

SUMMARY

Aprilia Dwi Anggraeni, Department of Urban and Regional Planning, Faculty of Engineering, University of Brawijaya, November 2016, *Building Intensity Effect on the Quality of The Microclimate Central Business District in Surabaya City*, Academic Supervisor: Chairul Maulidi, ST.,MT. dan Wisnu Sasongko, ST.,MT.

Microclimate is the climatic condition which studies about the small scale atmospheric phenomenon that affects air temperature, wind speed, and humidity. Related to the previous research, researchers arrested the same tendency regarding the area of research in which most of the Central Business District (CBD) in Surabaya city has a corresponding pattern of urban space that is divided into the traditional pattern of the former Dutch colonial in Jembatan Merah area and modern downtown (CBD) in Tunjungan area.

In this study, identifying the intensity of the building is conducted, including the characteristics of building height, building density, KDB and KLB with the discussion through a primary survey results. Whereas the identification of micro-climatic conditions in the two of CBD is conducted using ENVI-meth program. Simulation is conducted by the division of blocks each of the regions with the amount of research as much as 75 blocks on three conditions, those are in the morning (09:00), noon (12:00) and afternoon (15:00). Whereas the analyzes of the influence between variables is conducted by using the Crosstab test and Spearman Correlation.

The results of the analysis of correlation between the intensity of buildings and microclimate indicate a relationship between variables with the intensity of the relationship from weak to very strong. Very strong relationship shown in the height of building variable against humidity at 09:00 am with 0.825 correlation value. The correlations indicate that the higher a building then the humidity around the building also increasingly high. Meanwhile, overlay result shows that there are differences between the two of CBD, where Tunjungan area with modern patterns have a comfortable micro-climate more than Jembatan Merah area that has a pattern of traditional CBD.

Keywords: building intensity, air temperature, humidity, wind speed, Central Business District