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Study for New Cooling Technique in Tropical Climate

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Abstract: *In the modern world, it is quite difficult to achieve suitable indoor standards within a structure in tropical areas. This study investigates the development of indirect cooling techniques in residential construction as a means of preserving the environment by lowering cooling loads within the framework of interior design, using Navi Mumbai as a case study. This study presents conventional cooling techniques such radiant night cooling, radiant cooling with individual radiators, evaporate cooling, convective cooling, and rooftop pools. Over the past few years, Navi Mumbai's comfortable surroundings have been regulated by taking into account associations between the atmosphere, comfortable conditions, and framework cooling levels that specify how much cooling is required to accomplish those conditions. determining the right mixture that will produce.*

Keywords: Natural cooling methods, Housing Structures, Thermal comfort, Navi Mumbai, Computer model

REFERENCES

[1]. Ogunsote, O. O.-O. (2003). Choice of a Thermal Index for Architectural Design with Climate in Nigeria. Habitat International – A Journal for the Study of Human settlements. 63-81.

[2]. Balcomb, J. D. (1983). Passive Solar Heating Analysis: A New ASHRAE Manual. Los Alamos National Laboratory Report LA-UR-83-1209, Los Alamos, New Mexico, USA. , http://library.lanl.gov/cgi-bin/getfile?00248846.pdf.

[3]. Ekiti, A.An Introduction to Building Climatology - A Basic course for Architecture Students. Nigeria: Zaria :Ahmadu Bello University Press.

[4]. A, Walker. 2010. Natural Ventilation: National Renewable Energy Laboratory. Natural Ventilation: National Renewable Energy Laboratory. [Online] June 13, 2010. [Cited: March 12, 2021.] https://www.house-energy.com/cooling.