

A WHITE PAPER PRESENTED BY



Falls from height in the construction industry

August 2015



Introduction

The 2013 Health and Safety Executive (HSE) inspection programme which took place in October 2013 brought up some troubling statistics. The aim was to visit and review safety practices on some 2,500 construction sites where refurbishment or repair work was taking place.

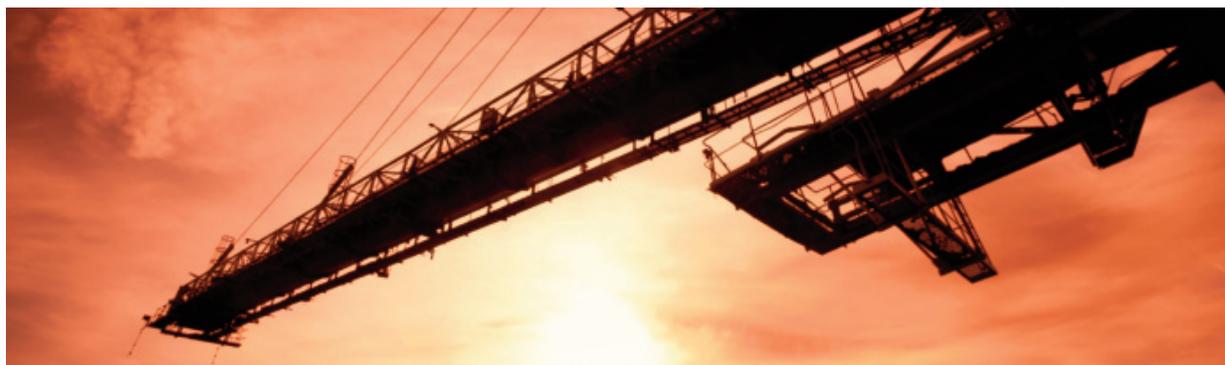
On nearly half of the 2,607 sites visited, basic safety standards were not being met. 539 prohibition notices to stop dangerous activities

immediately, and 414 improvement notices requiring standards to improve were served to protect workers.

Amongst other failings in standards, one of the most common was a failure to adequately protect workers at height. Looking at the statistics for the construction industry compared with the wider economy it is clearly an area that needs urgent attention to prevent injury and save lives.

Industry Facts

- In 2012/13, the construction sector was responsible for 39 of the nearly 150 fatal injuries recorded
- On nearly half of the 2,607 sites visited as part of the 2013 Health and Safety Executive (HSE) inspection programme, basic safety standards were not being met
- Of all fatal injuries recorded last year in the UK, approximately one third were attributable to a fall from height
- 10% of fall injuries across the workforce caused by falls of less than 6 feet. Almost half of all fatal falls were from a height of less than 20 feet, and 20% were from heights above 30 feet.
- The average cost in fine and fees of a fall from height injury claim is £15,000 – potentially tens of times more in the event of a fatality.



Injury rates compared to other industries

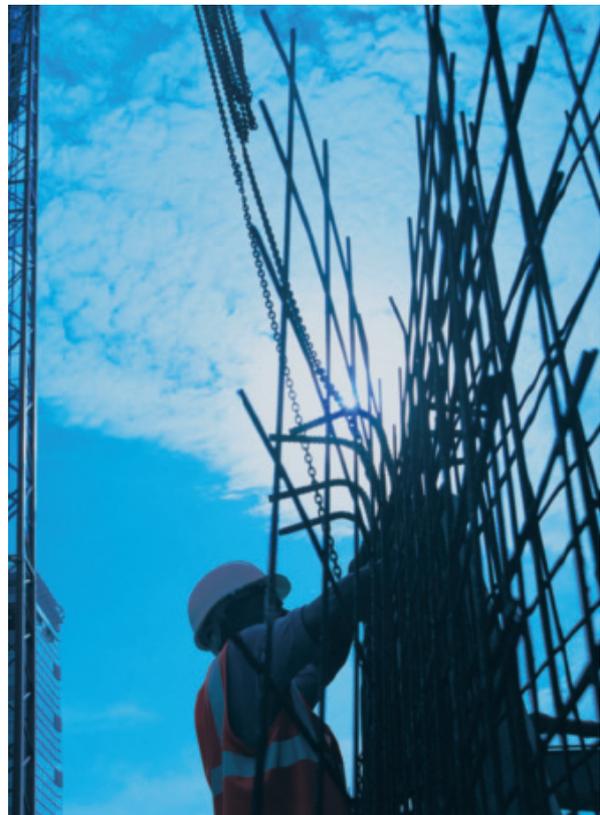
Construction as an industry accounts for around 5% of the UK workforce, but over a quarter of all fatal injuries in the UK. In 2012/13, construction was responsible for 39 of the nearly 150 fatal injuries recorded – higher than the extractive industries, higher (in absolute terms) even than agriculture. Of all fatal injuries recorded last year in the UK, approximately one third were attributable to a fall from height. When looking at the construction industry alone, that figure doubles, accounting for nearly two thirds of fatal injuries.

“Falls from height are among the most serious and frequent injuries in the construction sector. Early identification, consideration and management of risk can reduce incidents and cost to a business as well as ultimately save lives.”

Martin Smith, Alcumus Chief Executive Officer

It is perhaps no surprise that when the fatalities in construction are broken down by role, there is a prevalence of positions that require working at height: Roofers, tilers and slaters, Carpenters and joiners, and roles that are ‘nec’ – not elsewhere classified – such as labourers. Roofers alone constitute nearly a quarter of fatalities from height. Fatalities due to falls from height in construction constitute half of all deaths due to falls, and in fact constitute a little over 15% of all fatalities in the UK. Ultimately loss of life cannot be quantified, but injuries (in 2011/12) cost the UK nearly six hundred thousand working days.

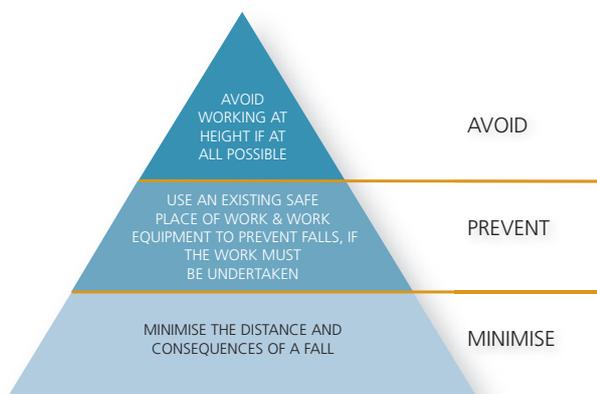
Further details are not immediately forthcoming – data from the Labour Force Survey (LFS3) fills in some of the blanks with 10% of fall injuries across the workforce caused by falls of less than 6 feet – suggesting a ladder fall. Almost half of all fatal falls were from a height of less than 20 feet, and 20% were from heights above 30 feet. The HSE proposes that over half of the serious injuries reported to the HSE result from either a fall from height or from tripping over materials on walkways – and are easily preventable. The HSE also identifies inadequate scaffolding and edge protection on roofs, edges, and openings in buildings, and the inappropriate use of ladder and hoists as being key causes of fatal injury.



What regulations apply and what does industry say?

As a result of the dangers associated with working at height, stringent regulations apply when doing so – the Work at Height Regulations (WAH, 2005) requires that the work is properly planned and demands a reassuring multitude of safety protections are put in place. Doing so is the responsibility of the employer and as will be discussed later, not meeting these requirements in full can be extremely costly – in some cases criminally dangerous.

In an effort to limit fatalities, the HSE has developed a hierarchy of control measures to help employers consider how to approach a work-at-height situation.



The HSE policy is one of endeavouring to avoid dangerous work and perhaps this detracts from emphasis on a situation where it has to take place. When there is no alternative and work must be done at height, then arguably even more preparation needs to go into ensuring that the risks inherent in the situation are managed and controlled - as far as is 'reasonably practicable'.

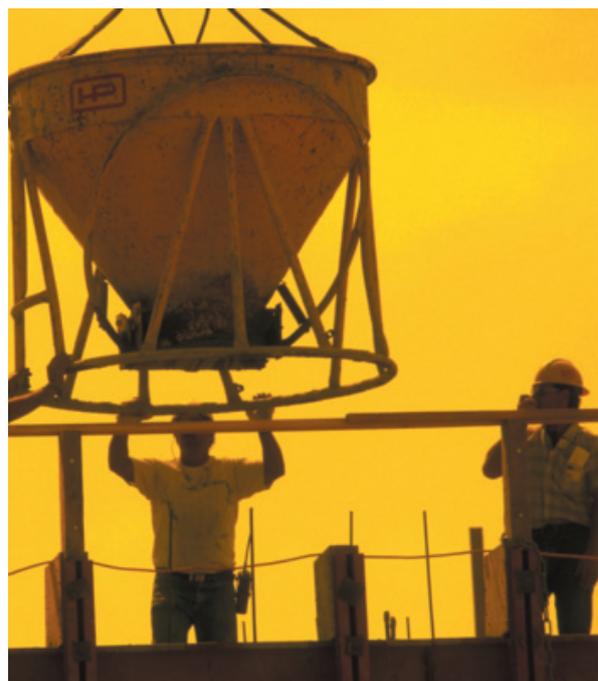
It is not possible to expect that all risks can be eliminated, but they must be addressed and minimised.

Competency of those working at height, including training and oversight of all involved, is also key – and safety equipment and weather conditions must also be taken into account.

The ACR (Advisory Committee for Roofsafety) puts out industry guidance on the issue of working at height, advising the use of method statements and permit systems to keep track of all those authorised to work at height and ensure all health and safety items - such as a risk assessment - have been addressed.

According to the ACR, rooftops are one of the most hazardous areas on which to work – which is roughly borne out by statistics.

Ultimately the comment from the HSE is – “Remember: take a moment, not a fall”



Case Studies

The HSE estimates the full cost of injuries to be over £600m per year – just in terms of lost working days. The cost of a lost life or a serious injury cannot be calculated. Below are some case studies that illustrate the severity of outcomes – both for the injured worker and the employer.

Area of work	Occurance	Injuries	Financial outcome
Roofing	While making temporary repairs to a fragile asbestos roof, a worker fell through due to insufficient equipment	Serious injuries to skull, eye, leg and back, and required five days in hospital	Roofing firm was fined £17,500 and over £7,000 in costs
Scaffolding	Worker fell from unguarded scaffolding as it was being constructed, without sufficient training	Life changing injuries including the amputation of a lower leg	Scaffolding firm fined £15,000 and over £1,100 in costs
Roof work	Roof work being undertaken by a worker employed by a contractor was unsupervised and was not undertaken with the proper equipment, leading to the worker falling through a fragile clear panel	Following the fall, the worker died while in the ambulance	The building owner was fined £250,000, and the contractor was given a four month suspended prison sentence

What has been done to reduce fatalities?

Such a major cause of fatality is of grave concern to the regulator, the HSE, and a number of initiatives are underway to reduce the number of fatalities. 2005's 'Fit Out' campaign and 'Watch Your Step' in 2006 were focused on the construction industry and were precursors to the industry-wide 'Shattered Lives' campaign in 2008 to reduce slips, trips and falls in the workplace. The construction industry, work sites and factory environments were a major part of the campaign. STEP (the Slips and Trips eLearning Package) covers several industries and offers practical online and video guidance on reducing injuries caused by slips and trips. 'Watch Your Step' followed similar processes to other HSE health and safety guidance, built around a 'Plan, Train, Organise, Control, Monitor and Review' structure to ensure strong management and oversight. A key piece of support is WAIT – the Work at Height Access equipment information toolkit. This online tool includes a handy filtering function which allows a user to select key criteria of the job they intend to undertake at height and the equipment they will be using, and WAIT makes recommendations and suggestions. However, the tool should not be considered entirely comprehensive, and it may not be suitable for employers who regularly have people working at height or on complex structures such as fragile roofs.

Have these initiatives worked?

The law does not expect an employer to eliminate all risk, but risk must be minimised as far as is 'reasonably practicable'. The tools and support offered by the HSE and other professional bodies can help to do this but in many situations it may not go far enough to ensure that the employer has done all that is reasonably practicable to minimise the risk.

The most recent statistics show fatalities in construction are at their lowest level in 5 years – at under 2 per 100,000 workers per year, versus an average of 2.3 per 100,000 workers per year for the preceding 5 years. Falls from height constituted an average of 49% of those fatalities between 2008 and 2012 – though in the most recent year, the level was 59%, a marked increase, and may mean that further HSE scrutiny will come to bear on this topic.



Conclusion and Recommendations

Putting aside the human and emotional cost of an incident at work, which can be devastating for co-workers, family and friends; the average cost in fine and fees of a fall from height injury claim is £15,000 – potentially tens of times more in the event of a fatality. With potentially increased HSE scrutiny and the heavier hand of the law coming to bear in the form of corporate manslaughter, an employer who cannot justify their control measures and systems after an accident could find themselves found criminally negligent and face not only financial penalty but even a custodial sentence.

Business insurers highlight the value of an online risk management system, which can help protect an employer who has taken all the proper precautions in protecting their workforce. The ability to update and closely monitor all the checks and procedures put in place means an employer can prove they have done what they are required to do. Alcumus can offer a solution to support this process.

Accidents do sometimes happen, but it's better to be proactive than reactive, and ensure effective systems in place now. It is reassuring as an employer to know that if you are taking all the necessary precautions and are looking out for your workers' safety, should something terrible happen, you can account for your diligent and careful preparation. Of course ideally, having taken such care will prevent an incident from taking place at all.

“Any workplace where the expectations are unclear or poorly defined is a site where employees are unnecessarily exposed to risk and the potential event of an accident. Having structured processes, training and systems in place which are understood and reviewed frequently at all levels of the business are essential criteria for mitigating risk.”

Martin Smith, Alcumus Chief Executive Officer



Alcumus action points

- Without a robust management framework and structured health & safety procedures in place workers will be exposed to unnecessary workplace risks. Implementing safe working procedures which are shared throughout the organisation and reviewed at frequent intervals will help avoid or mitigate falling from height accidents and incidents. Consider what policies, procedures and controls your organisation has in place.
- Poor site conditions, hazards from works activity and poor visibility can be major contributors to falls from height. These can be avoided to some extent if proper site risk assessments are carried out prior to the commencement of work. Proper housekeeping and maintenance can also help. Are you confident that your risk assessments are up to date and how is your working environment managed on a daily basis?
- Violation of rules, misuse of personal protective or site equipment or use of an unauthorised access mean that workers often put themselves and their co-workers in danger. This may be because they don't know any different or have been inadequately trained. Health & safety training should not be limited to the higher echelons alone but made an essential part of employee induction and ongoing management. Consider the critical knowledge that is needed for your employees to undertake their roles safely.
- Having total visibility over the risks within your workplace and associated legal obligations is essential if you are to quickly identify trends and prioritise both remedial and proactive strategies. Consider how you manage your information and documentation relating to health & safety – is it easily accessible and up to date? Do you have full visibility of the extent of incidents across multiple sites?
- Whilst knowing that you need to stay abreast of changes to the law, if you are a small business then you may struggle with the costs associated with employing full time staff to ensure your business remains compliant. Consider whether you need additional support to stay compliant. Outsourcing your health & safety requirements to an external provider is one way to ensure your knowledge and documentation is up to date and will give you the time and resource to focus on the job in hand.

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About Alcumus

Alcumus is a market-leading provider of technology-enabled compliance risk management and certification services, supporting both UK and International clients with their Testing, Inspection & Certification (TIC) and Governance, Risk & Compliance (GRC) strategies. We have experience of working with organisations of all sizes within the construction sector.

Our solutions help assure the delivery of successful construction projects through a best practice health & safety approach - from simply supplying health & safety telephone helplines through to delivering full-scale compliance management software for extensive construction projects.

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