SUCCESS STORY

VIBRATION ISOLATION

Pandion Fünf Freunde, Cologne

PROJECT DATA

Brief description

Vibration-isolated installation of a spacious building complex.

Requirement

To protect against vibrations and structure-borne noise, the planned building complex requires a design of elastometic bearing.

City, year

Cologne, 2020

Visualization ©PANDION AG

PROJECT DESCRIPTION

The new city quarter „Ehrenveedel" is being built on the former approximately 70,000 m² large railway area of the goods depot in Cologne-Ehrenfeld. The property of Pandion AG „PANDiON FÜNF FREUNDE" with a distinctive anthracite-coloured clinker facade has a living space of 6,000 m² and comprises 129 high-quality condominiums with KfW-55 standard. Completion of the complex is planned for 2021. In the course of the new construction, the building complex should to be decoupled. The purpose of this measure is to protect the adjacent building areas against vibrations and structure borne noise. This required an elastometic bearing under the foundation, proportional wall insulation and a console support.

SOLUTION

Calenberg Cisador® 80 and 1700, Cibatur® as well as Civerso® type A as elastomeric bearings were integrated in the vibration-isolated installation of the building complex. The base bearing (partial bearing) was made with Cibatur® to transfer loads. Cibatur® was laid on a clean layer under the foundation of the building. By using Civerso® Type A, the earth pressure loaded exterior walls could be decoupled. The basement was separated from adjacent apartments by means of console bearings using Cisador® 1700 and Cisador® 80.

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