

# PRESS RELEASE

July 28, 2022

## Use of Wood in Condominiums Toward a Decarbonized Society Development of High Sound Insulation Wooden Double Floor System Achieving the Same Sound Insulation as Reinforced Concrete Structures

**Tokyo, Japan, July 28, 2022**--HASEKO Corporation (head office: Minato-ku, Tokyo; president: Kazuo Ikegami) is promoting the use of wood in condominiums\*<sup>1</sup> as an initiative toward achieving carbon neutrality in 2050. The company has developed a high sound insulation wooden double floor system (patent submitted) jointly with Hosoda Corporation (head office: Suginami-ku, Tokyo; president: Koichiro Nomura), a Haseko Group company. Performance testing was conducted at Japan Testing Center for Construction Materials (JTCCM), where the system's high sound insulation was confirmed, with a heavy floor impact sound level of LH-45\*<sup>2</sup> and a soft floor impact sound level of LL-35.\*<sup>3</sup>

Usually, wooden buildings have poorer sound insulation when compared to reinforced concrete structures. Therefore, in promoting the use of wood in condominiums, it was necessary to improve the sound insulation. To reduce the propagation of sound vibrations, this system optimized the weight balance of structural floors and double floors, improving sound insulation by separately installing the hanging ceiling and structural floor. In addition, besides the improvement of sound insulation, it has the following advantages when used in condominiums.

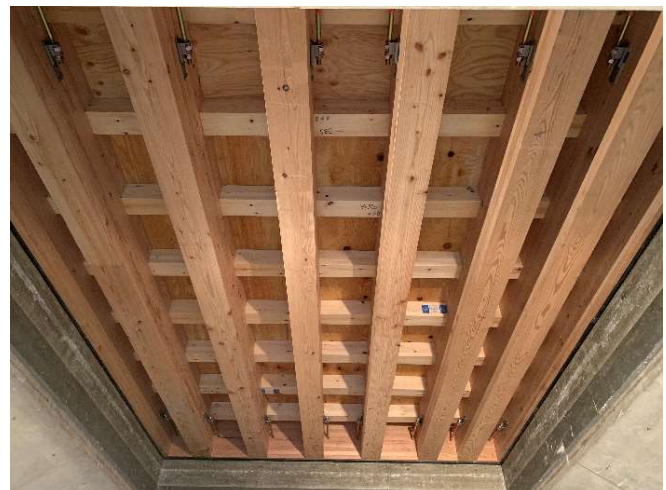
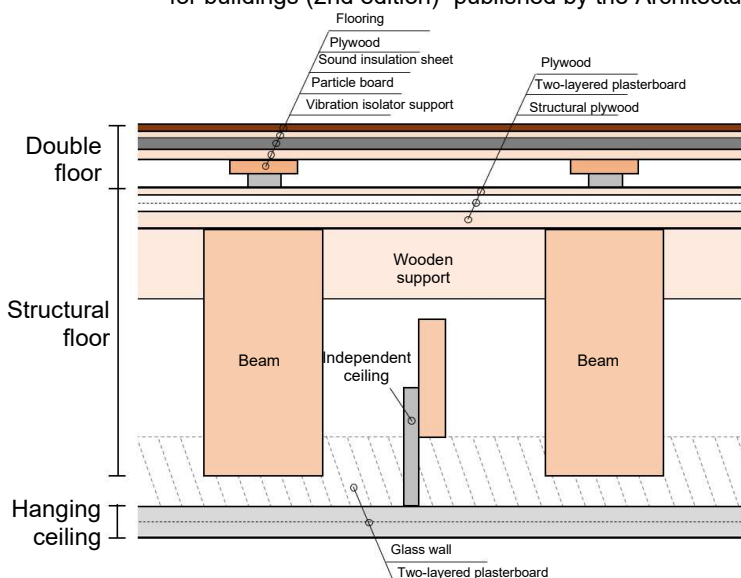
- (1) The overall weight of the building is reduced through the use of timber.
- (2) Timber is easier to process compared to reinforced concrete, helping to reduce the construction period.
- (3) There is high versatility as all components are commercially available.

The Haseko Group has established its climate change response policy HASEKO ZERO-Emission in December 2021 and set greenhouse gas (CO<sub>2</sub>) emission reduction targets that were certified by the Science Based Targets initiative (SBTi). Going forward, by promoting the use of wood—including this system—in new condominiums, it will contribute toward reduction of CO<sub>2</sub> emissions not just within Haseko but also across the entire supply chain, and at the same time, actively make proposals for the development of condominiums toward a decarbonized society.

\*1. Use of wood for the main parts of the load-bearing structure of a building

\*2. Audible but not really noticed (refer to the "Sound insulation performance standards and design guidelines for buildings (2nd edition)" published by the Architectural Institute of Japan in 1997)

\*3. Not audible under normal circumstances (refer to the "Sound insulation performance standards and design guidelines for buildings (2nd edition)" published by the Architectural Institute of Japan in 1997)



Concept of high sound insulation wooden double floor system

Structural floor of high sound insulation wooden double floor system

## Measurement of the high sound insulation wooden double floor system

As the measurement method of floor structure itself is not defined under JIS, the high sound insulation wooden double floor system was installed at the opening of the two-story reverberation room of JTCCM and floor impact sound level was measured.



Measurement of sound insulation

## Track record of use of wood in structures

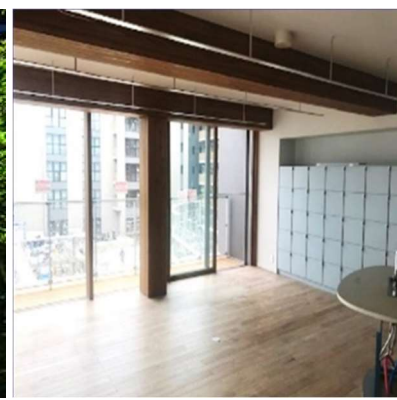
The Haseko Group has been promoting the use of wood in condominiums since 2014, with a track record of use in the communal buildings of condominiums. With the addition of Hosoda Corporation to the Haseko Group in 2020, the Group will actively promote the use of wood in condominiums with design and construction by Hosoda as the basic approach, expanding the scope to the main residential buildings of condominiums while using the expertise of Hosoda.



Communal building of  
BRANSIESTA Oji



Communal building of Renai  
Yokohama Totsuka



Communal area of ComRezi  
Akabane

## Initiatives for the Sustainable Development Goals (SDGs)

Out of 17 goals in the United Nations' Sustainable Development Goals (SDGs), the Haseko Group has identified 10 goals with a particular connection to its business and is working toward solving issues through its operations. The Group is minimizing the environmental burden stemming from condominiums, where many people live, and proactively introducing facilities and equipment that can contribute to the environment of cities as a whole.

### Related SDGs



SUSTAINABLE DEVELOPMENT GOALS