

Modernization means characterizing residential exterior forms in Shimogamo district, Kyoto

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Abstract

This paper aims to shade light on fundamental physical form shaping the contemporary life in Shimogamo district, Kyoto. The study explores aspects of nowadays modernization effects on exterior forms expressive of inhabitant's choice on dealing with their living space to the public. The study combines space configuration and quantitative methods of architectural elements to determine physical character of residential exterior forms, leading concerns on exterior space arrangement such as identity, social status expression have been isolated and discussed to widen our understanding of what people values in their homes, in the context of Kyoto.

Keywords

dwelling exterior design, modernization of residential settlement, exterior elements and social status

How to Prevent Vapor Condensation in Designing Indoor Environment Investigations in Houses by Questionnaire and Field Measurement

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Abstract

The vapor condensation causes not only interior stain but also the growth of the mold and tick, as well known. This paper reports the results of the investigation on vapor condensation in houses by means of the questionnaire survey and the field measurement, and also describes the results of the numerical analysis for preventing the vapor condensation of indoor wall surface. Regarding the questionnaire, the actual conditions of the vapor condensation in houses, which were students' dwellings in Sendai area, was investigated in the winter of 1999. The number of houses investigated was about 270. Various factors, including the building construction, heating apparatus, occupants' behavior and so on, affecting the vapor condensation were discussed. Concerning the measurement, the indoor thermal environment in a house, where vapor condensation occurred, was investigated in the winter of 1998. This house was the apartment in Sendai, structured by reinforced concrete. Temperatures and humidity were measured continuously for a few days by resistance thermometers and data logger. As the results, it was clarified that the vapor condensation was a still considerable problem in dwellings, and the good combination of building envelope performance, heating equipment, and the occupant's life-style should be increasingly studied.

Keywords

Indoor Environmental Design, Indoor Thermal Environment, Vapor Condensation, Questionnaire, Field Measurement, Numerical Analysis