

Review on Koppen-Geiger System for Indoor Thermal Comfort

ABSTRACT

Several research studies were carried out in recent years for monitoring climate change and heat island effect in the world. Many authors addressed the effect of climate on thermal comfort by referring to Koppen-Geiger climate classification. However, little information is available on the effect of climate types on thermal comfort. A review of four climate classification systems are described and discussed in this study. Additionally, the Koppen-Geiger climate system in terms of its classification criteria and impact on thermal comfort are portrayed in the present publication. The shifts in climate types did not necessary affect the predicted indoor neutral temperatures. Given that the identified climate types in some cases are different when using the Kottek and the Peel methods, this study recommends reporting the employed Koppen-Geiger classification method. The year (s) or the time period of climate identification is also required. This study also recommends investigating in the near future thermal comfort requirements for climate type A for generalization of the conclusions.