

SEATTLE FIRE DEPARTMENT

Fire Safety Handbook

for Multi-Residential Buildings



Public Affairs
seattle.gov/fire
fireinfo@seattle.gov

Updated January 2018

Contents

Introduction	2
Common Fire Hazards.....	3
Fire Emergency Guides	7
Fire Safety Planning	9
Fire Safety Inspections.....	13
Resources	14

Introduction

Between 2010 and 2014, the Seattle Fire Department responded to an average of 168 multi-residential building fires per year. The cost in property damage reached several million dollars.

Fire is almost always unexpected. Preparing for it shouldn't be. Responding to a fire requires quick decisions and fast actions in a setting that can be loud, smoky, dark, and hot. The dense nature of apartment living allows for the spread of smoke, heat, and fire.

Lives and property can be saved by being prepared before fire strikes. The Seattle Fire Code and Washington State Law establish fire safety regulations for multi-residential housing. These rules require property owners to develop and provide a fire emergency guide to tenants.

This publication was developed to assist multi-residential property managers, owners, and home owners associations in their fire safety efforts. This handbook will provide:

- Information to inform staff and tenants about home fire prevention and safety.
- Guidelines for developing code-required fire safety and emergency plans.
- Recommendations for training and preparing staff and tenants.
- Overview of what to expect from the Fire Department inspection process.

*Developed by:
Seattle Fire Department
Public Affairs
seattle.gov/fire
fireinfo@seattle.gov*

CHAPTER 1

Common Home Fire Hazards

In a typical year, the Seattle Fire Department responds to around 170 fires in multi-residential buildings. Understanding where and how residential fires begin and following a few basic rules will help reduce the risk. The following information is intended to inform building managers and owners about the potential fire hazards common to multi-residential buildings. This information should be shared with tenants on a regular basis.

Cooking Safety for Residents

In the United States, cooking is the leading cause of home fires and home fire injuries. In Seattle, cooking causes more fires than any other source. Over a third of all fires in multi-residential buildings started in the kitchen. The majority of these fires began from food left unattended on the stove. The most common materials ignited are grease, oils, and flammable items such as plastic bags and paper products left on or near the stove.



Safety Precautions for Residents

- Do not leave cooking unattended on the stove. A serious fire can start in seconds.
- Keep the stove and oven clean. Do not allow grease to build up.
- If a fire starts in a pan, turn off the stove and carefully cover the pan with a lid or another pan. Do *not* throw water on the fire!
- Keep children and pets away from the stove while cooking.
- Keep items that can catch fire - such as dishtowels, bags - at least three feet away from the stove top.
- Keep loose-fitting clothing away from hot burners.
- Never use the stove or oven to heat your home. Use all cooking equipment according to manufacturer's directions. Don't alter stovetops, burners or backsplashes.

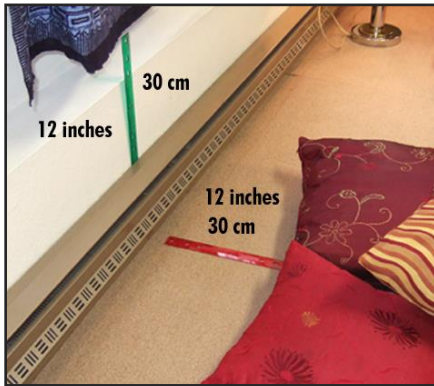


Heating Safety for Residents

Heaters are the second leading cause of fires in residential buildings. As would be expected, most heating-related fires occur during the winter months when heaters get turned on and the use of portable heaters and fireplaces increases. Fires caused by furniture, bedding, and other materials placed too close to baseboard heaters and portable heaters are the most common types of heating-related residential fires.



Safety Precautions for Residents



- Do not put anything close to any type of heater. Baseboard heaters need 1 foot of clearance and portable space heaters need 3 feet of clearance.
- Never use an extension cord with a portable heater. Plug the heater directly into a wall outlet.
- Make sure your portable heater is tested by an independent testing laboratory and has an automatic shut off feature if it tips over.
- Turn portable heaters off before leaving the room or before going to bed.
- Never permit any item to drape across heaters.
- Clean or replace furnace filters regularly.
- Inspect all heating equipment yearly and always hire an experienced electrician to do any necessary repair work on your baseboard heaters.

Smoking Safety for Residents

Fires started by smoking materials cause more fatalities than any other type of fire. One out of four fatal victims of smoking-material fires is not the smoker whose cigarette started the fire (NFPA 2013).

Safety Precautions for Residents

- Never smoke in bed or when feeling drowsy.
- Keep ashtrays off of sofas or chairs.
- Use deep ashtrays and soak ashes in water before disposal.
- Don't leave cigarettes, cigars or pipes unattended. Put out all smoking materials before you walk away.
- Do not leave matches or lighters where children can reach them.



Candle Safety for Residents

More than half of all candle fires start when combustible materials (such as drapes, clothing, and bedding) are too close to the candle. December is the peak month for candle fires and roughly 1/3 of all candle fires started in the bedroom.

Safety Precautions for Residents



- Always keep burning candles within sight. Extinguish all candles when leaving a room or before going to sleep.
- Always use a candleholder specifically designed for candle use. The holder should be heat resistant, sturdy and large enough to contain any drips or melted wax.
- Place lighted candles where they won't be knocked over by children, pets or anyone else.
- Keep burning candles away from items that can catch

on fire such as furniture, drapes, bedding, carpets, books, paper, etc.

Outdoor Grilling Safety for Residents

Most grill fires occur during the summer months. The leading ignition factors in grill fires are mechanical failure or malfunction, combustibles placed too close to the heat, and cooking left on the grill unattended (USFA 2010).



Safety Precautions for Residents

- For gas grills, make certain the hose connection is tight and check the hoses for leaks. Turn the grill and fuel cylinder off immediately after grilling.
- For charcoal grills, avoid adding lighter fluid after the coals have been lit.
- Always place coals in a metal container with a tight lid after they have cooled for 48 hours.
- Never leave gas or charcoal grills unattended while cooking.
- Always use your grill outdoors and never barbecue in an enclosed area because carbon monoxide can accumulate and be deadly.
- Set-up your grill in an open area at least 10 feet away from buildings, overhead combustible surfaces, dry leaves and brush.
- The Seattle Fire Department recommends the use of one-pound propane cylinders as the least hazardous fuel source for outdoor grills.

Clothes Dryer Safety for Residents

Between 2008 and 2010, there were around 2,900 clothes dryer fires a year in residential buildings in the U.S. Failure to clean the lint is the leading factor contributing to clothes dryer fires in apartment buildings.

Safety Precautions for Residents

- Always remove lint from trap before using the clothes dryer.
- Regularly check dryer exhaust vent hoses behind the dryer for lint build up and clean. Bends and lint buildup in hoses can block airflow.
- Never put rubber, plastic, foam or any materials that made contact with flammable liquids in the dryer even if previously washed.
- Never leave dryer running while sleeping or out of the home.



Arson Safety for Residents

Arson is a crime that can happen at any time, any day of the year. The following steps will help keep apartment buildings from being the target of an arson crime.

Safety Precautions for Residents

- Lock doors and windows of your home and garage.
- Clean up wastepaper, long grass, weeds, litter, or anything that can burn from around buildings.
- Clear carport areas of anything that could fuel a fire.
- Do not allow dumpsters to become overfilled. Arrange for additional dumpsters or take refuse to transfer stations, if required.
- Locate commercial dumpsters and recycling bins at least five feet away from combustible walls and openings of roof eave lines. Use only metal or metal-lined receptacles.
- Place locks on commercial dumpsters, if possible.
- Trim shrubbery away from doors and windows to improve visibility.
- Leave your indoor and outdoor lighting on during hours of darkness. Consider installing devices that automatically turn on outdoor lights when they sense darkness or movement outside the home.



CHAPTER 2

Seattle Requirements for Fire Emergency Guides

The Seattle Fire Code sets minimum emergency planning and preparedness standards for multi-residential buildings. The Fire Emergency Guide is one requirement with which all apartment owners and managers should be familiar.

Fire Emergency Guides

In accordance with Chapter 4 of the 2012 Seattle Fire Code (SFC SEC. 408.9), owners or managers of rental properties are required to develop and provide to residents a building specific Fire Emergency Guide. The Fire Emergency Guide will provide residents with a suggested evacuation plan and information about accessible fire protection equipment in the building. A copy of the Fire Emergency Guide should be given to each resident when they move in and when changes are made.



One format option for the Fire Emergency Guide is to prepare a basic floor plan diagram for each floor of the building, being sure to include the points outlined in the sample guide below. The Fire Emergency Guide should reflect the needs of your residents and the specifics of the building.

As a minimum, the Fire Emergency Guide should contain the following:

- location of manual pull fire alarms.
- location of portable fire extinguishers.
- location of smoke/CO alarms.
- exit routes from each apartment using the stairs, not elevators.
- location of outside assembly area for building occupants.
- instructions for those tenants unable to evacuate the building using stairwells.

The building owner or manager should review the Fire Emergency Guide at least once a year. A copy of the guide should be given to each tenant when they move in or when changes are made.

High-rise buildings are also required to have [Fire Safety and Emergency Plans \(SFC SEC. 404\)](#).

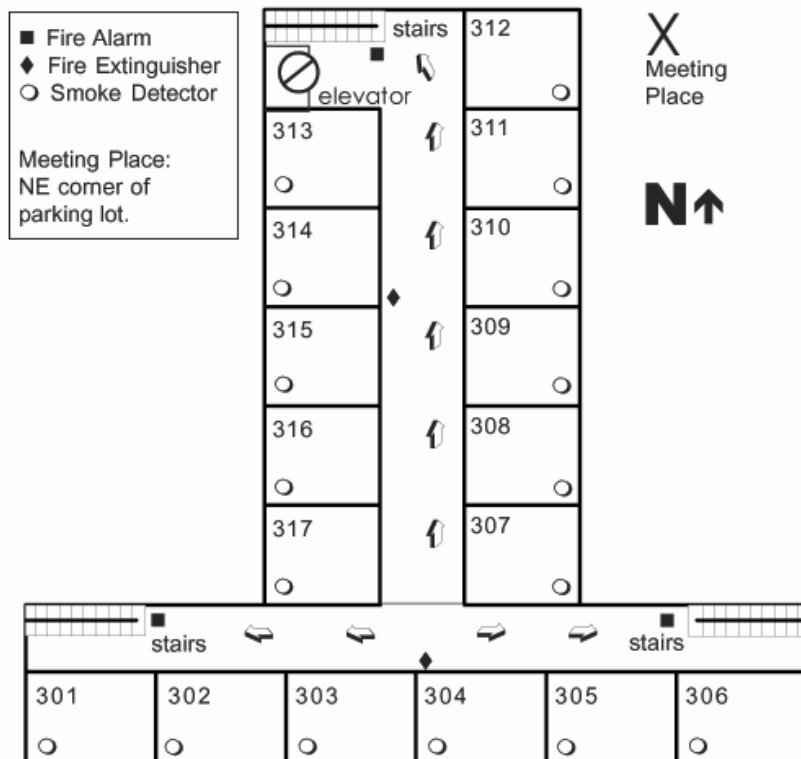
SAMPLE Clover Street Apartments Fire Emergency Guide

Building Fire Safety Equipment

1. The building is equipped with smoke alarms and a fire sprinkler system.
2. Portable fire extinguishers are located on every level next to each exit and fire alarm pull stations are located next to each exit stairwell.

Every alarm must be treated as a fire emergency. When you hear the fire alarm or if you encounter smoke or fire, take these steps to ensure a safe evacuation of the building.

1. Leave your unit as quickly as possible, closing the front door as you go. Pull the fire alarm next to the stairwell as you exit if fire alarm is not sounding.
2. Use the stairs, not the elevators, to evacuate the building.
3. Once outside, move away from the building to the designated meeting place. Do not congregate in the lobby. The meeting place is on the NE corner of the parking lot.
4. If you encounter smoke or fire outside of your apartment and you are unable to exit using the stairs, stay in your unit. Keep your door and windows closed. Use towels or clothing to block openings around doors or vents where smoke might enter.
5. Once you have left the building, do not go back into the building for any reason until the Fire Department has given permission to reenter.



CHAPTER 3

Fire Safety Planning

Staff Training

If your building has regular staff members, it is important that they have an understanding of their role in a fire emergency. Training should be provided for any tasks they may need to perform during a fire emergency. Particular attention should be paid to the following areas.

Prevention

Educate all employees as to the specific hazards in their working environment and how to prevent fires while conducting their assigned duties. Employee awareness can prevent fires and protect residents.

Evacuation

Staff members may be expected to manage the evacuation of the building during a fire emergency. Employees who are asked to fulfill this task must understand the building's evacuation plan for both ambulatory and non-ambulatory residents. Staff members should know evacuation routes, areas of refuge, shelter in place procedures, and where the outside meeting place is located. Once residents are outside it is important to keep them informed in order to combat any fears or rumors.

Reporting

Any fire alarm must be treated as a real emergency and needs to be reported to the Fire Department, even if a central station monitoring company provides service to the building. One staff member should be assigned the responsibility of calling 9-1-1 from a safe telephone whenever the building alarm activates or a fire is reported. The caller should be prepared to provide information as it is requested by the dispatcher and

What is Real Fire Like?

- **Real fire is fast.** Once a fire begins to flame it can double in size every 30 seconds. At this rate, a room can become fully involved in minutes.
- **Real fire is dark.** Fires produce large amounts of thick, black smoke that obscures vision, causes nausea and may even lead to unconsciousness or death. Three out of four people who die in residential fires die from smoke inhalation.
- **Real fire is hot.** A fire can cause the temperature at ceiling level to reach excesses of 1200 degrees Fahrenheit, at just 5 feet it can be 800 degrees. At this temperature, the superheated air will burn your lungs.
- **Real fire is unpredictable.** Each fire is unique. Some may smolder for hours filling a room with smoke. Others will burn at exceedingly high temperatures, consuming everything with flames.

Remember to contact the monitoring company again when the drill is completed. There is no need to notify the Fire Department.

- Keep a fire drill logbook to record fire drill activity. Records should include the date and time of each drill, the name of the person conducting the drill and other information pertinent to the drill.
- It is also recommended that you notify residents that the audible alarms will be sounded for the staff fire drill and invite them to participate.

Another recommendation is to keep records of fire drills and include the following information:

1. Identity of the person conducting the drill.
2. Date and time of the drill.
3. Notification method used.
4. Staff members on duty and participating.
5. Number of occupants participating.
6. Special conditions simulated.
7. Problems encountered and corrective actions taken
8. Time required to evacuate.

Alternate Fire Evacuation

For those residents unable to use stairs to evacuate, the safest response to a fire emergency may be to remain in their apartments. As long as the fire is not in the individual apartment, that unit is an area of refuge. An area of refuge provides protection from smoke and flames. Residents must be instructed that if they choose to stay in their units, their doors and windows must remain shut. Residents should also understand that it is safer for them to remain inside the apartment rather than await further evacuation assistance from their balconies. If they feel they are in jeopardy, residents should use their telephone to call 9-1-1 to report their location and request immediate help.

Shelter in Place Guidelines for Residents

- **Keep the door to the room closed.** A closed door is a barrier to smoke.
- **Use towels or clothing to block openings** around doors or vents where smoke might enter.
- **Place a signal in the window.** The signal can be anything that will call attention to your location.
- **If smoke or fire enters your unit, call 9-1-1 to report your location.** Stay low to the floor to breathe the best air. Put a wet cloth over your mouth or nose.
- **It is advisable to keep windows and balcony sliders closed.** Smoke from the outside of the building can enter through open windows. Breaking windows may put you at greater risk of smoke entering from the outside, and will hamper rescue efforts below.

Residents who choose to stay in their units should be identified to the responding firefighters immediately upon their arrival. One way this can be done is by maintaining a roster at the fire alarm panel of residents who plan to stay in their rooms. This roster is then provided to the firefighters upon their arrival.

Window Security Bars

If windows have security bars, it is important that residents understand how to open them for evacuation. Serious incidents have occurred where people have been trapped and died in fires because the security bars were permanently fixed or did not have quick release devices.

Every resident should understand and practice how to properly operate locked or barred windows and doors. Locked or barred doors should operate quickly and easily. Windows and doors with security bars should have quick-release devices to allow them to be opened immediately in an emergency. If the security bars are permanently fixed or do not have quick release devices, they should be replaced or retrofitted with release devices which meet Fire Code requirements (SFC SEC 1029.4)



Carbon Monoxide (CO) Alarm Requirements

State law and the Seattle Fire Code require all residential rental units to have CO alarms installed retroactively, including rental homes, apartments, and condominiums. The only exception to this requirement is Residential Group R-2 buildings (this includes apartments and condominiums) when those occupancies **do not** contain a fuel-burning appliance, fuel-burning fireplace, or an attached garage. [More information](#)

For more information on Carbon Monoxide poisoning, visit [King County Public Health](#). Or call the Washington Poison Center at 1-800-222-1222.

CHAPTER 4

Fire Safety Inspections

Emphasis Areas for Apartment Inspections

Seattle Fire Department firefighters inspect buildings at least every other year to help ensure certain fire and life safety requirements are being met. The primary goal of the inspection program is to identify and remove potential fire safety hazards in a building's public areas.

To prepare for inspections, apartment managers should be aware of the following fire safety items.



Emergency Access

- The property's street address should be clearly marked and visible from the street.
- Fire lanes must remain clear for emergency vehicles at all times. A congested parking lot can impede proper access to fire hydrants and fire lanes. A ladder truck can be eight to nine feet wide and up to 50-feet long.
- Fire Department hose connections must have clear access and be free of vegetation.



Fire Extinguishing Equipment

- Each floor, parking garage, and basement should have 2A fire extinguishers. Extinguishers must be installed in identified locations on normal routes of travel and be accessible within 75 feet from any place on the floor. Fire extinguishers must be annually inspected and serviced by an individual certified by the Seattle Fire Department.
- If your building requires a tenant fire hose, the required hose and controlling nozzle must be in place and accessible.

Fire and Life Safety Systems

- Required fire and life safety systems require confidence testing on an established schedule. This includes items like the fire alarm, sprinkler systems, standpipes, fire extinguishers.
- The person testing the systems must be certified by the Seattle Fire Department.

Exits

- Exit signs must be clearly visible and in working order.
- Exit ways must be free of obstructions and lit in hours of darkness.
- Fire doors must close freely and completely when released. Fire doors must never be blocked open.
- Stairwells must be kept clear and not used for storage. Storing combustibles under stairs is prohibited.

Code Violations

- The firefighter who finds any fire hazard or safety issues during an inspection is required to issue a Notice of Code Violation form clearly indicating items to be corrected. Firefighters will typically follow up with additional inspections of the property to monitor what progress, if any, has been made to resolve the issues. If the problem is not corrected within the specified time frame, the Fire Marshal's Office will be notified to assist with corrective action.



Resources

Seattle Fire Department Residential Fire Safety and Evacuation Procedures

<http://www.seattle.gov/fire/safety-and-community/home-fire-safety>

Fire Emergency Guides for Multi-Residential Occupancies -

<http://www.seattle.gov/Documents/Departments/Fire/Business/5052CAMFireEmergencyGuides.pdf>

Washington State RCW 59.18.060—Landlord Duties -

<http://apps.leg.wa.gov/RCW/default.aspx?Cite=59.18.060>

Seattle Office of Emergency Management (Disaster Education) -

<http://seattle.gov/emergency>

Seattle Dept. of Construction & Inspections, Landlord-Tenant Information -

<http://www.seattle.gov/dpd/codesrules/commonquestions/rentalhousingproblems/default.htm>

Home Fire Safety Checklist (including languages other than English) -
<http://www.seattle.gov/fire/pubEd/homesafety/homeFireSafety.htm>

Fire Stoppers Program (for kids who misuse fire) -
<http://www.seattle.gov/fire/safety-and-community/childrens-programs/fire-stoppers>

Carbon Monoxide Alarms -
<http://www.seattle.gov/Documents/Departments/Fire/Safety/COsafety.pdf>

Fire Extinguishers -
<http://www.seattle.gov/Documents/Departments/Fire/Safety/FireExtinguishers.pdf>

Heating Safety -
<http://www.seattle.gov/Documents/Departments/Fire/Safety/HomeHeating.pdf>

Outdoor Cooking -
<http://www.seattle.gov/Documents/Departments/Fire/Safety/Outdoor%20Grilling%20Safety.pdf>
