



4 facts about the sound properties of stone wool



SOUND
ABSORBENT
**INSPIRED
BY
NATURE.**

From railways to tramways, roads to airports, good infrastructure is crucial to urban life, but it can be very noisy. The resulting ground-borne vibration, traffic noise – and not to mention human noise pollution – all have a negative impact on our wellbeing, especially in densely populated areas. Protection from unwanted noise can have a positive effect on our physiology, learning capacity, and social behaviour.

1

ROCKWOOL stone wool has excellent sound properties. Its high-density secures optimal resistance to airflow, improving its ability to absorb noise. It can be used to significantly reduce noise transmission into buildings and between indoor spaces. ROCKWOOL acoustic insulation contributes to human health and wellbeing by providing quiet spaces to recover and recuperate in homes and hospitals and by helping avoid health issues associated with noise pollution such as diabetes and increased blood pressure.

Stone wool insulation can significantly reduce the noise transmission into a building and between the indoor spaces

Consider roofs, for example. Impact noise from a roof, such as heavy rain, makes it difficult to teach in schools or concentrate in offices. If a metal roof is insulated with stone wool, the noise from the rain can be reduced by more than 50 percent when compared

to plastic foam insulation. In the workplace, better acoustics, particularly in open-plan offices, can reduce distraction and improve productivity by two to three percent, worth up to EUR 1,600 per year on average per person.



2

Stone wool solutions can improve learning conditions in schools

Stone wool has an open, porous structure, which makes ROCKWOOL products highly efficient sound absorbers. In schools with no sound absorption, children miss 25 percent of words spoken by their teachers. In fact, ROCKWOOL acoustic solutions improved the learning conditions of over 1.7 million students worldwide in 2021.

3

Stone wool helps avoid the health issues associated with noise pollution

ROCKWOOL acoustic insulation helps building occupants avoid negative health consequences of noise, such as diabetes and increased blood pressure. In hospital environments, noise control is very important for patient recovery as “unwanted sound” can increase heart rate, blood pressure and respiration rate. Similarly, stone wool insulation can contribute to human health and wellbeing by providing quiet spaces in homes, hospitals, and care facilities.

4

Stone wool can help reduce noise pollution outdoors

Stone wool insulation products from ROCKWOOL Group can also be used to mitigate the noise and vibrations caused by trains, or as sound barriers in external sound walls, for example, constructed alongside motorways.

To explore the exceptional properties of stone wool further, visit:
<https://www.rockwool.com/group/about-us/inspired-by-nature/>



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At the ROCKWOOL Group, we are committed to enriching the lives of everyone who comes into contact with our solutions. Our expertise is perfectly suited to tackle many of today's biggest sustainability and development challenges, from energy consumption and noise pollution to fire resilience, water scarcity and flooding. Our range of products reflects the diversity of the world's needs, while supporting our stakeholders in reducing their own carbon footprint.

Stone wool is a versatile material and forms the basis of all our businesses. With approx. 10,500 passionate colleagues in 38 countries, we are the world leader in stone wool solutions, from building insulation to acoustic ceilings, external cladding systems to horticultural solutions, engineered fibres for industrial use to insulation for the process industry and marine & offshore.

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