UL 96A

STANDARD FOR SAFETY

Installation Requirements for Lightning Protection Systems

UL Standard for Safety for Installation Requirements for Lightning Protection Systems, UL 96A

Thirteenth Edition, Dated March 18, 2016

Summary of Topics

This revision of UL 96A dated October 12, 2022 includes the following changes in requirements:

– Addition of Connector Definitions to the Glossary; 5.7A

– Clarification of Requirements for Dead Ends; 9.1.1

– Addition to Paragraph 2.5 Exception Regarding Accessories

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated February 4, 2022 and August 19, 2022.

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UL 96A

Standard for Installation Requirements for Lightning Protection Systems

Prior to the sixth edition, previous numbered and unnumbered editions covering Installation Requirements for Lightning Protection Systems have been published since 1916. The sixth edition was titled Installation Requirements for Master Labeled Lightning Protection Systems.

Sixth Edition – March, 1958
Seventh Edition – April, 1960
Eighth Edition – June, 1963
Ninth Edition – April, 1982
Tenth Edition – May, 1994
Eleventh Edition – July, 2001
Twelfth Edition – May, 2007

Thirteenth Edition

March 18, 2016

This UL Standard for Safety consists of the Thirteenth Edition including revisions through October 12, 2022.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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INTRODUCTION

1 Scope

1.1 These requirements cover the installation of lightning protection systems on all types of structures other than structures used for the production, handling, or storage of ammunition, explosives, flammable liquids or gases, and other explosive ingredients including dust.

1.2 These requirements apply to lightning protection systems that are complete and cover all parts of a structure. Partial systems are not covered by this standard.

1.3 These requirements shall not apply to adjacent structures.

1.4 Adjacent structures shall be considered separate structures.

1.5 Adjacent structures with lightning protection shall be considered part of the structure if the adjacent structure's lightning protection system complies with this standard and is connected to the lightning protection system of the structure in accordance with Section 10.4.

1.6 Walkways that are attached to a structure shall be considered part of that structure.

1.7 Free standing Walkways shall be considered an adjacent structure under the following conditions:

a) It is separated by a fire wall and conductive media that is shared by both facilities has an SPD in accordance with Section 13.

b) It is isolated by a distance of not less than six feet and conductive media that is shared by both facilities has an SPD in accordance with Section 13.

1.8 This standard does not cover lightning protection for:

a) Electric transmission lines or open air distribution racks,

b) Outdoor substations or switch yards, and

c) Electric generators unenclosed by a building or other enclosed structures.

1.9 Enclosed generators and conventional building structures at or associated with generators or power plants, etc. are covered.

1.10 These requirements do not cover lightning protection components, which are covered by the Standard for Lightning Protection Components, UL 96.

2 Components

2.1 Except as indicated in 2.2, a component of a product covered by this standard shall comply with the requirements for that component.

2.2 A component is not required to comply with a specific requirement that:

a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard, or

b) Is superseded by a requirement in this standard.

2.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

2.5 Components utilized in the installation of a lightning protection system covered by this standard shall comply with the Standard for Lightning Protection Components, UL 96 or other applicable UL Standards.

Exception: Screws, bolts, nuts, washers, nails and accessories as defined in UL 96.

3 Units of Measurement

3.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

4 Undated References

4.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

5 Glossary

5.1 For the purpose of this standard, the following definitions apply.

5.2 ADJACENT STRUCTURE – A structure that is physically separated by a fire wall or greater than six feet of distance separating it from a structure with lightning protection.

5.3 AIR TERMINAL – A type of strike termination device intentionally installed for the purpose of intercepting lightning flashes. These items are sometimes referred to as lightning rods.

5.4 BONDING (POTENTIAL EQUALIZATION) – An electrical connection between an electrically conductive object and a component of a lightning protection system with a secondary or main-size conductor intended to significantly reduce potential differences created by lightning currents in the main lightning conductors and other grounded metal objects.

5.5 BUILDINGS:

a) Ordinary Building – A building of common or conventional construction used for ordinary purposes, whether commercial, farm, industrial, institutional, or residential.

b) Class I Ordinary Building – A building that is not more than 75 feet (22.9 m) high.

c) Class II Ordinary Building – A building that is more than 75 feet (22.9 m) high or greater.

d) Metal-Clad Building – A building with either sides or roof made of or covered with sheet metal.

e) Metal-Framed Building – A building with electrically continuous framing of sufficient size and conductivity to be used as part of the lightning protection system.

5.6 CHIMNEY – A smoke or vent stack not meeting the requirements of a heavy-duty stack.