SUMMARY

In recent years there has been a considerable increase in the demand for window airconditioners due mainly to its ease in installation coupled with the government's relaxation on the use of airconditioning in public apartments in Singapore. However, despite its popularity, the general public is still ignorant of the noise associated with it and so far very little work has been done in this area. This study is therefore carried out firstly to establish some data to be used as a general selection guide for window units, and secondly to reduce the noise emission from these units into the community.

The results of this study show that the sound power level on the outside is generally higher than the inside, and its maximum values are 52dB and 58dB respectively occurring around 100 and 250 Hz. The results also show that the environmental noise from these units can be reduced by up to 10dB in the higher frequency range (200 Hz to 4000 Hz) and by about 2dB to 5dB in the lower frequency range (31.5 Hz to 160 Hz) by enclosing the outer section of the unit in a fibre-glass lined wooden attenuator box thus showing that such a box may be an economical and effective means of reducing the problem of environmental noise affecting neighbours.