

Building Lightning Safe Communities to Weather the Storm

When we build AND protect, we increase sustainability and resilience against a leading weather threat.

Lightning losses are costly for our communities.

\$5.7 BILLION

Severe thunderstorms and convective weather was responsible for a record-breaking \$5.7 billion costs in insured losses in the U.S. in the 1st quarter of 2017.

40 MILLION

With the U.S. experiencing more than 40 million strikes each year, it's not shocking that lightning is a year-round concern for homes and businesses.

200 kA

A single bolt of lightning can generate up to 200 kA of electrical energy, making the threat of fire from a direct strike or indirect surge very real.



Lightning and surge-related overvoltages are a leading cause of damage and downtime for photovoltaic (PV) systems and solar equipment like combiner boxes, inverters and data lines.



Lightning can wreak havoc and cause serious power outages at server farms, data centers, emergency and 911 facilities.



Lightning is a special concern for smart structures, as connected devices and built-in monitoring systems can be zapped "offline" with a single strike—resulting in irreparable damage or degradation of sensitive equipment and data.

Lightning is risky for business.

Manufacturing facilities, financial service institutions, hospitals, schools and critical facilities are especially susceptible to lightning. The need for protection is more profound when lives and life-providing systems are at risk. Without proper grounding and bonding provided by a safety standard compliant lightning protection system, uncoordinated installations (telecommunications, antennas, electronics, generators and interconnected systems) can be especially vulnerable to lightning. For structures with costly state-of-the-art hardware, internal circuitry and critical systems, the cost-benefits of lightning protection can't be overstated.



Lightning hits homes and homeowners hard.

Even when home automated systems are grounded, they're still highly vulnerable to lightning. A direct strike can spark a fire and an indirect surge of current can pass through the wiring of a structure in any direction. Lightning can initiate a domino effect path of transient overvoltage which can disrupt, degrade and damage multiple electronic systems and connected equipment, making lightning protection systems important for all homes, especially today's "smart" structures.

Lightning doesn't discriminate.



Lightning is the weather peril that affects most people, most of the time in the U.S. In terms of overall losses, lightning has outranked destruction caused by fires, explosions, earthquakes and vandalism.

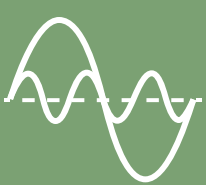


Lightning often strikes the same place repeatedly, and structures like the Empire State Building and Willis (Sears) Tower are zapped numerous times a year.



Scientists are predicting increases in lightning activity as forecasts depict increasingly unstable weather patterns.

Lightning Protection Systems (LPS) are helping to manage the risk.



Lightning protection maximizes power quality.



Lightning protection systems safeguard your most important assets (family, home and contents).



Lightning protection systems are key for productivity, safety and sustainability of industry.



Lightning protection helps protect sensitive electronics connected to smart grid systems.



Lightning protection systems prevent costly downtime and lost revenues when businesses are zapped.

When we build lightning safe communities today, we help weather tomorrow's storms!

Sign up for **BUILD & PROTECT**, LPI's technical newsletter [here](#).

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LPI is a supporter of the Alliance for National and Community Resilience (ANCR) and its mission to "help build America into a country that can face challenges of the 21st Century—one community at a time."