



CHINO VALLEY INDEPENDENT FIRE DISTRICT FIRE PROTECTION STANDARD

STANDARDS FOR WET BARREL FIRE HYDRANT SPECIFICATIONS FOR PRIVATE DEVELOPMENT

STANDARD # 114

REVISED 04/01/2019 PAGES 4

A. Location, Size and Type

1. The location, size and type of fire hydrant shall be designated by and approved by the Fire Chief.
2. The centerline of the riser shall be normally two feet (2') behind the curb face, except where a five foot (5') sidewalk is adjacent to the curb, in which case the riser shall be at six and one-half feet (6 ½') or as shown on the plans.
3. Where the sidewalk adjacent to the curb is greater than five feet (5'); as in commercial areas, the centerline of the riser shall be placed two feet (2') behind the curb face.
4. In the absence of a curb, set bottom outlet twenty-four inches (24") above the crown of the road and provide steel pipe barricades as directed by the inspector. Where curbs exist, the centerline of the bottom inlet must be twenty inches (20") above the finished grade.
5. No fire hydrant shall be installed closer than five feet (5') from the edge of any driveway apron.
6. The approved type of hydrant that shall be installed is James Jones J-3078 series or Clow 2050 series hydrants only.

B. Fire Hydrant Heads

1. Wet barrel fire hydrants shall be manufactured to ANSI and AWWA standards. The head, 6" inlet, and outlet nozzles, one 2-1/2" and one 4" shall be cast in bronze. If the outlet nozzles are not cast as an integral part of the head, they shall be locked to the head in such a manner so as to prevent the unintentional removal of the outlet by unscrewing itself out of the head.
2. Outlets shall be independently valved. A compression type valve assembly shall be constructed of water works bronze. The stem shall be constructed of low zinc, high

strength silicon bronze meeting ASTM B198(124) and D271(124) standard in order to assure the highest tensile strength to prevent twisting and stem breakage.

3. The valve assembly, including the neoprene rubber bevel shaped disc, shall be free spinning on the operating shaft so as to minimize the damage that could occur when the valve disc comes into contact with the valve seat and a rock or other debris becomes wedged between the disc and valve seat while the hydrant outlet is being closed.

The disc holder shall be recessed to allow the neoprene rubber disc to be protected by the disc holder in such a manner so as to prevent dirt and gravel from accumulating under the disc. The disc shall be firmly attached to the disc holder in such a manner so as to prevent turning and flapping of the disc in the disc holder and the accumulation of dirt and gravel between the attaching device and the disc. The disc holder valve assembly shall be locked onto the stem to prevent the stem from backing out of the disk holder assembly.

4. The stems shall be equipped with removable 1-1/8" pentagon operating nuts.
5. The hydrant shall be hydrostatically tested to 300 psi, rated for a working pressure of 200 psi, outlet threads shall be national standard. "o" ring seals shall be used in the bronze stem insert to prevent leakage.
6. Bronze or plastic caps with 1-1/8" operating nuts shall be installed to each outlet and attached by chain to the hydrant barrel.
7. Manufacturer's specifications of fire hydrants shall be submitted to the Fire Chief or his designated representative upon request.
8. All hydrants on private property shall have a break off spool and a control valve.
9. The fire hydrant barrel and standard bury shall be of a standard steel pipe of minimum wall thickness equivalent to schedule #40 pipe.
10. All hydrants not mechanically attached to the mainline will be supported by thrust blocks of adequate size, according to soil condition requirements.

C. Exterior of Hydrant

1. The exterior of the hydrant, except for the threads, shall be painted with two coats of primer and two coats of Industrial yellow paint. The riser may be painted with two coats of primer and two coats of industrial yellow.

D. Fire Hydrant Barricades and Post Indicator Valves

1. Barricades located 36” from the hydrant in such a manner so as to provide optimum protection of the hydrant and not obstruct the operation and use of the hydrant. Barricades are not necessary if fire hydrant or P.I. valve is behind curbs or sidewalks, except as determined by the City Engineer and/or Fire District.
2. Fire hydrant barricades shall consist of four inch diameter standard steel pipe, schedule #40, filled with concrete, extending three feet above the ground and three feet below the ground imbedded in concrete of twelve inches in diameter and four feet deep. The steel pipe above ground shall be painted with two coats of primer and two coats of industrial yellow.

