

ABSTRACT

The library is one of the locations that is used as a reservoir for all information related to science whose validity can be accounted for. The comfort of a library is very important for the manager. Factors that affect the comfort of visitors, for example, room temperature, room humidity, room noise levels, and lighting from the library room. The purpose of this study is to evaluate the space of the Telkom Institute of Technology Purwokerto library in terms of the economy of the room, the method used in this study uses heat stress which is carried out by calculating building physics, analyzing the results, comparing the value of the measurement results and the value of the provisions of the existing regulatory standards from the regulatory standards in the Regulation of the Head of the National Library of the Republic of Indonesia number 13 of 2017, and providing recommendations for improvements that should be made by the library of Institut Teknologi Telkom Purwokerto. Measurements at the time of observation were carried out using the help of measuring instruments in the form of a Lux Light Meter to measure room lighting, Thermometer Hygrometer to measure room humidity and temperature, and Sound Level Meter to measure the noise of the library room. The results obtained in this study are in the aspect of temperature and the measurements at the time of observation were carried out using the help of measuring instruments in the form of a Lux Light Meter to measure room lighting, Thermometer Hygrometer to measure room humidity and temperature, and Sound Level Meter to measure the noise of the library room. The results obtained in this study, namely in the aspect of temperature and humidity, the result is that the value of these two aspects in the library room is still quite high and exceeds the maximum standard limit of the set value, in the lighting aspect of some areas such as the discussion table, computer area, book collection area, and service area, the value is still high so that lighting improvements are needed, and in the noise aspect of the entire space in the library, the value exceeds the threshold value of the specified standard, so improvements are needed as well. Improvements that can be made are pairing glass film with a dark level of 20% in order to maintain the room temperature in the library of 24oC, adding a dehumidifier in areas A1 and A2 to maintain humidity, especially in the book collection area, adding silencers to the lockers in the library room to reduce indoor noise, and adding some additional lighting such as in the book collection area and discussion table.

Keywords : Heat Stress, Building Physisc, Thermal Comfort.