

## PROSPECTS OF THERMAL COMFORT IN SEMI-OUTDOOR ENVIRONMENT

Application of Thermal Adaptation Studies to Thermal Environmental Planning in Japanese Context

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Semi-outdoor environment is defined as a grade of environmental control in thermal environmental planning, falling in between indoor and outdoor environment. Thermal adaptation of occupants, together with building and equipment, needs to be taken into account for planning such environment. Behavioral and psychological adaptation was found to be influential on thermal comfort, and context of thermal environment was found to be important to understand the adaptive process from literature review. Environmental context was categorized into social, architectural, and personal elements. A concept model of adaptive thermal comfort in semi-outdoor environment was proposed. Problems concerning application of existing thermal comfort standards were discussed. Adaptive comfort zone, not comfort temperature, needs to be investigated through field surveys considering the Japanese context such as geographical location, climate, degree of environmental control and general-purpose of the architectural space. Adaptive comfort zone needs to be presented together with the definition of environmental context.