

503.05	<b>Central Control and Monitoring System</b>
	<p>For all new buildings with a cooling load of one (1) megawatt (MW) or gross floor area of 5,000 sq.M or greater, the building must have a central control and monitoring system capable of ensuring that the building's technical systems operate as designed and as required during all operating conditions, and that the system provides full control and monitoring of system operations, as well as diagnostic reporting.</p> <p>At a minimum, the system must control the chiller plant, heating, ventilation and air conditioning (HVAC) equipment, record energy and water consumption and monitor and record the performance of these items.</p>
504	<b>Chapter 4: Onsite Systems: Generation &amp; Renewable Energy</b>
504.01	<b>On-Site Renewable Energy – Small to Medium Scale Embedded Generators</b>
	<p>For all new buildings:</p> <p>Where a building incorporates on-site generation of electricity from small or medium scale embedded generators using renewable energy sources; the equipment, installation and maintenance of the system must be stand-alone (off-grid) and therefore not connected to the Dubai Electricity and Water Authority (DEWA) network and DEWA will provide electricity supply to the building when needed without parallel connection.</p>
504.02	<b>Outdoor Lighting</b>
	<p>For all new buildings:</p> <p>Where the light power density of external lighting exceeds that specified in Regulation 502.05, Lighting Power Density – Exterior, any additional lighting load must be powered entirely through renewable electricity sources such as photovoltaic systems.</p>
504.03	<b>On-Site Renewable Energy – Solar Water Heating System</b>
	<p>For all new villas and labour accommodations, a solar water heating system must be installed to provide seventy five (75%) of domestic hot water requirements. Solar water heating installations must be fitted with insulated storage tanks and pipes, sized and fitted in accordance with the solar panel manufacturer's requirements for each specific application. The supplementary heating system shall be controlled so as to obtain maximum benefit from the solar heater before operating.</p> <p>Where solar water heaters are being installed, the equipment, installation, operation and maintenance of the system must be:</p> <ul style="list-style-type: none"> <li><b>A.</b> Designed and installed by an installation company approved by Dubai Municipality (DM);</li> <li><b>B.</b> Equipment must be approved by DM; and</li> <li><b>C.</b> Regularly cleaned and maintained to ensure continuous efficient operation.</li> </ul>

