



BUILD & PROTECT

Lightning Protection Glossary of Terms

As defined by the Lightning Protection Institute Standard of Practice for Design, Installation and Inspection: LPI-175

Authority Having Jurisdiction	An organization, office, or individual responsible for enforcing the requirements of a code or standard, or approving equipment, materials, and installation, or a procedure.
Bonding	An electrical connection between an electrically conductive object and a component of a lightning protection system that is intended to significantly reduce potential differences created by lightning currents.
Bonding Conductor	A conductor used for potential equalization between grounded metal bodies or electrically conductive objects and a lightning protection system.
Cable	A conductor formed of a number of wires stranded together.
Catenary Lightning Protection System	A lightning protection system consisting of one or more overhead ground wires (also known as "overhead shielding").
Conductors	Devices defined by the LPI-175 as suitable to carry lightning current or make bonding interconnections.
Fastener	An attachment device used to secure the conductor to the structure.
Grounding Electrode	The portion of a lightning protection system, such as a ground rod, ground plate, or ground conductor that is installed for the purpose of allowing lightning current flow into the earth.



Labeled

Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

Lightning Protection System

A complete system of strike termination devices, main conductors (which could include conductive structural members), grounding electrodes, inter-connecting conductors, surge protective devices and other connectors and fittings required to complete the system.

Listed

Equipment, materials or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or periodic evaluation of services, materials, and whose listing states that either the equipment, material or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

Strike Termination Device (air terminal or rod)

A conductive component of a lightning protection system capable of receiving a lightning strike and providing a connection to a path to ground. Strike termination devices include air terminals, metal masts, permanent metal parts of structures as described in LPI-175 and overhead ground wires installed in catenary lightning protection systems.

Surge Protective Device (SPD) A device intended for limiting surge voltages on equipment by diverting or limiting surge current that comprises at least one nonlinear component while remaining capable of repeating these functions.

Transient

A subcycle disturbance in the ac waveform that is evidenced by a sharp, brief discontinuity of the waveform. It may be of either polarity and may be additive to, or subtractive from the nominal waveform.

Voltage Protection Rating (VPR)

A rating (or ratings) selected by the manufacturer based on the measured limiting voltage determined when the SPD is subjected to a combination waveform with an open circuit voltage of 6 kV and a short-circuit current of 3 kA.

Zone of Protection

The space adjacent to a lightning protection system that is substantially immune to direct lightning flashes.
