



FIRE CONSTRUCTION PERMIT SUBMITTAL CHECKLIST

SERVING THE CITIES OF LAKE STEVENS, MONROE AND SULTAN

STANDPIPE SYSTEMS

<u>PROJECT INFORMATION</u>	
Site address:	Associated Permits:
Project Name / Tenant:	Property Owner:

Electronic file standards

File naming standard: Electronic plans and documents shall be named as specified in bold type under “permitting requirements”. For example, the seating plan must be named “Seating Plan”.

Acceptable file types: Plans, calculations, specifications and supporting documents shall be uploaded as a PDF file.

Document Orientation: All plans must be uploaded in “Landscape” format in the horizontal position. All other documents can be in “Portrait” format.

<u>CODE EDITIONS</u>
<input type="checkbox"/> 2021 Washington State Fire and Building Code, 2019 NFPA 13, 2020 NFPA 25 and as applicable -Lake Stevens Municipal Code 14.84, Monroe Municipal code 15.04.110, and Sultan Municipal Code 15.05.
<u>PERMITTING REQUIREMENTS</u>
A Fire Construction Permit is required to install or modify a <u>Standpipe system</u> required by Section 105.6.23 of the 2021 Washington State Fire Code and local code amendments. The following information is required at time of application for the Fire Construction Permit.

- Completed Fire Construction permit submittal application
- Completed “Standpipe system submittal checklist”
- Current copy of the WA State Patrol Sprinkler License
- Current copy of the Department of Labor and Industries contractor’s License
- Plans - Stamped and signed by the system designer certified by Washington State Fire Marshal’s office not less than:
 - Level 1 Certificate in Water Based Sprinkler Layout Systems for a NFPA 13-D system,
 - Level II Certificate for a NFPA 13-R system
 - Level III for a NFPA 13 system.
- Water system calculations shall be no more than one year old, reflect the “worst case” demand scenario on the water supply, and should be taken as near the point of connection to the sprinkler system as possible.
 - Lake Stevens** - Contact SnoPUD Integrated 3 for system information.
 - Monroe** – Contact the City of Monroe Water System for system information.
 - Sultan** - Contact the City of Sultan Water System for system information.

- Drawings shall be legible, scaled, and contain only the fire sprinkler components and those structural and building components necessary to provide proper sprinkler layout
- Submitted hydraulic calculations shall show the water system calculation back to the point where the test was performed.

- Contractor shall provide a Contractor’s Material and Test Certificate for both Underground and Aboveground Piping. Signed copies of these forms shall be provided to the AHJ before the system is accepted. Installing contractor must provide copy of NFPA 25 to building owner, along with manufacturer instructions and literature.
- Cut sheets for fire sprinklers, valves, connectors, hanger, bracing and risers
HIGHLIGHT THE CUT SHEETS FOR ALL SYSTEM COMPONENTS TO BE INSTALLED.
- Completed design standard checklist

PLANS

The following is a list of information required on all plan submittals for review of a “Standpipe systems” permit application. The plan shall be drawn to 1/8”=1’-0” minimum scale. The applicant is required to submit all of this information so an accurate and timely review may be done:

- Stamp and signature of system designer on layout drawings and calculations
- Fire department connections for standpipe systems shall be in accordance with the SRFR FDC DESIGN STANDARD DS-001.
- Standpipes shall be installed in accordance with NFPA 13, 14 and 2021 WSFC 905
- Indicate the occupancy type and occupant load of the building where standpipe is to be installed
- Indicate class of standpipe to be installed
- Indicate location of Class I standpipe hose connections
- Indicate location of Class II standpipe hose connections
- Indicate location of Class III standpipe hose connections
- Indicate all locations of cabinets containing firefighting equipment
- Valves controlling water supplies to a standpipe shall be supervised in the open position, and where a fire alarm is provided shall supervise the valve.

EXISTING BUILDINGS REQUIRED TO HAVE STANDPIPES INSTALLED

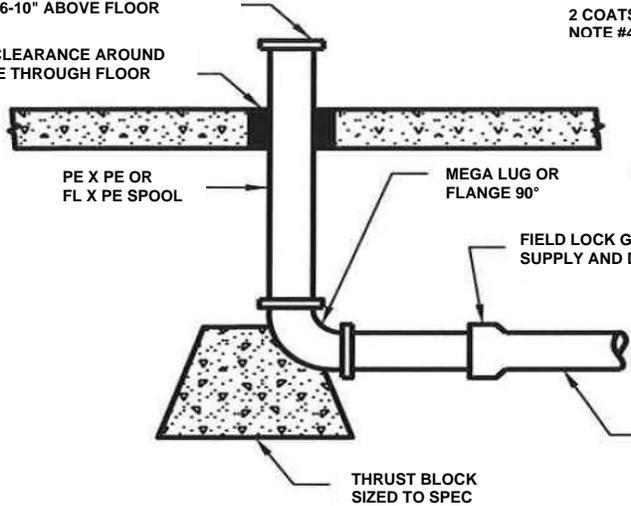
- Group A buildings having an occupant load of 1000 or more, See 2021 WSFC 905.3.2 for details and exceptions
- Covered and open mall buildings, See 2021 WSFC 905.3.3 for details and exceptions
- Stages greater than 1000 square feet, See 2021 WSFC 905.3.4 for details and exceptions
- Underground buildings shall have a class I automatic wet or manual wet standpipe system
- Helistops and heliports, See 2021 WSFC 905.3.6 for details
- Marinas and boatyards, See 2021 WSFC 905.3.7 for details
- Rooftop gardens and landscaped roofs, See 2021 WSFC 905.3.8 for details

SNOHOMISH REGIONAL FIRE AND RESCUE DESIGN STANDARD

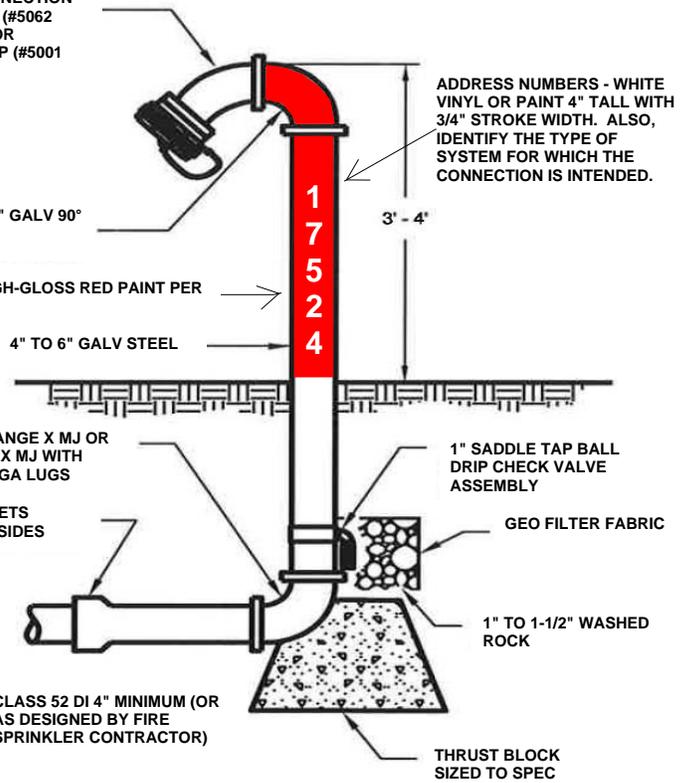
STORTZ TYPE FIRE DEPT. CONNECTION WITH 30° ELBOW NON-SWIVEL (#5062 FROM WWW.KNOXBOX.COM, OR EQUIVALENT) WITH 4" FDC CAP (#5001 FROM WWW.KNOXBOX.COM)

A METAL SIGN WITH 1" RAISED LETTERS STATING "AUTOMATIC SPRINKLERS or STANDPIPES or TEST CONNECTION" OR A COMBINATION THEREOF SHALL BE MOUNTED ON ALL FDC'S

FLANGE 6-10" ABOVE FLOOR
2" CLEARANCE AROUND PIPE THROUGH FLOOR



FLOOR FLANGE SUPPLY AND DRY SIDES



FIRE DEPARTMENT STAND PIPE CONNECTION WITH STORZ 30° ELBOW

NOTES:

1. SUPPLY AND DRY LINES TO BE RESTRAINED BY FIELD LOCK GASKETS ON BELL JOINTS, MEGA LUGS AND BLOCKING SHALL BE INSTALLED AT ALL CHANGES IN DIRECTION. PIPE TO BE CLASS 52 DI PIPE (TO 90° FLANGE).
2. FIRE SYSTEMS SHALL BE DESIGNED BY A NICET LEVEL III DESIGNER/WASHINGTON LICENSED ENGINEER. THE INSTALLER OF THE FIRE PROTECTION SERVICE UNDERGROUND LINES SHALL BE LICENSED AND CERTIFIED AS REQUIRED BY THE OFFICE OF THE STATE FIRE MARSHAL.
3. 1" SADDLE TAP BALL DRIP WITH 90° DOWNTURN IN A BED OF 1" TO 1-1/2" WASHED ROCK ENVELOPED IN GEO FILTER FABRIC. HEIGHT OF DRIP CHECK DETERMINED BY GROUND WATER ELEVATION.
4. FDC TO BE A 4" STORTZ NON-SWIVEL 30° DOWN ELBOW WITH LOCKING FDC STORTZ CAP (MODEL #5001 4" HARD ANODIZED ALUMINUM FROM WWW.KNOXBOX.COM) FDC STANDPIPE TO BE PAINTED WITH 2 COATS HIGH-GLOSS SHERWIN WILLIAMS SAFETY RED INDUSTRIAL ENAMEL B54R389. DO NOT PAINT 30° ELBOW.
5. CENTER OF FIRE HYDRANT TO CENTER OF FDC TO BE NO MORE THAN 25' (Lake Stevens) 50' (Monroe) AND NO LESS THAN 4' APART
6. PRESSURE TESTING PER NFPA 24 STANDARDS (200 PSI FOR 2 HOURS WITH NO LOSS)
7. FLUSH PER NFPA 24 STANDARD. FULL FLOWS WITH BURLAP BAGS FOR DEBRIS INSPECTION. FLOW OF FLUSH WILL BE ACCORDING TO DIAMETER: 4":390 GPM; 5": 610 GPM; 6": 880 GPM.
8. SOURCE WATER FOR FLOW TESTING TO BE PROTECTED BY MEANS OF A TEMPORARY DCVA THAT HAS BEEN VERIFIED TESTED BY A BACKFLOW ASSEMBLY TESTER. DCVA'S ARE TO BE A MINIMUM OF 4" DIAMETER AND SIZED TO ACHIEVE PROPER FLOW FOR FLUSH AFTER HYDRO TESTING HAS BEEN ACHIEVED. FLOW CALCULATIONS TO BE ESTABLISHED BY A NICET LEVEL III SYSTEM DESIGNER.
9. VERIFICATION OF FLOW RATE AND TESTING TO BE WITNESSED BY AUTHORITY HAVING JURISDICTION. NOTE: ALWAYS CHECK WITH WATER PURVEYOR ABOUT BACKFLOW REQUIREMENTS ON FIRE SPRINKLER SYSTEMS.



FDC DESIGN STANDARD FOR FIRE SPRINKLER AND STANDPIPE

SCALE
NOT TO SCALE

REVISED
August 18, 2020

DESIGNATION

DS-001