

Project Pasteur

Haarlem's Boerhaave, NL



Case Study



Contractor

HBB Group



Architect

Finch Buildings and FARO



Developer

Maat Feeling Home, Elan



Structural Engineer

Brons Structural Engineers



Acoustic Consultant

Peutz

OVERVIEW

Project Pasteur is a major sustainable housing redevelopment in Haarlem's Boerhaave district. Located on Louis Pasteurstraat, the project replaces 84 older social rental homes with 179 new energy-efficient apartments across three buildings.

Developed by Elan Living within HBB Group, the scheme combines social value with environmental ambition: 179 homes are built in solid wood using 322 modular Finch units, manufactured by Maat Feeling Home, making it one of the largest modular timber construction projects in Haarlem.

With construction starting in early 2025 and all modules installed in just six months, Project Pasteur is a strong example of fast, low-impact, future-oriented residential development.

Straviwood ModuLink

A bracket for structural joints with acoustic isolation features thanks to the resilient pads in the bracket.

Straviwood ModuBreak

Resilient pads designed to acoustically decouple stacked modular building parts of CLT, minimizing flanking sound transmissions.



SOLUTION

Acoustic performance is a key design consideration in relatively lightweight timber 3D modular buildings.

Compared with traditional construction methods, sound and vibration can travel more easily through lighter structures, particularly where module connections are not carefully detailed. For Project Pasteur, it was essential to acoustically decouple both the horizontal and vertical connections between modules in order to control flanking transmission. Given the scale of the project, another important challenge was to develop solutions that were not only effective, but also repeatable, practical to install, and easy to manage consistently throughout the construction process.

CDM Stravitec, together with our local partner - Delta-L, developed a series of tailored acoustic isolation solutions that combine reliable performance with compatibility for the modular construction process.

For the horizontal connections between modules, several variants of **Straviwood ModuLink** were designed to provide structural continuity and integrity without creating rigid contact bridges for sound and vibration. Custom Straviwood ModuLink were also supplied to connect the timber modulus to the concrete core structure, capable to accommodate differential displacements by the use of slotted holes.

To reduce vertical transmission through the support points, **Straviwood ModuBreak** bearings were installed beneath the modules. Additional isolation measures were also integrated at balconies, corridor supports, and gallery connections to address external flanking paths and ensure a consistent acoustic strategy throughout the entire building.



AT A GLANCE

CHALLENGES

- Lightweight timber modules are more sensitive to sound and vibration transmission
- Poorly detailed connections can create flanking noise paths
- Both horizontal and vertical module connections required acoustic decoupling
- Large project scale demanded repeatable, easy-to-apply solutions
- Installation needed to remain clear and manageable during execution
- Need to accommodate the differential displacement of different building components

BENEFITS

- Effective control of flanking noise and vibration transmission
- Acoustic isolation integrated into both horizontal and vertical connections
- Custom solutions matched to the modular timber construction method
- Repeatable details supported efficient large-scale implementation
- Consistent acoustic performance across the full project, including secondary connections, without compromising structural integrity

2.244 pcs

Straviwood
ModuBreak

536 pcs

Straviwood
ModuLink