502.07 Electronic Ballasts

For all new buildings, high frequency electronic ballasts must be used with fluorescent lights and metal halide of 150 W and less.

High frequency electronic ballasts must be labelled as conforming to an international standard approved by the DEWA / Dubai Municipality

502.08 Control Systems for Heating, Ventilation and Air Conditioning (HVAC) Systems

For all new buildings other than villas, all Heating, Ventilation, and Air Conditioning (HVAC) systems must be provided with controls to guarantee the achievement of energy efficiency in use in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2007, Section 6.4.3.or equivalent as approved by DM/DEWA.

As a minimum, the following control features must be incorporated:

- 1. Sub-division of systems into separate control zones to correspond with each area of the building that has a significantly different solar exposure, or cooling load, or type of use.
- 2. All separate control zones must be capable of:
 - Independent temperature control;
 - Inactivation when the building, or part of building served by the system, is not occupied.
- 3. The operation of central plant only when the zone systems require it.

502.09 Control Systems for Hotel Rooms

For all new hotels, guest rooms must incorporate, in each room, controls systems which are able to turn off the lighting, air conditioning and power when the room is not occupied.

In addition, it is recommended (optional) that each guest room should incorporate control system to enable to turn off the air conditioning when the balcony door / window is kept open.

502.10 Exhaust Air Energy Recovery Systems

For all new buildings with a requirement of treated outdoor air of over one thousand (1,000) litres per second (l/s), energy recovery systems must be provided to handle at least fifty percent (50%) of the total exhausted air. The energy recovery systems must have at least seventy percent (70%) sensible load recovery efficiency.