THE EXPERT RESPONSE TO

URBAN DENSIFICATION

Quality of life thanks to REGUPOL impact sound insulation and vibration isolation

REGUPOL

HOW CAN WE ENHANCE THE QUALITY OF **URBAN DENSIFICATION?** TOGETHER.

Urbanisation is a mega trend. Forecasts by the United Nations predict that 7 in 10 people worldwide will be living in cities by 2050. As there is already a great shortage of space, intelligent urban densification offers enormous potential. Increasing densification will have to take account of changing lifestyles and, using the city of short distances concept, will have to realise the conflict-free combination of working, living, retail and leisure activities in a confined space. The quality of the space created to achieve this can be significantly enhanced with the right partner providing the correct acoustic concept.

This means waste land and conversion areas close to critical rail infrastructure can be put to good use by constructing buildings on elastic bedding and this will result in additional building land being activated. Adding storeys to existing buildings, such as supermarkets, creates additional living space, gaps between buildings can be closed and brownfield land can be redeveloped to create new residential areas. In keeping with the circular economy cradle-to-cradle approach, modern architecture will have to fall back on sustainable concepts.

KEY TOPICS

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Your key to effective noise control

10 **Applications**
Our products are suitable for a wide range of applications.

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Our quality, services and efforts to achieve sustainability

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Get a better insight into our company and international sales team

HOW CAN WE MAKE

EFFICIENT SOUND INSULATION

POSSIBLE? TOGETHER.

RESIDENTIAL
REGUPOL comfort and
REGUPOL sonus
for impact sound insulation
REGUPOL sonusclips and
REGUFOAM hangers
for false walls and
suspended ceilings

MIXED-USE-BUILDING
Detailed solutions and information for this application can be found in our Mixed-Use brochure.

MECHANICAL ROOM
Vibration isolation and impact sound decoupling for mechanical rooms in buildings with **REGUPOL** or **REGUFOAM vibration**

CINEMA
Decoupling of structure-borne sound with **REGUPOL** or **REGUFOAM vibration**, floating floor constructions with **REGUPOL** or **REGUFOAM sound** and **REGUPOL sonus**, false wall constructions and suspended ceilings with **REGUPOL sonusclips** and **REGUFOAM hangers**

FACTORY BUILDINGS
Vibration isolation and decoupling of structure-borne sound in production industries with **REGUPOL** or **REGUFOAM vibration**

REFURBISHING
False wall constructions and suspended ceilings with **REGUPOL sonusclips** and **REGUFOAM hangers**, Impact sound insulation with **REGUPOL comfort** and **REGUPOL sonus**

DENSIFICATION BY ADDING STOREYS
Impact sound insulation for retail outlets or supermarkets with **REGUPOL** or **REGUFOAM sound,** Impact sound insulation for apartments above the supermarket with **REGUPOL comfort, REGUPOL sonus**

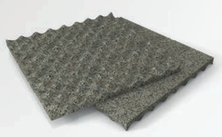
ELASTIC BEDDING OF BUILDINGS
Vibration protection from critical rail infrastructure with **REGUPOL** or **REGUFOAM vibration**

TIMBER STRUCTURES
Impact sound insulation with **REGUPOL comfort, REGUPOL sonus,** false wall constructions and suspended ceilings with **REGUPOL sonusclips** and **REGUFOAM hangers,** flanking noise reduction with **REGUFOAM strips**

Contact us

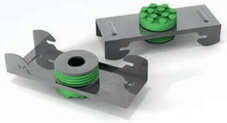
Detailed technical information about **REGUPOL** can be found at www.regupol.com/uk/acoustics.
Or speak to us in person: +49 2751 803-0
acoustics@regupol.eu

The **REGUPOL** product range



REGUPOL comfort:
Elastomer-based impact sound insulation for various types of floor design and screeds

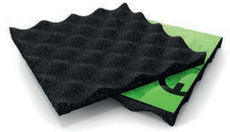
REGUPOL sonus:
Cork/PU or rubber-based impact sound insulation for screeds and floor coverings



REGUPOL sonusclips:
Resilient sound isolation clips for mounting drywall

REGUFOAM hangers:
Highly efficient mountings for suspended ceilings

REGUFOAM strips:
Highly efficient strips to reduce flanking noise in CLT timber structures



REGUPOL or **REGUFOAM sound:**
Elastomer-based impact sound insulation for various types of floor design and screeds that need to meet the highest acoustic requirements

REGUPOL comfort S1:
Elastic, mass-increasing and airborne sound insulating levelling fill for concrete ceilings or wooden beam / solid wood ceilings

REGUPOL or **REGUFOAM vibration:**
Effective solutions for vibration isolation and structure-borne sound decoupling

Urbanisation is now a permanent trend in spatial planning. A co-ordinated mix in densely populated inner city districts is becoming an increasingly decisive factor in determining what will make living in urban locations attractive in future.

A consequence of increasing urbanisation and the accompanying population development is the greater demand for housing, real estate and building land that needs to be satisfied. Intelligent densification of urban spaces is versatile and can culminate in very different concepts: revitalisation, addition of storeys, infill development and activating new building land.

With REGUPOL, structural engineers and building physicists put their faith in an expert with years of experience, who can actively help them to meet all the demands of sound and vibration insulation and make a significant contribution to successful inner-city densification.

Your benefits:

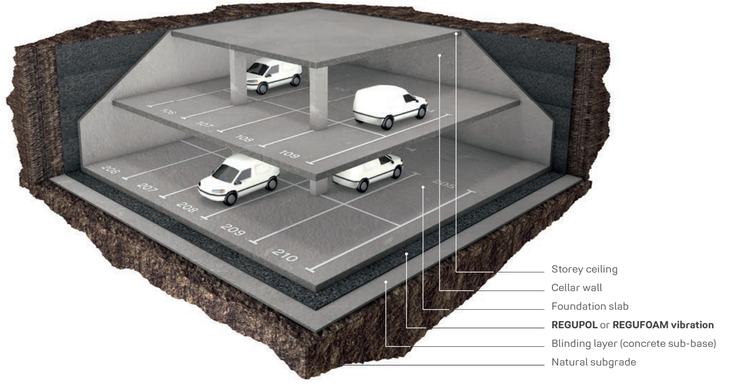
- reliable planning support and product performance
- a broad range of products and system solutions enable versatile design solutions
- decades of experience

HOW CAN WE CREATE **NEW LIVING SPACE IN THE CITY CENTRE?** TOGETHER.

As its scarcity increases, access to building land is becoming more difficult and consequently more expensive. Much greater importance is therefore being attributed to the activation of inner city building land and the targeted development of affordable building land in the catchment areas around our cities.

The lack of available building land can be counteracted by the effective application of sound and vibration protection. By using elastic vibration isolation products, disused railway property can be turned into new building land or so-called brownfield sites transformed to create attractive residential communities.

The building authority approved structural bearings **REGUPOL** and **REGUFOAM vibration** provide technically safe and economically reliable solutions for this. With a carefully co-ordinated product portfolio, which also includes approved and externally monitored special products, the **REGUPOL** or **REGUFOAM vibration** Range meets all the requirements for fulfilling demanding tasks and allowing reliable planning in building land activation projects.



REGUPOL vibration

REGUFOAM vibration

Our tip:

Ask the experts for a detailed consultation on product selection and dimensioning of the elastic bearings.

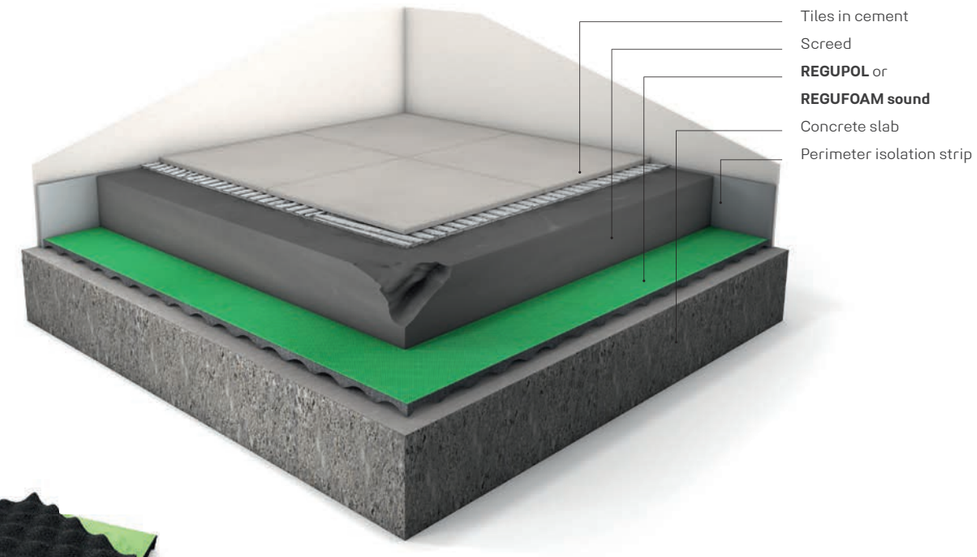
HOW CAN WE GUARANTEE **COMFORTABLE LIVING** IN EVER DENSER URBAN SPACES? TOGETHER.

Building plots for new construction projects in our conurbations are very scarce and those that are available cannot satisfy demand. To find additional living space, planners are increasingly focussing on adding storeys to existing buildings, but not only in residential complexes. They are now turning their attention to "non-residential buildings" too.

In the main, these are office and administrative buildings as well as single-storey retail premises. Adding storeys to existing buildings takes up very little additional residential or transport-related land. "Living above the supermarket" is an economically and ecologically intelligent approach to urban densification.

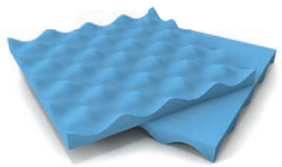
To achieve effective reductions in low-frequency rolling noise and to guarantee conflict-free mixed use, highly efficient materials from the **REGUFOAM** or **REGUPOL sound** Range are laid beneath high-load floor structures to achieve impact sound insulation.

This carefully co-ordinated product portfolio, which also includes approved and externally monitored special products, provides the planning reliability needed in sensitive areas. For other areas, too, **REGUPOL** or **REGUFOAM sound** are definitely the right choice. For instance, in cinemas, theatres, libraries, workshops or for drivable surfaces in production and assembly halls, where especially noisy rooms need to be acoustically separated from the more vulnerable rooms in residential, office and commercial buildings. Just ask the acoustics experts!



REGUPOL sound

REGUFOAM sound



REGUPOL or **REGUFOAM sound** product ranges are tested according to ISO standards and offer maximum sound reduction at low thicknesses.

Our tip:

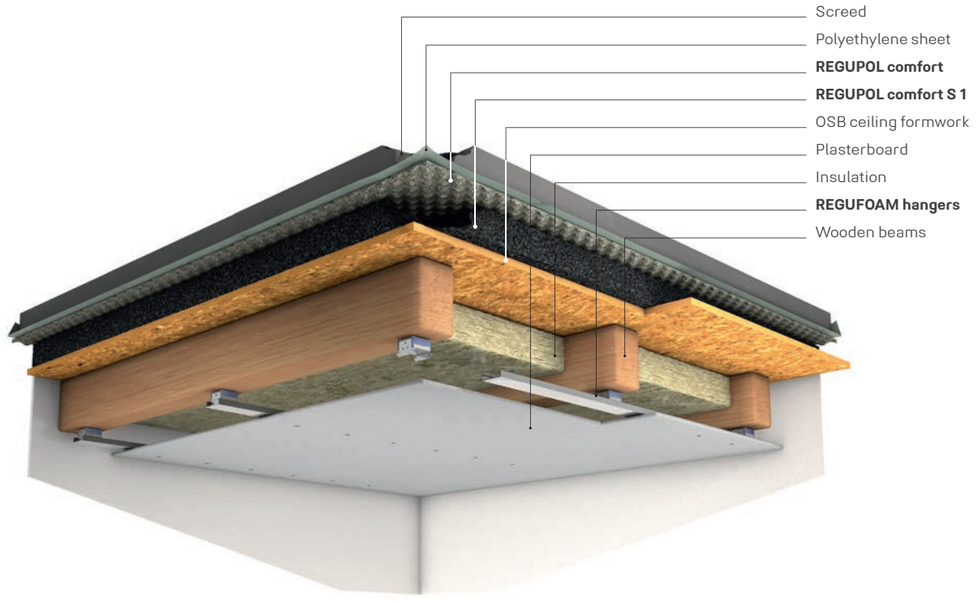
All **REGUPOL** or **REGUFOAM sound** impact insulation membranes are tested in Germany and certified throughout the EU – their quality is recognised worldwide.

HOW DO WE RENOVATE EXISTING BUILDINGS EFFECTIVELY? TOGETHER.

The key to Green Cities is intelligent densification. A major role plays the efficient use of existing buildings and the conservation of finite resources. Therefore, increasing the refurbishing rate of housing stock is an important factor in the efforts of cities and municipalities to achieve their ecological and economic goals in future.

Old buildings often do not provide energy efficient structures or sufficient sound control. In contrast, more and more cities aim for an increased sustainability and a better living quality. That is why not only increased energy efficiency is being promoted but also acoustic insulation measures are being implemented by many countries worldwide. At the same time architects, developers or consultants are facing many other challenges when renovating existing buildings.

The elastic, fast-drying and mass-increasing levelling fill **REGUPOL comfort S1** in combination with efficient **REGUPOL comfort** impact sound insulation layers will contribute to the improvement of living quality. Additionally, our **REGUFOAM hangers** or **REGUPOL sonusclips** can be used in suspended ceilings or wall applications in order to comply with the most stringent sound insulation requirements.



REGUPOL comfort

REGUPOL comfort S1

REGUFOAM hangers

Good to know:

We would be glad to provide you with detailed technical information about **REGUPOL**.
Just call or email us:
REGUPOL Germany +49 2751 803-0
acoustics@regupol.eu

HOW DO WE ACHIEVE **SUSTAINABLE BUILDING?** TOGETHER.

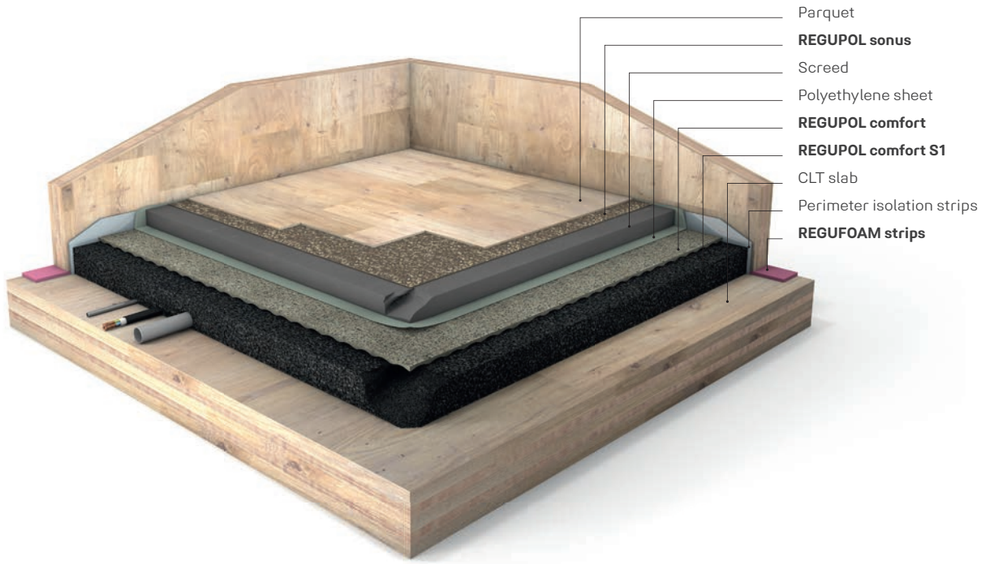
In times where sustainable buildings are in rising demand, wood with its enormous ecological benefits presents an excellent solution in the construction industry. Whether it is a single-family house or a 'wooden skyscraper' that has to be designed, wooden buildings serve lots of advantages. However, this will inevitably result in challenging tasks for sound insulation.

Both mass-timber or wood frame structures show weaknesses when it comes to sound control, especially at low frequencies. Impact sound from people walking is the most common source for low-frequency sound transmission in various timber constructions. Often current standards and even strict acoustic requirements do not consider such frequency range, which needs to be addressed in detail.

With our **REGUFOAM hangers**, for example, suspended ceilings can be designed to result in significant improvements in the low frequency range.

The acoustic improvement in cross-laminated timber structures, on the other hand, is achieved by using the elastic and mass-increasing levelling fill **REGUPOL comfort S1**. In combination with the highly efficient **REGUPOL comfort** impact sound insulation layers, this approach results in very effective sound insulation.

Additionally, the **REGUFOAM vibration** range offers perimeter strips to reduce the flanking noise transmission.



REGUPOL comfort

REGUPOL comfort S1

REGUFOAM strips

REGUFOAM hangers

HOW DO YOU ENSURE SOLUTIONS ARE SIMPLE AND SAFE? **TOGETHER.**

REGUPOL has been in business for some 65 years and enjoys a worldwide reputation. As a customer, you want your supplier to provide you with the right solution backed by professional expertise. Creative, committed and highly motivated, our staff are here to do just that. As a result, our customers trust us – something that is attested to by our long-standing customer relationships.

Independent studies show that our staff – their expertise, professionalism and commitment – are one of the key reasons why our customers choose **REGUPOL** products. We are confident that our team can deliver the best solutions both today and tomorrow.

REGUPOL leads when it comes to quality and service
With every thought, move and handshake, we strive to make sure that **REGUPOL** is globally synonymous with great products and a wide range of different industries. Not to mention excellent results, trust and high quality. In this regard, we see ourselves as a service and quality leader.

This aspiration is encapsulated in our brand proposition: "Good from the outset." We want customers to be sure they have chosen the right solution, regardless of which product they are working with. In fact, we strive to understand our customers and their needs in order to ensure that results are good from the outset and that our customers' expectations are exceeded. We can only perform well if we truly understand what our customers need and how we can help them achieve their goals. Only by doing this can our work make them feel they have made the right decision.

Our numerous references attest to our track record.
We have installed our products in the Burj Khalifa in Dubai, in the Elbphilharmonie in Hamburg and in the Olympic Stadium in Berlin

TÜVRheinland® CERT ISO 9001 ISO 14001 BS OHSAS 18001

MADE IN GERMANY

GreenCircle CERTIFIED

U.S. GREEN BUILDING COUNCIL MEMBER

Ask the experts about the best solution for your project.
REGUPOL +49 2751 803 0
info@regupol.de | www.regupol.com

HOW DO YOU BECOME MORE ENVIRONMENTALLY FRIENDLY? **TOGETHER.**

In the 1950s, polyurethane foam was new and very expensive. Instead of using all of the material produced, a considerable quantity was disposed. Our company was founded in 1954 to reprocess this wasted material into composite foam. Recycling is in our DNA.

How sustainable are REGUPOL products?
The circular economy works when recycled products compete directly with new products – we have been proving this for 65 years. **REGUPOL** products are typically made from 75% to 95% recycled materials,, as are our sports mats. However **REGUFOAM** products are made from genuine raw materials.

What standards and legal requirements does REGUPOL meet?
Our company has been fully DIN EN 14001 certified since 1997 and will remain so. In addition, our products and mats comply with paragraph § 45 II No. 2 of the German draft bill on recycling management. We hope that the clearly formulated regulation will help make government action more sustainable.

What is sustainable about our human resources policy?
All our staff in Germany are paid according to a chemical industry-wide collective agreement. We are a recognised provider of insulation solutions and attach particular importance training, which is why a large number of trainees undergo their training in-house.

NEW LIFE TOP RECYCLED PRODUCT NEW LIFE RECYCLED PRODUCT

New Life: From the disposing to a recycling economy
REGUPOL is a founding member of the „Initiative NEW LIFE“ and commits to an optimal recycling economy, together with the other member corporations. Jointly, the members want to point out the advantages of recycling products from ELT (End-of-Life-Tires) and motivate to act sustainably.
More about the initiative: www.initiative-new-life.de

REGUPOL's CO_2 balance sheet

In 2016, we partnered with the NRW Efficiency Agency to create a CO_2 location balance sheet, showing our total greenhouse gas emissions as CO_2 equivalents. We are on the right track. Find out more at www.regupol.com.

HOW DO YOU GET TO THE TOP?
TOGETHER.

If you want to set the highest standards in construction, you will find a great partner in REGUPOL. In addition to our 65 year commitment to leadership, REGUPOL is the building material of choice for experts worldwide.

As a fourth-generation family business, **REGUPOL** currently employs 750 people at eleven locations. Our customers come from over 132 countries around the globe. For them, we recycle more than 90 000 tons of high-quality plastics every year into products that set standards.

Our brand ambassador Usain Bolt – the fastest man in the world – embodies our focus on performance through skill and will. Usain Bolt:
"I love Regupol running tracks. They are fast, they feel the same everywhere on the track and they have no joints."

Our extensive range of training courses is just as targeted. Comprising business vocations, day release and mechanical and plant engineering, the focus is very much on young people. They represent our future. We are proud of their success.

We've got it covered.

750 employees

11 locations worldwide

90.000 tons of high-quality plastic per year

132 countries with satisfied customers

LOCATIONS
AND SUBSIDIARIES

MADE IN GERMANY

Locations

Factory 1, Headquarter
REGUPOL Germany GmbH & Co. KG
Am Hilgenacker 24
57319 Bad Berleburg
Germany
Phone +49 2751 803-0
acoustics@regupol.eu
www.regupol.com

Factory 2
Industriestraße 6
57319 Bad Berleburg-Raumland
Germany

Factory 3
Sählingstraße 16
57319 Bad Berleburg
Germany

Factory 4
Limburgstraße 34
57319 Bad Berleburg
Germany

Subsidiaries

REGUPOL America LLC
11 Ritter Way
Lebanon, PA 17042
USA
Phone +1 800 537 8737
info@regupol.com
www.regupol.com

REGUPOL Australia Pty. Ltd.
155 Smeaton Grange Road
SMEATON GRANGE NSW 2567
Australia
Phone +61 2 4624 0050
acousticsales@regupol.com.au
www.regupol.com.au

BSW Shanghai Co. Ltd.
Room 1105
No. 488 South Wuning Road
Jingan District
200042 Shanghai
China
Phone +86 21 6267 3369
info@regupol.cn
www.regupol.cn

REGUPOL Acoustics Middle East FZE
P.O. Box 61201
Jebel Ali Free Zone, Dubai
United Arab Emirates
Phone +971 4 8811 428
info@regupol.ae
www.regupol.ae

REGUPOL Schweiz AG
Bahnhofstrasse 5
8953 Dietikon
Switzerland
Phone +41 44 542 84 40
info@regupol.ch
www.regupol.ch

REGUPOL Zebra Athletics LLC
9210 Wyoming Ave N #270
Minneapolis, MN 55445
USA
Phone +1 800-989-8085
info@zebraathletics.com
www.zebraathletics.com

REGUPOL Germany GmbH & Co. KG
Am Hilgenacker 24
57319 Bad Berleburg
Tel.: +49 (0)2751 803-0
info@regupol.de
www.regupol.com

REGUPOL America LLC
REGUPOL Australia Pty. Ltd.
REGUPOL Acoustics Middle East FZE
REGUPOL Schweiz AG
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