

KSU Facilities Safety Bulletin

Volume 16, Issue 9

September 5, 2023

Fire Extinguisher Safety

Fire Triangle:

To understand how fire extinguishers work, you need to understand a little about fire. Fire is a very rapid chemical reaction between oxygen and a combustible material, which results in the release of heat, light, flames, and smoke.

For fire to exist, the following four elements must be present at the same time:

- Enough oxygen to sustain combustion.
- Enough heat to raise the material to its ignition temperature.
- Some sort of fuel or combustible material.
- The chemical reaction that is fire.



Using a Fire Extinguisher

The following steps should be followed when responding to incipient stage fire:

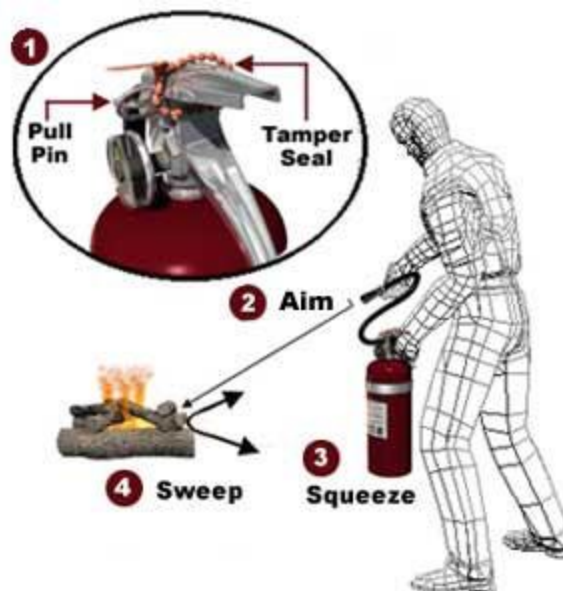
- Sound the fire alarm and call the fire department, if appropriate.
- Identify a safe evacuation path before approaching the fire. Do not allow the fire, heat, or smoke to come between you and your evacuation path.
- Select the appropriate [type of fire extinguisher](#).
- Discharge the extinguisher within its effective range using the [P.A.S.S.](#) technique (pull, aim, squeeze, sweep).
- Back away from an extinguished fire in case it flames up again.
- Evacuate immediately if the extinguisher is empty and the fire is not out.
- Evacuate immediately if the fire progresses beyond the [incipient stage](#).

September HSI/Vivid Course

All: Fire Extinguisher Safety

Login with your **KSU eid and Password:**

<https://otis.osmanager4.com/KSU>



Most fire extinguishers operate using the following P.A.S.S. technique:

1. *PULL*... Pull the pin. This will also break the tamper seal.
2. *AIM*... Aim low, pointing the extinguisher nozzle (or its horn or hose) at the base of the fire.
NOTE: Do not touch the plastic discharge horn on CO2 extinguishers, it gets very cold and may damage skin.
3. *SQUEEZE*... Squeeze the handle to release the extinguishing agent.
4. *SWEEP*... Sweep from side to side at the base of the fire until it appears to be out. Watch the area. If the fire re-ignites, repeat steps 2 - 4.

If you have the slightest doubt about your ability to fight a fire....EVACUATE IMMEDIATELY!

Source: [OSHA](#)