

LIGHTNING PROTECTION SPECIFICATIONS
SMOKESTACK LIGHTNING, INC.
Lightning Rods - Grounding Systems
37 Upper River Street, Brookfield, MA 01506
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PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. The objective of these specifications is to provide safety for the building and occupants by preventing damage to the building structure caused by lightning.

1.02 WORK TO BE PERFORMED

- A. Design, furnish and install all labor, materials and items of service for the completion of a functional and unobtrusive lightning protection system approved by the architect, engineer and in strict accordance with the specifications and standards of the most current editions of the National Fire Protection Association Lightning Protection Standard NFPA - 780 and Underwriters Laboratories Lightning Protection Standard UL 96-A. The system shall consist of a complete conductor network on the main roof and shall include air terminals, connectors, bonds, down leads and proper ground terminals.
- B. If any departure from the Contract Drawings or submittal drawing is deemed necessary by the Contractor, details of such departures and the reasons shall be submitted immediately to the architect and engineer for approval.

1.03 RELATED WORK

- A. Coordinate work of this Section with the related work to be performed under other Sections.

1.04 SUBMITTALS

- A. 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 STANDARDS

- A. 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 96-A.*
 2. National Fire Protection Association (NFPA) *Standard for the Installation of Lightning Protection Systems, NFPA 780.*
 3. Underwriters Laboratories, Inc., (UL) *Lightning Protection Components, UL 96.*

PART 2 - PRODUCTS

2.01 MATERIALS

- A. 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.
 - 1. 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 materials.
 - a. Class I materials shall be used on portions of the structure not more than 75 feet in height.
 - b. Class II materials shall be used on portions of the structure over 75 feet in height.

2.02 STANDARDS

- A. 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 that manufacturer's latest approved design. All components shall be UL listed and properly UL labeled.
- B. All components 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.
 - 1. Manufacturers: East Coast Lightning Equipment, Winsted, CT 860-379-9072 ecl.e.biz.
 - 2. DITEK, Largo, Florida 1-800-753-2345 ditekcorp.com
 - 3. INTERMATIC, Spring Grove, IL 815-675-2321 intermatic.com

PART 3 - EXECUTION

3.01 INSTALLATION

- A. An experienced lightning protection installation contractor listed with Underwriters Laboratories, Inc. for lightning protection installation shall install the system.
 - 1. Designer/Installer: Smokestack Lightning, Inc., 37 Upper River Street, Brookfield, MA 01506 508-867-9233. www.smokestackusa.com.

All components shall be installed in a neat, workmanlike manner.

3.02 COORDINATION

- A. The lightning protection installer shall coordinate with other trades to ensure a correct, neat and unobtrusive installation.
- B. The lightning protection installer shall ensure a sound bond to the main water service and interconnection with other ground systems.

3.03 INSPECTION AND CERTIFICATION

- A. Upon completion of the installation, the lightning protection contractor shall furnish the Master Label issued by Underwriters Laboratories, Inc. for this system.