## auri research brief



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## **Changes in Building Management System by Enforcement of the Building Management Act**

As the life cycle of a building lasts longer in the face of a low-growth period, the maintenance of old buildings is becoming more important. According to the national building statistics at the end of 2019, the ratio of buildings older than 30 years or more after the completion is about 37.8% of all buildings, and the number is increasing each year. In particular, due to the huge housing supply in the 1990s, the number of old houses is expected to increase rapidly from 2020. However, only 1.7% of the existing buildings are subject to the maintenance according to the Building Act and the Special Act on the Safety Control and Maintenance of Establishments, and thus, about 98.27% of the existing buildings are in the blind spot of the management system.

In addition, although the dismantling, demolishing and remodeling works are increasing due to the increase of old buildings, collapsing accidents are occurring continuously because of the insufficient safety actions on the sites. Moreover, the demand for fire safety is also increasing due to the large fire accidents that are continuously occurring at existing buildings.

[Table 1] Current Status of Buildings Subject to the Management According to the Building Act and the Special Act on the Safety Control and Maintenance of Establishments

ltem	Number of buildings	Ratio (%)
Building Act	98,113	1.72
Special Act on the Safety Control and Maintenance of Establishments	44,964	0.78
Applied to both the Building Act and the Special Act on the Safety Control and Maintenance of Establishments	42,555	0.74
Not applicable(Blind Spot)	5,702,148	98.27
Total	5,802,670	100

Note: The statistical data include only the Class-I and Class-II establishments according to the Special Act on the Safety Control and Maintenance of Establishments.

Source: Internal materials from the Department of Green Buildings in the Ministry of Land, Infrastructure, and Transport (as of June 2018); Plans for Improving Building Maintenance System, Yu, Gwang-heum et al. (2018); AURI BRIEF 179, p.3.

As social consensus has been formed on the need for preparing an institutional means to systematically manage the actions after completion depending on the life cycle of buildings, the Building Management Act was enacted on April 30, 2019 and has been enforced since May 1, 2020.

The Building Management Act newly enforced includes the following regulations:

the establishment and operation of building life history information system, and the preparation and storage of building life history management register;

the reinforcement of fire safety performance of existing buildings to improve fire safety;

the intensification of safety management through the introduction of building dismantling work permission and supervision systems; and

the establishment of building management basis. In comparison to the conventional Building Act, the changes in the building management system implemented by the Building Management Act include:

the new establishment of building management examination system;

the improvement of building management examination system;

the introduction of building dismantling work permission and supervision systems; and

the establishment of building management basis.

First, building management plans have been newly established for efficient building management. For a building that should be constructed by a building contractor according to Article 14 of the Framework Act on the Construction Industry, such as a building having a total floor area of 200 m² or larger, the builder should prepare a building management plan and submit it to the head of the local government when applying for an approval of use. The

building management plan should include the details about the current status of the building, the builder, the designer, the constructor, the inspector, the finishing materials of the building and the products attached to the building, the long-term building repair plan, the fire and emergency evacuation safety, the structural safety and seismic performance, and the energy and environment-friendly performance management. The Act gives the head of the local government the duty of reviewing the appropriateness of the building management system and requesting its supplementation, and imposes the managers the responsibilities to review and adjust the building management plan and to replace and repair the key facilities according to the building management plan in a period of three years in order to increase the effectiveness of the system.

Second, the types of in building management inspection (regular inspection, occasional inspection and old building inspection) were further divided into regular inspection, urgent inspection and small-scale old building inspection, and safety examination, and the scope of the inspection targets was expanded. In addition, to secure transparency in the building management inspection, the subject that designates a building management inspection institution, which is the subject of inspection, was changed from the owner or manager of a building to the head of the local government. In particular, the Building Management Act has improved the procedures following the building management inspection, which are not covered in the existing Building Act, and stipulates as the procedures following the building management inspection the evaluation of inspection results, the implementation of the inspection results, measures such as restriction of use, prohibition of use and dismantling, and the discontinuation of business operated by inspection institutions.

Third, a fire safety performance reinforcement system has been newly established for existing buildings that are frequently used by those who are vulnerable to evacuation. According to this system, among the medical facilities, facilities for the elderly and children, local children centers, youth training centers, public baths, postnatal care centers, maternity centers, and private education institutes, those that are vulnerable to fire (buildings with three or more floors having combustible exterior materials without sprinklers) must reinforce the fire safety performance until 2022. In order to alleviate the burden of expense borne by the builders, the Building Management Act stipulates that the state and the local government should subsidize the builder with the entire or a portion of the construction or installation expenses needed for the reinforcement of the performance or the expenses needed for the design or inspection.

Fourth, the targets of building dismantling works were divided into those subject to reporting and those subject to permission, and a permission system and an inspection system are applied to the dismantling works of all buildings except those subject to reporting. For the dismantling works subject to permission, the dismantling plan, submitted before the permission of the dismantling work, should be reviewed by experts. The highly risky dismantling works performed by using heavy equipment of 10 tons or heavier or by explosion and the dismantling of a special structure building that has sensitive structure, should be reviewed in advance by the Korea Infrastructure Safety Corporation.

Fifth, supportive regulations have been newly established to prepare the basis for the activation of the building management-related industry. In addition to the supportive regulations about the research and development in building management, the fostering of technical experts, and the relevant business operators, the Building Management Act stipulates that the Building Management Support Centers should be designated to perform building status investigation, foster building management technical experts, evaluate building management inspection results, and provide consultation to the public in order to prevent any confusion that may be caused by the introduction of the new systems.

[Table 2] Comparison between the Building Act and the Building Management Act

Item	「Building Act」 「Building Management Act」		uilding Management Act	
Building management plant	<newly established=""></newly>		For a building having a total floor area of 200 m² or larger, the builder should submit a building management plan to the head of the local government when applying for an approval of use.	
Building management inspection	Regular inspection	Performed for publicly used buildings every 2 years and 10 years after completion	Regular inspection	Performed for publicly used buildings (including structures) every 3 years and 5 years after completion
	Occasional inspection	Performed for publicly used buildings when necessary to secure safety of the building	Urgent inspection	Performed for any buildings when necessary due to disasters, building deterioration, and faulty design
	Old building inspection	Performed for safety vulnerable buildings among buildings 20 years old or older (excluded from the subjects to regular and occasional inspection)	Old building inspection	Performed for safety vulnerable buildings determined by ordinance, including buildings 30 years old or older, facilities for the elderly and children, and houses for vulnerable residents
	-	<newly established=""></newly>	Safety inspection	Performed in the cases where repair and reinforcement are needed according to the results of inspection or where structural safety is a concern due to the occurrence of a disaster

Item	「Building Act」	「Building Management Act」	
Designation of inspection institution	Building owner or manager	Head of local government	
Reinforcement of fire safety performance	<newly established=""></newly>	Dismantling of a building should be permitted or reported. The dismantling plan should be reviewed by experts. An inspector should be designated.	
Support for building management	<newly established=""></newly>	New regulations have been established for fostering building management technical experts, providing support to building management business operators, and designating Building Management Support Centers.	

Source: Reorganized by referring to page 7, press release from Ministry of Land, Infrastructure, and Transport (2019) on November 27, "We will manage the safety of old buildings more meticulously and more systematically.

As described above, the Building Management Act stipulates the details that are necessary to appropriately manage buildings from completion to destruction, providing the basis for securing the performance and safety of buildings throughout the entire life cycle of buildings. The establishment of building management plans, as a policy for systematic building management, will allow for efficient building management and the establishment of an effective building management inspection system. In addition, the reinforcement of the fire safety performance will improve the safety performance of existing buildings, and the introduction of the dismantling permission and inspection systems will strengthen the safety of dismantling works. Therefore, the changes implemented by the Building Management Act are expected to contribute to the increase of the citizens' safety, welfare and interests.

Keywords: Building Management Act, Building Management Inspection, Building Management Plan, Dismantling Works, Fire Safety Performance Reinforcement

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