



vortex

Stays in position -

Verified by testing!

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STRAIL

vortex

FOR HIGH SPEEDS



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vortex – Level crossing system for high-speed lines

vortex is a level crossing system engineered for high-speed lines, built on the proven **STRAIL** level crossing panels made from recycled rubber. It gives maintenance and rescue vehicles access to the track and is designed to withstand the high aerodynamic loads created by fast-moving trains.

Fatigue strength has been tested under suction and pressure loads and **successfully verified for train speeds of up to 300 km/h.**

vortex refers to the swirling air forces that act on the **panel** at these **speeds**.



At high train speeds, strong alternating pressure and suction forces act on the panels in the track area. **vortex** prevents the outer panels from lifting through a specially developed mechanical lock: a bolted steel panel engages with the V-kerbstone, securing the rubber panel reliably in place.

The proven **STRAIL** tie rod system and end restraints provide additional longitudinal stability.

Advantages

- Aerodynamic fatigue strength **verified up to 300 km/h**
- Positive-locking fixation of the outer panels
- High-strength anchoring at the V-kerbstone
- Proven tie rod system and rail foot clamps

Fast installation and removal for track work

On high-speed lines, available possession times are a key factor for maintenance. **vortex** is based largely on proven **STRAIL** components and requires no special tools.

The design allows for fast installation and removal, keeping the rails and track bed accessible for inspection and maintenance work.

