This Checklist outlines general requirements. Information contained herein applies to typical instances and may not address all circumstances.

Reference numbers following worksheet statements represent an NFPA code section unless otherwise specified.

<table>
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<th>Approved drawing and above-ground piping certification documents are on site.</th>
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</table>
1. |    | Underground supply testing and flushing is witnessed and underground piping certification is provided. Flushing requirements shall be 880 GPM for 6 in., 1,560 GPM for 8 in., 2,440 GPM for 10 in., 3,520 for 12 in., have them pitot and calculate that flow and confirm the velocity is at least 10 ft/sec. |
3. |    | Hydrostatic test: wet system, 200 PSI for 2 hours and it should include the FDC piping. |
4. |    | Hydrostatic test: dry and double interlock system: 200 PSI for 2 hours and a 40 PSI air leak test for 24 hours with less than 1.5 PSI loss, 16.2.2. |
5. |    | Backflow prevention device is installed in accordance with the approved set of plans and forward flow tested 16.2.5. |
6. |    | Systems subject to pressures greater than 150 PSI shall be hydrostatically tested at 50 PSI above system working pressure, 16.2.1.2. |
7. |    | Operational test of the dry-pipe valve is performed and the quick opening device (500+ gallon systems) is tested, 750+ gallon system must trip within 60 seconds. |
8. |    | PRVs are tested at maximum and normal inlet pressures or as specified be the manufacturer, the supply pressure is recorded on the certificate, a relief valve is on the discharge side and gauges on each side of the valve, 16.2.4. |

**RISER ROOM**

9. |    | The main drain is routed to the exterior with a turned down elbow or an inside drain capable of handling the water flow. A flow test is performed. The main drain pipe is ¾ in. or greater for a riser up to 2 in., 1¼ in. or greater for a riser 2½ in. to 3½ in., 2 in. for a riser 4 in. or greater, 8.15.2.4, 16.2.3.4. |
10. □ □ Water control valves and flow switches are electronically supervised and tested, IFC 903.4 there are 7 exceptions: 13D systems, limited area systems, 13R systems where supply is common to the sprinkler and the domestic system.

11. □ □ Paddle type water flow is not allowed for dry, preaction or deluge systems.

12. □ □ 24 hour monitoring service agency or remote supervising station or proprietary supervising station received signals, IFC 903.4.1.

13. □ □ Water flow alarm is tested and initiates an alarm within 5 minutes, located in accordance with the approved set of plans, and it is properly signed, 16.2.3.1.

14. □ □ High-rise: each floor system shall have water flow device with a test connection and be connected to the fire alarm system.

15. □ □ Permanent system identification signs for each control valve and what portion of the building each valve serves is provided, 6.7.4.

16. □ □ Permanent hydraulic nameplate is attached to the riser, 16.5.1.

17. □ □ Riser in a multistory structure is supported at the lowest level, each alternate level, above and below offsets, and at the top, 9.2.5.3.

18. □ □ If flexible couplings are used, supports above the lowest level are designed in accordance with the approved plans to prevent an upward thrust of the piping, 9.5.3.2.

19. □ □ Gauges are above and below riser check valve, 7.1.1.2.

**FDC**

20. □ □ FDC capped and permanently signed with system type, the required pressure to support the system if the pressure demand is equal to or greater than 150 PSI, and area or building served, 8.16.2.4.7.

21. □ □ FDC has check valve and drip valve, 8.16.2.5.

22. □ □ FDC for wet single riser system connects to the system side, 8.16.2.4.

23. □ □ FDC for wet multi-riser system connects after the main system shutoff valve, 8.16.2.4.

24. □ □ FDC for dry system connects between the indicating and dry-pipe valves.

25. □ □ FDC pipe complies with the size indicated on the plans: FDC is 18 in. to 48 in. above grade and properly supported 8.16.2.

**SPRINKLERS**

26. □ □ Spare sprinklers – Provide at least 6 spare sprinklers for systems designed with 300 or less sprinklers; 12 spare sprinklers for system designed using 300 to 1000 sprinklers, and 24 spare sprinklers for systems designed using more than 1000 sprinklers, 6.2.9.

27. □ □ Replacement wrench(s) are provided, 6.2.9.

28. □ □ Sprinklers shall be a minimum of 4 inches from the wall and be properly spaced, 8.6.3.3.
Sprinkler is equipped with a guard if it subject to damage.

Sprinklers are not painted or covered.

ESFR upright deflectors are a minimum 7 in. above the top of the pipe, 8.12.5.3.2.1.

ESFR sprinklers are at least 1 ft. horizontally from the bottom edge of bar joist or open truss and at least 3 ft. above the top of the storage level, 8.12.6.

The proper type and temperature sprinklers are used and match plans.

Escutcheon plates are installed.

Sprinklers are not obstructed, 8.5.5-8.12.5.

PIPED: HANGERS, SEISMIC, AND PENETRATIONS

Piping layout and pipe size are the same as the plans.

Pipe penetrations have proper clearance 2 in. for pipe 1 in. to 3½ in., 4 in. for pipe 4 in. and larger, 9.3.

When flexible couplings are used in risers, above and below floor penetrations of multi-story structures, near penetrations of concrete or masonry walls, and near expansion joints, their location is in accordance with Section 9.3.2.3 (1)-(4).

Minimum clearance around pipes penetrating construction element listed in 9.3.4.1 is in accordance with 9.3.4.2 unless the requirements of 9.3.4.3 – 9.3.4.5 are met.

A seismic separation assembly is provided at building seismic joints, 9.3.3.

Lateral sway bracing spacing is in compliance with the approved set of plans, 9.3.5.3.3

Special CA amendment “Lag screws or powder-driven fasteners shall not be used to attach braces to the building structure.”

Lateral sway bracing is within 20 ft. of the end of the pipe, 9.3.5.3.2.

Special CA amendment “where pipe is used for sway bracing, it shall have a wall thickness of not less than Schedule 40.

Spacing does not exceed 80 ft. for longitudinal sway bracing, which is required for feed and cross mains, and the last brace is within 40 ft. of the end of the pipe, 9.3.5.4.1 and 9.3.5.4.3.

A four-way sway brace spacing is not greater than 25 ft. and a four way brace is located at the top of the riser if the top of the riser exceeds 3 ft. in length, 9.3.5.5.

Longitudinal and lateral bracing is provided for each run of pipe between the change of pipe direction unless the pipe run is less than 12 ft., 9.3.5.11.

Sprigs greater than 4 ft. are restrained from lateral movement, 9.3.6.5.

Splayed seismic bracing wire, wrap-around u-hooks, or lateral sway bracing shall not exceed 30 ft. spacing and are used to restrict sprinkler movement that could impact the building, equipment or finishing materials, 9.3.6.4.
Y N

48. □ □ Restraining straps are on all C-clamps and the strap is bolted through if there is not a lip on the beam, 9.3.7.1.

49. □ □ Branch lines have one hanger per section of pipe, 9.2.3.2.

50. □ □ Mains and cross mains have one hanger between each branch line and at the end of the main.

51. □ □ The maximum distance between the end sprinkler and hanger is 36 in. for 1in. pipe, 48 in. For 1 ¼ in., and 60 in. for 1½ in. pipe and greater, 9.2.4.

52. □ □ Risers in multistory buildings have supports at the lowest level, at each alternate level, below offsets, and at the top, 9.2.5.3.

53. □ □ Risers in vertical shafts or buildings with ceiling greater than 25 ft. have support for each pipe section.

54. □ □ Hangers are not within 3 in. of upright sprinklers, 9.2.3.3.

**DRY AND PRE-ACTION SYSTEMS**

55. □ □ Dry system compressor, fill line, pressure gauges, check valve and shutoff valve and relief valve are installed in accordance with 7.2.6.2. The system fills the system within 30 minutes, 7.2.6.2.2.

56. □ □ Preaktion and deluge systems are tripped by activation of the detection system.

57. □ □ Riser room is heated, 7.2.5.

58. □ □ Air pressure is set according to the manufacture instruction document or at least 20 PSI above the trip pressure, 7.2.6.7.1.

59. □ □ Preaktion systems exceeding 20 sprinklers shall be supervised in accordance with 7.3.2.3.1.

60. □ □ Non-interlock and double interlock preaction systems supervise pipe pressure to maintain a minimum internal pressure of 7 PSI, 7.3.2.3.2.

**Additional Comments:**

Inspection Date: Approved □ or Disapproved □  
FD Inspector:

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FD Inspector:

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FD Inspector: