

Town of Ogden
Fire Marshal's Office
269 Ogden Center Road
Spencerport, NY 14559
585-617-6195

Automatic Fire Sprinkler Plan Review and Permit Requirements

This checklist has been developed to provide the highest level of service to the residents and visitors of the Town of Ogden. The goal of automatic fire sprinkler plan reviews conducted by the Fire Marshal's Office is to ensure the design of the system meets the minimum requirements of NFPA 13 and the adopted codes and ordinances. To meet this goal, the submitted plans and supporting documentation must contain the information listed below to conduct a thorough review.

Administration

*Working shop drawings can be produced by technicians, designers or contractors meeting NICET Level 3 or greater for the layout of water-based fire protection systems. However, the working shop drawings, hydraulic calculations, and product data shall be reviewed and approved by the design engineer or licensed design professional and stamped prior to submission. ALL shop drawings must include a Town of Ogden Fire Marshal Permit with the associated fee. The design engineer or licensed design professional will typically provide a preliminary design within the construction documents that will contain sufficient detail to identify the scope of work and allow for competitive bidding which is broken down in the plan's submittal checklist below. The responsibilities of the design engineer or licensed professional include but are not limited to:

1. Evaluate the broad range of hazards and fire protection schemes required to develop a workable, integrated fire sprinkler solution.
2. Provide design documents outlined in this checklist.
3. Review shop drawings and submittals to ensure conformance with design documents and applicable codes and standards.
4. Monitor the installation of fire protection systems and participate in the acceptance and commissioning.

Plans Submittal Checklist

- ☐ Owner's name, address and telephone number.
- ☐ Contractor's name, address and telephone number.
- ☐ Project location, including street address.
- ☐ North arrow on site plan.
- ☐ Full height cross section, or schematic diagram, including structural member information, if required, for clarity and including ceiling construction and method of protection for non-metallic piping.
- ☐ Location of partitions and fire walls.
- ☐ Construction type and occupancy load.
- ☐ Location and size of concealed spaces, closets, attics, and bathrooms.

- ☐ Any small enclosures in which no sprinklers are to be installed.
- ☐ Size of water main in street and whether dead end or circulating. If dead end, direction, and distance to nearest circulating main. Water 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.
- ☐ Temperature rating and location of high-temperature sprinklers.
- ☐ Total area protected by each system on each floor.
- ☐ Number of sprinklers on each riser per floor.
- ☐ Total number of sprinklers on each dry pipe system, preaction system, combined dry pipe-preaction system, or deluge system.
- ☐ Approximate capacity in gallons of each dry pipe system.
- ☐ Pipe type and schedule of wall 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 drawing any sections to be shop welded and the type of fittings or formations to be used.
- ☐ Type and locations of hangers, sleeves, braces, and methods of securing sprinklers, when applicable.
- ☐ All control valves, check valves, drainpipes, and test connections.
- ☐ Make, type, model, and size of alarm or dry pipe valve.
- ☐ Make, type, model, and size of preaction or deluge valve.
- ☐ Location of all "Exterior Audible" appliances include fire sprinkler bells or horns as applicable.
- ☐ Size and location of standpipe risers, hose outlets, and related equipment.
- ☐ Private fire service main sizes, lengths, locations, weights, materials, point of connection to the water main. Sizes, types and locations of valves, valve indicators, regulators, meters, and valve pits. Depth of the pipe below grade is also needed.
- ☐ 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, information must be on the hydraulic nameplate.
- ☐ A graphic presentation of the scale used on all plans.
- ☐ Hydraulic reference points shown on the plan that correspond with comparable reference points on the hydraulic calculation sheets.
- ☐ The minimum rate of water application (density), 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 pressure required noted at a 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 for pressure-reducing valves.
- ☐ Information about backflow preventers (manufacturer, size, type)
- ☐ Information about antifreeze solution used (type and amount)

- ☐ Size and location of fire hydrants. Static and residual pressures that were used in flow tests shall be shown.
- ☐ Size, location, and piping arrangement of fire department connections

Where Applicable:

Water Supply Capacity Information. The following information shall be included:

Location and elevation of static and residual test gauge with relation to

1. The riser reference point
2. Flow location
3. Static pressure (psi)
4. Residual pressure (psi)
5. Flow (gpm)
6. Date
7. Time
8. Test conducted by or information supplied by
9. Other sources of water supply, with pressure or elevation