

Safe Fire Extinguisher Use

Otis College of Art and Design **Health and Safety Training Series**

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Fire Extinguishers – Basic Information

- Can be used to put out incipient and localized fires
- Classes A, B, and C are most common and refer to corresponding fire classes
- Classes D and K are for specialized fires and must be used accordingly

- Never use a fire extinguisher on quickly spreading fire

- Remember the acronyms **R.A.C.E.** and **P.A.S.S.**

- **Always** activate the alarm for any indoor fire and uncontained and spreading outdoor fires

Structure of Fire Extinguisher



- Extinguishers can be filled with either water, carbon dioxide gas, or a dry chemical medium
- The purpose and limitation of an extinguisher directly relate what fire-fighting medium is being used

How Does a Fire Get Put Out?



- The combustion process always consists of three components: fuel source, oxygen, and generated heat
- For a fire to start and sustain, all three components are needed
- Extinguishers remove one or more of the components to put out a fire

Fire Classes

- **Class A** fires involve solid organics, such as wood, paper, cloth, and plastics
- **Class B** fires involve liquid fuels, such as gasoline, oil, grease, and other solvents
- **Class C** fires are caused by electrical discharges and sparking, coming from outlets, breakers, and electrical connections

A



B



C



Fire Classes (cont.)







- **Class D** fires involve flammable and combustible metals, such as magnesium, sodium, potassium, titanium, etc.



- **Class K** fires involve combustible oils, lards and fats used in commercial cooking



Extinguisher Use Summary

Extinguisher Type	Works By	Effective Against
Pressurized Water	Cooling	
Carbon Dioxide	Smothering	 
Multipurpose Dry Chemicals	Smothering	  

Fire Emergency Response (R.A.C.E.)

R

Rescue

Rescue anyone injured and help them move away from the fire



A

Alarm

Pull the nearest fire alarm to notify other occupants and call 911

C

Contain

If possible, **contain** the fire by removing nearby sources of fuel and closing the area



E

Extinguish

If the discovered fire is still incipient and not spreading, attempt to **extinguish**

Using a Fire Extinguisher (P.A.S.S.)

P

Pull the extinguisher pin

A

Aim at the base of the fire

S

Squeeze the lever

S

Sweep side to side



Fire Extinguisher Maintenance

- Extinguisher gauges must be inspected on a monthly basis (document the inspection by signing a tag).



Needs to be serviced!

- Extinguishers should be mounted, identified and readily accessible.



Not readily accessible!

Precautions for Putting Out Fires

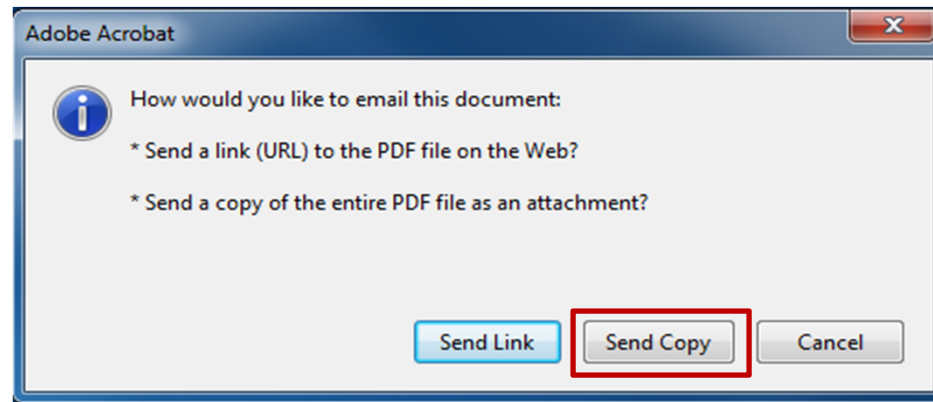
- Never fight a fire if:
 - You don't know what is burning
 - The fire is spreading rapidly beyond the spot where it started
- Always position yourself with an exit or means of escape at your back before you attempt to put out a fire

Thank you and please direct any follow-up questions regarding this presentation to pzaretskiy@otis.edu

Please proceed to the next slide for instructions on how to receive a certificate of training for this presentation

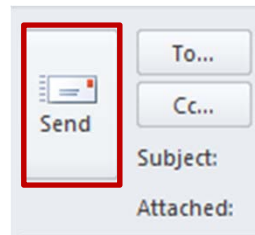
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- A new Outlook E-mail message will appear with your Confirmation Form as an attachment; be sure to put pzaretskiy@otis.edu as one of the recipients and the click “**Send**” to complete the process!



- Please note that reviewing this presentation alone is not a good substitute for attending the training itself, as additional discussion of topics along with Q & A are often not fully covered by the slides. Training sessions covering various health and safety topics will be regularly announced.

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