

Fire and Life Safety Design of Very Tall Buildings: Challenges and Strategies

Course Description

This one-day seminar will explore a wide range of fire and life safety challenges associated with very tall buildings and strategies to address them. To enhance learning, attendees will be asked to participate in simple, qualitative hazard, risk or reliability analyses, fire and life safety strategy development for representative building configurations and fire scenarios, and fire safety management and evacuation planning exercises. Due to time constraints there will be no quantitative or computational analyses. The topics and sequence will generally follow those embodied in the *SFPE Engineering Guide: Fire Safety for Very Tall Buildings*. Content includes an overview of fire events in tall buildings, highlighting issues of concern and lessons learned. Emerging trends in very tall building design, which may have implications for fire and life safety performance, will be discussed.

Learning Objectives

Upon completion of this seminar, the participant will be able to

- Identify the potential impacts of new and emerging technologies and design features on fire and life safety performance in very tall buildings,
- Explain how hazard, risk and reliability analysis can help identify and assess scenarios of concern and potential mitigation options,
- Explain the roles that occupant risk perception and situation awareness might have on the selection and operation of defend in place and evacuation strategies,
- Distinguish the impact of building design decisions on factors such as smoke control, fire spread and structural fire resiliency,
- Understand systems reliability and robustness issues,

Prerequisite

None

Materials Needed

SFPE Engineering Guide: Fire Safety for Very Tall Buildings. Attendees will be asked to participate in exercises and encouraged to share experiences with fire and life safety issues and strategies in very tall buildings.

Who will benefit: Experience Level Intermediate

FPEs, Architectural, Civil, Structural, Mechanical and Electrical Engineers, Insurers, Fire Safety Managers, Fire Service Personnel.

Course assessment

Participants will be assessed via a written test. A passing score of 70% will be required to obtain a Certificate of Completion.

Professional Development Hours

Upon completion each participant qualifies for 7 PDHs or .7 CEUs. A Certificate of Attendance will be awarded.