601 Chapter 1

# Conservation and Efficiency

## **601.01 Water Efficient Fittings**

For all new buildings, following must be used:

A. Water-conserving fixtures meeting the criteria listed in Table 601.01 (1):

Table (1) 601.01 Maximum Flow Rate

Fixture Type	Maximum Flow Rate
Showerheads	8 I/min
Hand wash basins	6 l/min
Kitchen sinks	7 l/min
Dual Flush Toilets	6   Full flush
Urinal	3   Part flush
External Wall and Exposed Floor	1l per flush or waterless

B. Dual Flush toilets.

D. Cisterns serving single or multiple urinals in public, commercial and industrial buildings with manual or automatic flush controls that operate based on usage patterns. Only sanitary flushing is acceptable in the event of building closure or shutdown (including overnight).

Faucets installed for specialized application may be exempt from meeting the flow rates, subject to Dubai Municipality's approval.

#### **601.02 Condensate Drainage**

For all buildings including existing buildings, where condensate water is produced by air-conditioning equipment, the condensate water must be collected and disposed appropriately. Condensate collection pans and drainage pipes must be installed to provide proper drainage and to prevent any stagnant water. A minimum air break of 25 mm must be provided between the condensate piping and the wastewater pipe. If the condensate water is not reused, it must be discharged into the wastewater system through a properly sized water trap.

### 601.03 Condensate Reuse

For all new buildings with a cooling load not less than 350 kW, condensate water from all air-conditioning equipment, air handling units or equipment handling a mixture of return air and outside air, where the outside air is not preconditioned, must be recovered and reused. The condensate water can be re-used for irrigation, toilet flushing, or other onsite purposes wherein it will not come into direct contact with the human body. The condensate water can also be re-used for heat recovery as per the requirements set in regulation 502.10.

## 601.04 Water Efficient Irrigation

For all new buildings, 100% water requirement for the total exterior landscaping must be irrigated using non-potable water or by use of drip or subsoil water delivery systems. The landscaping shall also include the area for green roofs.

All irrigation systems must incorporate backflow prevention devices, if at any point they get connected to a potable water supply. The backflow prevention devices must be checked in line with the manufacturer's recommended practice.

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C. Automatic (proximity detection) / push button faucets in all public facilities.