# Fire Safety Teaching Guide

# High Rise Floor Captains





# Floor Captain Training

# Instructor Outline

# Introduction

# ■ Goals:

To ensure that high rise floor captains are knowledgeable about their duties and responsibilities as required by Article 193 of the Seattle Fire Code.

# ■ Objectives:

Floor captains should be able to:

"describe the emergency evacuation procedures in case of fire.

"describe the role of floor captains in the evacuation process.

- identify special situations or individuals in the workplace that may require an emergency response different than the standard response.
- describe the basic operation of building life safety systems as they relate to the evacuation process.

#### ■ Materials:

- Your building's emergency evacuation procedures
- Handouts(obtained from Seattle Fire Department)
   High Rise Tenant Safety, Duties of Floor Captains
- Videos (obtained from Seattle Fire Department)
   Highrise Evacuation, Evacuation

# **Instructor Information**

# Factors of High Rise Fires

# High rise complexity

High rise fires are more complex than many other occupancies because of: the number of people occupying the building and the distances they must travel to evacuate, the building's size and the physical challenges to firefighters in tackling the fire. Because of these factors, well trained staff are vital to the proper handling of a fire emergency.

# ■ Major causes of fire

The major causes of fires in high rise buildings are smoking materials, electrical, flammable liquids such as organic oils/solvents used in remodeling, and arson.

# Fire Response Plans

# ■ Become familiar with your facility's fire and life safety systems.

Prior to your program, become familiar with your facility's fire and life safety systems. Know which of the following your building has, as well as their location and use:

Manual pull alarms

Emergency phones

Smoke detectors

Exit doors & stairwells

Fire extinguishers

Automatic door unlocks

Pressurized shafts

Heat detectors

Sprinklers

Fire doors



### ■ Emergency evacuation procedures

It is important for your high rise to have updated *Emergency Evacuation Procedures* for tenants. This can be a simple one page handout or part of a handbook on building emergency procedures. All building occupants should receive a copy of this information - including those who work weekends and nights. In addition, the Seattle Fire Department requires that each high rise maintain an *Emergency Operations Plan*. This more formal document details the functions and responsibilities of building staff during a fire emergency, as well as serves as an information resource to fire fighters on building layout and systems during an emergency. A copy of this document is to be filed with the Fire Marshal's Office, another copy kept at the fire alarm panel.

# Controlled evacuation with zoned alarm systems

The majority of high rise buildings have zoned alarm systems. This means the alarm will ring on only a few floors in the direct vicinity of the fire. The minimum number of floors that must go into alarm are the fire floor and the floor above. Recommended evacuation instructions for high rise buildings with zoned alarm systems are for those persons on a floor where the alarm is sounding to enter the exit stairwell, go down four (4) floors, and re-enter the building unless the alarm is sounding on this floor also. This controlled method is used instead of evacuating the entire building at once. The reason for this controlled evacuation is threefold:

- 1) Initial evacuation is limited to those people in the direct vicinity of the fire. Because of building construction features, occupants on more distant floors may not need to evacuate.
- 2) The average time period for the complete evacuation of a high rise building is approximately two hours. This is due in part to the large number of building occupants. If evacuation is not controlled, backups are likely in the stairwells and the opportunities for injury or panic are increased.
- 3) The majority of high rise buildings have pressurized stairwell shafts. When the building alarm system is activated, fans pump air into the stair and elevator shafts to create areas of high pressure. This pressurization helps keep smoke from entering the stairwells and keeps them clear for evacuation. Closed stairwell doors are crucial for maintaining this high pressure. If evacuation is not controlled (i.e. if all stairwell doors are opened at once by everyone exiting) the pressure is lost and smoke may enter the stairwells, making evacuation hazardous.

Occupants of high rise buildings should always be instructed to evacuate downward, never up to the roof. Although roof rescues may look dramatic in the movies, in reality it is a very dangerous place to be during a serious fire.

### ■■■■ Choosing floor captains

The primary role of floor captains is to facilitate the evacuation of occupants from the floor during a fire alarm. Floor captains are on the front lines of emergency response when a fire occurs. Their quick actions, clear thinking and calm leadership are vital to ensuring the safety of building occupants during a fire emergency. Floor captains should be chosen with these considerations in mind. It is recommended that each floor have at lease two captains and that they undergo training at least once a year. Floor captains should exhibit a concern for others, be able to handle pressure well and have a assertive, "take control" sort of attitude.



# When a fire happens...

### ■ Treat every alarm as though it is a real emergency, even if the initial source is unknown.

It is imperative that every alarm is treated as though it is a real emergency, even if the initial source is unknown. If the alarm sounds, floor captains should immediately being the evacuation of the floor.

## ■ Remember your emergency number -- 911.

Anyone discovering a fire should call 911 from a safe location. It's important for employees calling 911 to be able to give the following information: nature of the problem, location, address, nearest cross street, any specifics known. The caller should not hang up until told to do so by the emergency operator.

After calling the Fire Department, if you determine that there is no fire, but rather a malfunction of your equipment or a false alarm, call 911 and relay this information. Never wait to investigate the situation before notifying the Fire Department. Any delay will allow a fire to grow and further endanger the building occupants and property.

#### Persons unable to use exit stairwells

Those persons who are unable to use exit stairwells should follow the instructions detailed in the handout *Responsibilities of Floor Captains*. For additional information on evacuation procedures for non-ambulatory persons, visit the Seattle Fire Department website at www.cityofseattle.net/fire or call the Public Education Office at 386-1337.



#### ■ If unable to leave the building

If guests or tenants are unable to leave the building, they should create an area of refuge: Seal the room. Use wet cloth to stuff around cracks in doors and seal up vents to protect against smoke. Do not break windows. Flames and smoke can come back in from the outside. If you need air, open the window a crack.

Stay low under smoke. The freshest air is near the floor. Keep a wet cloth over your nose and mouth, breath through your nose only.

Signal for help. Use the telephone, or hang something in the window.

#### **■** Elevators

Elevators should never be used by building occupants during a fire emergency. The reason is three fold: 1) elevators often fail during a fire, trapping occupants; 2) elevator shafts may fill with smoke; and 3) the elevator needs to be available for the use of arriving firefighters. Occupants must exit by way of stairwells only.

# **Lesson Outline**

# ■ Introduce roles of fire safety personnel

Explain the staff positions and responsibilities required by Article 193, include the Fire Safety Director, and Floor Captains. Introduce the Fire Safety Director to the floor captains so that they know who is in charge during a fire emergency until the Fire Department arrives.



# View high rise fire video.

The video High Rise Evacuation can be used to help elaborate the necessary actions of both building staff and tenants during a fire emergency.

#### ■ Discuss your building's fire & life safety systems.

List your building's fire and life safety systems and describe their action during an alarm. Which of the following does your building have and what is their importance in a fire - smoke detectors, manual pull alarms, elevators, stairwells, fire doors, alarm system, shaft pressurization, sprinklers, etc. Having this basic knowledge of the building will help floor captains understand the reasons for controlled evacuation procedures.

## ■ Review your facility's emergency response plan.

Make sure all floor captains have a copy of your facility's written emergency evacuation procedures. Review the procedures as a group and make sure that they are clear to everyone.

#### Discuss floor captain responsibilities.

Using *Dutiesof Floor Captains* as a guide, discuss each of the floor captains duties listed. The back of the handout details procedures to be followed for persons unable to use exit stairs.

Describe any other special situations that may occur in your building that would differ from the established evacuation response.

# ■ Review the actions to take if you discover a fire.

Stress the need for the quick alerting of floor occupants, rapid evacuation, and the importance of calling 911 immediately. Review the information to be relayed when calling to report an alarm.

### ■ Address procedures for those unable to evacuate.

Review the actions to take if a person is unable to evacuate during a fire. Cover seeking an area of refuge, fire survival behaviors to follow, and the importance of not breaking out windows. Use the handout *High Rise Tenant Safety* as a guide.

