



FORSYTH COUNTY FIRE MARSHAL'S OFFICE

Sprinkler Plan Review Requirements

The following information must be completed before review and submitted with permit application

Project Name: _____ Address: _____

Sprinkler Requirements	OK	Absent	N/A	Comments
An approved site plan by Winston-Salem/Forsyth County Planning Department per set of plans (most up to date, check for revisions).				
FDC, PIV, system riser and alarm bell location match approved utility plan.				
FDC needs to be within 100 feet of a public fire hydrant.				
Square footage per permitted area and per system shown on the plans.				
All spaces of the structure labeled per use.				
Show, make, model, size, K-factor, temp, style and quantity for all sprinkler heads (Includes cut sheets on all sprinkler heads and pump data booklets. Pump room details must be on the plans. Also, meet all requirements of NFPA 20 and NFPA 13).				
Type of system and type of hazard each system is designed for on all plans.				
Inspector test and auxiliary drains.				
Show detail of each type of hanger.				
Show accurate freeze protection details.				
Include UL design number when penetrating a rated wall and address the freezing issues.				
Show all sprinkler head dimensions. Also show sq ft of all rooms when using the small room rule, identify all areas with a symbol, S.S.R. is an example (Small room rule to be used only in light hazard occupancies).				

Rack: Show rack cross sections and Commodity class per NFPA 13 on your plans.				
All buildings with racks must fill out an Owner's Information Certificate (NFPA 13 Figure A. 14 .1 (b)).				
Show all sprinkler pipe sizes				
Show all elevation changes of pipe on the plans				
An accurate riser detail (Identify each system).				
Key plan of Zone Map to show the area of the building illustrated on the page.				
All attic systems must show a cross section and identify all construction materials used.				
Note the construction type per the architectural drawings and show a cross section to identify the roof construction, canopies and unique areas.				
For different occupancy areas, provide a note including how and where each design criteria was derived from.				
Address all elevator rooms or shafts per NFPA 13 (Sprinklers are required at the top and bottom of the shaft. Exception must be called out on plans).				
Label all FDC and standpipes per NC Fire Code and NFPA.				
Penetration though any rated wall or floor needs to be shown on the plans. Provide a detailed and approved lab design number (Must have general note in not applicable).				
Show size and locations of all hanging heaters and use intermediate according (Must have general note if not applicable).				
Show all roll back doors and overhead doors (Must have a general note in not applicable).				
Show all skylights, domes, and unusual ceilings, including all ceiling slopes (Must have a general note in not applicable).				

Show all canopies, docks, and obstructions (Must have a general note in not applicable).				
Identify all HVAC ducts and other Obstructions over 4 ft. (Must have a general note in not applicable).				
Show hydraulic calculation information on the plans for each remote area.				
Show all hydraulic reference.				
Dry System- increase all remote areas by 30%. Increase remote areas by an additional 30% if slope of the ceiling is greater than 2 in 12. Show sloping direction of all sprinkler pipes in the dry system. Slope must meet minimum requirements of NFPA 13.				
Slope of ceiling (If greater than 2 in 12 or 16.7% and is on-storage, your remote area must increase by 30%, need cross section to verify).				
A note reflecting maximum sprinkler head spacing for each of occupancy shown on the plans.				
Stages made of anything other than non-combustible material, FR wood or other approved methods will need to be protected per NFPA 13. All combustible concealed spaces must be indicated and addressed per NFPA 13.				
Two stapled sets of plans and completion of the form with all attachments.				
Name of the person responsible for designing the sprinkler plans.				
N.I.C.E.T. or PE stamp must be on the plans.				
Show floor area size of each system. Also show volume of all dry systems (C-factor must be 100 for all dry systems unless galvanized pipe in your system).				
Remote area is correctly and accurately outlined. If reduced, show a cross section and elevations. (Example, if the remote area is not exactly 1500sqft, shows the actual size on the plans).				
Correct hydraulic calculations with a 10psi safety margin and cover sheet that clearly identifies each area calculated				

Additional Notes:

The above is not an all-inclusive list. Plans must meet all NFPA requirements. Please refer to the current NC Fire Prevention Code for the Version adopted.

Provide contact information for person responsible for the competition of this package:

Name: _____ Phone Number: _____

Date: _____