

July 1, 2010	<b>SANTA ROSA FIRE DEPARTMENT</b> <b>FIRE PREVENTION BUREAU</b> <b>INSPECTION CHECKLIST</b>
	<b>FIRE SPRINKLER SYSTEM TENANT IMPROVEMENT</b> <b>INSPECTION - NFPA 13 - 2002</b>

<b>Address:</b>		<b>Permit #:</b>
<b>Inspector:</b>	<b>Date:</b>	<b>Status:</b>
<b>Inspector:</b>	<b>Date:</b>	<b>Status:</b>
<b>A-Approved, R-Re-inspection Required</b>		

**This Checklist outlines general requirements for Clean Agent Fire Extinguishing Systems. 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.

**GENERAL**

- |    |                          |                          |   |
|----|--------------------------|--------------------------|---|
|    | <b>Y</b>                 | <b>N</b>                 |   |
| 1. | <input type="checkbox"/> | <input type="checkbox"/> | Hydrostatic test: wet system, 200 PSI for 2 hours or 50 over static.  |
| 2. | <input type="checkbox"/> | <input type="checkbox"/> | 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. |
| 3. | <input type="checkbox"/> | <input type="checkbox"/> | Systems subject to pressures greater than 150 PSI shall be hydrostatically tested at 50 PSI above system working pressure, 16.2.1.2.                |

**SPRINKLERS**

- |     |                          |                          |   |
|-----|--------------------------|--------------------------|---|
|     | <b>Y</b>                 | <b>N</b>                 |   |
| 4.  | <input type="checkbox"/> | <input type="checkbox"/> | 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. |
| 5.  | <input type="checkbox"/> | <input type="checkbox"/> | Replacement wrench(s) are provided, 6.2.9.  |
| 6.  | <input type="checkbox"/> | <input type="checkbox"/> | Sprinklers shall be a minimum of 4 inches from the wall and be properly spaced, 8.6.3.3.  |
| 7.  | <input type="checkbox"/> | <input type="checkbox"/> | Sprinkler is equipped with a guard if it subject to damage.   |
| 8.  | <input type="checkbox"/> | <input type="checkbox"/> | Sprinklers are not painted or covered.  |
| 9.  | <input type="checkbox"/> | <input type="checkbox"/> | ESFR upright deflectors are a minimum 7 in. above the top of the pipe, 8.12.5.3.2.1.  |
| 10. | <input type="checkbox"/> | <input type="checkbox"/> | EFSR 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.  |
| 11. | <input type="checkbox"/> | <input type="checkbox"/> | The proper type and temperature sprinklers are used and match plans.  |

- |     | Y                        | N                        |  |
|-----|--------------------------|--------------------------|--|
| 12. | <input type="checkbox"/> | <input type="checkbox"/> | Escutcheon plates are installed.             |
| 13. | <input type="checkbox"/> | <input type="checkbox"/> | Sprinklers are not obstructed, 8.5.5-8.12.5. |

**PIPE: HANGERS, SEISMIC, AND PENETRATIONS**

- |     |                          |                          |  |
|-----|--------------------------|--------------------------|--|
| 14. | <input type="checkbox"/> | <input type="checkbox"/> | Piping layout and pipe size are the same as the plans.   |
| 15. | <input type="checkbox"/> | <input type="checkbox"/> | Pipe penetrations have proper clearance 2 in. for pipe 1 in. to 3½ in., 4 in. for pipe 4 in. and larger, 9.3.  |
| 16. | <input type="checkbox"/> | <input type="checkbox"/> | 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). |
| 17. | <input type="checkbox"/> | <input type="checkbox"/> | 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.  |
| 18. | <input type="checkbox"/> | <input type="checkbox"/> | A seismic separation assembly is provided at building seismic joints, 9.3.3.   |
| 19. | <input type="checkbox"/> | <input type="checkbox"/> | Lateral sway bracing spacing is in compliance with the approved set of plans, 9.3.5.3.3 Special CA amendment <i>“Lag screws or powder-driven fasteners shall not be used to attach braces to the building structure.”</i>                          |
| 20. | <input type="checkbox"/> | <input type="checkbox"/> | Lateral sway bracing is within 20 ft. of the end of the pipe, 9.3.5.3.2. Special CA amendment <i>“where pipe is used for sway bracing, it shall have a wall thickness of not less than Schedule 40.”</i>   |
| 21. | <input type="checkbox"/> | <input type="checkbox"/> | 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.   |
| 22. | <input type="checkbox"/> | <input type="checkbox"/> | 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.   |
| 23. | <input type="checkbox"/> | <input type="checkbox"/> | 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.  |
| 24. | <input type="checkbox"/> | <input type="checkbox"/> | Sprigs greater than 4 ft. are restrained from lateral movement, 9.3.6.5.   |
| 25. | <input type="checkbox"/> | <input type="checkbox"/> | 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.                  |
| 25. | <input type="checkbox"/> | <input type="checkbox"/> | 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.   |
| 26. | <input type="checkbox"/> | <input type="checkbox"/> | Branch lines have one hanger per section of pipe, 9.2.3.2.   |
| 27. | <input type="checkbox"/> | <input type="checkbox"/> | Mains and cross mains have one hanger between each branch line and at the end of the main.   |
| 28. | <input type="checkbox"/> | <input type="checkbox"/> | The maximum distance between the end sprinkler and hanger is 36 in. for 1 in. pipe, 48 in. For 1¼ in., and 60 in. for 1½ in. pipe and greater, 9.2.4.  |
| 29. | <input type="checkbox"/> | <input type="checkbox"/> | Hangers are not within 3 in. of upright sprinklers, 9.2.3.3.   |