

STRALLastic®

SOUND PROTECTION SYSTEMS

made
in
germany

NOISE CAUSES ILLNESS

Sound is neutral, so how does it become noise?

Noise is unwanted, unpleasant or harmful sound. Noise is not only defined by measurable values but also by subjective perception. That is why sounds coming from playgrounds can therefore be perceived quite differently by different people – either as enjoyable or as annoying.

Every listener has an individual tolerance limit when it comes to different sound sources. However, that for „railway noise“ is generally quite low.

Despite of getting used to the noise, permanent exposure to it can have subconscious harmful effects on the body and the mind.

Noise can disturb the biological rhythm and cause or increase sleep problems with all their detrimental effects. The **STRAILastic_RAIL** sound protection products have been designed to protect you from those unwanted sounds.

We can close our eyes – but not our ears.

THE GENTLE TRACK

Fight noise where it is created, close to the rail.

That is the most effective way of decreasing noise emissions. Therefore, we bring our products as close to the rail and the railway-clearance outline as possible. Owing to our sturdy but still elastic material, fibre-reinforces rubber, we achieve what others cannot.

Due to this short distance, it is not necessary to erect very high sound protection walls, so our **STRAILastic_RAIL** products do not create a barrier in the landscape. Residents as well as passengers can enjoy an unobstructed view while being offered a significant sound reduction.

Hear the invisible.

PRODUCTS AT A GLANCE

STRAILastic_mSW

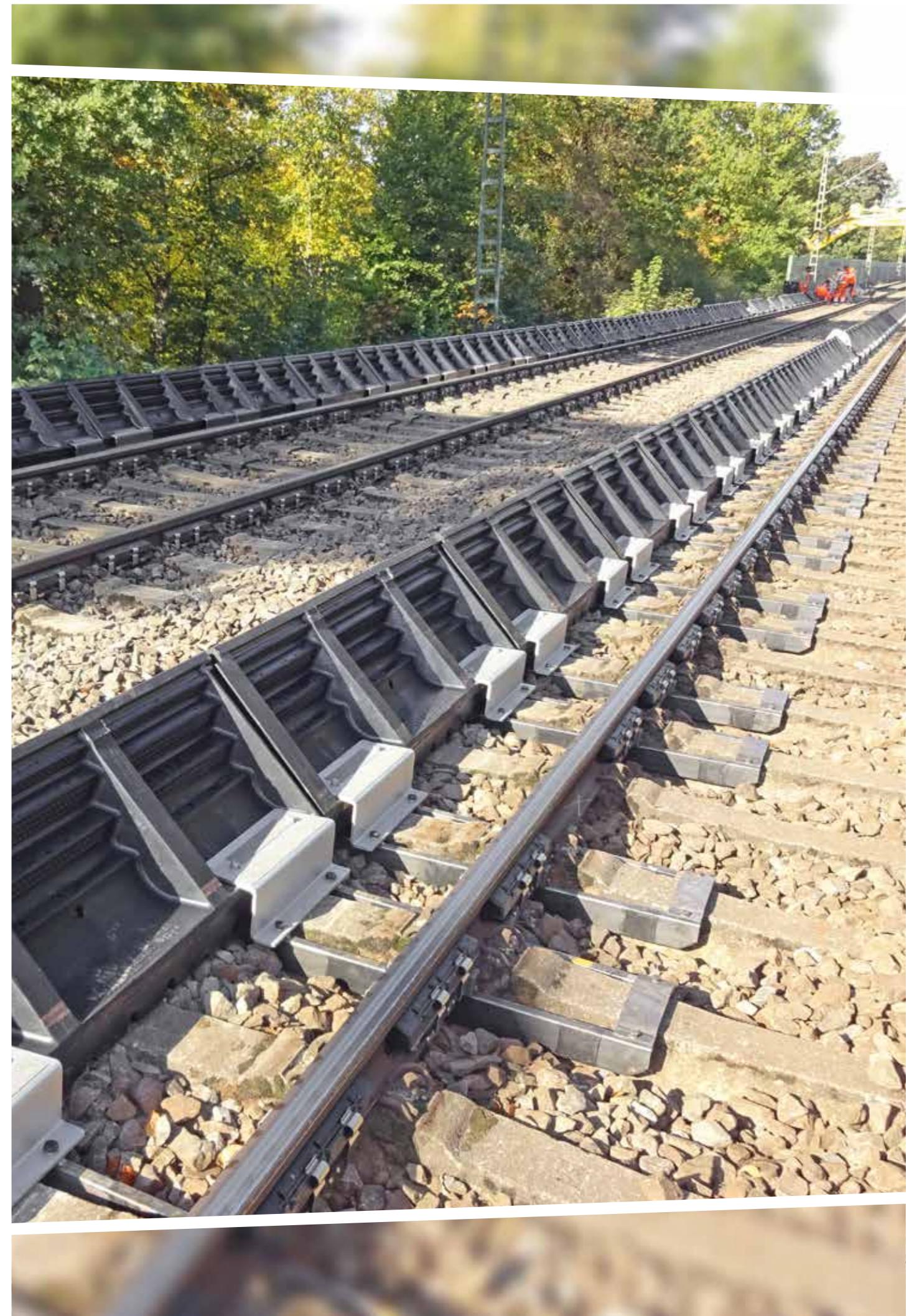
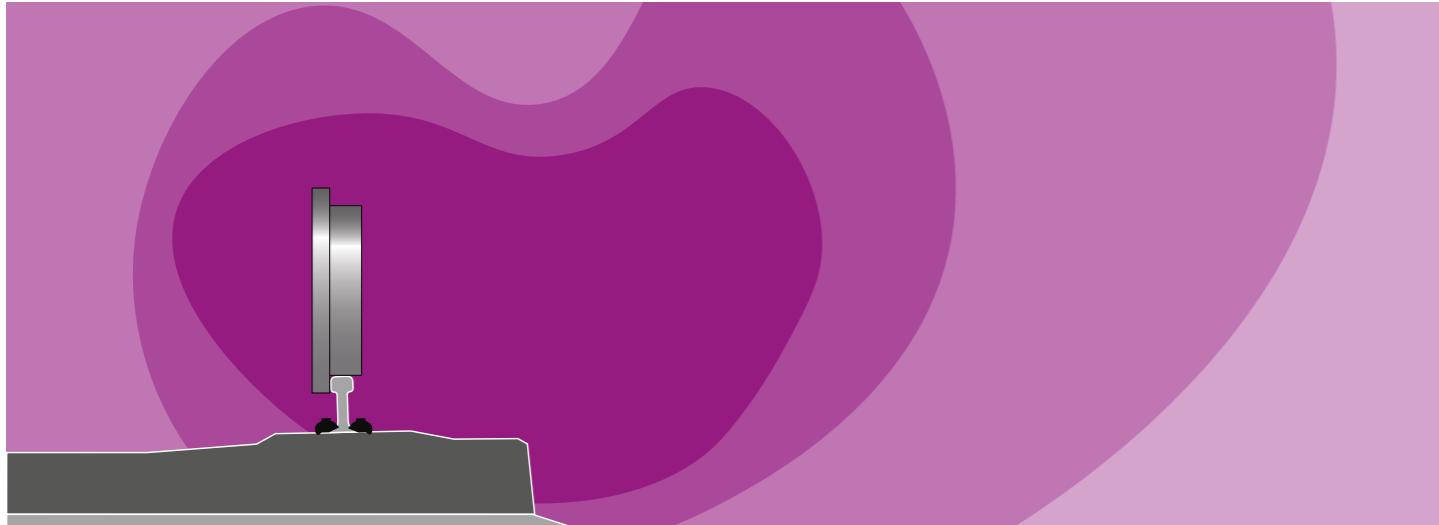
The mini sound protection wall, fastened to the sleeper, is closer to the noise source than any other low sound protection wall.

STRAILastic_IP

Restore tranquillity by using the existing structure. The infill panels can be mounted directly onto special railings.

STRAILastic_A inox 2.0

Fight noise before it is created. Using its weight, **STRAILastic_A** dampens the vibrations and therefore reduces sound emissions.

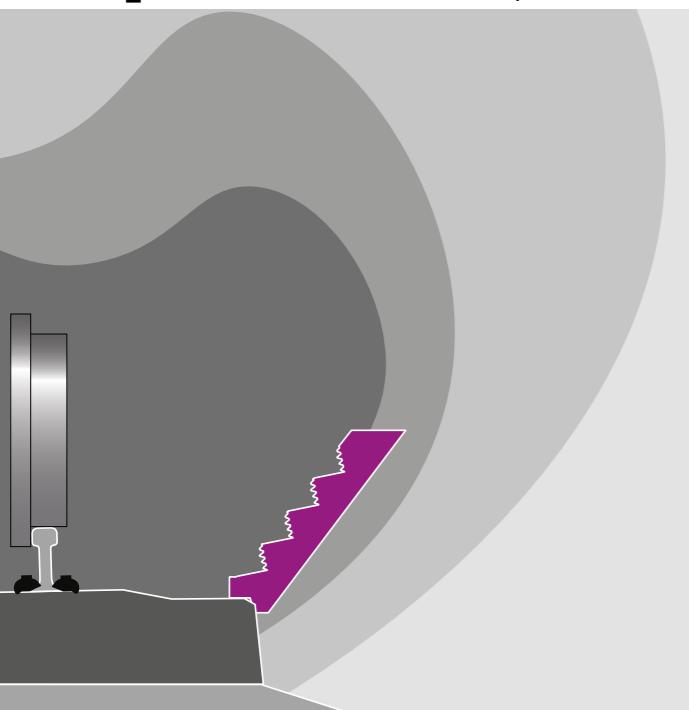




STRAILastic_mSW

Coming as close to the noise emission as possible – the objective of STRAILastic_mSW.

The mini sound protection wall is installed just barely outside the clearance area. Neither the metal substructure, which is needed to fasten the wall to the sleeper, nor the fibre-reinforced mini sound protection wall touch the clearance area. Only a few screws are needed to fasten STRAILastic_mSW to the metal substructure, which in turn



is fastened to the sleeper. That also allows a quick removal of the wall to carry out track maintenance work.

By the way, it is not necessary to remove the metal substructure for track maintenance work. Past experience shows that approx. 30-40 m of STRAILastic_mSW can be installed in one hour.

> mini but mighty!

The advantages at a glance:

- ¬ No foundation required for installation
 - > no plan approval procedure necessary
- ¬ Short delivery times
 - > noise hot spots can be supplied with products quickly
- ¬ Closer to the noise source than any other sound protection wall
- ¬ Can be installed on one or on both sides of the track
- ¬ Break-proof due to fibre-reinforced rubber compound with a cover layer of virgin rubber
 - > UV and ozone resistant
- ¬ No material fatigue caused by vibrations or pressure and suction forces
- ¬ No problems with oversized loads
- ¬ Federal Railway Authority's approval for field testing
- ¬ Technical note by German Railways issued

Dimensions sound protection element

Required sleeper spacing

Weight per element

Fastening

Calculated reduction

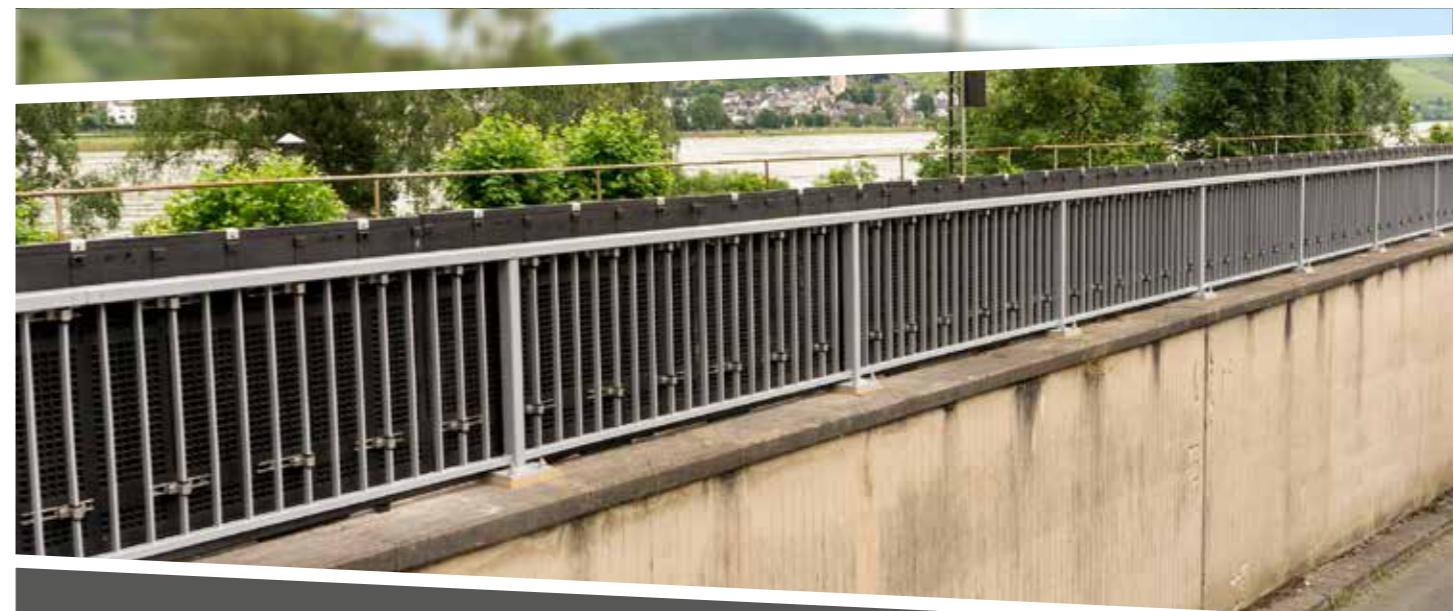
Length 1,800 mm x height 380 mm above TOR

600 mm ± 25 mm

125 kg

Metal substructure at rail foot

Up to 6 dB(A) on an embankment



STRAILastic_IP

Sound protection you can hear but not see –

STRAILastic_IP uses existing structures.

We introduced our infill panels in 2014. Since then, the fibre-reinforced sound protection wall has been demonstrating its benefits especially on bridges and supporting walls in exposed positions.

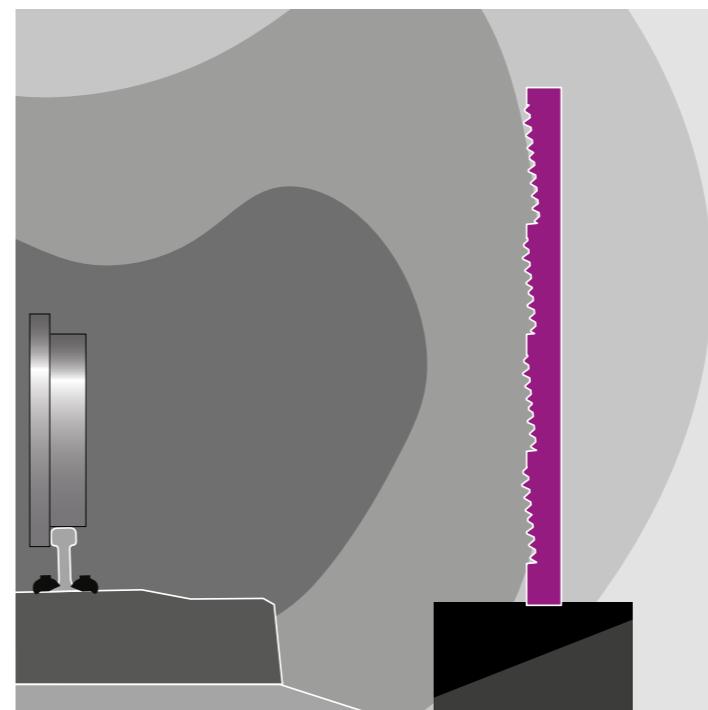
The mounting rail used for installation is vulcanised onto the product, so the infill panels can be mounted to the railings either on the inside or on the outside.

When the infill panels are installed on the outside, it is possible to furnish them with customised printed panels.

The „beautiful“ sound protection wall.

Advantages at a glance:

- ¬ No plan approval procedure required
- ¬ Short delivery times
 - > Noise hot spots can be supplied with products quickly
- ¬ Can be installed on one or on both sides of the track
- ¬ Break-proof due to fibre-reinforced rubber compound with a cover layer of virgin rubber
 - > UV and ozone resistant
- ¬ No material fatigue caused by vibrations or pressure and suction forces
- ¬ No problems with oversized loads
- ¬ Customised prints possible, can be used as advertising space or to blend the panels into the surroundings
- ¬ Noise is absorbed on both sides due to the special surface geometry > no acoustical bridges
- ¬ Federal Railway Authority's approval for field testing
- ¬ Technical note by German Railways issued



Dimensions sound protection element

Necessary for fastening

Weight per element

Fastening

Calculated reduction

Length 1,800 mm x height 1,250 mm

Railings (Ril. 804.9060), others upon request

140 kg

Screw connection into the vulcanised rail

Up to 7,5 dB(A)

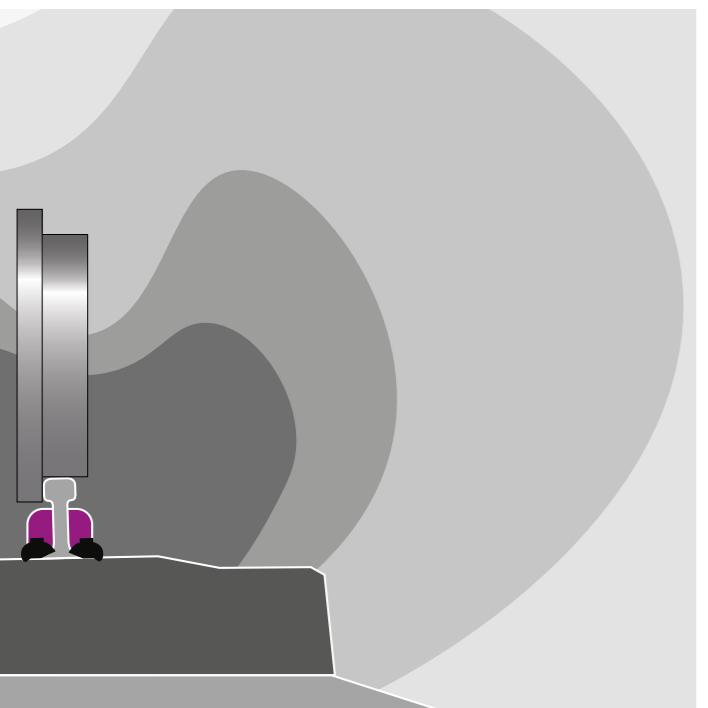


STRAILastic_A

What is the most effective way to fight noise?

Before it is created – STRAILastic_A rail damper

STRAILastic_A inox 2.0 rail damper use their weight to dampen the vibrations of the rail and therefore reduce the noise emissions that those vibrations normally cause.



Advantages at a glance:

- Extremely slim design > tamping possible in radius curves with the standard tamping machine
- No removal for normal track maintenance work necessary
- Integrated cut-outs for signal cables
- Permanent fastening with maintenance-free stainless steel clamps > no follow-up costs
- Quick and simple handling
- Rail damper made of virgin rubber
 > UV and ozone resistant
- Double effect > due to its large mass, it absorbs really well, the elastic material dampens vibrations
- Control and/or survey work is not affected or hampered
- Available for all common rail types

Dimensions & weight rail damper

Required sleeper spacing

Fastening

Material used for clamps

Varies according to the superstructure configuration rail damper can be individually adjusted
2 clamps for each rail damper
1.4310 stainless steel acc. to DIN 17224



Partner of railways.

KRAIBURG STRAIL® GmbH & Co. KG

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Rev. 01.02/04.10.2018

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