

Fire Sprinkler Inspector Task List (2017)

Inspection

1. Conducts a rough inspection of new, existing, or replacement fire sprinkler and standpipe installations (e.g. dry pipe, wet pipe, deluge, pre-action, gridded, lopped, and Early Suppression Fast Response) found in residential, commercial, and industrial buildings, prior to the installation of walls and ceilings, by reviewing the approved plan, visually inspecting the fire sprinkler system, and using tools such as a measuring tape, scissor lift, ladder, or boom lift to determine if the fire sprinkler system is in compliance with construction specifications, the National Fire Protection Association Code (NFPA), and the Los Angeles City Building, Plumbing, and Fire Codes with regard to appropriate spacing between hangers and bracings, proper piping and size of piping, proper fire sprinkler system assembly, appropriate fire sprinkler head placement, appropriate sprinkler coverage for projected fire hazards, use of approved materials such as CPVC, steel, and copper pipe, and adequate support such as seismic bracing and pipe stands and then writes corrections on the approved plan and/or sends correction notices electronically, if necessary, which must be corrected and another inspection is scheduled, or signs the approved plan to allow contractors to move to the next phase of the construction project if it is determined that the fire sprinkler system is code compliant.
2. Conducts a final inspection of new, existing, or replacement fire sprinkler and standpipe installations found in residential, commercial, and industrial buildings, after construction finishes have been completed, by reviewing the approved plan and visually inspecting the fire sprinkler system to verify that appropriate construction finishes have been completed such as the construction and painting of walls and ceilings, that there is appropriate signage, such as where the fire sprinkler shut off valve is located, and that the system components have been finished including the valves being placed in the proper position and the caps being placed on fire hose valves in compliance with NFPA codes and then writes corrections on the building plan and/or sends correction notices electronically, if necessary, which must be corrected and another inspection is scheduled, or signs the permit/building card for final approval if it is determined that the fire sprinkler system is code compliant.
3. Conducts visual inspections of underground piping within commercial and industrial trenches using a flashlight and measuring tape in order to ensure proper sizing and pressure ratings of pipes, accurate valve placement, and adherence with approved plans to determine if any corrections and/or additional inspections are necessary, and/or if the piping is code compliant.

Testing

4. Observes contractors performing pressure tests including a hydrostatic functionality test on fire sprinkler installations in order to visually inspect the system piping and components when under pressure for up to two hours to ensure material integrity, that the piping is installed correctly, that fire sprinkler/standpipe components are in working condition and are acceptable for Fire Department use, that there are no leaks, and that the system can withstand a high amount of pressure.
5. Observes contractors performing fire pump tests by visually witnessing them flow water through hose streams connected to the test header to compare test results with factory specifications and/or from previous year's results in order to measure performance of the fire pump's flow and pressure and determine if there is a significant reduction in the pumps performance or if repairs are necessary.
6. Observes contractors performing a main drain test by recording pressure shown on the gauge and then having the contractor turn the main drain valve on slowly and waiting until water pressure stabilizes, and then records the pressure shown on the gauge to ensure proper water supply is available at the system riser, detect changes in water supply that may affect the fire sprinkler system's performance, and confirm the drain valves are operational.
7. Observes contractors performing dry pipe valve trip tests by visually witnessing the contractor partially or fully opening the control valve so that water is released and allowed to flow in order to ensure that water is reaching the end of the system in sixty (60) seconds.
8. Observes contractors performing water flow tests and water flow alarm device tests by visually witnessing the contractor slowly open the inspector's test valve and allowing water to flow for about 60 seconds or until the alarm sounds and a signal is received by a central station to ensure water flow detecting devices and alarms are operational.
9. Observes contractors performing fire pump performance tests, in the presence of Fire Department staff, by visually witnessing them conduct flow testing at 50%, 100%, and 150% of the fire pump's rated capacity by conducting six manual and six auto starts of the fire pump, and conducting roof flow testing in order to ensure the fire pump operates as designed and within the manufacturers pump curve.

Communication

10. Communicates with plan check engineers and fire sprinkler designers, contractors, building owners, and homeowners through e-mail, telephone, and in-person in order to discuss incorrect plan information, plan check discrepancies, and unique job conditions resulting in violations such as plans showing wood construction when it should be steel construction, different materials installed than the materials on the approved plan, unique ceiling slopes and beams beyond the fire sprinkler listing, and an approved building modification in order to resolve discrepancies and achieve code compliance.
11. Communicates with sprinkler fitters, engineers, contractors, building owners, homeowners, other inspection divisions including plumbing, electrical, and building, and staff from other City departments through e-mail, telephone, and in-person for the purpose of providing advice and/or directing interested parties to the inspection page of Los Angeles Building and Safety's website or the appropriate code books such as NFPA 13, 13d, 13r, 14, 20, 22, and 24, scheduling inspections, discussing inspection findings such as necessary corrections, and/or obtaining or providing information regarding the readiness of a fire sprinkler inspection for temporary standpipe approval, construction of a fire pump, electrical power release, gas release, and temporary occupancy in order to provide quality customer service and facilitate the installation of fire protection systems that are code compliant.

Documentation

12. Writes clear and precise reports and/or field notes regarding the results of fire sprinkler system inspections including system tests, corrections and/or approvals and prepares, stores and tracks hard and electronic copies of notes, reports and/or permits using file folders or computer software such as Microsoft Office Suite, Plan-Check Inspection System (PCIS) or M-Power in order to maintain records of inspection history for future reference.
13. Reviews hard copy and electronic approved fire sprinkler plans during the inspection of a facility to determine if the construction completed by the contractor is in accordance with the approved plan, any noted corrections were completed, correct fees were paid for the inspection, the person being charged is a licensed contractor and that the work they completed was within their scope, and then issues a correction notice (electronic and/or hard copy) and/or writes any necessary corrections on the approved plan which must be completed prior to approval for future inspectors to refer to during the next inspection, or approves the permit if the construction is in accordance with the approved plan by signing the plan, permit and/or building/inspection card in order to provide authorization that the fire sprinkler system is code compliant.

Other Related Job Duties

14. Trains new Fire Sprinkler Inspectors, with the assistance of and when requested by a Senior Fire Sprinkler Inspector, by taking the new employee on a daily inspection route and explaining and demonstrating work procedures, answering questions and sharing information and then observing the employee performing such work to ensure they are properly trained and can successfully perform the job duties required of this job class.
15. Drives personal vehicle to and from job sites such as commercial, industrial, or residential buildings in order to complete inspections of fire sprinkler and standpipe installations.