

Portable Fire Extinguisher Training



What we are going to Learn:

- What "fire" is
- Causes of fire
- Importance of portable fire extinguishers
- Classifications of fire
- Types of portable fire extinguishers
- Visual Inspection
- How to use a portable fire extinguisher
- Rules for Fighting Fires
- Reporting an emergency



What is Fire?



A rapid chemical reaction.

The self-sustaining process of rapid oxidation of a fuel, which produces heat and light.



Examples of fire Causes

Electricity
Housekeeping
Cleaning Supplies
Flammable Liquids
Machinery
Careless smoking

Improper Storage
Space Heaters
Construction
Combustible Liquids
Unattended Cooking
Hot Work Operations

Prevention is the best way to fight a fire!

Portable Fire Extinguisher Training

• The importance of portable fire extinguishers?



Your first line of defense!

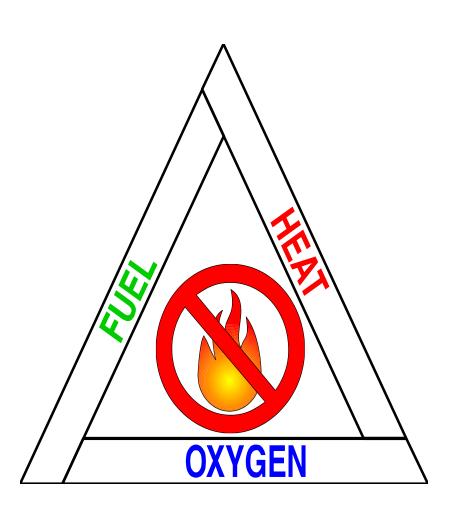


Extinguishment Theory

- Removing Heat
- Removing Fuel
- · Reducing Oxygen

WILL

 Inhibit Chemical Chain Reaction



FUEL CLASSIFICATIONS

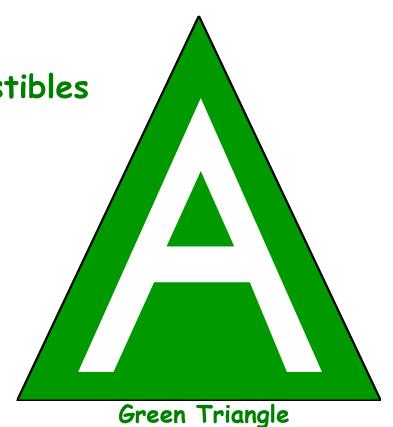
- Fires are classified according to the type of fuel that is burning.
- If you use the wrong type of fire extinguisher on the wrong class of fire, you might make matters worse.
- Its very important to understand the four different fire (fuel) classifications...



Class A or Ordinary Combustibles

This includes fuels such as wood, paper, plastic, rubber, and cloth.

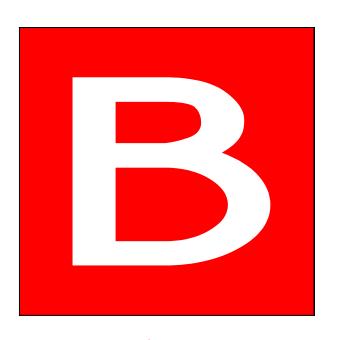






Class B or Flammable and Combustible Liquids and Gases

This includes all hydrocarbon and alcohol based liquids and gases that will support combustion.



Red Square

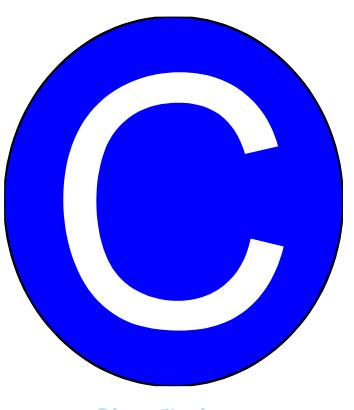




Class C or Electrical

This includes all fires involving energized electrical equipment.



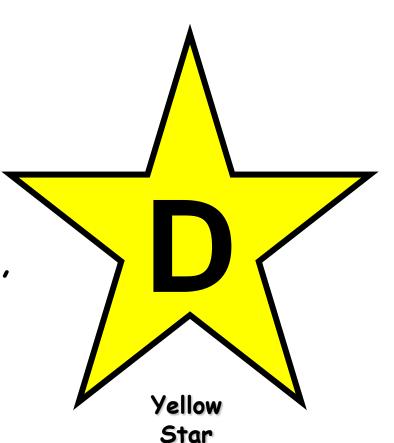


Blue Circle



Class D or Combustible Metals

Examples of these types of metals are: zirconium, titanium, potassium, and magnesium.





Class K is for fires in unsaturated cooking oils in well insulated cooking appliances primarily in commercial kitchens.

2A:1B:C:K













Characteristics



Water extinguisher 30-40 ft. 60 sec.



Dry chemical 5-20 ft. 8-25 sec.



Co2 extinguisher 3-8 ft. 8-30 sec.



"Quick-Check"

Is It Ready To Use?

- 1. Check the gauge. The pressure indicator should be in the green zone. (CO2 extinguishers do not have pressure gauges.)
- 2. The extinguisher should have a current inspection tag.
- 3. The pin and handle should be secured with a plastic tab seal.
- 4. The extinguisher and hose should be free of any visible damage.





It's easy to remember how to use a fire extinguisher if you remember the acronym PASS:

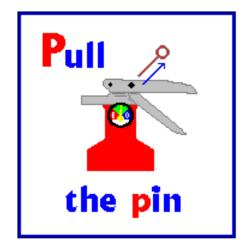
- Pull
- Aim
- Squeeze
- Sweep





Pull the pin...

This will allow you to discharge the extinguisher.





Aim at the base of the fire...

Hit the fuel.

If you aim at the flames...



... the extinguishing agent will fly right through and do no good.



Squeeze the top handle...

This depresses a button that releases the pressurized extinguishing agent.





Sweep from side to side...

.. until the fire is completely out.

Start using the extinguisher from a safe distance away, then slowly move forward.



Once the fire is out, keep an eye on the area in case it re-ignites.



Make The "Right" Decision

When to use a Portable Fire Extinguisher



Fires can be very dangerous and you should always be certain that you will not endanger yourself or others when attempting to put out a fire.

For this reason, when a fire is discovered...

- 1. Assist any person in immediate danger to safety, if it can be accomplished without risk to yourself.
- Call 911 or activate the building fire alarm. The fire alarm will
 notify the fire department and other building occupants and
 shut off the air handling system to prevent the spread of smoke.

If the fire is small (and only after having done these 2 things), you may attempt to use an extinguisher to put it out.

However....

. . . before deciding to fight the fire, keep these things in mind:

- Know what is burning. If you don't know what's burning, you won't know what kind of extinguisher to use.
- Even if you have an ABC fire extinguisher, there may be something in the fire that is going to explode or produce toxic fumes.

Chances are you will know what's burning, or at least have a pretty good idea, but if you don't, let the fire department handle it.

. . . before deciding to fight the fire, keep these things in mind:

- 3. Is the fire spreading rapidly beyond the point where it started? The time to use an extinguisher is at the beginning stages of the fire.
- If the fire is already spreading quickly, it is best to simply evacuate the building.



As you evacuate a building, close doors and windows behind you as you leave. This will help to slow the spread of smoke and fire.

Do not fight the fire if:

- You don't have adequate or appropriate equipment.

 If you don't have the correct type or large enough extinguisher, it is best not to try fighting the fire.
- ✓ You might inhale toxic smoke.
 - When synthetic materials such as the nylon in carpeting or foam padding in a sofa burn, they can produce hydrogen cyanide, acrolein, and ammonia in addition to carbon monoxide. These gases can be fatal in very small amounts.
- ✓ Your instincts tell you not to.

 If you are uncomfortable with the situation for any reason, just let the fire department do their job.

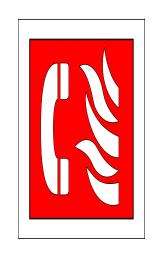
The final rule is to always position yourself with an exit or means of escape at your back before you attempt to use an extinguisher to put out a fire.



In case the extinguisher malfunctions, or something unexpected happens, you need to be able to get out quickly. You don't want to become trapped.



Reporting an Emergency



• Call the 911, to report the fire "even" if the fire is extinguished.

△ It is not recommended you stay in the building to call. Call from a nearby building or a cell phone.

Give as much information as possible to the emergency dispatcher.





You are not expected to be firefighters! Do not take unnecessary risks!

Portable Fire Extinguisher Training

Thank You For Your Time!

Questions?

Contact Risk
Management
Department at:
702-799-6496

