

***Abstract*** – Three types of apartment claddings in Surabaya, Indonesia were studied to analyze their effect into bedroom temperature. They were glass windows in a niche, glass door in a balcony, and glass windows on a plain wall with glass door in a balcony. On-site temperature measurement was recorded and complemented with questionnaire surveys of occupants' perception regarding room temperature. The study showed that an apartment cladding with the largest proportion of opaque material combined with a balcony offered an indoor temperature of up to 9 °C lower than the outdoor compared to the other cladding types. Nevertheless, 72 % of occupants participated in this study, who use air conditioners during night time, including one with the cladding with the largest temperature difference claimed that the indoor temperature before air-conditioners was still too warm, which triggered air-conditioners initial time more than 10 minutes to achieve the desired indoor temperature. It indicated that the opaque material time lag played a significant role in heating the room during night time when the air-conditioner is about to be operated.

***Keywords*** – Apartment; cladding; temperature; perception; Surabaya