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Residential Fire Extinguisher Information

Aurora Fire Rescue provides this information as a public service with the intent of improving safety within the city of Aurora and ensuring a safe community. This bulletin is intended to provide general information related to fire extinguisher requirements, installation, maintenance and use and is not designed nor can be relied upon to completely cover all situations. Your safety can best be assured through continued personal vigilance, education and diligence.

The information provided in this safety bulletin is provided while referencing NFPA 10 Standard for Portable Fire Extinguishers. More detailed and in depth information can be attained by acquiring an actual copy of NFPA 10. Fire Extinguisher use, installation, maintenance and precautions should follow NFPA 10 as well as all manufacturer guidelines. Should information contained in this bulletin differ from either NFPA 10 or manufacturer guidelines, please defer to the standard or guidelines for definitive guidance.

Many fires are small at origin and can be extinguished by the use of fire extinguishers or small hose streams. However, the fire department should be notified as soon as a fire is discovered and notification should not be delayed by the use or determination of the results of application of residential fire extinguishing equipment. Homeowners/occupants should recognize fire hazards on their properties and plan in advance exactly how, and with what, a fire will be fought. It is important for homeowners to understand that extinguishers of the sizes discussed have a discharge time of only 8 seconds to 60 seconds; in actual use, no time can be wasted determining the best way to use the device. Instruction on fire extinguisher use should be provided upon purchase of the extinguisher and can also be obtained from the Aurora Fire Department. Portable fire-extinguishing equipment can represent an important segment of a residential fire protection program. The presence of an extinguisher in a residence can only enhance safety and provide protection if the homeowner is willing to:

- 1. Understand how to use the device properly;
- 2. Instruct family members who might have to use it;
- 3. Maintain and recharge it according to the manufacturer's instructions.

If a fire starts in your residence, get people out of the house and call the fire department (regardless of the size of the fire); then use a fire extinguisher. These rules should be followed when fighting a residential fire:

- 1. Keep near a door that can be used as an escape route;
- 2. Stay low. Avoid breathing the heated smoke, vapors, or fumes as much as possible, as well as the extinguishing agents;
- 3. If you feel confident in attacking the fire, use the appropriate fire-fighting equipment. If the fire is not extinguished quickly, get out of the building, closing door(s) behind you, and do not re-enter.

Selecting a fire extinguisher for residential use should be made with the understanding of an extinguisher's capacity (or its rating) along with the potential fire hazards in the residence. Depending on the conditions existing in each living unit, additional extinguishers or extinguishers of larger capacity might be advisable.

Selecting Fire Extinguishers

The following types of fire extinguishers are recommended for installation and use in family dwellings and living units:

- 1. Dry chemical;
- 2. Water, AFFF, FFFP, antifreeze, wetting agent;
- 3. Carbon dioxide;
- 4. General use residential fire extinguisher;
- 5. Special purpose residential fire extinguisher.

The following are minimum recommendations per floor level:

- 1. A single extinguisher rated 2-A:10-B:C or higher;
- 2. One extinguisher rated 2-A or higher, and a second extinguisher rated 10-B:C or higher;
- 3. A maximum of 40 feet (12 m) of travel distance from the potential fire to the fire extinguisher.

Extinguisher Installation

Portable fire extinguishers should be installed as follows:

- 1. In an accessible spot, free from blocking by storage and equipment, and near room exits that provide an escape route;
- 2. So that the top of the extinguisher is not more than 5 ft (1.5 m) above the floor and not less than 4 in. (101.6 mm) above the floor; the extinguisher should be easy to reach and remove and should be placed where it will not be damaged;
- 3. On hangers or in the brackets supplied by the manufacturer, mounted in cabinets, or placed on shelves;
- 4. Placed so that the operating instructions on the extinguisher face outward.

Special Circumstances

Garages and Carports. One extinguisher rated 2-A: 10-B:C or higher should be provided to protect garages and carports that are either attached under the residence or connected to the residence by a common wall or detached from the residence. Due to the volume of flammable liquids normally present in garages and carports (those liquids associated with automobiles, lawn mowers, snow blowers, workshops, etc.), a larger extinguisher than those meeting the minimum recommendations should be specifically installed for protection.

Cooking Areas. Combustible cooking fires require the use of extinguishers that will extinguish the fire from a safe distance, without causing splashing of the burning grease or permitting reignition of the fire. This can be achieved by a special purpose residential fire extinguisher listed for residential grease fires or an automatic fire extinguisher unit listed for residential range top protection. An ABC dry chemical extinguisher is not the extinguisher of choice because of the possibility of re-ignition.

WARNING: Do not attempt to pick up a pot or pan containing burning grease! To avoid personal injury and to avoid spreading the fire, fight the fire in place. Shut off the heat source as soon as it is safe to do so to avoid fire rekindle.

General Safety Precautions

For personal safety, observe the following precautions for locating and using a fire extinguisher:

- 1. Most fires produce toxic decomposition products of combustion, and some materials can produce highly toxic gases. Fires can also consume available oxygen or produce dangerously high exposure to convected or radiated heat. All of these can affect the degree to which a fire can be safely approached with extinguishing equipment;
- 2. Discharging portable fire extinguishers from too close a distance on cooking grease fires can cause splashing of the burning grease or oil and spread the fire. The recommended distance for operating portable fire extinguishers is shown on the label;

- 3. Portable fire extinguishers should not be installed adjacent to the location of a potential fire hazard but should be accessible to the hazard;
- 4. The use of a carbon dioxide extinguisher(s) in an unventilated space can dilute the oxygen supply. Prolonged occupancy of such spaces can result in loss of consciousness due to oxygen deficiency;
- 5. Extinguishers not classified for Class C hazards present a shock hazard if used on fires involving energized electrical equipment;
- 6. Dry chemical extinguishers, when used in a small unventilated area, can reduce visibility for a period of up to several minutes;
- 7. It is also essential that once the extinguisher is used, it be refilled or replaced promptly. Even if only a short burst of agent is released, the extinguisher can lose the rest of its pressure.

Inspection, Maintenance, and Servicing of Residential Fire-Extinguishing Equipment

Inspections, maintenance and service of extinguishers should be performed by competent and qualified individuals when the fire extinguisher is initially placed in service and thereafter at approximately 30 day intervals. Inspections should be performed in accordance with the owner's manual supplied with the fire extinguisher. Should any deficiencies be found, immediate corrective action should be taken by the homeowner or occupant. Fire extinguishers should be maintained in a fully charged and operable condition and kept in their designated places at all times when they are not being used.

If you have any unanswered questions or concerns, please contact the Aurora Fire Rescue Life Safety Division at 303-326-8999.