

# THE EXPERT RESPONSE TO **URBAN DENSIFICATION**

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





# 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 AT A GLANCE



06

**The REGUPOL product range**

Your key to effective noise control

10

**Applications**

Our products are suitable for a wide range of applications

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**Quality, Service, Sustainability**

Our quality, services, and efforts to achieve sustainability

24

**REGUPOL Group**

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**

## Contact us

Technical documentation for all **REGUPOL**  
acoustic solutions can be found at  
[www.regupol.com/us/acoustics](http://www.regupol.com/us/acoustics).

[acoustics@regupol.com](mailto:acoustics@regupol.com) +1 800 537 8737

## DENSIFICATION BY ADDING STOREYS

Impact sound insulation for retail outlets or supermar-  
kets with **REGUPOL** or **REGUFOAM sound**, Impact sound  
insulation for apartments above the supermarket with  
**REGUPOL comfort**, **REGUPOL sonus**





#### 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**



#### 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**



## **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

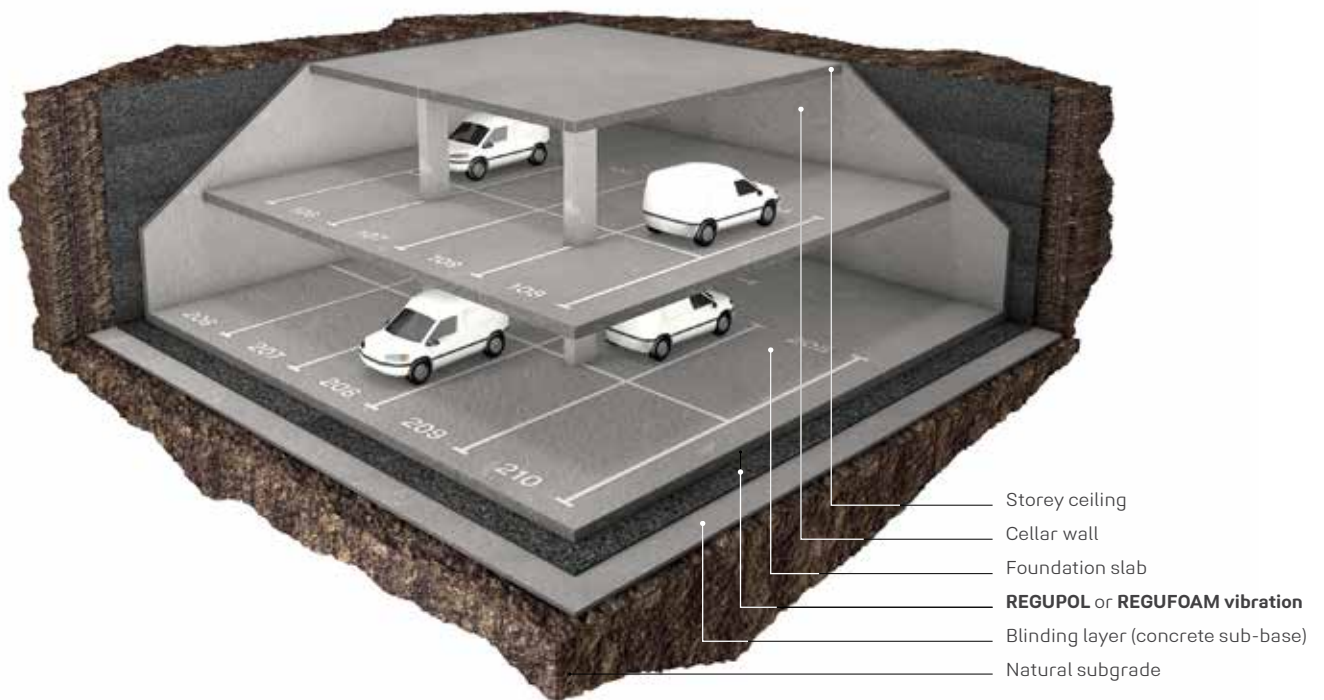
HOW CAN WE CREATE  
**NEW LIVING SPACE**  
**IN THE CITY CENTER?**  
TOGETHER.



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 us about the system components – such as adhesives and primers – suitable for each individual **REGUPOL** product. Our experts are glad to support you.



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

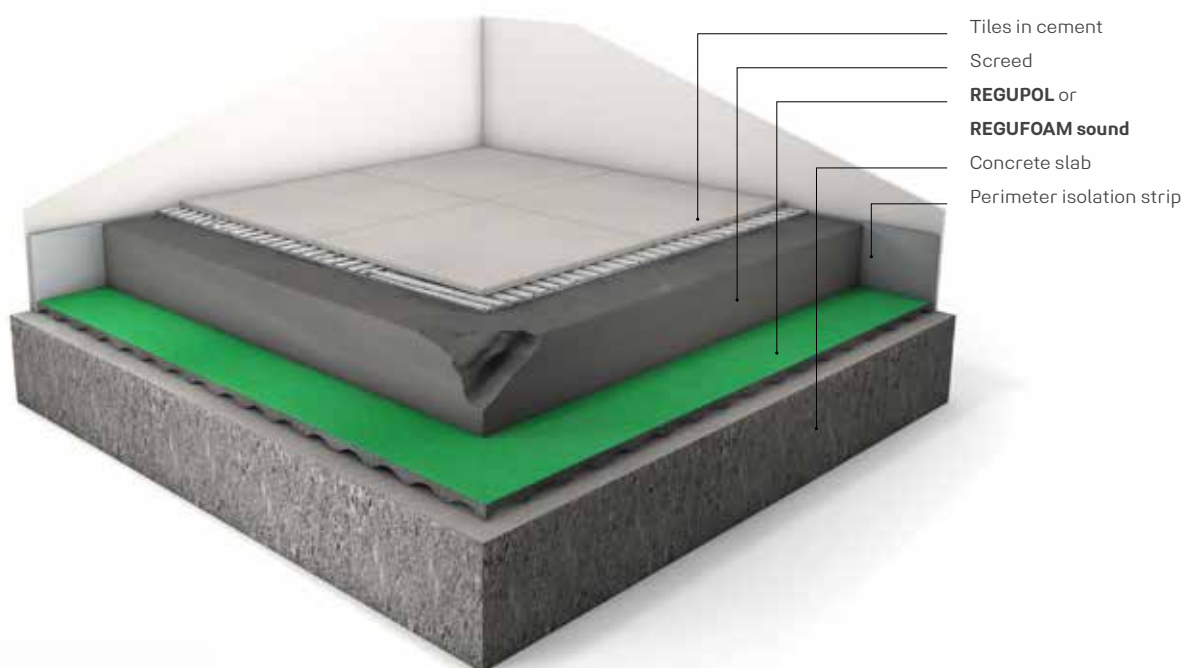


Building plots for new construction projects in our conurbations are very scarce and those that are available cannot satisfy demand. To find additional living space, planners are increasingly focussing on adding storeys to existing buildings, but not only in residential complexes. They are now turning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

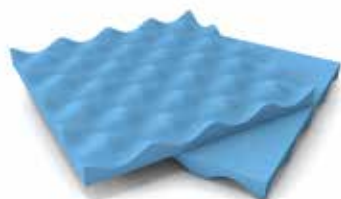
This carefully co-ordinated product portfolio, which also includes approved and externally monitored special products, provides the planning reliability needed in sensitive areas. For other areas, too, **REGUPOL** or **REGUFOAM sound** are definitely the right choice. For instance, in cinemas, theatres, 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.

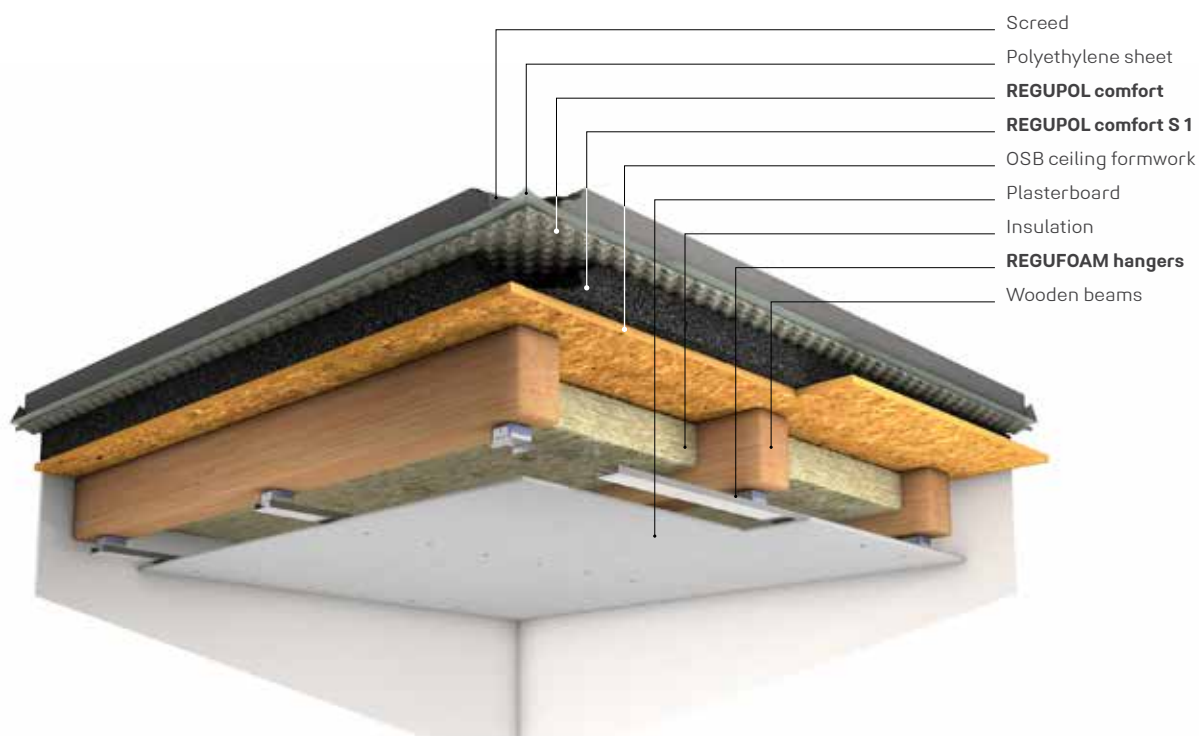




The key to Green Cities is intelligent densification. A major role plays the efficient use of existing buildings and the conservation of finite resources. Therefore, increasing the refurbishing rate of housing stock is an important factor in the efforts of cities and municipalities to achieve their ecological 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** +1 800 537 8737

[acoustics@regupol.com](mailto:acoustics@regupol.com)

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 ARE SOLUTIONS EASY AND INSPIRING? TOGETHER

## We've got it covered.

**REGUPOL** is more than sports and multi-purpose surfaces. More than our acoustic underlayments. And more than our state-of-the-art track and field surfaces. For over 65 years, providing solutions and delivering exceptional customer service has been our business. We understand that paying attention to the details is critical from the start of any project. Making changes later means inconvenience and additional expenses. We sweat those details so you don't have to.

Because we invented the technology to recycle tires into unique products, you benefit from decades of experience and expertise that only we can offer. That means the right information, advice, and answers when you need them, along with products that have been refined, tested, and retested over the years by our R&D team to deliver precision performance that will not disappoint. It is all accomplished with manufacturing that meets the highest quality standards with the strictest environmental requirements.

## Delivering results, developing leaders worldwide

We have grown steadily since 1954 – new products developed, new subsidiaries established and new locations added. Today, **REGUPOL** is still a family enterprise, with third and fourth generations currently working in company management. We have eleven offices in seven countries, all serving as epicenters for innovation, ingenuity, and community.

Behind every **REGUPOL** product, there is a talented team that works together, across the globe, to create performance solutions from reclaimed materials that deliver durability and protection where you need it most without sacrificing sustainability. Whether used to protect surfaces and optimize load transport or to dampen sound and vibration, **REGUPOL** gets it done. We deliver with a level of product, customer service, and investment that only the inventor can offer.

No matter the customer—we aim to make their experience easy and inspiring, at an only-at-**REGUPOL** value.

## Customer service excellence for over 65 years.



Ask our experts about the optimal  
Solution for your project:  
[sales@regupol.com](mailto:sales@regupol.com) | +1 800 537 8737

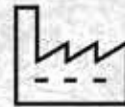


 **REGUPOL**

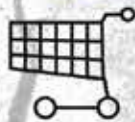
Raw material procurement



Product design



Production



Distribution



Recycling



Use



# HOW TO ACT MORE SUSTAINABLE? TOGETHER

**Caring about the environment is part of the REGUPOL core mission. When it comes to how we conduct our business and develop our products, we think long term. We ask ourselves: How will our actions today impact tomorrow's world? We strive to protect and sustain our environment every step of the way, from development and production to customer use and disposal.**

On the road, tires eventually wear down or sustain irreparable damage. But, in the environment, tires can last forever. They are nonbiodegradable, unable to be compacted like plastic or metal, and maintain their shape. Because of their sheer size and impenetrable rubber compound, tires are among the most problematic sources of waste we face today.

Each year we reclaim over 9 million tires (or 90,000 tons of SBR) from landfills to make environmentally sound solutions for the sports, acoustics, commercial, construction, and transportation markets. Our products are comprised of either shredded and cleaned SBR tire rubber (100% post-consumer waste) or a combination of SBR tire rubber and vibrant EPDM (post-industrial waste) color granules. The recycled content ranges from 75% to 100% recycled materials.

We understand that sustainability is not only about material content, which is why our manufacturing facility is near our rubber supplier. By eliminating excessive fuel use created through transportation of resources, fossil fuel expenditures are minimized, and atmospheric damage reduced. We are practically a zero-waste manufacturer regrinding our scrap material for use in some of our products.

There is an increasing demand for honesty and transparency from manufacturers. We were the first Pennsylvania manufacturer to be GreenCircle Certified. They provide independent verification of our products annually to ensure the legitimacy of our recycled content claims. But our commitment to sustainability does not end there; we've gone one step further. We work with UL Environment to independently certify our Environmental Product Declaration (EPD) to better understand and communicate the sustainable qualities and the life-cycle impact of our products.

Products used in the built environment should meet specific criteria for the health and safety of all occupants. These are called Health Product Declarations (HPDs) and are the standardized way of reporting the contents of building products. It is a valuable tool for not only encouraging transparency, it creates a sense of brand trust and is safer for anyone using the property. We make HPDs readily available for our family of brands including Aktiv, Sonus, and Revolution.

We are active USGBC members and our products can potentially assist architects and designers in earning points under 2 out of 9 categories—Materials and Resources and Indoor Environmental Quality—of LEED certification v4.1.





700

Employees

11

Locations worldwide

90,000

Tons of high quality rubber per year

132

Countries served worldwide



# HOW DO YOU GROW TO THE TOP? **TOGETHER**

**When you partner with REGUPOL, you become part of a community with a shared goal of leading with excellence and innovation. Our path to success has always been rooted in product innovation and great service, with an eye on the future. We transform over 90,000 tons of high-quality rubber every year to create products that meet and exceed industry standards.**

Over the course of our 65-year journey to become a leader in our category of building materials, we have built up a wealth of expertise and forged long-term customer partnerships in 132 countries worldwide—like sprint legend Usain Bolt, who made history on our blue **REGUPOL** running track in Berlin's Olympic Stadium in 2009 when he set two world records.

**"There's nothing like running on REGUPOL. To me, REGUPOL equals gold. In more ways than one." – Usain Bolt**

**We've got it covered.**





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