

## Fire Extinguishers 101:

With so many [fire extinguishers](#) to choose from, selecting the proper one for your home can be a daunting task. Everyone should have at least one fire extinguisher at home, but it's just as important to ensure you have the proper type of fire extinguisher. Fire protection experts recommend one for the kitchen, the garage and workshop.

Fire extinguishers are divided into four categories, based on different types of fires. Each fire extinguisher also has a numerical rating that serves as a guide for the amount of fire the extinguisher can handle. The higher the number, the more fire-fighting power. The following is a quick guide to help choose the right type of extinguisher. Also see [how to buy a fire extinguisher](#).



- [Class A](#) extinguishers are for ordinary combustible materials such as paper, wood, cardboard, and most plastics. The numerical rating on these types of extinguishers indicates the amount of water it holds and the amount of fire it can extinguish. Geometric symbol (green triangle)
- [Class B](#) fires involve flammable or combustible liquids such as gasoline, kerosene, grease and oil. The numerical rating for class B extinguishers indicates the approximate number of square feet of fire it can extinguish. Geometric symbol (red square)
- [Class C](#) fires involve electrical equipment, such as appliances, wiring, circuit breakers and outlets. Never use water to extinguish class C fires - the risk of electrical shock is far too great! Class C extinguishers do not have a numerical rating. The C classification means the extinguishing agent is non-conductive. Geometric symbol (blue circle)
- [Class D](#) fire extinguishers are commonly found in a chemical laboratory. They are for fires that involve combustible metals, such as magnesium, titanium, potassium and sodium. These types of extinguishers also have no numerical rating, nor are they given a multi-purpose rating - they are designed for class D fires only. Geometric symbol (Yellow Decagon)
- [Class K](#) fire extinguishers are for fires that involve cooking oils, trans-fats, or fats in cooking appliances and are typically found in restaurant and cafeteria kitchens. Geometric symbol (black hexagon)

Some fires may involve a combination of these classifications. Your fire extinguishers should have ABC ratings on them.

Here are the **most common types of fire extinguishers**:



- **Water extinguishers** or APW extinguishers (air-pressurized water) are suitable for **class A fires only**. [Never use a water extinguisher on grease fires](#), electrical fires or class D fires - the flames will spread and make the fire bigger! Water extinguishers are filled with water and are typically pressurized with air. Again - water extinguishers can be very dangerous in the wrong type of situation. Only fight the fire if you're certain it contains ordinary combustible materials only.
- **Dry chemical** extinguishers come in a variety of types and are suitable for a combination of **class A, B and C fires**. These are filled with foam or powder and pressurized with nitrogen.
  - **BC** - This is the regular type of dry chemical extinguisher. It is filled with sodium bicarbonate or potassium bicarbonate. The BC variety leaves a mildly corrosive residue which must be cleaned immediately to prevent any damage to materials.
  - **ABC** - This is the multipurpose dry chemical extinguisher. The ABC type is filled with monoammonium phosphate, a yellow powder that leaves a sticky residue that may be damaging to electrical appliances such as a computer

Dry chemical extinguishers have an advantage over CO<sub>2</sub> extinguishers since they leave a non-flammable substance on the extinguished material, reducing the likelihood of re-ignition.

- **Carbon Dioxide (CO<sub>2</sub>) extinguishers** are used for **class B and C fires**. CO<sub>2</sub> extinguishers contain carbon dioxide, a non-flammable gas, and are highly pressurized. The pressure is so great that it is not uncommon for bits of dry ice to shoot out the nozzle. They don't work very well on class A fires because they may not be able to displace enough oxygen to put the fire out, causing it to re-ignite.

CO<sub>2</sub> extinguishers have an advantage over dry chemical extinguishers since they don't leave a harmful residue - a good choice for an electrical fire on a computer or other favorite electronic device such as a stereo or TV.

**It is vital to know what type of extinguisher you are using.  
Using the wrong type of extinguisher for the wrong type of fire  
can be life-threatening.**

These are only the common types of fire extinguishers. There are many others to choose from. Base your selection on the classification and the extinguisher's compatibility with the items you wish to protect.