

STANDARD INFORMATION

Standard: UL 879

Standard ID: Electric Sign Components [UL 879:2009 Ed.9+R:03Sep2025]

Previous Standard ID: Electric Sign Components [UL 879:2009 Ed.9+R:18Dec2023]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **September 3, 2027**

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 Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes:

- Polymeric insulating barriers
- Grounding and bonding
- Service and maintenance
- Impact Test
- Abnormal component breakdown test
- Non-enclosure rated polymeric sign bodies
- LED Displays
- Fabric Sign Face Assemblies
- Aluminum composite materials (ACM)
- Installation and assembly test

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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>
2	Info	Construction
2.2	Info	Insulating barrier
		A polymeric material in direct contact with live parts that functions as an insulating barrier shall <u>comply with the UL 746C requirements for insulating materials.</u>
2.2.2		a) Have a flammability rating of at least HB or comply with the HB Testing Procedure specified in 3.2.2.1.4; b) Have a temperature rating equal to or greater than its maximum operating temperature in the component; c) For molded or formed thermoplastic parts, comply with the Mold Stress Relief Distortion Test of 3.4.1.1; and d) Have a HWI (Hot wire Ignition), HAI (High Ampere Ignition) and CTI (Comparative Tracking Index) PLC values not greater than 2. A thermoset material such as epoxy is not required to have a HWI, HAI or CTI PLC rating.
2.11	Info	Equipment grounding and bonding
2.11.0		<i>New section added;</i> General
2.11.0.1		When installed in or on a sign, accessible dead metal parts of components operating above class 2 voltage limits may require bonding to the sign's grounding means. Bonding can be accomplished by positive metal-to-metal contact of parts such as screw connections, rivets, bolts, soldering, or welding; or by a separate bonding conductor not smaller than 14 AWG (2.1 mm ²).
2.11.0.2		A grounding terminal or lead shall not be used for any other purpose and shall not be located on a removable part unless the removal of the part during user maintenance does not interrupt the bonding continuity.
2.13	Info	Insulating materials
2.13.1		Material that is not an integral part of a component and is within 0.8 mm (0.032 in) of uninsulated live parts shall be of non-absorptive, noncombustible material such as porcelain, phenolic complying with Table 2.14 or <u>a polymeric material that complies with UL 746C.</u> another material that complies with the Material Dielectric Voltage Withstand Test specified in 3.2.2.16 and has requirements for insulating materials. a) A minimum hot wire ignition rating (HWI) of 15 s, or comply with the Hot Wire Ignition Test of 3.2.2.3 or the Glow Wire End Product Test of 3.2.2.4, and b) A minimum hot current arc resistance to ignition rating (HAI) of 15 arcs, or comply with the High Current Arc Ignition (HAI) Test specified in 3.2.2.5 or the End Product Arc Resistance Test specified in 3.2.2.6.



CLAUSE	VERDICT	COMMENT
3	Info	Tests – General
3.2	Info	Polymeric material evaluation
3.2.2	Info	Material tests
3.2.2.16	Info	Material dielectric voltage withstand test
3.2.2.16.1		<p>An insulating material between current carrying parts <u>or serving as an accessibility barrier shall withstand for 1 min, without breakdown, the application of a potential specified in Table 3.6A. The test potential shall be obtained from any convenient source of a capacity, at least 500 VA, to maintain the potential indicated except during breakdown. The potential is to be gradually increased from zero at a substantially uniform rate until the specified test potential is reached.</u> an insulating material used to prevent user contact with live parts shall, with out any indication of dielectric breakdown, withstand a dielectric voltage withstand potential applied across the material and combination of material and air. When a material is insulating between live parts having a potential difference of 1000 V or less or preventing user contact to a voltage of 1000 V or less, the test shall be as specified in 3.2.2.16.2. When a material is insulating between live parts having a potential difference of greater than 1000 V or preventing user contact to a voltage of greater than 1000 V, the test shall be as specified in 3.2.2.16.3.</p>
3.4	Info	Product tests
3.4.1	Info	Material tests
3.4.1.6	Info	Impact test
3.4.1.6.2		<p>The component samples are to be impacted as shown in Figure 3.7 while mounted in their intended manner. A force of 4.1 <u>6.8</u> Nm (5 <u>3</u> ft-lb) is to be applied on any surface that can be exposed to a blow during intended use. This impact is to be produced either by dropping a steel sphere, 50.8 mm (2 inch) in diameter and weighing 0.54 kg (1.18 lb), from the height necessary to produce the desired impact force or the steel sphere is to be suspended by a cord and swung as a pendulum, dropping through the vertical distance necessary to produce the desired impact force.</p>
3.4.2	Info	Electrical tests
3.4.2.7	Info	Abnormal tests
3.4.2.7.3	Info	<p><i>New section added;</i></p> <p>Component failure test</p>
3.4.2.7.3.1		<p>Equipment with components such as resistors, semiconductor devices, capacitors, and the like shall not exhibit a risk of fire or electric shock when a simulated short circuit or open circuit is imposed on those components. The circuit diagrams and component specifications shall be reviewed to determine fault conditions that might reasonably be expected to occur. Examples include: short-circuits and open circuits of semiconductor devices and capacitors, faults causing open circuits of resistors and internal faults in integrated circuits.</p>



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		Exception No. 1: Components supplied by a source operating within class 2 voltage and power limits need not be subject to this test.
		Exception No. 2: Components whose reliability against failure which have already been evaluated shall not be faulted. Examples of such components: optical isolators evaluated to the Standard for Optical Isolators, UL 1577, and capacitors evaluated to the Standard for Standard for Safety Requirements for Fixed Capacitors for Use in Electronic Equipment – Part 14: Sectional Specification: Fixed Capacitors for Electromagnetic Interference Suppression and Connection to the Supply Mains, UL 60384-14.
3.4.2.7.3.2		Each component is to be short circuited or open circuited, one at a time (one fault per test). Each test shall continue until either the unit is no longer operable, or until conditions are obviously stable (as determined by no visual changes or detectable thermal increase) for at least 30 minutes.
4	Info	Specific Components Only for Use in an End Product
4.11	Info	Non-enclosure rated sign body material
4.11.3	Info	Tests
		<i>New clause added;</i>
4.11.3.2		Rigid sign body and face materials shall comply with the Mold Stress Relief and then either the Drop Impact (for portable applications) or Ball Impact (for fixed-in place applications) Test of three UL 746C. Materials intended for outdoor use applications shall have separate sample sets subjected to the UV and low temperature subjected conditioning of UL 746C prior to the Impact Test.
		<i>New section added;</i>
		Sign body polymeric enclosure materials
4.12		These requirements apply to sign body polymeric enclosure materials and supplement those of 2.1.4. See standard for details.
4.14	Info	Structural materials
4.14.3	Info	Tests
4.14.3.1		A structural panel having layers bonded together by adhesive shall continue to bond the layers together and not be subject to a reduction in bond strength when subjected to the Adhesive Laminations Bond Strength Test in 3.2.2.12 <u>be evaluated for compliance with the Adhesives program of UL 746C, except that only five samples are required for each conditioning set.</u>



CLAUSE	VERDICT	COMMENT
		<i>New section added;</i>
		LED displays
4.18A		<p>These requirements apply to LED power sources (4.18A.2), class 2 displays (4.18A.3), non-class 2 displays (4.18A.4), and integrated displays that include both a power source and display (4.18A.5). All display types are eligible for field-linking when found to comply with the supplemental requirements in 4.18A.6.</p> <p>See standard for details.</p>
		<i>New section added;</i>
		Fabric sign face assemblies
4.24		<p>Fabric sign face assemblies evaluated to this 4.24 include an integral edge intended for friction or mechanical interference fit into a sign frame slot, recess, or groove. The edge material is to be sewn or similarly secured around the entire border of the fabric sign face. The fabric sign face is permitted to be of any shape (square, rectangular, round, oval, irregular, etc.) but shall be of a single piece that requires no further assembly.</p> <p>See standard for details.</p>
		<i>New section added;</i>
		Aluminum Composite Material (ACM) panels
4.25		<p>To qualify as an enclosure rated material, the overall ACM assembly thickness shall comply with the minimum thickness for sheet aluminum from Table 2.3.</p> <p>See standard for details.</p>
5	Info	Sign Components for Field and Factory Installation
5.8	Info	Electrode receptacle enclosure
5.8.5	Info	Tests
5.8.5.1		<p><u>An electrode receptacle enclosure shall be assembled and installed in accordance with its instructions and then subjected to the Installation and Assembly Test in 3.4.3 followed by the Dielectric Voltage Withstand Test in 3.4.2.5.</u></p>