

# Preventor Air Terminal

## LIGHTNING PROTECTION SYSTEM SPECIFICATIONS

- 1) Furnish and install all labor, equipment and materials in performing all operations as noted herein in connection with the installation during construction of a Preventor Lightning Protection System to be installed during construction of a structure. All cables which run from roof to ground shall be run in 1-1/4" P.V.C. conduit, furnished and installed by the Electrical Contractor, in the walls and as indicated on lightning protection drawings previously submitted and approved.
- 2) The shop drawing would indicate the extent and general arrangement of the lightning protection system, showing the location of the grounds, cable coursing, and where to locate the Preventor Air Terminal. The Electrical Subcontractor shall furnish and install all required items and accessories to have the system approved by a competent authority.
- 3) Proper roof flashing shall be supplied by the roofing contractor and installed by the roofing contractor.
- 4) Conductors on structures under 100 feet in height shall consist of copper ropelay cable composed of 28 strands of 14 gauge wire weighing not less than 375 pounds per 1,000 feet. Conductors on structures over 100 feet in height shall consist of copper cable composed of 28 strands of 13 gauge wire weighing not less than 420 pounds per 1,000 feet.
- 5) Air terminal shall be a Preventor as manufactured by Lightning Preventor of America, Division of Heary Bros. Lightning Protection Co., Inc., No. LPA-2005; no substitutes will be accepted. Air terminal shall be designed specially for Preventor air terminals as manufactured by Lightning Preventor of America, Division of Heary Bros. Lightning Protection Co., Inc., of Springville, New York, 14141.
- 6) Cable on flat roof area may be run exposed. Cable fasteners on the flat roof shall be of the adhesive type spaced every 3'-0" on conductors.
- 7) Downlead cables to ground shall terminate in a triangular ground grid of three 3/4" x 10 ft. copperweld ground rods. LPA-107, installed a minimum of 2 feet below finished grade. Connections to ground rods shall be LPA-57D, Bolt pressure clamp. One such downlead shall be bonded to the water service line. Mechanical connectors are acceptable.
- 8) Excavating, back filling and tamping of earth around ground grids and rods shall be furnished and completed by the General Contractor.
- 9) Shop drawing shall be provided for the architect and engineer or owner by the Lightning Protection Contractor and be approved before installation begins.