Intelligent Double Skin as an Approach for Low Energy Consumption Design

Advantages and disadvantages of the Ventilated Double Skin

ملخص البحث (باللغة الإنجليزيه):

Building passing through different stages starting from the design, construction and until the stages of implementation and occupancy stage and the end of the lifespan by many different supplies of the energy consumed types, With the increased percentage of that building energy, especially in the era of the depletion of raw energy And the direction of the world to depend on renewable energy sources, Some designers and those interested in design turned to what was known a smart buildings few energy consumption, with attention to design its outer skin to be known as " Intelligent Skin" by its different example and models design.

This research deals with one of this modeling study which known by "Ventilated Double Skin" By studying the types, components and variables of this outer skin and its most important components and applied models.

The research aims to extract the most intelligent building design standards, which enters "Ventilated Double Skin" as a key element and influential in the design, With determine what guiding design criteria for the design as efficiently as possible, identifying the most important design advantages and disadvantages

research extract "Ventilated Double Skin" variables with special mention of the most important measures of these variables and their impact, by which they can reach the most appropriate elements standards design changing of "Ventilated Double Skin" Where possible, to determine the optimum values for thermal transition and the percentage of transparency for each direction and quality of the appropriate glass, The design and dimensions of the openings and air space of "Ventilated Double Skin" in Egypt, Which is characterized by a relatively moderate climate, and thus contributing to saving buildings energy consuming