



# *Foothills Fire Protection District*

<Emergency: 911> <Dispatch: 303-526-7676>

## **Firefighting Cistern Requirements**

**Water Flow:** All cisterns shall be positive gravity or pump fed flow stopped by a full flow valve (See below). This requirement may only be waived by the Fire Code Official where gravity or pump feed is impractical due to topography. **At no time will a cistern be installed where the lift from the bottom of the tank to the engine inlet is greater than 10'.**

**Piping:** Piping shall be schedule 80 PVC 6" or greater continuously from the water supply to the outlet at the FDC, where it will terminate with NST threads. Threaded onto this terminus shall be attached a 6" NST to a 5" STORZ connection with a cap. (Call KOCHER @ 800-420-4673 for parts) All pipes shall be bedded in sand or squeegee with a minimum burial depth of 48" up until the shutoff valve (Measured from grade level to top of pipe).

**Valves:** All flow to the appliance shall be controlled by a full flow valve with a positive stop. This valve shall be controlled by a manual handle with an operating stem installed to two feet above grade. This stem shall be encased in a section of 24" corrugated culvert with a valve stem extension of about one foot hanging inside the culvert. The culvert shall be topped with a hinged lid and hasp for a locking device.

**Tank Size:** Storage capacity shall be specified by the Fire Code Official based on application.

**Installation:** All installations shall meet the standards set forth in the National Water Work Association Standards and if associated with a municipal water supply shall have their approval in place prior to acceptance by the Fire District. All cistern installations shall meet the standards as set forth in NFPA 22. All installations shall be inspected and permitted by the Fire District's Fire Code Official.

**Fill/Vent Pipe:** The Cistern fill pipe shall be 4" Sch. 80 PVC and be installed parallel to the Cistern Discharge Pipe. The point of connection to fill shall be adjacent to the point of connection of discharge pipe, have 2½ NST adapter connection and 2½ NST cap with ¼ " drain holes. The fill pipe shall enter the tank in the top 6" of the tank. The vent pipe shall be six (6) inch diameter Sch. 80 PVC and be gravity guarded and screened.

**Cistern Marker Post:** The cistern marker post shall be located one (1) foot behind the standpipe. The post shall be four feet high topped with a sign lettered FIRE CISTERN and the sign shall indicate the number of gallons of the cistern. The construction of the sign shall be metal or wood. The sign shall have reflective lettering or stripes.

**Once the Fire Department has inspected and flow tested the cistern you have installed, it is your responsibility to maintain your cistern. Check the water level and cycle any valves twice per year. We will try to flow test cisterns at owner request. Community cisterns are the responsibility of the respective HOA or community organization.**

For questions regarding these requirements, please contact Fire Marshal Frank Dearborn at 303-674-3145 or [fdearborn@evergreenfirerescue.com](mailto:fdearborn@evergreenfirerescue.com)