

### **6.16 Size of Pipelines in Water Networks**

The sizes used for pipes, fittings and valves in the water networks shall comply with the relevant ISO /EN BS international standards. The recommended sizes to be used in Al Ain water distribution networks are listed below. The minimum size to be used in networks shall be 100 mm for DI and 110 mm for HDPE. HDPE pipelines shall be used for sizes up to DN 710 (600 mm internal dia) and DI shall be used for sizes above 600 mm internal diameters.

Table 8: Size of Pipelines to be used in Water Networks

<i>DI pipes / Valves (mm)</i>	<i>Equivalent HDPE SDR 17, PN 10 (mm)</i>	<i>Equivalent HDPE SDR 11, PN 16 (mm)</i>	<i>Remarks</i>
100	110	125	
150	160	180	
200	225	250	
250	280	315	Not a preferred size
300	355	355	
400	450	500	
500	560	630	
600	630	710	
700	-	-	Not a preferred size
800	-	-	
900	-	-	Not a preferred size
1000	-	-	
1100	-	-	Not a preferred size
1200	-	-	

### **6.17 Cover and Gradients of Water Pipelines**

The depth of cover to water networks laid in normal condition shall not be less than 1000 mm. Suitable depth greater than 1000 mm may be applied at road crossings and at other non-normal laying condition.

The water distribution pipelines that not have branches or service connections connected to them shall be laid to a minimum gradient that allow the release of air.