

Flashover Simulator Training

Lesson 1: 10:41

This is the first lesson in a series on flashover providing a general overview: facts about flashover, how modern building techniques generate flashovers, the importance of understanding fire behavior, fuel loads, response time to fires, and a definition of flashover. Contact Hours: 0.5

Lesson 2: 10:59

This is the second lesson in a series on flashover training which covers: reradiation and pyrolysis in the growth of a fire; thermal balance/imbalance and thermal collapse; the stages of fire behavior; and the progression of events toward flashover including rollover as exhibited by smoke behavior. Contact Hours: 0.5

Lesson 3: 11:31

This is the third lesson in a series on flashover training which covers: ways to sense temperature in a compartment on fire, the fire growth timeline, temperatures of importance to firefighters, and the value of your PPE. There are extremely useful tips here for being aware of what kind of threats are present in a compartment on fire. Contact Hours: 0.5

Lesson 4: 10:04

This lesson reviews the important issues of flashover: flammable gases, taking all fires seriously, wearing and using turnout gear in the heat, flashover danger signs, and how instant egress and immediate escape, ventilation methods, and water usage can reduce flashover potential and increase your chances for survival. Contact Hours: 0.5

Lesson 5: 11:19

This lesson reviews three different fires simulating different compartment environments, all of which eventually lead to flashover. The instructor points out critical points along the fire timeline in each fire, observing features and signs to watch for as flashover develops. It also provides a technique using a hoseline for controlling the upper atmosphere and the development of flashover. Contact Hours: 0.5

Lesson 6 12:41:

This lesson concludes our course series on Flashover Simulator Training. In this lesson we take a tour of the flashover simulator prior to live evolutions. Students have a brief safety meeting and then enter the simulator for four evolutions. Students observe in real time the progression toward flashover conditions (pyrolysis, dark-down, rollover, “dancing fingers” of fire, etc.) and witness actual, smaller flashovers at lower temperatures and how these conditions can be controlled through proper water applications. Contact Hours: 0.5