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A STUDY OF INDOOR AIR QUALITY (IAQ) THAT
CONTRIBUTES TO THE SICK BUILDING SYNDROME (SBS)
AND BUILDING RELATED ILLNESS (BRI)
(CASE STUDY : OFFICE BUILDING)

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ABSTRACT

The office building is one of the important places to the building occupant especially to the staffs of the company, organization or firm. Therefore, the important factors that need to be considered are the building occupant comfort and their satisfaction during in their work environment. Typically, sources of indoor air pollutant in the building are from the building itself and outdoor agent. If contaminants sources are not removed or at least not controlled, indoor air quality (IAQ) problems may be arise automatically.

The intention of this research is to study the quality of air that focus on the air particles and the environment sensitivity such as temperature, humidity and illumination. Otherwise, the level of the building occupant health that focus on the sick building syndrome (SBS) and building related illness (BRI) symptoms also become the intention to this research.

The research identifies the exposure of the building occupants to the indoor air contaminants and the effect of the contaminants to the occupant health by using the method of testing, questionnaire and observation. Besides, the causes and symptoms of SBS and BRI to the building occupant bodies and health also must to identify in order to know the level of the air quality in the building that will contribute to the SBS and BRI. This research encompass of the qualitative and quantitative methodology.

The quantitative method was carried out by using an instrument, Dust Trak Aerosol for the dust particles, Alarm Hygrometer for temperature and humidity and Digital Lux Meter for the lighting. These types of instruments are to measure the level of the dust particles, temperature, humidity and lighting in the different location which is in the office building. Its purpose to evaluate the level of the testing results among of the different location to find out the poor level of indoor air quality that may contribute to SBS and BRI.

The qualitative method was carried out by the distribution of the questionnaire set to the respondents which is about 20 questionnaires was distributed to each of the case study (Development Office UiTM building, Mahkamah Sultan Salahuddin Abdul Aziz Shah building and Facilities Management UiTM building). The purpose of distribution of questionnaire is to know the perception of the respondents towards the air quality in their work environment and the symptoms of SBS and BRI that they experienced along them in the work environment.

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