



## REQUIREMENTS FOR FIRE SPRINKLER, WATER SUPPLY and STANDPIPE SYSTEMS



1. Permits are required for all fire sprinkler work. You must obtain a Fire Sprinkler e-permit and submit electronic plans prior to starting any onsite work, any work performed without a permit or early work authorization will be charged additional fees. Fire Sprinkler e-permits are available at [www.edinamn.gov/717/Fire-Permits](http://www.edinamn.gov/717/Fire-Permits)
2. Electronic permit submittals shall include plan drawings, hydraulic calculations and technical data sheets. Plan drawings shall be signed by a NICET Level 4 Designer, Managing Employee of licensed Minnesota Fire Protection Contractor, or a Minnesota registered Fire Protection Engineer.
3. All fire sprinkler and standpipe systems shall be designed and installed in accordance with the current adopted Minnesota State Fire Code (MSFC), National Fire Protection Association (NFPA) Codes and Chapter 1306 from the Minnesota Department of Labor and Industry.
4. All equipment installed in a fire protection system shall be UL Listed, Factory Mutual Approved or listed by a nationally recognized organization acceptable to the Edina Fire Department.
5. Water flow data used for hydraulically designed fire protection systems shall be less than 3 years old. Contact the Edina Fire Department at 952 826-0339 for current flow data. If no data is available, you need to obtain an Hydrant Flow Test e-permit at [www.edinamn.gov/717/Fire-Permits](http://www.edinamn.gov/717/Fire-Permits)
6. The maximum size of the domestic water supply (including lawn sprinkler systems) on combination fire sprinkler/domestic water supply lines shall not exceed 1/4 size of the main water supply.  
Exception:
  - a. The maximum size of the domestic water supply may exceed 1/4 the size of the main water supply if an electric solenoid valve is installed on the domestic side of the service (including lawn sprinkler systems). This valve shall be normally powered open and shall close on loss of electric power or signal from the automatic fire sprinkler system flow indicator.
  - b. The maximum size of the domestic water supply may exceed 1/4 the size of the main water supply if the domestic service (including lawn sprinkler systems) usage can be designed into the hydraulic calculations for the automatic fire sprinkler system.
7. Fire protection systems that are hydraulically calculated shall have a 5-psi safety factor at maximum system flow.
8. Buildings two (2) or more stories in height shall be provided with shut-off valves and water flow devices for each floor,
9. Main drains and inspector test connections shall be piped to exterior atmosphere.
10. Pump and riser room size. Such rooms shall be of a size that will allow a minimum of 36-inch clearance around all portions of the fire pump assembly and in front of the fire alarm panel(s). All risers shall have a minimum of 36" clear space at the front and 18" on the remaining sides. (Must also meet 901.4.6 of the Minnesota State Fire Code.)
11. For elevator installations, sprinklers shall not be installed in elevator pits, machine rooms and shafts. The only exception is for other regulatory agency requirements such as federal rules for Medicare in medical facilities.
12. A strobe and horn shall be placed above the Fire Department Connection (FDC). The horn and strobe assembly shall be mounted at 120 inches +/- above finished grade.
13. Class I and III Standpipes in required stairways shall be installed on the stairway landings per MFSC unless another location is approved by the Edina Fire Department.

14. All components of the system shall be UL Listed for the application and installed per the appropriate codes and manufacturer's specifications.
15. All signage as required by the appropriate NFPA Standard the system was designed to shall be provided.
16. A permanent map is to be located at the FAAP and main sprinkler riser. The map shall show the location of control valves and drains for each sprinkler zone. A space shall be provided at the main riser for annual sprinkler test papers.
17. The Edina Fire Department shall witness all system tests and inspections required by NFPA 13, NPFA 13R or NFPA 13D. Appointments can be made by calling the Edina Fire Department at 952-826-0339. Signed copies of the "Contractor's Material and Test Certificates" for aboveground piping shall be provided to the Edina Fire Department upon job completion.
18. Monitoring is required in new buildings with 20 or more sprinkler heads and existing buildings with 100 or more sprinkler heads.
19. Sprinkler contractor shall coordinate with fire alarm contractor for full function test/inspection.
20. A service / maintenance agreement is required for the alarm system to be inspected and tested annually by a licensed contractor. Provide a copy of the agreement at the time of the final inspection.
21. Per NFPA 13, sprinkler contractor is required to provide the building owner with a copy of NFPA 25.
22. FDC's shall be locked with Knox FDC Locks. The locking FDC locks are ordered at [www.knoxbox.com](http://www.knoxbox.com). FDC signage shall specify sprinkler system or standpipe signage per the Edina Fire Department Connections Policy.