

REQUIREMENTS FOR FIRE ALARM AND SPRINKLER PLAN SUBMITTALS

Revision: 07-09-2015

In order to expedite your permits and clarify the process we ask that you read the applicable portions of this information sheet, and provide all necessary information. It is in your best interest to submit all required documents and information. Submitted plans that are incorrect or incomplete will be returned to the contractor/designer for correction - resulting in delays and additional fees. Please keep in mind that until a permit is issued the Village cannot schedule alarm or sprinkler tests. Adherence to the following will reduce the need for resubmittals, delays, and unnecessary costs.

FIRE ALARM

The Village of Oak Brook Fire Prevention Bureau requires all designs to meet the criteria listed in NFPA 72-2007 as well as various portions of other codes and standards. Contact the Village of Oak Brook Fire Prevention Bureau for a complete listing of current applicable fire and building codes.

Two (2) sets of fire alarm plans indicating the type and location of all devices. (Colored or highlighted devices is preferred, although not required.)

The fire alarm plans must be to scale. (1/8" = 1'-0" is preferred)

A legend indicating symbols for all devices must be part of the submitted plan(s).

Battery calculations must be a part of the submittal.

Manufacturer's data sheets must be submitted for all new devices and equipment. If the manufacturer's data sheets include multiple variations of a device type, the designer/contractor must indicate which specific device is being used.

If multiple strobe intensities are being utilized in the design, the designer/contractor must indicate the candela rating of each individual strobe on the drawing. Strobes on the submitted plan(s) that do not have a specified candela rating will be assumed the lowest candela rating listed in the manufacturer's data sheets (typically 15 candela). This includes existing strobe appliances. (For example, a "15/75" listed strobe is considered a 15 candela strobe.)

SPRINKLER SYSTEM

GENERAL

The Village of Oak Brook Fire Prevention Bureau requires all designs to meet the criteria listed in NFPA 13-2007 as well as various portions of other codes and standards. Contact the Village of Oak Brook Fire Prevention Bureau for a complete listing of current applicable fire and building codes.

Submit two (2) sets of sprinkler system plans indicating the type and location of all sprinklers. (We request folded plans, rather than rolled.)

A legend indicating symbols for all sprinklers and sprinkler system devices must be part of the submitted plan(s).

The sprinkler system plans must be to scale.

Designers/Contractors must base their system design or modification on an accepted basis of design such as *Pipe Schedule* design criteria (NFPA 13-2007, Section 22.5) or hydraulic calculations.

PIPE SCHEDULE DESIGN

Show both new and existing sprinkler piping within as well as outside the area of contract so that the reviewer can verify that the sprinkler system meets the criteria of NFPA 13-2007. This includes new and existing piping from the area(s) of modification all the way back to the source, which is where the water supply test data is derived from (typically a hydrant).

Submit manufacturer's data sheets for all new devices, piping, valves, and fittings.

HYDRAULIC CALCULATION DESIGN

Provide hydraulic calculations for the hydraulically most remote area of the sprinkler system.

Indicate all fittings, valves, pipe diameters, pipe lengths, hydraulic nodes, pumps, and sprinklers on the submitted plan(s).

A riser diagram must be included (if applicable).

The hydraulic calculations must account for all piping back to the source, which is where the water supply test data is derived from (typically a hydrant). All piping must be shown on the submitted plan(s) back to the source as well.

Submit manufacturer's data sheets for all new devices, piping, valves, and fittings.

If a fire pump is part of the design, submit the manufacturer's data sheet for the pump, which must include a pump curve indicating pump performance (pressure) at various flows. The hydraulic calculations must incorporate the appropriate data from the pump curve.

Provide water flow test information. Water flow tests information may not be older than one year.

AS-BUILT DRAWINGS

If there is any deviation from the approved plans, As-Built drawings must be submitted, reviewed and approved prior to final inspection. Any deviation from the approved plan is done at the installer's sole risk.

13D RESIDENTIAL SYSTEMS

All residential fire sprinkler water must be metered. Please refer to 2007 NFPA 13D Figure A.6.2(c) "**Acceptable Arrangement with Valve Supervision – Option 2**". Please specify detail and note accordingly and adequate for review, including the meter characteristics in the fire sprinkler system hydraulic calculations.

QUESTIONS AND CLARIFICATIONS

Address questions and clarifications regarding these or other requirements:

Village of Oak Brook Fire Prevention Bureau
1200 Oak Brook Road
Oak Brook, IL 60523
(630) 368-5220