

Subject 96

August 18, 2017

SUMMARY OF TOPICS

The following changes in requirements to the Standard for Lightning Protection Components, UL 96, are being proposed:

1. Compliance with UL 467 is Sufficient to Comply with UL 96

STP BALLOTS AND ALL COMMENTS DUE: October 17, 2017

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 96, UL is looking for participants in the following interest categories: AHJ, Commercial/Industrial User, Consumer, Government, and Testing & Standards. 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 96 membership or are aware of potential candidates for this STP, please contact the STP Project Manager, Mitchell Gold at Mitchell.Gold@ul.com.

For your convenience in review, proposed additions to existing requirements are shown underlined and proposed deletions are shown ~~lined-out~~.

1. Compliance with UL 467 is Sufficient to Comply with UL 96

RATIONALE

Proposal submitted by: Alberto Manuel Ontiveros Balcazar, Conduzinc, S de RL de CV

At the time when UL 96 was written, only two materials existed and were in use: Copper and Aluminum; however, new alloys exist.

I mention only as a context that the trajectory of lightning strike is:

- 1) First contact: Lightning rod.
- 2) Transmitted by: Down Conductor.
- 3) Dissipated by: Grounding System.

Question:

Since it is part of the same protection system and drives exactly the same quantity of energy, why is the ConduGround listed under UL 467, but does not qualify as a down conductor for UL 96 listing?

Please note that ConduGround is a trademark name for a material made from a Steel Zinc alloy +Cu +Sn: It is a solid metal strip alloy with double electrolytic coating, the first coat is of copper and the second of tin with an anti-corrosive treatment. The material is listed under UL 467.

Furthermore, attached are testing certificates that show ConduGround's compliance with IEC/EN 62561-2: 2012, The International Standard for Lightning Protection System Components (LPSC) Part 2: Requirements for conductors and earth electrodes.

PROPOSAL

6 General

6.1 Class I components shall be made of copper, copper alloy, aluminum or aluminum alloy with hardware made from stainless steel, unless otherwise required in this Standard, as outlined below:

- a) Copper conductors and air terminals shall be made from electrical grade copper, C11000, generally designated as being 95% conductivity when annealed.
- b) Aluminum conductors shall be made of electrical grade aluminum, with a minimum chemical composition of 99% aluminum.
- c) Aluminum air terminals, stampings and couplings, shall be made with an alloy having a minimum chemical composition of 90% aluminum.
- d) Stainless Steel hardware, such as nuts, bolts, washers, screws, threaded rods, and fasteners shall be of minimum 18-8 grade (Chromium & Nickel content) with acceptable alloys being 302, 303 and 304.
- e) All copper alloys other than brass shall have a minimum copper content of 80%.
- f) Aluminum alloys suitable for use in castings shall have a minimum aluminum content of 85%.
- g) Brass alloys suitable for use in couplings, connectors, bases and fittings shall have a minimum copper content of 60%.
- h) Steel Zinc alloy clad with Copper and Tin, e.g. a Steel and Zinc alloy with double electrolytic coating. The first coating is of copper and the second of tin, with an anti-corrosive treatment.