An apartment building, located in Zurich-Wollishofen district directly adjacent to a railway station, is currently under construction. The findings of an extensive emission forecast by experts for structural dynamics of Ziegler Consultants engineering company concluded that the building requires elastic support in order to comply with the legal values for acoustic noise and vibrations.

Based on these investigations, mageba designed and installed a complete building support solution. The entire apartment and all earth-moulded walls were supported by various types of VIBRAX®PUR vibration isolation.

Specific challenges for building support:
- Low tuning frequency of 12 Hz
- Complex building geometry
- After building completion some parts of the supporting level permanently lie in groundwater

**mageba scope**

The scope of supply comprises a total of 700 m² of various types of VIBRAX®PUR with a thickness of 25 mm.

In addition to professional technical consultancy, mageba was also in charge of accurate on-site installation. Due to the complex building geometry, with plenty of inclined areas and different supporting levels, a thorough installation execution was of vital importance.

Moreover, mageba provided assistance for the installation of noise insulation and vibration isolation in terms of measures for quality assurance.

### Highlights & Facts

**mageba products / services:**
- Type: VIBRAX®PUR
- Features: Vibration isolation
- Installation: 2016

**Structure:**
- City: Zurich
- Country: Switzerland
- Type: Reinforced concrete structure
- Construction: 2016
- Architect: huggenbergerfries Architekten AG
- Structural dynamics: Ziegler Consultants

The insulation mats are available in more than twelve different types.