

## 6.11 Treated water storage

A water supply system needs to include some form of treated water storage to provide a reserve of drinking water in the event of planned maintenance or problems with the source or treatment and to cater for fluctuations in demand. Storage may take the form of a small covered reservoir, providing sufficient head to supply more than one property, or may be a suitably positioned storage tank (e.g. in the roof space of the property), from which water flows under gravity to the taps.

The tank or reservoir should hold a volume sufficient to accommodate the peak demand and the maximum period of interruption of supply.

The storage tank, and other parts of the water supply system, may be contaminated during construction and should therefore be disinfected before use. This may be achieved by filling the system with a strong (20 mg/l) solution of chlorine and leaving to stand for several hours, preferably overnight. The chlorine solution should be drained off and the system rinsed thoroughly using treated water.

All storage tanks must be insulated to guard against freezing during the winter. Insulation will also prevent the water from warming up too much during the summer months. The tank must be fitted with a lockable, well-fitting (but not airtight) lid to exclude light and pollutants. It is especially important to guard against the ingress of insects and animals and all openings must be protected using a fine mesh screen.

The storage tank must be inspected regularly; at least annually and preferably every six months. If necessary, any accumulated silt can be flushed or siphoned out and the system disinfected as described above.