

# CHAPTER 3 - COMMISSIONING AND MANAGEMENT

500

## 503.01 COMMISSIONING OF BUILDING SERVICES – NEW BUILDINGS



### INTENT

To ensure the installed building services operate as designed and to be compliant with the local and international standards.

### REQUIREMENT

For all new air conditioned buildings other than villas having a cooling load of 1 MW or greater, commissioning of air distribution systems, water distribution systems, lighting, central control and building management systems, refrigeration systems and boilers must be carried out.

1. Commissioning must be carried out in accordance with the CIBSE Codes listed below or other commissioning standard or code approved by Dubai Municipality (DM).
  - 1.1. 'The Chartered Institution of Building Services Engineers (CIBSE) Commissioning Code, Air Distribution Systems, Code A-2006'
  - 1.2. 'CIBSE Commissioning Code, Water Distribution Systems, Code W-2010'
  - 1.3. 'CIBSE Commissioning Code, Lighting, Code L-2018'
  - 1.4. 'CIBSE Commissioning Code, Automatic Controls, Code C-2001' for central control and Building Management System (BMS)
  - 1.5. 'CIBSE Commissioning Code R: 2002 Refrigeration Systems
  - 1.6. 'CIBSE Commissioning Code B: 2002 Boilers'
2. Commissioning results must be recorded and available for inspection by DM.
3. A system manual, documenting the information required to allow future operations staff to understand and optimally operate the commissioned services, must be developed and provided to the building operator, upon completion of commissioning works.

### SIGNIFICANCE

Commissioning is an important activity for all the buildings. Without proper commissioning, even buildings with high performance design with high energy efficient equipment, system and control, would not provide the expected outcome of energy savings and occupant comfort. When systems fail to function as intended, the comfort of building occupant is affected. Also, this increases the energy consumption of the building and operation and maintenance costs.

A properly commissioned building ensures the performance of the system to be within the acceptable tolerance limits, conforms to design and in line with local and international standards. Any shortfall or the issues found during commissioning can also be rectified prior to building occupancy. This ensures systems in the building provide correct conditions and services to suit the occupants.