



How to Use a Fire Extinguisher

(Please review the following steps before contacting your local fire department. Note that the US Fire Administration does not recommend the use of fire extinguishers from untrained persons.)

Not being prepared in-case of a fire can be detrimental to your life and for those around you. That's why knowing how and when to use a fire extinguisher is an important skill to obtain. The following article explains the process of using a fire extinguisher in the event of an emergency.

- 1. Call for help before attempting to extinguish a serious fire.** The fire may take off much faster than you think, and with help already on the way, it is one less thing for you to remember.
 - **Call, or have someone else call, 911 as soon as possible.** Ask for the help immediately, give your address and a brief description of the type of fire.
 - **Check that all other people are out of the house.** Check that everyone is assembled and ready to meet at your designated safe meeting point. Do not allow children to attempt to use a fire extinguisher or control a fire in any retrospect whatsoever.
- 2. Check for your own safety before attempting to extinguish a fire.** There are some key items to check before you attempt to extinguish a fire utilizing a fire extinguisher.
 - **Are you physically capable of extinguishing a fire?** Some people have physical limitations that might diminish or eliminate their ability to properly use a fire extinguisher. People with disabilities, older adults, or children may find that an extinguisher is too heavy to handle or may be too difficult for them to exert necessary pressure to operate the extinguisher.
 - **Look for exit points.** Ensure that there is a clear exit for immediate escape, if escape becomes necessary. At all times, keep focused on the availability of a safe retreat. If your exit becomes threatened leave at once. The US National Fire Prevention Association recommends installing all fire

extinguishers close to an exit point, to enable you to keep your back to the exit when you use the extinguisher; this ensures that you can make an easy escape if the fire cannot be controlled.

- **Do not attempt to put out a fire if it's emitting toxic smoke**, if you suspect or simply don't know if the smoke is toxic, leave it to the professionals.
- **Check for structural safety of the building**, in case burning walls, floors or rafters pose a risk to your safety.
- **If you have more than one fire extinguisher**, consider asking another mature and responsible person to use it in tandem with you.
- **Remember that your life is more important than your property**, so don't place yourself or others at risk.

3. Assess the fire. Only a contained fire should be extinguished using a fire extinguisher. Portable fire extinguishers are only good for immediate use on small fires because they contain a limited amount of extinguishing material, which needs to be applied properly or it will be wasted. For example when a pan initially catches fire, it may be safe to turn off the burner, place a lid on the pan, and use an extinguisher. By the time the fire has spread, however, these actions will not be adequate, and only trained firefighters can safely extinguish such fires.

- **Make a quick common sense assessment** about the safety of using a fire extinguisher for the fire you're experiencing. For example: A fire extinguisher is overkill for a candle but it is useless when that candle has set the whole room on fire. A fire in a wastepaper basket, however, is another suitable candidate for fire extinguisher use.
- **Use your instincts.** If your instincts tell you the fire's too dangerous to attempt extinguishment, trust them.

4. Check the type of extinguisher. In the USA, there are five main classes of fire extinguishers. (Please note that these can vary from country to country.) A, B, C and the less common classes D and K. The extinguishing agent might be water, dry chemical, halon, CO2, or a special powder.

- **Class A:** This is suitable for cloth, wood, rubber, paper, various plastics, and regular combustible fires. It is usually filled with 2.5 gallons (9.46 liters) of pressurized water.



- **Class B:** This is suitable for grease, gasoline or oil-based fires are usually filled with a dry chemical. Extinguishers smaller than 6 pounds (2.72kg) are not recommended.



- **Class C:** This is suitable for electrical fires caused by appliances, tools, and other plugged in gear. It can contain either halon or CO2. Halon 1211 and 1301 is very expensive and depletes the ozone layer, but it is being replaced by non-depleting agents such as FM200. Note that halon is now illegal in numerous jurisdictions.



- **Class D:** This is used for water-reactive metals such as burning magnesium and will be located in factories using such metals. It comes in the form of a powder that must cover the material to extinguish it.



- **Class K:** This contains special purpose wet chemical agent for use in kitchen fires and deep fryers to stop fires started by vegetable oils, animal fats, or other fats started in cooking appliances.



- **Class ABC:** This is the most common household fire extinguisher in use today. It is usually a dry chemical extinguisher and will handle all three types of fires; this is why it is so popular.



5. **Ready the fire extinguisher.** Almost all fire extinguishers have a safety pin in the handle. This pin usually looks like a plastic or metal ring, sometimes colored red, which is held in place by a seal. The distinctive features will vary depending on the type of fire extinguisher you have. You must break the seal and pull the safety pin from the handle before you can use the fire extinguisher by squeezing the lever, which discharges the fire extinguishing agent.

- It helps is you ensure that you're familiar with how your fire extinguisher works before being placed under pressure; take time to read over its instructions after you've read this article. Familiarize yourself with its special features and parts. Different extinguishers rely on different methods of use; be aware of this in advance of having to use them.

6. **Aim for the base of the fire.** Shooting into the flame is a waste of the fire extinguisher, as you're not putting out the source of the flames. It's vital to stop the fire at its source, or to remove or dampen the fuel from the fire. By focusing the extinguisher's spray at the base of the fire or the source, you're extinguishing the heat from the fuel.

7. **Remember the simple acronym P.A.S.S. to help you use the fire extinguisher effectively.** P.A.S.S. stands for **P**ull, **A**im, **S**queeze, **S**weep.

P A S S

Pull the safety pin from the handle

Aim the extinguisher nozzle or hose at the **base** of the fire, **not** at the flames.

Squeeze the handle slowly to discharge the agent.

Sweep side to side, approximately 6" / 15cm from the fire until expended. Keep a safe distance from the fire.

- **Pull** the safety pin from the handle. The pin is located at the top of the fire extinguisher. Once removed, it releases the locking mechanism, allowing you to discharge the extinguisher.
- **Aim** the extinguisher nozzle or hose at the base of the fire. As explained, this removes the source or fuel of the fire. Keep yourself low.
- **Squeeze** the handle or lever slowly to discharge the agent. Letting go of the handle will stop the discharge, so keep it held down.
- **Sweep** side to side approximately 6 inches over the fire until expended. The sweeping motion helps to extinguish the fire. Stand several feet back from the fire: Fire extinguishers are manufactured for use from a distance.
- Note: The fire may flare up when extinguishment begins due to the flames being pushed away from the burning material (the real target) by the agent and/or the gust of propellant. Do not be alarmed *unless* the fire does not die back down promptly.

8. Be aware that the typical fire extinguisher will contain around 10 seconds of extinguishing power. If the extinguisher has already been discharged partially this time will be less.

- If the fire is not extinguished after you've used up the fire extinguisher, remove yourself to safety quickly.
- If the room fills with smoke, make a hasty exit.

9. Tend to the area if you have successfully put out the fire. This means not leaving it alone, as it might re-ignite without warning. If it is safe to do so, remove fuel sources and commence cleaning up. Water can be used to ensure there are no remaining sparks in materials that are safe to extinguish with water (most combustibles other than oils and other insoluble combustible liquids or places involving electricity.) The fire department could help you ensure the fire is completely extinguished. If you're legally obliged to report fires to local authorities, then do so, especially if filing for an insurance claim.

10. Purchase a new fire extinguisher immediately. The old one is now depleted and will serve no further purpose. Do not allow an empty extinguisher to be present where it could create the false impression of being a good extinguisher. A multi-purpose extinguisher is best for a home; check that it is labeled by an independent testing laboratory.

PLEASE NOTE:

- Fire extinguishers should be wall mounted in an accessible place. Keep out of the reach of children who are not responsible enough to leave well alone.

- It's a good idea to always keep a fire extinguisher in the kitchen away from sources of heat, such as the stove or cooking surfaces.
- Other good places to keep a fire extinguisher include: your car, your garage (especially if you use welding equipment or flammable products), your caravan or RV, and your boat. In each case, mount it somewhere accessible and protected from outdoor elements.
- Ensure that everyone in the house knows where the fire extinguisher is located and how to use it (provided they are old enough and responsible enough to do so.)

FOR MORE INFORMATION:

The following link is to a video where you can see firsthand someone using P.A.S.S. to put out a fire. <http://bit.ly/UBW9pO>

If you still feel that you need more training, please contact the Frederick-Firestone Fire Protection District's Community Outreach Specialist Summer Stair, at sstair@fffd.us or 303-833-2742, to schedule a training session.