



## **An experimental study of human local thermal discomfort from the glass window with a venetian blind in a tropical climate**

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**Abstract.** An experimental study on the local thermal comfort condition for a seated person near a glass window with a venetian blind in between was performed in a test room. The plane radiant temperature asymmetry (RTA) was chosen to be a local thermal comfort index. The experiment was conducted with different blind angle settings: 0°, 45° and -45°. It was found that the glass window with venetian blind setting at a positive blind angle improves the local thermal comfort condition for a seated person near the glass window. The glass window with the venetian blind setting at a negative blind angle causes a seated person to feel the most uncomfortable compared to the case of a glass window with the venetian blind setting at a positive blind angle.

**Keywords:** Glass window, Venetian blind, Human local thermal discomfort, plane radiant temperature asymmetry.