

About Fires

Fires are classified by the type of material that is burning. Fires are divided into five classes: **A**, **B**, **C**, **D**, and **K**.

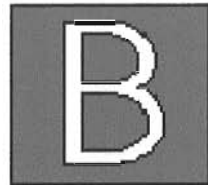
A: *Class A fires* involve ordinary combustibles like paper, wood, cloth and most plastics.

B: *Class B fires* involve flammable liquids such as gasoline, oil and solvents.

C: *Class C fires* involve electrical equipment including electrical outlets and wiring.

D: *Class D fires* involve combustible metals like magnesium, titanium, aluminum, sodium and potassium.

K: *Class K fires* involve combustible cooking media such as animal or vegetable oils and fats.



About Fire Extinguishers

These different kinds of fires require different forms of extinguishing agents. Each extinguisher is prominently marked with the letter of the class of fire it is designed to extinguish.

Some extinguishers contain extinguishing agents that will work on a variety of fires. If you have one of these extinguishers, you don't need different extinguishers for each type of fire. These multipurpose extinguishers are usually labeled "multi-purpose-ABC." They may be used for common combustibles, flammable liquids, and electrical fires.

Using Fire Extinguishers

Most extinguishers have a safety pin that prevents accidental discharge. The safety pin must be pulled before you can operate the extinguisher. The pin is held in place by a thin plastic strap. Pull and twist the pin and the strap will easily break.

Don't Aim the Extinguisher at the Fire's Flames!

- ① Aim the extinguisher's nozzle at the base of the fire, not at the flames.
- ② Hold the operating handle and squeeze.
- ③ Sweep the extinguishing agent along the base of the fire.
- ④ Continue discharging until the fire is completely out.
- ⑤ Watch carefully for a minute or two for possible flare-ups.

Preparing the Extinguisher, Preparing Yourself

1. Check each month to make sure that fire extinguishers are fully charged, visible, and within easy reach.
2. Before you attempt to fight the fire, have someone contact the fire department.
3. **Fight or Flee.** Decide whether to use a fire extinguisher to confine the fire or evacuate.

4. Determine what kind of a fire you have.
5. Understand the limitations of a fire extinguisher. Don't overcommit yourself in attempting to extinguish the fire.
6. Fight only small fires. The fire should be no wider than four feet and no higher than three feet. Portable fire extinguishers aren't designed to fight large fires or quick-spreading fires.
7. Learn the **PASS** system: **Pull**, **Aim**, **Squeeze**, **Sweep**.
8. Always have an exit to your back while attempting to extinguish a fire.
9. Use the buddy system, if possible.
10. Follow the **Four Steps to Fire Safety**: Sound the alarm. Call the fire department. If the fire is stationary, try to extinguish it with your back to an exit. Leave the building if your efforts fail, closing the doors as you leave.

How to PASS Your Fire Extinguisher

Pull the pin.

Aim low.

Squeeze the lever.

Sweep the nozzle from side to side.



Be sure:

- ☐ you know how to use your fire extinguisher and what to expect when you pull the pin.
- ☐ you know exactly where the extinguisher is, without having to look for it.
- ☐ you have a clear escape route behind you, so the fire won't trap you.
- ☐ your extinguisher is large enough to fight the fire. Some fire extinguishers discharge in as few as 8 seconds.
- ☐ the fire extinguisher matches the type of fire you are fighting.

Extinguisher Inspections

Have your extinguisher inspected once a year. By law, only a technician licensed by the State Fire Marshal's Office of the Texas Department of Insurance can conduct the inspection.

The inspector can refill the extinguisher agent. This is necessary if the extinguisher has been discharged.

Periodically check the extinguisher's pressure gauge to see that it is set at the correct level. If not, call an inspector to correct the problem.

If you have a permanently installed fire extinguisher, the installation company's name should be on the tag. The company should be licensed to perform inspections and refill the extinguishing agent.

You can find licensed dealers in the telephone directory, by calling the Better Business Bureau, contacting your local fire department, or searching the State Fire Marshal's Office list of currently licensed companies and personnel at www.tdi.state.tx.us. If you are using a dealer for the first time, ask to see a copy of the company's license.

Types of Extinguishers

- Stored pressure, water-filled extinguishers
The water cools the fire.
Use on Class A fires only!
- Chemical foam extinguishers
The chemical smothers the fire.
Use on Class A and B fires.
- Compressed gas extinguishers
Also work by smothering the fire.
Use on Class B and C fires.
- Dry chemical extinguishers
The chemical smothers the fire with a blanket of powder.
Use on Class B and C fires.
- Multipurpose dry powder extinguishers
The chemical smothers the fire with a blanket of powder.
Use on Class A, B, or C fires.
- Dry powder extinguishers
The powder smothers the fire but does not react with burning metal.
These are designed for Class D fires only.
- Kitchen extinguishers
The wet, potassium acetate-based, low pH agent smothers the fire.
Most of these extinguishers can safely be used on Class A, B, and C fires.

For more information:
State Fire Marshal's Office
P.O. Box 149221 (Mail Code 112-FM)
Austin, Texas 78714-9221
512-305-7900
FAX: 512-305-7910
E-mail: fire.marshall@tdi.state.tx.us
Web site: <http://www.tdi.state.tx.us>

The ABCDKs of Fire Extinguishers

A basic guide on fire extinguisher use



Deputy State Fire Marshals help property owners keep fire extinguishers in good working order by verifying that extinguishers have been annually inspected by a registered firm.

Published by
State Fire Marshal's Office
Texas Department of Insurance
October 2002