WATER STORAGE TANKS USED FOR FIRE PROTECTION

Inspections, testing, and maintenance of water storage tanks used for fire protection 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 water storage tanks. This list, however, is not meant to replace manufacturer's instructions and updated code requirements. This data is based on the 2014 edition.

NFPA 25 Table 9.1.1.2: Summary of Water Storage Tank Inspection, Testing, and Maintenance

ITEM	FREQUENCY	NFPA 25 REFERENCE
Inspection		
Water temperature – low temperature alarms connected to constantly attended location	Monthly	9.2.4.2
Water temperature – low temperature alarms not connected to constantly attended location	Weekly	9.2.4.3
Heating system – tanks with supervised low temperature alarms connected to constantly attended location	Weekly ¹	9.2.3.1
Heating system – tanks without supervised low temperature alarms connected to constantly attended location	Daily^1	9.2.3.2
Control valves		See Table 13.1.1.2
Water level – tanks equipped with supervised water level alarms connected to constantly attended location	Quarterly	9.2.1.1
Water level – tanks without supervised water level alarms connected to constantly attended location	Monthly	9.2.1.2
Tank – exterior	Quarterly	9.2.5.1
Support structure	Quarterly	9.2.5.1
Catwalks and ladders	Quarterly	9.2.5.1
Surrounding area	Quarterly	9.2.5.2
Hoops and grillage	Annually	9.2.5.4
Painted/coated surfaces	Annually	9.2.5.5

¹ Cold weather/heating season only.

NFPA 25 Table 9.1.1.2: Summary of Water Storage Tank Inspection, Testing, and Maintenance

ITEM	FREQUENCY	NFPA 25 REFERENCE
Expansion joints	Annually	9.2.5.3
Interior – tanks without corrosion protection	3 years	9.2.6.1.1
Interior – all other tanks	5 years	9.2.6.1.2
Temperature alarms – connected to constantly attended location	Monthly ²	9.2.4.2
Temperature alarms – not connected to constantly attended location	Weekly ²	9.2.4.3
Testing		
Tank heating system	Annually (Prior to heating season)	9.3.2
Low water temperature alarms	$Monthly^2$	9.3.3
High temperature limit switches	$Monthly^2$	9.3.4
Water level alarms	Semiannually	9.3.5
Level indicators	5 years	9.3.1
Pressure gauges	5 years	9.3.6
Maintenance		
Water level		9.4.2
Control valves		See Table 13.1.1.2
Embankment supported coated fabric (ESCF) ³		13.4.2.2

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

ITEM	FREQUENCY	NFPA 25 REFERENCE
Inspection		
Control Valves		
Sealed	Weekly	13.3.2.1
Locked or electrically supervised	Monthly	13.3.2.1.1

² Cold weather/heating season only.

³ Maintain ESCF tanks per manufacturer's instructions. Clean and paint exposed surfaces every 2 years.

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

ITEM	FREQUENCY	NFPA 25 REFERENCE
Valve Supervisory Signal Initiating Device	Quarterly	13.3.2.1.2
Check Valves		
Interior	5 years	13.4.2.1
Testing		
Gauges	5 years	13.2.7.2
Control Valves Position	Annually	13.3.3.1
Operation	Annually	13.3.3.1
Supervisory	Semiannually	13.3.3.5
<u>Maintenance</u>		
Control valves	Annually	13.3.4