

COUNTY OF ORANGEBURG

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Fire Sprinkler Plan Review Checklist

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 County (test data must be less than a year old)
4. Transmittal Letter with Name, Address, Phone, Fax, and License Number of Sprinkler Contractor

<u>CHK</u>	<u>N/A</u>	I. General Information- Working Plans
<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 Stopping 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. Use and Function of Each Area or Room
<input type="checkbox"/>	<input type="checkbox"/>	8. Location and Size of Concealed Spaces, Closets, Attics, and Bathrooms
<input type="checkbox"/>	<input type="checkbox"/>	9. Any Small Enclosures in Which No Sprinklers Are to Be Installed (Include Justificaton)
<input type="checkbox"/>	<input type="checkbox"/>	10. Make, Type, Model, 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 Legnth 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 Calaculations 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. Kind and Location of Alarm Bells and Standpipe Riser Fire Department Connections
<input type="checkbox"/>	<input type="checkbox"/>	20. Size, Location, and Piping Arrangements for Fire Department Connections
<input type="checkbox"/>	<input type="checkbox"/>	21. Type and Location of Small Hand / Hose Equipment and Fire Pumps
<input type="checkbox"/>	<input type="checkbox"/>	22. Fire Authority Signatures for Appliance Locations and Water Supply
<input type="checkbox"/>	<input type="checkbox"/>	23. Reference CBC Amendments to NFPA 13 in CBC Chapter 35, Section 3505
<input type="checkbox"/>	<input type="checkbox"/>	24. Reference OSHPD Policy Intent and Code Application Notices
<input type="checkbox"/>	<input type="checkbox"/>	25. Indicate edition of NFPA 13. Current Edition is NFPA 13, 2007
<input type="checkbox"/>	<input type="checkbox"/>	26. See NFPA 13, Chapter 8 Section 8-1.1 & 8-2.1 for Additional Items Not Listed On This Ckecklist..

II. Hydraulic Calculation Worksheets

- 1. Sheet Number
- 2. Sprinkler Discharge, Discharge Constant (K), and Flow in GPM
- 3. Hydraulic Reference Points
- 4. Provide Hazard Classification For All Areas to be Sprinklered
- 5. Indicate if System is Hydraulic and Pipe Schedule mix.
- 6. Pipe Size, Pipe Lengths, and Center to Center of Fittings
- 7. Equivalent Pipe Lengths for Fittings and Devices
- 8. Friction Loss in psi/ft of Pipe and Appropriate "C" factor of Pipe
- 9. Total Friction Loss Between Reference Points
- 10. Elevation Head in psi at each Reference Point
- 11. Required pressure in psi Between Reference Points
- 12. Velocity Pressure and Normal Pressure if Included in Calculations
- 13. Diagram of Most Remote Area Showing Sprinkler Nodes Included in Calculations
- 14. Graph Sheet Showing Supply Curve, Demand and Hose Demand

NOTE:

The purpose of this list is to reduce oversights and to achieve minimum levels of uniformity and completeness. The use of this reminder list does not constitute a complete plan review. Compliance with all items on this list does not necessarily assure compliance with all provisions of the applicable codes and standards. This reminder list should be used only by persons with a comprehensive knowledge of the applicable codes and standards.