



## Automatic Sprinkler Systems

# Contractor's Material and Test Certificate for Underground Piping

**Date:** \_\_\_\_\_ **Property Name:** \_\_\_\_\_  
**Property Address:** \_\_\_\_\_

**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 the 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 contractors. It is understood that 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.

**Plans**

Accepted by [approving authority's name(s)] \_\_\_\_\_

Address \_\_\_\_\_

Installation conforms to accepted plans?  Yes  No

Equipment used is approved?  Yes  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 of this new equipment?  Yes  No  
 If no, explain.

Have copies of appropriate instructions and care and maintenance charts been left on premises?  Yes  No  
 If no, explain.

**Location**

Supplies bldgs. \_\_\_\_\_

**Underground Pipes and Joints**

Pipe conforms to \_\_\_\_\_ standard.  Yes  No

Fittings conforms to \_\_\_\_\_ standard.  Yes  No

If no, explain.

Joints needing anchorage clamped, strapped, or blocked 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 400 gpm (1514 L/min) for 4-in. (102-mm) pipe, 600 gpm (2271 L/min) for 5-in. (127-mm) pipe, 750 gpm (2839 L/min) for 6-in. (152-mm) pipe, 1000 gpm (3785 L/min) for 8-in. (203-mm) pipe, 1500 gpm (5678 L/min) for 10-in. (254-mm) pipe and 2000 gpm (7570 L/min) for 12-in. (305-mm) pipe. When supply cannot produce stipulated flow rates, obtain maximum available.



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# Contractor's Material and Test Certificate for Underground Piping (cont.)

**Test Description (cont.)**

**HYDROSTATIC:** Hydrostatic tests shall be made at not less than 200 psi (13.6 bar) for two hours or 50 psi (3.4 bar) above static pressure in excess of 150 psi (10.2 bar) for two hours.

**LEAKAGE:** New pipe laid with rubber gasketed 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 per hr. (1.89 L/h) 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 in. valve diameter per hour (30 mL/25 mm/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 per minute (150 mL/min) leakage is permitted for each hydrant.

**Flushing Tests**

New underground piping flushed according to \_\_\_\_\_ standard.  Yes  No  
By (company) \_\_\_\_\_ If no, explain.

How flushing flow was obtained:  Public water  Tank or reservoir  Fire pump  
Through what type opening  Hydrant butt  Open pipe  
Lead-ins flushed according to \_\_\_\_\_ standard  Yes  No  
By (company) \_\_\_\_\_ If no, explain.

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

**Hydrostatic Test**

All new underground piping hydrostatically tested at \_\_\_\_\_ psi (bar) for \_\_\_\_\_ hours  
joints covered?  Yes  No

**Leakage Test**

Total amount of leakage measured: \_\_\_\_\_ gals (L) \_\_\_\_\_ hours  
Allowable leakage: \_\_\_\_\_ gals (L) \_\_\_\_\_ 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 with all control valves open: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Installing Contractor: \_\_\_\_\_

**Signatures of Test Witnesses**

For property owner (signed) \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

For sprinkler contractor (signed) \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_