

CHAPTER 2 - CONSERVATION AND EFFICIENCY: BUILDING SYSTEMS

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502.14 MAINTENANCE OF MECHANICAL SYSTEMS



INTENT

To practice efficient maintenance of all the building systems to minimise energy usage, reduce operational costs and increase system lifespan.

REQUIREMENT

For all new and existing air conditioned buildings, all mechanical, electrical and plumbing systems in the buildings must be serviced and maintained regularly.

1. Mechanical systems must be installed in a way such that adequate access is available. This would allow for regular inspection, maintenance and cleaning of the equipment, without the need to remove or dismantle any building components.
2. The building operator must ensure that a proper maintenance manual and schedule is developed for the building. This shall be based on the instructions for preventative maintenance or recommendation from equipment manufacturer or supplier or according to the latest edition of ASHRAE Standard 180 or equivalent as approved by DM.
3. The building operator must either have a service contract with a DM approved maintenance company or provide sufficient evidences that the equipment shall be properly maintained by competent members of their own staff.
4. Service records in the form of a service log book including details of both preventative and corrective maintenance must be kept on-site and be readily available for inspection by DM staff.

SIGNIFICANCE

Mechanical systems are very critical for a building's operation. It is important that mechanical systems are checked periodically as per operational guidelines. Therefore, easy and adequate access should be provided to them.

Effective operation and maintenance of mechanical systems in buildings can reduce unscheduled shutdowns and repairs, increased equipment life expectancy and maintain overall energy performance.

When the building operator has a service contract with an approved company and maintenance is carried out under the supervision of competent personnel, it ensures proper periodical maintenance is carried out. Properly planned preventive maintenance program can also reduce overtime cost and help to utilise maintenance workers more economically.