

Michael J. Monds
Chief of Fire

Steven P. Evans
First Deputy Chief



Deputy Chiefs
Robert Cussen
Elton Davis
Thomas Clarke
Barry Lasky
Jeffrey Kite

DEPARTMENT OF FIRE

Ben Walsh, Mayor

Fire Pump Permit Submission Requirements

In accordance with the Uniform Fire Prevention and Building Code of New York State and the Standard for the Installation of Stationary Pumps of Fire Protection (NFPA 20), all sprinkler contractors performing work on fire pumps in the City of Syracuse shall apply for a permit through City of Syracuse Permit's Desk (315) 448-8600. All fire pumps and associated submittal documents for systems installed within the City of Syracuse are subject to the Syracuse Fire Prevention Bureau's review and inspection process. The submitted documents shall be prepared by a professional engineer registered in the State of New York and bare the seal of the design professional in accordance with Article 145 of the New York State Education Law. Supporting documentation shall be submitted with all plan submittals.

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

- Written scope of work which includes the design standards, overview of installation, and intent of the system.
- A floor plan which identifying locations of all stairwells and all standpipe hose connection locations.
- All depicted detail and locations of risers, piping, sizes, supports, heads, drains, ITV's and valves.
- Manufacturer's equipment and material listing information.
- All obstruction detail and mechanical equipment that could affect system operations.

Submissions must consist of two (2) sets of all documents (plans, hydraulic calculations, and manufacturer's material information).

The following outlines the in detail what submitted plans shall include:

Plans: (extracted from NFPA 20)

Plans shall be drawn to an indicated scale, on sheets of uniform size, and shall indicate, as a minimum, the items from the following list that pertain to the design of the system:

- (1) Name of owner and occupant
- (2) Location, including street address
- (3) Point of compass
- (4) Name and address of installing contractor
- (5) Pump make and model number
- (6) Pump rating _____ gpm @ _____ psi _____ rpm
- (7) Suction main size, length, location, weight, type of material, and point of connection to water supply, as well as size and type of valves, valve indicators, regulators, meters, and valve pits, and depth to top of pipe below grade
- (8) Water supply capacity information including the following:
 - (a) Location and elevation of static and residual test gauge with relation to the riser reference point
 - (b) Flow location
 - (c) Static pressure, psi (bar)
 - (d) Residual pressure, psi (bar)
 - (e) Flow, gpm (L/min)
 - (f) Date
 - (g) Time
 - (h) Name of person who conducted the test or supplied the information
 - (i) Other sources of water supply, with pressure or elevation
- (9) Pump driver details including manufacturer, horsepower, voltage, or fuel system details
- (10) Controller manufacturer, type, and rating
- (11) Suction and discharge pipe, fitting, and valve types

- (12) Test connection piping and valves
- (13) Flow meter details (if used)
- (14) Jockey pump and controller arrangement, including sensing line details

Hydrostatic Test

Suction and discharge piping shall be hydrostatically tested at not less than 200 psi (13.8 bar) pressure or at 50 psi (3.4 bar) in excess of the maximum pressure to be maintained in the system, whichever is greater. The required pressure shall be maintained for 2 hours. The installing contractor shall furnish a certificate for flushing and hydrostatic test prior to the start of the fire pump field acceptance test.

Field Acceptance Tests

The pump manufacturer, the engine manufacturer (when supplied), the controller manufacturer, and the transfer switch manufacturer (when supplied) or their factory authorized representatives shall be present for the field acceptance test. The date, time, and location of the field acceptance test shall be coordinated with the authority having jurisdiction. Acceptance test procedures shall be performed in accordance with 14.2.6 of NFPA 20 (2013).