



UL 96A

STANDARD FOR SAFETY

Installation Requirements for Lightning Protection Systems

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

Fourteenth Edition, Dated September 29, 2023

Summary of Topics

This is the new Fourteenth Edition of UL 96A, the Standard for Installation Requirements for Lightning Protection Systems, dated September 29, 2023. This new edition includes an addition of the NFPA 780 definition for the term "Listed".

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated August 11, 2023.

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SEPTEMBER 29, 2023

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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, 2016

Fourteenth Edition

September 29, 2023

This UL Standard for Safety consists of the Fourteenth Edition.

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

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ANNEX A (Normative) – MATERIAL REQUIREMENTS

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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:
- It is separated by a fire wall and conductive media that is shared by both facilities has an SPD in accordance with Section [13](#).
 - 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:
- Electric transmission lines or open air distribution racks,
 - Outdoor substations or switch yards, and
 - 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:
- Involves a feature or characteristic not required in the application of the component in the product covered by this Standard, or
 - 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 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 Referenced Publications

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.

4.2 The following publications are referenced in this Standard:

ASTM A792/A792M, *Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process*

IEEE C62.1, *Standard for Gapped Carbide Surge Arresters for AC Power Circuits*

IEEE C62.11, *Standard for Metal-Oxide Surge Arresters for AC Power Circuits*

NFPA 70, *National Electrical Code*

NFPA 780, *Standard for the Installation of Lightning Protection Systems*

UL 96, *Lightning Protection Components*

UL 452, *Antenna Discharge Units*

UL 497, *Protectors for Paired-Conductor Communications Circuits*

UL 497C, *Protectors for Coaxial Communications Circuits*

UL 1449, *Surge Protective Devices*

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.

5.7 CONDUCTOR – The portion of a lightning protection system intended to transfer lightning discharge currents between strike termination devices and ground or to provide potential equalization between conductive bodies in/on the structure.

a) Main Conductor – A conductor intended to conduct primary lightning currents that interconnects strike termination devices with grounding electrodes.

b) Secondary Conductor – A conductor that connects metal bodies within the zone of protection to the lightning protection system to eliminate electrical potential that may create arcing.

5.8 CONNECTOR – A device to splice, tap, or terminate a conductor.

a) Exothermic Weld – A welding process that employs molten metal to form a permanent connection.

b) Bolted Connector – A device that employs mechanical fasteners to maintain conductivity.

c) Crimp Connector – A device that employs metal tabs (i.e. fingers) that enclose the conductor to maintain conductivity.

d) High-Compression Connector – A device that utilizes a high tonnage compression tool to permanently deform the connector material to maintain conductivity.

5.9 EARTH – Finished grade level around a structure.

5.10 ELECTRICALLY CONTINUOUS – An uninterrupted electrically conductive path or one made electrically continuous by being bonded together by welding, brazing, compression fitting or suitable bonding plate.

5.11 FASTENER – An attachment to secure a conductor to a structure.