

- C. The joints shall contain a neoprene ring gasket which must be contained in a groove on the spigot end of each pipe to ensure proper positioning and confinement in annular space.
- i. The length and cross-sectional diameter of the gasket, annular space provided for the gasket, and all other joints details must be such as to produce a watertight joint which must not leak when pulled 13mm over and above the initial jointing allowance.
 - ii. Ensure that the gasket socket complies with ASTM C361M and must be a synthetic rubber compound in which the elastomeric is neoprene, exclusively. Ensure that the solid compound contain not less than 50 percent by volume of neoprene and contain no reclaimed rubber or any deleterious substances.
- D. The gaskets shall be extruded or molded and cured in such a manner that they will be dense, homogeneous and free from porosity, blisters, pitting and other imperfections. The gasket stock must be extruded or molded with smooth surfaces to the specified size within a tolerance of ± 6 percent on any dimension, measured at any cross-section.

24.2.3 Pipe Accessories

Pipe Joints General:

- A. The major design criteria of the pipe joints shall be the internal test pressure and the prevention of infiltration of ground water. Provide the Engineer with details of vacuum tests on the joints
- B. Unless otherwise approved by the Engineer, use flexible type joints of spigot and socket for all buried pipes and sealed with rubber material ring or flexible gasket. Ensure that the joints will withstand the various tests specified herein for pipelines. For pipes up to and including 600mm nominal internal diameter, use joints capable of standing a deflection of not less than one and a half degrees in any direction. For pipes over 600mm nominal internal diameter, use joints capable of withstanding a deflection of half degree in any direction. Use pipes capable of withstanding "draw" of 13mm over and above the initial jointing allowance. The initial jointing allowance is the gap between the spigot and the shoulder of the socket measured parallel to the centre line of the pipeline and must not be less than 6mm or greater than 13mm or as recommended by the pipe manufacturer.