



Standard Test Method for Windload Resistance of Rigid Plastic Siding¹

This standard is issued under the fixed designation D5206; 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 test method describes methods for testing and evaluating windload resistance of rigid plastic siding when fastened in accordance with specific product standard specifications, or in accordance with the manufacturer's installation instructions.

1.2 The proper use of this test method requires a knowledge of the principles of pressure measurement.

1.3 This test method describes the apparatus and the procedures to be used to determine an average maximum sustained static test pressure, or ultimate test pressure values, or both, with static pressure applied uniformly to a specimen.

NOTE 1—There is no known ISO equivalent to this test method.

1.4 The values expressed in inch-pound units are to be regarded as the standard. The SI equivalents in parentheses are for information only.

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. For specific precautionary statements, see Section 7.*

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

2. Referenced Documents

2.1 ASTM Standards:²

D883 Terminology Relating to Plastics

D1600 Terminology for Abbreviated Terms Relating to Plastics (Withdrawn 2024)³

D4756 Practice for Installation of Rigid Poly(Vinyl Chloride) (PVC) Siding and Soffit (Withdrawn 2023)³

E631 Terminology of Building Constructions

2.2 *ASCE Standard*:⁴

ASCE 7-10 Minimum Design Loads for Buildings and Other Structures

2.3 *International Code Council*:⁵

International Building Code

International Residential Code

3. Terminology

3.1 *General*—Definitions are in accordance with Terminologies **D883** and **E631** and abbreviations are in accordance with Terminology **D1600** unless otherwise indicated.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *maximum sustained static test pressure, n*—the greatest difference in static air pressure (negative or positive) that a test specimen withstands without failure, expressed as force per square foot (or pascals).

3.2.2 *nail hem thickness, n*—the average thickness of the nail hem as measured between the nail slots.

3.2.3 *specimen, n*—the entire assembled siding panel as described in Section 8.

3.2.4 *static test pressure, n*—the specific difference in static air pressure (positive or negative) for which the specimen is to be tested expressed as force per square foot (or pascals).

3.2.5 *ultimate test pressure, n*—the difference in static air pressure (positive or negative) at which failure occurs expressed as force per square foot (or pascals).

4. Summary of Test Method

4.1 This method can be used to determine either the maximum sustained static test pressure or the ultimate pressure, or both, for the siding specimen. The procedure

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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.

³ The last approved version of this historical standard is referenced on www.astm.org.

⁴ Available from American Society of Civil Engineers (ASCE), 1801 Alexander Bell Dr., Reston, VA 20191, <http://www.asce.org>.

⁵ Available from International Code Council (ICC), 500 New Jersey Ave., NW, 6th Floor, Washington, DC 20001, <http://www.iccsafe.org>.

*A Summary of Changes section appears at the end of this standard