



Atlantic Beach Fire Department Presents:

Portable Fire Extinguishers

For Business
Employees and the
General Public



Portable Fire Extinguisher Training

What we are going to Learn:

- 📄 What “fire” is.
- 📄 Classifications of fire.
- 📄 Leading fire causes.
- 📄 Fire prevention.
- 📄 Importance of portable fire extinguishers
- 📄 Types of portable fire extinguishers.
- 📄 How to use a portable fire extinguisher.
- 📄 Making the “right” decision.
- 📄 Reporting an emergency.

Standards/Regulations

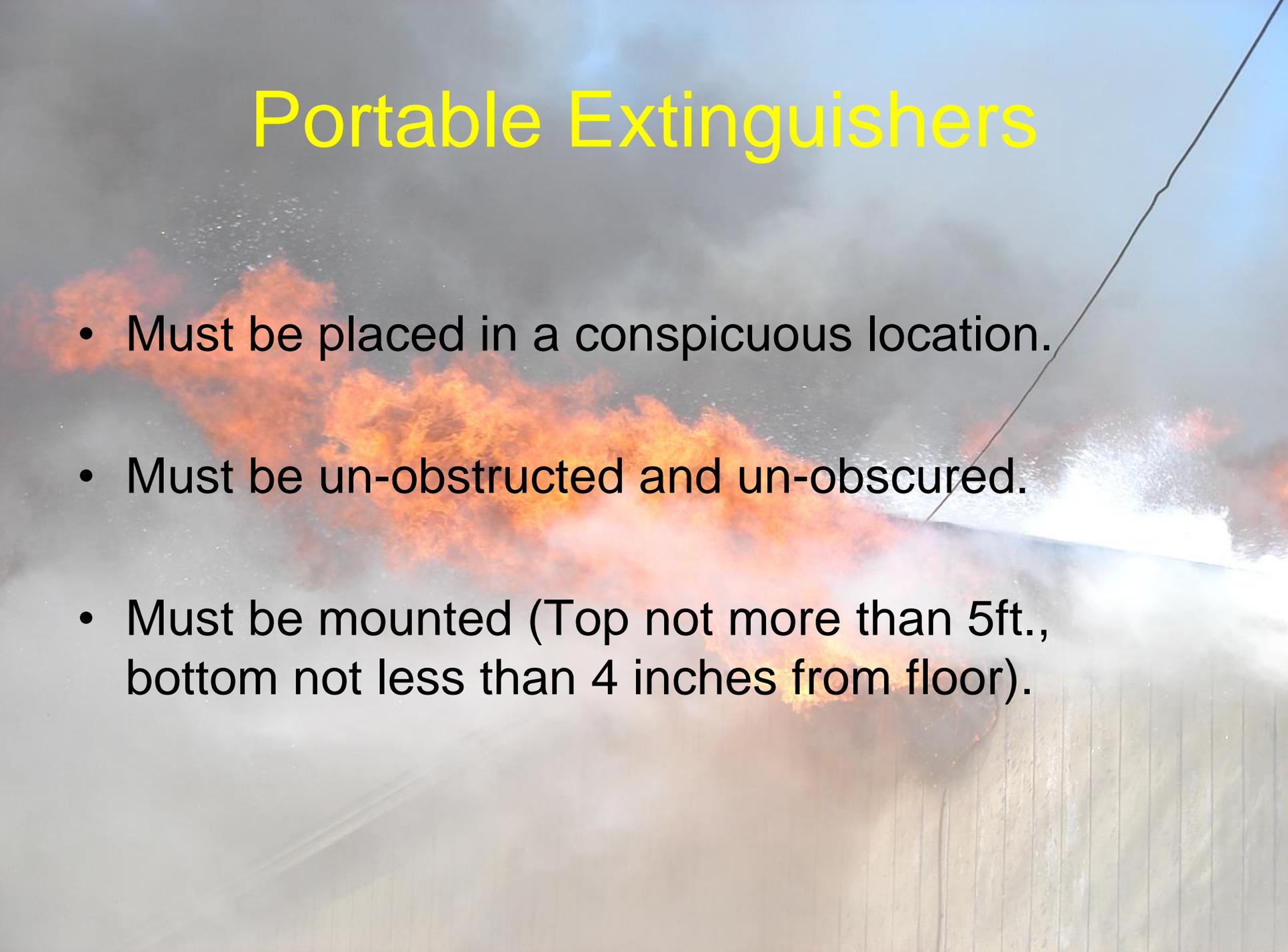
The background of the slide is a photograph of a fire. Bright orange and yellow flames are visible, rising from a wooden structure that appears to be the side of a building. Thick, grey smoke billows upwards from the fire, filling the upper portion of the frame. A thin, dark wire or cable runs diagonally across the upper right quadrant of the image.

- **OSHA 1910.157** – Establishes care, use, maintenance & education requirements.
- **NC Fire Prevention Code** – Establishes requirements for need, placement & travel distances.

Portable Extinguishers are Required:

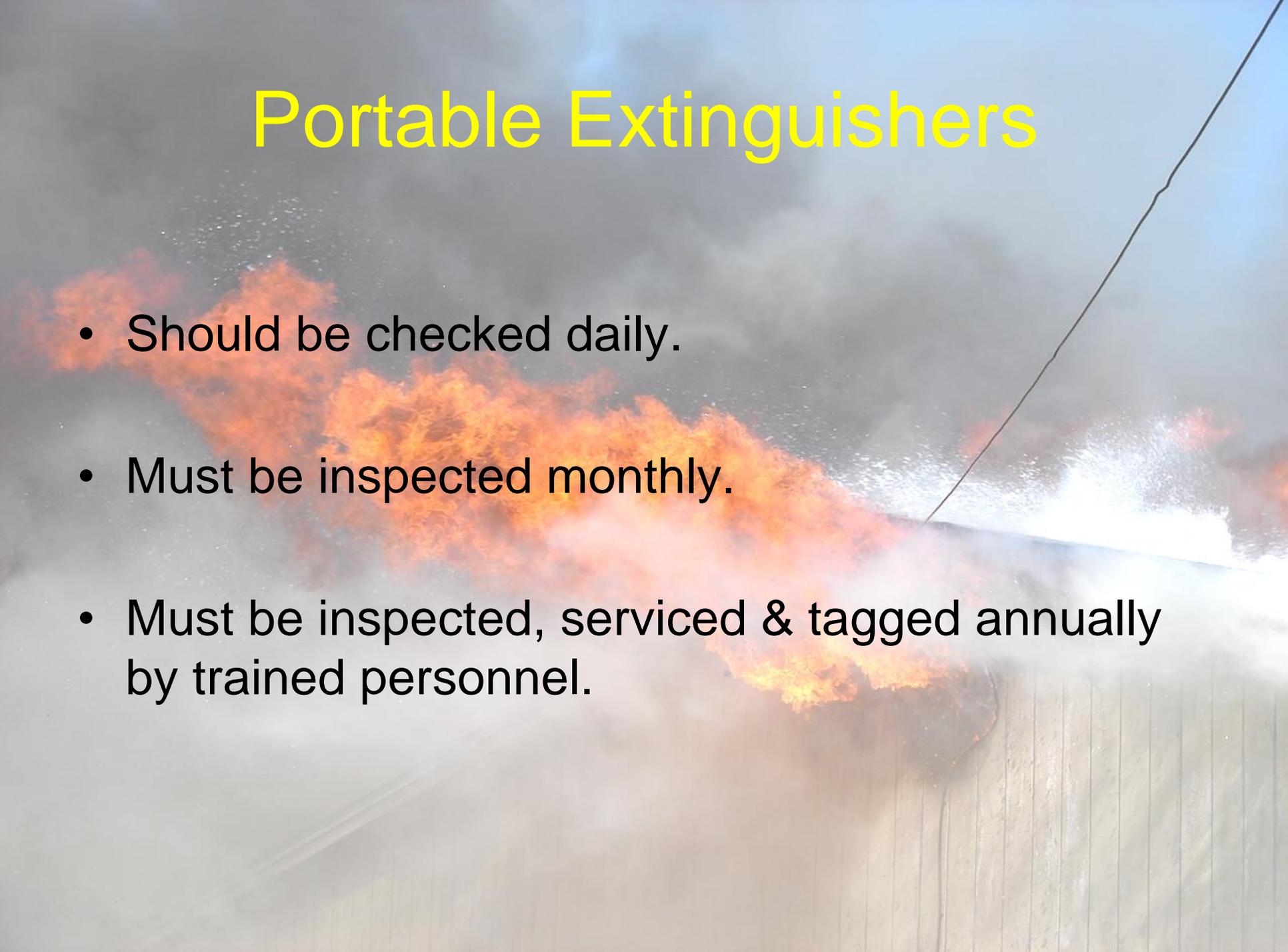
- In all commercial & public facilities
- Within 30 ft. of commercial cooking equip.
- Areas where flammable or combustible liquids are stored.
- On each floor of structures under construction.
- Special Hazard Areas.
- Where required by the Fire Code Official.

Portable Extinguishers



- Must be placed in a conspicuous location.
- Must be un-obstructed and un-obscured.
- Must be mounted (Top not more than 5ft., bottom not less than 4 inches from floor).

Portable Extinguishers



- Should be checked daily.
- Must be inspected monthly.
- Must be inspected, serviced & tagged annually by trained personnel.

Each of these three elements must be present at the same time to have a fire. A fire will burn until one or more of the elements is removed.

Fuel

Any combustible material – solid, liquid or gas

Oxygen

The air we breathe is about 21% oxygen – fire needs only 16% oxygen



Heat

The energy necessary to increase the temperature of fuel to where sufficient vapors are given off for ignition to occur

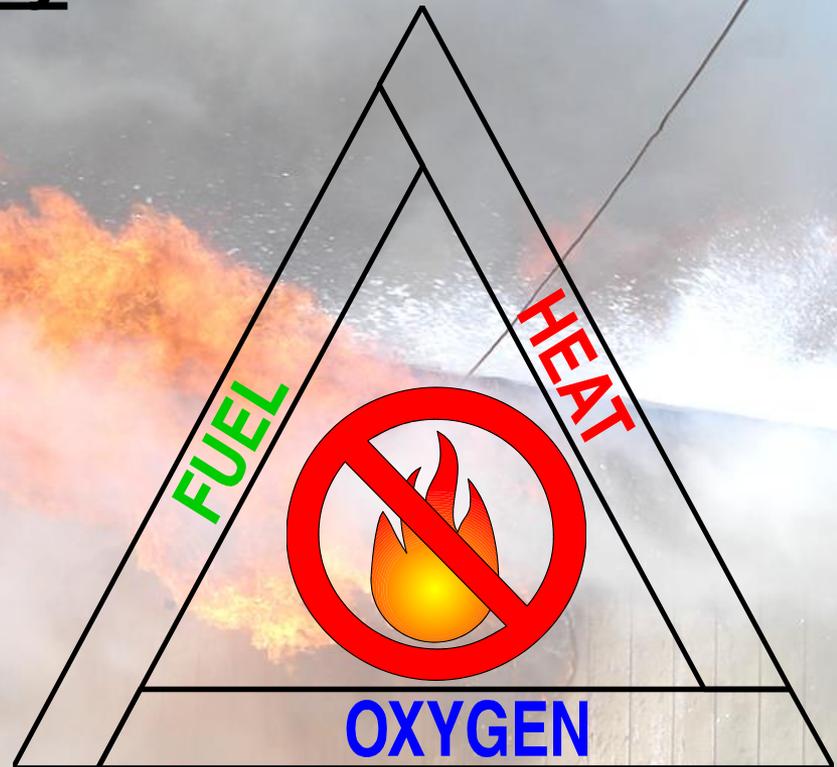
Portable Fire Extinguisher Training

Extinguishment Theory

- Removing Heat
- Removing Fuel
- Reducing Oxygen

WILL

- Inhibit Chemical Chain Reaction



Portable Fire Extinguisher Training

Classification of Fire

Class A or Ordinary Combustibles

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

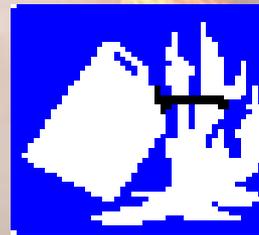
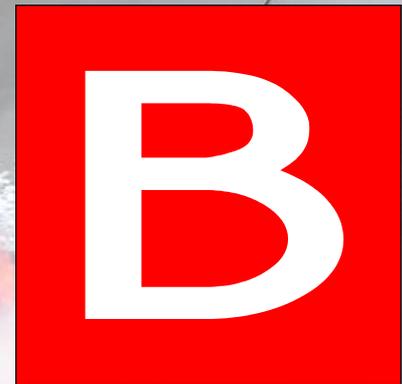


Portable Fire Extinguisher Training

Classification of Fire

Class B or Flammable and Combustible Liquids and Gases

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

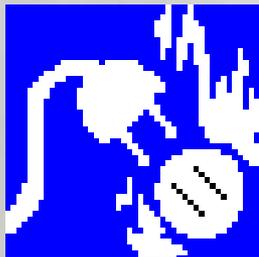


Portable Fire Extinguisher Training

Classification of Fire

Class C or Electrical

This includes all fires involving energized electrical equipment.



Portable Fire Extinguisher Training

Classification of Fire

Class D
or Combustible Metals

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



Portable Fire Extinguisher Training

Classification of Fire

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

2A:1B:C:K



Model 260

Model 262

To Prevent Fires

Class



Ordinary Combustibles:

- Keep storage and working areas free of trash.
- Place oily rags in covered containers.

To Prevent Fires

Class



Flammable liquids or gases:

- ♦ Don't refuel gasoline-powered equipment in a confined space, in the presence of an open flame, or while the equipment is hot.
- ♦ Keep flammable liquids stored in a tightly closed container and away from spark producing sources.
- ♦ Use flammable liquids only in well ventilated areas.

To Prevent Fires

Class  ⇒ **Electrical Equipment:**

- ◆ Never install a fuse rated higher than specified for the circuit.
- ◆ Investigate any appliance or electrical equipment that smells strange. Unusual odors can be the first sign of a potential fire.
- ◆ Utility lights should always have some type of wire guard over them.

To Prevent Fires

Class  ⇒ Flammable metals:

- Knowledge of the properties of the metals and using good judgment and common sense will assist you in controlling or avoiding potential fires/reactions.

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.

This label shows that this extinguisher can be used on ordinary combustibles (A) or flammable liquids (B). The red slash through the last symbol tells you that the extinguisher cannot be used on electrical fires (C).

Be advised that most fire extinguishers will function for less than 40 seconds.



Some Causes of Fires

Electricity

Housekeeping

Cleaning Supplies

Flammable Liquids

Machinery

Improper Storage

Space Heaters

Construction

Combustible Liquids

Unattended Cooking

Careless smoking

**Prevention is the best way to
fight a fire!**

The Importance of Fire Extinguishers



**Your First Line
Of Defense!**

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.



Making that “Right” decision to use a portable extinguisher!

- 📄 You are trained in the use of extinguishers.
- 📄 You know what is burning.
- 📄 Fire is not spreading rapidly.
- 📄 Smoke and heat has not filled the area.
- 📄 You have a clear path of escape.
- 📄 Follow your instincts.

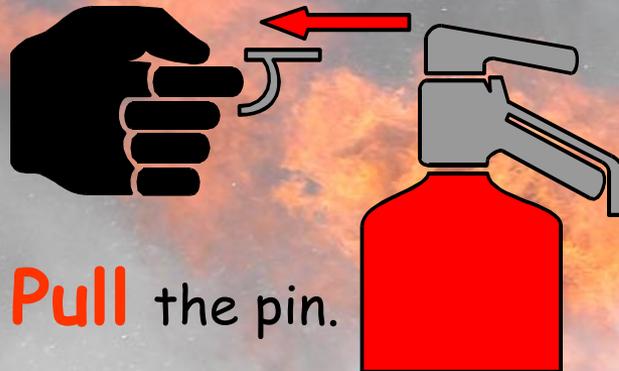


NEVER fight a fire if:

- The fire is spreading beyond the immediate area in which it started, or if it is already a large fire.
- The fire could block your escape route.
- You are unsure of the proper operation of the extinguisher.
- You doubt that the extinguisher you are holding is designed for the type of fire at hand or is large enough to fight the fire.

Portable Fire Extinguisher Training

The P.A.S.S. Method

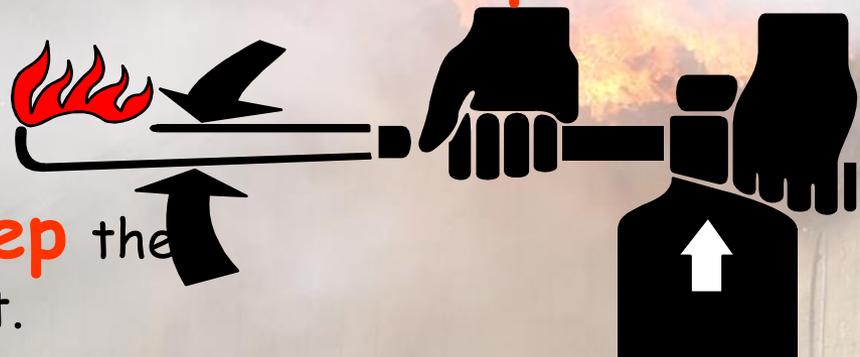


Pull the pin.

Aim the hose or nozzle.

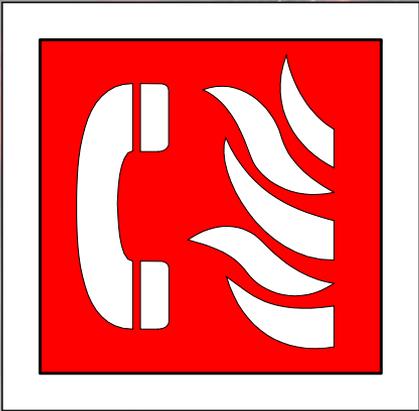


Squeeze the lever.



Sweep the agent.

Reporting An Emergency



 Dial 911.

 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.

Portable Fire Extinguisher Training

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





Remember!

Your Safety Comes First

**When in doubt,
leave the fire
fighting to the
professionals**

Portable Fire Extinguisher Training

**Thank You
For Your
Time!**

**Any Questions?
Contact the
Atlantic Beach Fire
Department at:
252-726-7361**

