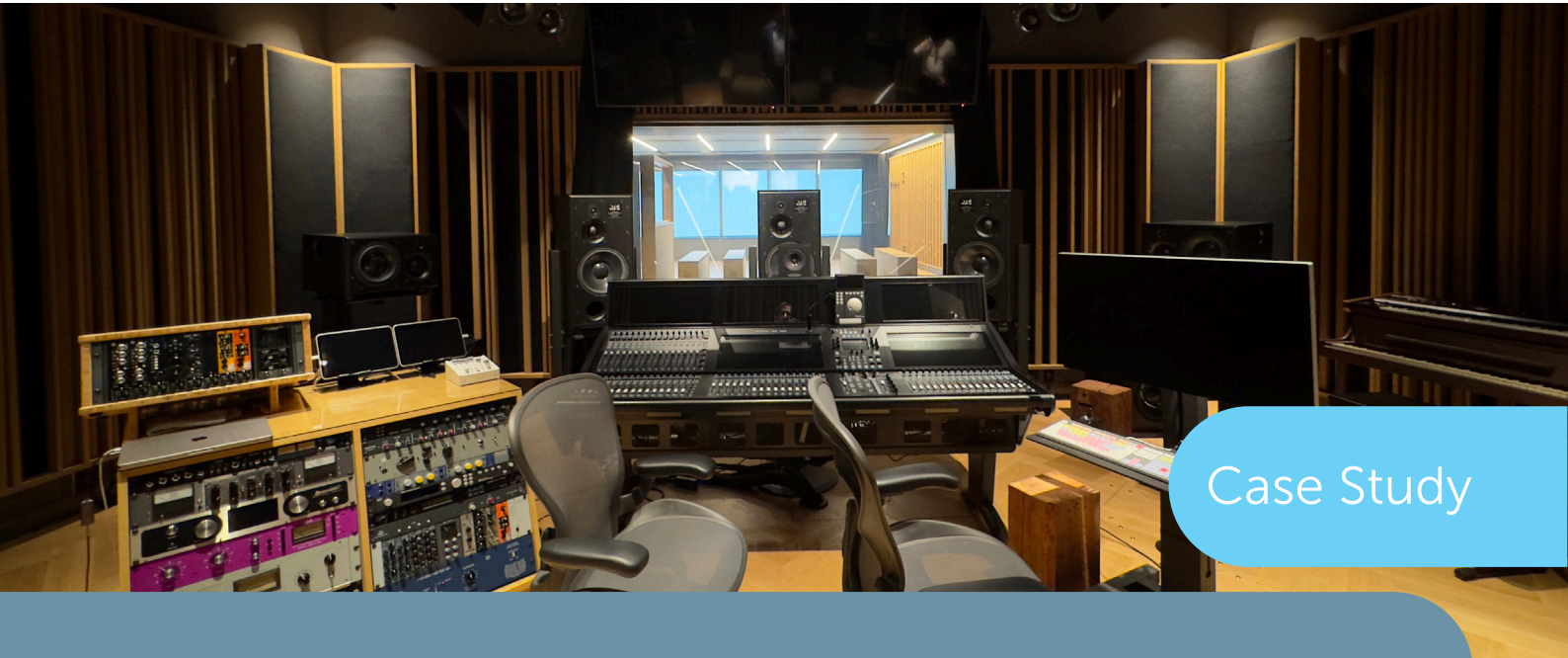


Allied Music Centre at Massey Hall Toronto, ON



Case Study



Property Owner

Massey Hall



Main Contractor

EllisDon Corporation



Acoustic Consultant

Sound Space Design



Architect

KPMB Architects



Structural Engineer

Entuitive

OVERVIEW

The expansion of the iconic Massey Hall in downtown Toronto introduced a new layer of acoustic complexity. The project added the Allied Music Centre, a multi-level facility connected to the historic venue, with performance and recording spaces stacked above one another across floors five, six, and seven.

Within the new structure, designers created intimate performance spaces, rehearsal rooms, recording booths, and support areas for artists.

Stravifloor Mount

A discrete elastomeric pad-based system allows precise control of natural frequency, reducing structure-borne noise in performance, rehearsal, and recording, and other acoustically sensitive areas. The wet version adds a concrete topping for higher load capacity, maintaining acoustic performance while supporting heavier equipment or finish flooring.

Stravifloor Channel

An isolated steel batten system supporting panel-based floating floors on resilient pads. It distributes localized loads, reduces floor deflection, and enhances acoustic performance, while accommodating height constraints and allowing adjustable channel spacing to tailor stiffness without compromising isolation.

This vertical arrangement presented a significant acoustic challenge: multiple high-performance spaces located directly above and adjacent to one another in a structurally lightweight timber-concrete hybrid building.

Acoustic consultants Sound Space Design and architect KPMB required floating floor solutions capable of meeting variable acoustic needs, integrating with existing floor designs, and adapting to changing finish materials and load requirements throughout space usage.



SOLUTION

CDM Stravitec collaborated closely with the architect, contractor, and acoustic consultant to deliver floating floor solutions across 340 m² (3,649 sq ft) of performance and technical spaces.

Small Theater and Multipurpose Room: specified for higher acoustic performance levels, required robust vibration isolation. The design team selected **wet Stravifloor Mount** for its effective acoustic performance.

Control Rooms and Vocal Booths: Height constraints on upper levels necessitated a solution that minimized floor-to-ceiling space. **Dry Stravifloor Channel**, with galvanized steel channels over isolation pads, was implemented to provide vibration control while accommodating structural limitations.

Mid-Project Adjustment: During installation, the architect observed that the dry Stravifloor Mount could be too flexible in areas expecting higher rolling loads, potentially compromising the finish flooring. These areas were switched from dry Stravifloor Mount to **dry Stravifloor Channel**, as the channel framework better distributes localized loads, reduces floor deflection, while maintaining acoustic performance.

The flexibility of the Stravifloor portfolio enabled these on-site adjustments without a significant redesign, allowing the project team to meet both structural and acoustic requirements across all rooms

AT A GLANCE

CHALLENGES

- Multi-level venue with stacked acoustic spaces required adaptable isolation solutions
- Unanticipated high rolling loads caused floor deflection compromising finish flooring choices
- Mid-project changes to isolated flooring systems required coordination across disciplines

BENEFITS

- Stravifloor Mount and Channel offered flexible solutions for high- and low-conflict zones.
- The flooring solution allowed structural span and layout adjustments without compromising acoustic performance
- Custom channel spacing optimized floor stiffness with minimal redesign and additional cost.
- CDM Stravitec supported integration across acoustic, structural, and architectural teams.
- The adaptable nature of the solutions allowed changes during final design stages without major delays or additional engineering work.

15 m²
(163 ft²)

Stravifloor
Mount

325 m²
(3,496 ft²)

Stravifloor
Channel