

Automatic Sprinkler Systems

Insert logo here

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 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.

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? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, explain _____ <hr/> Have copies of appropriate instructions and care and maintenance charts been left on the premises? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, explain _____
Location	Supplies buildings _____
Underground pipes and joints	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 _____ <hr/> Joints needed 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 \pm 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="margin-left: 40px;"> <i>L</i> =testing allowance (makeup water), in gallons per hour <i>S</i> =length of pipe tested, feet <i>D</i> =nominal diameter of the pipe, in inches <i>P</i> =Average test pressure during the hydrostatic test, in pounds per square inch </p>									
Flushing tests	<p>New underground piping flushed according to _____ <input type="checkbox"/> Yes <input type="checkbox"/> No standard by (company) _____</p> <p>If no, explain _____</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">How flushing was obtained</td> <td style="width: 50%; text-align: center;">Through what type opening</td> </tr> <tr> <td> <input type="checkbox"/> Public water <input type="checkbox"/> Tank or reservoir <input type="checkbox"/> Fire pump </td> <td> <input type="checkbox"/> Hydrant butt <input type="checkbox"/> Open pipe </td> </tr> </table> <p>Lead-ins flushed according to _____ standard by _____ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If no, explain _____</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">How flushing was obtained</td> <td style="width: 50%; text-align: center;">Through what type opening</td> </tr> <tr> <td> <input type="checkbox"/> Public water <input type="checkbox"/> Tank or reservoir <input type="checkbox"/> Fire pump </td> <td> <input type="checkbox"/> Y connection to flange and spigot <input type="checkbox"/> Open pipe </td> </tr> </table>		How flushing was obtained	Through what type opening	<input type="checkbox"/> Public water <input type="checkbox"/> Tank or reservoir <input type="checkbox"/> Fire pump	<input type="checkbox"/> Hydrant butt <input type="checkbox"/> Open pipe	How flushing was obtained	Through what type opening	<input type="checkbox"/> Public water <input type="checkbox"/> Tank or reservoir <input type="checkbox"/> Fire pump	<input type="checkbox"/> Y connection to flange and spigot <input type="checkbox"/> Open pipe
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Form 3

Leakage test	Total amount of leakage measured		
	_____	_____ hours	
	Allowable leakage		
	_____	_____ hours	
Hydrants	Number installed	Type and make	All operate satisfactorily
	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
Control valves	Water control valves left wide open		<input type="checkbox"/> Yes <input type="checkbox"/> No
	If no, state reason _____		
	Hose threads of fire department connections and hydrants interchangeable with those of fire department answering alarm		<input type="checkbox"/> Yes <input type="checkbox"/> No
Remarks	Date left in service _____		
Signatures	Name of installing contractor _____		
	Tests witnessed by		
	For property owner (signed)	Title	Date
	_____	_____	_____
	For installing contractor (signed)	Title	Date
	_____	_____	_____

Additional explanation and notes:

Overall System Status

Satisfactory Unsatisfactory

Signature: _____ Date: _____

License/Certification No.: _____