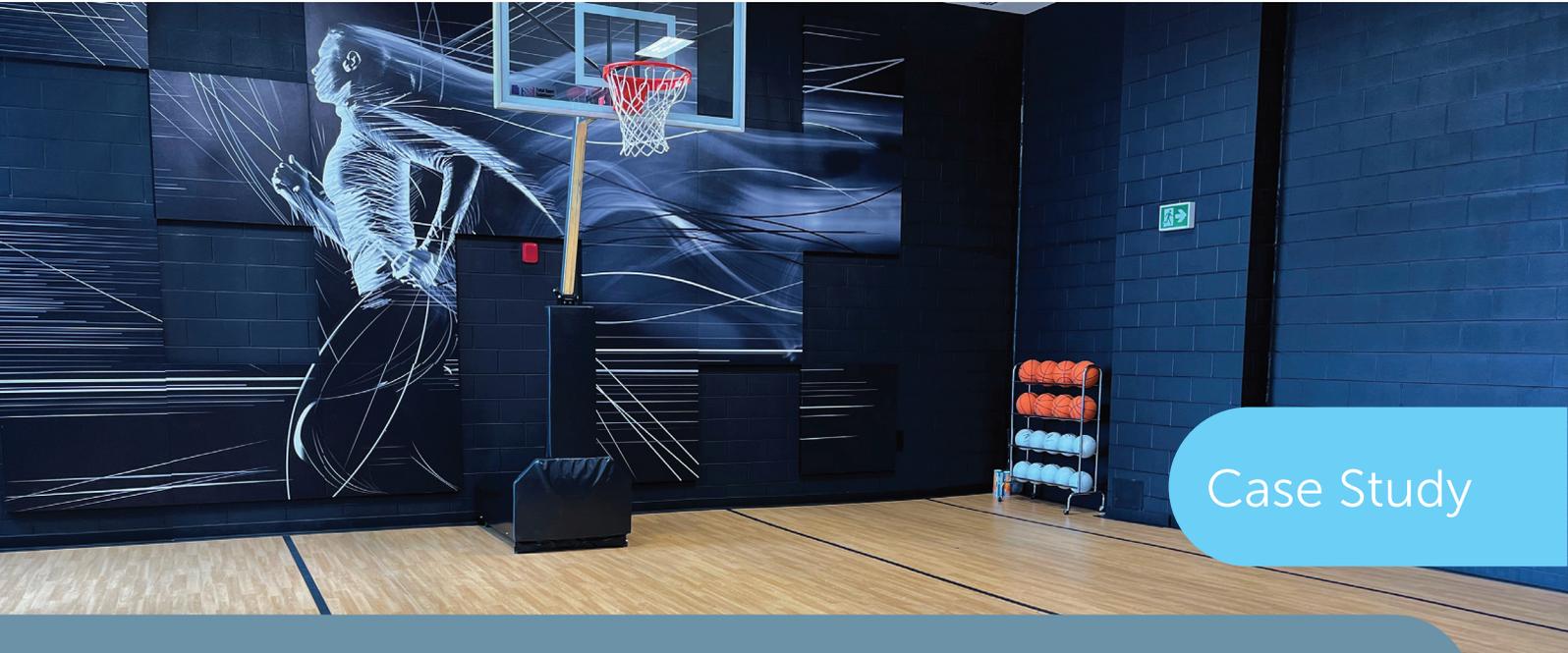


Westwood Gardens

Toronto, CA



Making your world a quieter place



Case Study



Property Owner

Collecdev (8868 Yonge) LP



Main Contractor

Collecdev



Structural Engineer

Jablonsky Ast & Partners



Architect

Kirkor Architects and Planners



Acoustic Consultant

HGC Engineering

Stravifloor Jackup-R

- Jack-up floating floor system with reinforced steel boxes cast into concrete
- Once dry, the isolated slab is raised off the structure to the required void depth

OVERVIEW

Westwood Gardens, is a contemporary and high-end condominium built on Yonge Street in the sought-after Richvale neighbourhood in the town of Richmond Hill, north of Toronto.

The two-tower, 15-storey development is comprised of different units, tailored to the needs of young urban professionals and those looking to downsize from their luxury home in the Greater Toronto Area.

Sustainable living stands at the foreground of Westwood Gardens. Landscaped green roofs and patios help reduce the urban heat island effect, while water recycling installations, e-vehicle charging stations and a geothermal heating system help reduce the buildings carbon footprint.

The east building, which is themed around an active lifestyle, features many recreational amenities, including a ground floor sports court.



SOLUTION

To isolate the Sports Courts located on the ground floor of the east building and thereby prevent the transmission of unwanted vibrations from travelling throughout the building structure and causing noise disturbance to those living above, a high-performance **Stravifloor Jackup-R** floating floor was installed.

Reinforced steel boxes were placed under the floor of the basketball court, cast into concrete and jacked up once the concrete has cured, creating the required air void and decoupling the entire slab from the rest of the building structure.

The Stravifloor Jackup-R isolated floating floor system allowed the developers to meet the specified frequency of 6Hz.

“ Thanks for your hard work, I’m looking forward to closing this out and working with CDM Stravitec again in the future.

- Grant Wood, Project Manager CAPM

AT A GLANCE

CHALLENGES

- Prevent vibrations caused by the play of basketball from being transmitted through the building structure.
- Isolate vibrations generated by human motion (range between 1.7 Hz for a slow walk up to more than 3.2 Hz for sprinting) and dribbling (frequency is < 3 Hz for 99% of the time).

BENEFITS

- Solution that allows for easy adjustment of the final floor height as well as replacement or inspection of isolators, should the use of the room or load conditions change in the future.
- Solution with a very low risk of having a bridge between the slab and the structure, isolation is guaranteed because the whole slab is lifted.

126 sqm

Stravifloor
Jackup-R

