



Fire Sprinkler Systems



System installations must meet these minimum requirements

- [Contractor qualifications](#) shall be per the [Washington State Fire Marshal's Office](#).
- New sprinkler system plans are sent out to a consulting FPE for review (4-6 weeks time).
- Hydraulic calculation sheets are required for system modifications exceeding 5 heads.
- Plan sheets and calculation cover sheets shall be stamped and signed by the designer.
- Plans shall include a table showing the sprinkler models used and the total counts for all.
- A sprinkler riser room is required for the main riser controls. The door shall be labeled.
- Provided a MFD approved [KnoxBox](#) key box at the sprinkler riser room door.
- Fire pumps shall be diesel driven or motor driven with diesel electric backup power.
- A location in the sprinkler riser room is required for the DCDA backflow prevention.
- Provide an approved means for full forward flow testing of the backflow device.
- Install pressure gauges above and below riser check valves- two gauges are required.
- The FDC shall be located between 3' to 10' from a hydrant per [standard plan 2-050-001](#).
- The FDC shall be signed/labeled and secured with [Knox FDC locking caps](#).
- Underground inspections include: thrust blocks pre- and post-pour, hydro test and flush.
- Provide a drip drain valve at the base of the FDC underground piping.
- Aboveground piping shall not be connected to underground piping without approval.
- Contractor certification is required for underground and aboveground materials and tests.
- Minimum bending radius for any flex drops must be observed- provide manufacturer sheets.
- Provide an audible/visible exterior water flow alarm device at the sprinkler riser room.
- Provide an audible/visible water flow alarm device on the address side of the building.
- Supervision of sprinkler systems shall include: water flow alarm switch with 30-60 seconds delay, tamper alarms for all control valves, low air pressure alarm on dry systems, 40°F low temperature alarm in riser area, and one fire alarm manual pull station in the riser room.
- Monitoring of alarms shall be provided by a UL listed central station fire alarm company.