Balfour Beatty and Billingtons join forces for safer sites

Reducing falls from vehicles case study 6

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
When Balfour Beatty Ltd and steelwork subcontractor Billingtons were working together on the demolition and rebuilding of York College they needed to make their working practices safer. The £47 million, two-year project was set on a large site in York, surrounded by green fields, housing and a main road.

Both companies needed to find safe ways to unload structural steel and concrete panels around the site, and comply with the Work at Height Regulations 2005.

Next steps
The two companies looked into a number of different options. The most flexible was to build a two-part, edge-protection style gantry from tube and fitting scaffolding. This could be craned into position around the two sides of the vehicle when it parked at any number of different locations on the site. Or, at times, it was left in position for the vehicles to drive between.

Results
A ladder frame was built into the gantry to allow safe access to the bed of the vehicle. The gap between the bed of the vehicle and the edge of the gantry is never more than 150mm.

The system makes sure that safe unloading happens at different locations on site, which is efficient in terms of handling of materials and time. Also, where there is space onsite, the system can be set up as a drive-through unloading area.

Figure 1 Drive through unloading gantry
Balfour Beatty have also utilised a similar system on their £530 million project at Birmingham Hospital, using a system scaffold, to address the issue of falls from vehicles.

Figure 2 System scaffold unloading gantry

Figure 3 Safe stair access onto the scaffolding system

This unloading bay is constructed from a system scaffold. The vehicle reverses in to the area and then the vehicle bed can be safely accessed from the scaffold platforms using the stair access that has been incorporated into the scaffolding.