



Fixed Extinguishing Systems Guidelines

PURPOSE

California State law requires that fixed fire protection equipment be maintained and serviced on a regular basis, in accordance with the requirements contained in NFPA 12, 12A, 13, 14, 17, 17A, 25, 2001, and the California Code of Regulations (CCR), Title 19, Chapter 5 **Service, Testing, and Maintenance**. Every automatic fire extinguishing system (AES), including, but not limited to, fire sprinkler systems, engineered and pre-engineered fixed extinguishing systems, standpipe systems, and alarm and supervisory equipment attached to those systems shall be serviced, tested, and maintained in accordance with the regulations and building standards adopted by the State Fire Marshal pursuant to Health and Safety Code Section 13195. This is a two part program including maintenance and service inspections.

SCOPE

Conformance with this guideline shall be required within *the City of Vernon*.

REQUIREMENTS

These regulations require that the owner, an employee designated by the owner or a licensed service company **inspect** sprinkler systems quarterly and standpipes semiannually. A license shall not be required to perform inspections. Inspections may be conducted by any person designated by the building owner or occupant who has developed competence through training and experience. Written records of each **inspection** must be maintained for five years and must be available for review by Fire Prevention Inspectors or Firefighters. Maintain these inspection records in a notebook near the system riser or make other arrangements to assure that inspection forms are available when the Fire Department inspects the occupancy. Owners are required to make immediate correction of any deficiencies noted during the maintenance inspections.

SERVICE

These regulations require that fixed extinguishing systems shall be serviced by a C16 Fire Protection Contractor Licensed by the California State Contractors Licensing Board, or by a State Fire Marshal licensed company, three types of licenses are issued to companies which are approved to do the servicing: Type 1 for Fire Sprinkler Systems, Type 2 for Engineered and Pre-engineered Fixed Extinguishing Systems and Type 3 for Standpipe Systems. These types of licenses are indicated on the service tag for verification. Sprinklers and standpipes must be serviced every five years, while other fixed extinguishing systems must be serviced every six months, and immediately after a system activation. Owners are required to make an immediate correction of any deficiency noted during the inspection and to maintain a record of the inspection for five years.

The following procedures shall be performed at each required maintenance inspection.

Table 1. Summary of Sprinkler System Inspection, Testing, and Maintenance		
Item	Activity	Frequency
Gauges (dry, pre-action, and deluge systems)	Inspection	Quarterly
Control valves	Inspection	Quarterly
Alarm devices	Inspection	Quarterly
Gauges (wet pipe systems)	Inspection	Quarterly
Hydraulic nameplate	Inspection	Quarterly
Buildings	Inspection	Annually (prior to freezing weather)
Hanger/seismic bracing	Inspection	Annually
Hanger/seismic bracing in accessible concealed spaces	Inspection	5 Years
Pipe and fittings	Inspection	Annually
Pipe and fittings in accessible concealed spaces	Inspection	5 Years
Sprinklers	Inspection	Quarterly
Sprinklers in accessible concealed spaces	Inspection	5 Years
Spare sprinklers	Inspection	Quarterly
Fire department connections	Inspection	Quarterly
Valves (all types)	Inspection	
Alarm devices	Test	Annually
Main drain	Test	Annually
Antifreeze solution (cold/freezing conditions)	Test	Annually
Gauges	Test	5 years
Sprinklers — extra-high temperature	Test	5 years
Sprinklers — fast response	Test	At 20 years and every 10 years thereafter
Sprinklers	Test	At 50 years and every 10 years thereafter
Valves (all types)	Maintenance	Annually or as needed
Obstruction investigation	Maintenance	5 years or as needed
Low point drains (dry pipe system)	Maintenance	Annually prior to freezing and as needed

Table 2. Summary of Standpipe and Hose Systems Inspection, Testing, and Maintenance

Item	Activity	Frequency
Control valves	Inspection	Quarterly
Pressure regulating devices	Inspection	Quarterly
Piping	Inspection	Semi-Annually
Hose connections	Inspection	Semi-Annually
Cabinet	Inspection	Semi-Annually
Hose	Inspection	Semi-Annually
Hose storage device	Inspection	Semi-Annually
Alarm device	Test	Annually
Hose nozzle	Test	Annually
Hose storage device	Test	5 years
Hose	Test	5 years/3 years
Pressure control valve	Test	5 years
Pressure reducing valve	Test	5 years
Hydrostatic test	Test	5 years
Flow test	Test	5 years
Main drain test	Test	Annually
Hose connections	Maintenance	Annually
Valves (all types)	Maintenance	Annually/as needed

Labels shall be used on water-based fire protection systems.

DO NOT REMOVE BY ORDER OF THE STATE FIRE MARSHAL												
 LICENSE # _____ <input type="checkbox"/> 5 YEAR <input type="checkbox"/> 3 YEAR <input type="checkbox"/> ANNUAL	OWNER IS RESPONSIBLE FOR MAINTAINING RECORDS						SPRINKLER					
	X _____ SIGNATURE Company Name Address Phone Number Will Print Here						STANDPIPE					
							FIRE PUMP					
							WATER TANK					
							FOAM					
							WATER SPRAY					
	X _____ PRINT NAME						PRIVATE FIRE SERVICE MAIN					
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		

Diagram of a fire tag with dimensions 5.250 and 2.625. The tag is divided into sections for 'FIXED SYSTEMS', 'RESTAURANT', 'INDUSTRIAL', 'CO2', 'CLEAN AGENT', 'COMPANY NAME', 'STREET ADDRESS', 'CITY STATE ZIP CODE', 'PHONE NUMBER', 'SIGNATURE', 'PRINTED NAME', 'LICENSE NO.', and a calendar grid. It also includes checkboxes for 'ANNUAL', 'RECHARGED', 'MAINTENANCE', and 'NEW' with years 2005-2009.

FRONT

Tags shall be used on engineered and pre-engineered fixed extinguishing systems.

Forms

The following forms in the format developed by the Office of the State Fire Marshal shall be used to record the results of all inspections, tests and maintenance of water-based fire protection systems.

It is the responsibility of the contractor, company, or licensee to provide a written report of the test and maintenance results to the building owner and the local fire authority having jurisdiction at the completion of the testing and maintenance.

- (1) Inspection, Testing, Maintenance Cover Sheet (AES 1 dated March 21, 2006).
- (2) Sprinklers Systems (AES 2 dated March 21, 2006).
- (3) Standpipe and Hose Systems (AES 3 dated March 21, 2006).
- (4) Private Fire Service Mains (AES 4 dated March 21, 2006).
- (5) Fire Pumps (AES 5 dated March 21, 2006).
- (6) Water Storage Tanks (AES 6 dated March 21, 2006).
- (7) Water Spray Fixed Systems (AES 7 dated March 21, 2006).
- (8) Foam-Water Sprinkler Systems (AES 8 dated March 21, 2006)
- (9) Continuation Sheet (AES 9 dated March 21, 2006)

These forms can be found at http://osfm.fire.ca.gov/strucfireengineer/strucfireengineer_aes.php

Vernon Fire Department / Bureau of Fire Prevention

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<http://www.cityofvernon.org/departments/fire-department>