



The Corporation of **THE CITY OF NORTH VANCOUVER**

Inspections of Sprinkler & Standpipe Installations

Inspections of sprinkler/standpipe installations are conducted by the City of North Vancouver Plumbing Inspector and a member of the North Vancouver City Fire & Rescue, Fire Prevention Office.

The Plumbing Inspector (604-983-7355) conducts a visual inspection of the rough installation including piping, sway bracing, head placement, etc., and witnesses the 200 lb. hydrostatic testing of the piping.

A member of the North Vancouver City Fire & Rescue, Fire Prevention Office (604-980-5021) is to witness the sprinkler system flow test and trip test by the TQ sprinkler fitter/installer, and will review the valve trim and alarm functions.

Prior notice of 3-5 working days is required by the Fire Prevention Office (for scheduling purposes).

As well, the following documentation will be required to be submitted to the City Building Inspector prior to the start of the sprinkler system installation:

- Three sets of plans c/w hydraulic calculations are to be submitted—sealed by an Engineer registered in the province of BC.
- Completed Schedule B-1 and B-2— sealed by an Engineer registered in the Province of BC.
- Sprinkler permit applications required prior to any installations.

In addition, to minimize re-inspections, ensure the following items are in place prior to inspection by the Fire Prevention Officer:

- Sprinkler system is to be tied into building fire alarm system to initiate and indicate alarm or water flow condition, and annunciate zone of water flow device. Provide water flow detecting devices as per BCBC 1998 3.2.4.16. (i.e. one per storey, each area on each storey, stair shaft, etc.).

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- Each water flow device should:
 - initiate an alarm signal,
 - indicate separate zones of water flow,
 - provide a trouble signal as per BCBC 1998 3.2.4.16.
- Where a Fire Alarm is not installed, then ULC listed audible alarms are to have signage adjacent indicating “sprinkler alarm – when bell rings call Fire Department 911”.
- Sprinkler and standpipe systems are to be clearly tagged with metal or rigid plastic signs for all control valves and drains. This includes proper signage on valve room access door and access panels on each floor zone for shut off and control valves. All floor control valves are to be visible and accessible without the use of a ladder. If not visible, the valve location is to be clearly marked and be accessible without the use of a ladder.
- The Fire Department Connection must be unobstructed and is to be adjacent to the main entrance and visible upon approach (maximum distance to a fire hydrant is 45m).
- Heat tracing (if required) for the fire suppression systems water supply piping is to be installed as per manufacturer’s specifications and monitored for loss of A/C power at the fire alarm panel. If the building does not have a fire alarm system, loss of A/C power is to be supervised via an independent ULC listed remote audible and visible trouble alarm. Location is to be determined by consultation with the North Vancouver City Fire & Rescue, Fire Prevention Office. The heat tracing is to be hard wired to the power source. Manufacturer’s documentation proving the installation will maintain the water at +40°F is to be placed in the valve room.
- The compressor for a dry pipe sprinkler system shall be ULC listed for sprinkler service,—and be sized so that the system can be pumped up to operating pressure within 30 minutes. Recommend locating and mounting the compressor “off” the floor in a safe location.
- Locker construction is not to obstruct sprinkler coverage (maintain 18 inches clear space below sprinkler heads or sprinkler each locker). N.F.P.A. 13 1999 5-8.5.3.
- Sprinkler heads adjacent to slab bands, etc. shall conform with N.F.P.A. 13 1999 5-8.5

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- Main drain is to be piped to a safe location (i.e. parkade with a 45° elbow).
- Sprinkler heads are required in elevator shafts as per N.F.P.A. 13 1999 5-13.5.
- Piping in attic spaces is to be insulated as per the BCBC to maintain a minimum temperature of +40°F.
- Calculation of loads for sizing and details of sway bracing, and information regarding backflow preventers is to be checked by others (plumbing or building dept.).
- The installation of the sprinkler system is to be conducted by a TQ Sprinkler Fitter.

The Plumbing Inspector and the Fire Prevention Officer will conduct a final inspection of the installation including head location and valve trim, etc. Prior to final approvals, the following documentation is to be submitted:

- Contractor's Material and Test Certificates for 'above' and 'below' ground piping to the Fire Prevention Office.
- Engineer's Letter of Assurance of Professional Field Review and Compliance Schedule C-B shall be delivered to the City Building Inspector upon completion of the sprinkler system installation.