

SUCCESS STORY

VIBRATION ISOLATION

Grandaire, Berlin

PROJECT DATA

Brief description

Elastic partial support of a multistory building complex with 270 apartments and shops near a subway line.

Requirement

Development of an economical elastic support of a part of the building complex (no support of the complete building) to protect the building against vibrations and secondary airborne noise immission from near railway traffic that is supposed to effect the building.

City, year

Berlin, 2018

PROJECT DESCRIPTION

The Grandaire multistory building is a residential building in Berlin-Mitte, near Alexanderplatz.

It consists of two towers which are 65m or 40m high and connected by a lobby.

The towers comprise 164 individually owned apartments, 105 apartments for rent and shops on the ground floors. There are two underground parking levels in the building basement.

There is a subway line in approx. 20m distance and a railway viaduct in approx. 50m distance.

SOLUTION

Calenberg carried out a technically high effective and at the same time economical solution using the bearing types Civerso and Cibatur®. These bearing types were applied to the tower wall and the foundation of the tower wall within an area of the building most affected by vibrations, beginning at the 9m deep foundation level and ending at ground level.

The benefits:

- Economical elastic support only of a part of the building
- Increased value of the building because of better living quality for its residents

