



**#6-Fire and The Use of Portable Fire Extinguisher's-Safe Job Procedure
(Final Oct/04)**

1. General;

Good housekeeping is essential in the prevention of fires, fire extinguishers are designed to put out or control small fires. A small fire, if not checked immediately, will soon spread out of control.

2. Types of Fires:

To help in choosing the proper extinguisher, fires are classed A, B, C or D according to the type of fuel (i.e. Paper, grease oil) that is involved in the fire. Extinguishers are available for use on one or more classes of fire, depending on the extinguishing agent they contain (i.e. Water, Chemicals).

Some extinguishers are suitable for one class of fire only; others can fight two or even three classes of fire. However no extinguisher will fight all four classes of fire. The following table gives examples of specific types of fire extinguishers, and the class (es) of fire on which they can be used.

Fuel Source	Class of Fire	Type of Extinguisher
Ordinary combustibles (i.e. Trash, wood, paper, cloth etc.)	A	Water; chemical foam; dry chemical
Flammable liquids (i.e. Oils, grease, tar, gasoline, paints, thinners)	B	Carbon dioxide (CO ₂); halon, dry chemical;
Electricity (i.e. Live electrical equipment)	C	CO ₂ ; halon; dry chemical
Combustible metals (i.e. Magnesium, titanium)	D	Dry powder (suitable for the specific combustible metal involved)

Halon extinguishers are no longer made, but some may still be in use.

#6-Fire and The Use of Portable Fire Extinguisher's –Safe Job Procedure

3. Fighting the Fire:

Type of Fire	Fighting the Fire
A	Soak the fire completely- even the smoking embers
B	Start at the base of the fire and use a swinging motion from left to right, always keeping the fire in front of you.
C	Use short bursts on the fire. When electrical current is shut off on a Class C fire, it can become a Class A fire, if the materials around the electrical fire are ignited.
D	Follow manufacturers instructions

4. Specific Types of fire extinguishers and their uses:

Water	Multi Purpose Dry Chemical	Chemical Foam	Compressed Gas
<ul style="list-style-type: none"> • Pressurized pump type • Cools fire • Use on Class A fires • Do not use on electrical fires 	<ul style="list-style-type: none"> • Stored pressure type • Smothers fire with layer of powder • Use on Class A, B and C fires 	<ul style="list-style-type: none"> • Aqueous film forming foam (AFFF) type • Smothers fire with foam • Use on class A and B fires 	<ul style="list-style-type: none"> • Halon , CO2 types • Smothers fire with gas • Use on class B and C fires

Using the wrong extinguisher to fight a fire can have serious results. For example, if a water –based extinguisher is used on a flammable liquid (Class B fire), the fire may flare up, spread and cause personal injury to the user and others.

#6-Fire and The Use of Portable Fire Extinguisher's –Safe Job Procedure

General Precautions:

1. Fire extinguisher caps shall not be interchanged.
2. Water or water extinguishers shall not be used on electrical fires.
3. Dry chemical recharge materials shall be stored in a dry location.
4. Dry chemical shall be blown from the extinguisher hose after use, by turning the extinguisher upside down and squeezing control lever
5. Straight stream of water shall not be placed on hot oil or steam lines or other normally hot surfaces.
6. All extinguishers shall be inspected at regular intervals and shall be tagged with the date of inspection and/or refill.
7. All extinguishers shall be promptly refilled after use.
8. The contents of all extinguishers shall be projected on a fire from the windward side and directed at its base or outer edge of fire with a sweeping motion.
9. All instructions of the manufacturer as to the recharging of the extinguisher and its maintenance shall be followed.

5. Procedure for Extinguisher Use When a Fire Has Been Discovered:

As soon as a fire is discovered:

- **Sound the alarm and start to evacuate**
- **Call the fire department**
- **If fire is small, call for assistance, and attempt to extinguish.**
- **If fire is large do not endanger yourself attempting to extinguish it, and leave the area.**

#6-Fire and The Use of Portable Fire Extinguisher's –Safe Job Procedure

Tips for safe extinguisher use:

- **Test that the extinguisher works before you approach the fire**
- **Protect yourself at all times**
- **Take care, speed is essential but it is important to be cautious.**
- **Keep your back to the exit at all times and stand 6 to 8 feet away from the fire.**
- **Follow the 4-step P-A-S-S procedure.**

P-A-S-S

1. **Pull the pin ,release the lock latch or press the punch lever).**
2. **Aim the nozzle at the base of the fire.**
3. **Squeeze or press the trigger.**
4. **Sweep the extinguisher from side to side.**

If the fire does not go out immediately or the extinguisher appears to be getting empty, leave the area at once. Back out with the lever squeezed and the nozzle pointed at your feet. This will protect you until you are out of the area.

6. Maintenance

Extinguishers must be properly maintained to ensure that they work when needed and they are safe to use.

Adequate maintenance of extinguisher's consists of regular inspections, recharging as needed. Records are to be kept of all maintenance work carried out, including inspections.

#6-Fire and The Use of Portable Fire Extinguisher's –Safe Job Procedure

Inspections:

Fire extinguishers must be inspected at least once a month either by the site supervisor or the safety co-ordinator, which shall include the following:

It is in working order:

Is fully charged

Is not damaged The ring pin is in place

The seal is intact

Hose is not cracked or corroded.

The inspection tag that is attached to the extinguisher will record the inspection.