

# NEUGRAF - Nová Grafická

## Prague, CZ



## Case Study



### Property Owner

UBM Development Czechia s.r.o.  
& CRESTYL real estate, s.r.o.



### Main Contractor

PORR a.s.



### Structural Engineer

RECOC s.r.o.



### Acoustic Consultant

Ing. Jan Stěnička &  
Ing. Daniel Makovička



### Architect

Bogle Architects

## OVERVIEW

NEUGRAF - Nová Grafická is a new residential development project at the heart of the Smichov district of Prague 5. NEUGRAF consists of 177 apartments divided over 10 floors.

Prague's newest building development stands out with its terraced roof lined with lush greenery, making it a perfect refuge from the hustle and bustle of the city.

Because of the strict acoustic requirements, anti-vibration systems were used to mitigate vibrations and structure-borne noise (Building Base Isolation). After all, this is a residential building, which is exposed to vibrations from the "Smichov" traffic tunnel running alongside the building.

## Stravibase Raft

- Resilient full-surface mat system specially designed for bathtub foundations
- Wide range of thicknesses for different isolation performances to meet natural frequencies as low as 10Hz



## SOLUTION

Located in between several other buildings, NEUGRAF had to be acoustically decoupled using a flexible solution. Across the entire surface area (bathtub foundation) and up the outer walls of the building, a [Stravibase Raft](#) resilient continuous mat was installed.

Nested between two reinforced concrete structures, the Stravibase Raft full-surface anti-vibration rubber mats act as a worthy alternative to the originally prescribed PU-foams enclosed in waterproofing layers, and effectively isolate the building from structure-borne noise.

## AT A GLANCE

### CHALLENGES

- Vibrations from heavy trucks
- Replacement of RR mats for PU foams

### BENEFITS

- Compliance with the hygienic noise limit
- Stable long-term stiffness and dynamic performance
- High resistance to external factors as alkaline water (wet concrete)

1.731 m<sup>2</sup>

Stravibase  
Raft

