



Santa Monica Fire Department

Fire Extinguishers for the Home

Do you have a portable fire extinguisher? If not, why not? If you do have one, is it the right one for the job, and do you know how to use it? When properly maintained and used, a fire extinguisher can save lives and property by putting out a small fire or controlling it until the fire department arrives.

Portable fire extinguishers, made for personal use, are designed to fight small confined fires. Even when used to fight a small fire, they are effective only when:

- ◆ The extinguisher is of the right type for the fire being fought
- ◆ The extinguisher has been properly maintained
- ◆ The extinguisher is within easy reach
- ◆ The operator knows how to use the extinguisher

Select Your Extinguisher

- ◆ It should bear the seal of an independent testing laboratory, such as Underwriters Laboratories (UL), or Factory Mutual (FM). These seals certify that the unit has been type tested and passed for the specified type and size of fire listed.
- ◆ It should be labeled as to the type of fire it is intended to extinguish (see *Classes* below).
- ◆ It must be large enough to put out the fire. The higher the rating on an “A” or “B” extinguisher, the more fire it can put out.

Classes of Fires and Extinguishers

There are four basic classes of fires, and extinguishers for those fires, grouped according to the type of material involved in fire:

- ◆ **Class A** fires involve ordinary combustibles such as wood, cloth, paper, rubber, and many plastics. *Class A* extinguishers are water based, often using compressed air to deliver the water. Water acts a cooling agent to extinguish the fire.
- ◆ **Class B** fires involve flammable liquids such as gasoline, oil, grease, tar, oil-based paint, lacquer, and flammable gas. *Class B* extinguishers use carbon dioxide gas, dry chemical or foam to cover the fire and exclude air.
- ◆ **Class C** fires involve energized electrical equipment including wiring, fuse boxes, circuit breakers, machinery, and appliances. *Class C* extinguishers require the use of non-conductive agents such as carbon dioxide or dry chemicals. Carbon dioxide is the preferred agent, as it leaves no residue to be cleaned up.
- ◆ **Class D** fires involve combustible metals such as magnesium and sodium. Dry powders are used as the extinguishing medium; they cover the burning material in

order to absorb the heat. Care must be taken that no agent is used that might react with the metal.

ABC Extinguishers: Portable extinguishers labeled A-B-C may be used on *Class A*, *B*, and *C* fires, but are not acceptable for *Class D* fires.

Extinguisher Sizes

All extinguishers are rated as to the size of fire they are designed to handle. The rating is a number from 1 to 40 for a “Class A” fire, and 1 to 640 for a “Class B” fire. For example, a 20-B rated extinguisher can handle a flammable liquid fire twice as big as a 10-B extinguisher; the rating will appear on the label.

Installation and Maintenance

Extinguishers should be installed in plain view above the reach of small children, near an escape route and away from stoves and heating appliances.

Extinguishers require routine care; read your operator's manual. Rechargeable models must be serviced after every use. Disposable models can be used only once, and then must be replaced. Following manufacturer's instructions, check the pressure in your extinguishers once a month.

Using your Extinguisher

Stand about 6 feet from the fire and follow the four-step **PASS** method to extinguish the fire. If the fire does not go out immediately, leave the area at once. Even if the fire does go out, you should still call the Fire Department.

- ◆ Pull the pin out to unlock the operating lever and allow you to discharge the extinguisher. Some extinguishers have other devices, such as a lock latch, that prevent inadvertent operation.
- ◆ Aim low, pointing at the base of the fire.
- ◆ Squeeze the handle, or press the lever or button to discharge the extinguishing agent; releasing will stop the discharge.
- ◆ Sweep the nozzle from side to side at the base of the fire until the flames appear to be out. Watch the fire area. If the fire re-ignites, repeat the process.

Before you begin to fight a fire, be sure that all of the following is true:

- ◆ You know what you are doing.
- ◆ You have the proper extinguisher, and it is in working order.
- ◆ Everyone has left, or is leaving, the building.
- ◆ The fire department has been notified.
- ◆ The fire is confined to a small area and is not spreading beyond the immediate area.
- ◆ You have an unobstructed escape route to which the fire will not spread.

When in doubt: Turn around, leave the room, shut the door, leave the building.