

Innovative Sound Control for Timber Construction



» Proven noise reduction

» Cost-effective - equally as effective as a dry lining

» Reliable planning thanks to tested and approved values (abZ)

High-quality sound decoupling with technical approval (abZ)



Building projects and therefore planners and the companies carrying out the construction work have been subject to steadily increasing requirements in recent years. This is particularly true for timber construction.

Innovative products and new approaches take care of these requirements, making timber construction one of the most promising industries in the construction sector. On top of that, timber construction offers advantages such as quick construction times, negative carbon footprint, precision pre-fabrication and low dead weight.

Benefits

- Proven noise reduction
- Cost-effective - equally as effective as a dry lining
- Reliable planning thanks to tested and approved values (abZ)
- Fatigue strength
- Resistant to ageing
- Minimal settlement behaviour

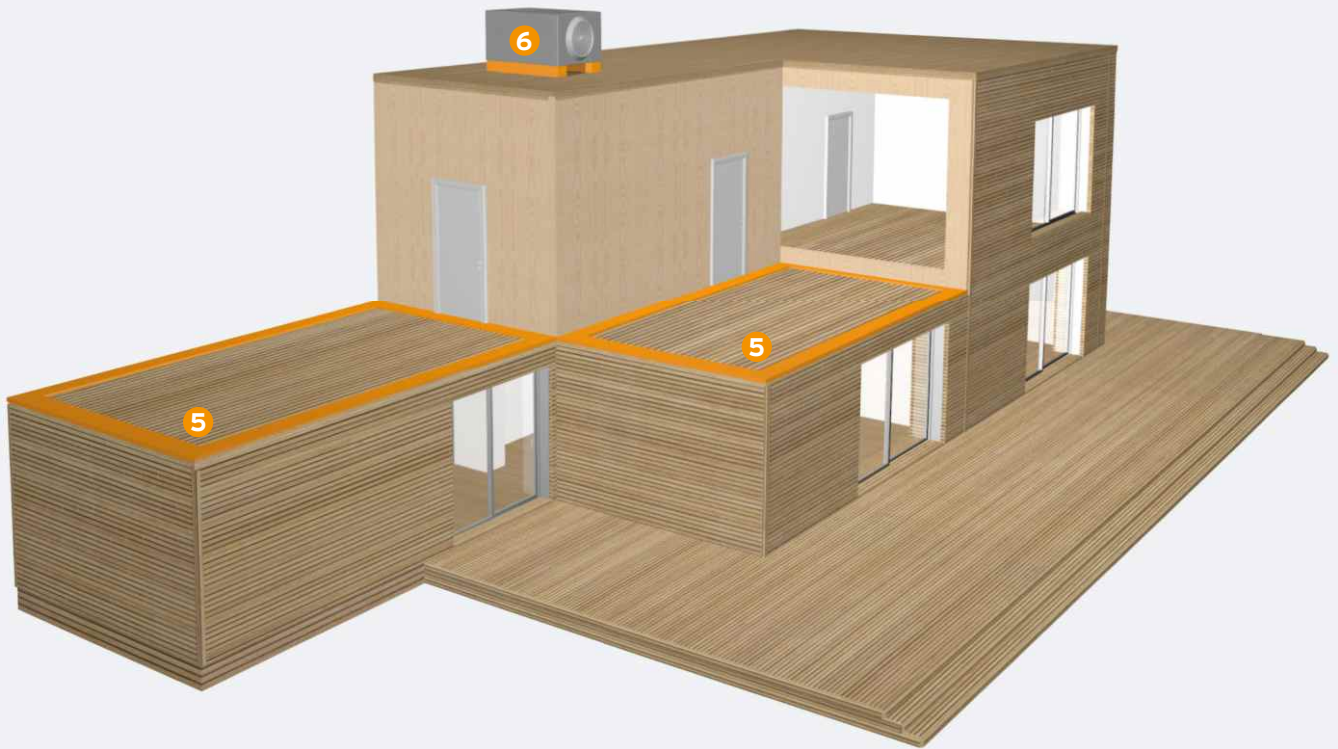
Material properties

- Long-lasting product quality
- High-efficient sound decoupling
- Static load range up to 12N/mm^2
- Bearing thicknesses of 6mm and 12.5mm
- Customer-specific widths on request
- Optional equipped with a self-adhesive tape
- Temperature range $-30\text{ }^\circ\text{C}$ to $+70\text{ }^\circ\text{C}$
- Flammability class E/EN 1350-1
- Low dynamic stiffness



Fig.: Sylodyn® range

20 years
of experience
in timber
construction



Range of use



Decoupling of flanking transmission



Elastic dry lining



Bearing of modules



Floating floors



Decoupled suspended ceilings



Bearing of building service equipment

Comfort is more than just minimum sound insulation



The level of sound control should be defined as early as the planning phase. The national minimum requirements given in the standards often do not provide the level of comfort that people expect.

Sylodyn® bearings move properties into the comfort zone. DEGA recommendation 103 helps you choose the right sound control class.

Highly effective Sylodyn® material

Sylodyn® is characterised by its dynamic properties and durability. It is resistant to moisture, oils and greases commonly found on construction sites and has proven itself both in real-life applications and at testing institutes for decades. All this makes it the ideal bearing material for joints.

TimberCalc

The free online calculation tool for timber construction.

Results in real time:

- Design load capacity
- Optimal Sylodyn® types
- Acoustic effectiveness
- Sylodyn® pre-fabrication to suit the installation in situation
- Installation plans on request



apps.getzner.com

What's your comfort level?

	F	E	D	C	B	A	A*
L'ₙ,ₙ	> 60 dB	≤ 60 dB	≤ 50 dB	≤ 45 dB	≤ 40 dB	≤ 35 dB	≤ 30 dB
R'ₙ	< 50 dB	≥ 50 dB	≥ 54 dB	≥ 57 dB	≥ 62 dB	≥ 67 dB	≥ 72 dB

Fig.: Sound control classes according to DEGA recommendation 103

» The higher the quality of the ceiling, the more important it is to get the flanking transmission right.

K_{ij}
improvement
of up to
35 dB



Fig.: Sylodyn® strips in 12 mm and 6 mm version

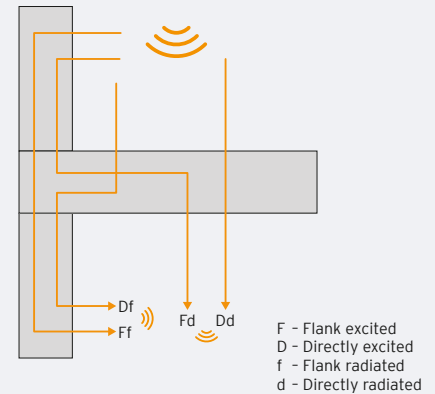


Fig.: The sound level results from the sum of the individual transmission paths

Sound bridges must be avoided during planning and implementation. Therefore, the right fasteners must be selected in addition to the highly-effective Sylodyn® strips. These fasteners must be acoustically optimised and structurally verifiable.

For this purpose, Getzner cooperated with established partners in the timber construction industry to develop solutions for angle brackets, screw connections and plug-in connections.

Everything from a single source

- Sylodyn® bearing strips
6 and 12 mm
8 bearing stiffnesses
- GEPI angle brackets
- Sylodyn® elastic washers
with and without centring aid
M8 to M27 screw diameter

Flanking sound decoupling

The vibration reduction index K_{ij} of the joint plays a key role in transmission. It provides information about the acoustic coupling of a component joint. If the right decoupling version is used, there may even be no need for a dry lining.

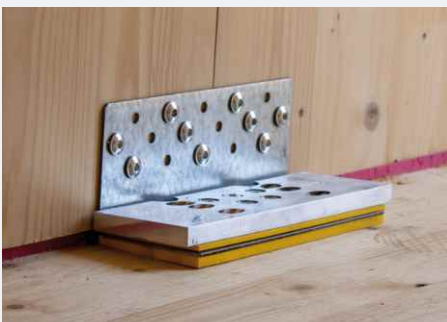


Fig.: Elastic angle bracket
GEPI Connect 240



Fig.: Screw connection with Sylodyn®
EW M8-6 elastic washer

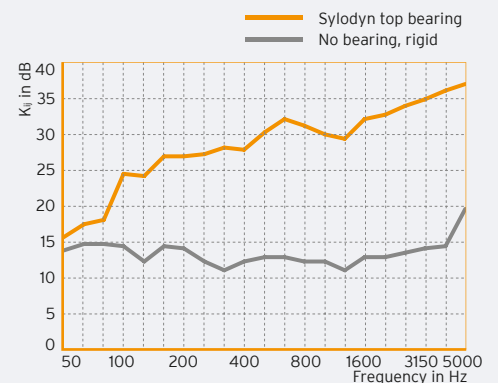


Fig.: Improvement of the joint insulation according to EN ISO 10848

Sylodyn® solutions for element construction and modern modular construction



Optimally decoupled modules

Due to increasing time and budget specifications, modular construction methods gain more and more ground in the building and construction industry. This requires certain measures during planning which offer a wide range of advantages at the implementation.

Acoustic decoupling with Sylodyn® prevents impact noise and airborne sound being transmitted from one module to another. This also enables optimisation of the floor construction and, in many cases, weight reduction. Sylodyn® itself is highly effective even with a small bearing thickness (6 or 12 mm). Sylodyn® can also be purchased in a self-adhesive version for easy pre-fabrication.

The ultimate quality requirements in element construction

For many years, Getzner has developed solutions with research and development input from leading manufacturers in the timber construction industry. These solutions have also been tested by independent institutes (EMPA, Rosenheim Technical University of Applied Sciences, Holzforschung Austria).

Whether solid wood structures, frame or panel construction or cement-bonded wood fibre composite constructions, Sylodyn® from Getzner and the associated fasteners give planners maximum freedom without having to sacrifice sound control.

Getzner is a reliable, experienced partner

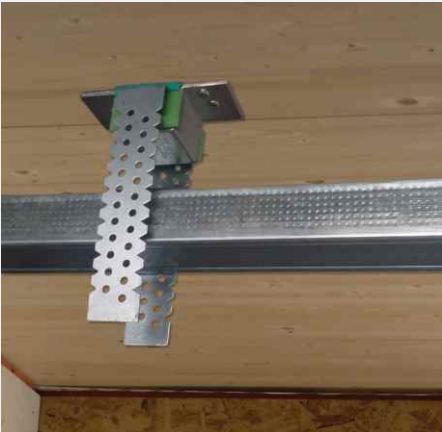
Solutions from Getzner have been successfully used in timber construction since 1998. Alongside the Sylodyn® and Sylomer® materials, Getzner has also helped to develop detailed designs for smooth installation or easy-to-fit adhesive versions.

A dense dealer network made up of established partners means our customers can rely on quick and punctual delivery, anytime.

» *They are true vibration protection experts: You can not only rely on the sound control solutions but also on their consultancy service.*

Christian Kaufmann, Managing Director at Kaufmann Bausysteme GmbH

Individual challenges call for individual solutions



Elastically decoupled ceilings and dry linings

Suspended ceilings offer the option of improved sound control, particularly for renovation projects, but also for new buildings. Getzner provides support, both with elastic ceiling hangers as well as with elastic mounts for false walls.

Highly effective impact noise insulation

Selecting the right flooring system is crucial when it comes to the acoustic effectiveness of a ceiling. Getzner offers the Acoustic Floor Mat and Acoustic Floor Block products for dry and wet screed, along with highly effective solutions for hollow floor systems, terraces or renovations of existing ceilings for reducing impact noise.

Bearing of building service equipment

Due to the lower mass of timber constructions, decoupling from building service equipment is very important. Using Sylomer® and Isotop®, facilities are acoustically decoupled from the building structure and disturbing vibrations are reduced. This also reduces unwanted sound radiation in adjacent rooms.

Increasing the airborne noise improvement rating
 $\Delta R'_w = 14 \text{ dB}$

For renovations with dry and wet screed



Further information:
www.getzner.com/acoustics





Advice and individual solutions - everything from a single source

Getzner is far more

... than a manufacturer of premium vibration isolation. Our technical knowledge, resulting from many years of development and project work, enriches the field of timber construction with tailor-made services and solutions.

Working together with:

- Swiss Federal Laboratories for Materials Science and Technology
- University of Technology Sydney
- Institut Fenster Technik Rosenheim
- Technical University of Munich
- University of Innsbruck
- Linnaeus University
- Holzforschung Austria
- University of Northern British Columbia
- Rosenheim Technical University of Applied Sciences
- Slovenian National Building and Civil Engineering Institute



More information

www.getzner.com/timber

More than a thousand successful projects are testament to the effectiveness of Sylodyn® sound control bearings.

Europe's largest timber student residence at UDQ Hamburg:

www.getzner.com/module

Apartment building to passive house standards:

www.getzner.com/clt

Detailed solutions on request