



KEEP SAFE

A Monthly Publication for Texas Electric Cooperatives

October 2011

Fire = Heat + Fuel + Oxygen

This equation is sometimes referred to as the “fire triangle” because it has three components. If you can take away one of these elements, then you can successfully put out a fire. This is the key to all fire fighting and how an extinguisher works, but before we discuss the portable fire extinguishing process, let’s first look at the classes of fires that extinguishers were designed to put out.

The four classes of fires defined by the National Fire Protection Association

The National Fire Protection Association (NFPA) has identified four general types of fires, based on the combustibles involved and the extinguisher needed to put them out. Each has a unique symbol and color to help identify the type of fire and the correct response to it. Fire extinguishers are coded according to this system. The four types of fire are:

◆ Class A – This is the most common fire and, involves ordinary materials such as wood, paper, rubber, and plastics. A green triangle represents a Class A fire. The common extinguishing agent is water, but dry chemicals are also effective.

◆ Class B – These fires are denoted by a red square. Flammable liquids, gases and greases make up this class. They are harder to fight and require a special kind of extinguisher. Use foam, carbon dioxide, and dry chemical extinguishers on Class B fires. Also, water fog and vaporizing liquid extinguishers can be used.

◆ Class C – Electrical fires are the most common sources of industrial fires. A blue circle indicates a Class C fire. Carbon dioxide and dry chemical extinguishers are appropriate for this type of fire.

◆ Class D – These fires are caused by combustible metals including magnesium, titanium, zirconium, and sodium. They are represented by a yellow star symbol. These fires require specialized techniques to extinguish them. None of the common

extinguishers should be used since they can increase the intensity of the fire by adding an additional chemical reaction.

Extinguishers work because they contain an agent which eliminates one of the vital elements of the fire (heat, fuel, or oxygen). A fire is deprived of oxygen when an extinguishing agent smothers the fire with a gas, foam, or powder. The fuel of the fire is eliminated when it is wetted by foam. A fire is cooled when an extinguishing agent covers the fire source.

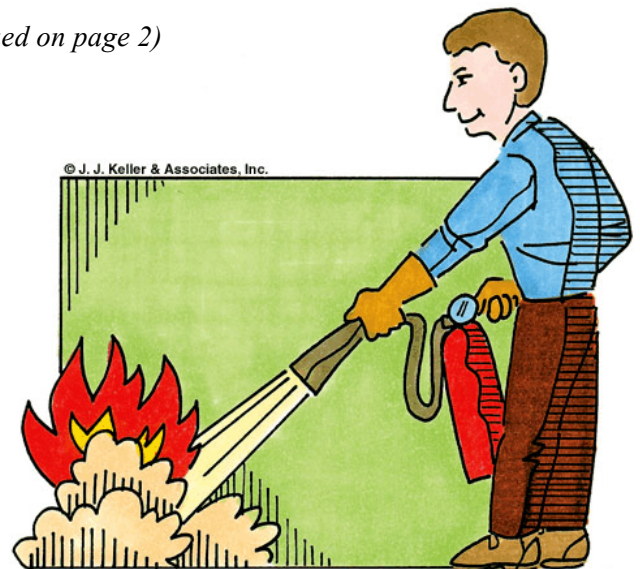
Many types of extinguishing agents are available. Each agent is made to extinguish one or more classes of fires. Be sure to use your fire extinguisher only on fires for which it is designed.

When to fight a fire

Because fires are dangerous, you must know when it is appropriate to attempt to fight one with a portable fire extinguisher. You should meet the following criteria before fighting a fire:

- The fire alarm has been sounded (someone has summoned the fire department).
- The building has been evacuated or is in the process of being evacuated.

(continued on page 2)



October- Install smoke alarms

The Home Safety Council's State of Home Safety in America Report found that fires and burns are the third-leading cause of unintentional home injury and related deaths, and the leading cause for children ages 1 to 14. During October — Fire Safety Month — make sure your home's smoke alarms are working well and that you know exactly what to do if they go off.

- ✓ Install a smoke alarm on every level of your home, especially where people sleep. (If possible, put an alarm inside every bedroom.)
- ✓ Smoke rises, so smoke alarms should be mounted high on walls or ceilings, away from corners or vents.
- ✓ Get both kinds of smoke alarms — photoelectric and ionization — which each sense different types of fires. Better still, buy combination systems that have both types of sensors.
- ✓ Consider installing interconnected smoke alarms. When one alarm senses smoke in a single room, the rest go off simultaneously. This gives you more time to get outside.
- ✓ Look for smoke alarms with packaging that features a mark such as ETL, UL or CSA — this means they have been laboratory-tested for safety.
- ✓ Test your alarms once a month by pushing the test button until you hear a loud noise.
- ✓ Replace the battery if the alarm makes a chirping sound, indicating low power.
- ✓ In general, replace batteries in your smoke alarms once a year.
- ✓ If your alarms are more than 10 years old, get new ones.

If building a new home, or remodeling an older one, install a home fire sprinkler system. They turn on automatically in the room with a fire. Sprinklers can control and often put out the fire before the fire department arrives. This saves lives and property. Visit homefiresprinkler.org to learn more.

— Home Safety Council
For more home safety tips, visit MySafeHome.org

(Fire continued from page 1)

- The fire is small and confined.
- You can fight the fire with your back toward a nonthreatened escape.
- Your extinguisher matches the type of fire you face.
- Your extinguisher works effectively.
- You are trained to use the extinguisher and are confident you can put out the fire.

When not to fight a fire

Do not use a portable fire extinguisher under the following conditions:

- The fire is already large or has grown beyond its original confined space.
- Your escape path is threatened.
- You are not sure if your extinguisher is the right type for your fire (you may not always know what elements are contributing to a fire).

Using the PASS method to fight a fire

When using a typical fire extinguisher, follow the “PASS” method. Hold the extinguisher upright and:

- **P**ull the pin (some extinguishers have a cartridge you need to Push), stand back eight or ten feet.
- **A**im at the base of the fire.
- **S**queeze the handle to release the extinguishing agent.
- **S**weep at the base of the fire with the extinguishing agent. If you aim high at the flames, you won't put out the fire.

Fire prevention measures

Controlling the consequences of a fire depends to a large extent on trying to prevent one. Always:


- Keep work areas clean and clutter free.
- Know how to handle and store chemicals.
- Know what you are expected to do in case of a fire emergency.
- Call professional help immediately; don't let a fire get out of control.
- Know what chemicals you work with — you might have to advise fire fighters on the scene of a chemical fire concerning the type of hazardous substances involved.
- Become familiar with your company's emergency action plan for fire.

Source: KellerOnline®

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Texas Electric Cooperatives

Your Touchstone Energy® Partner 

2011 TEC LOSS CONTROL SCHOOLS (35 Schools)

Regulator Recloser Capacitors (Merkel)	January 11-14
Metering (Gonzales)	January 18-21
2 Day Transformer (San Augustine)	January 26-27
Transformer (Livingston)	February 8-11
Metering (Lubbock)	February 15-18
Regulator Recloser Capacitors (San Augustine)	February 22-25
Advanced Pole Climbing (Gonzales)	February 22-25
Regulator Recloser Capacitors (Tahoka)	March 1-4
Troubleshooting (Greenville)	March 8-11
Transformer (Gonzales)	March 29-April 1
Metering (Merkel)	April 5-8
Basic Pole Climbing (San Augustine)	April 5-8
Regulator Recloser Capacitors (McGregor)	April 12-15
Hotline 1-4 (Henderson)	April 25-29
Basic Pole Climbing (Gonzales)	April 26-29
Underground (Quitman)	May 2-6
Regulator Recloser Capacitors (Gonzales)	May 10-13
Transformer (Tahoka)	May 17-20
Hotline 1-4 (Merkel)	May 23-27
Digger Operation and Safety School (Merkel)	May 23-27
Metering (McGregor)	June 7-10
Basic Pole Climbing (Tahoka)	June 7-10
Underground (Gonzales)	June 13-17
Metering (Livingston)	June 21-24
Troubleshooting (Livingston)	July 26-29
Regulator Recloser Capacitors (Greenville)	August 16-19
Underground School (Levelland)	August 22-26
Hotline 1-4 (Gonzales)	August 29-Sept 2
Digger Operation and Safety School (Gonzales)	August 29-Sept 2
Underground (McGregor)	September 12-16
Regulator Recloser Capacitors (Livingston)	September 20-23
Hotline 1-4 (Levelland)	September 26-30
Underground (Merkel)	October 3-7
Regulator Recloser Capacitors (Decatur)	October 11-14
Hotline 1-4 (Livingston)	October 24-28