

SUCCESS STORY

VIBRATION ISOLATION

Masaryk Project, Prague

PROJECT DATA

Brief description

Vibration isolation of a multifunctional complex near the Masaryk railway station to protect it from vibrations and structure-borne noise.

Requirement

Economically effective and technically efficient solution against vibration and structure-borne noise immission caused by adjacent rail traffic.

City, year

Prague, 2021

PROJECT DESCRIPTION

A new impressive building is being constructed in the centre of Prague: the multifunctional complex Masaryk Center, designed by the famous architect Zaha Hadid. The building complex, which is scheduled for completion in 2023, is located in the immediate vicinity of the historic Masaryk railway station. The adjacent rail traffic causes vibrations and secondary airborne noise. To ensure the comfort of the people inside the building, a protective measure is required. This is done by elastically decoupling the building from the transmission medium underground.

SOLUTION

Calenberg Ingenieure offers an effective solution with elastic bearings. Civerso A and Cisador® 80 were used for this project. The bearings were installed laterally on the perimeter insulation of the UG outer wall to a depth of -8.8 m. Civerso A from 0.0 to -3.0 m and Cisador® 80 subsequently to -8.8 m. The total area is approx. 2600 m².

The advantages:

- Both products hardly absorb any water due to their material properties
- Technically functional and economical solution

