

An Investigation on Climate Responsive Design Strategies of Apartment Buildings in Athens of the Period 1920-1960s

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Abstract : This paper thoroughly investigates residential buildings of the period 1920 - 1960 in Athens and evaluates their bioclimatic response and energy performance. A methodology adapted to the specific context of the city is proposed and applied in order to assess and extract results related to the climate analysis of the city of Athens, the general/architectural design and construction characteristics of the apartment buildings constructed during the period 1920 - 1960, the bioclimatic strategies applied on them, and the achieved thermal comfort based on questionnaires answered by their users. The results of the current study indicate that the residential architecture of that period in the city of Athens is adapted to an extent to the local climate with various climate responsive strategies. As an outcome of the analysis, the most frequently applied depending on the period of construction are presented. For this reason, the examined period is divided into 3 sub - periods: 1st period 1920s - 1930s (late neoclassicism & eclecticism), 2nd period 1930s - 1940s (modernism), 3rd period 1940s - 1960s (postwar modernism).

Keywords : Athens, climatic design strategies, residential buildings, middle war and post war architecture, thermal comfort

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