

2010 Plan Review - Fire Sprinkler System Reminder List

Applicable Codes and Standards

CBC 2010, CFC 2010

NFPA 13 2010

Instructions: The following items are to be verified for completeness prior to submitting to OSHPD for plan review

Submittal Requirements

1. Two (2) Sets of Plans and Calculations
2. Two (2) Sets of Equipment Submittals (cut sheets and product information)
3. Water Supply and Pressure Data from City or District. (test data must be less than a year old)
4. Transmittal Letter with Name, Address, Phone, Fax, and License Number of Sprinkler Contractor

CHK. N/A I. General Information- Working Plans

- | CHK. | N/A | I. |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Name of Owner and Occupant |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Location, Including Street Address |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Symbol Legend, Point of Compass, Graphic Scale, Sheet Numbers |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Type of Construction and Occupancy of Each Building |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. Location of Fire Rated Wall Assemblies. Provide "Through Penetration" Fire Stop Details and Listings |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. Full Height Cross Section of Building Showing Location of Fire Sprinkler Heads and Piping |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. Ceiling Heights and Slopes |
| <input type="checkbox"/> | <input type="checkbox"/> | 8. Use and Function of Each Area or Room |
| <input type="checkbox"/> | <input type="checkbox"/> | 9. Any Small Enclosures in Which No Sprinklers are to Be Installed (Include Justification). |
| <input type="checkbox"/> | <input type="checkbox"/> | 10. Make, Type, Model, SIN Number and Nominal K-Factor of Sprinklers. Indicate Existing Sprinkler Type. |
| <input type="checkbox"/> | <input type="checkbox"/> | 11. Temperature Rating and Location of High Temperature Sprinklers |
| <input type="checkbox"/> | <input type="checkbox"/> | 12. Number of Sprinklers on Each Riser Per Floor and Total Area of Space Being Protected |
| <input type="checkbox"/> | <input type="checkbox"/> | 13. Total Number of Sprinklers on Each Dry Pipe, Preaction, or Deluge System |
| <input type="checkbox"/> | <input type="checkbox"/> | 14. Nominal Pipe Size and Cutting Length of Pipe |
| <input type="checkbox"/> | <input type="checkbox"/> | 15. Location and Complete Detail of Sprinkler and Standpipe Risers |
| <input type="checkbox"/> | <input type="checkbox"/> | 16. Types of Fittings and Joints and Location of All Welds (Welding Inspection to Be Included on TIO) |
| <input type="checkbox"/> | <input type="checkbox"/> | 17. Type and Location of Hangers, Trapezes, and Braces (Provide calculations for Sway Bracing) |
| <input type="checkbox"/> | <input type="checkbox"/> | 18. All Control Valves, Check Valves, Drain Pipes, and Test Connections |
| <input type="checkbox"/> | <input type="checkbox"/> | 19. Make, Type, Model and Size of Alarm, Dry Pipe, Preaction or Deluge Valve |
| <input type="checkbox"/> | <input type="checkbox"/> | 20. Size and Location of Standpipe Risers, Hose Connections and Fire Department Connections |
| <input type="checkbox"/> | <input type="checkbox"/> | 21. Reference Plans of the Private Fire Service Main to the City Connection Including Size, Type and Location of Pipe, Valves and Backflow Prevention Devices. |
| <input type="checkbox"/> | <input type="checkbox"/> | 22. Size, Location, and Piping Arrangements for Fire Department Connections |
| <input type="checkbox"/> | <input type="checkbox"/> | 23. Type and Location of Small Hand / Hose Equipment and Fire Pumps |
| <input type="checkbox"/> | <input type="checkbox"/> | 24. The Information on the Hydraulic Data Nameplate and Hydraulic Reference Points Shown on the Plan that Correspond to the Hydraulic Calculations |
| <input type="checkbox"/> | <input type="checkbox"/> | 25. The Pressure Setting for Pressure Reducing/Regulating Valves |
| <input type="checkbox"/> | <input type="checkbox"/> | 26. Relative Elevations of Sprinklers and Hydraulic Reference Points |
| <input type="checkbox"/> | <input type="checkbox"/> | 27. Fire Authority Signatures for Appliance Locations and Water Supply |
| <input type="checkbox"/> | <input type="checkbox"/> | 28. Reference CBC Amendments to NFPA 13 in CBC Chapter 35 |
| <input type="checkbox"/> | <input type="checkbox"/> | 29. Reference OSHPD Policy Intent and Code Application Notices |
| <input type="checkbox"/> | <input type="checkbox"/> | 30. Indicate edition of NFPA 13. Current Edition is NFPA 13, 2010. |
| <input type="checkbox"/> | <input type="checkbox"/> | 31. NFPA 13, Chapter 22 Section 22.1.3 & 22.2.1 for Additional Items Not Listed On This Checklist. |

000000 2010 Plan Review - Fire Sprinkler System Reminder List

- | <u>CHK.</u> | <u>N/A</u> | II. Hydraulic Calculation Worksheets |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Hydraulic Calculations to Meet NFPA 13, 22.3.5 with Sheets in the Following Order: Summary, Graph, Supply Analysis, Node Analysis and Detailed Worksheets. |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Sheet Number |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Sprinkler Discharge, Discharge Constant (K), and Flow in GPM |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Hydraulic Reference Points |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. Provide Hazard Classification For All Areas to be Sprinklered |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. Indicate if System is Hydraulic and Pipe Schedule mix. |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. Pipe Size, Pipe Lengths, and Center to Center of Fittings |
| <input type="checkbox"/> | <input type="checkbox"/> | 8. Equivalent Pipe Lengths for Fittings and Devices |
| <input type="checkbox"/> | <input type="checkbox"/> | 9. Friction Loss in psi/ft of Pipe and Appropriate "C" factor of Pipe |
| <input type="checkbox"/> | <input type="checkbox"/> | 10. Total Friction Loss Between Reference Points |
| <input type="checkbox"/> | <input type="checkbox"/> | 11. Elevation Head in psi at each Reference Point |
| <input type="checkbox"/> | <input type="checkbox"/> | 12. Required pressure in psi Between Reference Points |
| <input type="checkbox"/> | <input type="checkbox"/> | 13. Velocity Pressure and Normal Pressure if Included in Calculations |
| <input type="checkbox"/> | <input type="checkbox"/> | 14. Diagram of Most Remote Area Showing Sprinkler Nodes Included in Calculations |
| <input type="checkbox"/> | <input type="checkbox"/> | 15. Graph Sheet Showing Supply Curve, Demand and Hose Demand |

NOTE

Compliance with all items on this list does not necessarily assure compliance with all provisions of the applicable codes and standards. This check list should be used only by persons with a comprehensive knowledge of the applicable codes and standards.

OSHPD Policy Intent Notices and Code Application Notices.

<http://www.oshpd.ca.gov/FDD/Regulations/pinscans.html>

OSHPD Project Review Status

http://www.oshpd.ca.gov/FDD/Project_Tracking/index.asp

OSHPD Public Use Forms

<http://www.oshpd.ca.gov/FDD/Forms/index.html>