

▶ LIGHTNING PROTECTION SERVICES

UL's Lightning Protection Certificate Services

The lightning protection certificate services of Underwriters Laboratories® enables customers to request inspections of lightning protection system installations. UL publishes certificates for installations that comply with applicable inspection standards such as UL 96A, the Standard for Installation Requirements for Lightning Protection Systems; NFPA 780, Standard for Lightning Protection Systems; and other published standards for lightning protection systems.

UL's lightning protection certificate services serve the lightning protection installation community by offering third-party inspection services of installed systems. Listed lightning protection installers include those companies whose services are described in a list published by UL.

Service overview

UL's lightning protection certificate service recognizes only traditional lightning protection systems – or Franklin systems – and excludes inspection of nontraditional designs incorporating alternate technology such as lightning elimination/dissipation arrays (or charge transfer systems) and early streamer emission (or corona emission systems).

A master label inspection certificate is evidence that a lightning protection system installation was found by inspection to comply with an inspection standard. Certificates identify the name and address of the property where the installed system can be found, the name of the installer requesting a Certificate, inspection date, certificate expiration date, and all other relevant details about an inspected system. A UL certificate is posted in our lightning protection services database at <https://lps.ul.com>. for a qualified installer who can then provide it to a property owner or another ultimate user of a system.

Only those lightning protection systems covered by a valid inspection certificate are published in UL's Internet directory. Certificates are issued through UL's Internet application and may be canceled or withdrawn by UL at any time. Master label certificates remain valid from the time of inspection until their expiration date unless modifications are made to:

- A structure
- A structure's electrical, mechanical or communication systems
- Any lightning protection devices or system
- A roofing and/or coping system

Additionally, a certificate expires when damage occurs to a lightning protection system. All master label certificates expire five years after the inspection date. Certificates may be renewed at any time through an inspection confirming adherence to current requirements. Canceling or withdrawing a certificate will remove it from the published directory of certificated systems on the Internet. Consumers, building owners, insurance agencies and other interested parties can view current copies of master label certificates on UL's Internet directory at <https://lps.ul.com>.

UL lightning protection certificate services offers independent, third-party inspection services for:

- Independent structures
- Structures separated by firewalls
- Structures attached by walkways



- Structures protected by NFPA 780
- Structures used for ammunition and explosives as defined by published military standards

Scope

This document outlines the requirements for participating in UL's lightning protection certificate services. Lightning protection certificate services cover traditional lightning protection systems and exclude early streamer emission (ESE), charge transfer systems (CTS) and dissipation array systems (DAS).

General

The lightning protection industry is, in many respects, a subset of the building industry that serves residential, commercial and industrial structures. The industry addresses the common need to limit the hazardous and damaging effects of a lightning strike. Professional lightning protection system installers must choose and install UL Listed components carefully and effectively to establish a protective system for a structure. Components shall meet requirements of UL 96, the Standard for Safety of Lightning Protection Components. Components that effectively meet the requirements of UL 96 shall be used to provide the zones of protection needed to comply with UL 96A. Lightning protection certificate services provide inspections for independent structures and do not cover more than one building per request. Each building is evaluated for compliance independent of the surrounding objects and structures.

RESPONSIBILITIES

Listed installers

It is the responsibility of UL Listed installers to use UL Listed lightning protection components evaluated to the latest edition of UL 96 and labeled with the appropriate UL marking indicating eligibility for use in these systems. It is also a Listed installer's responsibility to assure that a lightning protection system submitted for certification is installed in accordance with the applicable requirements.

Standard selection

Installation companies can obtain copies of UL's Standards for Safety through Comm-2000 at www.comm-2000.com. If using a

standard other than UL 96A or NFPA 780, it is a Listed installer's responsibility to identify the specific standard prior to inspection and provide a copy with the application for inspection. UL will not suggest or imply which standard should be utilized for a specific type of inspection.

Site access

A representative from a Listed installation firm or its appointee must be in attendance at time of inspection. A Listed installer is also responsible for coordinating access to all portions of a structure necessary to verify compliance to an applicable standard. Some areas include but are not limited to:

- Main electrical/power distribution room
- Main communications room
- Service utilities, i.e., sewer, water, fire suppression, etc.
- Rooftops
- Attics
- Basements

A Listed installer is responsible for verifying that an area can be accessed safely. This may entail removing snow, trip hazards, moving equipment and disconnecting power sources if applicable.

Weather conditions

A Listed installer should contact a UL field representative as soon as possible when conditions are known to be unfavorable for an inspection. Inspections will be rescheduled if weather conditions are not deemed safe for access. This may include but is not limited to:

- Rain or thunderclouds in area
- Snow
- Wind
- Water, ice or snow on a structure

Inspections will be terminated if conditions deteriorate during an inspection.



Submitting an application

Requesting an inspection of a completed system is done through a secured Web page at <https://lps.ul.com>. Each installation company receives a unique user name and password that allows access for submitting applications, tracking status of previous requests, and retrieving master label certificates and letters of findings issued by UL.

Submitting a completed online application is an installer's declaration that an installation cited by that application complies with applicable requirements. Systems comprised of concealed portions shall be installed in accordance with all requirements of the standard requested for inspection. An installer may not submit an application for a master label certificate for systems known by the installer to be incomplete or not in compliance with the applicable requirements.

Installers submitting systems with intentional noncompliances due to construction or limitations of scope as outlined by the installer, rendering them ineligible for master label certificates should request a letter of findings.

An installer shall supply a structure's name/identification, location and all other fields required by the Web application form. All supporting documentation shall be attached to an application prior to submitting a request. Supporting documentation consists of photos of grounding systems, shop drawings, surge identification information, firewall documentation, and other required information.

UL suggests that an application for a master label certificate or letter of findings be submitted prior to completion of an installation. This will enable an installer and a UL field representative flexibility in scheduling an inspection, which will occur when the lightning protection system is completed and can often be coordinated with a final day on site. UL will not conduct or schedule inspections when an application has not been submitted.

Documents issued after inspection

Upon completing an inspection of a lightning protection system, UL will provide an installer with:

- Master label certificate: Issued for those structures that fully comply with a recognized standard. UL retains ownership

of the master label certificate. This certificate is valid for five years based on UL's reasonable estimate that a system will remain unchanged during that time period. A certificate may be rendered invalid and necessitate a complete inspection of a structure prior to the five-year expiration date if any of the modifications or damage described in the UL's lightning protection certificate service section on page 1. An installer may reapply for a certificate prior to expiration or any time a system has been altered.

Master label certificates are valid only if published to UL's public directory. Structure owners, architects, insurance agencies, code officials and interested parties are directed to the Web to verify these published certificates.

UL will issue a noncompliance report when a master label certificate is requested for systems found not to comply with the appropriate standard or installer guidelines. A noncompliance report is not published to the Web and serves as the conclusion of the inspection at a specific site. In this situation, an installer may choose to make corrections and re-submit the application requesting a master label certificate.

- Letter of findings: Outlines inspections of a traditional lightning protection system with intentional noncompliances due to construction or limitations of scope outlined by the installer that render a system ineligible for a master label certificate. A letter of findings is the final deliverable, has no expiration and is not published to the Web. An installer may choose to bring a system into compliance and re-submit the original application for a master label certificate.

Listed installer directory

Consumers, lightning protection installers, architects, building owners, insurance agencies and other interested parties can view UL Listed lightning protection installers on UL's corporate Web site at www.ul.com/lightning and locate pertinent news related to the program on <https://lps.UL.com>.

Invoicing

Lightning protection master label certificate inspections are invoiced a flat fee based on structure perimeter. Each structure inspected by UL will be invoiced according to the current pricing structure. UL does not accept inspection requests with multiple buildings on a single application and does not offer a discounted



price for grouping inspections. Inspections that are requested after receiving a noncompliance report are invoiced at the flat rate according to the structure perimeter.

Letter of finding inspections are invoiced at a flat fee for each inspection.

Additional hourly inspection charges apply when an installing company requests that a UL field representative remains on a job site after an inspection while corrections from findings are completed. Additional expenses will apply if excessive travel or wait time is incurred.

Inspections outside the parameters of the program are processed on a case-by-case basis and quoted specifically for each inspection.

UL bills an annual maintenance fee on January 31 of each year. In part, this fee covers maintenance of our database systems for our certificate services, mailings of information to customers, and responding to technical questions that customers may have during inspections. Please contact our customer service team at lightningprotection@us.ul.com to learn more about the annual maintenance fee or for a quote on inspection types.

PROGRAM ELIGIBILITY AND ENROLLMENT

Training requirements for new installers

To become a UL Listed installer, a company or its representative must achieve a minimum level of competency. UL's initial assessment of installers requires either an in-house training program known as LPStart or participation in an instructor-led course delivered through UL University.

Training option 1: UL University

The UL University instructor-led course offers an in-depth study of the inspection process and the UL 96A Standard. New installer companies may send up to three individuals from the company to attend the public seminar. More information on the UL University course can be found at www.uluniversity.com.

Training option 2: LPStart

In lieu of the UL University course, a private in-house training session may be requested. This session is geared toward

providing a new installer company an overview of inspection process as well as technical training on the standards UL uses for its inspections. The training session is held at an installer's facility. If selected, LPStart must be completed prior to submitting any applications. Please contact lightningprotection@us.ul.com to schedule an LPStart session at your facility.

Ongoing participation requirements

UL Listed installer companies must complete at least 10 inspections annually to remain eligible for publication in our inspection services directory for lightning protection installers. Installing companies that do not meet the minimum number of inspections are required to meet the same training requirements as a new installer. Attending a lightning protection installer seminar or having an LPStart session at a facility satisfies UL's reassessment or minimum inspection requirements. Installing companies who fail to meet the minimum requirements will not be published in our inspection services directory.

UL reserves the right to revoke access to the online application form and use of services for any installing company failing to follow program guidelines. To regain access to UL services, an installing company must comply with all requirements, submit an application to become a new installer, and attend a ULU seminar or request LPStart.

Use of the UL Mark in promotions and advertising

Promoting your status as a UL Listed installer is one of the benefits of our program. Please refer to the proper use and reference to the UL mark can be found on www.UL.com/show. All references to the UL Mark shall comply with the guidelines published here.

Applicable documents

Unless otherwise indicated, the most current editions of the referenced documents are applicable to the lightning protection certificate service. Program documents include:

- UL 96, the Standard for Safety of Lightning Protection Components
- UL 96A, the Standard for Installation Requirements for Lightning Protection Systems
- NFPA 780, the Standard for Lightning Protection Systems



- Government standards for lightning protection systems
- Installer Web application directions

Required materials and equipment

A UL Listed installer shall supply all necessary tools that may be required for an inspection. Some examples include but are not limited to are:

- Ladder(s) suitably rated for personnel weight and building height. Ladders shall be secured to building as required
- Site-specific safety equipment
- If needed to verify existing components, a one-inch calibrated micrometer with up-to-date annual calibration report meeting UL's requirements for inspection, measuring and testing equipment and National Institute Standards Testing (NIST) criteria found on our Web site at www.ul.com/global/eng/documents/offerings/services/fus/globalfieldservices/ul_calibrationrequirements.pdf.

To conduct work with UL, installers will need the following:

- Access to the Internet
- Valid e-mail address
- Designated contact person

Additional tools may be required, depending on the type of inspection. Installers shall be prepared for any situations requiring additional equipment.

Safety

An installer is responsible for coordinating all special safety training such as emergency evacuation procedures or use of specialized safety equipment required to gain access to a lightning protection system.