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An American National Standard

Standard Specification for Air Performance Measurement Plenum Chamber for Vacuum Cleaners¹

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1. Scope

1.1 This specification covers the acceptable details and tolerances for the plenum chamber used in specified air performance measurement tests for vacuum cleaners.

1.2 The plenum chamber is designed for vacuum measurements only. (Warning—The plenum chamber has been shown to accurately determine maximum air power values at various test points for vacuum cleaners. There is a possibility that the airflow values measured with orifices larger than 2 in. at high flow rates may be erroneous due to the proximity of the top and bottom surfaces to the orifice plate inlet.)

1.3 The foot-pound, inch system of units is used in this standard. The values in parentheses are given for information only.

2. Referenced Documents

2.1 ASTM Standards:

F 558 Test Method for Measuring Air Performance Characteristics of Vacuum Cleaners

F 820 Test Method for Measuring Air Performance Characteristics of Central Vacuum Cleaning Systems

2.2 ASTM Adjunct:

¹ This specification is under the jurisdiction of ASTM Committee F-11 on Vacuum Cleaners and is the direct responsibility of Subcommittee F11.22 on Air Performance. Current edition approved Oct. 10, 1998; 1, 2003. Published February 1999; October 2003. Originally published as F 431 – 75; approved in 1975. Last previous edition F 431 – 87 (1992)^{ε1}; approved in 1998 as F 431 – 98.