



2.3 Fire Systems Inspection Requirements

500 W. Pennsylvania Ave. * Southern Pines, NC 28387 * Phone (910) 692-2720 * www.southernpines.net/fire

1. **UNDERGROUND SUPPLY LINES:** Underground fire protection supply lines must be scheduled for inspection with the Town Engineering Department, 910-692-1983, after the supply line has been installed and prior to backfilling and pressurizing.
2. **LINE FLUSHING:** Flushing of the supply lines for fire protection systems must be scheduled for inspection with the Town Engineering Department, 910-692-1983, prior to connecting the building system to the underground. Underground Material Test Certificate must be completed and signed by town inspector. Leave copy with the permit card on site.
3. **CHLORINATION:** Chlorination and flushing of the supply lines for fire protection systems must be scheduled for inspection with the Town Engineering Department, 910-692-1983, prior to connecting the building system to the underground.
4. **UNDERGROUND FDC LINES:** Underground FDC supply lines must be scheduled for inspection with the SPFD- Fire Inspection Division, prior to backfilling the line. Lines will be flushed after connection to building system. Flushing to be witnessed by GC, on underground material test certificate.
5. **FIRE PROTECTION ROUGH-IN:** The sprinkler "rough-in" must be scheduled for inspection with the SPFD Fire Inspection Division after all arm-overs, drops, sprig-ups, walls, partitions, all valves, etc., are completed and sprinklers installed (including attic sprinklers, if required) and prior to the installation of any ceilings. The walls or partitions do not have to be completed but, must be framed in place. The hydrostatic test, including completion of the Aboveground material test certificate, will be performed at this time. The standpipe rough-in will utilize the same procedure as for sprinkler systems above.
6. **FIRE ALARM ROUGH-IN:** The fire alarm rough-in must be scheduled for inspection after all wiring and boxes have been installed. Rough-in must be signed off prior to installing finishes which will conceal the wiring and boxes.
7. **FINAL INSPECTION:** The sprinkler/ standpipe/ fire pump/ fire alarm final must be scheduled for inspection with the SPFD Fire Inspection Division after the alarm and sprinkler work is completely finished, including fire alarm system, and all building finishes completed (painting, carpet, etc.). Some of the tests that are required to be conducted when applicable, but not limited to, are:
 - a. Main Drain Flow Test. (must drain outside to an appropriate place)
 - b. System flow test (inspectors test)
 - c. Complete Fire Alarm Systems Test
 - d. A framed map of all system device locations at each annunciator and main fire alarm panels.
 - e. Dry Pipe System Air Test (40 psi, 24 hours) will be required in addition to the hydrostatic test
 - f. Dry Pipe Trip Test (60 second)
 - g. Dry System Low Air, High Air supervisory alarm test
 - h. Valve Tamper for all system control valves
 - i. Fire pump Alarm TestThe fire alarm final inspection must be scheduled for inspection at the same time as the sprinkler final and will be inspected along with the sprinkler system. The purpose of this requirement is to reduce the number of inspections which require a contractor's presence.

All standpipe and pressure regulating/ restricting hose valve will be flow tested in the presence of the SPFD inspector. All pressure and flow readings will be recorded and turned over to the owner for future reference. A complete electronic set of as-built shop drawings for all system shall be provided before the final inspection will be signed complete.

Other Inspections

1. Alterations and Interior Completion projects are to be scheduled for a rough in inspection prior to the ceiling being installed. In the case of alterations in occupied spaces the sprinkler contractor shall be onsite to remove ceiling tiles as necessary for inspection.
2. Scheduling of the Fire Pump Startup. Fire Pump Rough-in inspection must be approved prior to scheduling fire pump startup. Startup test must be requested at least two working days prior to running the test. Due to the time required to conduct this inspection, it needs to be coordinated with the Fire Protection Inspector, prior to scheduling the inspection. After an acceptable date is established the contractor is responsible for scheduling the inspection.
3. The fire pump will be tested in the presence of the inspector and in accordance with the requirements of NFPA-20. The required amount of water must flow to the atmosphere at the pump test header (Bypass Flow meter testing is not allowed for initial tests).
4. 12 hours prior to the fire flow test, advise the Southern Pines Public Works Inspector of the location of the test and the approximate flow required.

Certification Requirements

1. Contractors Material and Test Certificate for both underground and above ground piping (including flushing, hydrostatic test, and system drain test).
2. A copy of the Test and Maintenance Report for the backflow preventers and ensure that the test report has been place in the BSI Online system.
PHONE: 1-800-414-4990
FAX: 1-888-414-4990
EMAIL: bsionline@backflow.com
3. Fire pump test certification letter.
4. Certification for flow test of all pressure regulating valves.
5. Certification of backflow prevention assembly forward flow test at system design demand.
6. Monitoring Report from UL listed central station showing pretest of all fire alarm, supervisory, and water flow devices.
7. Design engineer's certification statement that the total fire protection system is installed in accordance with the design drawings and meets the requirements of the N.C. State building code.

Note:

Do not request an inspection until the work is ready. Work not ready will be rejected and will require a re-inspection fee to be paid prior to rescheduling the inspection. It is required that the contractor, superintendent, or foreman check the work for code compliance before an inspection is requested.