FEMA, The Life Safety Group is an international, non-profit trade association dedicated to saving lives and protecting property through first line of defense fire protection products and education.

For more fire protection training materials, please visit:

FEMA | the life safety group
www.femalifesafety.org

FIRE EQUIPMENT MANUFACTURERS' ASSOCIATION, INC.

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How to use a Portable Fire Extinguisher

Brought to you by

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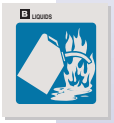
BEFORE USING A FIRE EXTINGUISHER, BE SURE

- the fire department has been called
- you have announced the fire to alert others
- occupants have begun evacuating or are leaving the structure
- the fire is small and not spreading
- you know how to operate the fire extinguisher, and
- the fire won't block your unobstructed escape route

Provided by the National Fire Protection Association (NFPA).

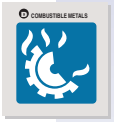
TYPES OF FIRES

Class A fires are fires in ordinary combustibles such as wood, paper, cloth, trash, and plastics.



Class B fires are fires in flammable liquids such as gasoline, petroleum oil, and paint. Also included are flammable gases such as propane and butane. Class B fires do not include fires involving cooking oils and grease.

Class C fires are fires involving energized electrical equipment such as motors, transformers, and appliances. Remove the power and the Class C fire becomes one of the other classes of fire.



Class D fires are fires in combustible metals such as potassium, sodium, aluminum and magnesium.

Class K fires are fires in cooking oils and greases such as animal fats and vegetable fats.

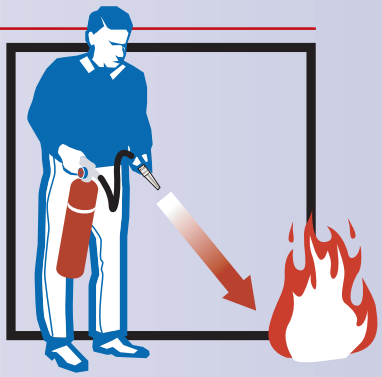
When it's time to use a Fire Extinguisher, just remember **PASS!**

PULL

Pull the pin.

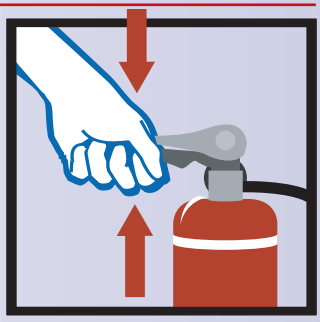
AIM

Aim the nozzle or hose at the base of the fire from the recommended safe distance.



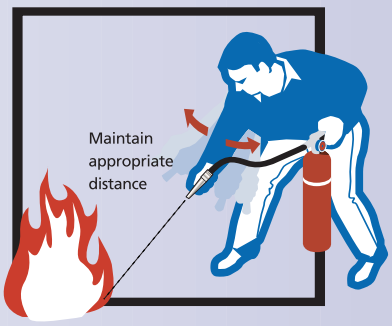
SQUEEZE

Squeeze the operating lever to discharge the fire extinguishing agent.



SWEEP

Starting at the recommended distance, **Sweep** the nozzle or hose from side to side until the fire is out. Move forward or around the fire area as the fire diminishes. Watch the area in case of re-ignition.



TYPES OF EXTINGUISHERS

Dry Chemical fire extinguishers extinguish the fire primarily by interrupting the chemical reaction in the fire. *Today's most widely used type of fire extinguisher is the multipurpose dry chemical that is effective on Class A, B and C fires. This agent also works by creating a barrier between the oxygen element and the fuel element on Class A fires. Ordinary dry chemical is for Class B & C fires only. It is important to use the correct extinguisher for the type of fuel! Using the incorrect agent can allow the fire to re-ignite after apparently being extinguished successfully.*

Water and Foam fire extinguishers extinguish the fire by taking away the heat from the fire. Foam agents also separate the oxygen from the fuel and heat. *Water extinguishers are for Class A fires only, they should not be used on Class B or C fires. The discharge stream could spread the flammable liquid in a Class B fire or could create a shock hazard on a Class C fire. Foam extinguishers can be used on Class A & B fires only. They are not for use on Class C fires due to the shock hazard.*

Carbon Dioxide fire extinguishers extinguish the fire by separating the oxygen element from the fuel and heat, and also by removing the heat with a very cold discharge. *Carbon dioxide can be used on Class B & C fires. They are usually ineffective on Class A fires.*

Wet Chemical is a new agent that extinguishes the fire by removing the heat from the fire and prevents re-ignition by creating a barrier between the oxygen and fuel elements. *Wet chemical or Class K extinguishers were developed for modern, high efficiency deep fat fryers in commercial cooking operations. Some may also be used on Class A fires in commercial kitchens.*

Halogenated or Clean Agent extinguishers are either based on halocarbon agents or on the older and no longer made halon 1211 agent, which can no longer be used for training. *Halocarbon agents replaced halon 1211 within the last 8 years and are much more environmentally acceptable. Commercialized halocarbon agents extinguish the fire by removing heat from the combustion zone. Halon 1211 extinguishers, however, were chemically active and interfered with the chemical reactions occurring in the combustion zone. Halocarbon and halon 1211 extinguishers are effective on Class A, B, and C type fires, although very small sizes do not achieve the lowest UL Class A rating, 1-A.*

Dry Powder extinguishers are similar to dry chemical except that they extinguish the fire by separating the fuel from the oxygen element of the fire. *However, dry powder extinguishers are for Class D or combustible metal fires, only. They are ineffective on all other classes of fires.*

Water Mist extinguishers are a recent development that extinguishes the fire by taking away the heat from the fire. They are an alternative to the clean agent extinguishers where contamination is a concern. *Water mist extinguishers are primarily for Class A fires, although they are safe for use on Class C fires as well.*