































NFPA 72 Requirements

 14.4.4* Testing Frequency. Unless otherwise permitted by other sections of this Code, testing shall be performed in accordance with the schedules in Table 14.4.3.2 or more often if required by the authority having jurisdiction.

	Component	Initial Acceptance	Periodic Frequency	Method
1.	All equipment	х		See Table 14.3.1.
2.	Control equipment and transponder (1) Functions	х	Annually	Verify correct receipt of alarm, supervisory, and trouble signals (inputs); operatio of execution signals and auxiliary functions (outputs); circuit supervision, including detection of open circuits and ground faults; and power supply supervision for detection of loss of ac power and disconnection of secondary
	(2) Fuses	x	Annually	battenes. Verify rating and supervision.
	(3) Interfaced equipment	x	Annually	Verify integrity of single or multiple circuits providing interface between two or more control units. Test interfaced equipment connections by operating or simulating operation of the equipment being supervised. Verify signals require to be transmitted at the control unit.
	(4) Lamps and LEDs	x	Annually	Illuminate lamps and LEDs.
	(5) Primary (main) power supply	х	Annually	Disconnect all secondary (standby) power and test under maximum load, including all alarm appliances requiring simultaneous operation. Reconnect al secondary (standby) power at end of test. Test redundant power supplies separately.
9	Alarm control unit trouble signals			









 3.6.4.2 Deluge Sprinkler System. A sprinkler system employing open sprinklers or nozzles that are attached to a piping system that is connected to a water supply through a valve that is opened by the operation of a detection system installed in the same areas as the sprinklers or nozzles. When this valve opens, water flows into the piping system and discharges from all sprinklers or nozzles attached thereto. [13, 2019]



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Table 13.1.1.2

Table 13.1.1.2 Summary of Valves, Valve Components, and Trim Inspection, Testing, and Maintenance

Item	Frequency	Reference
Inspection		
Alarm Valves		
Exterior	Quarterly	13.4.1.1
Interior	5 years	13.4.1.2
Strainers, filters, orifices	5 years	13.4.1.2
Backflow Prevention Assemblies	2	
Reduced pressure	Weekly	13.7.1
Reduced-pressure detectors	Weekly	13.7.1
Interior	5 years	13.7.1.3
Check Valves		
Interior	5 years	13.4.2.1
Control Valves		
All valves except locked or supervised	Weeklv	13.3.2.1
Locked or supervised	Monthly	13.3.2.1.1
Electrically supervised	Ouarterly	13.3.2.1.2
Dry Pipe Valves/	\sim	
Ouick-Opening Devices		
Enclosure (during cold weather)		Chapter 4
Exterior	Monthly	13.4.5.1.2
Interior	Annually	13.4.5.1.3
Strainers, filters, orifices	5 years	13.4.5.1.4
Low temperature alarm	Annually	Chapter 4
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Deluce Values		
Enclosure (during cold weather)	Dailv/weeklv	Chapter 4
Exterior	Monthly	13.4.4.1.1
Interior	Annually/5 years	13.4.4.1.2
Strainers, filters, orifices	5 years	13.4.4.1.3
Fire Department Connections	Quarterly	13.8.1
Gauges	Monthly/quarterly	13.2.5
Hose Valves	Quarterly	13.6.1
Preaction Valves	· ,	
Enclosure (during cold weather)		Chapter 4
Exterior	Monthly	13.4.3.1.1
Interior	Annually/5 years	13.4.3.1.2
Strainers, filters, orifices	5 years	13.4.3.1.3
Pressure-Regulating and Relief Valves		
Master pressure-regulating	Weekly	13.5.4.1
Sprinkler system pressure-reducing	Quarterly	13.5.1.1
Hose connection pressure-regulating	Annually	13.5.2.1
Hose rack pressure-regulating	Annually	13.5.3.1
Fire pump circulation relief	With no flow test	13.5.6.1
Fire pump main pressure-relief	With fire pump test	13.5.6.2.1
Value Supervisory Signal Initiating Device	Quarterly	13.3.2.1.3
Supervisory Signal Devices (except valve supervisory switches)	Quarterly	13.2.6.1

Table 13.1.1.2 Continued			
Item	Frequency	Reference	
Dry Pipe Valves/ Quick-Opening Devices			
Air leakage	3 years	13.4.5.2.9	
r rinning water Low air pressure alarm	Annually	13.4.5.2.6	
Quick-opening devices	Quarterly	13.4.5.2.4	
Trip test	Annually	13.4.5.2.2	
Full-flow trip test	3 years	13.4.5.2.2.2	
Gauges	5 years	13.2.5.2	
Main Drains	Annually/quarterly	13.2.3	
Preaction Valves			
Priming water	Quarterly	13.4.3.2.1	
Low air pressure alarms	Quarterly	13.4.3.2.11	
Trip test	Annually/3 years	13.4.3.2.2 and 13.4.3.2.3	
Air leakage	3 years	13.4.3.2.6	
Low temperature alarm	Annually	13.4.3.2.12	
Pressure-Regulating and Relief Valves		10540 110540	
Master pressure-regulating	Quarterly/annually	13.5.4.2 and 13.5.4.3	
Sprinkler systems pressure-reducing	Annually/5 years	13.5.1.3 and 13.5.1.2	
Hose connection pressure-regulating	Annually/5 years	13.3.2.3 and 13.3.2.2	
Fire nump circulation relief	With churp test	13.5.5.5 and 13.5.3.2 13.5.6.1.9	
Fire pump pressure relief values	With fire nump test	13.5.6.1.2	
Hose Values	Annually/8 years	13.6.9	
Waterflow Alarms	Quarterly/semianpually	13.9.4	
Subervisory Signal Devices (except value	Annually	13262	
Supervisory Signin Devices (except bube		a composition	

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Alarm Valves	Per manufacturer	13.4.1.3	
Backflow Prevention Assemblies	Per manufacturer	13.7.3	
Check Valves	Per manufacturer	13.4.2.2	
Control Valves (outside screw and yoke)	Annually	13.3.4	
Deuge values Dev Pibe Values/	Annually/ 5 years	13.4.4.3	
Ouick-Opening Devices	7 unitually	15.1.5.5	
Hose Valves	As needed	13.6.3	
Preaction Valves	Annually/5 years	13.4.3.3	





Inspection of Deluge/Preaction Systems

- Gauges monitoring water pressure shall be inspected quarterly to verify that normal water supply pressure is being maintained.
- Gauges monitoring air or nitrogen pressure shall be inspected monthly to verify that normal air or nitrogen pressure are being maintained.

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Testing of Deluge Systems

- Deluge valve flow tests shall incorporate full functionality of the system as a unit, including automatic and manual activation.
- Protection shall be provided for any devices or equipment subject to damage by system discharge during flow tests.

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Testing of Preaction Systems

 Preaction valves protecting freezers shall be trip tested in a manner that does not introduce moisture into the piping in the freezer.





















