

PANDROL

FASTCLIP SFC



PRODUCT INFORMATION



BASEPLATE SYSTEM:

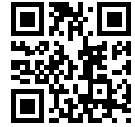
FASTCLIP SFC

The PANDROL FASTCLIP (SFC) baseplate system enables use of the PANDROL FASTCLIP rail fastening system in slab track applications.

The product allows non-ballasted trackforms to take full advantage of the PANDROL FASTCLIP captive fastening system, which offers high levels of vertical and lateral adjustment.

Find more information about the FASTCLIP range at Pandrol.com

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PANDROL FASTCLIP SFC baseplates are designed for use on wet-pour top-down slabs, pre-cast blocks, sleepers and plinths. The product is available in three variants:

2-hole offset baseplate: For medium axle load and shallow curve applications. Proven on high speed systems.

2-hole in-line baseplate: For concrete sleepers embedded in pre-cast concrete. Proven on high speed systems.

4-hole baseplates: For installation on slab track with high axle loads, tight curves, and where compatibility with 4-hole PANDROL VIPA or PANDROL VANGUARD baseplates are required.

Components:

1. Clip and toe insulator

- 250-1250 kgf nominal clamping force, high deflection
- Zero toe load (rail free) option available
- Integral toe insulator reduces rail contact stresses and improves electrical resistance

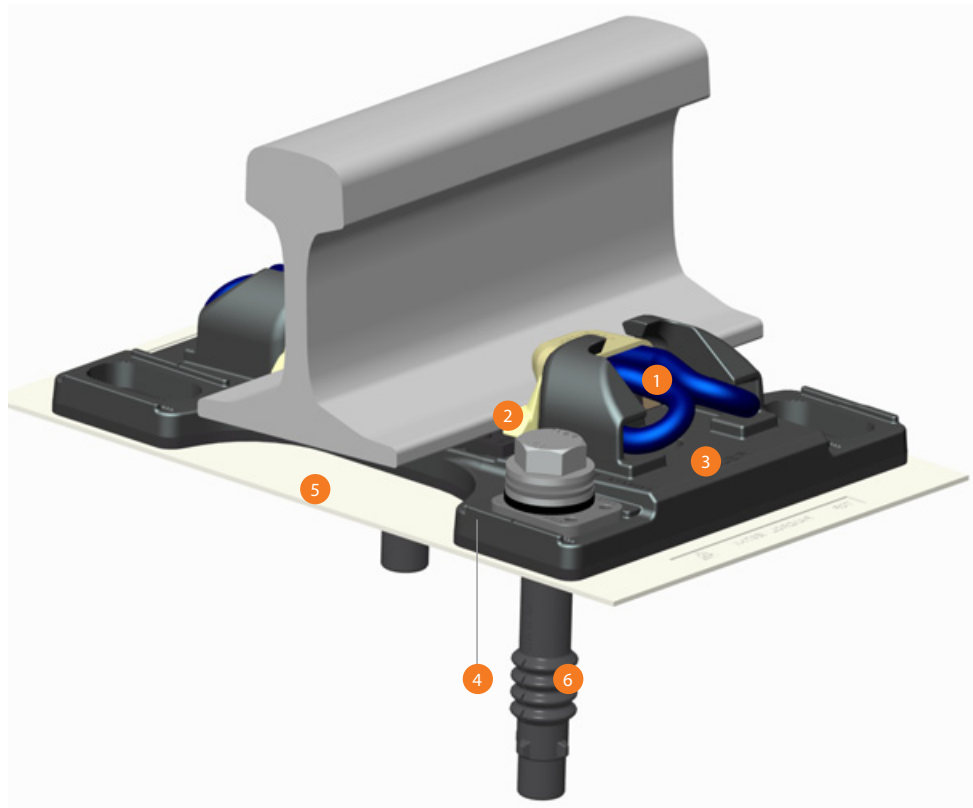
2. High-viscosity nylon side-post insulator

3. Cast SGI baseplate

4. Studded natural rubber rail pad

5. Under baseplate conforming shim

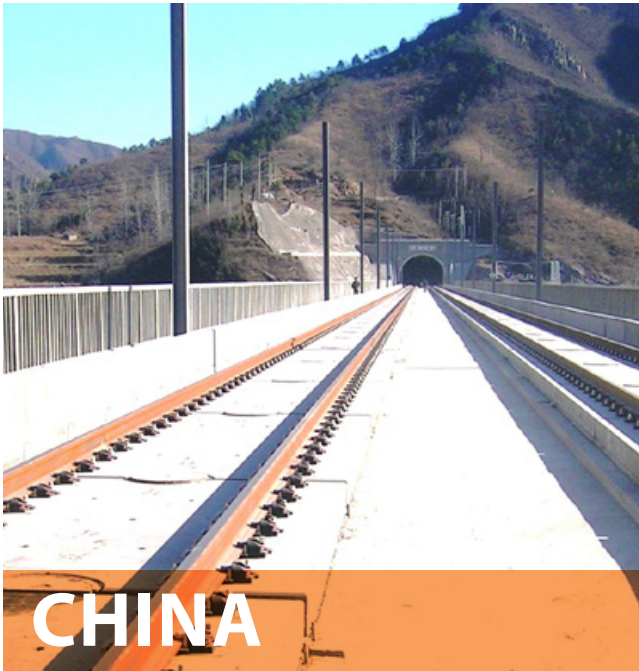
6. Anchors with/without inserts



Shown above: 4-hole baseplate with two anchors. Other combinations are available.



INSTALLATIONS



CHINA



KOREA



UK

VARIATIONS



In-Line FASTCLIP SFC



Offset FASTCLIP SFC



4-Hole FASTCLIP SFC

FEATURES OF ASSEMBLY

FULLY PRE-ASSEMBLED

PANDROL FASTCLIP SFC baseplates are supplied to site as fully pre-assembled units.

HIGHLY ADJUSTABLE

PANDROL FASTCLIP SFC baseplates provide exceptional room for adjustment. Adjustment range is typically +/- 15 mm lateral per baseplate, and + 30 mm vertical. For additional requirements please consult PANDROL.

DUAL RAIL/GAUGE CHANGE

FASTCLIP SFC makes changes of rail section possible, using side post insulators of different thicknesses.

TIMBER SUPPORT

A non-adjustable version of the 4-hole FASTCLIP SFC baseplate is available for timber sleepers.

RAIL-FREE & STRUCTURE INTERACTION

Low-toe load and zero longitudinal restraint (ZLR) options are available for use on structures.

EXCELLENT ANCHORAGE

The PANDROL "hold down" method is an integral part of the rail fastening design and can be provided for specific applications.

ELECTRICAL INSULATION

FASTCLIP SFC electrically insulates the rail from the baseplate and clips, using its rubber rail pad and nylon side-post insulators. A second level of insulation can be provided between the baseplate and slab.

INSTALLATION METHODS

Track can be constructed conventionally by top down (wet pour) or bottom up methods.

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FASTCLIP SFC

- For use on light rail, metro, general main line and high speed tracks
- Suitable for concrete non-ballasted tracks (slab tracks)
- Also for use with concrete or wooden sleepers or bearers
- For heavy haul applications, please consult PANDROL

Application data (Standard products – special variants may differ)

Rail inclination	Provided in the baseplate or concrete as required			
Typical applications	LRT/Metro, general main line and high speed non ballasted tracks			
Clip Type	PANDROL FASTCLIP FC1501, FC1504			
EN13481-5 Track Category	Cat A	Cat B	Cat C	Cat D
Maximum Axle Load*	130 kN	180 kN	260 kN	260 kN
Minimum Curve Radius*	40 m	80 m	150 m	400 m

* For special applications consult PANDROL.

Typical performance data* As identified by Track Category in EN 13481-1

	Value	Test Method
Assembly static stiffness	≈ 40 kN/mm minimum	EN 13146-9:2011
Assembly dynamic stiffness	≈ 60 kN/mm minimum	EN 13146-9:2011
Electrical Insulation	>10 kΩ	EN 13146-5:2012
Nominal toe load	1000 kgf	
Clamping force	>16 kN	EN 13146-7:2012
Creep resistance	>9 kN	EN 13146-1:2012
Lateral adjustment	+/- 20 mm	
Vertical adjustment	+ 30 mm	

COMPLIANCE WITH STANDARDS:

PANDROL FASTCLIP SFC has been tested against the requirements of EN 13481-5:2012 'Fastening systems for slab tracks.' The system meets the requirements of the European High Speed TSI (Technical Standards for Interoperability).

NOTE:

PANDROL is a provider of innovative custom rail fastenings. Data in this document indicates typical performance. Actual performance is dependent on a range of external factors. Please contact us to discuss how PANDROL can tailor products to suit local operating conditions and specific requirements. Technical information in this document was correct at time of printing. Improvements may since have been introduced as a result of our continuous research and development programmes.

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PANDROL TRACK SYSTEMS

63 Station Road
Addlestone, Surrey
KT15 2AR
England

Telephone: **+44 (0)1932 834500**
e-Mail: **info@pandrol.com**
Website: **www.pandrol.com**

