



A REVIEW ON THE INFLUENCE OF BUILDING FAÇADE IN RELATION WITH POST-OCCUPANCY COMFORT OF GREEN BUILDING

Asniza Hamimi Abdul Tharim

Faculty of Architecture, Planning and Surveying,
Universiti Teknologi MARA,
Perak, Malaysia
mimiasniza@gmail.com

and

Muna Hanim Abdul Samad^a, Mazran Ismail^b
Architectural Programme,
Universiti Sains Malaysia,
Penang, Malaysia

^amhanim@usm.my, ^bmazran@usm.my

Green buildings represent sustainable design and construction that require a holistic interaction between all components of a building that are environmentally responsible throughout a building's life cycle from the beginning until the completion. A green building should deliver its occupants with a comfortable indoor environment that will satisfy their comfort needs and enhance the productivity while working in the building. Previous literature reveals that indoor environment quality (IEQ) evaluation in green rating standards such as the LEED United State and BREEAM United Kingdom; do play a significant role in the certification process of green building. The indoor environment quality (IEQ) comprises of several main aspects such as temperatures, humidity, noise, lighting, space design, structural systems and last but not least the building envelope design of roof and building facade. Consequently, establishing the thermal comfort of building occupants is a challenging area that often relate to high energy use for heating and cooling. Thus, it is believed that the sustainable design strategies such as green roof and effective façade design that suits with the climate can be used to enhance indoor environment quality (IEQ). Hence, this will improve the occupant comfort, satisfaction and work performance in a certified green building. However, this remains an inconsistent relationship, which requires additional empirical support. Despite the widespread adoption of a certified green building image and benefits, the actual impacts of these green environments have on occupant comfort satisfaction remains unclear because they rarely assessed at the post-occupancy period of the certified building. Therefore, the aim of this paper is to review the literature that claims to link the occupant's comfort of the green building to the indoor environment and architectural façade design. This paper adds to the debate by identifying the need for appropriate selection of building façade in optimizing the occupant's thermal comfort of green building.

Key Words: *Green Building, Occupants Comfort, Indoor Environment Quality (IEQ), Building Facade*