

- d) Pipes and fittings shall be suitable for carrying domestic sewage at temperatures up to 50°C and having a maximum sulphide concentration of 50 mg/litre.
- e) Pipes and fittings to be designed to withstand up to 5% long term deflection in their installed conditions.
- f) Conform to BS/DIN EN 14364 for pipe dimensions and tolerances. Deviations in diameters and wall thicknesses of pipe ends and coupling shall be such that the seal at the joints is not affected.
- g) Ensure that the internal surfaces of the pipes and fittings are smooth, and that the internal and external surfaces are clean and free from defects such as protruding fibres, pits, cracks, blisters tackiness and embedded foreign matter. The core of the pipe wall shall be free of bubbles, voids, cracks and de-bonding.
- h) All bends shall be long radius bends unless otherwise approved by the Engineer.
- i) Latest Type Tests (Long Term test) results not later than three years from the date of submission of the proposed GRP pipes and fittings required for the Works including Manufacturers Certificates of compliance with this section of the standard specification, to be provided.

Joints

General

Joint performance shall be according to section 07 of BS/DIN EN 14364; in general.

- a) All buried joints shall be Non-end-load-bearing flexible joints of spigot and socket type (including double socket designs) with EPDM rubber in full faced elements or rings in accordance with BS/DIN EN 681; manufactured according to the individual manufacturing technique and supplied as integral part of the pipe or separately. The sealing rings shall be supplied by the pipe manufacturer.
- b) Non-end-load-bearing flexible joints with elastomeric seals shall be tested using test pieces conforming to BS/DIN EN 14364, for conformance to the test performance requirements under hydrostatic pressure.