

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: _____

Property Address: _____ **Date:** _____

Plans	Accepted by Approving Authorities (Names): _____		
	Address: _____		
	Installation conforms to accepted plans:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Equipment use is approved:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	If no, explain deviations: _____		
Instructions	Has person in charge of fire equipment been instructed as to location of control valves and care and maintenance?: <input type="checkbox"/> Yes <input type="checkbox"/> No		
	If no, explain: _____		
	Have copies of the following been left on the premises?:		
	1. System components instructions	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	2. Care and maintenance instructions	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	3. NFPA 25	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Location of System	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: _____		
	Joint needing anchorage clamped, strapped, or blocked in accordance with _____ standard	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	If no, explain: _____		

Test Description:

Flushing
Flow the required rate until water is clear as indicted by no collection of foreign material in burlap bags as outlets such as hydrants and blow-offs. Flush at flows not less than 390 GPM (1476 L/min) for a 4" pipe, 880 GPM (3331 L/min) for a 6" pipe, 1560 GPM (5905 L/min) for an 8" pipe, 2440 GPM (9235 L/min) for a 10" pipe, and 3520 GPM (13323 L/min) for a 12" pipe. When supply cannot produce stipulated flow rates, obtain maximum available.
Hydrostatic
Hydrostatic tests shall be made at not less than 200 psi (13.8 bars) for two hours or 50 psi (3.4 bars) above static pressure in excess of 150 psi (10.3 bars) for two hours.
Leakage
New pipe laid with rubber gasket joints shall, if the workmanship is satisfactory, have little or no leakage at the joints. The amount of leakage at the joints shall not exceed 2 qts/hr (1.89 L/hr) per 100 joints irrespective of pipe diameter. The leakage shall be distributed over all joints. If such leakage occurs at a few joints, the installation shall be considered unsatisfactory and necessary repairs made. The amount of allowable leakage specified above may be increased by 1 fl oz per inch valve diameter/hr (30 mL/25mm/h) for each metal seated valve isolating the test section. If dry barrel hydrants are tested with the main valve open so the hydrants are under pressure, an additional 5 oz/min (150 mL/min) leakage is permitted for each hydrant.

Flushing Tests	New underground piping flushed according to _____ standard by _____ <input type="checkbox"/> Yes <input type="checkbox"/> No (company) _____ 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 of opening?
Hydrostatic Test	All new underground piping hydrostatically tested at _____ psi for _____ hours Joints covered <input type="checkbox"/> Yes <input type="checkbox"/> No
Leakage Test	Total amount of leakage measured _____ gallons for _____ hours Allowable leakage _____ gallons for _____ 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 thread 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
Test Witnessed By	Name of Installing Contractor:
	For Property Owner (signed) _____ TITLE _____ DATE _____
	For Sprinkler Contractor (signed) _____ TITLE _____ DATE _____
Additional Explanation and Notes:	

Pressure Reducing Valve Test	Location & Floor	Make & Model	Setting	Static Pressure		Residual Pressure (Flowing)		Flow Rate
				Left (psi)	Outlet (psi)	Inlet (psi)	Outlet (psi)	Flow (gpm)
Test Description	<p>Hydrostatic: Hydrostatic tests shall be made at not less than 200 psi (13.6 bars) for 2 hours or 50 psi (3.4 bars) above static pressure in excess of 150 psi (10.2 bars) for 2 hours. Differential dry-pipe valve clappers shall be left open during the test to prevent damage. All aboveground leakage shall be stopped.</p> <p>Pneumatic: Establish 40 psi (2.7 bars) air pressure and measure drop, which shall not exceed 1 ½ psi (0.1 bars) in 24 hours. Test pressure tanks at normal water level and air pressure and measure air pressure drop, which shall not exceed 1 ½ psi (0.1 bars) in 24 hours.</p>							
Tests	All piping hydrostatically tested at ____psi ____ bars for ____ hrs If no, state reason:							
	Dry piping pneumatically tested <input type="checkbox"/> Yes <input type="checkbox"/> No							
	Equipment operates properly <input type="checkbox"/> Yes <input type="checkbox"/> No							
	Do you certify as the sprinkler contractor that additives and corrosive chemicals, sodium silicate or derivatives of sodium silicate, brine, or other corrosive chemicals were not used for testing systems or stopping leaks? <input type="checkbox"/> Yes <input type="checkbox"/> No							
	Drain Test	Reading of gauge located near water supply test connection: ____psi (____ bars)			Residual pressure with valve test in connection open wide: ____psi (____ bars)			
	Underground mains and lead in connections to system risers flushed before connection made to sprinkler piping:							
Verified by copy of the U-Form No. 85B <input type="checkbox"/> Yes <input type="checkbox"/> No						Other (explain):		
Flushed by installer of underground sprinkler piping <input type="checkbox"/> Yes <input type="checkbox"/> No								
If powder-driven fasteners are used in concrete, has representative sample testing been satisfactorily completed? <input type="checkbox"/> Yes <input type="checkbox"/> No						If no, explain:		
Blank Testing Gaskets	Number Used		Locations			Number Removed		
Welding	Welded Piping? <input type="checkbox"/> Yes <input type="checkbox"/> No							
	If yes:							
	Do you certify as the sprinkler contractor that welding procedures comply with the requirements of at least AWS D10.9, Level AR-3? <input type="checkbox"/> Yes <input type="checkbox"/> No							
	Do you certify that the welding was performed by welders qualified in compliance with the requirements of at least AWS D10.9, Level AR-3? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Do you certify that welding was carried out in compliance with a documented quality control procedure to ensure that all discs are retrieved, that openings in piping are smooth, that slag and other welding residue is removed, and that the internal diameters of piping are not penetrated? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Cutouts (Discs)	Do you certify that you have a control feature to ensure that all cutouts (discs) are retrieved? <input type="checkbox"/> Yes <input type="checkbox"/> No							
Hydraulic Data Nameplate	Nameplate provided? <input type="checkbox"/> Yes <input type="checkbox"/> No			If no, explain:				
Remarks	Date left in service with all control valves open:							
Test Witnessed By	Name of Sprinkler Contractor:							
	For Property Owner (signed)				TITLE		DATE	
	For Sprinkler Contractor (signed)				TITLE		DATE	
Additional Explanation and Notes:								