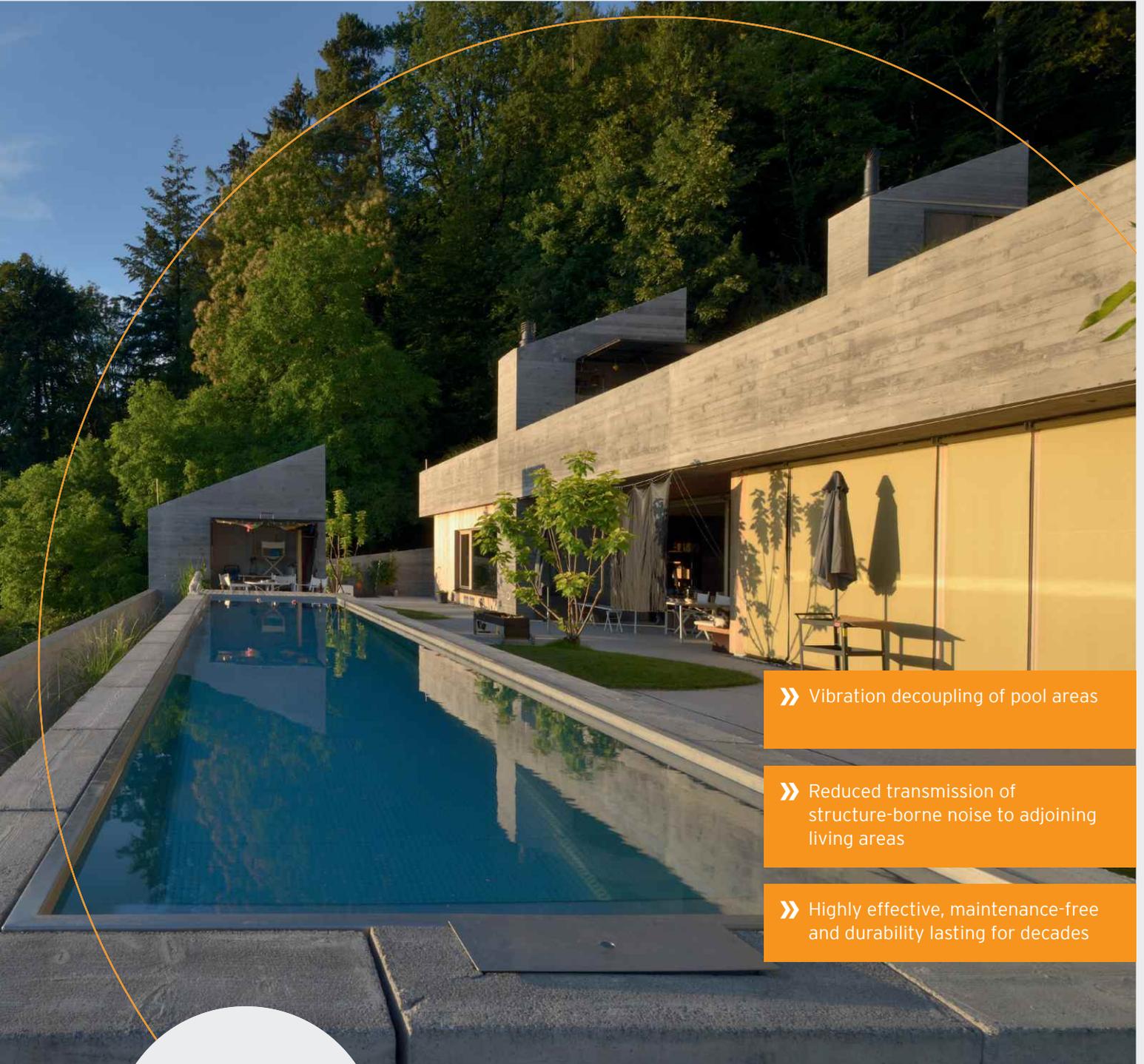


Case Study

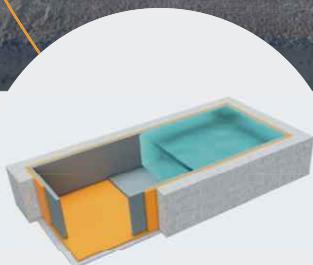
Bearing of Swimming Pools at the Villa Aurea, Lochau (AT)



» Vibration decoupling of pool areas

» Reduced transmission of structure-borne noise to adjoining living areas

» Highly effective, maintenance-free and durability lasting for decades



Sylomer® Avoids the Unwanted Transmission of Sound

Description of the project The solution

The "Villa Aurea" is a construction project that combines three luxury apartments in a single terraced complex. The developer has placed exacting demands on peace and well-being.

Sitting on the slopes of the Pfänder mountain overlooking Lake Constance, the Villa Aurea offers panoramic views of the lake and the area where the three countries of Austria, Switzerland and Germany meet.

All three apartments are between 200 m² and 300 m² and have their own pool in the generous private outdoor area. In order to guarantee undisturbed peace and quiet in each of the residential units, the pools and their associated equipment have been bedded on the PU material Sylomer® from Getzner. Vibrations and noise are thereby effectively eliminated.

Whenever there are pool areas on or in residential buildings, vibrational decoupling is essential. Otherwise, vibrations can spread out over the structures and cause unwelcome secondary airborne noise. For around 35 years, Getzner has been bedding pools using elastomers made from polyurethane.

Vibrations are generated by technical systems - such as circulation pumps, hydroflow systems and air jets - or even just splashing about in the water. In order to prevent these vibrations spreading to adjoining building structures, pools are bedded using elastic materials. PU materials from Getzner have proven themselves to be particularly effective in this respect.

"At the Villa Aurea, the pools are located on the roof of the living rooms of the apartments below. This pool layout is incredibly sensitive, which is why, from an acoustic point of view, a complete vibration decoupling was necessary. With Sylomer® mats, we have found an ideal structural solution", explains surveyor Ing. Andreas Ellensohn.

Effective – for a lifetime

Getzner uses a full-surface bearing on Sylomer® mats for the decoupling of pools. This prevents cavities filling with water and effectively inhibits sound bridges. Sylomer® displays outstanding resistance to chlorinated water and oil. In addition, the material



Schematic representation of the pool bearing



»» *The bearing of the pools using Sylomer® from Getzner is very reliable.*

is hydrophobic and does not lose its excellent material properties, even over several decades. Thus, the effect of the bearing is maintained throughout the entire service life of the pool. Moreover Sylomer® is produced without using any softeners or halogenated foaming agents and therefore is not harmful to humans nor the environment.

Cost-saving installation

Sylomer® materials are particularly impressive in full-surface applications as they are easy to install, are very soft and can even be installed around corners or folded over edges. Installation is therefore time- and cost-efficient.

Impressive complete package

In addition to innovative materials, Getzner also offers a wide range of services. In the Villa Aurea project, Getzner application engineers calculated the requirements, chose the material and designed the layout of the pool bearings. The entire project was supervised by a Getzner expert, who was also present on-site during the installation.

Feedback

The developer Q-rt Raum GmbH has made the right decision with Getzner.

"In this project it was important to ensure that the adjoining apartments were not disturbed by any noise or vibrations. This was of course a top priority for the three pool areas. Thanks to Getzner's expertise in the bearing of pools, everything turned out perfectly."

DI Kurt Schuster,
Q-rt Architektur & Raum GmbH



Full-surface installation of Sylomer® at the Villa Aurea



Facts and figures at a glance

Complex with three luxury apartments

Location:	Lochau (AT) on the Pfänder mountain
Client:	Q-rt Raum GmbH
Solution:	Elastic bearing of pools using Sylomer®
Products used:	Sylomer®
Implementation:	2017

Getzner Werkstoffe GmbH

Founded:	1969 (as a subsidiary of Getzner, Mutter & Cie)
Chief Executive Officer:	Jürgen Rainalter
Employees:	420
2017 turnover:	95.2 million euros
Business areas:	railway, construction, industry
Headquarter:	Bürs (AT)
Locations:	Munich (DE), Berlin (DE), Stuttgart (DE), Lyon (FR), Amman (JO), Tokyo (JP), Pune (IN), Beijing (CN), Kunshan (CN), Charlotte (US)
Ratio of exports:	94 %

Pool bearing references (extract)

- Paracelsus Spa, Salzburg (AT) 2018
- Wohnanlage, Sao Paulo (BRA) 2017
- Villa Aurea, Lochau (AT), 2017
- Wadi Hills, Beirut (LBN) 2016
- Hotel Grand Ferdinand, Vienna (AT), 2015
- Damac Tower, Beirut (LB), 2015
- Hotel Alpenwelt, Königsleiten (AT), 2015
- Hotel Regina, Sölden (AT), 2015
- Grandhotel, Sölden (AT), 2015
- Quellenhof Resort, San Martino (IT), 2015
- Hotel Prokulus, Naturns (IT), 2015
- Green Spa Resort Stanglwirt, Going (AT), 2014
- Hotel Feldhof, Naturns (IT), 2014
- Trabaud 1804, Beirut (LB), 2014
- Hotel Fliana, Ischgl (AT), 2013
- Veer Towers, Las Vegas (US), 2009
- Minato Mirai 21, Yokohama (JP), 2005
- Alt Erlaa, Vienna (AT), 1983