

Firefighting reserve

- 1.4 The Department of Civil Defence is the only reference for determining the quantity and the application of water allocated for firefighting purposes for Premises, which are classified as those requiring internal fire-fighting systems. The tank capacity shall be sufficient to cater for the duration of fire flow as determined by the Department of Civil Defence and shall not be less than 60 minutes, subject to Civil Defence approval in all cases.
- 1.5 Where Ground Storage Tanks are considered (and in order to avoid contamination in tanks), the allocation of separate tanks for firefighting purposes is prohibited if the total required capacity is less than three times the average daily water demand, unless prior approval has been obtained from the Distribution Company. The lower part of that tank shall be reserved for the Fire Service by maintaining a constant water level either by means of a suction pipe invert level, or another approved device. The allocated fire reserve shall be held completely within the ground tank's actual capacity.
- 1.6 If the total required capacity exceeds three times the average daily water demand, then a dedicated firefighting water reserve tank shall be provided. It shall be totally separated from the domestic water supply system to avoid contamination and water stagnation. Separate firefighting reserve tanks should have a circulation pump that automatically circulates 20% of the water volume in 8 hours/day to prevent stagnation. It is recommended that the dedicated firefighting water reserve tank should be cleaned at least annually.
- 1.7 The Department of Civil Defence should be consulted to determine the firefighting systems and actual quantity of firefighting water reserve required. The construction of fire services shall comply with the requirements of the UAE Fire and Life Safety Code of Practice, Fire Service regulations and instructions issued by the Department of Civil Defence in the Emirate of Abu Dhabi. Final approval from the Department of Civil Defence shall be obtained for fire fighting systems after incorporating all the requirements of the Distribution Company.

Tank storage capacity

- 1.8 Total storage capacity of ground storage tank and roof tanks or cistern shall be as per the following limits:
- (i) Minimum Capacity = 1 x daily consumption + firefighting reserve; and
 - (ii) Maximum Capacity = 2 x daily consumption + firefighting reserve
- 1.9 The roof tank should always be sized to hold sufficient water to supply between 12 and 24 hours of the Premises' total daily consumption, irrespective of the provision of Ground Storage Tanks. In situations where no ground tanks are allowed for, the