

# Fire Extinguishers

Virtually all fires are small at first and might easily be contained if the correct type of extinguisher is readily available and properly used. Fire extinguishers are the first line of defense against unfriendly fires and should be installed in all homes and businesses. Selecting the correct extinguisher is important both to insure suitability for the expected type of fire, and to reduce damage to valuables from extinguishing agents. Using the wrong type of extinguisher can needlessly ruin your expensive computer which gets blasted with over spray from a small fire in your office.

## Portable Fire Extinguishers

Used properly, a portable fire extinguisher can save lives and property by putting out a small fire or containing it until the fire department arrives.

## Extinguishers Have Limits

- The operator must know how to use the extinguisher. There is no time to read directions during an emergency.
- The extinguisher must be within easy reach and in working order, fully charged.
- The extinguisher must be kept near the exit, so the user has an escape route that will not be blocked by fire.
- The extinguisher must match the type of fire you are fighting. Extinguishers that contain water are unsuitable for use on grease or electrical fires.
- The extinguisher must be large enough to put out the fire. Most portable extinguishers discharge completely in as few as eight seconds

## Choosing Your Extinguisher

Fire extinguishers are tested by independent testing laboratories. They will be labeled for the type of fire they are intended to extinguish.

## Classes of Fires

There are three basic classes of fires. All fire extinguishers are labeled using standard symbols for the classes of fires they can put out. A red slash through any of the symbols tells you the extinguisher cannot be used on that class of fire. A missing symbol tells you only that the extinguisher has not been tested for a given class of fire.

### Class A

Ordinary Combustibles such as wood, cloth paper, rubber, and many plastics.

### Class B

Flammable liquids such as gasoline, oil, grease, tar, oil-based paint, lacquer, and flammable gas.

### Class C

Energized electrical equipment including wiring, fuse boxes, circuit breakers, machinery, and appliances.

Many household fire extinguishers are "multipurpose" A-B-C models, labeled for use on all three classes of fire. If you are ever faced with a Class A fire and don't have an extinguisher with an "A" symbol, don't hesitate to use one with the "B-C" symbol.

## Be Careful With Water

It is very dangerous to use water or an extinguisher labeled only for Class A fires on a grease or electrical fire. The "C" in a rating indicates that you can use the unit on electrical fires.

## Extinguisher Sizes

Portable extinguishers are also rated for the size of fire they can handle. Normally, an extinguisher that has a rating of 2-A:10-B:C on its label is recommended for each floor level. The larger the number, the larger the fire that the extinguisher can put out. Higher-rated models are often heavier. Make sure you can hold and operate the extinguisher before you buy.

## Extinguishing Agents

There are five common groups of extinguishing agents. Choose one which will handle the correct class of fire while keeping damage at a minimum.

### Dry Chemical - Standard

Useful on Class B and C fires. Leaves a mildly corrosive residue which must be cleaned up immediately to prevent damage to electrical equipment. Best uses are automotive, grease fires and flammable liquids.

### Dry Chemical - Multipurpose

Useful for Class A, B, and C fires. Versatile and effective on most common types of fires. Highly corrosive and leaves a sticky residue. Not for use around delicate electrical appliances or computers.

### Halogenated Agents

Useful on Class A, B and C fires depending on agent used, check label. Expensive but very versatile and clean. Leaves no residue. Mildly toxic. Excellent for delicate computers and electrical equipment. Also good for flammable liquids and automotive use. This is one of the best all around choices for offices, however, environmental restrictions and rising costs limit availability.

### Carbon Dioxide

Useful on Class B and C fires. Very clean, no residue. Short range, must be applied close to fire.

### Water Based Agent

Use on Class A fires only. Inexpensive to refill and maintain.

These are the most common extinguishers in use. Base your selection on the size and classification needed plus compatibility with what you are trying to protect. It is also necessary to familiarize yourself with the location, use, and limitations of your fire extinguishers. Extinguishers which are required by the Fire Code must be serviced each year.

## Installation / 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. Ask your local fire department for advice on the best locations.

Extinguishers require routine care. Read your operator's manual and ask your dealer how your extinguisher should be inspected and serviced. Rechargeable models must be serviced after every use. Disposable fire extinguishers can be used only once, and must be replaced after use. Following manufacturer's instructions, check the pressure in your extinguishers once a month.

## Remember the PASS-word

Keep your back to an exit and stand six to eight feet away from the fire. Follow the four-step PASS procedure. If the fire does not begin to go out immediately, leave the area at once.

### Pull the Pin

This unlocks the operating lever and allows you to discharge the extinguisher. Some extinguishers may have other seals or tamper indicators.

### Aim Low

Point the extinguisher nozzle (or hose) at the base of the fire.

### Squeezing

Squeeze the lever above the handle: This discharges the extinguishing agent. Releasing the lever will stop the discharge. (Some extinguishers have a button instead of a lever.)

### Sweeping

Sweep the nozzle from side to side, while moving carefully toward the fire. Keep the extinguisher aimed at the base of the fire and sweep back and forth until the flames appear to be out. Watch the fire area. If the fire re-

ignites, repeat the process.

Always be sure the fire department inspects the fire site, even if you think you've extinguished the fire.

## **When to Fight a Fire**

Before you begin to fight a fire:

- Make sure everyone has left, or is leaving, the building.
- Make sure the fire department has been called.
- Make sure the fire is confined to a small area and is not spreading.
- Be sure you have an unobstructed escaped route to which the fire will not spread.
- Be sure you have read the instructions and that you know how to use the extinguisher.

It is reckless to fight a fire in any other circumstances. Instead, leave immediately and close off the area.

## **Disposal of Fire Extinguishers**

Please check the [Dane County's Clean Sweep Website](#)