



Coffee Break Training - Fire Protection Series

Portable Extinguishers: Portable Fire Extinguisher Hydrostatic Testing

No. FP-2010-9 March 2, 2010

Learning Objective: The student shall be able to identify the frequency of periodic hydrostatic testing for portable fire extinguishers.

Periodic hydrostatic pressure testing is performed on portable fire extinguishers to evaluate the containers' strength against unwanted failure. The tests are performed by qualified service technicians in a controlled environment to minimize the risk of injury or damage.

Hydrostatic testing is performed by filling the container with water or another non-compressible fluid that is compatible with the fire extinguisher container. The pressure is then increased on the container to a specific point as required by the manufacturer or Federal safety standards, and the container is inspected for potential failure points. The pressure must be maintained for at least 30 seconds.

National Fire Protection Association (NFPA) 10, *Standard for Portable Fire Extinguishers*, provides the following hydrostatic test frequency based on the different types of portable fire extinguishers.



The dates stamped into the shell of this carbon dioxide extinguisher cylinder identify the dates it was hydrostatically tested.

Hydrostatic Test Intervals

Extinguisher Type	Test Interval (Years)
Stored-pressure water, water mist, loaded stream and/or antifreeze	5
Wetting agent	5
AFFF (Aqueous film-forming foam)	5
FFFP (Film-forming fluoroprotein foam)	5
Dry chemical with stainless steel shells	5
Carbon dioxide	5
Wet chemical	5
Dry chemical, stored-pressure, with mild steel shells, brazed brass shells, or aluminum shells	12
Dry chemical, cartridge- or cylinder-operated, with mild steel shells	12
Halogenated agents	12
Dry powder, stored-pressure, cartridge- or cylinder-operated, with mild steel shells	12

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For additional information, refer to NFPA 10, *Standard for Portable Fire Extinguishers*.



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