

Swabs

Swabs have a density of 20 - 25 kg/m³, minimum tensile strength 95 kN/m² and a hardness (at 50% deflection to BS 4443 Parts 1, 2 and 4) of 19 to 23 kg.

The diameter of the swab shall be as follows:

- Hard swabs: nominal bore of main
- Soft swabs for mains less than 200 mm: nominal bore + 50mm
- Soft swabs for mains greater than 200 mm: nominal bore + 75mm

The length of the swab shall be 1.5 times its diameter.

Water for Testing, Swabbing and Disinfection

Add the following clause:

Any additional water needed to repeat the procedures as a result of any failure on the part of an SLO may be charged at South East Water prevailing metered rate.

Disinfection and Sampling

Disinfection shall not commence until the cleaning and flushing process has been completed satisfactorily. When inspection of the flushing water shows its appearance is clear, the new main shall be disinfected by filling it with water containing not less than 30 mg/l free chlorine. Chlorinated water shall be drawn through to the ends of all branches of the new main by opening washouts or hydrants and monitoring of the presence of chlorine until a residual of at least 25 mg/l chlorine is measured at each outlet. Where practicable, all valves and hydrants shall be operated to bring chlorinated water into contact with their components

When filled with highly chlorinated water at the correct chlorine concentration, the new main shall be left isolated for a contact period of 24 hours. After this period the chlorinated water shall be displaced with mains water.

As highly chlorinated water is displaced its chlorine residual shall be checked at the end of each branch, or at suitable sampling points along its length, if the new main comprises a long un-branched length. If the residual at any point is less than 20 mg/l free chlorine the main shall be cleaned again and re-disinfected

When satisfactory chlorine residuals have been measured as above, the new main shall be flushed with mains water until the chlorine residual measured at the end of each branch is no greater than that of the mains water being introduced. When this is achieved, the main shall be left filled with mains water and isolated. After a further 24 hours, it shall be sampled for aesthetic, bacteriological and chemical tests. These test results shall be submitted to South East Water for approval.

A shut valve is not sufficient to isolate the new main from the existing one. If the two mains are to be directly connected prior to disinfection, a blank end (spade) shall be fitted between them.