Tour Litwin
Puteaux, FR

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Making your world a quieter place

Case Study

Property Owner
SNC Bayen Litwin

Main Contractor
Petit - VINCI Construction

Architect
DGM & Associes / Suprem Architecture

Acoustic Consultant
Cap Horn Solutions

Structural Engineer
INCET

OVERVIEW

After already opening two successful Mama Shelter hotels in Paris, the unique and quirky hotel chain has moved into the recently renovated Tour Litwin, located in the Bellini district in Puteaux.

The former office tower, designed by Jean de Mailly in 1969, has been completely transformed to house the Mama Shelter hotel. The high-rise building was raised by four storeys to accommodate 211 bedrooms, 2 restaurants, meeting rooms, a gym, a parking lot for 58 cars and a rooftop bar offering panoramic views of the nation's capital.

Stravifloor Channel

- Isolated steel batten system for the support of concrete floating floor applications, using strong, galvanized steel channels over the isolation pads
- Uses steel channels to facilitate the positioning of the optimized discrete supports, allowing fewer contact points (transmission paths) to the subfloor

SOLUTION

A Stravifloor Channel floating floor with isolated steel battens, 4 cm thick high-density mineral wool and 18 mm MDF lost formwork panels supports a 12 cm reinforced concrete slab in the hotel's rooftop restaurant and bar, mitigating the transmission of noise and vibration towards the underlying guest rooms.

The combination of strong galvanized steel channels and elastomeric isolation pads selected to have a natural frequency os 8 Hz under serviceability limit state (SLS), creates a system that is optimized in terms of acoustic performance.

The Stravifloor Channel floating floor system makes the Mama Shelter La Défense hotel a true urban refuge were people can enjoy a good night's sleep, share a meal, have a drink and relax.

AT A GLANCE

CHALLENGES

- Need to isolate the noise generated in the rooftop restaurant and bar from the quiet ares of the hotel

BENEFITS

- Solution using resilient elements that offer an extremely low and constant resonant frequency over a wide load range
- System that incorporates an air void to maximize the airborne noise insulation
- Solution with as few contact points as possible, reducing the risk for acoustic bridging

415 m²
Stravifloor Channel

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