

Title: Kajian Rekabentuk Klimatik Untuk Rumah Kediaman Di Sumatera Barat Indonesia (Dengan Menggunakan Kaedah Jadual Mahoney)

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Abstract:

Climate and weather are factors, which play an important role in determining the design of a building and its environment. The building that is built without considering its climate condition will result in uncomfortable condition to the occupants. This study is a climatic design for residence in West Sumatera, Indonesia toward the climate aspect by using the Principle of Mahoney Schedule. The focus of the study is to the design of residence. This study is carried out in the mountain range climate area in Bukittinggi and the coastal climate area in Padang. This study concentrates on three kinds of residence:- traditional, colonial and modern house. The phase of study that is carried out is based on scientific study, field study, climatic data analysis, and the formulation of study by estimating the climatic aspects. The aim of this study is to evaluate how far the design of residence in Padang and Bukittinggi full fill the guide line which is suggested in Mahoney Schedule and also to test the methodology that is used, with the result of this study the weakness of be found out and be solved with the guideline that is suggested. The scope of the study is focused on Mahoney Schedule principle in evaluating the chosen design of residence. The guideline produced in Mahoney schedule after doing the analysis of climatic data is used to reflect the design aspect of residence as follow:

ABSTRACTS

- a) Layout
- b) Spacings
- c) Air Movement
- d) Saze of Openings
- e) Position for Openings
- t) Protection for Openings
- g) Walls and Floors
- h) Roof
- i) Rain Protection
- j) External Surface Treatment