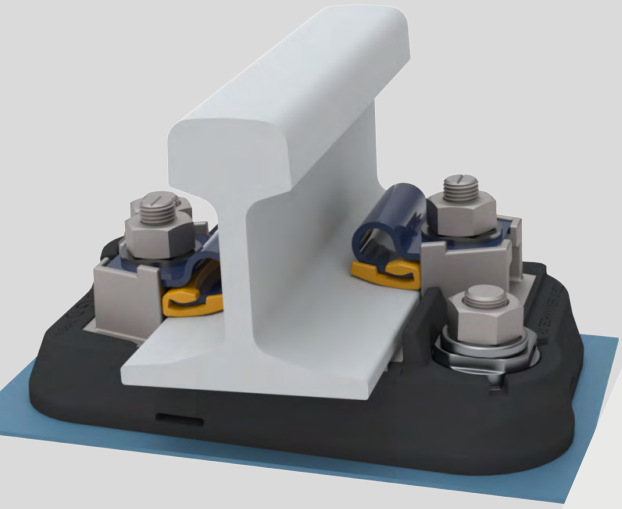
PANDROL
Partners in excellence

Compact Bonded Baseplate

Fastening Systems



Pandrol's Compact Bonded Baseplate reduces ground-borne noise vibrations caused by the major dynamic forces generated by passing trains.

The Compact Baseplate is a smaller size than the equivalent fastening system. It is designed to be used on tracks where the space allocated for the rail fastening system is reduced (viaducts, bridges).

This versatile system can be used on both standard track and turnouts. A single fastening system can be used for the whole track, as the standard model is designed for running track and customised models are designed for switching zones.

The Compact Baseplate provides vertical and lateral stiffness via two independent top and bottom cast baseplates. A one-piece bonded system is factory assembled by bonding with vulcanised rubber. This provides high levels of electrical resistance and good corrosion protection.

TECHNICAL FEATURES

Compact version

Ligther and compact for bridges and viaducts.

Different clip types

The Compact Bonded Baseplate available with Nabla G4 and SKL3 clip types.

Electrical insulation

The system's unique bonding process achieves very high levels of electrical resistance and long electrical leakage paths.

Track-structure interaction

Rail fastening clips are available in low toe load and zero longitudinal restraint (ZLR) configurations. This makes the system ideal for use on bridges and viaducts where the effects of track-structure interaction need to be considered.

Safety anchor

The Compact Bonded Baseplate has a strong anchor with a highly resistant anti-rotation feature for safer installation and easy replacement through screwing.

Highly adjustable

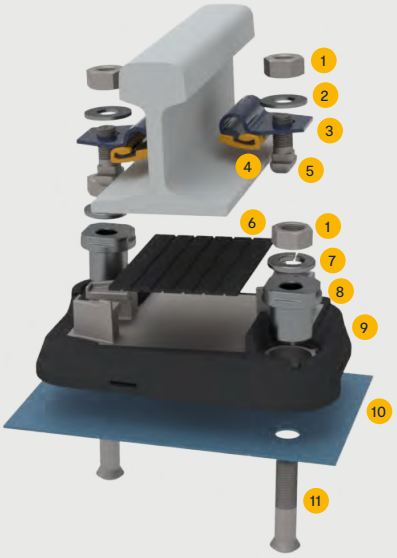
Easy lateral and vertical adjustments, with highly resistant large prongs for safer installation. The range of adjustability is high, with a lateral adjustment of ± 6 mm and a vertical adjustment of + 30 mm. Other adjustments can be done on request.

Robust and long-lasting

Due to its rubber composition, the baseplate is extremely resilient and robust, resulting in an extended product lifespan.

ADVANTAGES

- The system's low stiffness decreases the dynamic load level by reducing vibrations transmitted to the ground and distributing them along the supports. As a result, vibrations are isolated and noise generated by the moving wheels on the rail is attenuated.
- The Compact Bonded Baseplate has a particularly high corrosion resistance. The plate is covered with rubber which acts as a protective barrier between the baseplate and the atmosphere.
- The system provides good track elasticity and a specific longitudinal rail restraint which can be an advantage when controlling the stress in the rails on bridges.
- The system provides electrical insulation for the rail, isolating it from the track bed and avoiding electrical leakage into the ground. In addition to this, the system has a high level of stray current protection.
- Installation is simple, requiring only one person with hand tools for either the entire assembly or the replacement of components. Methods of installation include top-down and bottom-up techniques with the possibility for compact and lateral/vertical adjustments.
- No maintenance required during the product's lifetime.



COMPONENTS

1. Nut
2. Flat washer
3. Nabla G4 clip
4. Clip insulator
5. G4 clip T-Bolt
6. Rail pad
7. Grower washer
8. Adjustment bushing
9. Bonded baseplate
10. Conforming shim
11. Anchor Bolt

SPECIFICATIONS

Assembly performance data	
Recommended categories	B, C, D
Type of track	Slab
Rail inclination	1/20
Rail fixation	Nabla G4, SKL3
Static stiffness	45 MN/m
Dynamic stiffness	55 MN/m
Lateral adjustment	± 6 mm
Vertical adjustment	+ 30 mm
Gauge adjustment	± 12 mm
Anchor bolt diameter	24 mm
Weight	11 kg
Dimensions (L x l x h)	341 x 225 x 54 mm

Performance values can be varied, depending on product configuration. For any other configuration, please contact us.

Standard compliance

- EN 13146
- EN 13481

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