

- f) Pipes or joints shall not be accepted if any leakage or damage is visible during an internal inspection.
- g) If the result of any test or inspection does not comply with the requirements of the specification, the Contractor shall investigate the reason and carry out remedial work to the approval of the Engineer at the Contractor's cost. The pipeline shall then be re-tested. This process shall be repeated until the requirements of the specification are satisfied.
- h) The Contractor may be required to incorporate a 100mm tee on property connection laterals near the junction of the main sewer and this tee may be used to insert an expanding stopper in the lateral for testing purposes. On the satisfactory completion of such tests, remove all temporary fittings from the lateral. Provide the tee with a watertight cap or plug.

21.3.2.3 Air Testing of Non Pressure pipelines

- a) Pipelines up to 1000 shall be air tested using a pressure of 100mm of water monitored using a clear manometer. Tests shall be carried out prior to backfilling.
- b) A test shall be accepted if the air pressure remains above 75mm of water after a period of 5 minutes without further pumping. It shall be noted that this criteria is independent of diameter or length.
- c) On initial failure the test will be repeated twice more after checking seals and equipment and extending. The period of stabilisation may also be extended before pressure drop is measured. On the third failure the engineer may recommend hydrostatic testing in accordance with 3.2.2 above or replacement of the pipe length.
- d) It is recommended that a test shall be carried out on installation of each pipe length but in no case after more than every three lengths are installed.
- e) Final testing from manhole to manhole shall be carried out prior to backfilling.

21.3.3 Deflection Measurement of Pipelines

- a) Initial pipe deflection measurements shall be undertaken within 3 days of a line of PP pipes being installed, hydrostatically tested and the trench completely