


# LIGHTNING PROTECTION RISK ASSESSMENT

EVERY YEAR THERE ARE 15-20 MILLION LIGHTNING GROUND STRIKES AFFECTING 30% OF US BUSINESSES & CAUSING OVER \$5 BILLION IN DAMAGE. THE AVERAGE BUILDING IS HIT WITH 20,000 AMPS OF ELECTRICITY FROM LIGHTNING STRIKES EVERY 5-20 YEARS.

With the release of the NFPA 780 2011 Edition, there has been significant modifications in the area of Risk Assessment for Lightning Protection. The NFPA now has two methods of Risk Assessment; the "Simplified Risk Assessment" and the "Detailed Risk Assessment." Both of which are best reviewed by a lightning protection expert. The purpose, based upon the structure and its use, is to determine the lightning protection need.

As stated in the NFPA 780 Standard:



*"THE LIGHTNING RISK ASSESSMENT IS PROVIDED TO ASSIST THE BUILDING OWNER, SAFETY PROFESSIONAL, OR ARCHITECT/ENGINEER IN DETERMINING THE RISK OF DAMAGE OR INJURY DUE TO LIGHTNING. THIS ANNEX NOW PROVIDES BOTH A SIMPLIFIED, QUICK-LOOK ASSESSMENT AND A MORE DETAILED ASSESSMENT FOR THOSE REQUIRING A MORE DETAILED ANALYSIS. ONCE THE LEVEL OF RISK HAS BEEN DETERMINED, THE DEVELOPMENT OF APPROPRIATE LIGHTNING PROTECTION MEASURES CAN BEGIN."*

## SIMPLIFIED RISK ASSESSMENT

Lyncole's staff of LPI certified Lightning Protection engineers can help you complete these assessments and provide guidance through the process. The Simplified Risk Assessment is something that Lyncole will conduct for free through a phone interview as well as will send you a statement of our findings. We can also, when requested, provide you with a full design and quotation for the implementation of a Lightning Protection System when appropriate.

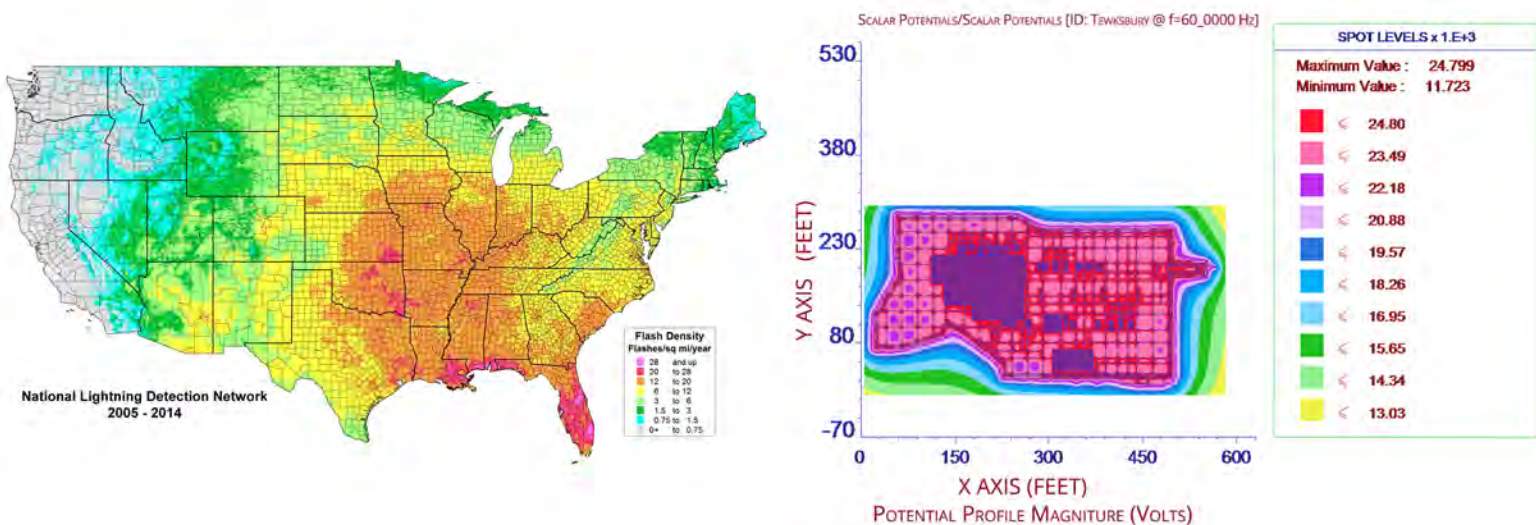
*\*(Carnegie Mellon Report, February, 2006)*



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## DETAILED RISK ASSESSMENT

The Detailed Risk Assessment is extremely comprehensive and requires obtaining in-depth structural details and evaluation of use. These details are then incorporated into the Risk Assessment formula to calculate the need for protection of people and structures. Lyncole provides this assessment by conducting a very detailed phone interview then analyzing the data provided. This process will result in a full report detailing the data collected, observations, recommendations and the results from of the Risk Assessment formula.



## ON-SITE DETAILED RISK ASSESSMENT

Lyncole provides on-site Detailed Risk Assessments where our engineers gather all necessary data, make necessary observations, run soil tests and interview appropriate on-site personnel to fully complete the assessment to determine and justify the need for lightning protection. This is the most thorough analysis that meets all of the guidelines established in the NFPA 780 standard. The result of this assessment is a full report of findings including justifications for recommendations. A full design and quotation for installation of a Lightning Protection System can be added to this report when appropriate.

Lyncole is known for complete site surveys that include Lightning Protection, Electrical Protection and Grounding. We conduct a full survey on all aspects of a facility then provide a detailed report of our observations and recommendations for repairs or to bring your facility up to comply with preset day Industry Standards. If you are evaluating your facility for Lightning Protection, a full site survey may be an appropriate consideration.

