

TRIPACS®

Ein Produkt der Elastomere Lagersysteme Heim GmbH

Product Information

TRIPACS®

Development according to ZTV-Lsw 06 and directive 804.5501



Protection of coatings

Permanent anchoring

Guaranteed soundproofness

The elastomer sealing strip TRIPACS® is an innovative elastomer strip, which closes the component joints between steel girders and concrete elements permanently and soundproof!

The elastomer sealing strip is ingrained during the manufacture of noise protection walls in precast concrete plants, where the embedded supporting grid is moulded into the concrete and thus securely anchored.

An unintentional falling out under dynamic strain is no longer possible (request according to ZTV-Lsw 06 and directive 804.5501 06 of the German Rail Corp.).

Field of Application:

The elastomer sealing strip TRIPACS® is mounted vertically to the exterior surface of the concrete noise protection walls and ensures the elastically supported integration of the wall panels in the steel railings.

The sealing strip also closes permanently and reliably the horizontal gap between the precast concrete elements.

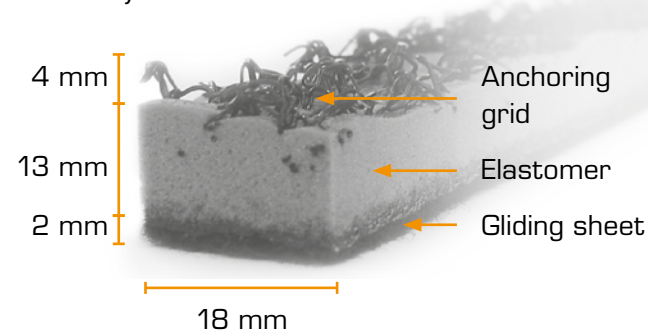
It is inserted into the vertical joints with a light pressure, so that the wall elements are kept stable and don't tilt.

Due to the anchoring of the sealing strip in the concrete, slipping or falling out during the assembly as well as in an installed condition, e.g. by dynamic strain (wind pressure – or suction), is excluded!

When introducing the concrete elements into the steel girders, the strip prevents a direct contact between the concrete and the coating of the steel girders. The coatings thus won't be damaged. The exterior gliding sheet of the elastomer sealing strip TRIPACS® provides a low friction on the steel girders during assembly.

Standard dimension Elastomer sealing strip TRIPACS® 45-13-TG	
Colour	grey
Width	18 mm
Gauge	15 mm (without grid)
Delivery length	1,50 m Other dimensions on request

Assembly



Technical data TRIPACS® 45-13-TG:

Chemical stability	
UV-radiation and weathering	excellent to good
Ozone	excellent
Biological stability	excellent
Sodium chloride	excellent
Concrete milk	excellent
Formwork oil	excellent
Engine oil	excellent

For details please request the data sheet "Chemical Stability".

Physical characteristics	
Resilience (width 18 mm)	ca. 2500 N/mm per meter
Peak strains	< 3,00 N/mm ²
Fire behaviour	B2
Ultimate elongation	> 300 %
Mechanical loss factor	approx. 0,17
Dynamic modulus of shear	approx. 0,80 N/mm ²
Static modulus of shear	approx. 0,50 N/mm ²

For details please request the data sheet "Physical Stability".

References:

- High speed railway line Cologne – Rhine/Main area, Route network of German Rail Corp., Renovation SSW Köhlershojn
- Noise protection wall Waghäusel DB ProjektBau GmbH
- High speed railway line Cologne – Rhine/Main area, New building of noise protection walls Staffel and Elz DB ProjektBau GmbH
- Noise protection wall Frankenthal DB ProjektBau GmbH

Tender documents:

Elastomer sealing strip TRIPACS® 45-13-TG with supporting grid and exterior gliding sheet for ex-works embedment in armoured concrete noise protection walls

Colour	grey
Width	18 mm
Gauge	15 mm (without grid)
Delivery length	1,50 m

Provider
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Certifications:

- Audit report P-152-08 MPA Wiesbaden, determination of resilience and overcharge properties
- Data Sheet Chemical Stability
- Data Sheet Physical Stability
- Data Sheet Testing of Natural Frequency
- Noise protection wall Esslingen-Zell DB ProjektBau GmbH
- Noise protection wall Guntersblum Road sector, Noise protection wall Worms
- Noise protection wall Ubstadt-Weiher
- Noise protection wall Metzgersteich Gondelsheim
- Noise protection wall Leimen, Stralsunder Ring, township of Leimen
- Noise protection wall Viernheim motorway
- Noise protection wall Oppenheim DB Projektbau GmbH

Description of Installation:

The elastomer sealing strip TRIPACS® is firmly ingrained into the concrete elements at manufacturing in precast concrete plants by means of a groove in the formwork. The supporting grid of TRIPACS® guarantees a shear-resistant interconnection with the concrete.

Technical demands and standards for noise protection walls:

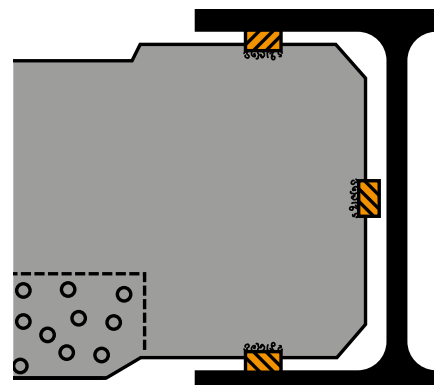
Currently valid directives and technical rules for the planning and the construction of noise protection walls with varying specific designs are the ZTV-Lsw O6 (for noise protection walls of roads) and Ril 804.5501 (noise protection installations for railway lines).

Therefore the following principles of construction are required:

- Noise protection walls must not possess any percolating fissures, holes, slots or open grooves (ZTV-Lsw O6).
- The sockets must be attached soundproof to all sides (ZTV-Lsw O6).
- Elastic supports (sealing profiles), bearings and other fixing materials have to be secured permanently against falling out and dismantling (Ril 804.5501).
- At the installation of wall sockets and wall elements damages to the corrosion protection of girders and elements must be avoided by appropriate protective measures (ZTV-Lsw O6 und Ril 804.5501).
- In the gap between element and the inner flange of girders groove paddings must be inserted. Groove constructions and paddings must have permanent stability of shape and chemical stability against weathering and de-icing salt. In addition, if required, they must be resistant to root penetration and able to absorb constructional deformation due to variation of strain and temperature without constraint (ZTV-Lsw O6).
- Even in the case of alternating attacks of maximum wind strain no gap must result (ZTV-Lsw O6).
- Synthetic materials must be non-ageing (e.g. UV-radiation- and oxidation-resistant) (ZTV-Lsw O6).
- Rattling of the elements by pressure/suction effects of wind and train-traffic must be excluded (Ril 804.5501).
- In the gap between the element and the inner flange of girders groove paddings (sealing strips) must be inserted, compensating unevennesses of the socket and changes of volume of the elements due to changing ambient conditions (temperature change, varying atmospheric moisture) (ZTV-Lsw O6).
- A two-sided elastic support (e.g. sealing profiles) is required (Ril 804.5501).

The elastomer sealing strip TRIPACS® is conceived and constructed for these requirements.

Please contact us for further technical informations. We will be glad to forward technical documents and to provide advice for the application and installation of TRIPACS® elastomer sealing strips.



This product information corresponds to our present level of knowledge. The right of alternations is reserved. Date of issue 01/2020.