



# CITY OF RIVERSIDE FIRE DEPARTMENT

## FIRE PREVENTION DIVISION

### INFORMATIONAL BULLETIN: 2022-011

APPROVED BY: C. Kodat, Fire Marshal, 1/1/2023

## FIRE DEPARTMENT CONNECTION (FDC) AND CONTROL VALVE INSTALLATION

This information bulletin is to provide guidelines regarding the installation requirements, identification, and location of automatic fire sprinkler system water supply appurtenances.

### 1. Post Indicator Valves (PIVs)

- Post indicating valves servicing private on-site fire service mains shall be no less than 40' from a structure.  
Exception: When the space is unavailable to maintain the separation from the building, PIVs may be installed closer or mounted on the building wall, providing the exterior wall of the building has no unprotected openings within 20' or protected openings within 10' of the valve(s).
- The installation height of the PIV shall be 36" above the adjacent grade to the PIV handle's socket.
- Protection of the PIV is required in accordance with CFC section 312 when the PIVs are subject to impact from vehicular traffic.
- For working clearance, an unobstructed 3-foot radius shall be maintained around the PIV.
- PIVs shall be painted red.
- Provide an identification sign on PIV to which structure it serves.

### 2. Indicating sprinkler system control valves: (Other than PIVs)

- Post indicating valves servicing private on-site fire service mains shall be no less than 40' from a structure.  
Exception: When the space is unavailable to maintain the separation from the building, PIVs may be installed closer or mounted on the building wall, providing the exterior wall of the building has no unprotected openings within 20' or protected openings within 10' of the valve(s).
- The installation height of the PIV shall be 36" above the adjacent grade to the PIV handle's socket.

- Protection of the PIV is required in accordance with CFC section 312 when the PIVs are subject to impact from vehicular traffic.
- For working clearance, an unobstructed 3-foot radius shall be maintained around the PIV.
- PIVs shall be painted red.
- Provide an identification sign on PIV to which structure it serves.

### 3. Fire Department Connections (FDCs)

- FDCs shall be located at least 50' from the building being protected and at least 6' from the PIVs.

EXCEPTION: When FDCs cannot be installed with the required clearance, they shall be permitted to be located closer or wall mounted, provided they are installed on a wall without openings within 20'. Openings within 20' of the FDC will only be allowed, if the opening has a fire resistance of one-hour.

- FDCs shall not be installed where there is the possibility of injury by falling objects. FDCs shall not be permitted below and within 20' of signage, cornices, soffits, balconies or other cantilevered objects.
- FDCs shall be installed so that the centerlines of the inlets are located at a minimum height of 18" and a maximum height of 48" above the adjacent finish grade.
- FDCs shall be installed on the system side of the indicating valves.
- Fire Flow

The number and size of FDC inlets shall be determined by the fire flow of the sprinkler system and /or standpipe system. Interior hose streams shall be included in the sprinkler demand for determining the number and size of inlets when standpipes and /or hose stations are a part of the sprinkler system.

Any sprinkler system with a required water flow below 750 gpm requires that the FDC be equipped with (2) 2-1/2-inch female swivel inlets. The threads shall be 2.5-7.5 American National Hose connection screw threads (NH). The riser to the FDC must be 4" diameter pipe.

Any sprinkler system with a required water flow greater than 750 gpm requires that the FDC be equipped with (2) 2-1/2 in female swivel (2.5-7.5 NH) inlets and one 4-inch female swivel (4-4 NH) inlet. The riser to the FDCs must be 6" diameter pipe. A list check valve device shall be installed at each inlet, in addition to the clapper.

If the on-site water main supplies both the fire sprinkler system and the on-site fire hydrants, an FDC as noted in the above paragraph is required.

Protection of the FDC is required in accordance with CFC section 312 when the FDCs are subject to impact from vehicular traffic.

FDCs shall be painted red.

For working clearance, an unobstructed radius of 3-feet shall be maintained around the FDC.

#### **4. Signage**

All indicating valves, including PIVs and fire department connections shall be identified in accordance with this document and City of Riverside Fire Department Information Bulletin 012.