

Fire Sprinkler Plan Review Submittal Requirements

The following is a list of requirements for all plan submittals. Any information that is not provided may result in the plans being rejected and returned without review.

Application

1. Completed Application Form with all fields filled-in.
1. PDF containing all drawings, calculations, and specifications emailed to firemarshal@cityoftahlequah.com

Site Plan

2. Site Plan showing the location of the entire buildings, water line, fire department connection, and fire hydrant(s).

Plans

3. PDF of plans
4. Plans must be drawn and printed to a scale no smaller than 1/8"

Calculations

5. PDF of calculations

Specifications

6. PDF of specification book/books.

50% Walkthrough

7. One set of reviewed plans with the colorized stamps on it is required to be on site before the walkthrough.
8. One set of reviewed submittal brochure with the colorized stamps on it is required to be on site before the walkthrough.
9. Look at hanger spacing as per NFPA 13 and 13R.
10. Look at outlet locations as per the reviewed plans.
11. Look at the ceiling/roof elevation changes for proper sprinkler protection.
12. Look at ceiling pockets for proper sprinkler protection.
13. Look at sky lights for proper sprinkler protection.
14. If a fire pump is required and within the building it must be within a 1 hour rated barrier for non-high rise structures. A 2 hour barrier is required for high rise structures.

Final Walkthrough

15. One set of reviewed plans with the colorized stamps on it is required to be on site before the walkthrough.
16. One set of reviewed submittal brochure with the colorized stamps on it is required to be on site before the walkthrough.
17. Verify a record of completion is filled out prior to the test
18. Verify the sprinkler system will be monitored by a fire alarm system unless the requirements of IBC 903 are met.
19. Look at outlet locations as per the reviewed plans.
20. Look at the ceiling/roof elevation changes for proper sprinkler protection.
21. Look at ceiling pockets for proper sprinkler protection.
22. Look at sky lights for proper sprinkler protection.
23. Verify the upright, pendent, and sidewall sprinkler heads is at least 3' from all diffusers.

24. Verify the upright and/or pendent sprinkler head is at least 3' from the ceiling fan motor mount.
25. Verify the sidewall sprinkler head is at least 5' from the ceiling fan motor mount.
26. If a fire pump is required it must be within a 1 hour rated barrier for non-high rise structures. A 2 hour barrier is required for high rise structures.
27. Verify a sprinkler head box with a head wrench or head tool is provided.
28. Verify a supply pressure gauge and system pressure gauge is installed.
29. Verify a pressure relief valve is installed on all gridded systems. (if applicable)
30. Verify a ball drip is installed on the fire department connection.
31. Verify the flow switch is installed with the flow arrow going the right direction.
32. Verify the Inspector's Test Valve is installed in a remote location and is properly identified.
33. Verify the riser room is properly identified.
34. Verify a map showing the location of the fire riser(s), Inspector's Test Valve, and fire alarm panel.
35. Verify the Inspector's Test Valve has an orifice provided in the outside elbow or a test/drain assembly giving the equivalent flow of the smallest sprinkler installed.
36. Test the tamper switch (es)-identified as supervisory at panel.
37. Flow water from the Inspectors Test Valve-Flow identified at panel within 60 seconds. If the alarm is more than 60 seconds adjust the flow switch setting. If after the adjustment a quick opening device or accelerator may be required.
38. A weatherproof horn/strobe is required to be installed in an approved location by the local AHJ. The horn/strobe shall activate upon water flow only. (Not a smoke detector, pull station, duct detector, or hood suppression system)
39. Test the low air alarm-identified as trouble at panel. (if applicable)
40. Ensure that the pump is properly tested prior to being put in service. Obtain testing documentation in accordance with NFPA 20 at the time of final inspection. Ensure that the pump provides the following signals at the fire alarm panel:
 - a. Pump running
 - b. Phase Reversal
 - c. Loss of power
41. The drawings indicate that the system is being fed from an elevated tank that is located adjacent to the structure. Ensure that proper water levels and proper freeze protection are maintained as per the requirements set forth in NFPA 22 and as outlined on the drawings.
42. After the installation of the tank is complete, and prior to placing the tank in service, a representative of the tank contractor and a representative of the owner shall conduct a joint inspection of the tank. Written reports of tank inspections shall be made in triplicate.
A copy that has been signed by the contractors and the owners shall be provided to our office and another copy must be maintained on site and available for review by the field agent during inspection. A certificate of occupancy will not be granted until the documentation has been provided to the agent for review.
43. A supervisory signal-initiating device for other than pressure tanks shall initiate a low-water level signal when the water level falls 12 inches. Ensure that a low water level supervisory device is provided and properly wired to the fire alarm panel.

44. A temperature supervisory device for a water storage container exposed to freezing conditions shall initiate two separate and distinctive signals. One signal shall indicate a decrease in water temperature to 40°F and the other shall indicate its restoration to above 40°F. Ensure that the temperature of the water is properly supervised.
45. Shut the tamper switch (if applicable) and continue to test the initiating devices

46. Verify the alarm was received by the monitoring company and dispatch.
47. Verify the appropriate tag is placed on the riser with the correct information (if applicable)
48. Verify a green tag is placed on the fire alarm control panel