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The Old Traditional Structures in Iran: A Suitable Model for Today's Greenhouse

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Abstract: One of the principles for societies' development is the requirement to consider past experiences. Man should always take advantage of the predecessor's experiences and analyze their works and methods. The predecessors have had a more friendly relationship with nature and their lives less damaged the nature, and it is one of the elements of green building. One of the things the ancients have observed in regard to green building in their houses, stores, sacred places, etc. was using wind-catchers as an air conditioning and cooling system which can be considered as the first foundations of green building. In designing houses Iranian architects have paid a great attention to the factor of making use of more shaded area in hot season and insulation of wall and ceiling against influence of hot weather and also air circulation inside the building. In order to circulate the air inside closed spaces and decrease the temperature, they have considered different winds which blow in Iran and its effective power, and in order to make use of it they invented wind catcher. Direction of wind blow and its height from the earth as well as the time and duration of wind blow and other factors have been effective in making different types of wind catchers. Using wind catchers has been and is prevalent mainly in central and south regions of Iran, coastal areas of Persian Gulf, and Khorasan, especially in cities like Yazd, Kashan, Bam, Abarghoo, Jahrom, and Tabas.

Keywords: environment pollution, green building, Iran, wind catchers

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