

# Fire Extinguishers Meeting Kit



Fire extinguishers are an important tool in preventing a small fire from growing larger. However, they should not be used to combat large or rapidly spreading fires. The most important thing to do during a fire is to get yourself to safety then call the proper authorities to combat the fire. A building and the property inside is not worth putting yourself or anyone at risk trying to put it out with a fire extinguisher. It is important to understand how to use a fire extinguisher and the limitations they have.

## TYPES OF EXTINGUISHERS

- Class A Extinguishers are used on regular combustibles like wood and paper.
- Class B Extinguishers are for flammable liquids such as gasoline, oil, or grease.
- Class C Extinguishers are only used for energized electrical fires related to equipment
- Class D Extinguishers are used for flammable metals like lithium or magnesium.
- Class K Extinguishers are required where there are combustible cooking materials in kitchens.

## HOW TO CHOOSE A FIRE EXTINGUISHER

- **The size of the facility.** To calculate the number of extinguishers that you would need divide the square footage of the building by the number of square feet that the fire extinguisher can handle.
- **The layout of the room.** The NFPA states that there should not be more than 75 feet between fire extinguishers.
- **The fire hazard level of the building.** Is there a light fire hazard, ordinary fire hazard (class 1 or 2), an extra fire hazard (class 1 or 2), or does the building include a commercial kitchen?
- **If there are any flammable liquids around.** OSHA standards dictate that if flammable liquids or gases are stored in more than 5-gallon containers then there must be at the minimum a 10B rated fire extinguisher within 50 feet of the substance.
- **The presence of stairwells.** There must at least one fire extinguisher across from stairwells in multiple-level facilities.

# HOW TO USE A FIRE EXTINGUISHER – P.A.S.S

The easiest way to remember how to use a fire extinguisher is to follow the P.A.S.S. method. The PASS acronym was developed to allow people to remember the basic four steps to properly using a fire extinguisher.

P- Pull. Pull the pin. Hold the extinguisher away and release the locking mechanism.

A- Aim. Aim the stream towards the base of the fire. Spraying the flames will not put the fire out.

S- Squeeze. Squeeze the lever slowly and evenly. Pulling the lever too fast may shoot the stream from your target wasting the valuable firefighting agent.

S- Sweep. Sweep the nozzle side to side to combat the fire.

## FIRE EXTINGUISHER LIMITATIONS

- A dry chemical fire extinguisher such as the common red “ABC” extinguishers will reach a distance between 5 and 20 feet. It is important to be familiar with the models used in your work areas and the effective distance they can be used for.
- A 10lb to 20lb dry chemical fire extinguisher will last anywhere from 10 to 25 seconds. Again, this depends on the model and weight you are using.
- Fire extinguishers are only designed to fight small fires. A rule of thumb a lot of professionals use is the size of the fire should not be any larger than the size of a small trash can.

## FIRE EXTINGUISHER INSPECTION TIPS

- Extinguishers should be periodically checked every 30 days. There should be a formal check of all fire extinguishers onsite annually. These inspections should be documented.
- Ensure the pressure is okay when inspecting a fire extinguisher. There is a gauge that has an arrow that should be in the green portion of the gauge. If the arrow is in the red the fire extinguisher needs to be tagged out of service until recharged.
- Check to make sure the pin is still in place. Often times the pin is bumped out of place leaving the chance of accidental discharge occurring.
- Look for rust on the container and ensure that the label is in good readable condition.

## TRAINING AND EDUCATION

- Employers must provide an educational program to familiarize employees with the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting.
  - Provide this education when employees are first hired and once a year thereafter.
- Train employees (who have been designated to use fire fighting equipment in the emergency action plan) in the use of the equipment.

Provide this training when employees are first given this assignment and once a year thereafter.

## **WHEN WORKERS SHOULD NOT USE A FIRE EXTINGUISHER**

If any of the following conditions are present, workers should follow evacuation procedures immediately and should not attempt to fight the fire with an extinguisher:

- **The fire is too large.** The fire involves flammable solvents, is partially hidden behind a wall or ceiling, cannot be reached from a standing position, or covers more than 60 square feet in area.
- **The air is unsafe to breathe.** Levels of smoke make the fire impossible to fight without some form of respiratory protection.
- **The environment is too hot or smoky.** Radiated heat is easily felt, making it hard to approach a fire within adequate range of using the extinguisher (about 10-15 feet). It is necessary to crawl on the floor to avoid heat or smoke. Visibility is poor.
- **Evacuation paths are impaired.** The fire is not contained and heat, smoke or flames block potential evacuation routes.

## **FINAL WORD**

It is important to know more than just where the fire extinguishers are located in your work area. Make sure you know how to properly use them in case the time comes where you need to extinguish a fire. Always make sure the fire extinguishers in your work areas are in good condition through thorough inspections.