

Inspection and Testing Requirements for Fire Sprinkler Systems

Sprinkler Systems	Monthly	Quarterly	Semi-annual	Annual	Other	Code	NFPA 25
Inspection							
Gauges - Dry, PreAction & Deluge					●	2-2.4.2	Gauges on dry, preaction, and deluge systems shall be inspected weekly to ensure that normal air and water pressures are being maintained.
Gauges - Wet Pipe Systems	●					2-2.4.1	Gauges on wet pipe sprinkler systems shall be inspected monthly to ensure that they are in good condition and that normal water supply pressure is being maintained.
Control Valves	●				●		(See "Valves" below)
Alarm Devices		●				2-2.6	Alarm devices shall be inspected quarterly to verify that they are free of physical damage.
Hydraulic Nameplate		●				2-2.7	The hydraulic nameplate, if provided, shall be inspected quarterly to verify that it is attached securely to the sprinkler riser and is legible.
Buildings				●		2-2.5	Annually, prior to the onset of freezing weather, buildings with wet pipe systems shall be inspected to verify that windows, skylights, doors, ventilators, other openings and closures, blind spaces, unused attics, stair towers, roof houses, and low spaces
Hangers/Bracing				●		2-2.3	Sprinkler pipe hangers and seismic braces shall be inspected annually from the floor level.
Pipe & Fittings				●		2-2.2	Sprinkler pipe and fittings shall be inspected annually from the floor level.
Sprinkler Heads				●		2-2.1.1	Sprinklers shall be inspected from the floor level annually.
Spare Sprinkler Heads				●		2-2.1.3	The supply of spare sprinklers shall be inspected annually.
Valves (All Types)							(See "Valves" below)
Testing							
Alarm Devices		●				2-3.2	Waterflow alarm devices including, but not limited to, mechanical water motor gongs, vane-type waterflow devices, and pressure switches that provide audible or visual signals shall be tested quarterly.
Main Drain		●					(See "Valves" below)
Antifreeze Solution				●		2-3.4	The freezing point of solutions in antifreeze shall be tested annually by measuring the specific gravity with a hydrometer or refractometer and adjusting the solutions if necessary.
Gauges					●	2-3.2	Gauges shall be replaced every 5 years or tested every 5 years by comparison with a calibrated gauge. Gauges not accurate to within 3 percent of the full scale shall be recalibrated or replaced.
Sprinkler Heads					●	2-3.1.1	Where sprinklers have been in service for 50 years, they shall be replaced or representative samples from one or more sample areas shall be submitted to a recognized testing laboratory acceptable to the authority having jurisdiction for field service test

Sprinkler Heads - Extra High Temp					●	2-3.1.1	Exception No. 3*: Representative samples of solder-type sprinklers with a temperature classification of extra high [325_F (163_C)] or greater that are exposed to semicontinuous to continuous maximum allowable ambient temperature conditions shall be tested
Sprinkler Heads - Fast Response					●	2-3.1.1	Exception No. 2: Sprinklers manufactured using fast response elements that have been in service for 20 years shall be tested. They shall be retested at 10-year intervals.
Maintenance							
Valves (All Types)				●	●		(See "Valves" below)
Obstruction Investigation					●	10-2.2	Systems shall be examined internally for obstructions where conditions exist that could cause obstructed piping. If the condition has not been corrected or the condition is one that could result in obstruction of piping despite any previous flushing procedures.
Valves	Monthly	Quarterly	Semi-annual	Annual	Other		
Inspection							
Control Valves					●	9-3.3.1	All valves shall be inspected weekly.
Alarm Valves	●					9-4.1.1	Alarm valves shall be externally inspected monthly.
Check Valves					●	9-4.2.1	Valves shall be inspected internally every 5 years to verify that all components operate properly, move freely, and are in good condition.
Preaction/Deluge Valves				●		9-4.3.1.3	The interior of the preaction or deluge valve and the condition of detection devices shall be inspected annually when the trip test is conducted.
Dry Pipe Valves/Quick Opening Devices				●		9-4.4.1.4	The interior of the dry pipe valve shall be inspected annually when the trip test is conducted.
Backflow Prevention Assemblies				●		9-6.1.2	All backflow preventers installed in fire protection system piping shall be tested annually.
Testing							
Main Drain		●				9-2.6	A main drain test shall be conducted quarterly at each water-based fire protection system riser to determine whether there has been a change in the condition of the water supply piping and control valves.
Waterflow Alarm		●				9-2.7	All waterflow alarms shall be tested quarterly in accordance with the manufacturer's instructions.
Control Valves				●		9-3.4.1	Each control valve shall be operated annually through its full range and returned to its normal position.
Preaction/Deluge Valves				●		9-4.3.2.2	Each deluge or preaction valve shall be trip tested annually at full flow in warm weather and in accordance with the manufacturer's instructions.
Dry Pipe Valves/Quick Opening Devices				●		9-4.4.2.1	Each dry pipe valve shall be trip tested annually during warm weather.
Backflow Prevention Assemblies				●		9-6.2.1	All backflow preventers installed in fire protection system piping shall be tested

							annually.
Maintenance							
Control Valves				●		9-3.5	The operating stems of outside screw and yoke valves shall be lubricated annually.
Preaction/Deluge Valves				●		9-4.3.3.2	During the annual trip test, the interior of the preaction or deluge valve shall be cleaned thoroughly and the parts replaced or repaired as necessary.
Dry Pipe Valves/Quick Opening Devices				●		9-4.4.3.2	During the annual trip test, the interior of the dry pipe valve shall be cleaned thoroughly and parts replaced or repaired as necessary.