

# Portable Fire Extinguishers

## Self-Inspection Checklist



### Optional Information

Name of School:
Date of Inspection:
Career-Technical program/course/room:
Signature of inspector:

### Guidelines:

This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.157. It applies to the placement, use, maintenance, and testing of portable fire extinguishers. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist.

This checklist does not address detailed regulations covering the methods used for hydrostatic testing of fire extinguishers. Please consult 29 CFR 1910.157 for additional information.

### General Requirements

1	Are all portable fire extinguishers approved? [29 CFR 1910.157(c)(2)]
2	Are portable fire extinguishers using carbon tetrachloride or chlorobromomethane prohibited? [29 CFR 1910.157(c)(3)]
3	Have all the following portable fire extinguishers been removed from service? [29 CFR 1910.157(c)(5)] 1. Soldered or riveted shell self-generating soda acid. 2. Self-generating foam 3. Gas cartridge water <i>Note: These types of fire extinguishers are operated by inverting the extinguisher to rupture the cartridge or to initiate an uncontrollable pressure-generating chemical reaction to expel the agent.</i>
4	Are portable fire extinguishers mounted, located, and identified so that they are readily accessible? [29 CFR 1910.157(c)(1)]
5	Are portable fire extinguishers fully charged, operable, and kept in their designated places at all times? [29 CFR 1910.157(c)(4)]

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## General Requirements

6	If fire extinguishers are enclosed in cabinets, is access to the cabinet unobstructed and is the cabinet clearly visible? [recommended]
7	If fire extinguishers are enclosed in cabinets with opaque doors, are doors unlocked, and are the cabinet contents indicated on the outside? [recommended]
8	When fire extinguishers are enclosed in locked cabinets and doors are equipped with approved visual identification clear glass panels, are glass panes easily broken? Is the door capable of being opened when the glass panel is broken? Is the unlocking handle painted red? Is the direction the handle must be pushed or pulled to open the door indicated? Is the door labeled Fire equipment: in case of fire, break glass and operate red handle? [recommended]
9	When fire extinguishers are enclosed in locked cabinets and doors are completely glass, are doors labeled In case of fire, break glass? [recommended]
10	Are extinguishers installed on the hangers or on the supplied brackets, mounted in cabinets, or set on shelves unless the extinguishers are of the wheeled type? [recommended]
11	Are extinguishers installed where they are subject to physical damage protected from impact? [recommended]

## Training and Education

12	When employees are expected to use fire extinguishers, have they been trained in the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting? [29 CFR 1910.157(g)(1)]
13	Is this training given at the time of initial assignment and annually thereafter? [29 CFR 1910.157(g)(2)]

## Selection and Distribution

14	Is at least one fire extinguisher available in each laboratory, shop, or other career-technical room, and one fire extinguisher available for each 2,500 square feet of floor area? [recommended]
15	According to the table that follows, are portable fire extinguishers selected and distributed based on the classes (see class definitions at end of checklist) of anticipated fires and on the size and degree of hazard that would affect their use? [29 CFR 1910.157(d)(1)]

First Hazard Class	Maximum Permitted Distance to Portable Fire Extinguisher
A	75 feet <sup>1</sup>
B	50 feet <sup>2</sup>
C	50-75 feet <sup>3</sup>
D	75 feet <sup>4</sup>

<sup>1</sup>Uniformly spaced standpipe systems or hose stations connected to a sprinkler system installed for emergency use may be used instead of Class A portable fire extinguishers.

<sup>2</sup>Depending on size of extinguisher and size of fire hazard, a maximum 30 feet travel distance may be required.

<sup>3</sup>Use existing Class A or Class B hazards to determine the required pattern.

<sup>4</sup>Required where combustible metal powders, flakes, shavings or similarly sized products are generated at least once every two weeks.

## Inspection, Maintenance, and Testing

16	Are portable fire extinguishers inspected monthly? [29 CFR 1910.157(e)(2)]
17	Are portable fire extinguishers subjected to an annual maintenance check? [29 CFR 1910.157(e)(3)]
18	Does each extinguisher have a tag or label securely attached that indicates the month and year the inspection, maintenance, states that recharging was performed and identifies the person performing the service? [recommended]
19	Are records of the annual maintenance check kept and retained for at least a year? [29 CFR 1910.157(e)(3)]

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## Inspection, Maintenance, and Testing

20	When portable fire extinguishers are removed for service, are standby or spare units temporarily installed of the same type and capacity? [29 CFR 1910.157(e)(5)]
21	Are stored pressure dry chemical extinguishers that require a 12-year hydrostatic test emptied and subjected to applicable maintenance procedures every 6 years? [29 CFR 1910.157(e)(4)] <i>Note: Dry chemical extinguishers with non-refillable disposable containers are exempt from this requirement.</i>

## Hydrostatic Testing

22	Are extinguishers hydrostatically tested at the intervals listed in the table below? [29 CFR 1910.157(f)(2)]
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Type of Extinguishers	Test Interval (years)
Stored pressure water and/or antifreeze	5
Wetting agent	5
Aqueous film forming agent (AFFF)	5
Dry chemical with stainless steel	5
Carbon dioxide	5
Dry chemical, stored pressure, with mild steel, brazed brass or aluminum shells	12
Halon 1211	12
Halon 1301	12
Dry powder, cartridge or cylinder operated with mild steel shells	12

23	Is hydrostatic testing performed by trained persons with suitable testing equipment and facilities? [29 CFR 1910.157(f)(1)]
24	Are hydrostatic testing certification records maintained that show the date of the test, the signature of the person who performed the test, and the serial number (or other identifier) of the fire extinguisher that was tested? [29 CFR 1910.157(f)(16)]

## Definitions

**Class A fire:** a fire involving ordinary combustible materials such as paper, wood, cloth, and some rubber and plastic materials.

**Class B fire:** a fire involving flammable or combustible liquids, flammable gases, greases and similar materials, and some rubber and plastic materials.

**Class C fire:** a fire involving energized electrical equipment where safety requires the use of electrically nonconductive extinguishing media.

**Class D fire:** a fire involving combustible metals such as aluminum, magnesium, titanium, zirconium, sodium, lithium, and potassium.

**Incipient stage fire:** a fire that is in the initial or beginning stage and can be controlled or extinguished by portable fire extinguishers, Class II standpipe or small hose systems without the need for protective clothing or breathing apparatus.