

Performance-Based Fire Protection Course

Course Description:

This course will provide an overview of The SFPE Engineering Guide to Performance-Based Fire Protection. This process identifies methods that includes defining a project scope; developing goals, objectives and performance criteria; selecting design fire scenarios and design fires; developing and evaluating trial designs; and preparing design documentation. Emerging issues related to Performance-Based Design (PBD) will also be covered such as incorporating Risk Informed Methods in PBD; selecting an appropriate fire model for a given application; estimating required safe egress time (RSET); performance-based design in tall buildings; performance-based design in long tunnels; performance-based design in structural fire engineering; conducting peer review for a performance-based design and performance-based design ITM for fire protection systems

Learning Objectives:

Upon completion of this course, participants will be able to:

- Define the process outlined in the SFPE Engineering Guide to Performance-Based Fire Protection
- Formulate fire safety goals & objectives for a given project
- Differentiate and apply the different types of acceptance criteria
- Estimate design fires based on a given scenario
- Contrast the differences in incorporating deterministic vs probabilistic approaches
- Identify the important steps in selecting a fire model for a given application
- Estimate RSET
- Outline the steps in performing a structural fire engineering analysis
- Discuss fire safety issues in tall buildings and long tunnels
- Identify the steps to conducting a peer review for a PBD project
- Explain how to implement a performance-based ITM program for fire protection systems

Who will benefit:

This course is intended for engineers who are interested in applying the concepts of performance-based design (PBD) and enforcement officials who review PBD or engineering alternatives to prescriptive codes.

Course Assessment

Participants will be assessed via a written exam upon completion. They will need to pass with a minimum score of 70%

Professional Development Hours

Upon completion participants qualifies for 8 PDHs, 0.8 CEUs. A Certificate of Completion will be awarded.