



Newton County Fire Prevention Bureau
4136 GA Hwy 278
Covington, GA 30014
678-625-5015

SPRINKLER PLAN REVIEW SUBMITTAL

To: Fire Sprinkler Design or Contracting Firms

The Newton County Fire Prevention Bureau would like to take this opportunity to inform you of our desire to achieve a standardized means of formatting for all future fire sprinkler system design plans for a submittal to us for review.

In accordance with The State of Georgia's minimum requirements and the ordinances of Newton County for the installation of supervised automatic sprinkler systems (NFPA 13, NFPA 13 R & NFPA 13D). All sprinkler contractors performing work on sprinkler systems in Newton County shall apply for a Sprinkler permit through Newton County Development Services 1113 Usher St. Covington, GA 30014 at 678-625-1651. Fees for plan review and permits are as follow any facility that has the total square footage less than 5000 shall be \$100 all square footage greater than 5000 shall be \$150. **All supervised automatic sprinkler systems and associated submittal documents for systems installed within Newton County are subject to Newton county Fire Prevention Bureau's review and inspection process.**

The submitted documents shall be prepared by a professional engineer registered by the State of Georgia, a design professional that has a current State License and or a person that has NICET certification in sprinkler design and a current State License. Supporting documentation shall be submitted with all plan submittals.

The following will describe in general information necessary for our review:

- The property owner shall provide the certificate of ownership prior to any plan review. (see our office for this document)
- Written scope of work which includes the design standares, overview of the installation and the intent of the system.
- A complete floor plan which includes the use and the labeling of each room within the building and all dimensional criteria of the rooms or areas being protected. (e.g., length, width, ceiling heights, and wall construction)
- All depicted detail and locations of sprinkler risers, piping, sizes, supports, heads, drains, ITV's and valves.

- Manufacturer's equipment and material lists.
- Standard or Specific Ruling being used in the design.
- All obstruction detail and mechanical equipment that could affect sprinkler operation.

NOTE: Deviation from the approved plans shall only be approved by Newton County Fire Prevention Bureau.

The plans shall be submitted by the following means:

- (3) full sets of paper plans to include the appropriate hydraulic calculations and manufacturer's material list or one electronic version in (*pdf) formats) The sprinkler contractor shall be responsible in giving a full set of approved plans to the property owner and to have a set on the job site at all times.

The following describe what details the submitted plans shall have:

WORKING DRAWINGS: (Extracted from NFPA 13)

Working plans shall be drawn to an indicated scale, on sheets of uniform size, with a plan of each floor, and shall show those items from the following list that pertain to the design of the system (minimum page size shall be 12 x17).

- Name of the property owner and the occupant.
- Location, including street address
- Name, address, phone number and email address of submittal person.
- Point of compass
- Full height cross section, or schematic diagram, including structural member information if required for clarity and including the ceiling construction and method of protection for nonmetallic piping.
- Location of partitions
- Location of firewalls and barriers and location smoke walls and partitions.
- Occupancy class of each room.
- Hazard classification of all system design.
- Location and size of concealed spaces, closets, attics, and bathrooms.
- Any small enclosures in which no sprinklers are to be installed.
- Size of county main in the street and whether dead end or circulating; if dead end, direction and distance to the nearest circulating main; and county main test results and system elevation relative to test hydrant.
- Other sources of water supply, with pressure or elevation.
- Make, type, model, and nominal K-factor of sprinklers including SIMS numbers.
- Temperature rating and location of high-temperature sprinklers.
- Total area protected by each system on each floor.
- The number of sprinklers per riser per floor.

- Total number of sprinklers on each dry pipe system, preaction, combined dry pipe-preaction systems or deluge system.
- Approximate capacity in gallons of each dry pipe system.
- Pipe type and schedule thickness.
- Nominal pipe size and cutting lengths of pipe (or center-to-center dimensions). Where typical branch lines prevail, it shall be necessary to size only one typical line.
- Location and size of riser nipples.
- Type of fittings and joints and location of all welds and bends. The contractor shall specify on the drawing any sections to be shop welded and the type of fittings or formations to be used. (Provide a copy of the welder's stamp)
- Type and locations of hangers, sleeves, braces, and methods of securing sprinklers when applicable.
- Make, type. Model, and the size of alarm or dry pipe valve.
- Make, type, model, and size of all preaction or deluge valves.
- What kind and location of the alarm bell?
- Size and location of stand pipe risers, hose outlets, hand hose, monitor nozzles, and related equipment.
- Private fire service main sizes, length, locations, weights, materials, point of connection, to the public water main; the sizes, types, and locations of valves, valve indicators, regulators, meters and valve pits; and the depth that the top of the pipe is laid below grade.
- Piping provisions for flushing.
- Where the equipment is to be installed as an addition to an existing system, enough of the existing system indicated on the plans to make all conditions clear.
- For hydraulically designed systems, the information on the hydraulic data name plate.
- A graphic representation of the scale used on all plans.
- Hydraulic references points shown on the plan that corresponds with comparable reference points on the hydraulic calculation sheets.
- The minimum rate of water application (density or flow or discharge pressure), the design area of water application, in-rack sprinkler demand, and the water required for hose streams both inside and outside.
- The total quantity of water and the pressure required noted at the common reference point for each system.
- Relative elevations of sprinklers, junction points, and supply or reference points.
- If room design method is used, all unprotected wall openings throughout the floor protected.
- Calculation of loads for sizing and details of sway bracing.
- The setting of pressure reducing valves.
- Information about the back-flow preventers (manufactures, size and type).
- Sze and location of hydrants, showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether house houses and equipment are to

be provided, and whom, shall be indicated. Static and residual hydrants that where used in the flow test shall be shown.

- Size, location, and piping arrangement of fire department connections. (10,000ft² > shall have a 5-inch Storz connection on FDC) (see attached documentation)
- Ceiling/roof heights and slopes not shown in the full height cross section.
- There shall be a reference to what addition Of NFPA 13 is used in the design.

NOTE: Deviation from the supply details above will result in plans being refused for review.

WATER SUPPLY INFORMATION:

- Location and elevation of static and residual test gauge with the relation to the riser reference point.
- Flow location
- Static pressure, psi. (bar)
- Residual pressure, psi (bar)
- Flow, gpm. (K/min)
- Date of test
- Time of test
- Name of who conducted the test.
- Other sources of water supply, with pressure or elevation
- Contractor shall provide current data (no later than 6 months from the date of submittal).

NOTE: Deviation from supplying details above will result in plans being refused for review.

HYDRAULIC CALCULATION FORMS:

Hydraulic calculations shall be prepared on form sheets that include a summary sheet, detailed worksheets, and a graph sheet. All Computer Generated Hydraulic Reports shall be prepared on form sheets that include a summary sheet, a graph sheet, a water supply analysis, a node analysis and detailed worksheets.

NOTE: Deviation from supplying details will result in plans being refused for review.

All requested details noted above for paper submittals shall be included in plans submitted in electronic shall be formatted as (*pdf) manufacture's equipment and device listings and hydraulic calculations.

All submittals shall be a complete package and turned in at Newton County Development Services located at 1113 Usher ST Covington, GA 30014. All review fees shall be paid fully prior

to the review and the issuance of the sprinkler permit. Newton County Fire Prevention Bureau will have the results back within approximately 10 day from the date of submittal. When the plans have been completed Newton County Fire Prevention Bureau will call for pick up at our office located at 4136 A Hwy 278 NE Covington, Ga 30014.

RESULTS:

Plans will be marked APPROVED, DENIED, or APPROVED WITH COMMENTS.

- APPROVED PLANS: Will be stamped and signed.
- Attached to approved plans will be the permit, owner's certificate (to be filled out by property owner) a procedure sheet or under ground inspection and a procedure sheet for the above ground inspection.
- Attached will also be cut sheets for items that may be needed from Knox.
- DENIED PLANS: will be marked up in red and a comment sheet will be attached. All comments shall be corrected and plans will be re submitted along with the red line drawings.
- PLAN APPROVED WITH COMMENTS: will be stamped for approval under the condition that all issues are corrected prior to inspection. These plans will have a comment sheet attached along with the same documentation as a set of approved plans.
- All inspection for sprinkler systems shall be scheduled no less than 48 hours prior.