

STANDARD INFORMATION

Standard: UL 1278

Standard ID:

Movable and Wall- or Ceiling-Hung Electric Room Heaters [UL 1278:2014 Ed.4+R:29May2025]

Previous Standard ID:

Movable and Wall- or Ceiling-Hung Electric Room Heaters [UL 1278:2014 Ed.4+R:27May2025]

Movable and Wall- or Ceiling-Hung Electric Room Heaters [UL 1278:2014 Ed.4+R:08Mar2024]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **December 12, 2028**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Note: This revision of ANSI/UL 1278 dated May 29, 2025, adds clauses that were inadvertently omitted from the May 27, 2025, revision. All products must be certified to the May 29, 2025, revision prior to the effective date.

Overview of Changes: Revisions to portable electric heaters. Specific details of new/revised requirements are found in table below.

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i>		
3	Info	Glossary
3.5A	Info	<i>New clause added;</i> ATTACHMENT PLUG – A male contact device which mates with an outlet.
3.5B	Info	<i>New clause added;</i> BARRIER – Any part of the product (metallic or nonmetallic) internal to the housing that retards propagation of flame initiated by electrical disturbances or renders inaccessible, parts that may otherwise present a risk of electric shock, injury to persons.
3.9A	Info	<i>New clause added;</i> CONNECTOR – The connector is intended to contact a matching connector configuration and the integral extension is part, located within the connector, to which the conductor of a flexible cord is connected.
3.10A	Info	<i>New clause added;</i> CRIMPED CONNECTION – An electro-mechanical connection made between a connector and a conductor by compressing the portion of the connector, termed “the integral extension” in 16A.3.8, against the conductor.
3.13A	Info	<i>New clause added;</i> HEATER-USE ATTACHMENT PLUG – An attachment plug intended for use with heater-use power-supply cords.
3.13B	Info	<i>New clause added;</i> HEATER-USE POWER-SUPPLY CORD – A length of flexible cord having a heater-use attachment plug intended for use with 120V portable heaters.
3.19A	Info	<i>New clause added;</i> TIP-OVER SWITCH – An electro-mechanical switching device or electronic switching circuit that detects if the appliance is not in its intended operating position.
4	Info	Components
4.9	Info	Switches



CLAUSE	VERDICT	COMMENT
<i>New clause added;</i>		
4.9.5		A moveable heater shall employ a tip-over switch. Wall (or ceiling) hung or mounted heaters need not comply with this requirement. Heaters rated 208 V or more need not comply with this requirement.
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12	Info	Polymeric Materials
<i>New clause added;</i>		
Barriers made of non-metallic materials shall have a flammability classification as follows:		
<p>12.1A</p> <p>a) The barrier material shall not be a flammability classification HB. The alternate path of Section 5 of UL 746C is not applicable; and</p> <p>b) One of the following:</p> <ul style="list-style-type: none">1) A minimum of V-0, VTM-0, or HF-1, in accordance with Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94, and IEC Test Flames 60695-11-10; or2) a minimum of SC-0 or SCTC-0, in accordance with Tests for Flammability of Small Polymeric Component Materials, UL 1694.		
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Any non-metallic part external to the external enclosure shall have a minimum flammability classification of V-2.		
<p>Exception 1: The part is permitted to be a minimum flammability classification of HB as follows:</p> <ul style="list-style-type: none">a) Greater than 20 mm above any openings in the enclosure used for venting, air inlet, or air outlet, or greater than 5 mm from the sides or bottom of any openings in the enclosure used for venting, air inlet, or air outlet; andb) Located so it cannot propagate flame from one area to another or bridge between a possible source of ignition and other ignitable parts in accordance with the Standard for Polymeric Materials – Use in Electrical Equipment Evaluations, UL 746C, 50 Flammability – 12 mm Flame Test.		
<p>12.4</p> <p>Exception 2: The part is not required to be made of a material classed 5VA, 5VB, V-0, or V-1, if it meets the following:</p> <ul style="list-style-type: none">a) The part does not occupy a volume greater than 2 cubic centimeters (0.122 cubic inch), does not have any dimension greater than 3 cm (1.18 inch), andb) Located so it cannot propagate flame from one area to another or bridge between a possible source of ignition and other ignitable parts in accordance with the Standard for Polymeric Materials – Use in Electrical Equipment Evaluations, UL 746C, 50 Flammability – 12 mm Flame Test or IEC 60695-11-5 Test flames – Needle-flame test method.		
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16	Info	<i>Section deleted;</i>
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Supply Connections		



CLAUSE	VERDICT	COMMENT
<p><i>New section added;</i></p>		
<p>Mounting Means</p>		
16A		Hanging brackets and any necessary fasteners required for hanging the heater shall:
<p>See standard for details.</p>		
<p><i>New section added;</i></p>		
<p>Supply Connections</p>		
16B		A heater shall be provided with a power-supply cord consisting of a length of attached flexible cord as described in 16B.2 and an attachment plug as described in Section 16C for connection to the supply circuit. The length of the attached power-supply cord (including fittings) shall:
<p>See standard for details.</p>		
<p><i>New section added;</i></p>		
<p>Attachment Plugs</p>		
16C		The current rating of the attachment plug shall not be less than 125 percent of the current rating of the heater except as follows:
<p>See standard for details.</p>		



CLAUSE	VERDICT	COMMENT
<p><i>New section added;</i></p>		
<p>Terminals and connectors</p>		
<p>Note: 16D.7 and 16D.8 are shown for significance.</p>		
16D		<p>16D.7 The distance separating opposite polarity internal wiring connections of the supply cord to the internal wiring shall be greater than 30 mm (1.18 inches).</p> <p>Exception: Distance may be 30mm or less if suitable supplemental insulation or barrier is provided between the connections.</p> <p>16D.8 All connections of supply cord to internal wiring of a heater shall comply with both (a) and (b):</p> <p>a) The soldered connection shall be mechanically secured prior to soldering. Mechanical securement shall be made by one or more of the following methods:</p> <ul style="list-style-type: none">1) Crimping;2) Twisting of conductors;3) Right-angle bend; or4) An offset in the conductors. <p>b) Continuous solder shall be applied on the entire zone X shaded areas in Figure 16D.1:</p> <ul style="list-style-type: none">1) The wire strands on cord side of the crimp;2) At the crimp; and3) The wire strands to the integral extension for the connector. <p>Exception: Heaters rated 208 V or more need not comply with this requirement.</p> <p>See standard for details.</p>
20	Info	Internal Wiring
20.3	info	Wire connectors
<p><i>New clause added;</i></p> <p>Twist-on wire connectors shall not be permitted for connections of the wiring in a heater.</p> <p>Exception: This requirement is not applicable to connections that carry 15 watts or less. The 15 W determinations shall be in accordance with Section H27.1 of UL 60730-1 (or IEC 60730-1)</p>		



CLAUSE	VERDICT	COMMENT
<p><i>New clause added;</i></p>		
<p>All internal connections of the internal wiring of a heater, except for supply cord connections, shall comply with 16D.8.</p>		
20.3.5		<p>Exception 1: This requirement is not applicable to internal connections carrying 15 watts or less in a steady-state condition. The 15 W determinations shall be in accordance with Section H27.1 of UL 60730-1 (or IEC 60730-1).</p> <p>Exception 2: This requirement is not applicable to connections to a motor or pilot light.</p> <p>Exception 3: Heaters rated 208 V or more need not comply with this requirement.</p>
33	Info	<p>Switches</p> <p>A switch employed in a heater to de-energize the heating elements in the event the heater is tipped over shall function before the heater has tipped in any direction beyond the angle of critical balance (see 3.2) if compliance with the requirements in 42.4.1 – 42.4.4 is dependent on operation of the switch. <u>A tip-over switch relied on to comply with 42.4.1- 42.4.4 is considered a protective control intended to reduce the risk of electric shock, fire, or injury to persons during abnormal operation of the heater. A protective control always provides Type 2 action. (See definitions 3.20 – 3.23).</u></p>
<p><i>New clause added;</i></p>		
33.19		<p>A tip-over switch shall de-energize all the heating elements once detecting the appliance is not in its intended operating position and shall not permit the heating elements to re-energize the heating elements until the appliance is returned to its intended operating position. See 42.4A and 42.4B. A tip-over switch relied on to comply with 42.4A and 42.4B is considered an operating control intended to start or regulate the heater during normal operation. An operating control could provide Type 1 or Type 2 action. (See definitions 3.20 – 3.23).</p>
40	Info	<p>Normal Temperature Tests</p>
40.1	Info	<p>General</p>
<p><i>New clause added;</i></p>		
40.1.15		<p>A moveable heater, when tested under the conditions described in 42.4A – 42.4B shall deenergize all the heating elements. The test conditions shall be with different combinations of energized heating elements.</p>



CLAUSE	VERDICT	COMMENT
		<i>New section added;</i>
		Tip-over switch operation test
42A		A movable heater shall be subjected to 42.4A.2 and 42.4A.3. The heater is to be energized and tested with the different combinations of energized heating elements.
		See standard for details.
		<i>New section added;</i>
		Inversion test
42B		A movable heater shall be subjected to 42.4B.2. The heater is to be energized and tested with the different combinations of energized heating elements.
		See standard for details.