

HEIGHT SAFETY

IT'S EVERYONE'S BUSINESS



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INTRODUCTION

Providing a healthy and safe workplace is both a moral and a legal obligation. Safety is paramount when you have employees or contractors working at heights. Installing a system that improves safety for workers and contractors will minimise injury and loss of life. On average 26 workplace deaths and almost 8,000 injuries are recorded every year¹. Incidents such as these can be prevented with the installation of compliant roof access and height safety systems suited to the working at heights requirements.

Safety measures are often reactionary; with audits, upgrades and installations of height safety systems being implemented only after an accident has occurred. Such negligence can result in costly fines, litigation, serious injuries or worse still, loss of life. A proactive approach is crucial when dealing with safety systems. Tragic events can be avoided if fall protection systems are implemented and workers are trained in accordance to Australian industry standards and regulations.

This paper addresses the key considerations associated with fall protection systems and exemplifies the importance of compliant safety measures.



KEY CONSIDERATIONS FOR FALL PROTECTION SAFETY SYSTEMS

Knowledge of regulatory standards and guidelines

One of the most significant aspects of the roof access and height safety business is ensuring that products and system installations are compliant and meet (or even exceed) industry standards. The system must be suited to the maintenance needs of the workplace following the hierarchy of risk control.

Failure to comply with an improvement or prohibition notice without justification is considered an offence².

Accurate Installation

Correct installation of fall protection systems is imperative. Not all roof types are straight-forward or compatible with fall arrest systems, therefore it is essential that installers are competent with the engineering and design to ensure effective and compliant systems.

Quick Assembly

Time is money. Safety systems need to be simple to install whilst adaptable to varying site conditions.

Modular systems that can be delivered to site ready for easy installation are optimal.

User Training

Comprehensive training for all personnel that work at heights is vital. It is easy for training to be overlooked, however, insufficient training and inexperience can cost lives. This is the responsibility of building owners, managers and contractors.

Maintenance

Fall protection systems require periodic maintenance and inspection to ensure they remain at peak performance and that external environmental factors (including general wear and tear) have not affected the system's ability to perform as designed. Systems that are shown to have any deformation or deterioration must be tagged 'Do not use' until corrective action by a competent person has been performed.

Systems must include signage and tags which indicate specific system details (ie. installation date, due date of the next inspection and any limitations pertaining to the system).

CONSEQUENCES OF NON-COMPLIANT SAFETY SYSTEMS

Neglecting to provide safety protection for work at heights can result in fatal consequences. In 2014, 21 workers died as a result of falls from height, equating to 11% of all worker fatalities for that year³. It is the highest cause of deaths in the construction industry accounting for almost one-third in that industry³.

Nothing can replace a lost life.

Non-compliance can lead to substantial fines and litigation. In 2013, a worker in Tuggeranong who fell through a hole in a roof while helping build a gym won \$300,000 in damages against his employer and the site manager, who were ordered to pay 30% and 70% respectively⁴. In addition, a roofing company and its Director have been fined a total of \$100,000 (plus more than \$2,200 in costs) over an incident in which a worker was seriously injured when he fell through a roof⁵.

Further, an Adelaide-based shed manufacturer was fined in

the Magistrate's Court after one of his workers fell through a polycarbonate roof, injuring his back. The magistrate indicated he would have imposed a \$145,000 fine for breaches of occupational health and safety legislation, but applied a 40% reduction for a guilty plea and a further reduction due to the defendant's plea of financial hardship. This case is a reminder of the potential risk to lives of unsafe work practices and the potential high fines if adequate safety is not in place⁶.

Injuries lead to an incredible amount of lost time and reduced productivity. A typical falls-related claim in 2010-11 involved 6.2 weeks off work, which is considerably longer than the 4.4 weeks for all serious injury claims⁷. Evidently, time lost can have significant impacts on the business and more importantly can be avoided if the appropriate safety measures are implemented and maintained.

Installing a roof access and fall protection system is an investment in safety and its significance should never be undervalued.



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THE HIERARCHY OF CONTROL FOR WORKING AT HEIGHT

It is of utmost priority to eliminate the risk of a fall. The ultimate goal is to ensure a fall from height cannot occur. This can be achieved either by eliminating the need to work above the ground or to provide a solid elevated construction from which the work can be performed. If it is not possible to achieve this, the risk of a fall must be minimised through the application of control measures further down on the Hierarchy of Control. The Hierarchy of Control is as follows:

Elimination

Eliminate the hazard. Undertake the work from ground level or from a solid construction. Redesign should be considered to eliminate the need for working at height.

Substitution

Change the control measure to undertake the work from a safe zone. Relocation of equipment requiring maintenance should be considered to eliminate the requirement for the operator to enter the danger zone.

Isolation

Separate the operator from the hazard by means of passive fall protection. A plant screen, barrier or guardrail will effectively prevent a fall whilst maintenance is being undertaken.

Engineering

Manage the risk using an engineered control. Work undertaken using fall arrest systems requires operator training but it will prevent a fall from occurring when used correctly.

Administration

Control the risk using procedure. Control the environment using signage, demarcation line marking and operational instructions.

It is important to note that the level of Hierarchy of Control is equivalent to the risk of injury, as a result of operator incompetence. A lesser control measure requires greater skill of the operator and is therefore the least preferred.

IMPORTANT INFORMATION BEFORE UNDERTAKING WORK AT HEIGHTS

Before any work at heights is started it is most important that some key procedures are followed to ensure that all workplace requirements are identified and understood.

A risk assessment, safe work method procedure and rescue plan, must be completed and approved by management prior to any work being commenced. Authorisation to access the risk area must be obtained from the person in control of the workplace and all applicable Australian Standards, WHS Act and Regulations, and Codes of Practice and Guidelines must be read, understood and obeyed.

Prior to the use of fall protection equipment it is essential that the persons conducting the work have been trained and are aware of the correct operating procedures. Fall arrest systems must only be used by competent persons who have experience and training in the safe use of the systems and associated equipment.

All systems and equipment should be visually inspected for damage and if there is any noticeable deterioration or deformation of the components or the structure the system must not be used and should be tagged 'Do Not Use' until corrective action by a competent person has been completed.



Emergency services should be considered as only a part of the overall rescue plan



SAFE WORK METHOD STATEMENTS (SWMS)

Overview

A SWMS is a document which details construction work activities that are of a high risk nature which are going to be carried out at a workplace. It sets out the possible hazards arising from these activities and lists the measures to be put in place to administer and control the risks. A SWMS must always be prepared before the work commences.

Preparation

Usually preparation is carried out by the person responsible for carrying out the work after consultation with managers, contractors, leading hands and the workers who will be directly engaged in the work.

It is important to gain input from the workers to ensure that they are fully clear with the details of the SWMS and also so that they can implement and follow any required actions. If there is a Health and Safety Representative at the work site they should also be consulted when developing the SWMS.

Maintaining Compliance

Regular inspections and observations must be conducted by the

person in charge of the workplace to ensure the SWMS is being complied with.

Employee and subcontractor toolbox talks must be undertaken to identify, control and communicate site hazards.

Incidents or Near Misses

In the event of an incident or near miss work must be ceased immediately and the SWMS must be amended in consultation with the relevant persons to ensure the incident will not re-occur.

Accessibility of SWMS

The SWMS must be easily accessible for inspection and review and must be retained until the work has been completed. It is a requirement that all persons involved in working at heights must have the SWMS communicated to them prior to work commencement. Storage should be at the workplace where the high risk activities will be conducted but if this is not possible they need to be kept in a location where they can be easily and quickly delivered to the workplace if and when required. They may also be kept electronically for easy access.

FORMULATING A RESCUE PLAN

A rescue plan is an essential piece of documentation that must be completed before undertaking any work at heights.

This should detail the type of work being undertaken, the risks involved and what actions need to be implemented in the event of an incident or accident occurring.

Emergency service details should be included, but their attendance should be considered as only a part of the overall rescue plan. Emergency services may take time to arrive at the scene and it is imperative that rescue procedures are commenced as soon as possible to enable the situation to be rectified and to ensure injuries are not exacerbated.

Assessment of the building, on site rescue equipment and available access to the area by rescuers and emergency services are all factors that must be considered and detailed in the plan. Training of persons who will be conducting the rescue must also

be undertaken to ensure that they are skilled in the use of the rescue equipment.

If the person being rescued sustains injuries which result in unconsciousness rescue may be even more difficult and additional procedures must be put in place to cover this contingency.

Persons sustaining a fall while using fall arrest equipment are in significant risk of Suspension Trauma and for this reason it is imperative that they are rescued as soon as possible to lessen the likelihood of this condition occurring.

Suspension Trauma

Orthostatic Shock or Suspension Trauma (Syncope) is a condition that occurs when the human body is held in an upright position without any movement for a period of time in a fall arrest body harness. **This condition can occur in as little as 5 minutes so it is vital that rescue is commenced immediately.**



SAFETY MADE EASY WITH SAYFA

Sayfa is Australia and New Zealand's leading roof access and fall protection specialist, providing tailored solutions that encompass all aspects of roof safety across commercial, industrial and domestic markets. Since 2002, Sayfa have been offering Australia and New Zealand wide installation of safety systems that are manufactured in accordance with all Australian and New Zealand Standards industry requirements.

The success of Sayfa lies in its ability to proactively respond to evolving needs of the industries to which it provides products and services. Sayfa offers a complete technical service from initial consultation through to design, installation, training and certification. Beyond the wide range of physical products and solutions, Sayfa takes out the guess work and provides customers with complete peace of mind. From highly trained accredited installers to friendly technical specialists, the Sayfa team provides ongoing support and ensures that every job is completed to the highest standard.

Sayfa raises the standard of workplace safety through innovative, modular height safety and fall protection solutions that are not only easy to customise to suit individual specifications but easy to assemble and install on site. Leveraging advanced fabrication techniques and facilities, Sayfa has the capability to ensure all safety systems are designed and engineered to meet the individual requirements of the particular job. In the event that 'off the shelf' products cannot be used, Sayfa's manufacturing facility can produce bespoke fabricated components to fit even the most intricate design whilst ensuring that the aesthetics of the building are given due consideration.

Committed to continuous product research and development, Sayfa is proud of its constant growth and high standing in the industry. Specifying with Sayfa helps provide the right product for the job and ensures a safe and successful project.

No one is excused from safety - it's everyone's business.

REFERENCES

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