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What is a portable fire extinguisher?

According to NFPA 10 (2002), a portable device, carried or on wheels and operated by hand, containing an extinguishing agent that can be expelled under pressure for the purpose of suppressing or extinguishing fire.



What is a portable fire extinguisher?





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Classifications of Fire

- Class
- À
 - Ordinary Combustibles: Paper, Plastic, Cloth, Wood
 - Leaves behind an "A"sh when it burns
- Class
 - Flammable Liquids: Gasoline, Oil, Kerosene, Grease
 - Liquids that "B"oil when heated
- Class
 - Electrical Fires, or equipment powered by electric
 - Involves an electric "C"urrent or "C"ircuit



Classifications of Fire

- Class
 - Combustible Metals or Metal Alloys
- Class K
 - Cooking Fires: Animal or Vegetable Oils and Fats
 - Typically found in commercial "K"itchens



DIVISION OF FIRE

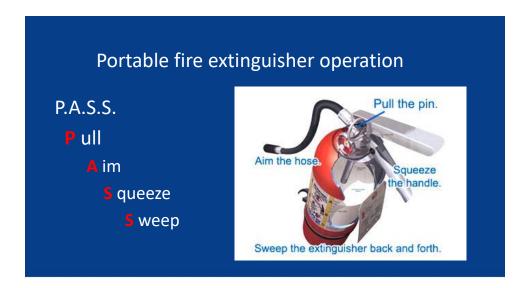
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CLASSES OF FIRES PICTURE SYMBOL A Wood, paper, cloth, trash & other ordinary materials. B Gasoline, oil, paint and other flammable liquids. C May be used on fires involving live electrical equipment without danger to the operator. D Combustible metals and combustible metal alloys. K Cooking media (Vegetable or Animal Oils and Fats)





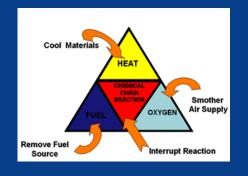






Extinguishing Methods

- Smothering
 - Oxygen Exclusion
- Cooling
 - Reduce burning material below its ignition temperature
- · Chain Breaking
 - Interrupting the chemical reaction
- Saponification
 - Forming an oxygen excluding soapy foam



Fire Tetrahedron



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Types of Extinguishers **Types of Extinguisher** **Dry Chemical Class A,B,C Class B,C **Carbon Dioxide Class B,C **Carbon Dioxide Class B,C **Carbon Dioxide Class A, Water Class A **Class A, Water Class A, Class A, Class A, Class A, Class A, Class B,C **Carbon Dioxide Class







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Monthly Inspections

- Extinguisher Location
- Status
- Condition
- Tag





Extinguisher Location

- Must be accessible
 - Not blocked by anything
 - Not locked to prohibit use
- Mounted
 - Hanging from wall
 - Inside cabinet





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Extinguisher Status

- Handle is secured
 - Locking pin in place
 - Tamper seal is not broken
- Check Pressure Gauge
 - Should be in "ready" zone
 - If not, it needs to be taken out of service & replaced with a working extinguisher





Extinguisher Condition

- Hose and Nozzle
 - In good condition
 - No signs of cracking or dry rot
- Cylinder
 - Dents, leaks, rust
 - Chemical deposits
- Labels
 - Present and legible





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Inspection Tag

- Check inspection tag for previous and required inspection, maintenance or charging.
- Must have been inspected by a licensed technician within the previous 12 months.
- Sign and date your monthly inspection.





Removing Extinguisher from Service

- Missing or defective extinguishers must be replaced immediately
- Replacement should:
 - Serviced within last year
 - Be tagged & signed





DIVISION OF FIRE

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Value of Extinguishers

- Serviceability
- Accessibility
- Simplicity of operation





Safety Factors when Extinguishing a Fire

- Do NOT fight a fire if:
 - Fire is spreading beyond the immediate area where it started or is already a large fire
 - Fire could block your escape route.
 - You are in doubt about whether the extinguisher is the proper type of fire at hand.
- If any of these are true:
 - Leave immediately & close off area





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QUESTIONS?

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