공공건축물의 에너지성능 제고를 위한 설계 발주제도 개선방안

The Improvement of the Architectural Design Procurement System for Enhancing the Energy Performance of Public Buildings

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To improve energy performance of public buildings it is important to induce the building design to focus on passive plan by setting standards that leads to eco-friendly and energy saving design in ordering stage. This study intends to come up with improvements of design ordering systems focused on design competition which encourage energy saving design of public buildings.

Current statutes and regulations related with improvements of building energy performance are most concentrated in active way which means there aren't enough systems that consider passive way in designing. The latest 155 cases of ordering public building design service shows that most guidelines are fragmentary and vague that it is difficult to set design directions. The cases can also tell that these guidelines are applied in all sizes and uses of buildings without any variation. There were only few cases that have evaluated energy efficiency or eco-friendly factors and these have been of little importance in scoring.

To induce energy saving design of public buildings first, the ordering organization should present energy efficiency guidelines clearly by strengthening prior review process of public building construction plans under Architectural Service Promotion Act. Next, when assessing the proposal plan it is necessary to carry out energy efficiency verification of the entries by prior technical review from an expert committee and place more importance on this in the main evaluation. Also, 'energy efficiency and eco-friendly' factors should be added up in evaluation and scoring criteria. When it is proposal competition 'The way of specializing building plan in energy efficiency' should be included in requests for proposals of ordering organizations to lead designers to suggest creative ideas and the ways of verifying these proposals are also required.

Keywords: Public Buildings, Green Building, Energy Performance, Ordering System, Design Competition