



CONTRACTORS' MATERIALS AND TEST CERTIFICATE FOR PRIVATE FIRE SERVICE MAINS - NFPA 24 2016

PROCEDURE

Upon completion of work, inspection and test 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:		
LOCATION	SUPPLIES BUILDINGS		
	PIPE TYPES AND CLASS	TYPE JOINT	
PIPES AND JOINTS	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:		
	BURIED JOINTS NEEDING 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-inch pipe, 610 gpm (2309 L/min) for 5-inch pipe, 880 gpm (3331 L/min) for 6-inch pipe, 1560 gpm (5905 L/min) for 8-inch pipe, 2440 gpm (9235 L/min) for 10-inch pipe, and 3520 gpm (13323 L/min) for 12-inch pipe. When supply cannot produce stipulated flow rate, obtain maximum available.</p> <p>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.</p> <p>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 amount of allowable leakage specified above may be increased by 1 fl oz. per in. valve diameter per hr. (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.</p>		
	NEW PIPING FLUSHED ACCORDING TO _____ STANDARD BY _____ (company) <input type="checkbox"/> YES <input type="checkbox"/> NO		
FLUSHING TESTS	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 <input type="checkbox"/> YES <input type="checkbox"/> NO		
	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"/> Y CONNECTION TO FLANGE & SPIGOT <input type="checkbox"/> OPEN PIPE	

HYDROSTATIC TEST	ALL NEW PIPING HYDROSTATICALLY TESTED AT _____ PSI FOR _____ HOURS			BURIED JOINT COVERED <input type="checkbox"/> YES <input type="checkbox"/> NO
LEAKAGE TEST	TOTAL AMOUNT OF LEAKAGE MEASURE NO LEAKAGE ALLOWED FOR VISIBLE JOINTS _____ GALS. _____ HOURS			
	ALLOWABLE LEAKAGE (BURIED) NO LEAKAGE ALLOWED FOR VISIBLE JOINTS _____ GALS. _____ HOURS			
HYDRANTS	NUMBER INSTALLED	TYPE AND MAKE		ALL OPERATED SATISFACTORILY <input type="checkbox"/> YES <input type="checkbox"/> NO
	WATER CONTROL VALVES LEFT WIDE OPEN <input type="checkbox"/> YES <input type="checkbox"/> NO			
CONTROL VALVES	IF NO, STATE REASON:			
	HOSE THREADS OF FIRE DEPARTMENT CONNECTION AND HYDRANTS INTERCHANGEABLE WITH THOSE OF FIRE DEPARTMENT ANSWERING ALARM <input type="checkbox"/> YES <input type="checkbox"/> NO			
REMARKS	DATE LEFT IN SERVICE			
	ADDITIONAL COMMENTS			
SIGNATURES	NAME OF INSTALLING CONTRACTOR			
	TESTS WITNESSED BY			
	FOR PROPERTY OWNER (SIGNED)		TITLE	DATE
	FOR INSTALLING CONTRACTOR (SIGNED)		TITLE	DATE

ADDITIONAL EXPLANATION AND NOTES

10.10.1 Approval of Underground Piping. The installing contractor shall be responsible for the following:
 (1) Notifying the AHJ and the owner's representative of the time and date testing is to be performed
 (2) Performing all required acceptance tests
 (3) Completing and signing the contractor's material and test certificate(s) shown in Figure 10.10.1

Table 10.10.2.1.3 Flow Required to Produce Velocity of 10 ft/sec (3.0 m/sec) in Pipes

Nominal Pipe Size		Flow Rate	
in.	mm	gpm	L/min
2	50	100	380
2 1/2	65	150	570
3	75	220	833
4	100	390	1500
5	125	610	2300
6	150	880	3350
8	200	1560	5900
10	250	2440	9250
12	300	3520	13,300