 *Class A*, is made with asphalt saturated organic felt on the bottom and a coated or saturated non-woven glass felt on top.

3.1.2 *Class B*, is made with glass fabrics both top and bottom.

3.1.3 *Classes A and B*, each include three thicknesses of board. If desired, one side of each of these classes may be covered with a thin plastic antistick sheet.

4. Materials and Manufacture

4.1 The protection board shall be comprised of layers of asphalt and reinforcing mat. One surface of the board will be uniformly coated with a bituminous material for limited weather protection.

4.2 The length and width measurements shall be as specified by the manufacturer. The tolerances of these dimensions (length and width) shall be ± 6 mm ($1/4$ in.)

4.3 The surfaces of the protection board shall be uniform and free from defects such as cracks and indentations. The edges shall be uniform.

5. Sampling

5.1 Each sample shall consist of sufficient material to provide at least five specimens for the tests listed in Section 7. One representative sample shall be selected for each shipment of 10 000 ft² or fraction thereof.

6. Physical Requirements

6.1 Nominal thicknesses of protection board are as follows:

6.1.1 *Type 1*, board is $1/16$ in.

6.1.2 *Type 2*, board is $1/8$ in.

6.1.3 *Type 3*, board is $1/4$ in.

6.2 *Class A* protection board shall conform to the requirements in Table 1.

6.3 *Class B* protection board shall conform to the requirements in Table 2.

7. Test Methods

7.1 *Thickness*—Determine the thickness of the specimen using vernier calipers in accordance with Test Methods D 5147, Section 5.

7.2 *Puncture Strength*—Determine in accordance with Test Methods E 154, Section 10.

7.3 *Water Absorption*—Determine in accordance with Specification D 994, 8.3.

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² *Annual Book of ASTM Standards*, Vol 04.03.

³ *Annual Book of ASTM Standards*, Vol 04.04.

⁴ *Annual Book of ASTM Standards*, Vol 04.11.

TABLE 1 Class A Protection Board Requirements

	Type 1	Type 2	Type 3
Puncture Strength	222 N (50 lbf) minimum	312 N (70 lbf) minimum	365 N (82 lbf) minimum
Thickness	1.3 to 1.8 mm (0.050 to 0.070 in.)	2.4 to 3.9 mm (0.095 to 0.155 in.)	5.6 to 7.1 mm (0.220 to 0.280 in.)
Water Absorption	10.0 % maximum	10.0 % maximum	10.0 % maximum
Asphalt, % by weight	65 % minimum	65 % minimum	65 % minimum
Resistance to Decay	Meets puncture requirements after completion of test	Meets puncture requirements after completion of test	Meets puncture requirements after completion of test

TABLE 2 Class B Protection Board Requirements

	Type 1	Type 2	Type 3
Puncture Strength	222 N (50 lbf) minimum	312 N (70 lbf) minimum	365 N (82 lbf) minimum
Thickness	1.3 to 1.8 mm (0.050 to 0.070 in.)	2.4 to 3.9 mm (0.095 to 0.155 in.)	5.6 to 7.1 mm (0.220 to 0.280 in.)
Water Absorption	10.0 % maximum	10.0 % maximum	10.0 % maximum
Asphalt, % by weight	40 % minimum	40 % minimum	40 % minimum
Resistance to Decay	Meets puncture requirements after completion of test	Meets puncture requirements after completion of test	Meets puncture requirements after completion of test

7.4 *Asphalt Content*—Determine according to Test Methods D 545, 7.5.

7.5 *Resistance to Decay*—Determine according to Test Methods E 154, Section 13.

8. Keywords

8.1 protection board; waterproofing

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