

# Contractor's Material and Test Certificate for Underground Piping



## PROCEDURE

Upon completion of work, inspection and tests shall be made by the contractor's representative and witnessed by the property owner or their authorized agent. 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.

Property name	Date
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Property address
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<b>Plans</b>	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, explain deviations			

<b>Instructions</b>	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

<b>Location</b>	Supplies buildings
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<b>Underground pipes and joints</b>	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 needed anchorage clamped, strapped, or blocked in accordance with _____ standard If no, explain			<input type="checkbox"/> Yes	<input type="checkbox"/> No

<b>Test description</b>	<p><b>Flushing:</b> 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><b>Hydrostatic:</b> 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><b>Hydrostatic Testing Allowance:</b> Where additional water is added to the system to maintain the test pressured 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="margin-left: 400px;">L = testing allowance (makeup water), in gallons per hour S = length of pipe tested, feet D = nominal diameter of the pipe, in inches P = average test pressure during the hydrostatic test, in pounds per square inch (gauge)</p>			
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<b>Flushing Tests</b>	New underground piping flushed according to _____ standard by (company)		<input type="checkbox"/> Yes	<input type="checkbox"/> No
	If no, explain			
	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				
How flushing flow was obtain <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 <input type="checkbox"/> Open pipe And spigot		

<b>Hydrostatic test</b>	All new underground piping hydrostatically tested at _____ psi for _____ hours		Joints covered <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Leakage test</b>	Total amount of leakage measured _____ gallons    _____ hours		
	Allowable leakage _____ gallons    _____ hours		
<b>Hydrants</b>	Number installed	Type and make	All operate satisfactorily <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Control valves</b>	Water control valves left wide open If no, state reason		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Hose threads of fire department connections and hydrants interchangeable with those of fire department answering alarm		<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Remarks</b>	Date left in service		
<b>Signatures</b>	Name of sprinkler contractor		
	<b>Tests witnessed by</b>		
	The property owner or their authorized agent (signed)	Title	Date
	For installing contractor (signed)	Title	Date
	For Fire Department (signed)	Title	Date
Additional explanation and notes			