

범죄예방 건축기준 고시 실효성 제고 방안

Improvement for the Effectiveness of
Crime Prevention Architectural Standards

조영진 Cho, Yeongjin

김성준 Kim, Sungjoon

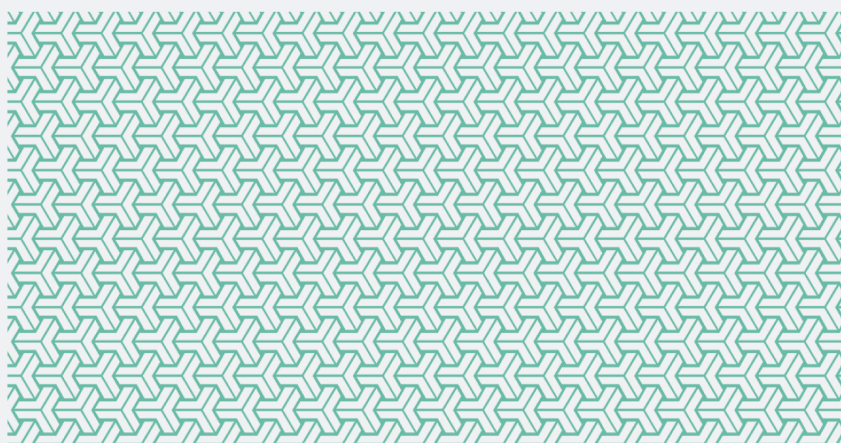
박종훈 Park, Jonghoon

고영호 Ko, Youngho

임보영 Im, Boyeong

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This policy study was conducted at a time when nine years have passed since the establishment of the crime prevention architectural standards notification. It aims to diagnose the issues surrounding the notification as a whole, present alternatives for short-term amendments in 2024, and suggest mid- to long-term improvement directions thereafter.

In the first part of the study, we summarized the current issues, problems, and points of contention regarding the Crime Prevention through Environmental Design (CPTED) standards notification. The diagnosis phase of the issues was broadly divided into the "construction process" and the "maintenance process." First, we analyzed the data from the National e-People website over five years to identify issues and main inquiries regarding the application of the notification in the construction process, such as building permits, building reports, building reviews, and approvals. As a result, out of 120 complaints excluding 22 complaints that did not specify the use of buildings, 45% (54 cases) were complaints about Article 10, which applies to apartments with more than 100 units. In detail, the complaints were related to the installation of specific facilities targeting external fences, windows, lobbies, and parking lots. In addition, there were 36 complaints about products meeting the intrusion defense performance standards, such as doors, entrance doors, windows, and shutters, followed by 23 complaints about emergency bells, 15 complaints about video information processing devices, 9 complaints about intrusion defense alternatives, and 8 complaints about door chains, indicating a high frequency of complaints regarding the standards for facility installation.

Next, in the maintenance process of buildings, we analyzed recent data from building management inspection reports to understand the actual state of applying the CPTED standards notification after the construction process. As a result, it was determined that even in the maintenance stage after building use approval, the proper maintenance of crime prevention facilities continues to produce crime prevention effects. Summarizing the details by item, firstly, video information processing devices (CCTV) were being used for access control in all buildings. Next, it was deemed important that the crime prevention performance of landscaping plantings is managed in such a way that blind spots and isolated areas do not form, and the possibility of intrusion is eliminated while maintaining the green level of the original design in the maintenance stage. Inspections of household windows were not mandatory but recommended, so there were almost no cases, and there was also no mention of semi-basement

household windows. However, considering the occurrence of related safety accidents, it was concluded that there is a need for improvement. Lastly, regarding lighting facilities, most inspections were concentrated during the daytime, which may have limited the verification of effectiveness.

In addition to the data analysis, a perception survey was conducted targeting practitioners at architectural firms who utilize the notification. This survey assessed the clarity of the notification's application and the direction for improvement during both the pre-construction design phase and the post-construction maintenance phase. The results of the survey are as follows. The practical utilization of the current CPTED standards notification is over 60%, indicating a high need in the field. Approximately 51% of respondents reported that the overall content is ambiguous, a percentage almost equal to those who found it clear. More than 70% of respondents felt that the content related to the composition of external spaces of buildings and the content of external spaces was unclear, indicating a need for clear regulations for semi-private (public) spaces connecting buildings rather than the interiors, which are considered private spaces. For apartments with more than 100 units, about 42% of respondents requested revisions to installation items such as lighting and alternative facilities for the sides, back, blind spots in the garden, and parking lots of the buildings. These findings suggest that improvements are needed for provisions related to the peripheral areas, parking lots, and entrances of residential facilities. While the standards for multifamily housing like apartments were perceived as relatively clear, small-scale housing such as communal living facilities, one-off retail stores, and multi-family homes had the highest ambiguity. Moreover, about 96% of respondents indicated that it is necessary to consider flood safety issues related to windows of semi-basement units, suggesting this should be included in revisions. Regarding the utilization of the CPTED standards in regular post-construction building inspections, about 70% responded positively, indicating good utilization in the building inspection stage. Responses about the common standards requiring revisions included "securing territoriality," "access control," and "activation of activity," with many requesting clear guidelines.

In the middle phase of the study, two rounds of Focus Group Interviews (FGIs) with experts were conducted to prepare amendments and set mid-to-long-term directions. In the first round of expert FGI, opinions were gathered on overall issues, revision directions, details, the expansion of application targets, and

measures to ensure effectiveness. In the second round of expert FGI, more specific opinions were collected based on the draft amendment of the CPTED standards notification.

As a result, first, regarding the social and institutional issues that the CPTED standards should consider, experts diagnosed that crime safety for all buildings and the user groups such as the elderly should be taken into account as social issues. However, opinions diverged regarding large-scale apartments with more than 100 units. Some suggested simplifying the current standards, while others proposed clarifying the specific details further. Additionally, issues were pointed out regarding the conflict between two important values: crime prevention and evacuation. Experts recognized the need for basement windows in semi-basement units to be capable of evacuation during disasters like floods or fires and suggested establishing design standards to maintain a balance in resolving such conflicts. They also emphasized the need to enhance the linkage of laws related to crime prevention, introduce verification systems, and strengthen review procedures.

Secondly, regarding the standards, they highlighted the need to clearly distinguish between mandatory and recommended items to avoid confusion. They suggested removing inefficient or ineffective regulations and emphasized the importance of ensuring accurate definitions and consistency of terms to prevent confusion.

Thirdly, concerning the application targets, they raised the need to strengthen crime prevention standards for multi-family and small-scale housing and called for expanding the application scope to public facilities and various public spaces. Additionally, many opinions emphasized the need to improve the realism of door and window regulations and to establish systematic procedures to confirm installation.

Lastly, to enhance effectiveness, they proposed introducing specific guidelines that practitioners can easily understand and apply, and developing visual design guidelines based on crime prevention design principles. They also stressed the necessity of quantitative level measurement, such as crime risk assessment, and suggested the adoption of advanced technologies in the future.

In the later phase of the study, following the collection of such opinions, the draft revision of the CPTED standards notification for short-term aspects was proposed, focusing on key items that need to be completed by 2024. To this end, two rounds of policy practical council meetings were held with the Ministry of

Land, Infrastructure and Transport, and major opinions were incorporated into the study results. The draft revision maintained the existing structure and composition to minimize confusion and reflected the latest trends in CPTED and field opinions to be applicable from a practical perspective. Additionally, outdated construction-related terms were deleted or changed, and terms arising from related legislative arrangements were organized separately, while ambiguous clauses were clarified from the perspective of ensuring effectiveness in CPTED. Furthermore, other sentences that were difficult to understand or potentially misleading were revised. After drafting the amendment, the final revision was derived through feedback from the relevant ministry and experts, and this revision is expected to be officially notified through ministerial consultation by 2024.

Separately from the minimum amendments aimed at minimizing confusion in the short term, a comprehensive overhaul of the CPTED standards notification appears inevitable to enhance its effectiveness in the future. Accordingly, the study results summarize the medium to long-term amendment directions of the CPTED standards notification into three major aspects:

First, improvements related to the structure, composition, and content of the building standards notification were proposed. This includes suggesting necessary improvements to the overall framework, targets, and detailed items. Specifically, while maintaining the standards for apartments with more than 100 units, it is necessary to raise the standard to 300 units or more, and potentially add standards for 500 units or more, providing detailed and refined crime prevention standards for such cases. Second, regarding common and individual standards, it has been pointed out that many overlapping and ineffective regulations exist. Therefore, it is necessary to minimize the overlap between common standards (e.g., natural surveillance, lighting, access control) and individual apartment standards, while presenting more detailed provisions for common standards. Third, a clear reorganization of terms is required. For instance, clear definitions and standards for convenience stores or multi-family housing should be specified in the preliminary part of the building standards. Furthermore, considering crime prevention design as a minimum safety measure for daily life, there is a need to expand mandatory provisions beyond the current standards.

Fourth, in terms of targets, it is necessary to propose specialized crime prevention design standards for buildings other than apartments. Fifth, addressing social

changes and advanced technologies, it is essential to preemptively establish standards for applying advanced technologies such as intelligent CCTV or patrol robots, beyond just installing CCTV. Also, it is necessary to review and supplement the intrusion defense performance standards for windows and doors considering recent crime trends. It is important to reflect new types of lifestyle crimes and consider balancing community activation. Lastly, regarding procedures, while the maintenance of buildings and equipment such as CCTV related to crime prevention is crucial after installation, there are no specified obligations or enforcement measures, leading to decreased effectiveness over time. Therefore, the notification should include measures to regularly issue corrective orders, regulate, and enhance administrative expertise in the maintenance aspect.

Next, the supplementation of the CPTED standards notification related to disaster situations such as fires and floods is necessary. This aims to address the conflicting issues with standards specialized in preventing external intrusions, which arise due to various social and climate changes. Although these issues are included in the CPTED standards notification, they were analyzed separately from the main content of this study, and the results were organized into separate improvement directions. Finally, various ideas for supplementary systems, policies, and academic efforts were proposed rather than the CPTED standards notification itself.

Lastly, institutional improvement measures to enhance the effectiveness of the CPTED standards notification include: first, the advancement and expansion of the CPTED certification system. Second, substantial and specific research should precede the establishment of crime prevention standards and their legalization. Third, it is necessary to specify the crime prevention building standards and develop and present various manuals linked to them.

Keywords :

CPTED, Crime Prevention Architectural Standards