

STRALastic[®] TRAM

Track damping systems



the gentle track.

made in
germany

1 | STRAILastic_TOR Systems



Track damping systems for all superstructures.

Application

The established and extremely economic **STRAILastic** track damping systems **STRAILastic_TOR** and **STRAILastic_TOR simplex** are available for both sleeper tracks and continuous support and are used for all superstructures.

A joint sealing compound which is generally high-maintenance (and therefore rather expensive) is not required for our chamber filling elements reaching up to the **Top Of Rail (TOR)**.

This is made possible thanks to our unique production method: hot vulcanisation in combination with a top layer of virgin rubber. This method creates durable elements that are resistant against UV-light, ozone and wear.

We could say our 40-year experience with **STRAIL** level crossing systems speaks for itself.

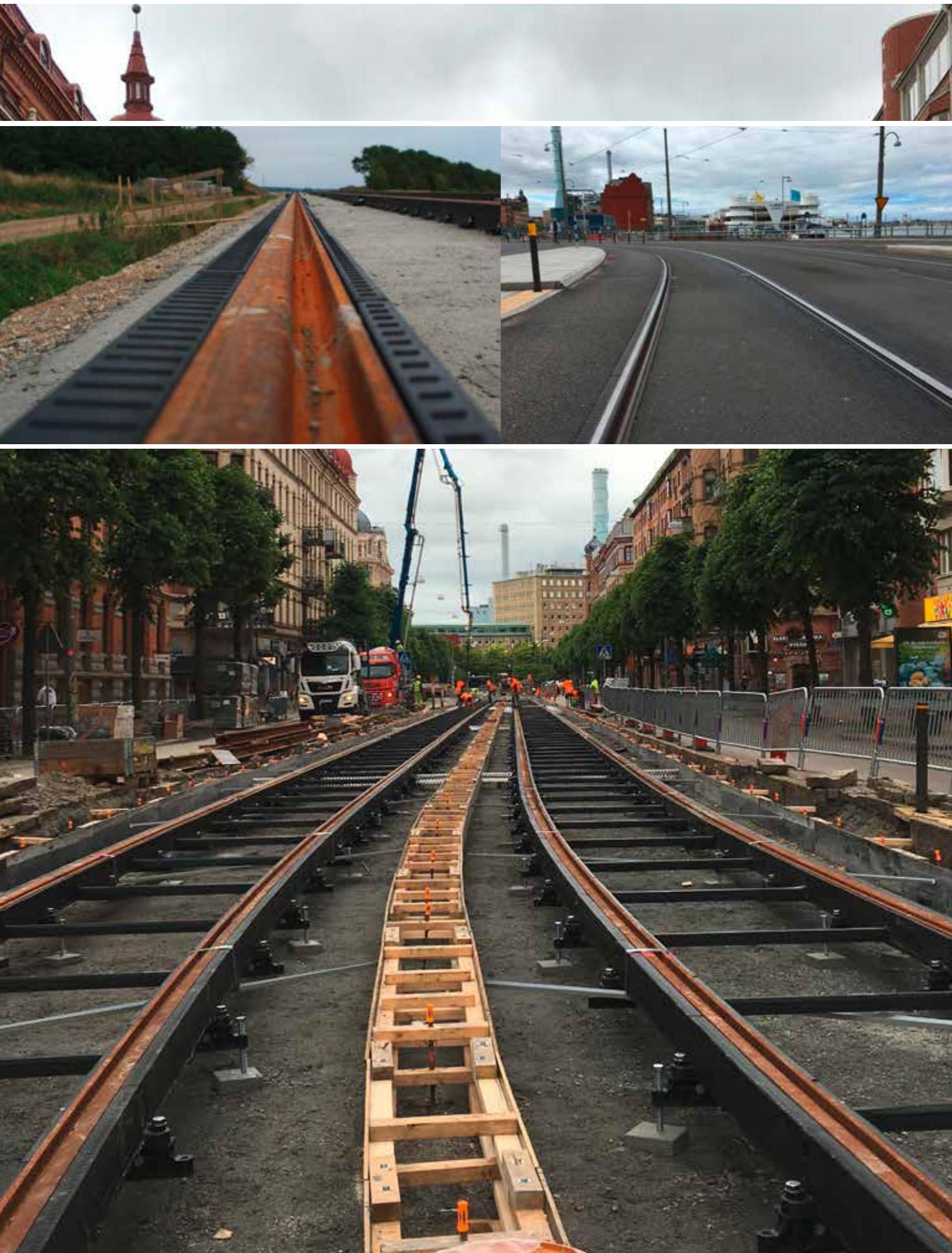
Due to their special geometries, the elements can be installed easily and fast – without adhesives. **This reduces installation time significantly and therefore keeps costs low.**

STRAILastic_TOR and **STRAILastic_TOR simplex** have different additional components which vary depending on the construction type. All of them are tried and tested and adjusted to the respective damping system.

STRAILastic -/ reduced installation time > lower costs.

Advantages at a glance

- ◆ Made of hot vulcanised rubber
- ◆ High mechanical strengths
- ◆ UV-light and ozone resistant
- ◆ Stray current insulating as per DIN EN 50122-2
- ◆ Material properties tested as per DIN 45673-8
- ◆ Defined deflection possible
- ◆ Easy and fast installation
 > no bonding required due to self-clamping elements
- ◆ Environmentally friendly as it is manufactured from recycled rubber which can also be recycled again in its entirety
- ◆ Pre-assembly possible



2 | STRAILastic_TOR

The track damping system for baseplates and sleeper tracks.



STRAILastic[®] SYSTEM TOR

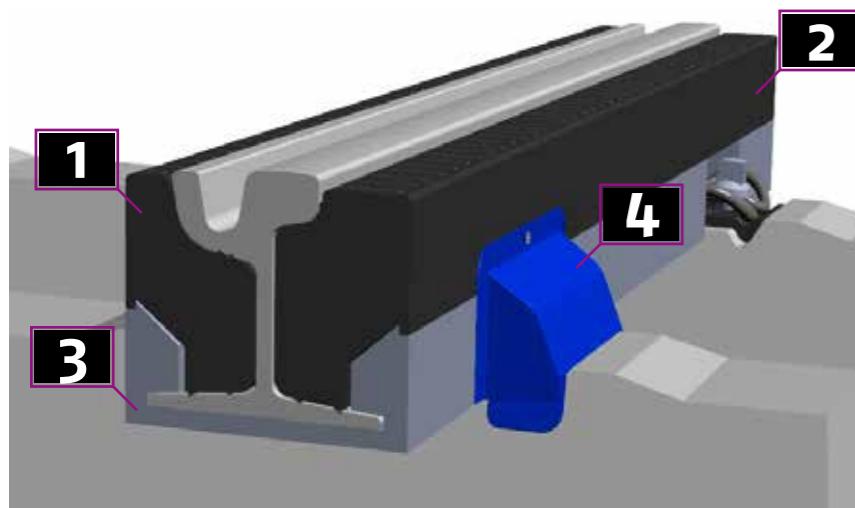
STRAILastic System TOR is used for grooved rails and any kind of baseplates and sleepers for stray current insulation

The system consists of:

- Hot vulcanised, UV-light and ozone resistant chamber filling elements which reach up to top of rail
- Rail base profiles made of elastic and closed-cell polyethylene foam which are installed between the baseplates or sleepers
- Cover caps

Due to the special geometry, the chamber filling elements can be installed independent of the sleeper or fastening distance.

The modular construction type allows individual adjustments of this system to different baseplate and sleeper constructions.



- 1 chamber filling element TOR (inside)
- 2 chamber filling element TOR (outside)
- 3 rail foot profile XPE
- 4 cover cap

For all superstructures.



01: STRAILastic_TOR with asphalt

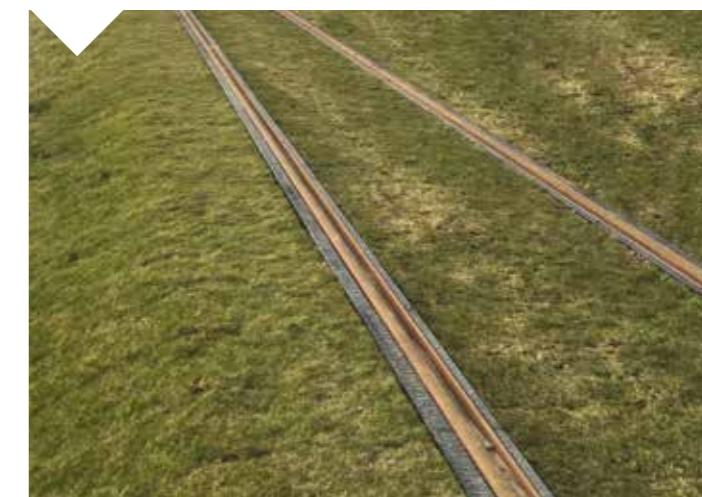


02: STRAILastic_TOR with concrete

03: STRAILastic_TOR with cobblestones



04: STRAILastic_TOR with lawn



3 | STRAILastic_TOR SIMPLEX



The track damping system for continuous support.

STRAILastic[®] TRAM SYSTEM TOR SIMPLEX

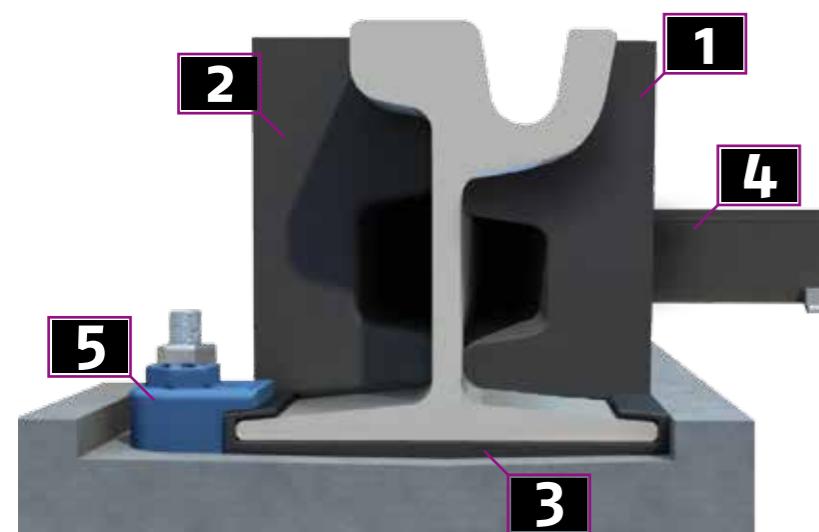
STRAILastic System TOR simplex is a track damping system used for embedded tracks with tie bars. It supports the rail continuously and embeds it completely.

The system consists of:

- Hot vulcanised, UV-light and ozone resistant chamber filling elements which reach up to top of rail
- One-piece, fibre-cord reinforced rail foot profiles made of premium virgin rubber which ensure a continuous and elastic support
- Tie bar covers
- Adjustable retainer clips

The system can be adjusted with different deflection settings to different requirements.

You would like to save even more construction time? > Then use our STRAILastic_GRS track section base plate. (# 6 | Accessories).



- 1 chamber filling element TOR (inside)
- 2 chamber filling element TOR (outside)
- 3 rail foot profile simplex
- 4 tie bar cover
- 5 adjustable retainer clip

For all superstructures.



01: STRAILastic_TOR simplex with asphalt



02: STRAILastic_TOR simplex with concrete

03: STRAILastic_TOR simplex with cobblestones



04: STRAILastic_TOR simplex with lawn



4 | STRAILastic_R



The established green track systems.

Application

Ecological awareness has risen starkly in the past few years and meant that large cities in particular are continually looking for new ways of increasing the amount of greenery in their urban environments. City planners and architects have a pioneering role to play here.

Green tracks retain a large amount of rain water and they bind road dust, which in view of today's fine particulate concerns represents a clear advantage, and thus improves the microenvironment in the urban centres. Adding lawn or sedum to routes injects the tramway with a whole new lease of life!

Moreover, due to the encapsulation of the rail, primary airborne noise is reduced significantly compared to ballast tracks. Noise emissions are minimised!

Yet, apart from giving your track a natural appearance and making it visually attractive, **STRAILastic_R** also offers significant advantages that meet the highest demands.

The individual design of **STRAILastic_R** gives every cityscape a new, distinctive face. We can also adapt **STRAILastic_R** to your individual demands.

Naturally, **STRAILastic_R** is stray current insulating and UV-light and ozone resistant. There is an easy maintenance access to rails and fastenings.

STRAILastic_R can be configured to enable it to be crossed by other vehicles in an emergency situation.

Advantage at a glance

- ◆ Made of hot vulcanised rubber
- ◆ High mechanical strengths
- ◆ UV-light and ozone resistant
- ◆ Stray current insulating as per DIN EN 50122-2
- ◆ Material properties tested as per DIN 45673-8
- ◆ Protection of the fastenings
- ◆ Easy maintenance of rails and fastenings
- ◆ Easy and fast installation
 - > no bonding required due to self-clamping profiles
- ◆ Installation during on-going operation possible
- ◆ Adaptable to all track superstructures
- ◆ Individually tailored design
- ◆ Environmentally friendly as it is manufactured from recycled rubber which can also be recycled again in its entirety (LCC)



5 | STRAILastic_R Systems



For every demand.

STRAILastic_R_TYPE AUGSBURG

STRAILastic_R_TYPE AUGSBURG is a green track system that is independent of sleeper distance and suitable for all superstructures with W-fastenings.

A groove/tongue system ensures perfect position stability.

The one-piece system protects the fastenings and can be installed at new constructions as well as subsequently at already existing ballast tracks.

As unique as your city.



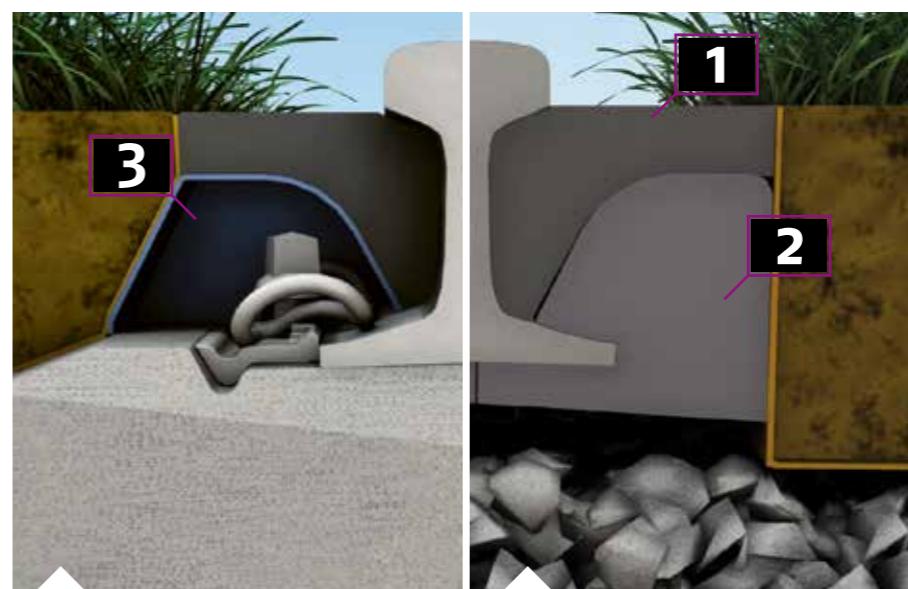
1 green track profile

STRAILastic_R_TYPE ZURICH

STRAILastic_R_TYPE ZURICH is a two-piece system which encloses the vignol rail completely.

It's ingeniously simple shape not only enables it to be set in the vignol rail without requiring adhesive and clamps but also makes it self-supporting.

This system is complemented by a cover cap for the rail fastening.



1 green track profile (upper part)

2 green track profile (bottom part)

3 cover cap

5 | STRAILastic_R Systems



For every demand.

STRAILastic_R_TYPE BERLIN

STRAILastic_R_TYPE BERLIN has been used in Berlin since 1996.

The system consists of a high-lying profile outside and a low-lying profile inside.

It is available for vignol rails as well as for grooved rails.

The screwed-on support angle allows fast removal and re-installation of the profiles after maintenance work and enables it to be crossed by other vehicles in an emergency situation.

STRAILastic_R_TYPE BREMEN

STRAILastic_R_TYPE BREMEN is a component of the „Bremer Rasengleis“ and has been used in Bremen also since 1996.

There is a TOR version as well as a version that reaches up to 4 cm below the rail head.

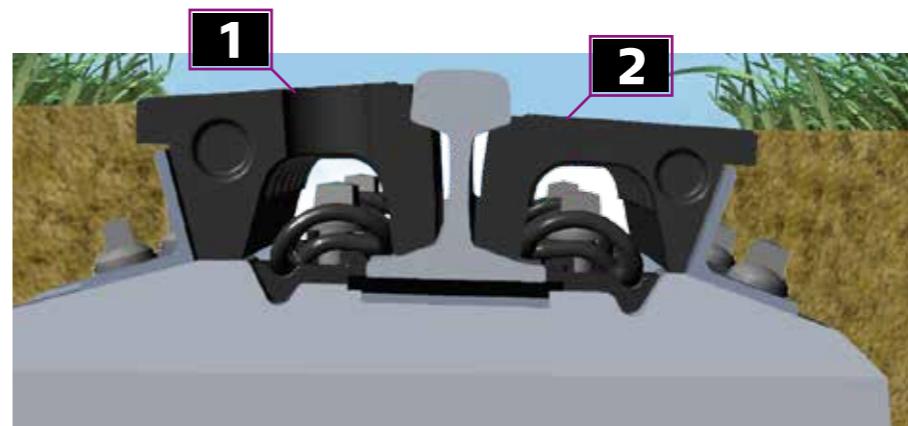
The TOR version allows a higher vegetation level. A flange groove is integrated into the inner profile and it can be crossed by other vehicles in an emergency situation.

STRAILastic_R_TYPE BIELEFELD

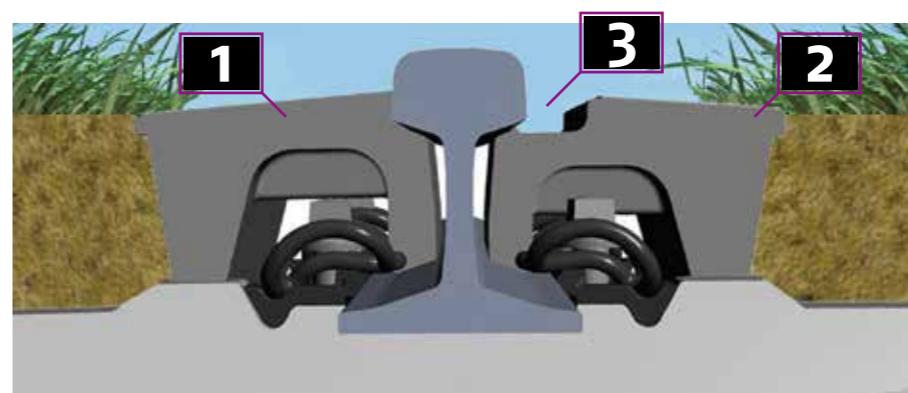
STRAILastic_R_TYPE BIELEFELD is a one-piece green track system suitable for superstructures with KS-fastenings.

The system is independent of the fastening distance and the groove/tongue system ensures perfect position stability.

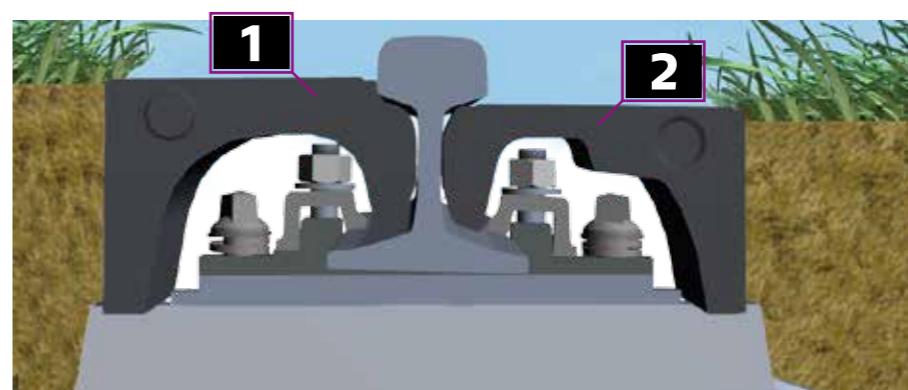
As unique as your city.



- 1** green track profile (outside)
- 2** green track profile (inside)



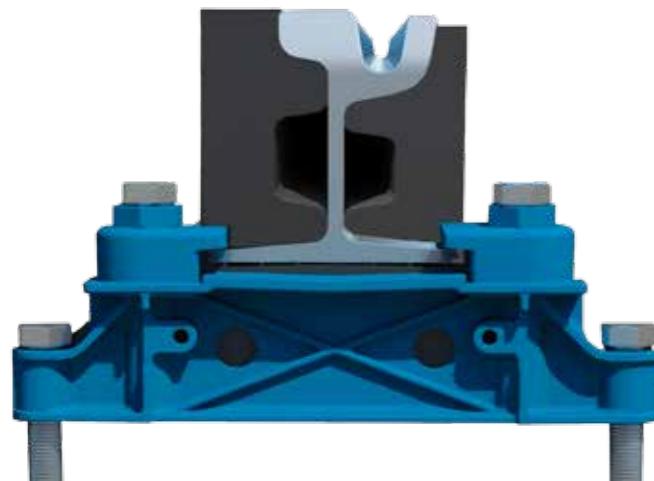
- 1** green track profile (outside)
- 2** green track profile (inside)
- 3** integrated flange groove



- 1** green track profile (outside)
- 2** green track profile (inside)

6 | ACCESSORIES

Your options.



STRAILastic_GRS

The **STRAILastic_GRS** track section base plate is designed to fit track sections of grooved rails, limited to a width of the foot of the rail of 180 mm. The base plate is designed to match our **STRAILastic TOR system simplex**.

STRAILastic_GRS allows to fix the track section for position and height and to adjust it in a way that the supporting slab can be concreted underneath the track. The filling concrete can also be poured between the rails without interruptions.

Due to this construction type there is no need for a rail bottom casting. This reduces installation time and costs significantly.

STRAILastic adjustable retainer clip

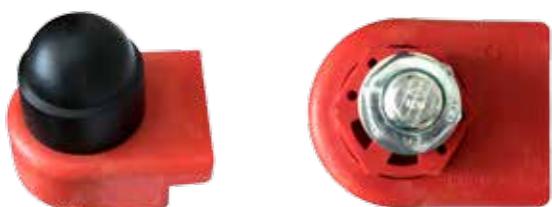
The **STRAILastic** adjustable retainer clip is made of glass-fibre reinforced polyamide and serves to fasten rails (position stability and fixation).

The adjustable retainer clip has an adjustment range of \pm 4 mm and is available for anchor rods M20, M22 and M24.



Additions

Cover caps / screws / anchor bolts / shear anchor cartridges / fastening plates



7 | QUALITY

durable & reliable.



It has been our goal and demand that we set on ourselves to always offer the best service to our customers. We want to outperform others in quality, product utility and customer service.

Therefore, we

- thoroughly analyse problems to improve our processes
- always evaluate our customers feedback and ideas
- look ahead to new development opportunities
- continuously improve even the tiniest details in all of our operations.

Our employees are motivated to incorporate these values into their daily work. To turn goals into reality.

At the time one of our systems leaves our production area, it has been tested, examined, and checked over and over again – from the raw material to the finished product.

We have been counting on the benefits of rubber for a long time. Its resistance, the simple assembly, its flexibility.

What makes **KRAIBURG STRAIL®** products stand out is their special production method that guarantees high durability.

Our products are inspected by different testing institutes on a regular basis. We have been working with TÜV/LGA for years (external supervision according to German Industrial Standard DIN/EN 18200). Additionally, we apply certified energy management according to DIN/EN/ISO 50001.

We thoroughly test our suppliers for their compliance in documenting processes and product management. And we are preparing for the future > we are going to introduce the environment management system DIN/EN/ISO 14001 in 2017.

This way we have made a name for ourselves also on an international level. Whatever the climatic conditions may be – our customers know that our products keep their form, quality and properties and that there will not be any unpleasant surprises.



We test raw materials very thoroughly in our technical centre and new developments and product changes are subjected to close scrutiny at our test bench under realistic conditions. Thorough quality control in R&D and production are a matter of course to us.



www.strailastic.de



STRAIL[®]astic
TRAM

- / track damping systems / Gleisdämmssysteme

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