

STANDARD INFORMATION

Standard Number: UL 507

Standard Name: Electric Fans

Standard Edition and Issue Date: 10th Edition Dated November 9, 2017

Date of Revision: November 9, 2017

Date of Previous Revision of Standard: 9th Edition Revised January 25, 2017

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **November 8, 2019**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

Overview of Changes:

- Revision to cord type/length requirements
- Addition of requirements for button or coin cell batteries
- Addition of requirements for lasers
- Addition of requirements for downdraft fans that move up/down
- Revised requirements for UV lamps

Specific details of new/revised requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
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Additions to existing requirements are underlined and deletions are shown lined out below.

15	Info	Power Supply Connections – Cord-Connected Appliances <i>Only modifications to the table are shown</i>
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Cords for appliances

Table 15.1	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Appliance</th> <th style="width: 30%;">Type of cord^a</th> <th style="width: 30%;">Length, m (ft)</th> </tr> </thead> <tbody> <tr> <td>6. Portable fan employing a general use convenience receptacle, <u>or evaporative cooler with or without a general use convenience receptacle.</u></td> <td style="text-align: center;">SJ, SJE, SJO, SJT, SJTO or equivalent</td> <td style="text-align: center;">0.5 – 7.6 (1.5 – 25)</td> </tr> </tbody> </table>	Appliance	Type of cord ^a	Length, m (ft)	6. Portable fan employing a general use convenience receptacle, <u>or evaporative cooler with or without a general use convenience receptacle.</u>	SJ, SJE, SJO, SJT, SJTO or equivalent	0.5 – 7.6 (1.5 – 25)	
Appliance	Type of cord ^a	Length, m (ft)						
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^a An SVT cord type is considered equally serviceable to SPT-2.								

38		<i>New section added;</i> Button or Coin Cell Batteries of Lithium Technologies
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The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies shall comply with the Standard for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies, UL 4200A, if the appliance or any accessory:

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| 38.1 | <ul style="list-style-type: none"> a) Is intended for use with one or more single cell batteries having a diameter of 32 mm (1.25 in) maximum with a diameter greater than its height; and b) The appliance is intended for household use. |
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Exception No. 1: This requirement is not applicable to appliances and accessories intended for use where the battery is not intended to be replaced and is not referenced in instructions and markings.

Exception No. 2: This requirement is not applicable to appliances and accessories where the battery compartment would be located at least 2.1 m (7 foot) above the floor when the fan is installed as intended.

39		<i>New clause added;</i> Lasers
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| 39.1 | A product employing a laser falling within the scope of the Code of Federal Regulations (CFR), Title 21, Part 1040 shall be compliant with the regulation. |
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With reference to 39.1, compliance of laser products with the Code of Federal Regulations (CFR), Title 21, Part 1040, shall be determined by:

- 39.2
- a) Determining the Class of the laser product and the Class of the radiation emitted by the laser product (as defined in the CFR) from the manufacturer's Center for Devices and Radiological Health (CDRH) product report;
 - b) Verifying that the manufacturer's markings and labels having the information specified in the CFR are affixed on the laser product (as defined in the CFR);
 - c) Determining that the corresponding construction features, such as protective housing, interlocks, and similar features, are provided in accordance with the CFR;
 - d) Determining that the resulting construction complies with the construction requirements of this standard; and
 - e) Verifying that the manufacture's safety instructions required by the CFR are provided with the laser product (as defined in the CFR).

185 Info **Construction**

185.4 **Accessibility of moving parts**

185.4.1 The housing of a down-draft fan which is designed to open on activation and close on deactivation shall comply with the requirements in 9.2.1. Compliance with 185.2 fulfills this requirement for the raising and lowering function of a down-draft intake system.

New clause added;

185.4.2 Automatically operated moving parts of a down-draft system shall reduce the risk of entrapment or injury. The moving part of a down-draft fan which is designed to open/raise on activation and close/lower on deactivation shall comply with the test requirement in 186.4, Moving parts, unless operated only via a biased-off switch.

186 Info **Performance**

New section added;

186.4 **Moving parts**

The down-draft is supplied at rated voltage and it is operated to open and close the driven part. The driven part shall:

- 186.4.1
- a) Decelerate to a speed lower than 15 mm/s in the last 50 mm of the movement, as it approaches any position in which entrapment may occur; or
 - b) When the probe illustrated in Figure 9.2 is placed at any potential entrapment point across the width and height of the opening;
 - 1) Stop and reverse direction before contacting the probe; or
 - 2) If the probe is touched by the driven part, the part shall not exert a force exceeding a value of 100 N.



If compliance with 186.4.1 (a) or (b) relies on the operation of an electronic circuit:

- 186.4.2
- a) The electronic circuit shall comply with the Standard for Tests for Safety-Related Controls Employing Solid-State Devices, UL 991; or
 - b) The circuit providing the required safety functionality shall be additionally evaluated as a protective control in accordance with the Standard for Automatic Electric Controls – Part 1: General Requirements, UL 60730-1.

223 Info **Performance**

223.2 Info **Ultraviolet radiation test**

223.2.1

A product employing ultraviolet lamps shall not emit ~~radiation~~ effective irradiance in excess of $0.1 \mu\text{W}/\text{cm}^2$ ~~beyond its enclosure when tested as described in 187.2.1–187.2.4.~~ based on the limits defined by the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) for Chemical Substances and Physical Agents and Biological Exposure Indices (BEIs) – Ultraviolet Radiation, Table 2, “Permissible Ultraviolet Exposures”, beyond its enclosure when tested as described in 223.2.1 – 223.2.4. This test should be conducted as received and after the enclosure impact test of the Standard for Polymeric Materials – Use in Electrical Equipment Evaluations, UL 746C, the guard impact test of Section 61, and the Drop Test of Section 70, where applicable.

Exception: Products exclusively identified for the use with lamps rated “Exempt Risk Group”, ANSI/IESNA RP-27.1, are considered to comply with this requirement without test.

CUSTOMERS PLEASE NOTE: This Table and column “Verdict” can be used in determining how your current or future production is or will be in compliance with new/revised requirements.
