

Subject 2017

October 26, 2018

SUMMARY OF TOPICS

The following changes in requirements to the Standard for General-Purpose Signaling Devices and Systems UL 2017, are being proposed:

1. Alternative Means Utilizing Adhesives to Provide Mechanical Securement of Parts

2. Revision to Require Leakage Current Test Only for Cord-connected Products

STP BALLOTS AND ALL COMMENTS DUE: NOVEMBER 26, 2018

UL's goal is to have no interest category comprise more than one-third of the STP membership balance. To improve the current balance for STP 2017, UL is looking for participants in the AHJ, Commercial/Industrial User, Supply Chain, and Testing and Standards interest categories. Definitions for these interest categories are available on the Standards STP Internet site:

<http://ulstandards.ul.com/develop-standards/participation/interest-categories/>

If you are interested in applying for STP 2017 membership or are aware of potential candidates for this STP, please contact the STP Project Manager, paul.e.lloret@ul.com.

For your convenience in review, proposed additions to existing requirements are shown underlined and proposed deletions are shown ~~lined-out~~. Blocks of proposed new requirements are indicated by (NEW).

1. Alternative Means Utilizing Adhesives to Provide Mechanical Securement of Parts

RATIONALE

Proposal submitted by: Larry Shudak, UL, LLC

The intent of the mechanical assembly requirements is to ensure sufficient resiliency in the construction of a product to provide intended operation over its service life. These proposed revisions provide for an alternative adhesive technology to meet the intent of using mechanical fastening means such as nuts and bolts, screws, and non-friction based fasteners. The proposed revisions are consistent with those now included in other UL life safety standards.

UL 746C, Standard for Polymeric Materials – Use in Electrical Equipment Evaluations, includes requirements for evaluating the resiliency of adhesives for identified mounting surfaces. The proposed addition of clauses 11.5 – 11.8 in UL 2017 specify the aspects to be assessed. The rationale for limiting the application of the adhesive to the factory is to address reproducibility and repeatability concerns.

Clauses related to enclosures, enclosure mechanical strength testing, and outdoor use applications are revised to align with the adhesive revisions for product mechanical assembly.

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The Mechanical Strength Test was included to assess compliance of the enclosure resiliency of enclosure parts, such as viewing windows, secured with adhesive. This test addresses the dimensions and location of the application of the adhesive.

PROPOSAL

8.1.3 Enclosure parts fastened with adhesive meeting 9.6 – 9.9 shall comply with the test requirements in Mechanical Strength Tests for Metal Enclosures and Guards and Enclosure Parts Fastened with Adhesive, Section 48.

8.2.1 An enclosure of metal shall have a minimum thickness as specified in Tables 8.1, 8.2, or 8.3 or shall comply with the test requirements in Mechanical Strength Tests for Metal Enclosures and Guards, and Enclosure Parts Fastened with Adhesive Section 48.

(NEW)

11.5 An adhesive that is relied upon to:

- a) reduce a risk of fire, electric shock, or injury to persons,
- b) limit access to a manual control, or
- c) avert dislodgement of a part/module affecting normal operation of the product

shall comply with the requirements for adhesives in the Standard for Polymeric Materials – Use in Electrical Equipment Evaluations, UL 746C. The durability shall be representative of a minimum of 30 years of service at the maximum rated prevailing ambient installation temperature.

(NEW)

11.6 The requirement in 11.5 applies to an adhesive used to secure a part, including a nameplate, which may, if loosened or dislodged:

- a) Energize an accessible dead metal part,
- b) Make a live part accessible,
- c) Reduce spacings below the minimum required values,
- d) Short-circuit live parts,
- e) Make a limited-accessible control accessible, or
- f) Affect the normal operation of the product.

(NEW)

11.7 Whether the conditions specified in 11.6 (a) – (f) can occur is to be considered with respect to both:

- a) A part inside or outside of the device and
- b) A part on the outside of the device that may affect equipment in which the device is to be installed.

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