



City of Phoenix

FIRE PROTECTION SYSTEMS AND EQUIPMENT INSPECTION, TESTING, AND MAINTENANCE

FREQUENCY CHART

FIRE SPRINKLER SYSTEMS (WET SYSTEM)			FIRE ALARM SYSTEMS		
ACTIVITY	FREQUENCY	NFPA/FIRE CODE REFERENCE & EFFECTIVE YEAR	ACTIVITY	FREQUENCY	NFPA/FIRE CODE REFERENCE & EFFECTIVE YEAR
<u>Visual Inspection</u> (e.g., system pressure, check gauges, rusting components, evidence of a leak, damage, etc.)	<u>Quarterly</u> Can be performed by staff	NFPA 25 (13.3.2.1) NFPA 25 (5.3.2) 2017	<u>Verify No Troubles</u> (e.g., check the lights on the panel, supervisory signals weekly, etc.)	<u>Weekly</u> Can be performed by staff Report any change in status of the panel immediately	NFPA 72 14.3.1 & 14.3.4 2016
<u>Complete NFPA 25 Inspection</u> (e.g., water flow, valve activation, etc.)	<u>Annually</u> Contractor conducts inspection	Phoenix Fire Code Section 901.6 2012	<u>Annual Inspection</u> Test all connected devices (e.g., smoke detectors, heat detectors, batteries, circuits, etc.)	<u>Annually</u> Contractor conducts inspection	NFPA 72 14.3.1 & 14.3.4 2016
<u>5-Year Inspection</u> (e.g., internal valve and pipe, check all valve covers and branch lines for corrosion, etc.)	<u>5-Years</u> Contractor conducts inspection	NFPA 25 Chapter 15 2017			
COMMERCIAL HOOD FIRE SUPPRESSION			EMERGENCY POWER GENERATORS		
ACTIVITY	FREQUENCY	NFPA/FIRE CODE REFERENCE & EFFECTIVE YEAR	ACTIVITY	FREQUENCY	NFPA/FIRE CODE REFERENCE & EFFECTIVE YEAR
<u>Visual Inspection</u> (e.g., make sure caps are in place, check system pressure, etc.)	<u>Weekly</u> Can be performed by staff	IFC Table 609.3.3.1 2016	<u>Visual Inspection</u> If the generator is required by the Fire Code (e.g., City Hall, Phoenix Convention Center, etc.)	<u>Weekly</u> Can be performed by staff	NFPA 110 8.4.1, NFPA 111 8.4.1, IFC 604.3, & IBC 2702 NFPA 2010 IFC/IBC 2012
<u>Maintenance and Cleaning</u> Failure to conduct maintenance and cleaning will result in a fire	Depends on frequency of use, every 6-months typical, 3-months for heavy use, annually for low use (e.g., hood systems in senior centers, seasonal facilities, etc.)	IFC Table 609.3.3.1 2012	<u>Generator Test</u> (e.g., run generator, check fluids and fuel, etc.)	<u>Monthly</u> Can be performed by staff (included fueling of generator)	NFPA 110 8.4.1, NFPA 111 8.4.1, IFC 604.3, & IBC 2702 NFPA 2010 IFC/IBC 2012
<u>Semiannual Inspection</u>	<u>Every 6-months</u> Contractor conducts inspection	IFC Table 609.3.3.1 2012	<u>Load Testing</u> Testing of generator under significant electrical load (e.g., elevators, escalators, emergency lighting, etc.)	<u>Annually</u> Can be performed by staff	NFPA 110 8.4.1, NFPA 111 8.4.1, IFC 604.3, & IBC 2702 NFPA 2010 IFC/IBC 2012
<u>Commercial Hood System Test</u>	<u>Annually</u> Contractor conducts test	IFC Table 609.3.3.1 2012			
<u>Ten-Year Hydrostatic Test</u>	<u>Every Ten-Years</u> Contractor conducts test (replacing the agent tank is an acceptable alternative)	IFC Table 609.3.3.1 2012			
FIRE PUMPS			ELEVATORS & ESCALATORS		
ACTIVITY	FREQUENCY	NFPA/FIRE CODE REFERENCE & EFFECTIVE YEAR	ACTIVITY	FREQUENCY	NFPA/FIRE CODE REFERENCE & EFFECTIVE YEAR
<u>Run Test</u> Electrical pumps run for 10 minutes Diesel pumps run for 30 minutes	<u>Monthly</u> minutes Can be performed by staff	NFPA 25 8.3.1.1 & 8.3.1.2 2017	<u>Elevator and Escalator Inspection</u>	<u>Annually</u> Contractor conducts inspection	ASME A17.1
<u>Fire Pump Maintenance</u> <u>Manufacturers Guidelines & Annual Flow Test</u>	<u>Annually</u> Contractor conducts inspection and test	NFPA 25 8.5 2017			
PRE-ACTION SPRINKLER SYSTEM (the content below is in addition to that for fire sprinkler systems above)			SPECIAL AGENT EXTINGUISHING SYSTEMS FM 200 SYSTEM		
ACTIVITY	FREQUENCY	NFPA/FIRE CODE REFERENCE & EFFECTIVE YEAR	ACTIVITY	FREQUENCY	NFPA/FIRE CODE REFERENCE & EFFECTIVE YEAR
<u>Visual Inspection</u> Check for system changes (e.g., valves, air pressure, corrosion, etc.)	<u>Monthly</u> Can be performed by staff	NFPA 25 13.4.3.1.3 2017	<u>Semiannual Inspection</u>	<u>Semiannual</u> Contractor conducts inspection	NFPA 2001 7.1.3
<u>Open & Prime Water Level Service</u>	<u>Quarterly</u> Contractor conducts this service	NFPA 25 13.4.3.2.1 2017	<u>Annual Inspection</u>	<u>Annually</u> Contractor conducts inspection	NFPA 2001 7.1.3
<u>Trip Test</u> Varies as to the extent of the systems size and complexity	<u>Annually</u> Contractor conducts inspection & test	NFPA 25 13.4.5.2.4 2017			
SPECIAL EXTINGUISHING ALARM DETECTION			PLEASE NOTE		
ACTIVITY	FREQUENCY	NFPA/FIRE CODE REFERENCE & EFFECTIVE YEAR	This list is not all inclusive. Individuals responsible for conducting, reviewing or approving any inspection, testing or maintenance are encouraged to review the applicable referenced standard to ensure all requisite items are addressed. This is evidenced in that the inspection, testing, and maintenance criteria for Water Based Fire Protection Systems specified in NFPA 25 and those relating to Fire Alarm Systems in NFPA 72 are very detailed. Additionally, it is stressed that all inspection, testing and maintenance work be thoroughly documented, and that those records be maintained, as required by the Phoenix Fire Code.		
<u>Visual Inspection</u> (e.g., check valves, power, panel, system changes, etc.)	<u>Monthly</u> Can be performed by staff	NFPA 72 Table 14.3.1 2016			
<u>Annual Inspection</u> Note: Every FM 200, Halon, or gaseous extinguishment system has an alarm component	<u>Annually</u> Contractor conducts inspection	NFPA 72 Table 14.3.1 2016			
PHOENIX FIRE CODE 901.6 INSPECTION TESTING AND MAINTENANCE					
Fire detection, alarm, and extinguishing systems, smoke management systems, mechanical smoke exhaust systems, and smoke and heat vents shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. All fire protection systems shall be inspected and tested annually by a contractor licensed by the State of Arizona who has a current business certificate issued by the Phoenix Fire Department to work on the particular fire protection system being inspected or tested. See Section 105.3.1. It shall be the responsibility of the owner to ensure that these requirements are met. Non-required fire protection systems and equipment shall be inspected, tested and maintained in accordance with Table 901.6.1 or removed.					
<u>Smoke management/control 909.20.3 testing.</u> Operational testing of the smoke control system shall include all equipment such as initiating devices, fans, dampers, controls, doors and windows.					
<u>909.20.4 Dedicated smoke control systems.</u> Dedicated smoke control systems shall be operated for each control sequence semiannually. The system shall also be tested under standby power conditions.					
<u>909.20.5 Nondedicated smoke control systems.</u> Non-dedicated smoke control systems shall be operated for each control sequence annually. The system shall also be tested under standby power conditions.					