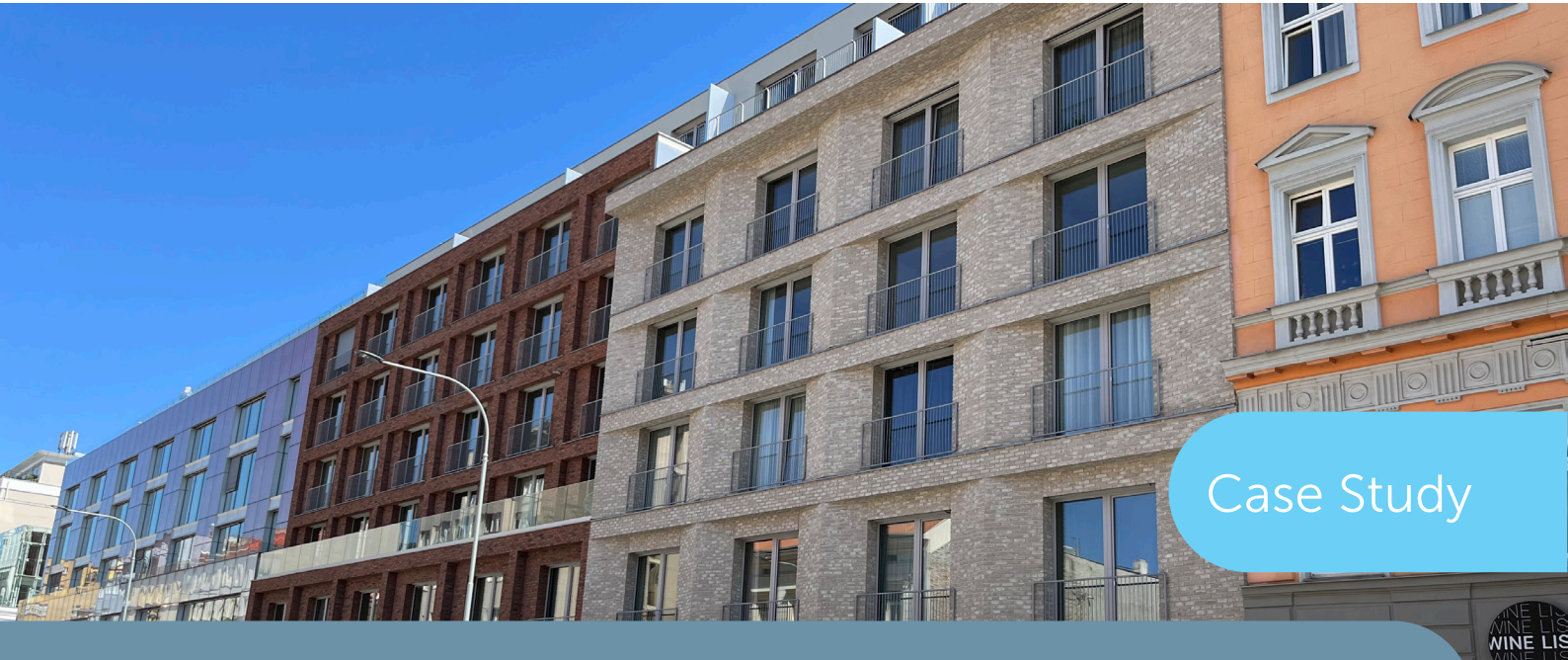


Rodbo (Dva Domy)

Prague, CZ



Case Study



Property Owner
Karlín Group a.s.



Main Contractor
Průmstav a.s.



Structural Engineer
Statikon solutions s.r.o.



Acoustic Consultant
Ing. Jan Stěnička



Architect
EBM Expert s.r.o.

OVERVIEW

“Dva Domy” or “Two Houses” in English is a new residential project located in the beautiful and thriving environment of Prague 8 - Karlín. The premium building development offers over 110 apartments and various retail spaces and offices.

Due to its proximity to the underground and road traffic passing in front of the buildings, anti-vibration systems to dampen structure-borne noise were needed. Dva Domy, consists of two separate residential towers that are connected at street level, where cafes and restaurants are located.

Stravibase VHS, Stravibase Lateral

- Very high stress bearings for structural building isolation. Designed to support very large loads whilst being significantly smaller than other elast. bearings (Stravibase VHS)
- Full-surface resilient perimeter isolation system. Wide range of thicknesses for different isolation performances to meet natural frequencies as low as 14Hz. (Stravibase Lateral)

Stravifloor Prefab

- Pre-manufactured modular floating floor solution that offers excellent structure-borne and airborne noise isolation thanks to the spring bearings



SOLUTION

To decouple the non-isolated substructure from the isolated superstructure, **Stravibase VHS** elastomeric bearings consisting of 5 layers of high-pressure elastomer and steel plates were installed on the walls and column heads (under the ceilings of the 1st underground floor).

To dampen vibrations from ascending and descending elevators, a **Stravibase Prefab** floating floor was installed in the elevator shafts. The elevator shafts themselves were lined with a 30 mm thick **Stravibase Lateral** resilient mat to create a box-in-box design.

AT A GLANCE

CHALLENGES

- Located above metro line and near a busy road in the center of the city
- Need for a cost-effective solution

BENEFITS

- Custom made isolation system optimized to the technical specifications
- Made of alternate layers of high-resilience elastomeric pads and steel plates
- Steel parts are centrifugal hot dip galvanized
- Quick and easy installation

208 MN

Stravibase
VHS

1.118 m²

Stravibase
Lateral

14 m²

Stravifloor
Prefab

