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Standard Guide for Use of Drainage System Media with Waterproofing Systems¹

This standard is issued under the fixed designation D7492/D7492M; 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 makes recommendations for the selection and application of prefabricated drainage media used in conjunction with waterproofing systems on horizontal and vertical surfaces. Drainage media considered include rigid and semi-rigid insulation boards and rigid materials including plastics. This guide considers drainage media as it relates to the performance of the waterproofing system, so its primary focus is draining water away from the membrane. This guide does not cover in detail other aspects or functions of drainage system performance such as efficiency of soil dewatering. The scope of this guide does not cover other drainage media including gravel and filter fabric systems that can be constructed. The scope of this guide does not cover drainage materials or drainage system designs used for vegetative roof systems. Vegetative roof systems require specialized designs.

1.2 The committee with jurisdiction over this standard is not aware of any other comparable standards published by other organizations.

1.3 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.

1.4 This standard may involve hazardous materials, operations and equipment. *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.*

1.5 *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

- [C165 Test Method for Measuring Compressive Properties of Thermal Insulations](#)
- [C898/C898M Guide for Use of High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane with Separate Wearing Course](#)
- [C981 Guide for Design of Built-Up Bituminous Membrane Waterproofing Systems for Building Decks](#)
- [C1471/C1471M Guide for the Use of High Solids Content Cold Liquid-Applied Elastomeric Waterproofing Membrane on Vertical Surfaces](#)
- [D896 Practice for Resistance of Adhesive Bonds to Chemical Reagents](#)
- [D1079 Terminology Relating to Roofing and Waterproofing](#)
- [D2434 Test Methods for Measurement of Hydraulic Conductivity of Coarse-Grained Soils](#)
- [D3273 Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber](#)
- [D3385 Test Method for Infiltration Rate of Soils in Field Using Double-Ring Infiltrometer](#)
- [D4511 Test Method for Hydraulic Conductivity of Essentially Saturated Peat](#)
- [D4630 Test Method for Determining Transmissivity and Storage Coefficient of Low-Permeability Rocks by In Situ Measurements Using the Constant Head Injection Test](#)
- [D4716/D4716M Test Method for Determining the \(In-plane\) Flow Rate per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head](#)
- [D5898/D5898M Guide for Standard Details for Adhered Sheet Waterproofing](#)
- [D6622/D6622M Guide for Application of Fully Adhered Hot-Applied Reinforced Waterproofing Systems](#)
- [E154/E154M Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover](#)

¹ This guide is under the jurisdiction of ASTM Committee [D08](#) on Roofing and Waterproofing and is the direct responsibility of Subcommittee [D08.22](#) on Waterproofing and Dampproofing Systems.

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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.