

Types of Fire Extinguishers Meeting Kit



A **fire extinguisher** is an active fire protection device used to extinguish or control small fires, often in emergency situations. It is not intended for use on an out-of-control fire, such as one which has reached the ceiling, endangers the user (i.e., no escape route, smoke, explosion hazard, etc.), or otherwise requires the expertise of a fire brigade. Typically, a fire extinguisher consists of a hand-held cylindrical pressure vessel containing an agent that can be discharged to extinguish a fire. Fire extinguishers manufactured with non-cylindrical pressure vessels also exist but are less common.

Classes of Fires and Extinguishers Used for Each

Class A: A fire extinguisher labeled with letter "A" is for use on Class A fires. Class A fires are fires that involve ordinary combustible materials such as cloth, wood, paper, rubber, and many plastics.

Class B: A fire extinguisher labeled with letter "B" is for use on Class B fires. Class B fires are fires that involve flammable and combustible liquids such as gasoline, alcohol, diesel oil, oil-based paints, lacquers, etc., and flammable gases.

Class C: A fire extinguisher labeled with letter "C" is for use on Class C fires. Class C fires are fires that involve energized electrical equipment.

Class D: A fire extinguisher labeled with letter "D" is for use on Class D fires. Class D fires are fires that involve combustible metals such as magnesium, titanium and sodium.

Class K: A fire extinguisher labeled with letter "K" is for use on Class K fires. Class K fires are fires that involve vegetable oils, animal oils, or fats in cooking appliances. This is for commercial kitchens, including those found in restaurants, cafeterias, and caterers.

Common Fire Extinguishers

The most commonly used fire extinguisher is the red ABC extinguisher. 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. They can be used on A, B, or C type fires.

Another common extinguisher is a silver extinguisher that contains pressurized water. These extinguishers are used for Class A fires only. They should never be used on Class C or Class K fires. Adding water to an electrical or oil fire can cause more damage and injury. Only use water filled extinguishers for fires that you know are all Class A materials.

Carbon Dioxide (CO₂) extinguishers are used for class B and C fires. These extinguishers are usually red too like the ABC extinguishers, but have “CO₂” clearly marked on it. CO₂ extinguishers contain carbon dioxide, a non-flammable gas, and are highly pressurized. 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. These extinguishers do not leave a residue which makes them ideal for electrical fires.

TRAINING

You need training so you will understand when and how to operate a fire extinguisher and hands-on practice to be able to operate a fire extinguisher in an emergency.

FIRE EXTINGUISHER SAFETY TIPS

Use a portable fire extinguisher when the fire is confined to a small area, such as a wastebasket, and is not growing; everyone has exited the building; the fire department has been called or is being called; and the room is not filled with smoke.

To operate a fire extinguisher, remember the word PASS:

- Pull the pin. Hold the extinguisher with the nozzle pointing away from you, and release the locking mechanism.
- Aim low. Point the extinguisher at the base of the fire.
- Squeeze the lever slowly and evenly.
- Sweep the nozzle from side-to-side.
- Choose a fire extinguisher that carries the label of an independent testing laboratory.

Read the instructions that come with the fire extinguisher and become familiar with its parts and operation before a fire breaks out. Local fire departments or fire equipment distributors often offer hands-on fire extinguisher trainings.

DON’T WAIT FOR ACCIDENTS TO HAPPEN

- Limit access to flammable or combustible materials, and store them in a cool, dry place—away from other materials or devices that could catch on fire.
- Inspect electronic devices, as well as flammable and combustible materials, for damage and degradation. If something is broken or has expired, get rid of it.
- Plan ahead. Use flammable or combustible materials in a safe, open space, and wear proper protective materials. Create an emergency action plan, and train and periodically remind employees what to do in the event of a fire.
- Practice common-sense safety. Don’t light fireworks indoors, in crowded spaces, or during a windy day. Follow the instructions for using flammable or combustible materials. Don’t mix fire and alcohol.

FINAL WORD

Fire extinguishers should not be looked at like they are “ornaments”. There are serious implications in the use of handheld extinguishers. They require training, education inspection, maintenance and testing.