

DESIGN OF A ZERO-ENERGY BUILDING

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ABSTRACT

In the context of intelligent environments, the zero energy buildings are often referred as the fully green energized building. In order to achieve this target of designing a zero energy building, the interconnection of building to the utilization grid is needed to ensure a balance energy budget in a year. This paper shows the theoretical analyze of a zero energy building with its equipment used and structural characteristics. In the current trend and availability of technology, the solar panels and wind energy are the basic needs in generating power. In Malaysia, solar insolation is considered maximum while wind energy is rather low throughout the year. This paper shows the selection of types of energy, structural material and electrical devices chosen to build into a zero energy building are included in the paper