

LED Road Sign Case Study

The energy efficient edge lit LED road sign

BEAR Scotland Case Study

In March, the first trial of a Eurosigns LED traffic sign began on a Scottish trunk road. It forms part of a package of signing improvements designed to tackle accident problems in the area.

BEAR Scotland, Eurosigns joint venture with Jacobs and Ennstone, is responsible for managing and maintaining the trunk network in both southeast and northeast Scotland. BEAR chose the approach to a crossroads junction, heading southbound into Pathhead on the A68, southeast of Edinburgh, for its trial site.

The 600mm-diameter warning sign was installed on a standard 76mm pole within a collapsible unit with a NAL RS76 socket – in line with BS EN 12767 passive safety requirements.

This internally-lit LED sign was found to perform extremely well in BEAR's night-time appraisal, says consultancy manager Eddie Ross. 'The high level of illumination across the whole sign face area provided a uniform and even level of light, with no dark areas or shadowing.'

The trial is just one element of the company's sustainability review. 'We are looking at every aspect of the business with respect to sustainability,' Ross explains. 'Our client, Transport Scotland, which is an agency of the Scottish Government, is particularly keen to reduce energy consumption across the trunk network as part of its very strong climate change agenda.'



'We're monitoring the sign at the moment, but in sustainability terms, it speaks for itself. So we'll be considering the case for using LED signs on a more widespread basis.'

Power solutions

Eco powered	Mains powered	Innovative installations
<p>Solar power</p> <p>Wind power</p>	<p>Wide base post</p> <p>Top mount termination</p> <p>Passive safe installations</p>	<p>Slot cut civil savings</p> <p>Multiple ring wiring configurations</p>

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Dudley MBC Case Study

The location proposed for this sign was at a horizontal traffic calming scheme outside a primary school.

Careless Green, Lye is a narrow road which fronts the school where the footways are also substandard for use by a large number of parents with pushchairs. The road is also on a hill which vehicles had a tendency to speed down as the road is a convenient rat-run to/from a number of small industrial estates.

A build out 1.5m wide was to be installed on both sides of the road over a length of 15m with the priority given to uphill traffic flow away from the school.

The choice of a Eurosigns sign, came after a review of an electroluminescent units and the Eurosigns LED sign, which I had seen in The Surveyor magazine. After a short presentation on both products it became evident that the LED product was far brighter within the office environment and therefore had potential for far better performance on site.

Further discussion with our street lighting colleagues on the future maintenance aspects took place and they approved the installation of the circular priority giveaway sign as a test location.

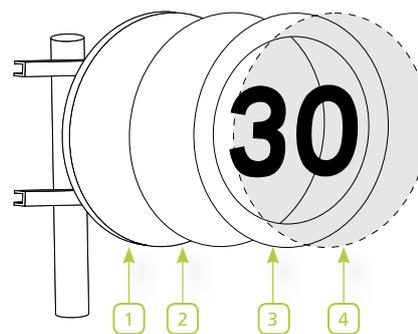
Over the six months since installation I have made numerous visits to the site to review the performance of the scheme and have been very impressed with the sign. Externally during the daytime the 3M DG3 retro reflective material performs exactly the same as a traditional sign plate, however, at night the lack of an external lantern minimises light pollution and concentrates the drivers attention on the regulatory statement to give way.

As a result of this success to date we will be carrying out a second test of other types of units including a triangular give way unit in a more heavily trafficked and urban location.

John Hindley from Dudley Council is the project engineer in the Traffic Safety Management department.



LED Sign exploded diagram



1. Industry standard composite backing plate with fixing bars. No scrap value
2. Encapsulated LED acrylic sheet
3. Microprismatic sign face
4. Anti dew or anti graffiti finish as standard