



Public Education Training For Fire Extinguishers

There are basically five different types or classes of fire extinguishers, each of which extinguishes specific types of fire. Newer fire extinguishers use a picture/labeling system to designate which types of fires they are to be used on. Older fire extinguishers are labeled with colored geometrical shapes with letter designations. We will discuss both types of labels and the description of the different classes of extinguishers.

Additionally, Class A and Class B fire extinguishers have a numerical rating which is based on tests conducted by Underwriter's Laboratories that are designed to determine the extinguishing potential for each size and type of extinguisher. Below are the four topics that we will cover today.

[Fire Extinguisher Ratings](#)
[Multi-Class Ratings](#)
[Types of Fire Extinguishers](#)
[How to Use a Fire Extinguisher](#)

Fire Extinguisher Ratings

Class A Extinguishers



A fire extinguisher labeled with letter "A" should be used on fires that involve ordinary combustible materials such as cloth, wood, paper, rubber, and many plastics. The numerical rating for this class of fire extinguisher refers to the amount of water the fire extinguisher holds and the amount of fire it will extinguish.

Memory trick: Class A fires create Ash



Class B Extinguishers



A fire extinguisher labeled with the letter "B" should be used on fires involving flammable liquids, such as grease, gasoline, oil, etc. The numerical rating for this class of fire extinguisher states the approximate number of square feet of a flammable liquid fire that a non-expert person can expect to extinguish. Larger grease fires now have their own classification-see Class K below.

Memory trick: Class B fires can Boil or Bubble



Class C Extinguishers



A fire extinguisher labeled with letter "C" should be used on electrically energized fires. This class of fire extinguishers does not have a numerical rating. The presence of the letter "C" indicates that the extinguishing agent is non-conductive.

Memory trick: Class C fires are Charged or full of Current



Class D Extinguishers



A fire extinguisher labeled with letter "D" is designed for use on flammable metals, such as sodium, magnesium, and titanium, and are often specific for the type of metal in question. These extinguishers generally have no rating nor are they given a multi-purpose rating for use on other types of fires.

Memory trick: Class D fires are Heavy Duty



Class K Extinguishers



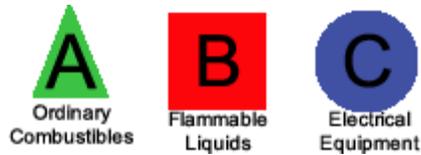
A fire extinguisher labeled with letter "K" should be used on fires that involve vegetable oils, animal oils, or fats used in cooking. These extinguishers are found in commercial kitchens, such as restaurants, cafeterias, and caterers.

Memory trick: Class K fires are Kitchen fires



Multi-Class Ratings

Many extinguishers available today can be used on different types of fires and will be labeled with more than one designator, e.g. A-B, B-C, or A-B-C. Make sure that if you have a multi-purpose extinguisher it is properly labeled.



This old style label indicates suitability for use on Class A, B, and C fires.



This new style label indicates this extinguisher may be used on Ordinary Combustibles, Flammable Liquids, or Electrical Equipment fires.



Some new style labels show a red diagonal line drawn through the picture to indicate what type of fire this extinguisher is **NOT** suitable for. This new style label indicates this extinguisher may be used on Ordinary Combustibles and Flammable Liquids fires, but not for Electrical Equipment fires.

Types of Fire Extinguishers



Dry Chemical extinguishers are usually rated for multiple purpose use. They contain an extinguishing agent and use a compressed, non-flammable gas as a propellant.



Halon extinguishers contain a gas that interrupts the chemical reaction that takes place when fuels burn. These types of extinguishers are often used to protect valuable electrical equipment since they leave no residue to clean up. Halon extinguishers have a limited range, usually 4 to 6 feet. The initial application of Halon should be made at the base of the fire, even after the flames have been extinguished.



Water These extinguishers contain water and compressed gas and should only be used on Class A (ordinary combustibles) fires.



Carbon Dioxide (CO₂) extinguishers are most effective on Class B and C (liquids and electrical) fires. Since the gas disperses quickly, these extinguishers are only effective from 3 to 8 feet. The carbon dioxide is stored as a compressed liquid in the extinguisher; as it expands, it cools the surrounding air. The cooling will often cause ice to form around the “horn” where the gas is expelled from the extinguisher. Since the fire could re-ignite, continue to apply the agent even after the fire appears to be out.

How to Use a Fire Extinguisher

Even though extinguishers come in a number of shapes and sizes, they all operate in a similar manner. Here's an easy acronym for fire extinguisher use:

P A S S -- Pull, Aim, Squeeze, and Sweep



Pull the pin at the top of the extinguisher that keeps the handle from being accidentally pressed.



Aim the nozzle toward the base of the fire.



Stand approximately 8 feet away from the fire and **squeeze** the handle to discharge the extinguisher. If you release the handle, the discharge will stop.



Sweep the nozzle back and forth at the base of the fire. After the fire appears to be out, watch it carefully since it may re-ignite!



Congratulations -- you did it!!!