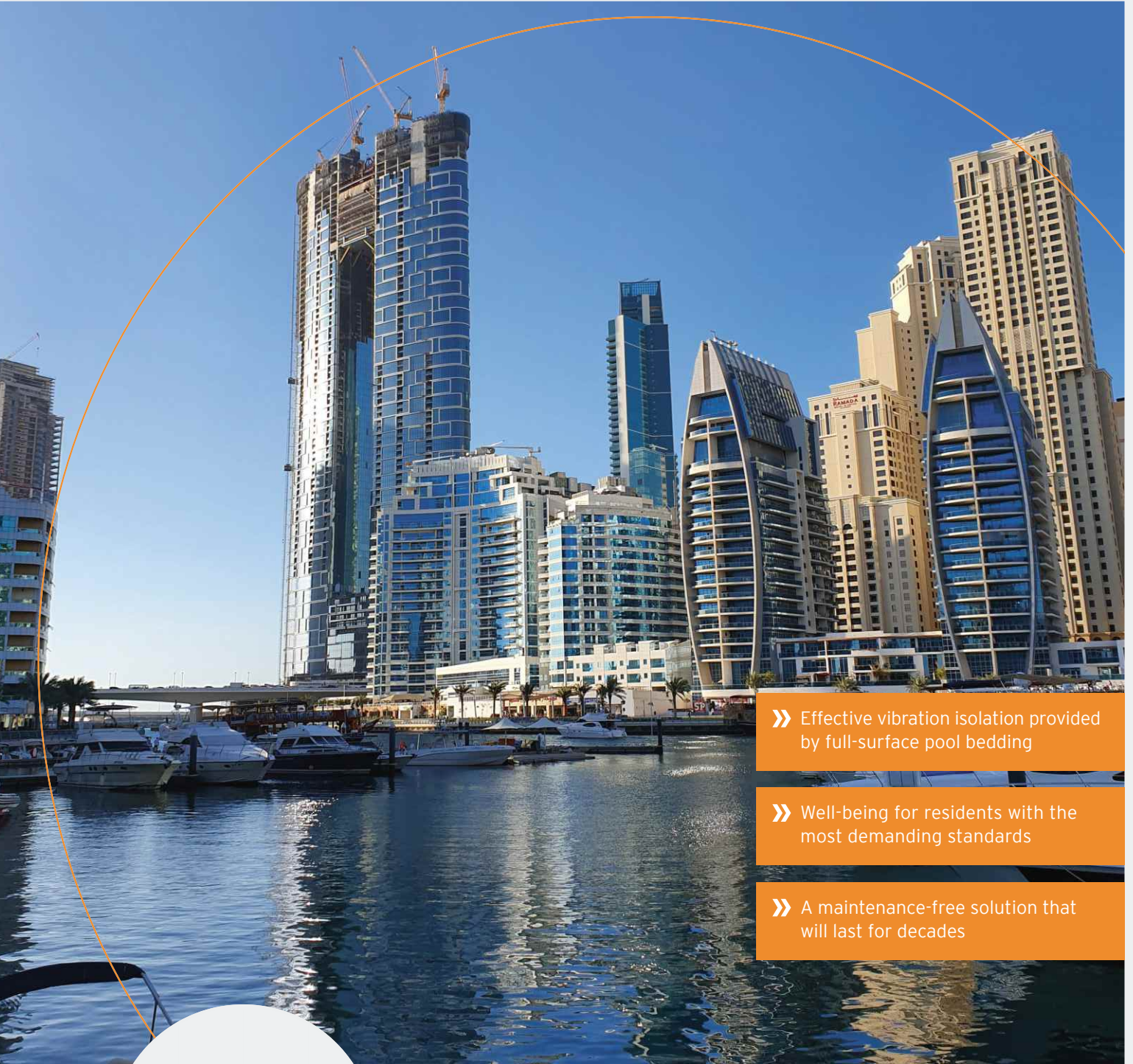


# Case Study

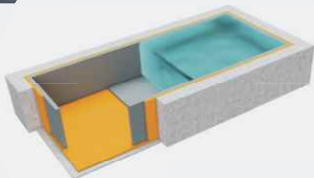
## Pool bearing at the Address Residences Jumeirah Resort + Spa, Dubai (AE)



» Effective vibration isolation provided by full-surface pool bedding

» Well-being for residents with the most demanding standards

» A maintenance-free solution that will last for decades



# Preventing sound transmissions in the world's highest infinity pool

## Description of the project The solution

**Jumeirah Gate is a 77-storey residential and hotel complex on the Jumeirah Beach Walk in Dubai. Operated by Address Hotels + Resorts - a premium luxury hotel group - it boasts more than 922 apartments and 217 hotel rooms.**

The total living space in the building extends over 170,525 m<sup>2</sup>. The various residential units are accessed using 21 lifts. The top floor - at 300 metres above sea level - features the world's highest infinity pool. To avoid disturbing the peace and quiet of the residents, the pool and its associated technical systems are mounted on the sound-absorbing Sylomer® material from Getzner.

Swimming pools and their technical systems, such as circulation pumps, filters and air jets, not to mention the activities of bathers in the pool, generate vibrations. These vibrations can spread throughout the structure of the building, causing unwelcome secondary airborne noise. Swimming pools therefore have to be elastically decoupled. For almost 40 years, Getzner has been bedding pools on elastomers made from polyurethane. This wealth of experience resonated with the project managers at Mirage Leisure and Development Inc. "Our customer wanted to install a pool over an area of 1100m<sup>2</sup> on the roof of a luxury hotel complex. It was obvious to us right from the start that we would have to install a vibration decoupling system to satisfy the high standards

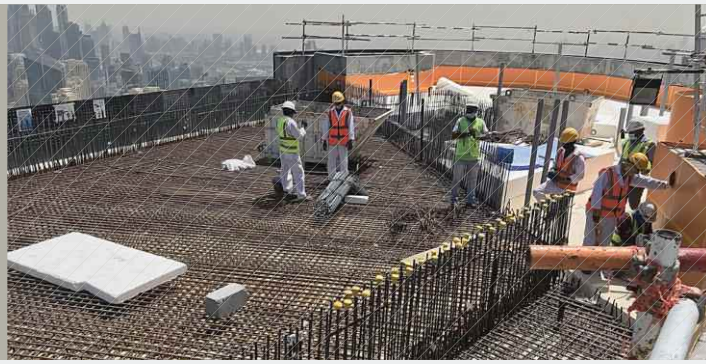
demanding by the guests and residents. Our many years of experience and extensive know-how enabled us to deliver the perfect solution for our customer," explained Omar Malas, the project manager at Getzner Werkstoffe.

### Impressive complete package

The approach adopted by Getzner for the decoupling of pools is to use full-surface bearing based on Sylomer®. This prevents any cavities filling with water and effectively inhibits sound bridges. Sylomer® also displays outstanding resistance to chlorinated water and oil. In addition, the material is hydrophobic and retains its excellent material properties over several decades. The effectiveness of the bearing is therefore

The joints are bonded very carefully:  
lining the pool basin with Sylomer®





maintained over the entire service life of the pool. "Steel springs were specified initially. However, we were able to demonstrate that Sylomer® provides the required level of effectiveness, needs no maintenance and also reduces the investment costs compared with the system as originally configured," noted Omar Malas. In addition to the product itself, Getzner also designed the elastic bearing and drew up some important specifications for the subsequent tradespeople who will use the product. Involving the builders and technicians early on in the project and the innovative approach towards critical details such as the connections and pipe openings were also major factors behind the success of the project. Last but not least, the Getzner team was also on site during the installation

to ensure the work went according to plan. Despite the crushing time pressure - the material had to be delivered during a narrow three-week window just before Christmas - the project went off without a hitch. The elastic bearing was installed extremely quickly, despite the challenges posed by the extreme height, the resulting windy conditions and space constraints.



Meticulous attention to the connection details is a critical factor in the acoustic decoupling of the building. One of the reasons it is so important to involve the associated trades represented right from the very start of the project.



## Facts and figures at a glance

### Luxury residential and hotel complex 301 metres high

Location:	Dubai (AE) on Jumeirah Beach
Client:	Al Aseel Investments, Mirage Leisure and Development Inc. (developer), WSP (structural engineer) & Multiplex (building contractor)
Solution:	Elastic bearing of pools using Sylomer®
Products used:	Sylomer®
Implementation:	2020

### Getzner Werkstoffe GmbH

Founded:	1969 (as a subsidiary of Getzner, Mutter & Cie)
Chief Executive Officer:	Jürgen Rainalter
Employees:	490 (360 in Bürs)
Turnover in 2019:	EUR 114.1 million
Business areas:	Railway, construction, industry
Headquarters:	Bürs (AT)
Locations:	Berlin (DE), Munich (DE), Stuttgart (DE), Lyon (FR), Amman (JO), Tokyo (JP), Pune (IN), Kunshan (CN), Beijing (CN), Charlotte (US), Melbourne (AU)
Ratio of exports:	93 percent

### Pool bearing references (extract)

- Premier Tower, Melbourne (AU), 2019
- Kalpataru Avana, Mumbai (IN), 2019
- Sky Garden, Tunis (TN), 2019
- One Riverside, Philadelphia (US), 2018
- Paracelsus Spa, Salzburg (AT), 2018
- Via Sonia residential complex, Sao Paulo (BR), 2017
- Villa Aurea, Lochau (AT), 2017
- Wadi Hills, Beirut (LB), 2016
- Hotel Grand Ferdinand, Vienna (AT), 2015
- Hotel Alpenwelt, Königsleiten (AT), 2015
- Quellenhof Resort, San Martino (IT), 2015
- Green Spa Resort Stanglwirt, Going (AT), 2014
- Hotel Feldhof, Naturns (IT), 2014
- Veer Towers, Las Vegas (US), 2009
- Minato Mirai 21, Yokohama (JP), 2005
- Alt Erlaa, Vienna (AT), 1983