

DEPARTMENT OF BUILDING SURVEYING FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITI TEKNOLOGI MARA

AN INVESTIGATION ON THE AIR-CONDITIONING DUCTING SYSTEM IN HIGH-RISE BUILDING

This academic project is submitted in partial fulfillment of the requirement for the Bachelor Of Building Surveying (Hons.)

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ABSTRACT

Work in buildings with mechanical heating, ventilation, and airconditioning (HVAC) systems; these systems are designed to provide air at comfortable temperature and humidity levels, free of harmful concentrations of air pollutants. Cleanliness of ventilation systems are considered important for human comfort and health, energy consumption, system service life and for cleanliness of operations or processes carried out in the ventilated area. The air-conditioning ductwork need to be inspected and maintained regularly. Poor maintenance of air ductwork components will lead to the building being uncomfortable also leads to 'sick building syndrome'. The main objectives of this study are to determine the air-conditioning components that required maintenance works, and to investigate the maintenance program in high-rise building. The study was carried out the cleaning works, material used, method and equipment used for some of the high-rise office building in Klang Valley. A total of 8 questionnaires were distributed and 5 of the questionnaires were received. The study was also carried out by interview. The data is analyzed using average index method and statistic. From the study, it was found that the maintenance programmed of cleaning works for air-conditioning ducting system is inefficient maintenance. The method used of cleaning works for ducting system is mainly by robotic (remote control).

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