

Preventive protection means **having information in advance** (from a storm detector) that allows the user to **start temporary preventive measures** before the storm begins. These measures will be deactivated after the storm.

Preventive protection will be complementary to an installed Lightning Protection System (LPS) in certain situations, while in others it will be sufficient to act alone.

The steps required for correct preventive protection are:

1° Early detection of lightning hazard in the area to be protected.

2° Lowering the risk of damage by starting preventive actions before the beginning of the storm. These measures are not permanent: when lightning risk finishes then the preventive action stops as well.

It is important to emphasize that preventive protection **does not replace external* nor internal* lightning protection** (both are permanent), but it is complementary to them. However, when external or internal lightning protection cannot be achieved (as for example with persons or moving elements) then preventive protection can be used alone.

Standards and methods for external and internal lightning protection exist, but they do not cover some hazardous situations related to lightning storms that can be dynamically prevented or lowered by temporary measures based on the alarm given by a detection system.

Having information about lightning storms is essential for workplaces or sensitive locations. Storm detectors are particularly useful for the people who are responsible for taking decisions (national or local governments, private or public companies) involving some of the following situations:

- **People in open areas:** workplaces, sports or open air activities, competitions, multitudinous events, farming, ranching or fishing activities.
- **Sensitive goods protection:** computers, electric or electronic controls, emergency, alarm or security systems
- **Prevention of losses in industrial processes and operations.**
- **Prevention of serious accidents involving hazardous products (flammable, radioactive, toxic, explosive)**
- Operations where basic service continuity has to be assured: telecommunications, power supply, energy transport and distribution, health and emergency services.
- **Infrastructures:** harbours, airports, trains, roads, highways, cable railway

- **Protection to the people and the environment.**
- **Prevention of workplace risk:** according to national codes and standards.

