

Fire Extinguishers

Fact: In 80% of fires, a portable fire extinguisher successfully extinguished the fire, and in 75% of those fires, it was not necessary for the fire department to respond.

Class of fire



Class A fires are ordinary combustibles or fibrous material, such as wood, cloth, trash, and paper.



Class B fires are flammable or combustible liquids, such as gasoline, acetone, thinners, and kerosene.



Class C fires are energized electrical fires, such as appliances, circuit boxes, motors, wiring, and power tools.



Class D fires are combustible metals, such as magnesium, titanium, and sodium. Class D fires react violently with water or other chemicals and must be handled with care.



Class K fires are combustible cooking media (vegetable or animal oils and fats).

Fire extinguishers are rated according to the type of fire they can put out. This information is listed on the extinguisher. Take a few minutes to become familiar with the location of extinguishers, the type of fire extinguishers you have, and the types of fires that could potentially occur in your workplace.

Fire extinguishers should be mounted on a wall. The top of the extinguisher may be a maximum of 5 feet from the ground if it weighs less than 40 pounds. Extinguishers that are more than 40 pounds should not be mounted more than 3.5 feet above the floor.

The extinguisher location should be marked, near an exit, have unobstructed access, and be in plain view.

Locate a Class K portable fire extinguisher within 30 feet of cooking operations. Place a sign near the extinguisher with instructions that the automatic extinguishing system should be triggered before using the extinguisher.

Fire extinguisher classification

Equipment that passes the laboratory's tests are labeled and given an alpha-numeric classification based on the type and size of fire it will extinguish.

The classification is: 1-A:10-BC.

The letters (A, B, and C) represent the type of fire for which the extinguisher has been approved.

The number in front of the A rating indicates how much water the extinguisher is equal to and represents 1.25 gallons of water for every unit of one. For example, a 4-A rated extinguisher would be equal to five (4 x 1.25) gallons of water.

The number in front of the B rating represents the area in square feet a non-expert user should be able to extinguish for a Class B fire. Using the above example, a non-expert user should be able to put out a flammable liquid fire that's as large as ten square feet.



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An employer must:

- Provide an educational program to familiarize employees with the general principles of fire extinguisher use and the hazards involved with incipient stage firefighting. [29 CFR 1910.157(g)(1)] Provide this education when employees are first hired and once a year thereafter. [29 CFR 1910.157(g)(2)]
- Train employees (who have been designated to use firefighting equipment in the emergency action plan) in the use of the equipment. [29 CFR 1910.157(g)(3)] Provide this training when employees are first given this assignment and once a year thereafter. [29 CFR 1910.157(g)(4)]

Inspection and maintenance

Proper maintenance should be followed. Be sure to consult the owner's guide or manual for your fire extinguisher. Here are general tips:

- Make sure the fire extinguisher is not obstructed from view and is easily accessible.
- Verify the fire extinguisher's pressure gauge shows the extinguisher has adequate pressure (i.e., the indicator needle is in the green zone).



Visually inspect portable extinguishers or hoses monthly. [29 CFR 1910.157(e)(2)]

Deciding to use a fire extinguisher

Before attempting to put out a fire with a portable fire extinguisher, you must ask these questions:

- Has someone called the fire department?
- Are there two ways to exit the area quickly and safely if I attempt to extinguish the fire? (The first priority is safety.)
- Do I have the right type of extinguisher for the type of fire?

- Is the extinguisher large enough for the fire?
- Is the fire small and contained (like in a wastepaper basket)?
- Is the area free from other dangers, such as hazardous materials or any debris?

When using a fire extinguisher:

- Always stand with an exit at your back.
- Stand several feet away from the fire, moving closer once the fire starts to diminish.
- If possible, use a “buddy system” to have someone back you up or call for help if something goes wrong.



FIRE EXTINGUISHER INSPECTION RECORD			
Extinguisher No. _____			
DATE	BY	DATE	BY

- It's important that you know how to operate the fire extinguisher before you attempt to fight the fire. If you decide to try, remember the word PASS, which stands for:

P – Pull the pin that unlocks the operating handle.

A – Aim the extinguisher low at the base of the fire.

S – Squeeze the lever on the extinguisher to discharge the agent.

S – Sweep the nozzle or extinguisher hose from side to side. Move slowly and carefully toward the fire, continuing to sweep the extinguisher back and forth at the base of the flames.

