



Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Siding with Foam Plastic Backing (Backed Vinyl Siding)¹

This standard is issued under the fixed designation D7445; 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 establishes requirements for vinyl siding with integral foam plastic backing, where the siding is manufactured from rigid PVC compound. Performance requirements and test methods addressed by this standard include materials properties and dimensions, warp, shrinkage, impact strength, expansion, appearance, flame spread, and wind load resistance. Methods of indicating compliance with this specification are also provided.

NOTE 1—Backed vinyl siding is composed of two major components: the siding and the backing. It is intended that the siding portion comply with Specification D3679. Applicable portions of Specification D3679 are included in this specification. Additional requirements that pertain only to the backing as a separate material, or to the combination of siding and backing as a whole, are also included.

1.2 Backed vinyl siding shall be tested with the backing material in place or removed, as specified in the applicable requirement or test method.

1.3 The use of PVC recycled plastic in this product shall be in accordance with the requirements in Section 4.

1.4 Siding produced to this specification shall be installed in accordance with Practice D4756. Reference shall also be made to the manufacturer's installation instructions for the specific product to be installed.

NOTE 2—Information with regard to siding maintenance shall be obtained from the manufacturer.

1.5 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.6 *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.*

NOTE 3—There is no known ISO equivalent to this standard.

1.7 *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

- D618 Practice for Conditioning Plastics for Testing
- D635 Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position
- D696 Test Method for Coefficient of Linear Thermal Expansion of Plastics Between –30°C and 30°C with a Vitreous Silica Dilatometer
- D883 Terminology Relating to Plastics
- D1042 Test Method for Linear Dimensional Changes of Plastics Caused by Exposure to Heat and Moisture
- D1435 Practice for Outdoor Weathering of Plastics
- D1600 Terminology for Abbreviated Terms Relating to Plastics (Withdrawn 2024)³
- D2244 Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
- D2457 Test Method for Specular Gloss of Plastic Films and Solid Plastics
- D3679 Specification for Rigid Poly(Vinyl Chloride) (PVC) Siding
- D3892 Practice for Packaging/Packing of Plastics
- D4226 Test Methods for Impact Resistance of Rigid Poly(Vinyl Chloride) (PVC) Building Products
- D4756 Practice for Installation of Rigid Poly(Vinyl Chloride) (PVC) Siding and Soffit (Withdrawn 2023)³
- D5206 Test Method for Windload Resistance of Rigid Plastic Siding

¹ This specification is under the jurisdiction of ASTM Committee D20 on Plastics and is the direct responsibility of Subcommittee D20.24 on Plastic Building Products.

Current edition approved May 1, 2024. Published May 2024. Originally approved in 1979. Last previous edition approved in 2018 as D7445 – 18. DOI: 10.1520/D7445-24.

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 The last approved version of this historical standard is referenced on www.astm.org.