

**The Ministry of Environment to minimize inconveniences from inter-floor noise
in multi-family housing**

*10:30 AM, Tue, Aug. 23, 2022, Director of the Indoor Air and Noise Management
Division under the Ministry of Environment*

I am the Director of the Indoor Air and Noise Management Division under the Ministry of Environment.

I will brief you on the amendments to inter-floor noise standards generated in multi-family housing.

The Ministry of Environment and the Ministry of Land, Infrastructure, and Transport plan to strengthen inter-floor noise standards to minimize inconveniences occupants of multi-family housing may experience.

In 2014, the two ministries enacted and administered a joint ordinance governing the scope and standards of inter-floor noise.

However, it has been pointed out that the current inter-floor noise standards do not adequately reflect the inconveniences of real life.

The "Among Neighbors Center for Floor Noise" measured a noise level of 1,864 cases over five years, and 8.2% exceeded the noise standard.

The Ministry of Environment and the Ministry of Land, Infrastructure, and Transport prepared an amendment to strengthen the equivalent sound level of impact noise by 4 dB among the inter-floor noise standards after the discussions among researchers and experts.

Currently, the standard one-minute equivalent sound level of direct impact noise applied to the sound of running indoors is 43 dB during the day and 38 dB at night. Once the revision comes into effect, the standards will be strengthened to 39 dB during the day and 34 dB.

A study by the Korea Environment Corporation in 2020, including an actual psycho-acoustic test, showed that approximately 30% of respondents found the current daytime noise standard of 43 dB very 'annoying'.

The World Health Organization (WHO) recommends that the rate of noise annoyance be kept below 10%. Also, EU vehicle noise requirements typically indicate a rate of noise annoyance between 10 and 20%.

The current inter-floor noise level of 43 dB has a somewhat higher noise annoyance than the EU.

The revised daytime noise standard of 39 dB has an approximately 13% noise annoyance rate, which is expected to reduce inter-floor noise annoyance to less than half the current level.

Stricter inter-floor noise standards may extend the scope of noise-related damage when disputes arise over the resulting damage from inter-floor noise.

Although the level of inter-floor noise depends on the house's structure and other factors, noise-inducing behaviors such as running indoors can cause the inter-floor noise to exceed 40 dB.

Both ministries will encourage people to live more considerately and advise them to take caution not to generate noise in multi-family housing.

For older multi-family housing that received construction approval before June 2005, the current 48 dB standard will be strengthened to 44 dB immediately following the amendment and gradually to 41 dB by 2025.

However, the maximum noise level and airborne noise requirements will remain unchanged except for equivalent sound standards. We will continuously monitor the situation related to inter-floor noise.

The Ministry of Environment and MOLIT will give administrative notice of revising the joint ordinance. We will promote the revision of standards based on ordinance review and feedback from the public.

In addition, both ministries will continue strengthening public services to reduce conflicts resulting from inter-floor noise significantly.

Considering that complaints related to inter-floor noise increased suddenly after the COVID-19 outbreak, the Ministry of Environment will bolster the expertise of inter-floor noise specialists and improve the quality of public services.

The ministry will expand customized services such as consultation at night time, online reservations, and one-stop noise measurement for dual-income households. The ministry will also provide on-site support, such as a noise meter rental service, and develop a conflict management training program to manage initial conflicts within houses.

From August 4, MOLIT has switched from a pre-certification system to a post-confirmation system for a performance test of the soundproofing of apartment floors.

In addition, on August 18, MOLIT announced measures to reduce inter-floor noise, such as subsidizing the cost of noise reduction mats and requiring the formation of an

inter-floor noise management committee.

Please refer to the distributed press release from MOLIT for further details on this.

Both the Ministry of Environment and MOLIT will stay committed to taking the lead in resolving inter-floor noise-related complaints.

With strengthening inter-floor noise standards, we will do our utmost to promote a lifestyle that reduces noise in people's daily lives with consideration and tolerance for neighbors.

It concludes the announcement. Thank you.

[Q&A]

<Q> The research survey that serves as the basis for strengthening the noise standards is a survey of 100 individuals, but I wonder if the sample size is too small to implement national policy.

In addition, a significant amount of inter-floor noise is frequently the result of fraudulent construction or structural defects. However, if the government unilaterally strengthens the standards for inter-floor noise, wouldn't that increase the likelihood of disputes and lawsuits?

<A> Your first question seems to ask about the outcomes of a previously conducted study. First, you mentioned the sample size of 100 and whether this is somewhat too small. Although 100 is not a large number, it appears sufficient to draw scientific conclusions by examining some scientific correlations.

Of course, if the Ministry of Environment invests more funds in research, we can conduct more tests. But the current level of 100 people is sufficient to draw scientific

conclusions from test results.

Next, about your question indicating that faults cause inter-floor noise problems in building structures, such as structural defects, ME and MOLIT agree that building structures should be improved. This is also why MOLIT announced the related countermeasure on August 18.

However, according to the noise standards announced today, many cases where people already suffer from inter-floor noise are not recognized as victims of inter-floor noise-related damage when reaching the final stage. So, to assist those victims in resolving their noise-related problems, we wanted to make a stricter standard for inter-floor noise, which cannot guarantee adequately reduced noise annoyance levels.

<Q> My question is, structurally, some realities inevitably cause such noise, but won't there be more disputes if the standards are strengthened in this way?

<A> In this regard, apartment dwellers must adopt a quieter lifestyle and consider that, when it comes to inter-floor noise, there can be both a perpetrator and a victim. It seems necessary to consider the victim's perspective a bit more and modify our apartment lifestyle so that we do not continue to cause disturbance to our neighbors.

As you mentioned, certain factors can make it difficult for people to improve their lifestyles. So, ME and MOLIT will actively endeavor to promote problem awareness and provide education.