## ABSTRACT

## The Application Of Tropical Architectural Style To Manipulate Thermal Comfort (Study On "Omah Bu Nur" Residential House Building, South Jakarta)

Fayrell Faza Putra Pratama<sup>1)</sup>, Khalid Abdul Mannan, S.T., M.Ars.<sup>2)</sup>

<sup>1)</sup> Student of Architecture Department, Universitas Pembangunan Jaya

<sup>2)</sup> Lecture of Architecture Department, Universitas Pembangunan Jaya

The increasing population density, especially in the capital city of Jakarta, has made a lot of residential development carried out by the community without applying the physical aspects of the building to provide residential comfort. The territory of Indonesia itself is an area with a humid tropical climate where climate and weather issues are something to be considered before building a dwelling. This makes the comfort aspect of building occupants something important to fulfill because it aims to maintain the temperature and humidity of the dwelling.

Thermal engineering for the comfort of building occupants is expected to be achieved by applying a tropical architectural style because it is able to respond well to Indonesia's tropical climate. This study will discuss the application of tropical architectural styles to provide comfortable temperature and humidity for residents of the house, and to prove how much influence the thermal comfort can have in the building. The residential building with a tropical architectural style that will be used as the object of this research is "Omah Bu Nur" which is the result of the design of the MjBarchitects architect bureau located in the Pejaten area, South Jakarta. This building was chosen because it has applied a tropical architectural style which can be easily characterized by its facade design using different materials.

The research method chosen in conducting this research is descriptive and quantitative methods. The descriptive method will discuss the theory of tropical architecture while the quantitative method will discuss the results of trials on the research object. The results obtained are "Omah Bu Nur" has applied the principles of tropical architecture but has not been able to provide significant thermal comfort.

Keywords: Tropical Architecture, Residential House, Thermal Comfort

Libraries : 49

Publication Years : 1975 - 2021