



# Zero tolerance

Human nature dictates that accidents and deaths caused by working at height and in confined spaces will always be with us. Reality or defeatism? Brian Wall reports

**W**orking at height legislation has been in place for years, yet serious accidents and fatalities still happen in the workplace. On the plus side, campaigns to raise awareness – such as the HSE's 'Shattered Lives' crusade last year, urging employers to make sure workers are afforded the maximum protection when undertaking potentially hazardous tasks – have clearly had a powerful impact.

Certainly, safety standards are now showing improvement across all industries, as evidenced by

the statutory reports produced by the HSE. Its annual figures for 2008/9 show there were seven fatal falls from height in the manufacturing, process and service industries, representing 8% of all fatal accidents in these sectors. Far more people were affected by what are known as serious and 'over three day' accidents: those that cause injury severe enough to warrant three or more days off work. In the same sectors during 2008/9, there were around 3,500 serious falls from height accidents, (around 15% of the total accidents in those industries) and 6,100 over-three-day accidents – around 6% of the totals for those industries.

## Work at Height Regulations

The Working at Height Regulations 2005 set out three simple rules:

- 1** Avoid work at height, if you can. If you don't need to go up there, don't! If work at height cannot be avoided, then: prevent falls by selecting and using the right access equipment; and minimise the impact of any fall. Where you cannot eliminate the risk of a fall, use work equipment or other means to minimise the distance and consequences of a fall, should one occur
- 2** Any work at height must be: kept to a minimum; properly planned; and appropriately supervised.
- 3** All work must also be carried out by someone who is trained and competent, and able to complete the task safely. The competent person must be able to erect, use, dismantle or operate, as appropriate, the selected access equipment.

### No other way?

Ultimately, when working in a dangerous environment, whether at height or in a confined space, it is essential first to ask the question: 'Do I have to do this job and, if so, do I have to do it this way?' If the answer is 'yes', then the job must be planned and executed by the safest means. That entails taking expert advice and using the correct safety gear where necessary. In many industries, it is not possible to eliminate the work or the method, so the emphasis then has to be on reducing risk, and developing the safest and most effective practices.

This is where the Work at Height Regulations

2005 come in (see panel left). They apply to any work in any place where there is a risk of falling a distance liable to cause personal injury, including working at or below ground level.

So are ladders the big enemy and to be avoided at all costs? “Contrary to popular belief, the HSE has not banned ladders from the workplace,” states Jonathan Wiseman, sales manager of truck-mounted access cranes firm CTE UK. “For simple, one-off jobs at low levels, these are still ideal access tools. However, where the task is longer term or the area being accessed higher, then a semi-permanent access platform, such as a portable access tower or scaffold, might be more appropriate.”

While towers and scaffold provide good access to many applications, there are still drawbacks. Generally more appropriate for working up against a wall, by their very nature they can also obstruct access to some of the working area, if a strut or spar gets in the way. “They take time to erect and take down, which limits their efficiency, and they can obstruct other activities in the area,” adds Wiseman.

**Staying mobile**

Fortunately, there are a number of options when it comes to mobile access platforms: low level; medium level for indoor and outdoor applications; and higher level outdoor access. Then, for the very tallest applications, to heights of 100m or more, it is likely that the access platform will be rented in for very short periods or operated by a contractor.

“The baskets on the very biggest machines not only reach the upper levels of some of the tallest industrial and residential structures, but also have the capacity to carry two or more people, and a good payload of equipment,” advises Wiseman.

Meanwhile, new equipment such as PAVs (push around vehicles) and podiums have required operators to use ever more complex bits of kit, points out Jay Barford, senior safety, environment,



**Tag matches**

Chris Nix, UK sales manager at equipment status indicators firm Scafftag, believes it is imperative that access-related equipment be properly maintained and managed to avoid potential accidents and subsequent disruption and cost to plant. One solution is to implement an effective inspection and visual tagging system.

“While a visual tagging system isn’t a legal requirement, many engineers have recognised the benefits of using such a system and adopted it as a solution to aid the safety inspection process, which is a requirement under law. As a result, visual tagging is becoming more commonplace and workplace safety is improving,” he says.

There is a wide range of visual tags available for specific purposes, whether for scaffolds, podiums, ladders or fall arrest equipment. “Tags should be placed in areas where they are easily seen by anyone working on, or with, the equipment – eg, at the point of access or near the control mechanisms. The tags can also be fitted with RFID chip technology that allows inspection to be carried out electronically, and can transform safety, maintenance and identification activities into a simplified paperless process.”


And one more point: “With copycat products available on the market, it is important that companies ensure they purchase from a reputable supplier that has many years’ experience and knowledge to advise on what is best for engineering companies,” warns Nix.



health and quality manager from equipment rental specialist Speedy. “Training in the correct use of ladders, for example, is relatively straightforward. But now there needs to be a shift of emphasis towards training staff in how to use the new and more complicated access equipment to avoid accidents,” he says.

“We are rolling out a number of our own initiatives. For example, on lifting equipment, such as portable cabins, by raising them from the ground up, rather than by attaching lifting gear to their roofs. As a result, we’re now looking into whether more of our accommodation units can be modified, with our Enviro-Cabin set to join the roster soon.”

Another area where an increase in the accessibility of sophisticated equipment and training has undoubtedly led to a reduction in accident rates is in confined spaces, he comments. “Legislation has remained unchanged for 13 years and rightly so. Today’s technology has made these environments far safer to work in, be it from better harnesses, winches, breathing apparatus, emergency escape sets or specialist sensors, to name but a few.” Once again, though, selecting the best equipment, providing staff with proper training, and adopting a work culture of care and vigilance should be uppermost in everyone’s minds.

Ultimately, whether the task involves working at height or in confined spaces, every job carries the potential for serious injury and, in some cases, death. If that possibility is borne in mind every time – and the highest levels of safety precautions invoked – the chances are that engineers and technicians, asked to work at height or in confined spaces, will go home safe and sound at the end of the working day. 

**Pointers**

- When working in a dangerous situation, the first question is: ‘Do I have to do this’ and, if yes, ‘Do I have to do it this way’
- If the answer is yes to both of the above, then engineers must take expert advice around methods and safety equipment
- The emphasis has to be on reducing risk, and developing safe and effective practices
- For simple, one-off jobs at low level, ladders are fine
- Towers and scaffolds have their place, but also their limitations
- Mobile access platforms are excellent solutions, but training is also essential