If possible, minimum velocities shall not fall below 0.3 m/s at low demand periods to ensure that the age of the water does not become excessive and that loose deposits in the main are not allowed to settle, only to be lifted into suspension again at peak demand periods.

Table 4: Velocities in Water Networks

No.	*Pipelines Size (mm)*	*Target velocity ranges (m/s)*	*Optimum target velocity (m/s)*
1	100 to 150	0.3 to 1.0	0.4
2	200 to 300	0.4 to 1.5	0.5
3	>300	0.5 to 2.0	0.6

As the available residual pressure at the interface points is generally much higher than the minimum required pressure of 1.25 bars and the distance from the interface points to the distribution networks is relatively short, therefore the target velocities can be higher than the values shown above if technically and economically justified.

6.14 Minimum and Maximum Pressure in Networks

Water distribution system shall be sized to ensure that the minimum residual pressures at the customer connection boundary shall be generally not less than 12.5 meters head (1.25 bar) at all times. Lower pressures than 12.5 m may be accepted under certain conditions, such as at emergencies and during fire fighting;

Water distribution system shall be generally designed for a target residual pressure of 15m to 40 m with a maximum pressure less than 40 m in the networks downstream the DMA feeding point and 60 m in the networks upstream the DMA feeding points.

including the connection part to the customers. The recommended pressure in the system is summarized below in Table 5.0:-

Table 5: Recommended Residual Pressure In Distribution Networks

No.	*Description*	*Minimum Pressure (m)*	*Target pressure Range (m)*	*Maximum target Pressure (m)*
1	Downstream DMA	12.5	15 to 40	40
2	Upstream DMA and main pipelines	12.5	25 to 50	60