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Role of Facade in Sustainability Enhancement of Contemporary Iranian Buildings

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Abstract : A growing demand for sustainability makes sustainability as one of the significant debates of nowadays. Energy saving is one of the main criteria to be considered in the context of sustainability. Reducing energy use in buildings is one of the most important ways to reduce humans' overall environmental impact. Taking this into consideration, study of different design strategies, which can assist in reducing energy use and subsequently improving the sustainability level of today's buildings would be an essential task. The sustainability level of a building is highly affected by the sustainability performance of its components. One of the main building components, which can have a great impact on energy saving and sustainability level of the building, is its facade. The aim of this study is to investigate on the role of facade in sustainability enhancement of the contemporary buildings of Iran. In this study, the concept of sustainability in architecture, the building facades, and their relationship to sustainability are explained briefly. Following that, a number of contemporary Iranian buildings are discussed and analyzed in terms of different design strategies used in their facades in accordance to the sustainability concepts. The methods used in this study are descriptive and analytic. The results of this paper would assist in generating a wider vision and a source of inspiration for the current designers to design and create environmental and sustainable buildings for the future.

Keywords: building facade, contemporary buildings, Iran, sustainability

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