

Contractor's Material and Test Certificate for Underground Piping			
<p>PROCEDURE Upon completion of work, inspection and tests shall be made by the contractor's representative and witnessed by an owner's representative. All defects shall be corrected and system left in service before contractor's personnel finally leave the job. A certificate shall be filled out and signed by both representatives. Copies shall be prepared for approving authorities, owners, and contractor. It is understood the owner's representative's signature in no way prejudices any claim against contractor for faulty material, poor workmanship, or failure to comply with approving authority's requirements or local ordinances.</p>			
Property name	Date		
Property address			
Plans	Accepted by approving authorities (names)		
	Address		
	Installation conforms to accepted plans <input type="checkbox"/> Yes <input type="checkbox"/> No Equipment used is approved <input type="checkbox"/> Yes <input type="checkbox"/> No If no, state deviations		
Instructions	Has person in charge of fire equipment been instructed as to location of control valves and care and maintenance of this new equipment? If no, explain <input type="checkbox"/> Yes <input type="checkbox"/> No		
	Have copies of appropriate instructions and care and maintenance charts been left on premises? If no, explain <input type="checkbox"/> Yes <input type="checkbox"/> No		
Location	Supplies buildings		
Underground pipes and joints	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Pipe types and class</td> <td style="width: 50%; border: none;">Type joint</td> </tr> </table>	Pipe types and class	Type joint
	Pipe types and class	Type joint	
	Pipe conforms to _____ standard <input type="checkbox"/> Yes <input type="checkbox"/> No Fittings conform to _____ standard <input type="checkbox"/> Yes <input type="checkbox"/> No If no, explain		
Joints needing anchorage clamped, strapped, or blocked in accordance with _____ standard <input type="checkbox"/> Yes <input type="checkbox"/> No If no, explain			
Test description	<p>Flushing: Flow the required rate until water is clear as indicated by no collection of foreign material in burlap bags at outlets such as hydrants and blow-offs. Flush at flows not less than 390 gpm (1476 L/min) for 4 in. pipe, 880 gpm (3331 L/min) for 6 in. pipe, 1560 gpm (5905 L/min) for 8 in. pipe, 2440 gpm (9235 L/min) for 10 in. pipe, and 3520 gpm (13,323 L/min) for 12 in. pipe. When supply cannot produce stipulated flow rates, obtain maximum available.</p> <p>Hydrostatic: All piping and attached appurtenances subjected to system working pressure shall be hydrostatically tested at 200 psi (13.8 bar) or 50 psi (3.4 bar) in excess of the system working pressure, whichever is greater, and shall maintain that pressure ± 5 psi for 2 hours.</p> <p>Hydrostatic Testing Allowance: Where additional water is added to the system to maintain the test pressures required by 10.10.2.2.1, the amount of water shall be measured and shall not exceed the limits of the following equation (For metric equation, see 10.10.2.2.4):</p> $L = \frac{SD\sqrt{P}}{148,000}$ <p style="font-size: small;"> L = testing allowance (makeup water), in gallons per hour S = length of pipe tested, in feet D = nominal diameter of the pipe, in inches P = average test pressure during the hydrostatic test, in pounds per square inch (gauge) </p>		
Flushing tests	New underground piping flushed according to _____ standard by (company) <input type="checkbox"/> Yes <input type="checkbox"/> No If no, explain		
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> How flushing flow was obtained <input type="checkbox"/> Public water <input type="checkbox"/> Tank or reservoir <input type="checkbox"/> Fire pump </td> <td style="width: 50%; border: none;"> Through what type opening <input type="checkbox"/> Hydrant butt <input type="checkbox"/> Open pipe </td> </tr> </table>	How flushing flow was obtained <input type="checkbox"/> Public water <input type="checkbox"/> Tank or reservoir <input type="checkbox"/> Fire pump	Through what type opening <input type="checkbox"/> Hydrant butt <input type="checkbox"/> Open pipe
	How flushing flow was obtained <input type="checkbox"/> Public water <input type="checkbox"/> Tank or reservoir <input type="checkbox"/> Fire pump	Through what type opening <input type="checkbox"/> Hydrant butt <input type="checkbox"/> Open pipe	
	Lead-ins flushed according to _____ standard by (company) <input type="checkbox"/> Yes <input type="checkbox"/> No If no, explain		
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> How flushing flow was obtained <input type="checkbox"/> Public water <input type="checkbox"/> Tank or reservoir <input type="checkbox"/> Fire pump </td> <td style="width: 50%; border: none;"> Through what type opening <input type="checkbox"/> Y connection to flange and spigot <input type="checkbox"/> Open pipe </td> </tr> </table>	How flushing flow was obtained <input type="checkbox"/> Public water <input type="checkbox"/> Tank or reservoir <input type="checkbox"/> Fire pump	Through what type opening <input type="checkbox"/> Y connection to flange and spigot <input type="checkbox"/> Open pipe	
How flushing flow was obtained <input type="checkbox"/> Public water <input type="checkbox"/> Tank or reservoir <input type="checkbox"/> Fire pump	Through what type opening <input type="checkbox"/> Y connection to flange and spigot <input type="checkbox"/> Open pipe		
© 2009 National Fire Protection Association NFPA 13 (p. 1 of 2)			

FIGURE 10.10.1 Sample of Contractor's Material and Test Certificate for Underground Piping. [24: Figure 10.10.1]

