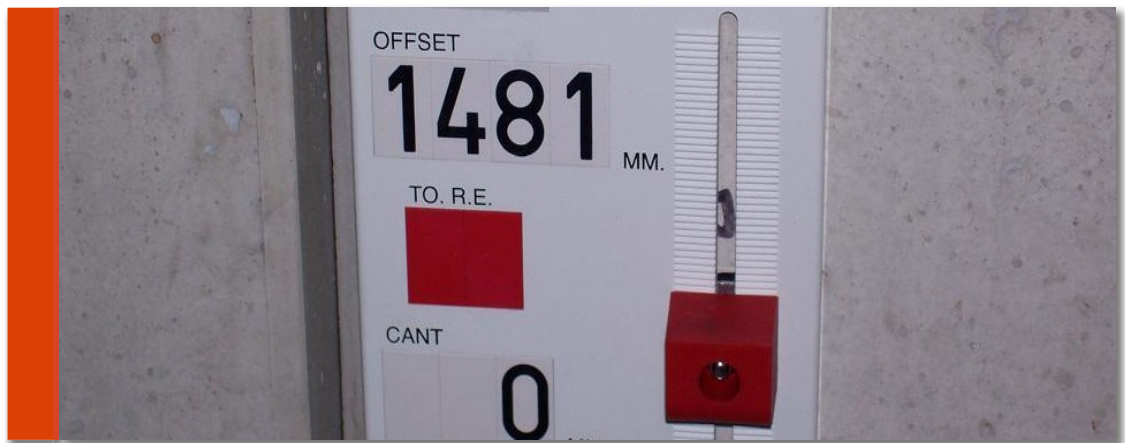




## Other Services





## Other Services

### Datum Plates

We stock & install plastic datum plates for use throughout the rail environment, these are affixed to all structures located within 2.5m of the nearest rail. The use of datum plates also allows any permanent way team to effectively remove the track & re-install it back to its original position, or simply for general maintenance. These plates can be installed on a wide variety of structures (ie walls, platforms, bridges, OHLE masts) and can be mounted in different methods from adhesives to fixings.

We have installed hundreds of datum plates throughout the country in a variety of different locations.

### Geometry Marking

Geometry Markers are installed to indicate the start/end of each geometric element i.e. straights, curves (and radii information) and also transitions (and length).

Cant markers are installed at each geometry marker as well as marking the position of every 5mm increment of cant in a transition.

These plates are required for any permanent way works, and are intended to provide future tamping/maintenance crews with the information of what geometry the track should have.

We use the 2 main geometry marking systems, T-Mark engraved plates & Duratherm.

The T-Mark system consists of plastic plates, with the unique geometric information specifically engraved onto it, these are fixed to the railway sleepers by means of adhesive and/or hammer fixings. This system is easy to install, but it requires the plates to be manufactured in advance, (however, for the vast majority of sites, the geometric information is already known as part of the design).

The Duratherm thermoplastic system, consists of a yellow plastic background with individual black lettering, which is then heated to bond together and with the sleeper. The advantage of this system is that any information can be displayed immediately, handy for the 'panic' jobs where time does not allow for the T-Mark plaques to be manufactured.



## Other Services

### Platform Gauging

We undertake platform gauging surveys using a variety of different methods, depending on the clients requirements. Typically these surveys consist of measuring the horizontal & vertical offset from the nearest rail, to the front of the platform coping stone.

#### Possible methods include –

Platform gauge utilising a plastic frame with a ‘laser disto’ that measures from 2 fixed points on the bracket to provide the offset measurement, all data is stored on a pda. This would be followed by cant & gauge measurements with a conventional crosslevel.

Trolley based survey, which simultaneously measures the cant/gauge/versine & coping stone offset and additionally coordinates all these points to provide a CAD drawing & spreadsheet.

Reflectorless survey, this system is ideal for stations where possessions are unavailable, allowing us to survey the rail positions & the platform edge without needing a possession/isolation.

In all cases a target is placed on the front of the platform coping stone so the theoretical intersection between horizontal & vertical faces is reproduced.

### Cant/Gauge Surveys

We can carry-out cant/gauge surveys using traditional equipment, although we recommend the use of one of our specialised trolleys (manufactured by [www.consillia.co.uk](http://www.consillia.co.uk)). These can accurately measure the cant/gauge/chainage, versine and twist at very frequent intervals. All data is stored on either a memory card or on one of our trolleys, also recorded on a paper readout).

The trolleys are pushed along at walking pace, and allow us to carry out large surveys (approx 4000m per hour), which would not be easily possible with conventional methods. The trolleys can be set to calculate the twist values over a specific twist base, such as 2m or 3m, making them ideal for carrying out hand-back surveys. The cant/gauge surveys can be as simple or complex as the client requires, measuring either;

Simple - Just chainage/cant/gauge, recorded on memory card (and/or paper)

Complex - chainage/cant/gauge/versine (L/R HZ/V) twist and co-ordinates. GPS can also be fitted for constant recording of a trace of the route (We are one of the only survey companies to offer the GPS functionality in the UK).