

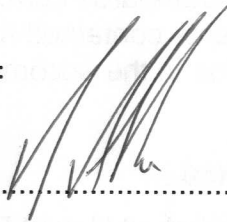
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Level 2

Working Safely at Height

Endorsement and Authorisation

Endorsed by:



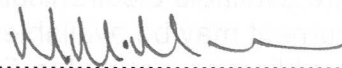
Dave Allen, Occupational Safety Specialist, Working Group Chair

Authorised by:



Julian Lindfield, Director Safety and Compliance, Steering Group Chair

Accepted for issue by:



Mick McManus, National Standards Manager

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Issue record

Issue	Date	Comments
1	04 September 2010	First Issue

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 04 March 2012.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 4 to continue to comply with the issue of any relevant Network Rail Standards current when GRIP Stage 4 was reached and not to comply with requirements contained herein, unless the designated Standard Owner has stipulated otherwise in the accompanying Briefing Note.

Reference documentation

SI 2005/735	Work at Height Regulations 2005
SI 1998/2307	Lifting Operations and Lifting Equipment Regulations 1998
SI 2007/1592	Construction (Design and Management) Regulations 2007
NR/L2/OHS/ 0102	Work Activity Risk Assessments

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1 Purpose

This standard defines the processes to be followed within Network Rail to enable employees who design, plan, manage and carry out work at heights to do so safely, and within the requirements of the relevant legislation.

This standard adopts a risk-based approach to working at height activities in line with the principles of the legislation and industry best practice. Under this approach measures taken to protect the safety of persons are proportionate to the risks involved.

2 Scope

This standard applies to all “Work at Height” carried out by Network Rail employees. “Work at Height” is defined as any work activities where there is a need to control a risk of a person or object falling a distance liable to cause personal injury. This is regardless of the work equipment being used, the duration the person is at height or the height at which the work is being performed. It includes access to and egress from a place of work.

Examples of activities considered as being work at height are :-

- Climbing permanent structures such as gantries, communication masts or signal posts.
- Working close to an excavation, cable pit or foundation where it would be possible for a person or object to fall and cause injury.
- Working on scaffolding or from a mobile elevated work platform (MEWP).
- Working on the back of a flatbed road or rail vehicle.
- Arboriculture and vegetation work performed in trees and on steep embankments.
- Using cradles or ropes to gain access to parts of tunnels, bridges, etc.
- Work on Electrification and Plant assets, boosters etc.
- Using a ladder to gain access to a permanent or temporary structure.

Examples of activities not considered as being work at height:

- Using permanent stairs (if there is no structural or maintenance work being undertaken).
- Work in an office on an upper floor of a multi-story building where there is no risk of falling. (Activities within the building which do involve a risk of falling, e.g. changing a light bulb from a step-ladder, would be considered to be work at height.)

3 Definitions

Fall Arrest System -

Personal protective equipment comprising a full body harness and a connecting sub-system made up of a lanyard of suitable length with a built in shock absorber

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designed to safely arrest a person should he fall from height.

Work Restraint System Technique using personal protective equipment to prevent a person reaching a position from which they could fall. This system does not include a shock absorber and is not used for fall arrest purposes.

Work Positioning A system of work in which a persons weight is supported to allow them to carry out work using personal protective equipment in suspension or tension in such a way so as to prevent a fall.

Shock Absorber A device designed to limit the shock load on equipment and anchor points to below 6 KN – also thereby minimising the impact load on the person falling.

4 Roles and Responsibilities

4.1 Persons who plan or control work at height

Persons responsible for planning and/or managing the work of others have the following responsibilities:

- a) To assess the risks from work activities involving work at height, record the findings, and do all that is reasonably practicable to prevent any person or object falling and causing injury to the worker or anyone else in the vicinity.
- b) To plan work to avoid the need to work at height where they can.
- c) Where working at height cannot be avoided, to give consideration to using an existing platform (i.e. permanent structure such as a flat roof or gantry with fixed guardrails and safe means of access & egress), work equipment or other measures to prevent falls.
- d) Where the risk of a fall cannot be eliminated, to use work equipment or other measures to minimise the distance and consequences of a fall should one occur.
- e) To eliminate or minimise risks from work activities involving work at height by designing out the need to work at height where possible, and where this is not possible by developing and implementing:
 - Safe systems of work for planning, organising and performing work at height.
 - Safe systems for the selection and inspection of suitable work equipment to perform work at height.
 - Safe systems for protecting persons from the consequences of falls of persons or objects.

NOTE 1 It is important that work at height issues are identified early in the planning and preparation stage to allow for the correct decisions to be made in a timely manner with regard to the need for the

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work at height, access equipment and methods, work methods and any emergency contingency requirements.

- f) Through communication and co-operation with third parties that Company employees working on third party sites are not put at additional risk from performing work at height as a result of working on premises controlled by a third party.
- g) That work at height performed at locations under Company control does not put others at risk (e.g. members of the public or the employees of other companies working on the same site).
- h) That no employee engages in any activity (including planning, supervision and rescue) in relation to work at height, unless he/she is competent to do so, except when being supervised by a competent person during training. Competence includes the fitness of the employee to undertake work at height.
- i) That employees fully understand the nature of the work and work methods prior to starting any work at height and understand the need to report any safety hazard.
- j) That employees understand the need to use the equipment supplied (including safety devices) properly, following any training and instructions given.

4.2 Designers and Specifiers of Equipment and Structures

When designers and specifiers are evaluating the hazards within their designs/specifications for equipment and structures that may require work at height during their construction, operation, maintenance or demolition they shall apply the principle of "Safety by Design" as enshrined in the Construction Design and Management Regulations 2007.

In practice this means that when considering hazard elimination and risk reduction designers and specifiers shall apply, and demonstrate the application of, the principles of prevention (the hierarchy of risk control):

- Eliminate
- Reduce
- Inform
- Control

NOTE 2 The concept of safety by design does not mandate the most costly risk free design from a safety perspective but rather that conscious thought is given to satisfactory solutions for hazard elimination and risk reduction within the confines of reasonable practicability.

5 Safe Work at Height

5.1 General

A risk assessment is the starting point for all work activities involving an element of working at height (see clause 5.2.1). This is intended to identify the hazards and the controls necessary to minimise the risks from those hazards. The risk assessment

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shall identify any high risk activities carried out at height which may need further control measures.

The hierarchy of control for work at height set out in clause **5.2.2** shall be followed systematically and only when one level is not reasonably practicable may the next level be considered.

The 7 steps identified in clause 5.2 shall be followed when considering any proposed work at height.

5.2 “The 7 steps”

5.2.1 Step 1. Assess the risk and decide how to work safely

When planning any work activity involving work at height the risks shall be assessed and whatever steps the assessment identifies taken, before work starts. The action taken to control the risk shall be proportionate to the risk of harm, and reflect what is reasonably practicable.

NOTE 3 For Network Rail employees the findings of the risk assessment shall be recorded in accordance with risk assessment procedure NR/SP/OHS/00102

5.2.2 Step 2. Follow the hierarchy for safe work at height

(i) **Avoid** by designing out the need to work at height (e.g. cleaning high windows from the ground using extending poles; use of the specially designed dropper tool for changing OLE components).

If it is not necessary to work at height, don't. Avoid work at height so far as reasonably practicable (e.g. it may be possible to assemble a structure at ground level and then lift it into place using a crane rather than assemble it at height).

(ii) **Prevent** by using an existing place of work at height (e.g. a permanent structure such as a flat roof or gantry with fixed guard rails and safe means of access).

Where it is not reasonably practicable to avoid work at height, assess the risks and take measures to allow the work to be done whilst preventing so far as is reasonably practicable people or objects falling. This may include having the work carried out safely from an existing place of work or selecting the appropriate work equipment to prevent falls. An existing place of work at height is a place which does not need additional work equipment to remove the risk of a fall from height occurring.

(iii) **Mitigate** by minimising the distance and consequences of a fall.

Where the risk of people or objects falling still remains, take steps to minimise the distance and consequences. This involves the selection and use of appropriate work/safety equipment. Despite the method/type of work/equipment selected, if it is still not reasonably practicable to avoid or prevent a fall, both the distance of the fall and its consequences shall be minimised.

(iv) **Give priority to collective protective measures** which protect more than one person (e.g. tower scaffolds, mobile elevating work platforms).