

CLAIMS

1. An anchoring device for use in retaining a railway rail fastening clip having first and second leg portions and a rail-bearing portion therebetween, the anchoring device
5 comprising:
a base member;
an opening in the base member configured to receive a fastening component for fastening the anchoring device to an underlying foundation; and
first and second clip-retaining sides extending from said base member with the
10 first clip-retaining side being spaced apart from the second clip-retaining side so as to define a space between the first and second clip-retaining sides for receiving the rail-bearing portion of the clip;
wherein each of the first and second clip-retaining sides comprises upper and lower clip contact walls defining a passageway for receiving one of the first and second
15 leg portions of the clip, wherein each of the first and second leg portions of the clip contact the upper and lower clip contact walls of the respective first and second clip-retaining sides as the clip moves in a first direction from an initial wedged position towards an engaged position in which the rail-bearing portion of the clip bears on the rail, and
20 wherein the upper and lower clip contact walls are spaced apart in the first direction so as not to overlap one another.
2. The anchoring device of claim 1, wherein the first and second clip-retaining sides are configured such that an initial upper contact point on the upper clip contact wall, at
25 which the clip first contacts the upper contact wall in the initial wedged position, is forward in the first direction of an engaged contact point on the lower clip contact wall, at which the clip contacts the lower clip contact wall in the engaged position.
3. The anchoring device of claim 1 or 2, wherein the lower clip contact walls each
30 comprise a ramp defining an initial lower clip contact point on the lower clip contact wall, at which the clip first contacts the lower clip contact wall in the initial wedged position.

4. The anchoring device of claim 3, wherein the ramp comprises a substantially flat portion.
5. The anchoring device of claim 3 or 4, wherein each ramp is formed by a
5 respective notch in an end of the lower clip contact wall.
6. The anchoring device of claim 5, wherein the notches are laterally spaced apart across a width of the anchoring device.
- 10 7. The anchoring device of any of the preceding claims, further comprising a downwards facing protrusion provided on a bottom surface of the base member, the anchoring device protrusion being configured to slidably engage with a corresponding recess associated with the underlying foundation so as to permit vertical adjustment of the anchoring device relative to the underlying foundation.
- 15 8. The anchoring device of claim 7 when dependent on claim 3, wherein the ramps are provided above the downwards facing protrusion.
9. The anchoring device of any of the preceding claims, wherein an end of the lower
20 clip contact wall that is closest to the upper clip contact wall has an end surface that is angled relative to a bottom surface of the base member with a non-perpendicular angle.
10. The anchoring device of any of the preceding claims, wherein an end of the upper
25 clip contact wall that is closest to the lower clip contact wall has an end surface that is angled relative to a bottom surface of the base member with a non-perpendicular angle.
11. The anchoring device of claims 9 and 10, wherein the end surface of the lower clip contact wall and the end surface of the upper clip contact wall are substantially in line.
- 30 12. The anchoring device of any of the preceding claims, wherein the upper clip contact wall is tapered at an end closest to the lower clip contact wall such that the

upper clip contact wall defines a first lower surface that is angled relative to a bottom surface of the base member with a first angle.

13. The anchoring device of claim 12, wherein the first angle of the first lower surface
5 substantially corresponds to an angle of a chamfer at an end of the first and second leg portions of the clip when the clip is in the initial wedged position.

14. The anchoring device of any of the preceding claims, wherein a mid-region of the
10 upper clip contact wall is tapered such that the upper clip contact wall defines a second lower surface that is angled relative to a bottom surface of the base member with a second angle.

15. The anchoring device of claim 14 when dependent on claim 12, wherein the first
15 angle is greater than the second angle.

16. The anchoring device of any of the preceding claims, wherein the anchoring
device is configured such that the clip moves substantially linearly between the initial
wedged position and the engaged position.

20 17. The anchoring device of any of the preceding claims, wherein the anchoring device comprises a first set of first and second clip retaining sides on a first end of the base member and a second set of first and second clip retaining sides on a second end of the base member, wherein a space for receiving the railway rail is defined between the first and second sets of the first and second clip retaining sides.

25 18. The anchoring device of any of the preceding claims, wherein each of the first and second clip retaining sides comprises a side wall extending between the upper and lower clip contact walls.

30 19. The anchoring device of claim 18, wherein the side walls of the first and second clip retaining sides are laterally inboard of respective first and second leg portions of the clip when the clip is installed.

20. The anchoring device of claim 18, wherein the side walls of the first and second clip retaining sides are laterally outboard of respective first and second leg portions of the clip when the clip is installed.
- 5 21. The anchoring device of any of the preceding claims, wherein the anchoring device further comprises at least one catch feature configured to hold the clip captive when the clip is in an intermediate parked position between the initial wedged position and the engaged position.
- 10 22. The anchoring device of claim 21, wherein the catch feature comprises an abutment surface that engages a corresponding abutment surface associated with the clip so as to resist movement of the clip away from the intermediate parked position.
23. A railway fastening assembly comprising the anchoring device of any of the
15 preceding claims.
24. The railway fastening assembly of claim 23, wherein the assembly further comprises the clip and a side post insulator, wherein the clip overhangs the side post insulator when in the initial wedged position.