

FIRE SAFETY BASICS



Fire Extinguishers & Basic Safety

TOPICS

- ❖ Safety Precautions
- ❖ Types & Classes of Fire
- ❖ Fire Extinguisher Use
- ❖ Evacuations



YOUR PERSONAL SAFETY

- ❖ Your personal safety is the **NUMBER 1** priority
 - ❖ Make sure authorities are notified and on the way **BEFORE** you attempt to extinguish a fire
 - ❖ You are **NOT** required to fight a fire
 - ❖ Make sure fire or other obstructions will not impede a quick exit
 - ❖ Be sure the fire extinguisher is designed to fight the type of fire you encounter...
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TYPES & CLASSES OF FIRES DEPENDS ON FUEL SOURCE

❖ Class A – Ordinary Combustibles

Wood, paper, cloth, rubber

❖ Class B – Flammable Liquids

Gasoline, paint thinners, propane

❖ Class C – Electrical

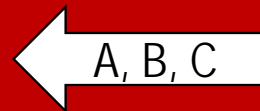
Appliances, switches, power tools

❖ Class D – Combustible Metals

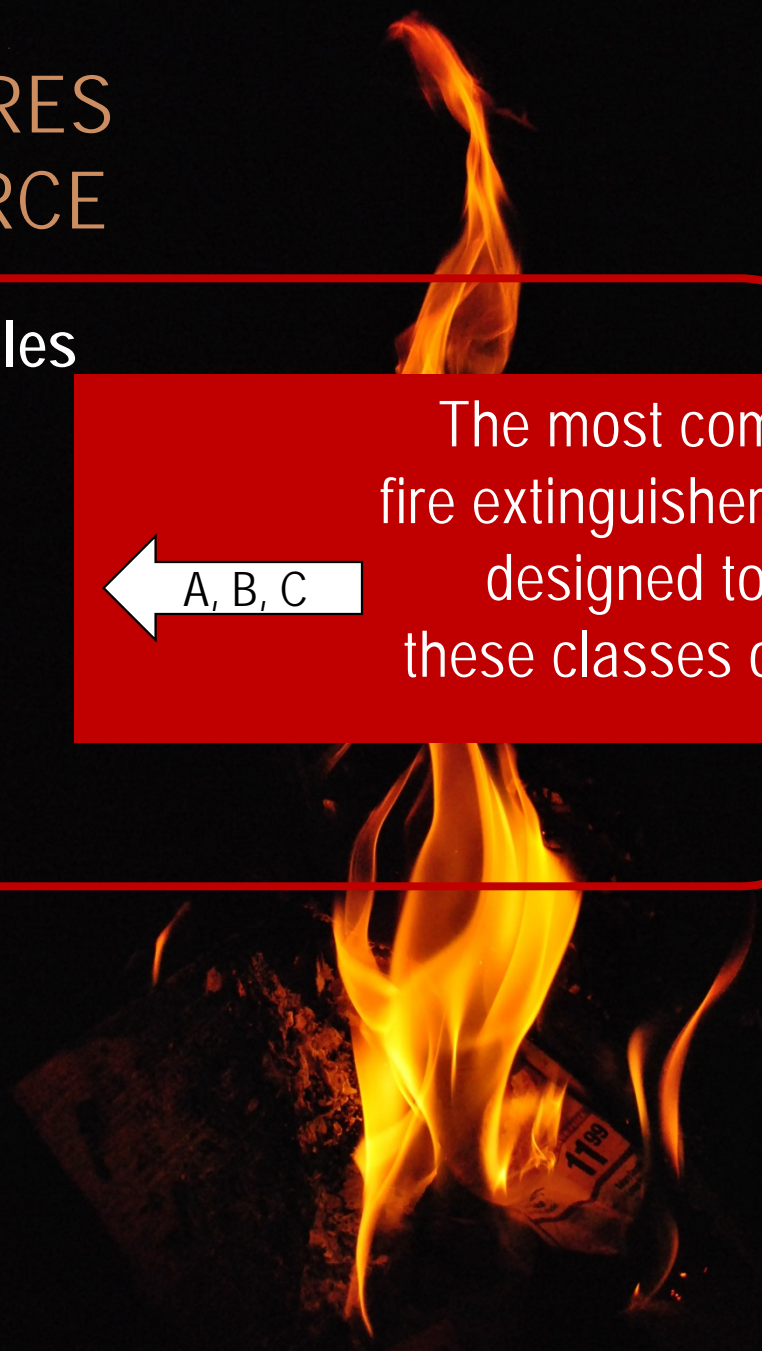
*Magnesium, potassium, sodium
(volatile reaction to water)*

❖ Class K – Kitchen

Oil, grease, fat



The most common
fire extinguishers are
designed to fight
these classes of fire



SPECIAL EXTINGUISHERS

❖ CO₂ – For Class B & C

Usually has a bell-shaped cone attached to the end of the hose
Class A fires will reignite

❖ Halogenated – For Class A, B & C

Generally used to protect sensitive equipment, such as computers and electronics

- Both of these types do not leave a residue, which can harm electronics

❖ Water Extinguishers – For Class A Only

Less common, typically silver, and much larger. Can cause flammable liquids to spread, and creates shock hazards on electrically charged equipment and circuits



A SPECIAL NOTE ON CHEMICAL FIRES:

- ❖ In fires involving chemicals, the fumes and reactivity of the chemical(s) is often more dangerous than the flames.

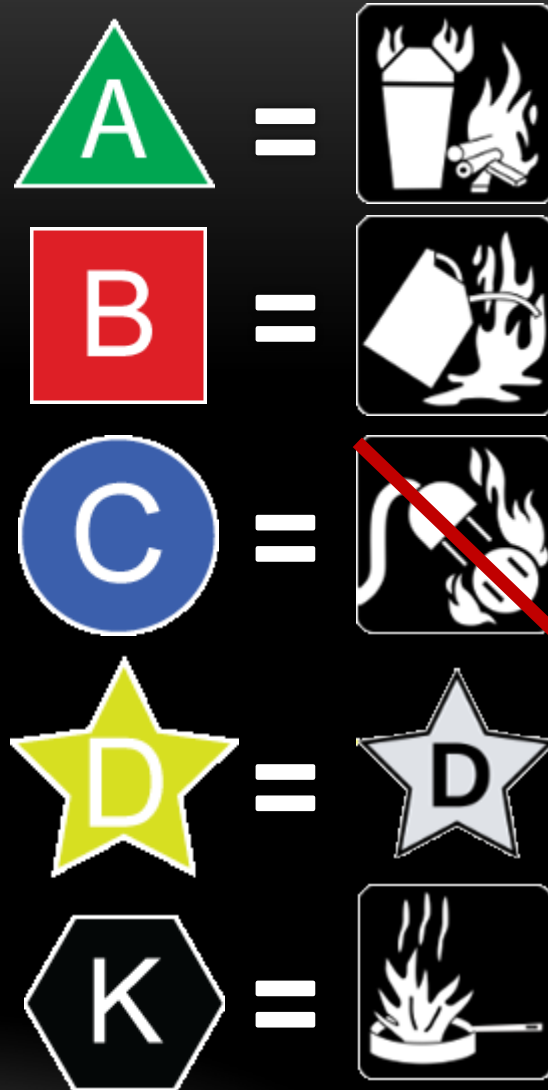
If unsure of the nature of chemicals involved in a fire, do not attempt to extinguish it



FIRE CLASS LABELS OLD - VS - NEW

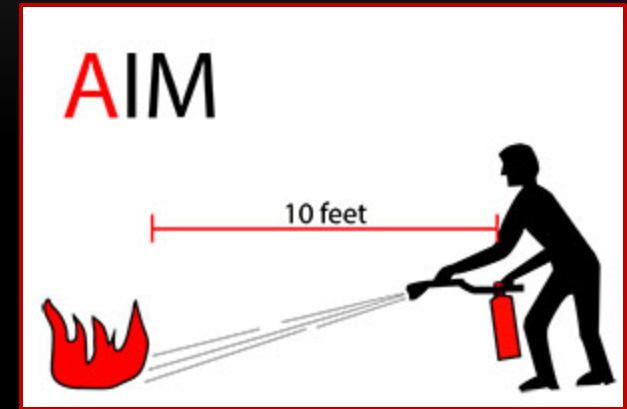
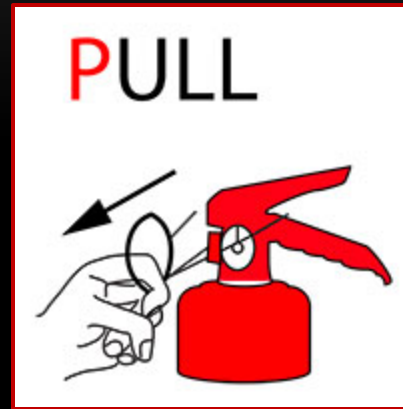
- ❖ The class of fire an extinguisher is designed for is indicated by symbols on the cylinder label
- ❖ New extinguishers use pictograms instead of shapes & letters (old style)
- ❖ A **Red Line** over a pictogram means the extinguisher cannot be used on that class of fire

(The example to the right indicates the extinguisher is not designed for an electrical fire)



USING A FIRE EXTINGUISHER REMEMBER **P.A.S.S.** ACRONYM

- ❖ **Pull** the pin – this pin keeps the extinguisher from discharging accidentally
- ❖ **Aim** at the base of the fire, stay 10 feet back
- ❖ **Squeeze** the handle to release the extinguishing agent
- ❖ **Sweep** from side to side at the base of the fire until it is out



FIRE EXTINGUISHER TIPS

- ❖ Familiarize yourself with extinguishers today. Don't try to read through instructions in an emergency
- ❖ Attack a fire within the first two minutes to increase your chances of bringing the fire under control
- ❖ Never fight a fire larger than a waste basket
- ❖ Most extinguishers function for less than 40 seconds
- ❖ When in doubt, GET OUT!



WHEN IN DOUBT...



Leave the fire fighting to
the professionals!



EVACUATION

BEFORE AN EVACUATION

- ❖ Review Emergency Procedures Handbook, page 9
- ❖ Learn the Emergency Evacuation Checkpoint for your building
- ❖ Familiarize yourself with all building exits and stairwells
- ❖ Keep alarm pulls and extinguishers clear of obstructions
- ❖ Plan multiple escape routes
- ❖ Use Evacuation Plan diagrams, usually posted near the elevator

DURING AN EVACUATION

- ❖ Leave immediately
- ❖ Avoid smoke
- ❖ Follow building evacuation plan
- ❖ Do not use elevators
- ❖ Feel doors for heat before opening. If hot, do not proceed
- ❖ Close, but do NOT lock, doors as you exit. This hinders search & rescue.
- ❖ Proceed down stairs to ground or exit floor. Never go up.

EVACUATION (CONT.)

IF TRAPPED:

- ❖ Take shelter in an enclosed stairwell. They are designed to burn last.
- ❖ Stuff clothes, towels or use tape to cover cracks around doors and vents.
- ❖ Stay low to the floor. Breathe through a damp rag if available.
- ❖ Call 911 or University Police (972-2093) and tell them where you are.
- ❖ Signal for help from a window. Do not jump. Do not break the window.
- ❖ Be patient and do not panic.

AFTER AN EVACUATION

- ❖ Once out, stay out
- ❖ Report to your Emergency Evacuation Checkpoint
- ❖ Report locations of anyone trapped in the building to authorities
- ❖ Only re-enter after the fire department gives the all-clear

REVIEW

Stay Safe:

- ❖ **YOUR PERSONAL SAFETY** always comes first
- ❖ Notify authorities before attempting to control a fire

Be Ready:

- ❖ Familiarize yourself with building layouts, exits and evacuation plans
- ❖ Learn about fire extinguishers in your building, and the classes of fire they are designed to fight

Know Your Limitations:

- ❖ Remember, you are NOT required to fight a fire
 - ❖ If the fire is larger than a waste basket, leave it to the fire department
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QUESTIONS?

Contact University Safety & Emergency Management:

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Email – jcarvell@astate.edu

