

Lightning Protection Engineering Seminar

(according to NFPA-780)

About the Seminar

This comprehensive 2-day seminar is designed for engineers, architects and others interested in covering the requirements of the National Fire Protection Association (NFPA) 780 - 2008 Edition, *Standard for the Installation of Lightning Protection Systems* and the methodology behind the requirements in various applications. A copy of the NFPA-780 book and a CD on Lightning Protection and Risk Assessment will be included along with the course study materials. You may bring a calculator and your laptop to the Seminar, but they are not required. (Expenses associated with continuing education may be tax deductible - please consult your tax advisor).

Course Outline

1. Principles of Lightning Protection

Review of the physics governing lightning protection system design.

2. Strike Termination

Defines strike termination devices and covers placement rules based on zone of protection modeling.

3. Conductors

General requirements for conductors used for current-carrying portions of the system in exposed and concealed areas.

4. Grounding

Considerations given for good grounding practices for lightning protection systems in variable soil conditions.

5. Potential Equalization

The basis for bonding to equalize potential of incoming services or internal building systems is analyzed using system design and surge protection devices.

6. Special Occupancies

Techniques cited in NFPA-780 to protect specific occupancies/appurtenances, including flammable and explosive materials storage, personnel shelters, masts, metal tanks, grain handling silos and more.

7. Maintenance & Inspection

Proper inspection for maintenance of the lightning protection system requires implementation of visual and instrument assisted testing procedures.

8. Risk Assessment

Examination of risk assessment tools available to determine the lightning hazard to a particular site. Based on Annex L of NFPA-780