Case Study

Vibration Protection for Red Bull Music Academy in Aoyama, Tokyo (JP)

Effective vibration isolation for high-tech music studios, which directly adjoin to the living area.

Sylomer® solutions provide ideal conditions for residents and musicians.

getzner engineering a quiet future
Description of the project

A cluster of music studios in a high-rise building in the middle of a residential area, what could be worse? Getzner delivered the vibration isolation solution that enabled the musicians in the Red Bull premises to do what they had to do without disturbing their neighbours.

The impetus for this project was the Red Bull Music Academy, which was held in Tokyo from October 12th to November 14th 2014. This is an important music initiative for selected representatives from the music industry, who meet for almost two weeks every year in an international city for a series of workshops, lectures and performances. And it was for this event that star architect Kuma Kengo was commissioned to renovate four floors of a multi-storey building, as eight small studios are located on the fourth floor, right next to a residential area. This is where Getzner came into the picture.

Resilient Bedding for Multi-Purpose High-Rise Building in the Aoyama District of Tokyo

The Getzner solution

In collaboration with Nihon Onkyo Engineering Co., Ltd., its Japanese sales partner, Getzner developed and installed the vibration isolation for the entire premises. The flooring in the studios was resiliently bedded on Sylomer® SR 110 and included a lecture hall, a radio station (Red Bull Music Academy Radio), together with one large and eight small recording studios. In addition, a room on the ground floor of the building was fitted out for professional live sessions and sound insulation was installed.

To provide an acoustically ideal recording environment as well as high levels of noise insulation for the neighbours, the studios were fitted out and insulated according to the “box-in-box” principle. “The flooring on all three floors was resiliently bedded on Sylomer® SR 110 point bearings. This enabled us to achieve the maximum decoupling of the floors without any adverse effect on the acoustics,” explained Tomoko Takekawa, director of Nihon Getzner K.K. in Japan. The vibration isolation system for the ceilings of the various...
rooms was developed jointly by Getzner and the Spanish company AMC Mecanocaucho. This unusual combination consists of AMC ceiling hangers plus Getzner Sylomer® bearings, which have the dual effect of reducing noise levels to a minimum and preventing vibrations from impacting upon the neighbouring properties or the surroundings in general.

Getzner received the enquiry for this order from Nihon Onkyo Engineering Co., Ltd., one of Japan’s leading acoustic engineering companies. “Getzner is well known within the Japanese acoustic scene for its state-of-the-art vibration protection solutions for floors, walls and ceilings. This is no doubt the reason why we were chosen as the partner for this project,” said Tomoko Takekawa, director of Nihon Getzner K.K. in Japan. Getzner helped with the fitting out of the music studios right from the outset by providing a set of technical calculations. It also supervised the building work during the conversion. As a result, the joint building project with Nihon Onkyo Engineering Co. was completed within just three months.

“With the conversion of the premises for the Red Bull Music Academy we have been able to create an impressive meeting of contrasts that provides peace and quiet for the residents and optimum recording conditions in the studios. All the floors in the rooms were equipped with vibration protection from Getzner – the ideal solution for problems of vibration and noise.”

Nihon Onkyo Engineering Co.

Feedback

Sound insulation for the modern Red Bull music studios installed using top-quality Sylomer® SR 110.
Facts and figures at a glance

Resilient bedding of music studios in Tokyo

Building complex: 20-storey apartment block, sound insulation has been installed on three floors
Vibration isolation: Nihon Getzner K.K.
Solutions: Point bearing of floors using Sylomer®
Mounting of ceilings using ceiling hangers from AMC-Mecanocauchu
Implementation Getzner: June to October 2014
Client: Nihon Onkyo Engineering Co. Ltd.
Investor: Red Bull Japan
Architect: Kuma Kengo

Getzner Werkstoffe GmbH

Foundation: 1969 (as a subsidiary of Getzner, Mutter & Cie)
Chief Executive Officer: Ing. Jürgen Rainalter
Employees: 420
2017 turnover: EUR 95.2 million
Business areas: Railway, construction, industry
Headquarter: Bürs (AT)
Locations: Berlin (DE), Munich (DE), Stuttgart (DE), Lyon (FR), Amman (JO), Tokyo (JP), Pune (IN), Beijing (CN), Kunshan (CN), Charlotte (US)
Ratio of exports: 94 %

Construction references
(some projects in Japan)
- National Training Centre (sports hall)
- Palace Hotels (swimming facilities, chapel)
- Peninsula Hotels (swimming facilities, kitchen)
- Tokyo American Club, Sports Centre (swimming facilities, fitness centre, kitchen)
- QVC Japan (television studio)
- Toppan Printing Co., Ltd. (rotary printing press)
- Kochi Newspaper (rotary printing press)
- Sumida Aquarium (machine room)
- Shibuya Hikarie (theatre)
- Toranomon Hills Mori Tower (four-lane urban motorway, high-rise building)

Image source: Red Bull, Dan Wilton