Fire and water supply

Engineering



The paper "Fire and Water Supply " is an outstanding example of an essay on engineering and construction. Fire-flow tests are done in order to verify the amount of water that is available for fighting the fire within the water distribution system and in different sections of the community. The tests are carried out in order to make the fire department aware of areas that lack sufficient water supply and consequently carry out operational plans in order to adequately supply water to these areas in the event of a fire outbreak or prior to a fire. The fire flow tests must be conducted once or twice a year on the entire water distribution system depending on the risks of fire in the building and usage of the distribution system. If there is a noticeable change in the water distribution system, the fire department must start making plans to conduct a fire flow test and solve any problem that was discovered (Wallace, 2003). The fire flow tests are usually carried out on hydrants within the water distribution system and are documented by the water and fire department personnel. In conducting the fire flow tests, one or more of the water pipes must be opened and the flow would consequently be measured while being cognizant of the difference in the flow pressure. A pitot gauge could be used to determine the rate of flow from the water pipe and the flow is then calculated using a chart. The unit for a flow of water from the hydrant (water pipe) is represented by gallons per minute (GPM) at 20psi. The inferences are then sent to the respective water and fire personnel for analysis (Wallace, 2003). It should be noted that before conducting a final flow test, a water distribution chart must be drawn; this would help in resolving the hydrant that would be used in measuring the water flow and the water pressure depending on the location of the flow test. Fire flow test

has the potential of correcting problems in the water distribution system and should be carried out effectively.