

## New construction of the Leibnizstrasse Residential Park

### Regupol® for the full-surface insulation of buildings

The "Leibnizstrasse Residential Park" construction project came into being at the northern part of the former factory premises of Freudenberg in Weinheim, Baden-Württemberg. 84 residential units, distributed across 10 buildings and 130 underground garage and outdoor parking spaces, were built on an area of 8,600 m<sup>2</sup> of the derelict industrial site. The Leibnizstrasse Residential Park is in the direct vicinity of the downtown area.

Weinheim, just a few kilometres away from the Ludwigshafen and Heidelberg metropolitan areas, offers an excellent infrastructure with convenient traffic connections to the A5 and A6 motorways. The ÖPNV public transit connections to Mannheim and Heidelberg also make Weinheim an attractive place of residence. The residential buildings, built according to the state of the art, are only a few walking minutes away from the OEG train station, whilst the second building phase lies directly on train line 5. The minimum distance to the property boundary required special measures in regard to seismic radiation and air-borne sound emissions.

### Full-surface insulation with Regupol®

To ensure that secondary air-borne sound caused by vibrations is minimised, a building must be insulated from any surrounding sources of vibration. In the case of the "Leibnizstrasse Residential Park" construction project, vibrations arise from the urban railway, which runs almost 24 hours a day, every day. As a solution, BSW suggested a horizontal, full-surface bedding system to elastically separate the entire floor slab from the building ground. The **Regupol®** plates, embedded into a clean layer, were laid end to end so that an enclosed surface arises and sound bridges become almost impossible. A PE film acted as a protective cover of the **Regupol®** surface, which prevented concrete slurry from penetrating during the cementing of the base plate.

**Regupol®** is a durable, economical and high-quality solution when it comes to the full-surface insulation of buildings. The plates and lengths made of rubber granulate, fibres and polyurethane can be manufactured in individual material compositions and sizes, depending on the locally occurring pressure. Due to the positive material properties, **Regupol®** is also suitable for striated or punctiform foundation bedding systems, vertical, lateral vibration insulation, or room-in-room construction.



For the development of individual solutions in the area of vibration technology, BSW engineers are available to planners as competent partners. With their extensive experience in building and foundation bedding systems, they always develop individual, economical suggestions for the implementation of sophisticated projects.

