

AUTOMATIC SPRINKLER SYSTEMS

Inspection, testing, and maintenance of automatic sprinkler systems shall be performed in accordance with the manufacturer's instructions and NFPA 25 (latest edition). The following list highlights minimum requirements for the essential care of automatic sprinkler systems. This list, however, is not meant to replace manufacturer's instructions and updated code requirements. This data is based on the 2014 edition.

Note: OFMR shall investigate a main drain test pressure drop of more than 10% with respect to the system baseline. OSHEM shall be immediately informed if a drop of more than 20% is discovered, as this represents an emergency situation that should be followed immediately by flow testing and main drain testing of surrounding buildings to determine if the problem is widespread.

**NFPA 25 Table 5.1.1.2: Summary of Sprinkler System
Inspection, Testing, and Maintenance**

ITEM	FREQUENCY	NFPA 25 REFERENCE
<u>Inspection</u>		
Gauges (dry/preaction/deluge)	Weekly/quarterly	5.2.4.2, 5.2.4.3, 5.2.4.4
Control valves	--	See Table 13.1.1.2
Waterflow alarm devices	Quarterly	5.2.5
Valve supervisory signal devices	Quarterly	5.2.5
Supervisory signal devices (except valve supervisory switches)	Quarterly	5.2.5
Gauges (wet pipe systems)	Quarterly	5.2.4.1
Hydraulic nameplate	Quarterly	5.2.6
Buildings (and heating systems)	Annually (prior to freezing weather)	4.1.1.1
Hangers/seismic bracing	Annually	5.2.3
Pipe and fittings	Annually	5.2.2
Sprinklers	Annually	5.2.1
Spare sprinklers	Annually	5.2.1.4
Information sign	Annually	5.2.8
Valves (all types)	--	See Table 13.1.1.2
Obstruction, internal inspection of piping	5 years	14.2
<u>Testing</u>		

Waterflow Alarm Devices

**NFPA 25 Table 5.1.1.2: Summary of Sprinkler System
Inspection, Testing, and Maintenance**

ITEM	FREQUENCY	NFPA 25 REFERENCE
Mechanical devices	Quarterly	5.3.3.1
Vane and pressure switch-type devices	Semiannually	5.3.3.2
Valve supervisory signal devices	--	See Table 13.1.1.2
Supervisory signal devices (except valve supervisory switches)	--	See Table 13.1.1.2
Main drain	--	See Table 13.1.1.2
Antifreeze solution	Annually	5.3.4
Sprinklers (extra-high or greater temperature solder type)	At 20 years and every 10 years thereafter	5.3.1.1.1.4
Sprinklers (fast-response)	At 20 years and every 10 years thereafter	5.3.1.1.1.3
Sprinklers	At 50 years and every 10 years thereafter	5.3.1.1.1
Sprinklers	At 75 years and every 5 years thereafter	5.3.1.1.1.5
Sprinklers (dry)	At 10 years and every 10 years thereafter	5.3.1.1.1.6
Sprinklers (in harsh environments)	5 years	5.3.1.1.2
Valves (all types)	--	See Table 13.1.1.2
<u>Maintenance</u>		
Valves (all types)	--	See Table 13.1.1.2
Low-point drains (dry pipe system)	Annually	13.4.4.3.2
Sprinklers and automatic spray nozzles protecting commercial cooking equipment and ventilation systems	Annually	5.4.1.9
<u>Investigation</u>		
Obstruction	5 years (if obstructions are a past problem)	14.3

**NFPA 25 Table 13.1.1.2: Summary of Valves, Valve Components, and Trim
Inspection, Testing, and Maintenance**

ITEM	FREQUENCY	NFPA 25 REFERENCE
Inspection		
<i>Control Valves</i>		
Sealed	Weekly	13.3.2.1
Locked or electrically supervised	Monthly	13.3.2.1.1
Valve Supervisory Signal Initiating Device	Quarterly	13.3.2.1.2
<i>Alarm Valves</i>		
Exterior	Monthly	13.4.1.1
Interior	5 years	13.4.1.2
<i>Check Valves</i>		
Interior	5 years	13.4.2.1
<i>Preaction/Deluge Valves</i>		
Enclosure (during cold weather)	Daily/weekly	13.4.3.1
Exterior	Monthly	13.4.3.1.6
Interior	Annually/5 years	13.4.3.1.7
Strainers, filters, orifices	5 years	13.4.3.1.8
<i>Dry Pipe Valves/Quick-Opening Devices</i>		
Gauges	Weekly/monthly	13.4.4.1.2.4, 13.4.4.1.2.5
Enclosure (during cold weather)	Daily/weekly	13.4.4.1.1
Exterior	Monthly	13.4.4.1.4
Interior	Annually	13.4.4.1.5
Strainers, filters, orifices	5 years	13.4.4.1.6
<i>Pressure-Reducing and Relief Valves</i>		
Sprinkler systems	Quarterly	13.5.1.1
Testing		
Main drains	Annually/quarterly	13.2.5, 13.2.5.1, 13.3.3.4
Gauges	5 years	13.2.7.2

**NFPA 25 Table 13.1.1.2: Summary of Valves, Valve Components, and Trim
Inspection, Testing, and Maintenance**

ITEM	FREQUENCY	NFPA 25 REFERENCE
Waterflow alarms	Quarterly/semiannually	13.2.6
<i>Control Valves</i>		
Position	Annually	13.3.3.1
Operation	Annually	13.3.3.1
Supervisory	Semiannually	13.3.3.5
<i>Preaction/Deluge Valves</i>		
Priming water	Quarterly	13.4.3.2.1
Low air pressure alarms	Quarterly/annually	13.4.3.2.13, 13.4.3.2.14
Full flow	Annually	13.4.3.2.2
Air leakage	3 years	13.4.3.2.6
<i>Dry Pipe Valves/Quick-Opening Devices</i>		
Air leakage	3 years	13.4.4.2.9
Priming water	Quarterly	13.4.4.2.1
Low air pressure alarms	Quarterly	13.4.4.2.6
Quick-opening devices	Quarterly	13.4.4.2.4
Trip test	Annually	13.4.4.2.2
Full flow trip test	3 years	13.4.4.2.2.2
<i>Pressure-Reducing and Relief Valves</i>		
Sprinkler systems	5 years	13.5.1.2
Circulation relief	Annually	13.5.7.1.2
Pressure relief valves	Annually	13.5.7.2.2
Maintenance		
Control valves	Annually	13.3.4
Preaction/Deluge valves	Annually	13.4.3.3.2
Dry pipe valves/Quick-opening devices	Annually	13.4.4.3