



Northeast Lightning Protection, LLC

Thank you, for downloading the Northeast Lightning's "General Spec". The general spec provides you with standard information regarding equipment / material needed to properly configure / install a lightning protection system.

Please customize our "General Spec" to fit your needs by adding/editing/deleting the information below. Once you have customized it to your specific requirements / needs, please email it to drafting@northeastlightning.com

Sincerely,

Northeast Lightning Protection, LLC

SECTION 16670 (also 13100): LIGHTNING PROTECTION SYSTEM

PART I. GENERAL

- 1.01 **Objective:** To provide safety for the building and occupants by preventing damage to enter structure name caused by lightning.
- 1.02 **Standards:** The following specifications and standards of the latest issue form a part of this specification:
- (1) Underwriters Laboratories, Inc., (UL)
Installation Requirements for Lightning Protection Systems, UL 96A
 - (2) Underwriters Laboratories, Inc.,
Lightning Protection Components, UL 96
 - (3) National Fire Protection Association
Standard for the Installation of Lightning Protection, NFPA 780
- 1.03 **System Design:** The work covered by this section of the specifications consists of furnishing all labor, materials and items of service required for the completion of a functional and unobtrusive lightning protection system approved by the architect, engineer, and in strict accordance with this section of the specifications and the applicable contract drawings.
- If any departure from the contract drawings or submittal drawings (where they exist), covered below are deemed necessary by the Contractor, details of such departures and reasons therefore shall be submitted as soon as practical to the architect and engineer for approval.
- The lightning protection system shall be designed by a Lightning Protection Certified Master Designer and the drawing shall bear the seal. The seal shall be current at the time of submission and shall be signed by the Master Designer. This shall be accepted in lieu of a state certified engineers stamp on the lightning protection drawings.
- The lightning protection installation company shall employ LPI Certified Master Installers to do the actual installation and the certification shall be part of the submittal package. The card shall be carried onsite at all times.
- 1.04 **Submittals:** Complete design drawings showing the type, size, and locations of all grounding, down conductors, through-roof / through-wall assemblies, roof conductors, and air terminals shall be submitted to the architect and engineer for approval.
- 1.05 **Quality Assurance:** The lightning protection system shall conform to the requirements and standards for lightning protection systems of UL and NFPA. Upon completion, application shall be made to the Underwriters Laboratories, Inc. for inspection and issuance of the UL Master Label.

PART II. PRODUCTS

- 2.01 **Standard:** The system to be furnished under this specification shall be the standard product of a manufacturer regularly engaged in the production of lightning protection equipment and shall be the manufacturer's latest approved design. The equipment shall be UL listed and properly UL labeled. All equipment shall be new, and of a design and construction to suit the application where it is used in accordance with accepted industry standards and UL and NFPA requirements.

Acceptable Manufacturers:

SECTION 16670 (also 13100): LIGHTNING PROTECTION SYSTEM

Northeast Lightning Protection, Bloomfield, CT
East Coast Lightning Protection Equipment, Winstead, CT
Advanced Lightning Technologies - Argyle, TX

- 2.02 **Equipment :** Provide and install a complete lightning protection system in compliance with the specifications and standards of the most current editions of the National Fire Protection Association's Lightning Protection Standard NFPA-780, and Underwriters Laboratories Lightning Protection Standard UL96-A. The system shall be installed by a lightning protection contractor who is listed by Underwriters Laboratories, Inc.
- 2.03 **Materials:** All lightning protection materials and components shall comply in weight, size and composition with UL 96 and NFPA-780 lightning protection material requirements for this type of structure. All materials shall be copper, bronze, or stainless steel. Aluminum components shall be used in locations where system components are mounted to aluminum surfaces to avoid galvanic corrosion of dissimilar metals. Class I materials shall be used on structures not more than 75 feet in height. Class II materials shall be used on structures over 75 feet in height.

PART III. EXECUTION

- 3.01 **Installation:** The installation shall be accomplished by an experienced installation company that is listed with Underwriters Laboratories for lightning protection installation. The installation company shall utilize Lightning Protection Institute Certified Master Installers. All equipment shall be installed in a neat, workmanlike manner. The system shall consist of a complete conductor network at the roof and include air terminals, connectors, splices, bonds, down leads and proper ground terminals.
- 3.02 **Coordination:** The lightning protection installer will work with other trades to ensure a correct, neat and unobtrusive installation. The roofing contractor will be responsible for sealing and flashing all lightning protection roof penetrations as per the roof manufacturer's recommendations.

Note: Lightning Protection penetrations and/or attachment procedures should be addressed in the roofing section of the specifications. It shall be the responsibility of the lightning protection installer to assure a sound bond to the main water service and to assure interconnection with other ground systems.

- 3.03 **Inspection and Certification:** Surge protection as required by UL96a, and labeled for lightning protection systems by UL, must be in place at the time of a UL inspection for the project to receive a full Master Label. The units shall be provided by the individual system (CATV, TELCO, Electric and antenna) providers on the service disconnect of CATV, TELCO, Electric system and at any antenna. Upon completion of the lightning protection installation, the contractor shall furnish the Master Label issued by Underwriters Laboratories, Inc. for this system. If the protected structure is an addition to, or is attached to (as defined by UL96a), an existing structure that does not have a lightning protection system, the contractor shall advise the Owner of installation requirements on the existing structure to obtain the Master Label. If the existing structure does have a lightning protection system, the contractor shall advise the Owner of any additional work required on the existing system to achieve compliance with current UL Master Label requirements.