

# ***Fire Sprinklers Plan Review Checklist***

Date:\_\_\_\_\_ Permit Number:\_\_\_\_\_

Business Name:\_\_\_\_\_Address:\_\_\_\_\_

## ***Fire Sprinkler System Submittal requirements:***

A Fire Protection System application is required to be completed and submitted with your plans.

A minimum of four sets of complete plans is required to be submitted with your plans.

A complete set of manufacturers cut sheets on all piping, appliances and heads are required to be submitted with your plans.

A plan review Fee shall be submitted with your plan review.

Hydraulic calculations and current Water Flow Data, within 2 years contact HPW.

## ***Fire Sprinkler Riser Locations:***

A 10" bell is required on the exterior above the fire department connection and a 6" bell is required inside the main riser.

36" clearance is required in front of the risers.

A spare sprinkler head cabinet, with a min of 6 heads and a wrench is required to be mounted by the risers.

A riser zone map is required to show areas of sprinkler coverage throughout the building.

The main drain shall be piped to the exterior of the building or to a floor drain that will accept the full flow of the drain.

Placards shall be posted for all calculated areas, by the risers.

All valves shall have proper signs attached.

The sprinkler riser room shall be properly labeled, "SPRINKLER ROOM."

## ***Fire Sprinkler Spacing and Head Locations:***

Sprinkler heads shall be properly spaced throughout the protected area.

Sprinkler heads shall be a minimum of 4" away from any wall.

Sprinkler heads shall not be obstructed by any ceiling mounted electrical fixtures, including exit lights, etc.

Sprinkler heads shall be installed under any permanent fixture, ductwork, etc. that exceeds 4'.

Sprinklers shall be installed under all building overhangs where combustible items are stored.

Sprinklers shall be installed under all parts of the building, where vehicles have access, drive thru, canopies, etc.

Sprinkler heads shall be installed in all accessible areas.

### ***Fire Department Standpipes:***

Fire Department standpipes shall be installed in all stairways, and on every level of this building and all service doors.

Standpipes shall have a 2 1/2" reducer installed on all valves.

A pressure gauge shall be installed at the top of all standpipes.

The valve shall have sufficient clearance to properly operate the valve and remove the caps.

The standpipe pressures as outlined in NFPA 14, are not required in fully sprinklered buildings.

Pressure reducing valves are required to maintain a safe working pressure at the valves.

### ***Fire Department Connections:***

A fire department 5" Storz 30° angle connection is required for this building.

A single 2 1/2" fire department connection is required for this building.

The fire department connection shall be located within 75' of a fire hydrant. The approved location is noted on the engineering plans.

The fire department connection supplies sections of the building, a sign, with minimum 4" letters shall be installed above the connection to indicate the coverage area of the connection.

The fire department connection shall not be obstructed by landscape, etc.

### ***Fire Inspectors Test Valve:***

The inspectors test valve shall be accessible and properly labeled.

The inspectors test valve shall be piped to the exterior or to a floor drain that will accept the full flow of the inspectors test.

An inspector's test valve is required to be installed.

### ***Fire Alarm Requirements:***

Water flow switch shall be shown on a separate zone on the fire alarm system.

Water flow and tamper switches for separate floors, shall be shown on a separate zone on the fire alarm system.

Tamper switches shall be shown on a separate zone on the fire alarm system.

High/low air switch shall be shown on a separate zone on the fire alarm system.

Pressure switch shall be shown on a separate zone on the fire alarm system.

The quarter turn valve under the pressure switch shall be supervised on the fire alarm system.

A 10" bell is required on the exterior above the fire department connection and a 6" bell is required inside the main riser.

***System Approvals and Inspections Required:***

Final inspection of the sprinkler system

2 hour, 200 P.S.I. hydro test

2 hour, 200 P.S.I. hydro test including the fire department connection

2 hour, 50 P.S.I. over static pressure, hydro test

24 hour air test

Final trip and alarm test

Final flow and alarm test

A water flow, from the top of all standpipes is required.

A fire pump flow and acceptance test is required for this building

A fire department, water flow flush is required prior to connecting the piping to the riser.

***Additional Requirements:***

***System Plan Review Results:***

**Approved**

**Not Approved**

**Completed By:**