Water Supply (Water Fittings) Regulations 1999
Guidance Note 3

NORTHUMBRIAN WATER

Customer Services: 0845 7171100

Pressure Testing of New Water Service Pipework

1. The Water Supply (Water fittings) Regulations 1999 require that all new water systems both above and below ground shall be tested hydraulically prior to commission.

2. For external below ground pipework where the supply pipe is newly installed and monlithic in structure (ie there are no joints on the service pipe other than the connection to the communication pipe) Northumbrian Water will not require an additional on site test but will accept the pipe manufactures test certificate or pressure guarantees.

3. For both internal pipework and underground pipework with joints the test pressure should be 1.5 times the maximum working pressure that any pipe or fitting would be subjected to.

4. It should be noted that Northumbrian Water do not guarantee pressures in their water mains and pressure can vary quite substantially over a 24 hour period.

5. The method of testing will vary depending upon the nature of the pipework. Those systems with plastic pipes need to make allowance for the expansion in the plastic material caused by the pressurisation process.

6. Prior to the commencement of any test the pipework shall be charged with wholesome water and all air removed.

7. All testing methods should be completed in a manner that will not permit the contamination of the public water main with pressurised water.

8. For internal systems all float operated valves should be capped off or isolated.

9. The test pressure is measured at the lowest point on the system to be tested.

10. For systems that do **NOT** contain any plastic materials (that is rigid materials such as copper or stainless steel) the requirement shall be satisfactory if, the whole of the system under examination is pressurised to the required value by pumping after which it is then isolated for the period of one hour and the pressure does not fall below that of the test pressure.

11. For systems that do contain plastic materials there are two methods of test procedure each of which is acceptable to Northumbrian Water

    Test A The whole system under examination is subjected to the test pressure by means of pumping. Once the test pressure is achieved the pressure is maintained by pumping for a further 30 minutes,after which the test continues with additional pumping.
    The pressure in the system is then carefully reduced to one third of the test pressure.
    The test is satisfactory if the pressure does not drop further over the following 90 minutes and there is no visible sign of leakage.

    Test B The whole of the system is subjected to the test pressure which is maintained by pumping for a period of 30 minutes after which the pressure is noted. Then without further pumping the test is deemed satisfactory if the test pressure does not fall more than 0.6 bar over the next 30 minutes and a further 0.2 bar during the following 120 minutes and there is no visible sign of leakage.