

Balfour Beatty introduces safety solutions

Information sheet WPT15

This case study is part of a series, which give examples of good practice to reduce injuries due to falls from vehicles through sensible management of health and safety risks in the workplace.

The challenge

Balfour Beatty Utility Solutions' national operations consist of a variety of tasks that present a risk of falling from vehicles.

After reviewing incident trends, it was found that there was a need to improve safety while working at height.

Finding a solution

An analysis was conducted to assess the risk of falls from vehicles. Following this, a report was generated with recommendations. The report identified that vehicle access points varied greatly, in design and function, between the different vehicles within the fleet. However, the accident trends highlighted the majority of incidents related to lorry mounted cranes and 7.5 tonne+ tippers.



Figure 1 Typical access ladder of a lorry mounted crane

From this, a working group was set up. It consisted of representatives from vehicle manufacturers and suppliers, vehicle drivers, various departments within the business and Balfour Beatty Fleet Services.

From the initial working group meetings, and working in partnership with the key stakeholders, a number of solutions were identified and trialed.

Results

A number of solutions have been successfully delivered, and will be rolled out across the business as part of a long-term programme.

Crane access platform

- The crane unit is turned around, which repositions the cranes outriggers allowing for a wider access ladder.
- New ladders have been made and have equally spaced steps that are wider and deeper with improved grip. In addition, the ladder is designed with an incline, which provides a more natural position while climbing.
- Remote controlled, lorry mounted cranes are being trialed with the view of preventing or reducing the need to work at height.



Figure 2 Redesigned ladder

Cab access

- Cab steps are being replaced with a highlighted step and grab handles.
- Maintenance inspections now include the replacement of worn or damaged access steps.
- A low entry cab for lorry mounted cranes is being trialled. This should provide a reduced access height and, a folding passenger door will allow occupants to walk forwards out of the cab, rather than having to climb down backwards.

Vehicle body

- A folding access ladder that provides an inclined access, with wider, deeper steps and a greatly improved grip pattern cut into the step, has been designed.
- The crane access platform area has been redesigned to provide an access point to the body from the platform.
- The access platform design of tarmac vehicles has been changed, and allows spillages to fall into a catchments tray, while providing improved grip.



Figure 3 Folding ladder with grab handles



Figure 4 Highlighted steps and handles

Awareness campaign

- Top tips flyers were sent to site managers' home addresses, advising them on how to avoid falls from vehicles within their teams.
- Top tips flyers were given out to drivers and passengers of vehicles over 7.5 tonne on how they could avoid falling from a vehicle.
- A presentation on 'Falls from vehicles' was circulated and used as a briefing by regional HSE teams.
- Stickers were placed on cab doors to remind passengers to always use three points of contact when getting in and out of the vehicle.

Further information

HSE website: www.hse.gov.uk

Workplace transport: www.hse.gov.uk/workplacetransport

Slips and trips: www.hse.gov.uk/slips

Falls from height: www.hse.gov.uk/falls

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Preventing slips, trips and falls from vehicles: The basics

WPT01 Information sheet HSE 2007 www.hse.gov.uk/pubns/wpt01.pdf

Safe access to road-going vehicles: Specifying the right

equipment WPT02 Information sheet HSE 2007 www.hse.gov.uk/pubns/wpt02.pdf

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This leaflet 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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