

## 녹색인프라 구축을 위한 건축물 조경 제도 개선방향 연구

Improving Building-related Landscape Systems to Create Green Infrastructure

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SUMMARY

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The purpose of this study is to suggest the improvement direction of the domestic building-related landscape system in order to implement the function of the building-related landscape from the viewpoint of green infrastructure construction. The details are as follows. First, we examined the function of building-related landscape in various aspects from the viewpoint of green infrastructure. Second, we analyzed the process of change of laws and systems related to building landscaping, and suggested the basic direction of system improvement. Third, we estimated the quantitative value that could be provided by the building-related landscape as a green infrastructure based on the result of survey on the current status of building-related landscape in Korea. Fourth, the problem of maintenance and management was derived through the field survey. Fifth, we examine the perceptions of the building-related landscape system through the questionnaire survey for building owners, public officials, and experts. Sixth, the implications for the improvement of the building-related landscape system in Korea were derived through the analysis of the building-related landscape system and policy cases. Seventh, we proposed a plan to improve the building-related landscape system in

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terms of social awareness, quantitative and qualitative, maintenance and management, and presented the results of simulation of landscape design for small and medium sized buildings.

The main results are as follows. First, as the components of green infrastructures, the functions of building-related landscape are divided into five aspects such as aesthetic, amenity, environmental performance, functionality, and connectivity. Second, as a result of analyzing the current status of the laws and regulations related to the building-related landscape, it is found that the purpose of building-related landscape installation is unclear, and it is recognized as a regulatory factor and gradually alleviated. Third, as of 2016, there are about 2.23 million buildings and about 135.2 square kilometers of building-related landscape area in Korea, which is estimated to generate about 843.3 billion won in environmental benefits. Fourth, many cases of illegal use and neglect were found in the maintenance and management of the building-related landscape space. Also, the buildings that satisfy the legal area standard were found to be inadequate in the layout and arrangement of the landscape space. Fifth, as a result of the questionnaire survey of the building owners, public officials and experts, all three groups are highly aware of the necessity of building-related landscape. In order to improve the quality of building-related landscape, it is necessary to verify the effects of building-related landscape to spread social consensus, and to provide support measures at the local level. Sixth, according to the analysis of the architectural landscaping laws and policy cases of advanced countries such as Japan, USA and Germany, it is necessary to manage the building-related landscape in the dimension of urban green space, and to provide the specific landscape design and management techniques reflecting local conditions and characteristics through ordinances and guidelines. Seventh, it is found that the domestic building-related landscape system should be improved in terms of social awareness, quantitative and qualitative aspects, maintenance and management, and it could contribute to the improvement of local environment and amenity in designing small and medium size buildings.

Policy suggestions for constructing urban green infrastructure through building-related landscape are as follows. First, accurate statistical data of national building-related landscape should be built. Second, there is a need to establish and manage related plans by including building-related landscape in the green space of the "Urban Parks and Greenery Act". Third, there is a need to revise the landscape standard (Ministry of Land,

Transport and Logistics Notice) to reflect the functions of building-related landscape needed in today's cities, such as permitting the introduction of permeable flooring area, ratio of the green space area facing the road, conditional gardening allowed. Fourthly, it is necessary to apply different criteria for building-related landscape area according to zoning. Fifth, it is necessary to develop applicable building-related landscape design guideline for each type of housing and provide it to building owners, architects and local governments. Sixth, the type of plants that can be installed in the land landscape space of each local government should be determined, and the specific planting, maintenance, and management methods should be provided so that citizens can easily approach and understand them. Seventh, it needs to conduct a survey on the building-related landscape to impose a strong penalty on the illegally employed or neglected clients. Eighth, it is necessary to consider revising 'building-related landscape system' to 'ecological building-related landscape system' on order to reflect the climate change response and ecological function of building-related landscape required in modern city. Ninth, there is a need to promote the building-related landscape improvement project in vulnerable areas in connection with the government policies such as the urban renewal New Deal project and the green remodeling project.

**Keywords :**

Building-related Landscape, Green Infrastructure, Landscape Area, Urban Green Space, Landscape Space.