

## Survey the Effects of Climate in Traditional and Modern Architecture of Iran

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**Abstract :** Humans have regularly been interacting with their environment, and have a close relation with their environment. House as a shelter which protects us against hot and cold weather and the other climatic occurrences in the environment has a close relation with climate. Before human could have access to the fossil fuels, preparing the comfort for the house was done by adjusting the building according to the climate conditions, and the help of natural resources. However after the man could access the fossil fuel, this way was forgotten, and caused much use of energy for heating & cooling. This research is trying to find some methods for designing suitable building that create comfort fitting with the zone by studying the climate condition of Arak city and as a result to find a way to reduce the use of energy and improving the design. So for the aim of this research we have used the statistics and information such as temperature, rain, wind and the approximate moisture from a period of 40 years from synoptic station of Arak. After specifying the climate of Arak by the use of effective temperature, Ulgi, Guni, Mahani and Ovenz indicator, we investigated the climate comfort conditions and the harmonious architecture with the climate and then some suggestion was given according to the climate situation of each month of the year and quality of human comfort according to this indicators.

**Keywords :** climate, architecture, traditional and modern architecture, comfort indicator, Arak city

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