



## Case Study



### Property Owner

Municipality Sint-Jans-Molenbeek



### Main Contractor

De Tender



### Architect

WAW architects



### Acoustic Consultant

Daidalos Peutz



### Structural Engineer

Dubimax

## Stravibase SEB

- A bespoke structural elastomeric bearing solution for the structural decoupling of the inner box
- Series of elastomer pads laminated to formwork

## OVERVIEW

Community centre De Vaartkapoen, is a public community centre in Sint-Jans-Molenbeek. De Vaartkapoen focuses on three pillars; music, society and Molenbeek. The name 'vaartkapoen' refers to the 19th-century workers who were responsible for loading and unloading cargo ships along the Charleroi-Brussels canal.

De Vaartkapoen was founded in 1974 at 76 Schoolstraat in Molenbeek. The venue was originally intended for amateur theatre at a time when the middle class was moving out of Molenbeek. Later, the focus shifted to social services such as food distribution and youth workshops. As of 1979, the venue was often used to host small concerts, mainly alternative music.

Early 2019, the city started renovating the by then derelict community centre. Renovation works involved a revamped community centre, an updated concert hall, garden and multipurpose room.



## SOLUTION

Because of the community centre's location in the city centre, with neighbors living directly adjacent to the building, it was an absolute must to properly insulate the concert hall. In addition, the contractor was commissioned to recuperate as much of the original building structure as possible. The mix of old and new structural elements makes the insertion of noise and vibration isolation solutions more complex.

To acoustically decouple the concert hall from its surroundings, a **Stravibase SEB** system consisting of elastomeric pads attached to a fibre cement board, were installed between the predals, steel beams and basement walls supporting the floating floor.

The floating floor consists of predals on which a concrete layer is poured, and on top of which the walls of the large hall's inner box are also placed. Between the walls of the inner box there will be another lowered acoustically decoupled ceiling, creating a complete box-in-box design.

## AT A GLANCE

### CHALLENGES

- Building located in a densely populated residential neighborhood used for organizing concerts
- Renovation project reclaiming as much of the original building structure as possible making proper noise and vibration isolation extra tricky

### BENEFITS

- Custom-made isolation system optimized to the technical specifications
- Long-lasting and maintenance-free structural solutions
- Quick and easy to install following the laying plan

**7 Hz**  
Stravibase  
SEB

Ca.  
**14 360 kN**  
Project  
Design Load

