



City of Novi

Fire Protection Plan Submittal

SPRINKLER SYSTEMS

The purpose of this document is to inform and educate contractors submitting fire sprinkler shop drawings for review by either the City of Novi or one of our Third Party Reviewing Consultants of what is expected on the plans. The intent is to expedite the review and permitting process resulting in a quicker permit issuance, timely installation, and successful inspection.

A minimum of three complete sets of plans and supporting documents shall be submitted for review (4 sets when being submitted to a third party reviewer). This will allow one set to be returned to the applicant.

Not all submittals will require all of the following items and other submittals may require items not included on this list. Designers/Applicants should contact the Novi Building (248-347-0415) or Fire Prevention Bureau (248-349-2293) with questions.

1. All submittals must have an application with the following information:
 - Project name and address
 - Contractor company name, contact name, address, phone and fax numbers
 - Owner name, contact name, address, phone and fax numbers
 - Architects name, contact name, address, phone and fax numbers
 - A written description or scope of the project

***The contractor must be registered for the permit to be logged in. Please include a copy of the driver's license and contractor's license. The fee for registration is \$15.00 and can be paid at time of permit issuance.**

2. For projects that are being designed by an Architect or another Design Professional, the Registered Design Professional in Responsible Charge (i.e., the Architect of the tenant build-out) must review the shop drawings and provide four signed & sealed (original signature & seal required) deferred submittal statements on their letter head that indicates the following:

"As the Registered Design Professional in Responsible Charge for this project, I have reviewed this deferred submittal as required by the current Michigan Construction Codes and it is my professional opinion that the submitted information has been found to be in general conformance with the design of the building".

MBC (106.3.4.2)

3. In addition to the deferred submittal statements (above), all documents must be either signed and sealed by a Michigan Registered Professional or signed by a NICET Certified Technologist (Level III or IV). If the NICET option is being used, provide a current copy of the Technologist's certificate.
City of Novi Local Requirements.
4. Hydraulic calculations shall be provided for all new systems, system modifications adding more than six heads, change in occupancy classification, or a change in the hazard design. The calculations shall include:
 - a. Water supply test data including the static, residual, flow pressures and volume.
 - b. Date of test
 - c. Name of City of Novi employee who witnessed the test.

- d. Name of person conducting the test.
 - e. Size of mains.
 - f. Locations of hydrants tested.
 - g. Occupancy classification
 - h. Design criteria
5. Submittals shall include, but not be limited to, the following (See NFPA 13 Chpt. 22 for complete details)
- a. Project name, address, and name of owner/occupant.
 - b. Point of compass.
 - c. The codes and referenced standards that it is designed to including the edition.
 - d. Full height cross section including ceiling construction and ceiling heights.
 - e. A floor plan to a workable scale and of sufficient clarity to indicate the location, nature and extent of the work proposed.
 - f. Design criteria and intended occupancy use type for all areas.
 - g. Ceiling plan, obstructions, and equipment including ceiling type, joist locations, and depth.
 - h. Occupancy class of each room or area.
 - i. Pipe locations and sizes, sprinkler locations, and hanger locations.
 - j. Hydraulic calculations and water supply data per NFPA 13.
 - k. Manufacture equipment data sheets for all proposed equipment to be used.
 - l. Make, type, model, temperature rating, and nominal K-factor of all sprinkler heads.
 - m. Total area (in square feet) protected by each system.
 - n. Total number of sprinkler heads used on each system, riser, floor, and total for building.
 - o. Capacity in gallons for each dry system.
 - p. Pipe type, size, and schedule of wall thickness.
 - q. Type of all fittings and joints, type and locations of all hangers.
 - r. All control valves, check valves, drain pipes, and test connections.
6. Means shall be provided to conduct a full system demand forward flow test of the backflow prevention device through either a main drain or a flushing valve. *NFPA 8.16.4.6.*

General Notes:

- All “cookies” and cut outs shall be secured to the pipe for inspection and accountability.
- No sprinkler spray patterns can be obstructed by items such as light fixtures, soffits, shelving, structural members, etc.
- After all work is completed, a final inspection and the required acceptance tests must be conducted. Notify the Novi Fire Department, Fire Prevention Division at least forty-eight (48) hours in advance to witness the testing. No work can be concealed until it is approved.
- All new sprinkler systems (including the FDC), system alterations of more than 20 heads, and system alterations deemed necessary to do so, shall be hydrostatically tested at 200 psi or 50 psi over the highest working pressure (whichever is greater) for not less than 2 hours without visible leaks and without a loss in pressure.
- Signed Contractor’s Material and Test Certificate(s) must be submitted at the time of inspection.
- Prior to commencing any work, the Contractor must obtain a permit from the City of Novi.

Inspections:

- All sprinkler work is subject to a rough piping inspection prior to the work being concealed and a hydrostatic test per NFPA 13. Contact the Novi Fire Department Fire Prevention Bureau at 248-349-2293 to schedule this inspection.

***Please do not include a check with the original submission. The Fire Marshall will calculate the fees. The applicant will be contacted when the permit is ready for pick up with the amount due.**