Automatic Sprinkler Systems

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 ☐ Yes ☐ No Equipment used is approved _____ ☐ Yes ☐ 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? ☐ Yes ☐ No If no, explain _____ Have copies of appropriate instructions and care and maintenance charts been left on the premises? ☐ Yes ☐ No If no, explain _____
Location	Supplies buildings _____
Underground pipes and joints	Pipe types and class _____ Type joint _____ Pipe conforms to _____ standard ☐ Yes ☐ No Fittings conform to _____ standard ☐ Yes ☐ No If no, explain _____ Joints needed anchorage clamped, strapped, or blocked in in accordance with _____ standard ☐ Yes ☐ No If no, explain _____

Test description

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.

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.

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):

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

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

Flushing tests

New underground piping flushed according to _____ standard by (company) _____ ☐ Yes ☐ No

If no, explain _____

How flushing was obtained	Through what type opening
☐ Public water ☐ Tank or reservoir ☐ Fire pump	☐ Hydrant butt ☐ Open pipe

Lead-ins flushed according to _____ standard by _____ ☐ Yes ☐ No

If no, explain _____

How flushing was obtained	Through what type opening
☐ Public water ☐ Tank or reservoir ☐ Fire pump	☐ Y connection to flange and spigot ☐ Open pipe

Hydrostatic test

All underground piping hydrostatically tested at	Joints covered
_____ psi For _____ hours	☐ Yes ☐ No

Leakage test	Total amount of leakage measured		
	_____	_____ hours	
	Allowable leakage		
	_____	_____ hours	
Hydrants	Number installed	Type and make	All operate satisfactorily
	_____	_____	☐ Yes ☐ No
Control valves	Water control valves left wide open		☐ Yes ☐ No
	If no, state reason _____ _____		
	Hose threads of fire department connections and hydrants interchangeable with those of fire department answering alarm		☐ Yes ☐ 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: