Scope of Services
Portable Fire Extinguishers

Introduction

Portable fire extinguishers are intended as a first line of defense to cope with fires of limited size. Cintas Fire Protection uses the National Fire Protection Association (NFPA) Standard 10 – *Portable Fire Extinguishers* as the guideline for establishing its Scope of Service for installing, inspecting, maintaining, recharging, and hydrostatically testing portable fire extinguishers.

This document provides an overview of the services Cintas provides while maintaining portable fire extinguishers. Refer to NFPA 10 and its referenced documents for more detailed information.

General Requirements

Portable fire extinguishers shall be conspicuously located where they are readily accessible and immediately available in the event of fire. Preferably they shall be located along normal paths of travel, including exits from areas. All rechargeable-type fire extinguishers shall be recharged after any use, as indicated by an inspection or when performing maintenance.

Maintenance, servicing, and recharging shall be performed by trained persons having available the appropriate servicing manuals, the proper types of tools, recharge materials, lubricants, and manufacturer's recommended replacement parts or parts specifically listed for use in the fire extinguisher. According to NFPA 10, a fire equipment-servicing agency is usually the most reliable means available to the public for having maintenance and recharging performed.

Inspection Requirements

Inspection, as defined by NFPA 10, is a "quick check" that a fire extinguisher is available and will operate. It is intended to give reasonable assurance that the fire extinguisher is fully charged and operable, that it is in its designated place, that it has not been actuated or tampered with, and that there is no obvious or physical damage or condition to prevent its operation.

Hand portable fire extinguishers are required to be inspected when initially placed in service and thereafter at approximately 30-day intervals. Fire extinguishers shall be inspected at more frequent intervals when circumstances require.

Inspection Procedures

Periodic inspection of fire extinguishers shall include a check of at least the following items:

- Located in designated place
- No obstruction to access or visibility
- Operating instructions on nameplate legible and facing outward
- Safety seals and tamper indicators not broken or missing
- Fullness determined by weighing or "hefting"
- Examination for obvious physical damage, corrosion, leakage, or clogged nozzle
- Pressure gauge reading or indicator in the operable range or position
- Condition of tires, wheels, carriage, hose, and nozzle checked (wheeled extinguishers only)
- HMIS (Hazardous Material Information System) label in place

When an inspection of any fire extinguisher reveals a deficiency in any of the conditions listed above, immediate corrective action shall be taken.

Inspection Recordkeeping

Personnel making inspections shall keep records of all fire extinguishers inspected, including those found to require corrective action. At least monthly, the date the inspection was performed and the initials of the person performing the inspection shall be recorded. Records shall be kept on a tag or label attached to the fire extinguisher, on an inspection checklist maintained on file, or in an electronic system (e.g., bar coding) that provides a permanent record.

Maintenance Requirements

Maintenance, as defined by NFPA 10, is a "thorough examination" of the fire extinguisher. It is intended to give maximum assurance that a fire extinguisher will operate effectively and safety. It includes a thorough examination and necessary repair or replacement of missing, broken or improper parts. It will also reveal if hydrostatic testing or internal maintenance is required.

Fire extinguishers are required to be subjected to maintenance at intervals not more than one year, at the time of hydrostatic test, or when indicated by an inspection.

Maintenance Procedures

Maintenance of portable fire extinguishers, as performed by Cintas Fire Protection, includes the following 10-Step Quality Assurance Standard to give you maximum assurance that your extinguishers will operate safely and effectively, and to help you comply with OSHA regulations and Fire Code standards.

1. Visually inspect the extinguisher – The extinguisher is removed from its bracket. The extinguisher label is checked to ensure that the instructions are legible and unobstructed. The cylinder is inspected for corrosion, abrasion, or dents (including under removable bands). The extinguisher is inspected for missing, substitute, or broken parts.

2. Check the hydrostatic and maintenance dates – The date of manufacture is checked on the unit. The most recent hydrostatic test and six-year maintenance dates are noted and the applicable service procedure (hydrostatic test or six-year maintenance) is performed.

3. Weigh the extinguisher – Hand portable extinguishers (except cartridge-operated extinguishers) are weighed to assure that they are fully charged with chemical. The weight is compared with the findings printed on the extinguisher label or cylinder. If necessary, the extinguisher is recharged.

4. Visually inspect the pressure gauge – For stored pressure extinguishers, the gauge is checked for damage, that the protective cover lens is clear, and that the proper gauge has been installed. The operating pressure is checked to assure that the extinguisher is properly charged.

5. Remove the tamper seal and safety pull pin – The plastic tamper seal is removed and the safety pull pin is removed to assure that it is not bent and operates freely. A new tamper seal is installed.

6. Check the discharge hose for continuity – Removable discharge hoses are removed and the hose gasket (o-ring), hose, and nozzle assembly are checked for damage. The hose is checked for obstructions. For carbon dioxide (CO_2) extinguishers, a continuity test is conducted to assure that the hose is properly grounded. A continuity test label is attached to CO_2 discharge hoses that pass the continuity test.

7. Inspect the valve assembly – The valve assembly is inspected for corrosion or damage in hose thread connections. The top and bottom (carrying) handles are checked for proper alignment and to make sure they are secure.

8. Clean and re-hang the extinguisher – The extinguisher is wiped down to remove dust and debris. The hanging bracket is checked to assure that the correct bracket is being used and that the bracket is securely installed. The extinguisher is re-hung on the bracket or in its cabinet.

9. Review the extinguisher placement, size, and type – The size, type and placement of the extinguisher are checked to assure it is appropriate for the hazard area. Additional record keeping is completed as required.

10. Attach a new certification tag – Valid for one year from the month punched, the Certification Tag will bring you into compliance with State, Local and National Fire Codes.

Hydrostatic Test / 6-Yr Maintenance

Hydrostatic testing, as defined by NFPA 10, is pressure testing of an extinguisher to verify its strength against unwanted rupture. Hydrostatic test intervals for portable fire extinguishers are generally at 5 and 12-year intervals. (Refer to NFPA 10 for more specific details.)

Hydrostatic Test Intervals

Extinguisher Type	Interval
Water-Based	5
Carbon Dioxide	5
Dry Chemical	12
Halogenated Agents	12
Dry Powder (Class D)	12

Every six years, stored-pressure fire extinguishers that require a 12-year hydrostatic test shall be emptied and subjected to the applicable maintenance procedures (commonly referred to as a "Six Year Maintenance).

Maintenance Recordkeeping

Each fire extinguisher shall have a tag or label securely attached that indicates the month and year the maintenance was performed and that identifies the person performing the service. In addition to the required tag or label, it is recommended that a permanent file record (either paper-based or electronically based as with a bar coding system) be kept for each fire extinguisher, including information relating to past preventive maintenance and repairs conducted, and any physical defects of the extinguisher.

Each extinguisher that has undergone maintenance that includes internal examination or has been recharged shall have a "Verification of Service" collar around the neck of the container. Cartridge-operated and cylinder-operated fire extinguishers do not require a "Verification of Service" collar.