

Smart Environmental Design Solutions for Serving the Interior Spaces of Pilgrim Accommodations in the Holy Sites of Mina

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Abstract:

The Hajj is one of the most significant religious rituals for Muslims, and the sacred sites in Makkah are among the most important religious locations that witness massive human gatherings during the Hajj season. With the increasing number of pilgrims annually, the need has arisen to improve the design of accommodation spaces to provide a comfortable and safe environment that takes into account the harsh climatic conditions in Makkah and the diverse needs of pilgrims. This research explores the study of smart environmental design solutions that can be applied in the interior spaces of pilgrim accommodation in the sacred sites, achieving a balance between environmental comfort and operational efficiency.

The significance of this research lies in its orientation towards functional and environmental sustainability in the design of pilgrim accommodation in the sacred sites, by leveraging interior design theories and smart technology. The research aims to provide applicable recommendations for the development of pilgrim accommodation in accordance with the highest environmental and smart standards, thereby enhancing the spiritual experience of pilgrims and contributing to the achievement of Saudi Arabia's Vision 2030 goals towards a sustainable environment.

This study aims to analyze the current state of pilgrim accommodation from the perspective of interior design and environmental performance, comparing the traditional tent model with modern towers in terms of spatial efficiency, indoor environmental quality, sustainability achievement, and energy efficiency. It also highlights the challenges facing the design of these spaces and the potential for developing innovative solutions that meet the increasing demands of pilgrims while preserving the Islamic character and urban identity unique to the sacred sites.

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