

# Proposals for Future Activities to Promote Airtightness in Non-Residential Buildings in Japan

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## ABSTRACT

In Japan, in the 1980s, a committee of the Architectural Institute of Japan (AIJ) conducted a study to understand the current status of airtightness in high-rise buildings (offices) and the increase in heat load due to air leakage, to predict the situation, and to take countermeasures. However, since the 1980s, there has been almost no progress in understanding, predicting, and taking countermeasures not only for high-rise buildings (offices) but also for non-residential applications in general (general offices, schools, factories, warehouses, shopping centers, etc.).

In order to change this situation in Japan, following proposals are made, based on the experience in the USA and the UK, where a great deal of experience has already been accumulated.

- (1) Proposal to establish the network of airtightness measurement service providers for non-residential buildings using existing residential airtightness measurement service providers.
- (2) Proposal to approach the climate citizen's assembly to gain consensus among citizens.
- (3) Proposal for air tightness testing standards for non-residential buildings and establishment of standards
- (4) Proposal to make airtightness testing mandatory based on survey results
- (5) Proposal for technical training to improve the skills of airtightness testing providers and installers
- (6) Recognition of a sense of speed and proposed schedule for the start of the 2030 system to limit average temperature increase to 1.5°C.

## KEYWORDS

establishment of network, climate citizens' assembly, establishment of standards, mandatory airtightness testing, technical training