



Case Study



Property Owner
Cyrille Tessier



Architect
Fitness Park



Acoustic Consultant
Orfea



Main Contractor
Burton

Stravigym HP

“High-performance” discrete isolator floating floor system that offers high mechanical resistance and acoustical performance. Suitable for areas with medium impact energy, like strength or cardio areas.

Stravigym XP

Extreme Performance discrete isolator floating floor system specifically intended for use in free-weight areas offering superior structural resistance and acoustical performance.

OVERVIEW

Located at 156 Avenue Gaston Roussel, Romainville, this mixed-use building combines a ground-floor gym with four residential floors above, and a restaurant adjacent.

An acoustical study identified potential impact noise and structure-borne vibration transmission from gym activities, which could affect both the residents above and the neighboring restaurant.

The project presented a typical challenge of mixed-use building acoustics, where high-impact activities such as free weights and strength training must coexist with sensitive residential and commercial spaces.

CDM Stravitec was tasked with providing high-performance gym flooring solutions that would mitigate structure-borne vibrations while supporting the functional requirements of a modern fitness center.



SOLUTION

To address the specific acoustic challenges identified in the gym areas, CDM Stravitec provided tailored flooring solutions designed to control structure-borne vibrations and impact noise.

For the 315 m² (3,390 ft²) free-weight zone, the **Stravigym XP with GypactLayer-45** solution was installed, engineered to absorb heavy impacts from free weights while minimizing vibration transmission to the building structure.

In the 229 m² (2,465 ft²) strength training zone, the **Stravigym HP** solution was implemented, specifically designed to handle dynamic loads from gym equipment and ensure effective vibration isolation.

Both solutions were carefully adapted to the building's structural conditions, the nature of activities in each area, and the proximity of sensitive spaces.

Together, these solutions provide high-performance acoustic isolation, allowing residents and neighboring businesses to remain undisturbed while maintaining a safe, functional, and comfortable environment for gym users.

AT A GLANCE

CHALLENGES

- Mixed-use building with residential apartments above and a restaurant adjacent, requiring strict acoustic isolation to prevent disturbances.
- High-impact gym activities, particularly in the free-weight zone, generate structure-borne vibrations that could transmit through the floor to sensitive areas.

BENEFITS

- High-performance acoustic solutions enable gym activities to coexist peacefully with residents and neighboring businesses.
- Stravigym XP and HP solutions were tailored to the specific demands of free-weight and strength zones, addressing impact and dynamic loads.
- Quick and clean installation thanks to dry CDM Stravitec solutions, minimizing construction time.

315 m²
(3,390 ft²)

Stravigym XP
with Gym-
pactLayer-45

229 m²
(2,465 ft²)

Stravigym HP



For the Fitness Park in Romainville, our project manager directed us to CDM Stravitec to implement the acoustic solution required according to the study we had commissioned. The gym is located on the ground floor of a residential building with limited ceiling height, numerous columns, and various constraints that had to be taken into account. It was essential that no disturbance could be perceived by the residents living on the upper floors. The solution requires a short adjustment period for the strength training machines to stabilize, but today both members and local residents are very satisfied with the results achieved.

Cyrille Tessier
Owner