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SOUND INSULATION FOR STANDARD PARTY WALL OF DOUBLE-STOREY TERRACE HOUSES IN SHAH ALAM

Dissertation submitted in partial fulfillment of the requirement for the award of Bachelor of Building Surveying (Honours)

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ABSTRACT

A peaceful and comfortable life happens to be the dream of every house owner and occupant. Here, the term peace means there are no noise distractions whether it would be during the day or night. A house is built with the features of sound insulation in order to lessen the effects of sound absorption coming from the adjacent house into the building. This is turn will provide comfort to the occupants. The rate of sound insulation varies from house unit to house unit even if the houses are situated in the same housing area. Thus, this dissertation is written to determine the extent of truth in the above statement and also to make a comparison between the three residential areas nearby. Also, to study and make a conclusion as to how the differences can occur as well as to identify the main sources of noise that is affecting the residential areas.

Sound Transmission Loss measured using Acoustics Instrument to find the Sound Transmission Class values and curve of the selected houses in Shah Alam; i.e. Section 7, 8 and 11. This curve of STC used to compare with the Standard curve. The rate of sound insulation varies from house to another even though they are situated in the same housing area. Between the three selected study areas, section 8 is very good in sound insulation which is having Sound Transmission Class (STC) value at 41, followed by Section 11 which is having STC value at 41 and Section 7 which is having STC value at 38.

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