

Commissioning and Water Management

602.01 Water Metering

For all new buildings, meters must be installed to measure and record water demand and consumption of the facility as a whole. It must also provide accurate records of consumption (tariff class meters). All meters should be approved by DEWA and comply with DEWA specifications.

- A. For all buildings having a cooling load of at least 1 MW or gross floor area of 5,000 m² or greater, additional water metering must be installed to record consumption data for major water use of the building and major water uses in and around the building.
- B. The building operator shall be responsible for recording water consumption for each individual meter. Records must be kept for 5 years.
- C. Each individual tenancy in the building must have a sub-meter installed when a building tariff meter is not present.
- D. Where a Building Management System (BMS) or Central Control and Monitoring System (CCMS) is installed, metering must be integrated into the system to allow real time profiling and management of water demand and consumption.
- E. Virtual meters using run-hours are not acceptable as sub-meters.
- F. The sub-meters should be used for demand management and cost allocation purposes.

Onsite Systems: Recovery and Treatment

603.01 Wastewater Reuse

For Golden and Platinum Sa'fa and for all new buildings, the building must be provided with a system for the collection and reuse of greywater (15% for Gold, 30% for Platinum).

For all cases and Sa'fa levels, if a system is installed for the collection and reuse of greywater produced within the building or uses Treated Sewage Effluent (TSE) from an external source, the following must be complied:

- A. The building must have dual-plumbing system for the collection and recycled use of drainage water (greywater). Pipes that transport greywater must be colour-coded differently from the pipes that are used for potable (drinking standard) water and must be labelled 'Not Suitable for Drinking.'
- B. There must be a minimum air break of 25 mm between any potable water sources and greywater collection systems.
- C. Greywater must not be used for purposes wherein it will come into contact with the human body. It must also be treated to the standard set forth by Dubai Municipality.

For all new commercial car washing facilities, at least 50% of the wastewater generated must be recovered and re-used.

603.02 Water Consumption for Heat Rejection Including Cooling Towers

For all new buildings:

Potable water supplied by Dubai Electricity and Water Authority (DEWA) must not be used for heat rejection purposes.

Where cooling towers are used, Treated Sewage Effluent (TSE), seawater or recycled water must be used to meet the water demand for all heat rejection purposes. Secondary water sources must be approved by Dubai Municipality or DEWA.

A separate totalizing meter must be fitted on the water supply line to the individual cooling towers. A daily log of water use must also be kept.