

Road markings

Workplace transport site safety information sheet WPT27

This information will be useful to anyone who uses workplace transport or who works where it is used. It will help employers, managers and supervisors to assess their workplace and make improvements. The checklists will help you to prepare your risk assessment.

Road markings direct, guide and define boundaries for vehicles and pedestrians. On site they are used to channel vehicle and pedestrian traffic, to define parking, non-parking, give-way and loading areas. They play an important role in preventing accidents by limiting pedestrian and/or vehicle conflicts and defining paths through hazardous areas.

Road users (vehicle drivers, cyclists and pedestrians) need defined boundaries and routes in which they are allowed to work and move. Problems occur when boundaries and routes are not clearly defined.

Common problems

Poorly defined areas: Conflicting movements have the potential to cause serious accidents. For example, if loading areas are not clearly defined pedestrians and other vehicles may enter these areas – where there is increased risk of injury or damage.

Worn and faded markings: Road markings have their limitations. They are easily worn and fade through weathering which results in the markings becoming incomplete and difficult to read. When wet or dirty, road markings become less visible to drivers, cyclists and pedestrians.

Too few or too many markings: Often, sites have too few markings, which can result in poor control of pedestrian and vehicle movements. Accidents can occur if pedestrian routes or hazardous areas such as loading bays are poorly defined; pedestrians and/or vehicles may enter unsafe areas. In some cases the opposite can occur with too many markings providing conflicting information; site users are left unsure about where to go, and are more likely to behave in a way that puts them at risk of an accident and/or injury. Too many markings may cause confusion with the potential to cause dangerous behaviour.



Changes to site layout and operation: Sites often change in layout and operation – problems can occur when road markings are not changed to reflect the new layout and use. Redundant road markings must be fully removed as painted-out markings can remain fully visible in wet or dark conditions.

Road markings not clearly visible: The visibility of road markings can be severely restricted because of the profile of the road. For example, road markings can be placed on an area of the site that slopes or curves away from the driver's line of sight. In such cases, the risk of accidents due to conflicting movement increases significantly and other means of directing traffic should be considered.

Inappropriate materials: The use of inappropriate materials will result in road markings that wear quickly and are not easily seen.

Checklist – what to look out for

- Road markings may have worn and faded over time due to weathering and wear by traffic.
- Too few road markings.
- Inconsistent or incomplete road markings.
- Too many road markings.
- Site layout and operation has changed but the road markings have not.
- Road markings frequently cannot be seen by site users because of the profile of the road surface.
- Inappropriate materials used.

How can you deal with common problems?

Mark parking areas: Marking parking bays for the various types of vehicle that use the site increases parking capacity and reduces the risk of collision.

Replace worn or faded road markings: Once they become worn and faded, road markings need to be renewed so that they remain effective. Road markings need to be clear and visible to all site users so that entry into dangerous areas is discouraged and the likelihood of conflicting movements is reduced.

Provide new markings: It may be necessary to provide new road markings if there is a change to your site or in an area where there are no markings and where accidents are known to have occurred.

Remove unnecessary or conflicting road markings: If markings are unnecessary or give conflicting information then they need to be fully removed – they can misinform and confuse drivers and pedestrians.

Replace road markings with signs: When looking to replace or alter road markings, consider whether markings are the most appropriate way of giving the necessary information to site users. For example, direction signs may be more appropriate for marking routes than lines on the ground.

Use coloured surface dressings to define specific areas: Coloured surfacing can be used with road markings (and signs) to provide segregation and to define loading, pedestrian and turning areas. It can make safe routes through hazardous areas more clearly visible.

Use the correct materials: It is important to use proper road marking materials to make sure that they are durable and remain visible to drivers even in bad conditions.

Checklist

- Make sure loading bays, parking areas and segregated pedestrian and vehicle routes are correctly marked out.
- Remove unnecessary or incorrect road markings.
- Provide new road markings where there are currently none but they are needed.
- Replace road markings with signs where appropriate.
- Renew worn or faded road markings.
- Use coloured surfacing to reinforce road markings and define specific areas.
- Make sure road markings are not covered or obscured.



Checking your site

Carry out a visual inspection of your site to look for problems with road markings. Walk around the premises, make notes and take photographs of any problems. In particular, make a note of areas where markings have worn or faded, areas where there are no road markings or where there are wrong markings, and any areas in which dangerous and conflicting movements occur. Mark the problem areas on a site plan.

For a more detailed and wider-reaching guide see the *Site inspection: Workplace transport checklist* at www.hse.gov.uk/workplacetransport.

If you don't feel you can complete an inspection yourself, you may want to commission a professional inspection or survey. This may be the most cost effective and comprehensive option.

Checklist

- Carry out a visual inspection of all road markings on your site.
- Pay for a professional inspection or survey if you feel you cannot do this properly yourself.
- Ask staff whether road markings on site are helpful or cause problems.
- Consider commissioning a traffic and pedestrian flow survey to identify any problems with existing road markings or areas where road markings may be needed.

Where to get help

If you identify any problems with road markings on your site, you will need to consider what action you should take and whether you are able to do the work yourself. If you are unsure, speak to your health and safety workplace representative or contact HSE for advice. In most cases, if you are unable to do the work yourself, you will need to employ a road lining contractor to provide new road markings.

You can also get advice by speaking to other similar local businesses – look for examples of good practice. Contact your local trade association or Chamber of Commerce for recommended local suppliers or look in the *Yellow Pages* for listings of road lining contractors.

Checklist

- Can you fix the problem yourself or do you need professional help?
- Seek advice from your local Chamber of Commerce.
- Speak to your health and safety representative and talk to your staff.
- Get professional help – employ a road lining contractor to carry out the necessary work.

What might it cost?

- A professional site survey is likely to cost around £2000.
- New road markings: £10 per 10 m of continuous white line. (The price will increase if the line is made thicker or is a different colour.)
- Removing road markings: £60 per 10 m of white line. (Price is dependent upon the thickness of the line and whether it is continuous.)
- Coloured surface dressing: £100 for an area of 10 m².

(These costs are given as a guide and may vary significantly for individual sites and circumstances.)

Find out more

Traffic signs and road markings wherever possible should be in accordance with standard road markings and comply with the *Traffic Signs Manual*.

Traffic Signs Manual: Chapter 5: Road markings The Stationery Office 2003 ISBN 978 0 11 552479 0

Traffic Signs Regulations and General Directions 2002 SI 2002/3113 The Stationery Office 2002 ISBN 978 0 11 042942 7

Segregation Workplace Transport Information Sheet WPT21 HSE 2009 www.hse.gov.uk/workplacetransport

Signage Workplace Transport Information Sheet WPT22 HSE 2009 www.hse.gov.uk/workplacetransport

Workplace transport safety: An employers' guide HSG136 (Second edition) HSE Books 2005 ISBN 978 0 7176 6154 1

DfT, DSA *The Official Highway Code* (Revised 2007 edition) The Stationery Office 2007 ISBN 978 0 11 552814 9

Designing for deliveries Freight Transport Association 1998 ISBN 978 0 902991 66 8

Further information

HSE priced and free publications can be viewed online or ordered from www.hse.gov.uk or contact HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA Tel: 01787 881165 Fax: 01787 313995. HSE priced publications are also available from bookshops.

For information about health and safety ring HSE's Infoline Tel: 0845 345 0055 Fax: 0845 408 9566 Textphone: 0845 408 9577 e-mail: hse.infoline@natbrit.com or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG.

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This document contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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