



LOYOLA UNIVERSITY CHICAGO GUIDELINES FOR FIRE EXTINGUISHER USE

PURPOSE: In the hands of a trained person, portable fire extinguishers are great tools to protect people and property from fire during early stages. When using an extinguisher, it's important to know the characteristics of different fire extinguishers. This document provides guidance for the proper use of a fire extinguisher.

REGULATORY:

1910.157 - Portable fire extinguishers. | Occupational Safety and Health Administration (osha.gov)

NFPA 10 - Standard for Portable Fire Extinguishers, 2022 Edition National Fire Protection Association(NFPA)

Step One - Classification of Fires:

Class A: Ordinary solid combustibles such as paper, wood, cloth, rubber, and many plastics.

Class B: Flammable and combustible liquids such as petroleum greases, tars, oils, oil-based paints, solvents, lacquers, alcohols, and flammable gases.

Class C: Energized electrical equipment, appliances, and wiring.

NOTE: Water or a Class A fire extinguisher should never be used on an electrical fire.

Class D: Flammable metallic substances including sodium, potassium, aluminum, titanium, magnesium, lithium, and zirconium. These types of fires usually occur in industrial, manufacturing, or laboratory settings when the metal fines, tiny, thin pieces of metal or metal shavings or the dust generated during the machining process ignite, becoming the fuel element in the fire tetrahedron (fuel, oxygen, and heat combining in a self-sustaining chemical reaction). These types of fires may cause significant damage and are not simple to put out.

Class K: Fires involving vegetable oils, animal oils, or fats utilized in commercial cooking appliances

Step Two - Types of Fire Extinguishers:

All fire extinguishers are labeled to indicate which classes of fire they are designed to combat. Fire extinguishers are classified as types A, ABC, BC, D or K. It is important to use the right type of extinguisher on the specific class of fire to avoid personal injury or damage to property. Using the wrong type of extinguisher could cause electrical shock, explosion, or spread the fire.



LOYOLA UNIVERSITY CHICAGO GUIDELINES FOR FIRE EXTINGUISHER USE

Type D: Dry powder helps to smother and eliminate

involving

Step Three - Fire Extinguisher Use

1. Identify a clear exit/escape route. Before operating the fire extinguisher, make sure there is a clear evacuation path. The main objective is to remain safe and to exit the building. Call 911.
2. Stand back. Face the fire and keep your back to the clear exit/escape route you identified earlier. You should stay six and eight feet away from the flames as you prepare to operate the fire extinguisher.
3. Discharge the extinguisher. It can be difficult to think clearly during an emergency, so fire safety has a long-standing acronym to help a person recall the steps involved in operating a fire extinguisher. When extinguishing a fire, a person should PASS:

P: Pull the pin on the fire extinguisher.

LOYOLA UNIVERSITY



LOYOLA UNIVERSITY CHICAGO GUIDELINES FOR FIRE EXTINGUISHER USE

How to Properly Use a Fire Extinguisher



While the specifics may vary depending on the model, the same basic steps apply. Stand six to eight feet away from the fire and remember to PASS:

- PULL** Pull the pin at the top to break the tamper seal.
- AIM** Aim the extinguisher at the base of the fire. Do not aim at the flames themselves.
- SQUEEZE** Squeeze the handle to discharge the extinguishing agent.
- SWEEP** Sweep the extinguisher from side to side, continuing to aim at the base of the fire.