



Standard Specification for Test Carpets and Pads for Vacuum Cleaner Testing¹

This standard is issued under the fixed designation F655; 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 provides construction details and a replacement procedure for the standard carpet and pad to be used when testing vacuum cleaners.

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

2. Referenced Documents

2.1 *ASTM Standards*:²

F555 Test Method for Motor Life Evaluation of an Upright Vacuum Cleaner

F608 Test Method for Evaluation of Carpet Embedded Dirt Removal Effectiveness of Household/Commercial Vacuum Cleaners

F922 Test Method for Motor Life Evaluation of an Electric Motorized Nozzle

F1284 Test Method for Evaluating Carpet Embedded Dirt Removal Effectiveness of Residential Central Vacuum Cleaning Systems

F1334 Test Method for Determining A-Weighted Sound Power Level of Vacuum Cleaners

F1409 Test Method for Straight Line Movement of Vacuum Cleaners While Cleaning Carpets

F1411 Practice for Presenting Selected Information on Vacuum Cleaners for Consumer Use

F1601 Test Method for Motor Life Evaluation of an Electric Motorized Nozzle for Central Vacuum Cleaning Systems

F1692 Test Method for Life Evaluation of a Turbine-Powered Nozzle for Household Central Vacuum Cleaning Systems

F2609 Test Method for Litter-Cleaning Effectiveness of Vacuum Cleaners

F2756 Test Method for Determining Energy Consumption of Vacuum Cleaners

F2797 Test Method for Evaluating Edge Cleaning Effectiveness of Vacuum Cleaners

3. Basis of Selection

3.1 These standard carpets and pads are intended to provide a database and shall meet the following requirements:

3.1.1 Representative of carpets currently in popular use in the United States.

3.1.2 Reasonable anticipation of continued availability.

3.1.3 Compatible with other ASTM Committee F11 methods.

3.1.4 Provide a separation of cleaning effectiveness ratings between products with good reliability and repeatability.

4. Classification

4.1 The carpet types shall be classified according to accepted carpet industry practice, such as shag, multilevel, plush, etc.

5. Physical Requirements

5.1 *Carpets*³—The following carpet types and construction have been found acceptable for use in vacuum cleaner testing. They shall be made in accordance with the physical requirements given in [Table 1](#), [Table 2](#) and [Table 3](#).

NOTE 1—A variance of $\pm 7\%$ in face weight is allowable per HUD guidelines. When a new construction is needed, the proposed custom tufted test carpets should be subjected to construction verification as well as cleanability testing prior to acceptance for use.

5.2 *Padding*⁴—Sponge rubber type of waffle construction with a reinforcing scrim. See [Table 4](#) for a description of the construction.

¹ This specification is under the jurisdiction of ASTM Committee F11 on Vacuum Cleaners and is the direct responsibility of Subcommittee F11.21 on Cleanability.

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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 central source for the test carpets at this time is SDL Atlas, 3934 Airway Drive, Rock Hill, SC 29732. If you are aware of alternative suppliers, please provide this information to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee,¹ which you may attend.

⁴ The sole source of supply of the padding (Grandstand) is General Felt Industries, Co., 80 Park Plaza West-One, Saddlebrook, NJ 07662-5864. If you are aware of alternative suppliers, please provide this information to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee,¹ which you may attend.