

## CASWICK INTEGRATED LADDER SYSTEM FOR ACCESS TO SEWERS AND UNDERGROUND CHAMBERS

### Background

The Caswick Integrated Ladder system for incorporation into pre-cast concrete manhole rings, provides access to and from gravity sewers and other underground chambers.

The ladder comprises polypropylene encapsulated steps, manufactured in accordance with BS EN1310, to which two polypropylene side rails (stringers) are attached. The steps provide the main structural support and the stringers give additional support.

The steps are available with projections of either 150 or 200 mm. The stringers are supplied in nominal 25m length coils.

### Scope of assessment

To assess the performance of the Caswick Integrated Ladder against the WRc Assessment Schedule PT250/1005-AS. Due to the unique nature of the system, there were no tests that were directly applicable. The tests included in the Assessment Schedule were developed taking into account the service requirements of the ladder system.



### Programme

1. The on-site installation was witnessed to confirm that the installation instructions were clear and the system could be successfully installed following instructions.
2. A technical audit of type testing was carried out. Selected tests were witnessed to demonstrate compliance with the Assessment Schedule with particular regard to the strength of the stringer.
3. Certificates of conformity from the material supplier were taken as evidence of compliance of the materials to the declared manufacturer's specification.
4. A certificate of conformity to EN ISO 9001 was accepted as evidence of a satisfactory quality system.

### Results

The tests and the site trial demonstrated that the Caswick Integrated Ladder complies with the requirements of the Assessment Schedule PT/250/1005-AS and a WRc Approved™ certificate was awarded to Caswick Ltd on 10 October 2005