

Soundim

Minimising the Environmental Impact of Railway Barriers



Soundim offers the rail industry a high-impact sound barrier with a low impact on the environment.

This is because the innovative design of Soundim's barriers ensure they don't block the view from either in or outside of the train, while the majority of its components can be recycled when the barrier comes to the end of its useful life.

Recyclable Materials

Soundim's noise-blocking railway barriers offer a sustainable solution to sound reduction on railways. This is because the company places great emphasis on recycling initiatives, and its barriers are designed to be

easily disassembled and recycled at the end of their lifespan, minimising waste and promoting a circular economy.

"In the beginning when the design tender was released, the Finnish Transport Infrastructure Agency expressed a strong wish that all material in the low-height barrier should be recyclable. This was our guideline in designing and building the first prototype, which we have since approved upon multiple times," says Jarmo Airaksinen, Founder of Soundim.

Each panel is made from aluminium, steel and Ewona insulation, which is created using environmentally friendly, additive-free recycled materials.

The insulation panels consist of polyester fibres bonded

together with heat and, depending on their use, can be made of up to 85% recycled plastic. This means the insulation already offers some great sustainability credentials at the point of manufacture, as one 10m² panel can represent a CO₂ emission reduction of 23 kilogrammes.

These are extended further when the material reaches the end of its useful life, as it can then be sent on to a textile recycling facility.

No Need to Spoil the View

Soundim's award-winning barriers are also 'landscape friendly', as they allow for unobstructed views of the surrounding landscape due to their low height.

This means that both onboard passengers and anyone looking at or beyond the track won't have their view restricted. This is particularly important for scenic areas, where the natural beauty or urban skylines shouldn't be obscured.

Clear views however, don't require a compromise in sound reduction, as Soundim has proven.

Most of the noise created by trains travelling at speeds of 200km an hour or lower comes from the wheels and rails. Therefore, sound barriers don't need to be high in order to lower noise pollution in the surrounding area.

"Understanding this, we developed an innovative low-height barrier that means our customers can reduce railway sound pollution without blocking the view from either inside the train or from outside looking across the track," says Airaksinen.

Market-Leading Noise Reduction

Soundim's ability to dramatically reduce noise pollution created by the railway is the final positive

environmental impact that cannot be overlooked.

Its barriers have been designed – and proven – to reduce noise from wheels and rails by a minimum of 50%. This is thanks to the Ewona insulation's excellent absorption and insulation, which has a particularly positive impact on those high-frequency sounds human ears hate the most. This, in turn, can encourage the use of nearby outdoor spaces for relaxation and recreation that might otherwise have been left as wasteland.

Noise absorption 13 dBA (Class A4) – EN 1793 2 and EN 1793 3
 Noise insulation 30 dBA (Class B3) – EN 1793 2 and EN 1793 3
 Total noise reduction of up to 12 dBA – SFS-EN ISO 3095

Animals are also sensitive to excessive noise, which can disrupt breeding patterns, communication and ecosystem balance. By minimising this, Soundim also provides a healthier environment for the local wildlife.

Get in Touch

Soundim is making a significant impact in the realm of sound reduction, while also prioritising environmental sustainability. Effective, cost efficient, sustainable and landscape-friendly, its railway barriers offer the full package.

If you'd like to learn more about the company and its sound reduction solutions, please visit www.soundim.fi.





We block the noise, not your view.

No longer there is need to compromise the
performance with the esthetics.



Eliminating noise
at the source



Recyclable
materials



Light weight and no need
for special foundation



Easy and fast to install
or to dismantle and reuse

Soundim noise barrier is a perfect
solution for any rail project.

FOR MORE INFORMATION, PLEASE CONTACT

Tero Lepistö
CEO
+358 50 4041346
tero.lepisto@soundim.fi

Jukka Näräkkä
Business Development
+358 50 353 5411
jukka.naracka@soundim.fi

Soundim Ltd
Annalankankaantie 18
90830 Haukipudas
Finland