

Property to be tested	Tests to be performed	Test pressure in Bars	Duration
<b>Angular deflection and draw</b>	Initial pressure	1.5 x PN	15 min
	Positive static pressure	2.0 x PN	24 h

a) Relative to atmospheric, i.e. approximately 0.2 bar (0.02 MPa) absolute.

### Marking

Ensure that all pipes including cut lengths and all fittings before dispatch from the pipe manufacturer's works are indelibly marked as follows:

- i. The manufacturer's name, initials, or identification mark.
- ii. The nominal internal diameter in mm.
- iii. The length in m.
- iv. Mark the classification i.e. pressure rating, stiffness.
- v. The date of manufacture and batch number.
- vi. A stamp to show that they meet the required inspection requirements and hydraulic tests (where applicable) at the point of manufacturer.
- vii. Stencil in legible letters the pipe identification number on the inside and outside at each end. Ensure that the same number appears on all record sheets and documents relating to the manufacture delivery and testing of that pipe.
- viii. The manufacturing standard.
- ix. The project or contract number.

### 18.2.2.2 Exposed GRP

GRP pipes and fittings utilized for exposed service inside pumping stations, and valve chambers shall be designed to resist all bending stresses, thrust forces, surge pressures, negative pressures and vibratory forces.

Exposed pipe and fittings shall be manufactured in the same manner and with the same materials as buried pipe, along with the following requirements unless otherwise approved by the Engineer.