

Case Study

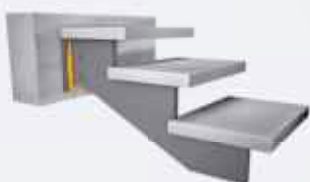
Lightweight Stair Bearing in a terraced Housing Complex, Munich (DE)



» Proven impact noise reduction due to elastic bearing of the stairs

» Reduction of structure-borne noise in the neighbouring residential units

» High effectiveness and durability over decades



Greater Impact Noise Protection for increased Comfort Levels in the Home

Description of the project The solution

A total of 78 harp stairs made from wood and steel were installed with impact sound control for 26 residential units.

When building the new terraced housing complex in Perlach, south-west of Munich, the renowned company Fuchs-Treppen was responsible for installing the staircases. A top-quality indoor environment requires effective protection against sound transmission. As lightweight stairs particularly facilitate the transmission of impact noise, bearings made from the elastic material Sylomer® were specially developed by Fuchs-Treppen and Getzner.

Stair specialist Fuchs and vibrations specialist Getzner enjoy a partnership stretching back over many years. Together they have developed the perfect solution.

The elastic bearing of stair flights has a significant influence on the reduction and transfer of structure-borne noise to the surrounding residential units.

With lightweight stairs, the bearing points on the ceiling and walls are elastically decoupled. Laboratory experiments have shown that this measure significantly reduces the transmission of impact noise into neighbouring rooms.

Proven noise protection

What was proven in the laboratory has been confirmed in practice: during acceptance tests, the stairs developed by Getzner and Fuchs-Treppen fulfilled the strict requirements of increased sound protection for raised comfort level.

Simple installation

The appropriate decoupling elements for the respective type of stairs are delivered and only need to be installed on-site. This guarantees fast and simple installation.



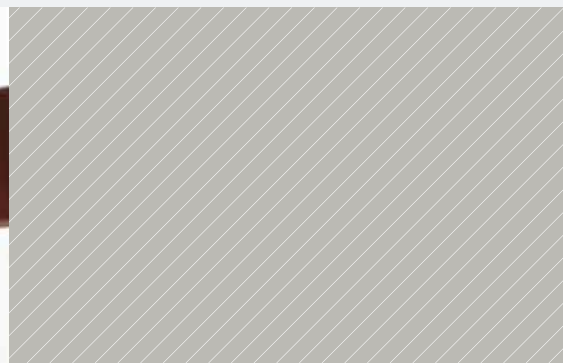
Decoupled harp staircase during construction phase



Floor connection



Wall connection



Effective for decades

The decoupling of the lightweight stairs has paid off in a number of ways for both the developers and residents of the new complex. The significantly improved comfort levels due to

less structure-borne noise also contribute to the value retention of the property. Thanks to the high product quality and durability, Sylomer® even impresses after many decades with low deflection and efficient vibration isolation.

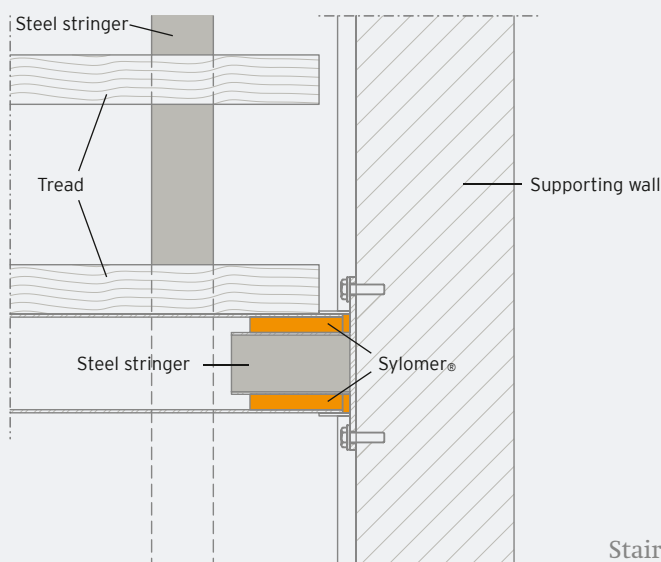
“It is simply staggering that impact noise on lightweight stairs can be reduced so much.”

Feedback

What does the client have to say about the project?

“Just like our customers, we also value excellent sound control. The demands and challenges for this have increased significantly in recent years. We have had outstanding experiences with the sound control bearings from Getzner which we have installed in our projects. The consistently positive feedback from our customers has impressed us.”

Christian Haas, Managing Director
neuBAUpartner.de GmbH



Staircase connection





Facts and figures at a glance

Terraced housing complex with 26 residential units

Location:	Perlach, Munich
Client:	neuBAUpartner.de GmbH
Solution:	Elastic decoupling of lightweight stairs with Sylomer®
Products used:	Specially developed Sylomer® bearings
Implementation:	2015/2016

Getzner Werkstoffe GmbH

Founded:	1969 (as a subsidiary of Getzner, Mutter & Cie)
Chief Executive Officer:	Juergen Rainalter
Employees:	380
2016 turnover:	EUR 80.4 million
Business areas:	Rail, construction, industry
Headquarters:	Buers (AT)
Locations:	Berlin (DE), Munich (DE), Stuttgart (DE), Lyon (FR), Amman (JO), Tokyo (JP), Pune (IN), Beijing (CN), Kunshan (CN), Charlotte (US)
Ratio of exports:	90%

FUCHS-TREPPEN
Maßarbeit mit System

Construction references (extract)

- Peralohstrasse terraced housing complex, harp staircase, Munich, Germany, 2016
- Terraced house, double-stringer staircase, Germering, Germany, 2016
- Terraced housing complex, harp staircase, Penzberg, Germany, 2016
- Semi-detached house, double-stringer staircase, Anzing, Germany, 2015
- Luxury apartments, double-stringer staircase, Abtwil, Switzerland, 2014
- Terraced housing complex, double-stringer staircase, Rimsting, Germany, 2014
- Residential complex, double-stringer staircase, Munich, Germany, 2011