



Richmond Fire Department

Fire Safety Handbook for Multi-Residential Buildings



RICHMOND FIRE PREVENTION SERVICES DIVISION

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CERTIFIED APARTMENT
MANAGER

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Introduction

Fire in an apartment building often involves more than one unit. Many building occupants may be affected. The dense nature of apartment living allows for the rapid spread of smoke, heat, and fire.

Fire is 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. Lives and property can be saved by being prepared before fire strikes. ***The California Fire Code establishes fire safety regulations for multi-residential housing.*** These rules require property owners to provide fire related safety items (i.e. fire extinguishers, smoke alarms/CO alarms, security bars that open from the inside) for tenants. They also require that property managers/tenants be informed about the fire protection equipment (sprinklers & fire alarm systems) in the building(s).

This publication was developed to assist property managers in their fire safety efforts. This handbook will provide:

1. Information to inform staff and tenants about home safety, and fire prevention.
2. Guidelines for developing a Code-required Fire Emergency Guide.
3. Recommendations for developing fire emergency procedures.
4. An overview of what to expect from the Fire Department Annual Inspection process.



CHAPTER 1

Common Home Fire Hazards

In a typical year, the Richmond Fire Department responds to around 150 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 apartment buildings. This information should be shared with tenants on a regular basis. New residents/tenants shall be advised of building's fire & life safety systems features i.e. fire alarm pull station locations, fire extinguishers, exit locations (stairwells) etc.

Cooking Safety for Residents

In the United States, cooking is the leading cause of home fires. In Richmond, 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!**
- Maintain 3 foot clearance for children and pets from the stove while cooking.
- Keep items that can catch fire--such as dishtowels, paper or plastic 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.
- Do not store cooking oil/grease near your cooking stovetop/appliance.



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



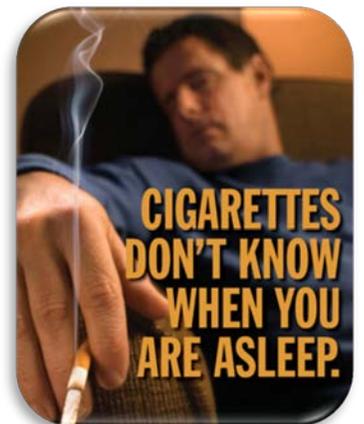
- Maintain 3 foot clearance, give your heaters space. Do not put anything close to any type of heater.
- Never use an extension cord with a portable heater.
- Make sure your portable heater is tested by an independent testing laboratory and has an automatic shut off feature if it tips over.
- Turn portable 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

The most common mistake people make when using candles is placing them near combustible materials (such as drapes, clothing, bedding). Most candle fires occur during the months of December and January.

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 Richmond 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 additional trash 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

Richmond Requirements for Fire Emergency Guides

The California 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 2016 California Fire Code (CFC 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.

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

1. Location of manual pull fire alarms.
2. Location of portable fire extinguishers.
3. Location of smoke alarms.
4. Exit routes from each apartment using the stairs, not elevators.
5. Location of outside assembly area for building occupants.
6. Instructions for those tenants unable to evacuate the building using stairwells.

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 6 points outlined in the box to the above. The Fire Emergency Guide should reflect the needs of your residents and the specifics of the building.

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.





SAMPLE

Richmond Housing Authority Apartments Fire Emergency Guide

Building Fire Safety Equipment

1. The building is equipped with smoke alarms, fire alarm systems, 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 doors as you go. Pull the fire alarm next to the stairwell as you exit if no fire alarm is 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. i.e. "Meeting place is on the NE corner of the parking lot."
4. Once you have left the building, do not go back into the building for any reason until the Fire Department has given permission to re-enter.
5. 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.

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 should be able to stay on the telephone until instructed to hang up. A staff member(s) should be ready to meet the Richmond Fire Department on the address side of the building.

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.

Staff Training

Investigation

If the building's fire alarm panel provides information as to where the alarm is initiated, building staff may be able to investigate the source. Investigation does not eliminate the need to report the alarm to the Fire Department. Anyone assigned to investigate a fire alarm must understand the danger of fire and know how to operate a portable fire extinguisher. Any information regarding the source of the fire alarm should be reported in a call to 9-1-1 as soon as possible.

If building staff determine that a fire alarm is false prior to the Fire Department's arrival, they should call 9-1-1 and relay the information to the dispatcher. The dispatcher will notify the responding fire companies that a false alarm has been reported. One fire company will arrive to verify that the alarm is false. The Richmond Fire Department will investigate all fire alarms. **The building alarm may not be silenced without permission of the Richmond Fire Department or dispatcher.**

Building staff should be able to provide the following to Fire Department personnel:

- Location of the fire alarm panel
- Access Keys (Knox Box Location)
- Details about the fire if known – such as floor, unit number, presence of smoke etc.
- Status of buildings evacuation, if known
- Location of residents needing assistance to evacuate. Is there a list kept of those identified as needing evacuation assistance.

Conducting Fire Drills: Call Dispatch to Report – Fire Drill – (510) 233-1214

Staff fire drills are intended to test staff readiness and response to a fire emergency situation. It is important that staff fully understands their role in case of a fire alarm. Fire drills should replicate as closely as possible the activity expected in an actual emergency. In addition, fire drills should include a review of the plan and execution of assigned staff duties.

The following suggestions are provided to assist with the planning of staff fire drills:

- Prior to any drill, staff should be familiar with the building emergency plan and the details of their responsibilities. Encourage staff to discuss their concerns regarding the evacuation procedures.
- The drill for your building should include sounding the fire alarm. If your building fire alarm is monitored, notify the monitoring company of the drill immediately prior to its occurrence. Remember to contact the monitoring company again when the drill is completed.
- 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.

Conducting Fire Drills Continue

- 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 evacuated.
6. Special conditions simulated.
7. Problems encountered.
8. Time required accomplishing the evacuation.

Alternate Fire Evacuation (Plan Ahead – Alert Fire Department if Implementing)

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.

****Residents who choose to stay (This Needs Fire Department Approval – Prior to Implementing)****

1. **Survival Rules for Residents**
 - a. **Keep the door to the room closed.** A closed door is a barrier to smoke.
 - b. **Use towels or clothing to block openings** around doors or vents where smoke might enter.
 - c. **Place a signal in the window.** The signal can be anything that will call attention to your location.
 - d. **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.
 - e. **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.

Conducting Fire Drills Continue

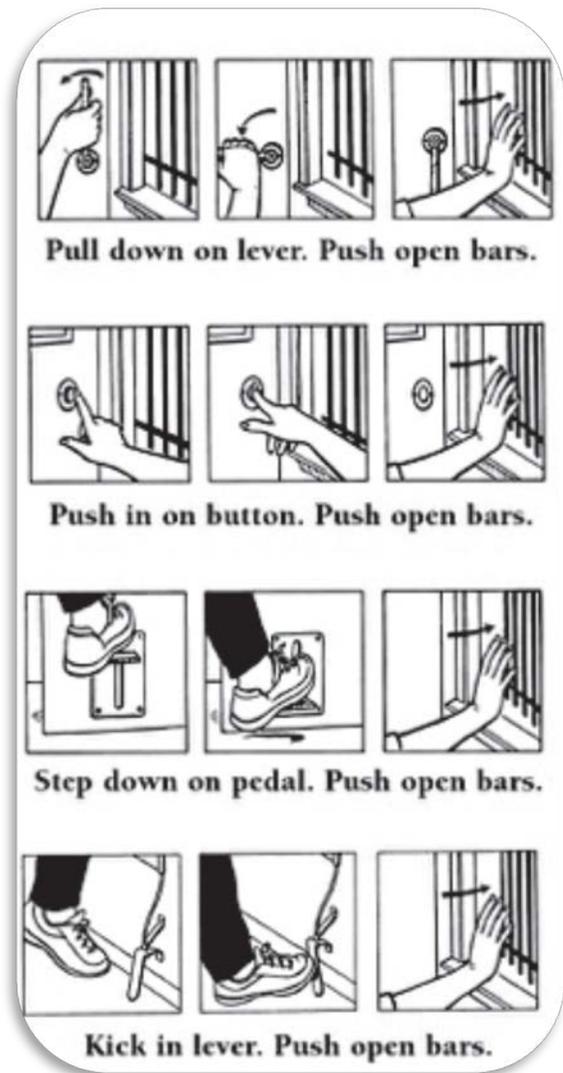
- Residents that are staying in their units should be identified to the responding firefighters immediately upon their arrival. One way this can be done is by maintaining a roster at the fire alarm panel of residents who plan to stay in their rooms. This roster is then provided to the firefighters upon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

Window Security Bars

Window Security Bars

If windows have security bars, it is important that residents understand how to open them for evacuation. People are afraid of crime near their homes. To feel safe, many people install security bars on their doors and windows. Some security bars, also called burglar bars, can trap you in a fire. They can also keep firefighters from getting in to rescue you.

- ❑ Make sure security bars have quick release devices.
- ❑ Make sure all exits can be opened easily from the inside. This includes barred doors and windows.
- ❑ 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.



CHAPTER 4

Fire Safety Inspections

Emphasis Areas for Apartment Inspections

Richmond Fire Department Inspectors and firefighters inspect buildings every 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 **Connection (FDC) must have clear access** and be free of vegetation.



Fire Extinguishing Equipment

- Each floor, parking garage, and basement should have 2A:10B:C rated fire extinguisher. **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 a certified state licensee approved by the Office of The State Fire Marshal.
- If your building requires a tenant fire hose, the required hose and controlling nozzle must be in place and accessible. This hose cabinet is required to be tested.



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 Office of The State Fire Marshal

Grilling Safety

There's nothing like outdoor grilling. It's one of the most popular ways to cook food. But, a grill placed too close to anything that can burn is a fire hazard. They can be very hot, causing burn injuries. Follow these simple tips and you will be on the way to safe grilling.

SAFETY TIPS

- » Propane and charcoal BBQ grills should only be used outdoors.
- » The grill should be placed well away from the home, deck railings and out from under eaves and overhanging branches.
- » Keep children and pets at least three feet away from the grill area.
- » Keep your grill clean by removing grease or fat buildup from the grills and in trays below the grill.
- » Never leave your grill unattended.
- » Always make sure your gas grill lid is open before lighting it.

CHARCOAL GRILLS

- » There are several ways to get the charcoal ready to use. Charcoal chimney starters allow you to start the charcoal using newspaper as a fuel.
- » If you use a starter fluid, use only charcoal starter fluid. Never add charcoal fluid or any other flammable liquids to the fire.
- » Keep charcoal fluid out of the reach of children and away from heat sources.
- » There are also electric charcoal starters, which do not use fire. Be sure to use an extension cord for outdoor use.
- » When you are finished grilling, let the coals completely cool before disposing in a metal container.

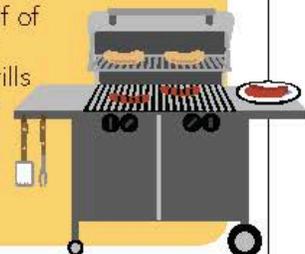
PROPANE Grills

Check the gas tank hose for leaks before using it for the first time each year. Apply a light soap and water solution to the hose. A propane leak will release bubbles. If your grill has a gas leak, by smell or the soapy bubble test, and there is no flame, turn off both the gas tank and the grill. If the leak stops, get the grill serviced by a professional before using it again. If the leak does not stop, call the fire department. **If you smell gas while cooking, immediately get away from the grill and call the fire department.** Do not move the grill.

If the flame goes out, turn the grill and gas off and wait at least **5 minutes** before re-lighting it.

FACTS

- ! July is the peak month for grill fires.
- ! Roughly half of the injuries involving grills are thermal burns.



NATIONAL FIRE PROTECTION ASSOCIATION
The leading information and knowledge resource on fire, electrical and related hazards



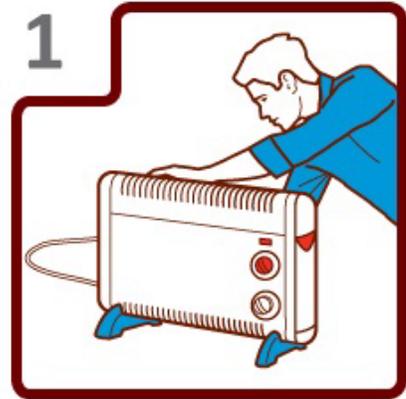
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Safety First

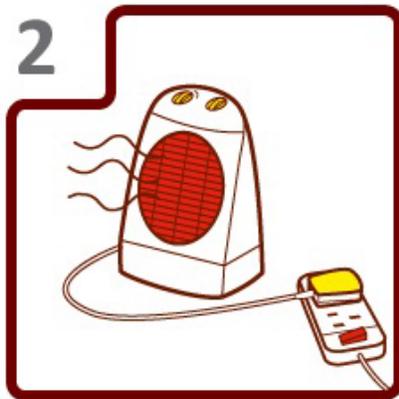
The UK's electrical safety experts

Portable heaters are responsible for 4% of house fires with a worrying number of injuries and fatalities associated.

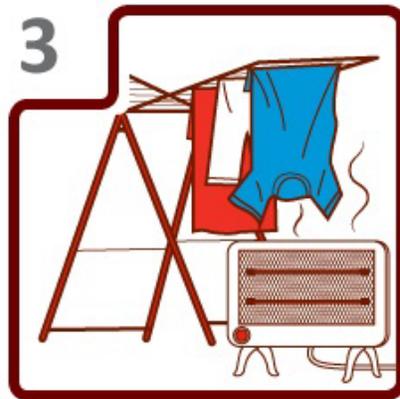
Highlighted are some common misuses, also some tips on how you can stay safe.



1 Regularly inspect your heater for damage and deterioration. Don't use it if it isn't in good condition.



2 Never plug a heater into an extension lead: they can easily be overloaded and cause fires.



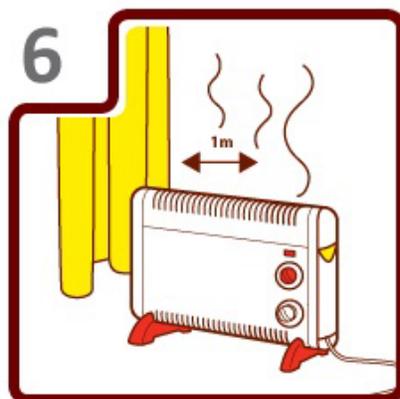
3 Never, ever use a portable heater to dry your clothes.



4 Never leave a heater unattended while it's on, or while you are asleep.



5 Avoid buying second-hand heaters. Make sure you buy from reputable manufacturers and retailers.



6 Make sure your heater is at least a metre away from combustible materials eg. paper, furniture or curtains.



7 Always put your heater on a level surface, well away from anything that could knock it over.