



Standard Practice for Presenting Selected Information on Vacuum Cleaners for Consumer Use¹

This standard is issued under the fixed designation F 1411; 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 practice identifies the method of presenting information on selected performance and physical characteristics of a vacuum cleaner.

1.2 This information is intended to assist the consumer in comparing selected characteristics of vacuum cleaner models.

1.3 It is also intended that this information be presented in a manner that is meaningful and understandable to the consumer.

1.4 The characteristics are selected from those for which ASTM test methods have been developed.

2. Referenced Documents

2.1 ASTM Standards:

F 395 Terminology Relating to Vacuum Cleaners²

F 555 Test Method for Motor Life Evaluation of an Upright Vacuum Cleaner²

F 558 Test Method for Measuring Air Performance Characteristics of Vacuum Cleaners²

F 608 Test Method for Evaluation of Carpet Embedded Dirt Removal Effectiveness of Household/Commercial Vacuum Cleaners²

F 888 Test Method for Measuring Maximum Functional Volume of the Primary Dirt Receptacle in a Vacuum Cleaner²

F 922 Test Method for Motor Life Evaluation of an Electric Motorized Nozzle²

F 1038 Test Method for Motor Life Evaluation of a Canister, Hand-Held, Stick, and Utility Type Vacuum Cleaner Without a Driven Agitator²

F 1334 Test Method for Determining A-Weighted Sound Power Level of Vacuum Cleaners²

F 1409 Test Method for Straight-Line Movement of Vacuum Cleaners While Cleaning Carpets²

3. Method of Information Presentation

3.1 Information will be presented to consumers in the form of a buyer's guide.

3.2 The cleaner characteristics to be included in the buyer's guide are as follows:

3.2.1 Brand,

3.2.2 Model number,

3.2.3 Weight of cleaner,

3.2.4 Bag capacity,

3.2.5 Maximum cleaning distance from outlet,

3.2.6 Cleaning ability,

3.2.6.1 Embedded dirt,

3.2.7 Maneuverability,

3.2.8 Maximum air power,

3.2.9 Quietness, and

3.2.10 Durability.

3.3 For an individual cleaner the information on weight of cleaner, bag capacity, and maximum cleaning distance from outlet should be presented as actual values obtained from the applicable test methods (see Table 1).

3.4 For an individual cleaner, the performance characteristics shown in Table 2 should be rated in accordance with the performance boundaries shown in Table 3. This rating represents a cleaner's performance for a given characteristic on a scale of 1 to 10 (the larger the number the better the performance).

3.4.1 Manufacturers who develop cleaners that exceed the high performance boundary shall be allowed to rate that characteristic as *Exceeds 10*. When this occurs, however, the manufacturer is asked to notify the Consumer Information Subcommittee to initiate a review of that characteristic's boundaries.

3.5 Embedded dirt, maneuverability, maximum air power, quietness, and durability tests must be conducted using the same settings (for example, nozzle, motor speed, suction regulator, etc.) for each specific carpet.

3.6 The buyer's guide will conform to the following sample and specification:

3.6.1 Buyer's guide (see Fig. 1).

3.6.2 Buyer's guide specification (see Table 4).

¹ This practice is under the jurisdiction of ASTM Committee F11 on Vacuum Cleaners and is the direct responsibility of Subcommittee F11.93 on Consumer Information.

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² *Annual Book of ASTM Standards*, Vol 15.07.

TABLE 1 Cleaner Characteristics Not Requiring Boundaries

Cleaner Characteristic	ASTM Test Method	Value
1. Operational weight of cleaner	F 395	pounds
2. Bag capacity	F 888	quarts (dry)
3. Maximum cleaning distance from outlet	F 395	feet plus inches

TABLE 2 Cleaner Characteristics, Boundaries and Increments

Cleaner Characteristics	ASTM Test Method	Value	Performance, Low	Boundaries, High	Performance Increments
I. Embedded dirt removal					
Level loop carpet	F 608	%	0	100	10 %
Multi-level carpet	F 608	%	0	75	7.5 %
Plush/saxony carpet	F 608	%	0	60	6 %
II. Maneuverability (Level loop, multi-level, and plush/saxony carpet)	F 1409	ft-lbf	72 (or higher)	0	Ratings 2 to 10 are in increments of 8 ft-lbf. Rating 1 is anything higher than 72 ft-lbf.
III. Maximum air power	F 558	airwatts	0	250	25 W
IV. Durability of motors	F 1038 (straight air cleaners) F 555 (upright cleaners) F 922 (motorized nozzles)	hours hours hours	0 0 0	720 (or higher) 720 (or higher) 720 (or higher)	Ratings 1 to 9 are in increments of 80 h. Rating 10 is anything higher than 720 h.
V. Quietness	F 1334	sound power, dB	greater than 91	lower than 75	Ratings 1 to 9 are in increments of 2 dB.

TABLE 3 Rating Scale for Cleaner Characteristics Requiring Boundaries

I. Embedded Dirt Removal (Test Method F 608)											
Level loop carpet	1	2	3	4	5	6	7	8	9	10	
Scale 1 to 10	0	10	20	30	40	50	60	70	80	90	100
% Dirt pick-up											
Multilevel carpet	1	2	3	4	5	6	7	8	9	10	
Scale 1 to 10	0	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75
% Dirt pick-up											
Plush/saxony carpet	1	2	3	4	5	6	7	8	9	10	
Scale 1 to 10	0	6	12	18	24	30	36	42	48	54	60
% Dirt pick-up											
II. Maneuverability (F 1409)											
Level loop, multilevel, and plush/saxony carpets	1	2	3	4	5	6	7	8	9	10	
Scale 1 to 10	higher	72	64	56	48	40	32	24	16	8	0
Work (ft-lbf)											
III. Maximum Air Power (Test Method F 558)											
Scale 1 to 10	1	2	3	4	5	6	7	8	9	10	
Maximum airwatts	0	25	50	75	100	125	150	175	200	225	250
IV. Durability of Motor (Test Methods F 555 and F 1038)											
Scale 1 to 10	1	2	3	4	5	6	7	8	9	10	
Hours	0	80	160	240	320	400	480	560	640	720	or higher
V. Quietness (Test Method F 1334)											
Scale 1 to 10	1	2	3	4	5	6	7	8	9	10	
Sound Power	higher	91	89	87	85	83	81	79	77	75	lower

3.7 The buyer's guide is to be used in its entirety with no substitutions, deletions, or additions except as noted in the specification.

3.8 Suggested uses for the buyer's guide would include fact tag, hang tag, wall charts, handouts, envelope stuffers, counter charts, and training materials.

4. Keywords

4.1 buyers guide; consumer information; vacuum cleaner

VACUUM CLEANER BUYER'S GUIDE

COMPANY NAME

MODEL TYPE CLEANER

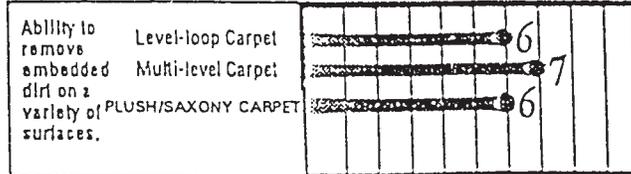
Weight.....12 pounds/5.5 kilograms

Bag Capacity..... 9 quarts/9.5 liters

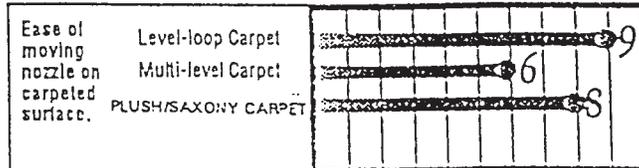
Maximum Cleaning Distance from Outlet . .40 feet/14.4 meters

Ratings based on a 1-10 scale, where 10 is best. Use the following ratings to compare this model with other vacuum cleaners on the same type carpet.

Cleaning Ability



Maneuverability



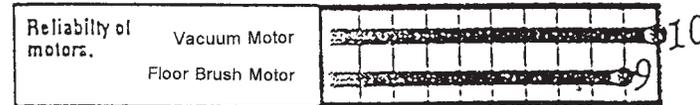
Maximum Air Power



Quietness



Durability



• These ratings are based on the results of laboratory tests carried out by the manufacturer using ASTM procedures.

Performance results in your home may vary from test results due to differences in carpets, type of soil, cleaning techniques or other factors.

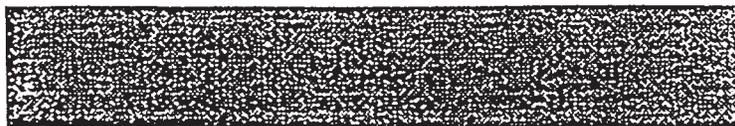


FIG. 1 Sample Buyer's Guide

TABLE 4 Buyer's Guide Specifications

1. Size	A 1 × 2 ratio of width to length. ^A
2. Type Face	The Vacuum Cleaners Buyer's Guide type face can be any plain, easy to read type face, such as Helvetica, Universe, or Helios.
3. Type Size	The minimum type size specified for each position of the Buyer's Guide is listed as follows:
	Buyer's Guide Title 14 point
	Definition: On a scale of 1 to 10, best = 10 8 point
	Guide Information 8 point
	Footnotes 6 point
	Optional Manufacturer's Clarifying Statements on Warranty 6 point
4. Color	Contrasting ink on white background, black ink preferred.
5. Order of Characteristics	Use order provided in 3.2.
6. Abbreviations	None
7. Power Nozzle Motor	Delete when not applicable.
8. Optional Information	No additional information, including logos, are allowed on Buyer's Guide side or page.

^A The Optional Manufacturer's Clarifying Statements on Warranty are not considered as part of the Buyer's Guide size specification.

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