



Steadfast

**ANCHOR
SYSTEMS**

Anchor Post System

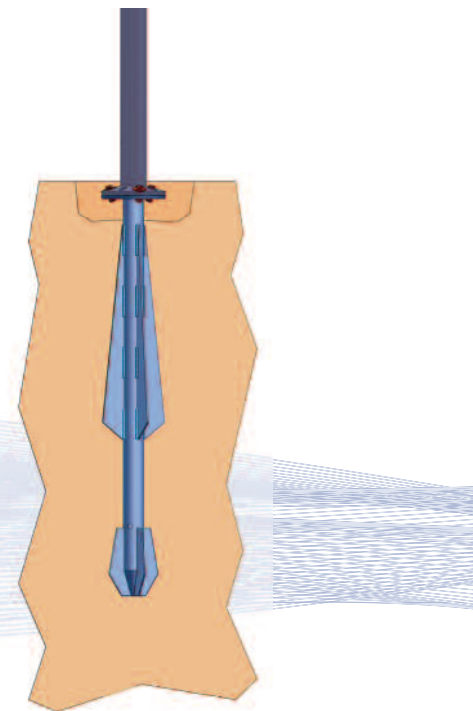


ANCHOR POSTS

Anchor Posts are an innovative patented* system designed by our founder, Ewan Smith, for lightweight foundations using hand held equipment. Ingeniously simple, they fulfil a widespread need for a fast and efficient way of securing small to medium foundations, without the need for concrete, in a variety of market sectors.

Both versatile and adaptable, Anchor Posts provide a rapid and extremely cost-effective means of foundation installation that is up to ten times quicker than traditional methods. Furthermore, installing anchor posts requires minimal labour and equipment and all operations are completed during just one site visit. This combination of factors means that Anchor Posts offer major cost savings.

**Patent Nos: Europe 08 251 833.3 USA 12/372,965*

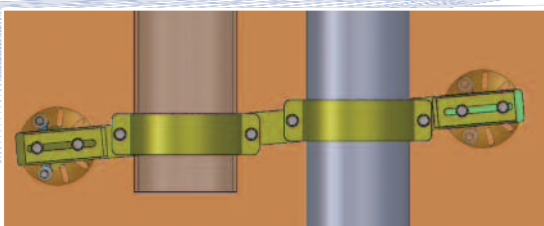
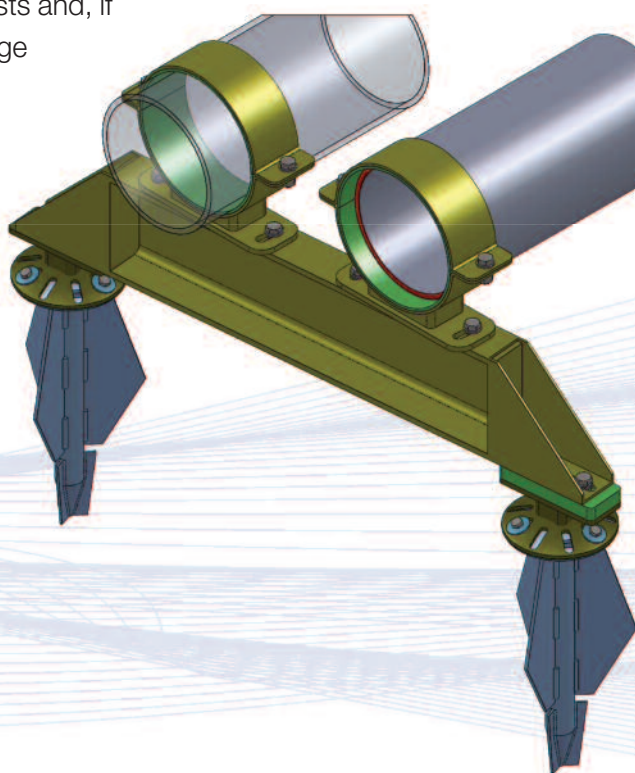




COMPREHENSIVE SERVICE

With considerable experience of all aspects of ground and structural stabilisation, Anchor Systems offers comprehensive customer support including a design and specification service. Its personnel can give advice on the most suitable anchor post for individual projects with their specific load requirements, will conduct site tests and, if necessary, provide installation training or arrange installation via a recommended contractor.

In addition, Anchor Systems also offers a wide range of other geotechnical and structural stabilisation systems which include Duckbill mechanical ground anchors, soil nails, helical anchors, anchor bolts, sock anchors and tree kits.



THE SYSTEM

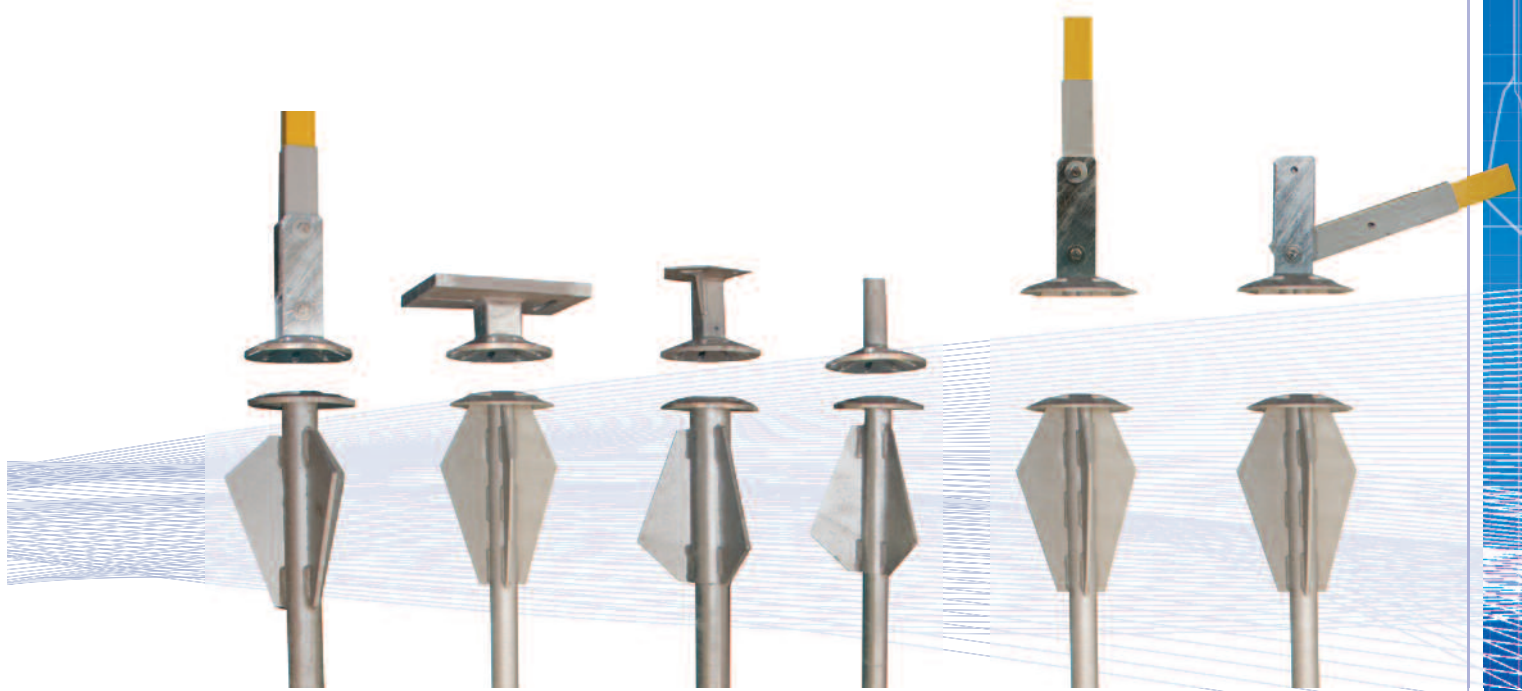
Anchor Posts come in a variety of sizes and formats for use in different applications but they all work on the same simple principle. Call us to discuss your particular requirements and we will advise on the most appropriate anchor post. Whatever your anchor post needs we can meet your demands or produce specials on request.

Apart from its flexible usage, the principle benefit of the anchor post system is its speed of installation into most displaceable ground conditions. Once a C.A.T. scan has been conducted to detect any hidden utilities, the anchor is simply hammer driven straight into the ground. The alignment plate is then secured to the top at surface level and an interface plate of the required specification is bolted to the plate. It is immediately ready for its desired application – fitting of signs, securing cable posts, fencing and the like. This rapid economical procedure allows far more posts to be positioned in considerably less time.



Unlike traditional post installation methods, anchor posts require no digging, no concrete or curing time and no return visits, making them significantly quicker and more cost-effective. This is particularly important on rail and motorway installations, where any track or lane closures can be kept to a minimum and travel disruption can be avoided.





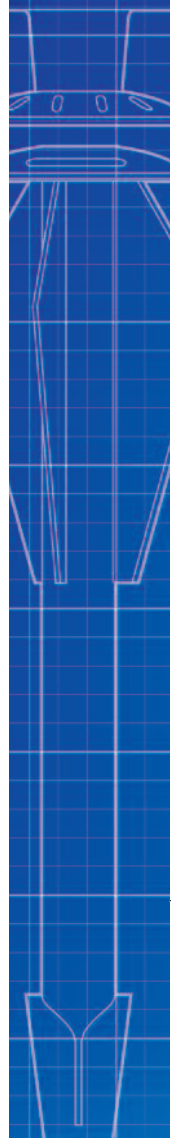
THE RAIL INDUSTRY



The Anchor Post system was originally designed by Anchor Systems for Metronet Rail SSL (London underground) as a rapidly installed post to support trackside cables on the LU Sub Surface Railway. Since that time they have been used extensively in the rail industry, by both London Underground Ltd and Network Rail.

Speed and ease of installation, by a small labour force, were all critical in Anchor Posts getting specified. Their versatility then resulted in them being used for a variety of other applications from cable stiles to foundations for lighting, signalling and embankment walkways.





SOLAR PANELS

With the growth in alternative sources of 'green' energy, Anchor Posts have proven themselves to be an extremely reliable and efficient way to secure the support framework for solar farms. As many of these installations can be in relatively inaccessible rural locations, the fact that Anchor Posts need a limited amount of lightweight equipment and no concrete is a major practical benefit.

Not only are Anchor Posts far quicker and cheaper to install but they are also seen as an environmentally friendly option as they are manufactured from recycled steel and they do not require concrete to be poured into the ground. Many companies wish to avoid such ground contamination, particularly if the land is to be returned to its natural state after its design life.



WHAT OUR CUSTOMERS SAY ABOUT THE ANCHOR POST SYSTEM

"The system meant we could install the required number of anchor points (16) in a couple of hours rather than days and the structural erection could begin as soon as the bolts were tightened. The equipment required was all fully portable, so easy to get on and off site and two men did all the installation once the marking out had been carefully completed."

The system was remarkable in its simplicity but very, very effective. We are in the process of designing a new structure and will be using this system again."

A leading solar panel installation contractor

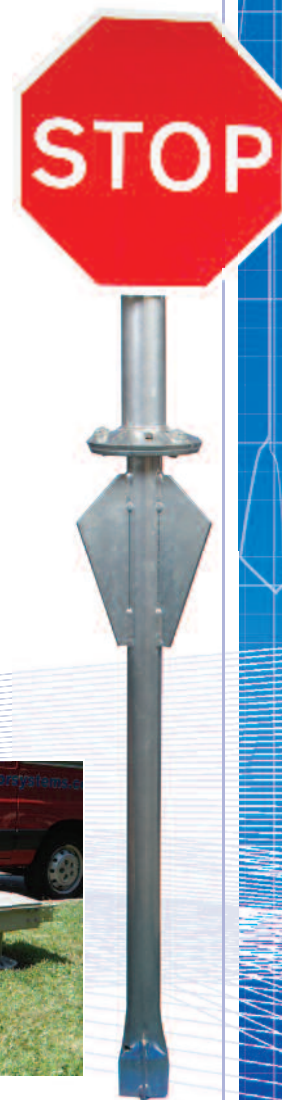




HIGHWAYS AND OTHER USAGES

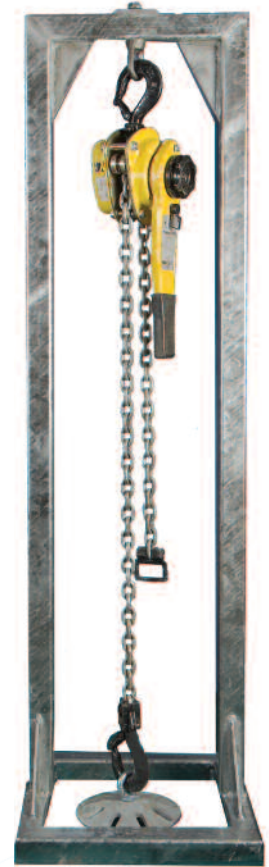
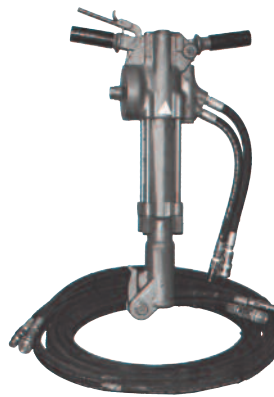
Anchor Posts have an extensive range of applications:

- Trackside cable management
- Cable stiles
- Lighting and signalling foundations
- Embankment walkway foundations
- Solar panels
- Road signs
- Gabions
- Motorway fencing
- Barriers
- Park and playground equipment
- Rockfall barriers
- Security fencing
- Mooring bollards
- Handrails
- Park benches
- Pipeline anchoring
- Cycle path signs
- Pedestrian signs
- Street furniture



EQUIPMENT AND ACCESSORIES

Anchor Systems is able to supply a full range of necessary installation equipment and associated accessories.

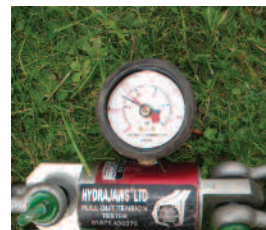


INSTALLATION

Installing Anchor Posts is extremely quick and simple.

1. Mark out the position of each Anchor Post to be installed during the shift.
2. Make a 100mm deep x 300mm square dished excavation for each Anchor Post.
3. CAT scan the excavations to identify potential hazards, such as live cables or other services, to a depth of 2m.
4. Position the Anchor Post with the tip over the excavation, insert the drive rod and connect the hydraulic hammer and then lift the complete system to a vertical position.
5. Drive approx. 300mm then stop, ensure that the system is vertical and make any adjustment. Drive until the fins are 100mm from the bottom of the excavation then stop, check alignment again before final drive to depth.
6. Stop when the domed plate is at original ground level; do not drive the plate to the bottom of the excavation.
7. Fit a patch of Denso Tape over the top of the anchor post, covering the drive hole then position the cable post onto the Anchor Post and align vertically.
8. Fit the nuts and washers and hand tighten only.
9. Make final checks to ensure the post is vertical and then tighten the nuts gradually in rotation.
10. Only when all three nuts and bolts are tight, apply a 40Nm torque load using a certificated torque wrench. Do not over tighten.
11. The system is now complete and the lateral support rails can be connected to the cable posts and testing the system can proceed.

Full installation details are available on request from Anchor Systems.



TESTING

Testing of the anchor post is a requirement, to prove the suitability of the ground conditions. Testing requirements are covered in a separate document, available from Anchor Systems, set out by the Design Engineers, Mitchell-Horton, and will be based on the site specific loading requirements.

1. Using a sledgehammer and a hand drive rod, percussion drive the DB-68 anchor into the ground, at the same angle as the pull direction (Normally 45°), until just the loop at the end of the wire is showing above ground.
2. Place the drive rod through the loop in the wire and pull sharply. This will load-lock the anchor in the ground.
3. Connect the in-line load cell to the wire tendon using a 'D' link shackle. Attach the chain pulley to the in-line load cell and the top of the cable post.
4. The Datum marker is then set at the base, directly in line with the load cell and on the opposite side, hard up against the dome plates. **YOU ARE MEASURING THE MOVEMENT OF THE BASE PLATES, NOT THE DEFLECTION OF THE CABLE POST.**
5. Using the chain pulley, load the system until the load cell reads the required test load for the length of cable post.
6. Measure and record any movement between the Datum and the plates. Record any recovery once the load on the cable post has been released.



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