



Tailgate Safety Training for Landscaping and Horticultural Services

Agricultural Safety Program, 590 Woody Hayes Drive, Columbus, OH 43210

Portable Fire Extinguishers

Objective: Identify the types of fire extinguishers and use them properly.

How to Use This Module

All fires are not the same. Workers need to know which fire extinguisher to use for each type of fire. For this module:

- Review the information on the types of fire extinguishers and how to use and maintain them.
- Check the placement of all units in your workplace; ask your supervisor for help if necessary.
- Ask your supervisor to demonstrate how to use and inspect a fire extinguisher.
- Ask your supervisor to watch you practice using an extinguisher.
- Review the important points.
- Take the True/False quiz to check your learning.

Background

Fire extinguishers can put out or control a fire until help arrives. Use portable units as first-aid or emergency units on small fires or in the initial stages of the fire. The discharge time on most portable units is only seconds, so plan an escape route. Stay low and avoid breathing the smoke and extinguishing agent. If the fire starts to spread, get out!

Types of Fire Extinguishers



The universal classification system has different designations for fire extinguishers — class A, B, C, and ABC. Classes are based on the type of fire — that is, what is burning. The type of fire determines the type of ex-

tinguishing agent. A good example of a combination fire would be a fire in a greenhouse unit heater, where there is a combination of electricity and flammable heating oils. (A fourth class, Class D, is used for combustible metals, which are usually not found in landscaping and horticultural services.)

| Class | Symbol | Type of Fire |
|-------|----------------|---|
| A | Green triangle | Ordinary combustibles <ul style="list-style-type: none"> • Wood, paper, straw, cloth, rubber, plastics • Greenhouse glazing materials (acrylic, polycarbonate, fiberglass reinforced polyester) |
| B | Red square | Flammable liquids <ul style="list-style-type: none"> • Gasoline, fertilizers, pesticides, oil, oil-based paint |
| C | Blue circle | Energized electrical equipment <ul style="list-style-type: none"> • Wiring, fuse boxes, circuit breakers • Machinery, power tools, generators, unit heaters |
| ABC | | Multipurpose, combination unit can be used on all three types of fires. |

Reading the Label

The label shows important facts about the fire extinguisher:

- The type of fire it can handle, shown by the letters A, B, and/or C.
- The size of fire it can handle, shown by numbers.

The bigger the numbers in the unit label, the bigger the fire the unit can handle. For example, a unit labeled 2A can handle a fire twice as big as a 1A unit. A 4A unit can handle a fire twice as big as a 2A unit.

A 2A:20B:C extinguisher will protect up to 3,000 square feet of area where a moderate fire may occur. This could be a storage, display, or shop area. It is also a good unit to carry on a tractor or a pickup truck.

Location and Placement of Fire Extinguishers

The following table shows suggested location, number, and placement of fire extinguishers. The units suggested are 20-pound units.

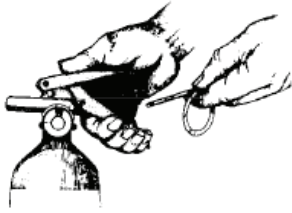
| Location | Number | Suggested Placement |
|--|-----------|---------------------|
| Equipment storage building, chemical storage area, greenhouse, shop, boiler room, outbuildings/head-houses | 1 or more | Near each exit door |
| Tractor, car, or truck | 2 | One near cab door |
| One at a convenient location | 1 | |

Before You Use the Fire Extinguisher

- Examine for defects at time of purchase.
- Read the operating instructions on the label.
- Find out where fire extinguishers are located.

To Operate a Fire Extinguisher

- Remove from the mounting bracket by grasping the unit by the carrying handle and the base and carry it to the fire.
- Pull the locking pin to break the tamper seal. If the unit has a hose, remove the hose from its retaining clip.



- Move the extinguisher as close to the base of the fire as possible. Grasp the hose in one hand and press or squeeze the handle or trigger release with the other. (If the unit is a CO₂ extinguisher, grasping the plastic discharge horn may freeze the hand.) If the unit has no hose, direct the stream of extinguishing agent by moving the extinguisher. If there is no pressure when you squeeze the handle, check the metal piece that is hanging downward and engage it into a groove, then try again to squeeze the handle.
- Use a side-to-side sweeping motion at the base of the flames starting from the near edge to the rear of the fire and then up the vertical surface.
- Always leave an escape route when fighting a fire.



Inspection of Fire Extinguishers

Inspect units monthly to ensure good working condition and adequate protection. Rotate the fire extinguisher to keep chemical from caking. Have units inspected annually by state certified individual. Inspection should cover these points:

- Are all extinguishers in their recommended location?
- Is there enough pressure to discharge the contents of the extinguisher (check the gauge)? Replace or re-charge the unit as needed.
- Is the tamper seal in tact?
- Is the unit damaged?
- Is the hose and nozzle unobstructed?
- Is the extinguisher area clear of clutter?

Review These Important Points

- Be prepared. Read the unit label before you need to use it for a fire.
- Inspect fire extinguishers monthly for proper functioning.
- Ensure that all designated locations have a fire extinguisher.
- In case of fire, evacuate building first.
- Call local fire department.

About These Modules

The author team for the training modules in the landscape and horticultural tailgate training series includes Dee Jepsen, Program Director, Agricultural Safety and Health, Ohio State University Extension; Michael Wonacott, Research Specialist, Vocational Education; Peter Ling, Greenhouse Specialist; and Thomas Bean, Agricultural Safety Specialist. Modules were developed with funding from the Occupational Safety and Health Administration, U.S. Department of Labor, Grant Number 46E3-HT09.

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Answer Key: 1 = F, 2 = F, 3 = T, 4 = F, 5 = T.

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Name _____

True or False?

- | | | |
|---|---|---|
| 1. Fire extinguishers can be used to fight a major fire. | T | F |
| 2. To put out a fire, aim anywhere in the fire and spray. | T | F |
| 3. Class A fire extinguishers can handle ordinary combustibles. | T | F |
| 4. Any fire extinguisher will put out any fire. | T | F |
| 5. Fire extinguishers should be inspected monthly. | T | F |