



**Inspection, Testing & Maintenance  
of Foam Water Sprinkler Systems**

<b>CUSTOMER &amp; JOB INFORMATION</b>			
<b>Company:</b>		<b>Date:</b>	
<b>Address:</b>		<b>Job Number:</b>	
<b>Contact:</b>		<b>Tech Name:</b>	
<b>Frequency:</b>		<b>License #:</b>	
<b>Monitoring Co. Name</b>		<b>Monitoring Co. Phone Number</b>	

<b>OWNER SECTION</b>	<b>RESULTS YES/NO/NA</b>
Is the building occupied?	
Was the occupancy classification and hazard of contents remained the same since the last inspection?	
Are all fire protection systems in service?	
Has the system remained in service without modification since the last inspection?	
Was the system free of actuations or devices or alarms since the last inspection?	
Is all wet system piping protected from temperatures below 40°F?	

<b>SYSTEM INFORMATION</b>			
<b>Location:</b>		<b>Type:</b>	
<b>Make:</b>		<b>Model:</b>	
<b>System Designation:</b>		<b>Building:</b>	
<b>Control Valve Location:</b>		<b>Has system been modified since last inspection?</b>	
<b>What is hazard protected?</b>		<b>System Notes:</b>	
<b>How are valves supervised?</b>		<b>Valve identification signs?</b>	
<b>FDC Location:</b>		<b>FDC identification signs?</b>	
<b>Operating instructions?</b>		<b>Location of operating instructions:</b>	

**INSPECTION**

<b>FREQUENCY</b>	<b>BACKFLOW</b>	<b>RESULTS YES/NO/NA</b>
WEEKLY	Isolation valves – open position and locked or supervised	
WEEKLY	RPA and RPDA – differential sensing relief valve operating correctly	
FIVE-YEAR	Internal inspection	



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<b>FREQUENCY</b>	<b>DELUGE/PREACTION VALVE</b>	<b>RESULTS YES/NO/NA</b>
DAILY	Enclosure, not equipped with a low temperature alarm, is inspected during cold weather to verify a minimum temperature of 40°F (4°C)	
WEEKLY	Enclosure, where equipped with low temperature alarm, is inspected during cold weather to verify a minimum temperature of 40°F (4°C)	
MONTHLY	Free from physical damage or leaks	
MONTHLY	Electrical components are in service	
MONTHLY	Valve seal not leaking	
MONTHLY	Trim valves are in the correct (open or closed) position	
ANNUAL	Interior is in good working condition	
ANNUAL	Detection device in good condition	
FIVE-YEAR	Internal inspection of deluge valve strainers, filters, restricted orifices, and diaphragm chambers	

<b>FREQUENCY</b>	<b>MASTER PRESSURE-REGULATING DEVICE</b>	<b>RESULTS YES/NO/NA</b>
WEEKLY	Downstream pressures are in accordance with design criteria psi:	
WEEKLY	Supply pressure is in accordance with design criteria psi:	
WEEKLY	Free of damage or leaks	
WEEKLY	Trim in good operating condition	

<b>FREQUENCY</b>	<b>CONTROL VALVES</b>	<b>RESULTS YES/NO/NA</b>
WEEKLY	In the correct (open or closed) position	
WEEKLY	Sealed	
WEEKLY	Post Indicator Valves (PIVs) are provided with correct wrenches	
WEEKLY	Free from damage or leaks	
WEEKLY	Proper signage	
MONTHLY	Locked or supervised	
MONTHLY	Accessible	
QUARTERLY	Electronically supervised	

<b>FREQUENCY</b>	<b>GAUGES</b>	<b>RESULTS YES/NO/NA</b>
MONTHLY	Gauges are in good operating condition	
MONTHLY	Normal air or nitrogen pressure maintained when not supervised at a constantly attended location psi:	
MONTHLY	Gauge on system side of dry valve reads proper ratio of air or nitrogen when not supervised at a constantly attended location psi:	



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MONTHLY	Gauge on quick-opening device reads the same as system side dry valve gauge when not supervised at a constantly attended location psi:	
QUARTERLY	Normal air or nitrogen pressure maintained when supervised at a constantly attended location psi:	
QUARTERLY	Gauge on system side of dry valve reads proper ratio of air or nitrogen when supervised at a constantly attended location psi:	
QUARTERLY	Gauge on quick-opening device reads the same as system side dry valve gauge when supervised at a constantly attended location psi:	
QUARTERLY	Gauge on supply side of valve reads normal	

FREQUENCY	PROPORTIONING SYSTEM(S)	RESULTS YES/NO/NA
MONTHLY	Foam concentrate quantity meets original design requirements	
MONTHLY	Strainers inspected	
MONTHLY	Pressure vacuum vent is operating freely	
MONTHLY	Gauges are in good operating condition	
MONTHLY	Sensing line valves are open	
MONTHLY	Foam liquid pump provided with power	
MONTHLY	Free of corrosion	
MONTHLY	Automatic drain valves are free and opened	
MONTHLY	Valves in correct position	

FREQUENCY	NOZZLES	RESULTS YES/NO/NA
MONTHLY	In place, aimed, and pointed in the direction intended	
MONTHLY	Free from external loading and corrosion	
MONTHLY	Caps or plugs are in place (where required)	

FREQUENCY	ALARM VALVES/RISER CHECK	RESULTS YES/NO/NA
QUARTERLY	In appropriate open or closed position	
QUARTERLY	Free of damage	
QUARTERLY	Accessible	
QUARTERLY	Retard chamber/alarm drains not leaking	
FIVE-YEAR	Alarm valve interior in good condition	

FREQUENCY	FIRE DEPARTMENT CONNECTIONS	RESULTS YES/NO/NA
QUARTERLY	Visible and accessible	
QUARTERLY	Coupling/swivels operate correctly	
QUARTERLY	Plugs/caps are in place	



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QUARTERLY	Gaskets are not damaged	
QUARTERLY	Ball drip valve is functional	
QUARTERLY	Identification signs are in place	
QUARTERLY	Interior is clear of obstructions (unless locked)	
QUARTERLY	Clapper(s) operates correctly	

FREQUENCY	PRESSURE-REDUCING VALVE	RESULTS YES/NO/NA
QUARTERLY	In the open position and not leaking	
QUARTERLY	Maintaining downstream pressure	
QUARTERLY	In good condition, with handwheels installed and unbroken	

FREQUENCY	FOAM CONCENTRATE STRAINER(S)	RESULTS YES/NO/NA
QUARTERLY	Blow-down valve closed and unplugged	

FREQUENCY	DRAINAGE	RESULTS YES/NO/NA
QUARTERLY	Method – in good operating condition	
QUARTERLY	Retention embankments or dikes are in good condition	

FREQUENCY	SIGNAGE	RESULTS YES/NO/NA
ANNUAL	Free from damage and in good condition	
ANNUAL	Securely attached to structure and piping	

FREQUENCY	SPRINKLERS (VISIBLE)	RESULTS YES/NO/NA
ANNUAL	No damage or leaks	
ANNUAL	Free of corrosion, foreign material, or paint	
ANNUAL	Fluid in glass bulbs	
ANNUAL	Loading — sprinklers are free of dust	
ANNUAL	Spare sprinklers — proper number and type, including installation wrench	
ANNUAL	Escutcheons/cover plates are present and installed correctly	
ANNUAL	Minimum clearance between sprinklers and storage	

FREQUENCY	PIPES AND FITTINGS (VISIBLE)	RESULTS YES/NO/NA
ANNUAL	In good condition and no external corrosion	
ANNUAL	No leaks or mechanical damage	
ANNUAL	Correct alignment — no external loads	
ANNUAL	Low point drains maintained and in proper working order	
ANNUAL	Rubber gasketed fittings in good condition	

FREQUENCY	SUPPORT/HANGERS	RESULTS YES/NO/NA
ANNUAL	In good condition (no missing or damaged paint or coating, rust, or corrosion)	
ANNUAL	No damaged or missing hangers bracing and support	



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ANNUAL	Securely attached to structure and piping	
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FREQUENCY	BLADDER TANK	RESULTS YES/NO/NA
ANNUAL	Presence of foam in water surrounding bladder	

FREQUENCY	OTHER	RESULTS YES/NO/NA
QUARTERLY	Alarm devices – free of damage	
QUARTERLY	Hydraulic design information sign is securely attached to the riser and legible	
ANNUAL	Low temperature alarm free of damage	
FIVE-YEAR	Strainers — per manufacturer’s instructions	
FIVE-YEAR	Check valve — internal moves freely and in good condition	
FIVE-YEAR	Obstruction inspection — no foreign or obstructing material found	

**TESTING**

FREQUENCY		RESULTS YES/NO/NA
QUARTERLY	Alarm devices — water motor gong	
QUARTERLY	Priming water level tested	
QUARTERLY	Low air alarm tested per manufacturer’s instructions	
QUARTERLY	Main drain test — if the sole supply is through a backflow preventer or pressure-reducing valve	
QUARTERLY	Static psi: Residual psi:	
QUARTERLY	Do main drain test results differ more than 10% from previous test?	
QUARTERLY	Master Pressure-Regulating Device: Partial flow test performed to exercise valve	
SEMI-ANNUAL	Valve supervisory switch(es) function	
SEMI-ANNUAL	Alarm devices (vane and pressure switch type) tested and functioning correctly	
ANNUAL	Master Pressure-Regulating Device: Full flow test compared to previous test results	
ANNUAL	Valve status test performed	
ANNUAL	Supervisory switch(es) function	
ANNUAL	Low temp alarm (if installed) at the beginning of heating season	
ANNUAL	All control valves operated through full range of motion and returned to normal position	
ANNUAL	Backflow Preventer: forward flow test at a minimum flow rate of the system demand	
ANNUAL	Foam concentrate strainer(s): in proper working condition	
FIVE-YEAR	Gauges tested or replaced	

FREQUENCY	OPERATIONAL TEST	RESULTS YES/NO/NA
ANNUAL	Foam-water system(s) responded as designed Discharge time:	
ANNUAL	Manual actuation device functions as intended	

FREQUENCY	CONCENTRATION TEST	RESULTS YES/NO/NA
ANNUAL	Foam sample measured	
ANNUAL	Foam concentration within 10% of acceptance results	



ANNUAL	Foam concentrate not more than 10% below minimum design standard	
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FREQUENCY	FULL FLOW TEST (DELUGE VALVE)	RESULTS YES/NO/NA
ANNUAL	Unobstructed discharge from all nozzles/position correctly	
ANNUAL	Pressure reading at deluge valve psi:	
ANNUAL	Pressure reading at most remote nozzle of sprinkler psi:	
ANNUAL	Air maintenance functions correctly (if provided)	

MAIN DRAIN TEST				
Riser Number or Location	Size Test Pipe	Static psi (before)	Residual psi	Do main drain test results differ more than 10% from previous test?

PREACTION PARTIAL TRIP TEST					
System #	Air Pressure (psi)	Water Pressure (psi)	Tripping Air Pressure (psi)	Trip Time (sec)	Water delivery time

PREACTION VALVE TRIP TEST OPEN CONTROL VALVE							
System #	Air Pressure (psi)	Water Pressure (psi)	Tripping Air Pressure (psi)	Trip Time (sec)	Water delivery time	Results compared to previous results	Preaction system tested for air leakage

**MAINTENANCE**

FREQUENCY		RESULTS YES/NO/NA
ANNUAL	OS&Y — stems lubricated annually	
FIVE-YEAR	Proportioned ball drip disassembled, cleaned and reassembled every five years Date:	
10 YEARS	Foam concentrate tank drained and flushed every ten years Date:	
10 YEARS	Foam concentrate tank inspected internally and externally for corrosion every ten years Date:	
10 YEARS	Foam concentrate tank hydrostatically tested every ten years Date:	
10 YEARS	Bladder tank proportioner sight glass cleaned every ten years Date:	



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FIVE-YEAR	Balancing valve diaphragm flushed every five years Date:	
FIVE-YEAR	Pressure vacuum vents serviced every five years Date:	

<b>COMMENTS</b>	
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DEFICIENCIES		
Severity	Description of the issue	Take a picture of the issue

Year	System	Location	Date	Inspector	Fire Department Connections	Valves Locked	Alarm Devices	Water Pressure	Instructions Posted	Nozzles	Valves	Concentrate Tank

<b>COMMENTS</b>

CLOSING			
Date & Time Complete		Tech Name	
Tech Signature		License/ Certification	