# Heights

There are many concerns when it comes to working at height, not least cheap and inferior products that are now ascending the UK market. Brian Wall reports



orking at height is an area where plant engineers generally enjoy a good record, ensuring that those performing potentially dangerous tasks are not exposed unduly to danger – and that they have the right equipment and remain vigilant.

Yet our best efforts can be undermined, if management fails to meet the same high standards. Take, for example, the raft of cheap products now flooding the UK market. These may offer only limited protection to users by, for instance, not providing adequate guardrails as standard or failing to meet minimum requirements for resistance to overturning. But when budgets are tight, managers may still be tempted to buy such goods, even though it's against their better judgement.

## Important milestone

So what can be done to militate against these enticements? A significant step forward, where mobile access towers are concerned, is the completion of the long awaited review into recommended best practice for the avoidance of falls from height.

Carried out by PASMA – the lead industry body for the mobile access tower sector, and a founder member of the Access Industry Forum (AIF) – in collaboration with the HSE (Health & Safety Executive), the review represents an important milestone for the industry. It brings clarity, for example, to the use of 'through the trap' (3T) and 'advance guardrail' (AGR) methods for assembling, altering and dismantling mobile access towers.

# **Minimising risk**

"Our report concludes that, when used in accordance with manufacturers' instructions and guidance, both methods continue to provide an acceptable safe method of working," states Chris Kendall, information officer for AIF. "AGR systems provide comprehensive fall protection and the 3T method uses conventional components to minimise the risk of a fall," he adds.

However, the association is urging industry to await the publication of a publicly available specification (PAS), in respect of low level access equipment, rather than seek ad hoc, one-off solutions from manufacturers.

"PASMA's technical committee is currently working with the British Standards Institution (BSI) to produce the PAS," explains Kendall. "That will set minimum quality standards for such products as podium steps and folding room scaffolds." For more information, see: www.pasma.co.uk

# More to be done

Working at height still remains one of the most dangerous activities in industrial and construction environments. And, while industry has come a long

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way in mitigating risks – for example, during the construction of Heathrow Terminal 5, the roof was built on the ground and then jacked up into position – more needs to be done to avoid accidents.

"The 15% increase in construction fatalities in the 12 months prior to April 2010 suggests increased complacency by some businesses," observes Andrew Camfield, head of health and safety assurance, Speedy Hire. "One of the greatest causes of accidents when working at height is a failure to train and induct staff correctly," he adds.

"Operatives need to be trained about how to riskassess a task, and how to select and safely use equipment that will best mitigate and manage that risk. Factors to consider include: the working environment and ground conditions; how long a job will take; how frequently a particular point needs to be accessed; and what risks might be involved when erecting or dismantling equipment.

"Equipment available, such as towers, personnel lifts, push-around verticals and MEWPS [mobile elevating work platforms], can all reduce the risk of falls from height. Yet, if the person operating the apparatus does not have the skills needed to use a piece of kit, it can become dangerous to the operative and people in the surrounding areas. When accidents happen, often the root cause is a failure to induct staff fully and a lack of training."

# **Controlling hazards**

So what happens when prevention has failed and an emergency arises? This is where rescue and evacuation take over, and each requires meticulous planning. Indeed, both are essential elements in meeting the regulations for working at height. In many cases, plans will involve the provision of PFPS (personal fall protection systems) and rescue descended devices. However, if they are to be effective, these must be chosen and used with care, according to lan Wake, UK sales manager for Sperian Protection.

He points out that, under the Work at Height Regulations 2005, Regulation 4.2 requires planning for emergencies and rescues. There is a similar requirement in BS 8437:2005, the code of practice for the use and maintenance of fall protection systems. This states: 'It is essential that there is a specific rescue plan in place at each worksite...'

The primary objective, in every case, is to try always to eliminate the need for work to be carried out at height at all, Wake reaffirms. "If that cannot be avoided, the next step is to look at preventing falls by implementing control measures. These are divided into collective measures, such as guard rails and scaffolding, and individual measures, which take the form of PFPS, and protect only the person wearing the equipment – measures that should only be chosen as a last resort."

### **Rescue** planning

Where a PFPS is the only practical solution, however, what are the key points in rescue planning? According to Wake: the safety of the persons carrying out the rescue; the anchor points for the rescue equipment; the suitability of the PFPS equipment; the type of rescue system used; and the method for attaching the casualty to the rescue system. Also, consideration must be given to the route used to move the casualty to a safe area, as well as the first aid requirements that casualty may have, in terms of injury or suspension trauma.

And what of PFPS equipment itself? "This essentially comprises three physical components: anchor devices,

> bodywear [which must take the form of a full body harness] and connecting devices. These can all be conveniently remembered as the ABC of fall arrest systems," says Wake

"The fourth component is training and this is as essential as the other three. Unless all four components are in place, the PFPS will not work safely and reliably," he cautions. "Modern equipment has an essential role to play in helping to ensure the safety of those who work at height. But, in every situation, it is training that provides the foundation stone for safety." Above: getting safety harnesses right Centre left: Andrew Camfield, head of health and safety at Speedy Hire Centre right: Ian Wake of Sperian Protection

# Ladders: myth and reality

The Ladder Association, a member organisation of the Access Industry Forum, is making its own contribution to advancing safety and best practice when working at height, with the launch of its LadderSolve information resource.

Available via the Ladder Association website (www.ladderassociation.org.uk), this covers everything from ladder myths to ladder training. Visitors to the site can also view the association's latest toolbox talk, covering ladder principles.

# Accessing the right data

Established in 2004 and liaising closely with HSE, the Access Industry Forum (AIF) represents the nine leading trade associations and federations involved in both temporary and permanent working at height.

It promotes the link between training and competency in the workplace by advocating the need for users of all types of access equipment to be professionally trained to a recognised standard, based on the agreed work procedures of its member organisations. For more information, visit: www.accessindustryforum.org.uk