



Assessment of installation of the Berolina-liner manhole to manhole lining system by Waterflow Plc - schedule

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1. Scope

To assess the ability of Waterflow Plc to install the Berolina-Liner Manhole to Manhole Lining Systems in accordance to the Berolina-Liner installation manual.

2 Description of system

The lining is used for the rehabilitation of domestic and industrial gravity sewers and tunnels with internal diameters 150 mm to 600 mm.

The Berolina-Liner Manhole to Manhole Lining system is a WRc Approved™ product reference certificate PT/265/0497. It comprises a GRP woven sleeve which is impregnated with a UV cure polyester resin.

The pipe to be lined is cleaned, isolated and any laterals are closed off. The factory impregnated lining sleeve is placed into the host pipe and inflated. The UV light train is pulled through the lining at the correct speed, dependent upon diameter and wall thickness of the lining sleeve, to cure the resin. The light train is removed from the lined pipe. The ends of the resultant lining are trimmed and grouted at the manholes. If requested an air test is undertaken on the lining. The connections to the laterals re-made.

Exclusions:

- I. The installation or reconnection of the laterals.
- II. The use, in a modified form, for the rehabilitation of land and rail track drains.

II. The performance of hydrophilic seals and grouts for leaktightness.

3. Assessment schedule

The assessment comprises the following:

- The design of the cured lining;
- Storage and handling of lining prior to installation;
- An audit of the installation of the lining undertaken by Waterflow in accordance with the Berolina-Liner Installation Manual version 07-02.

Details of the Berolina-Liner System product Approval can be found on WRc Approved™ Assessment Schedule reference PT/265/0497. These include:

- Review of the quality systems for the manufacture, supply, materials handling and storage of the sleeves, resins and resin impregnation;
- The design of the cured lining;
- Technical audit of all instructions for pre-installation procedures, environmental, planning, site preparation, receipt and storage of lining on-site and installation of the system.
- Properties of the cured in place pipe.
- Technical audit of the installation of the lining in accordance with the Berolina-Liner Installation Manual.

4. Reference documents

- Berolina-Liner Installation Manual version 07-02.