October 5, 2016

Spokane Valley Fire Department (SVFD) Notice

Attention Partners in Fire Safety:

The Spokane Valley Fire Department sends out general information to contractors working in our jurisdiction and makes this information available on our website. This is to address issues that have come up, provide information on code changes or policy changes, and to inform contractors about upcoming items. If you have any questions on the information presented here, please contact our office.

Current Fire Codes
The City of Spokane Valley, Liberty Lake, and Spokane County have adopted the 2015 International Fire Code (IFC) with State amendments on July 1, 2016. The NFPA Standards referred to in that code are the current versions as well (i.e., NFPA 13-2013, NFPA 72-2013).

New Requirements Effective July 1, 2016

Locking FDC Caps and Plugs
Fire Department Connections (FDC) are an important part of sprinkler and standpipe systems, designed to allow fire departments to supplement the system water supply in the event of a fire. Many buildings in our district at times have had missing caps. These caps prevent the introduction of dirt and foreign objects into the system which could cause an obstruction and prevent the effective use of the FDC. Because of the potential problems created by the lack of FDC caps, Spokane Valley Fire Department is initiating a new system requirement. For all new sprinklered buildings locking Knox caps are required as of July 1, 2016. For existing buildings a voluntary program would use locking Knox FDC Caps and Plugs to mitigate this problem. A sprinkler suppression system that has a locking Knox FDC cap installed immediately after completing a back flush of the FDC piping would not require future routine back flushes as part of the 5 year maintenance plan. All other 5 year requirements would still have to be completed. Locking caps would have to be purchased by the responsible party in the same manner as Knox key boxes. Contact a fire inspector to coordinate installation of the Knox caps.

Submittals/Re-submittals/Revisions
Submittals for construction permits with the Fire Department are required to be provided with drawings that clearly indicate the scope of work limits and the extent of work to be permitted. Note that clear, concise documentation results in a speedier plan review process. To facilitate a faster turn-around time for plan reviews, resubmitted documents must clearly show where the revisions are by indicating them on the plans. Revisions to approved plans are required to be reviewed and approved prior to the call for an inspection. They can be dropped off at the Administration building, and you will be contacted when the Plan Review has been completed. Expect typical review times of two weeks.

Significant deviations from approved plans during installation shall be required to be resubmitted for review prior to inspections; may include: hangers, earthquake bracing, sprinkler locations & pipe rerouting that could impact hydraulic calculations. Failure to submit revisions could result in cancellation of an inspection while a review of an as-built resubmittal is conducted.

All inspection requests must be made through the inspection line (509-892-4153)
**Inspection Requirements**

Aboveground Sprinkler Systems:

- Piping and hangers shall be inspected prior to cover.
- Hydrostatic testing:
  - New systems: 200 psi for 2-hrs
  - Existing systems: working pressure (static) for 2-hrs
  - Dry system: pneumatic test (in addition to hydrostatic) 40 psi for 24-hrs
- Hydrostatic testing requirements: 200 psi for CPVC pipe
  - Per manufacturers installation instructions hydrostatic testing is done with plugs in lieu of sprinklers, pipe to be checked for excess cement prior to installing sprinklers.
  - When hydrostatic testing is done with sprinklers installed a random sampling of heads shall be removed to check for excess cement, if significant amounts of cement are found all sprinklers shall be removed and checked (NFPA 13R 6.7.1.1)

- A copy of the Underground fire line Contractor’s Material & Test Certificate shall be on file with SVFD prior to connecting to underground fire line.
- A copy of Sprinkler system Contractor’s Material & Test Certificate is required for project close-out, occupancy may be held up until documentation received.

Underground Fire Mains:

- Hydrostatic test at 200 psi for 2-hrs with exposed joints.
- Flush until clear (use burlap bag) with a minimum flow:
- Contractor’s Material & Test Certificate to be provided after inspections and tests are complete. All tests to be witnessed by SVFD.
- Conduit is required from vault to building for electronic monitoring of tamper switches on devices at vault; include post indicator valve & double check assembly valves. Installation of the conduit is conditioned on underground fire main permit, coordinate as necessary as installation will be verified during final inspections.
- Installation of underground fire mains will meet the requirements of RCW 18.160 and WAC 212-80-043 & 212-80-010. Level U certificate is verified during plan review.

Fire Alarm Systems:

- Battery load test required, switch system to battery operation 24-hr prior to final SVFD inspection. Notifications appliances to operate for 5-min. During this test, stand-by and alarm current demand are measured and recorded.
- Trouble condition is to be verified for initiation, notification and signaling circuits.
- A copy of the final installation completion form is required for project close-out, occupancy may be held up until documentation received.
- Intelligibility for voice alarm (or similar) systems shall be verified as part of the final testing and inspection. Additional devices may be required.
- The manual voice message interruption and restart from the remote unit will be included at final testing and inspection for the voice alarm (or similar) systems.

Class I Kitchen Hood Suppression:

- Kitchen hoods shall have nozzle orientation verified through the use of a laser.
- **A “puff” test is to be conducted using a cartridge to blow the caps off**
- WAC IFC 904.12 requires approved durable signage indicating appliances (from left to right).
- A copy of the final installation completion form is required for project close-out, occupancy may be held up until documentation received.

**Calls for Inspections**

As a reminder, a minimum of 24 hours’ notice is required to schedule an acceptance test/system inspection. Although you must call at least 24 hours in advance for scheduling, this does not guarantee that an inspection will be conducted 24 hours later. Every attempt will be made to accommodate the soonest opening available, however the scheduling request will be handled in relation to our
manpower, workload, and other previously scheduled inspections. To schedule an inspection call 509-892-4153. Please provide the permit number or project address and indicate the type of inspection and desired day and time as well as contact information with name and phone number.

Final installation forms required for project closeout. (Some commonly used forms are available on our website: www.spokanevalleyfire.com

- Aboveground Contractor Material and Testing Certificate
- Underground Contractor Material and Testing Certificate
- Fire Alarm
- Hood
- Paint Booth
- Medical Gas
- Marijuana Extraction

**Permit/Plans Required at the Job Site**
As a reminder, International Fire Code (IFC) Section 105.3.5 requires that one copy of Fire Department approved documents shall be kept on-site at all times that work is in progress. Permits must be posted. Work discovered to have been completed prior to the permit review and approval, will result in double permit fees. If the permit with approved plans is not on site an inspection may be canceled and rescheduled after items are on site.

In closing, thank you for your continued cooperation, dedication and commitment to safety. Spokane is a safe city thanks to you and the conscientious professionalism you provide.

**Greg Rogers**

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