

New Sewers Code for Adoption signals a more flexible future for drainage

New approved guidance from Water UK for use by developers focusing on the planning, design and construction of foul and surface water drainage systems came into force on 1st April 2020.

With construction sites and housebuilders returning to work over the coming months, the new Sewers Code for Adoption provides merchants, developers and contractors with an updated and standardised set of delivery procedures.

The Sewers Code for Adoption guidance includes a Design and Construction Guidance document that replaces the existing manual outlining significant changes which will affect the adoption of sustainable drainage systems (SuDS) and below ground drainage systems on all development sites in England.

The main focus of the new guidelines is aimed at increasing the use of hard and soft SuDS at the outset of a development, in response to the rising rainfall in the country, and the recognition that distributing surplus water directly into sewers is unsustainable.

In addition, while the former regulations allowed water companies to vary requirements on products and systems deployed for drainage systems, the updated guidance ensures that all products and materials are evaluated by the same standards across England.

Importantly, there is an explicit instruction that the use of plastic-based pipes for below ground drainage can be considered on all sites.

Within the guidance Part E of the Design and Construction Guidance referring to civil engineering specification there is a list of acceptable pipe materials with the reference to plastic based systems reproduced here:

E2.21 Thermoplastics Solid Wall Pipes and Fittings for Gravity Sewers

- 1. Thermoplastics pipes, joints and fittings for gravity sewers shall comply with the relevant provisions of BS EN 1401-1 (PVC-U), BS EN 1852-1 (PP), or BS EN 12666-1 (PE) as appropriate.
- 2. Ancillary drainage fittings shall comply with BS EN 13598-1 or BS 4660, as appropriate.

E2.22 Thermoplastics Structured Wall Pipe

- 1. Thermoplastics structured wall sewer pipe shall comply with the relevant provisions of BS EN 13476-1 and WIS 4-35-01 and BS EN 13476-2 or BS EN 13476-3. Pipes shall be BSi Kitemarked or have equivalent third party certification.
- 2. Pipes less than or equal to 500 mm in diameter shall have nominal short-term ring stiffness not less than 8 kN per m2 (SN8) or be subject to a quality system for storage and embedment.
- 3. Nominal short-term ring stiffness of 2 kN per m2 (SN2) is acceptable for pipes greater than 500 mm in diameter, subject to structural design load calculations in accordance with BS 9295:2019 which shall be provided to support this.
- 4. Maximum length of pipe for laying is 3 m or 10 x DN, whichever is the greater.



This means that there are now regions in England where house builders and developers can select a greater range of products and systems when specifying below ground drainage on new housing estates and developments.

All water companies are now working to these changes made in accordance with Section 104 of the Water Industry Act 1991 so there is a need for merchants, developments and contractors to understand how the guidance will benefit them.

Housing Developers

The changes to the regulations now mean that developers can use a greater range of materials for sewerage systems. They can now opt for cost effective, light-in-weight but reliable and durable plastic systems for below ground drainage and sewer systems, as well as design and introduce SuDS systems using the latest in drainage technology.

Contractors and groundwork specialists

Groundwork specialists have an opportunity to increase their range of skills and services they can offer developers and scheme designers.

By placing water management and the control of surface water runoff as an integral part of the design process the guidelines offers an opportunity for groundworkers to offer engineering expertise on the overall management of water on a development site from waste water generated by housing units to surface water from rainfall and natural sources.

Merchants

As merchants return to work, the knowledge that they can now supply a greater range of solutions for sewerage systems, including light-in-weight plastic-based systems provides an improved sales opportunity.

This will have particular impact in regions including the South East, where legacy materials such as concrete and clay have been traditionally used for all adoptable applications.

Speak to our technical team

Polypipe is best placed to advise home builders, from large developers to small plot builders on how the new Sewers Code for Adoption will affect their projects, with our below ground drainage technical experts available to offer guidance for any project.

Our below ground drainage product portfolio includes the UK's largest range of sewer pipes, fittings and chambers for domestic and residential developments and project.

For more information, contact your Polypipe area sales manager.

