



**1. Product Name**

Lightning Protection Systems

**2. Manufacturer**

East Coast Lightning Equipment, Inc.  
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**3. Product Description**

**BASIC USE**

Lightning protection systems from East Coast Lightning Equipment provide a specified path on which lightning can travel. These systems protect equipped buildings by carrying the power of the lightning strike safely into the ground, leaving the structure, its contents and its occupants unharmed. These modern lightning protection systems are installed to blend with the style and materials of the structure, making the system practically undetectable from the ground.

Lightning protection systems consist of numerous components constructed from highly conductive copper or aluminum alloys. The system includes the following elements, all of which work together to prevent lightning damage:

- Air terminals (lightning rods)
- Conductors (special braided cables)
- Bonding connections to metallic bodies within the structure
- Ground terminations
- Surge suppression and lightning arrestors

Lightning protection systems are ideally suited for many applications, including schools, hospitals, airports, factories, chemical plants, power generating plants, homes and office buildings.

**COMPONENTS**

**Conductors**

Conductors are available in aluminum, copper, tinned copper or leaded. In addition to a full line of Class I and Class II lightning protection conductors, East Coast carries concentri-

cally wound grounding wire for direct burial, solid rod and flat conductor. All conductors are UL listed.

**Air Terminals**

East Coast's rooftop air terminals feature state-of-the-art design and geometry. Terminals are available tapered or round tipped in copper, aluminum, tinned or nickel plated. Manufacturer offers a wide variety of air terminal assemblies for use with all types of roofing systems and configurations.

**Connectors and Fittings**

Solid bronze and aluminum castings are manufactured onsite in a foundry dedicated exclusively to the production of highly conductive castings for lightning protection systems. Designed with ease of installation in mind, these fittings are simple to use, long lasting and comply fully with size, strength and materials requirements of UL and NFPA.

**Grounding Equipment**

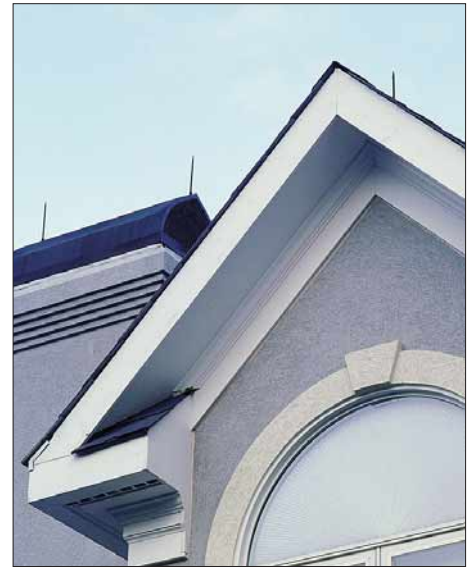
Grounding products include an array of clamps and connectors for joining rods and conductors in various applications. Manufacturer carries a full line of copper clad ground rods for direct burial as well as stainless steel ground rods, copper ground plates, grounding mats, signal reference grids, busbars, ground test wells, chemical grounds and computer pedestal clamps. Specialty and custom grounding products are also available.

**Lightning Arrestors and Surge Suppressors**

East Coast's line of lightning arrestors includes everything from simple hardwired residential panel protectors to sophisticated industrial electrical protection devices. The transient voltage surge suppression line is an array of products that protect individual pieces of sensitive electronic equipment from electrical surges. Products include electrical protection, modem and telephone protection and coaxial protection.

**Decorative Finials and Glass Balls**

East Coast finials are available in red bronze or aluminum and can also be tin plated. Whether used as decoration or incorporated into a lightning protection system, these decorative finials add a special touch to fine homes, historic buildings and structures. East Coast also carries a line of reproduction antique decorative glass lightning rod balls in cobalt blue, ruby red, milk white and emerald green.



Typical Residential System

**COMPOSITION & MATERIALS**

All lightning protection system components comply with the UL and NFPA material and size requirements and are listed and inspected for compliance with UL's Lightning Protection System Master Label Certification Program. Products are constructed from copper, bronze, aluminum and stainless steel. To avoid galvanic corrosion between dissimilar metals, aluminum components should not be installed on copper roofing materials or where exposed to runoff from copper surfaces. Aluminum materials shall not come into direct contact with earth. Approved bimetallic fittings shall be used to join aluminum and copper lightning protection system components.

**4. Technical Data**

**APPLICABLE STANDARDS**

- Underwriters Laboratories, Inc. (UL)
  - UL 96 Lightning Protection Components
  - UL 96A Installation Requirements for Lightning Protection Systems
- Lightning Protection Institute (LPI) - LPI 175 Standard of Practice
- National Fire Protection Association (NFPA) - NFPA 780 Standard for the Installation of Lightning Protection Systems



Typical commercial system

**5. Installation**

**PREPARATORY WORK**

Coordinate installation of lightning protection system with roofing, electrical and site preparation trades to ensure a correct and unobtrusive installation. Handle and store products in accordance with manufacturer's recommendations.

**METHODS**

Enlist the services of a specialty contractor firm that is listed with UL for lightning protection design and installation. Individual lightning protection systems are eligible for third party inspection and certification of compliance with UL and NFPA requirements under UL's Master Label Certification Program. Install system in compliance with UL and NFPA requirements and manufacturer's instructions. Comply with project drawings and specifications. Consult manufacturer for complete installation recommendations.

**BUILDING CODES**

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

**6. Availability & Cost**

**AVAILABILITY**

Consult manufacturer for information on local availability.

**COST**

Budget installed cost information may be obtained from the manufacturer. For more information, contact East Coast Lightning Equipment.

**7. Warranty**

Complete warranty terms and conditions are available from the manufacturer. For details, contact East Coast Lightning Equipment.

**8. Maintenance**

Lightning protection systems typically only require maintenance in the event that the protected building is changed structurally. The addition of rooftop equipment, such as antennae, HVAC units, railings, etc., will interfere with the performance of the lightning protection system. A regular program of inspection should be maintained to confirm the integrity of the lightning protection system.

**9. Technical Services**

In addition to its complete line of quality lightning protection system components, the manufacturer offers design, specification and consultation services. A nationwide network of UL-listed, trained lightning protection specialists can assist with any project. In addition to a standard product line, East Coast Lightning Equipment routinely manufactures custom parts for use in specific applications.

**10. Filing Systems**

- Reed First Source®
- MANU-SPEC®
- Additional product information is available from the manufacturer upon request.



Various rooftop rods