Working at Height
Safe System of Work

Version Control	Review date	Author	Version	Reason for change
July 2014	-	Authorising Engineer	v1	Under development
August 2016	-	Authorising Engineer	v2	Revised version
August 2024	August 2027	Assurance Manager	v3	Updated format with revisions

GLOSSARY OF ABBREVIATIONS

ACD	-	Anti-Climb Device
AE (WaH)	-	Authorising Engineer (Working at Height)
AP (WaH)	-	Authorised Person (Working at Height)
BMU	-	Building Maintenance Unit
BS	-	British Standard
BS EN		British Standard Euronorm
CAE	-	Co-ordinating Authorising Engineer
CDM	-	Construction, Design and Management
CISRS	-	Construction Industry Scaffolders' Record Scheme
COSHH	-	Control of Substances Hazardous to Health
CSCS	-	Construction Skills Certification Scheme
H & S	-	Health and Safety
HSE	-	Health and Safety Executive
IPAF	-	International Powered Access Federation
IRATA	-	Industrial Rope Access Trade Association
LOLER	-	Lifting Operations and Lifting Equipment Regulations
MEWP	-	Mobile Elevated (or Elevating) Work Platform
NDT	-	Non-Destructive Test
NASC	-	National Access and Scaffolding Confederation
PASMA	-	Prefabricated Access Suppliers' and Manufacturers' Association
PiC	-	Person-in-Charge
PtoC	-	Permit-to-Climb

PPE	-	Personal Protective Equipment
RAMS	-	Risk Assessment / Method Statement
RF	-	Radio Frequency
RHP	-	Restricted High Place(s)
SI	-	Standing Instruction
SAE	-	Suspended Access Equipment
SAEMA	-	Specialist Access Engineering and Maintenance Association
SSOW	-	Safe System of Work
TBT	-	Toolbox Talk
WaH	-	Working at Height
WRS	-	Work Restraint System

1.0 INTRODUCTION

1.1 General

1.1.1 This Safe System of Work (SSOW) provides direction on how Working at Height (WaH) is to be managed on sites and in work situations which are under the control of the NHS Lothian Estates Dept.

1.1.2 Working at Height is defined as any work undertaken at any place above, at, or below, ground level, from which, if measures were not taken, a person could fall a distance liable to cause injury or an object could fall with a risk of causing injury. It includes gaining access to or egress from such a place except by means of a staircase in a permanent workplace.

1.1.3 Working at Height is acknowledged as one of the most dangerous activities in the construction, maintenance and facilities management industries. At the time the regulations were drawn up in 2004, a third of all work related deaths involved falls from height. In addition, for every death resulting from falls, there were over 50 people with serious fall injuries. Workers are exposed to the risk of falls from height and others to the risk of being hit by objects that may fall from the workplace at height. Workers may also be exposed to other hazards, such as non-ionising radiation, electric currents, moving mechanical equipment and adverse weather conditions.

1.1.4 The Work at Height Regulations 2005 are subordinate regulations to the Health and Safety at Work etc Act 1974. The regulations place a responsibility on all persons at work engaged with the planning, supervision and carrying out of work at height to manage the risks involved.

1.1.5 A Restricted High Place (RHP) is a place that has been assessed and found to present a significant risk of a fall liable to cause personal injury and/or exposure to other hazards within close range. Because of these risks it has been determined that access to these places must be restricted in order to prevent unauthorised use/entry. RHPs can include masts, towers, walkways, work platforms, accessible roofs with inadequate edge protection, fragile roofs, or any place at height with significant risks.

1.1.6 This SSOW also covers other WaH activities using temporary access methods such as scaffolding, MEWPs, abseiling and the use of portable ladders.

1.2 Aim and Purpose

1.2.1 This document provides a system for:

- controlling work at height on restricted high places and other work at height activities at facilities for which NHS Lothian Estates Department APs have the responsibility for managing the risk;
- minimising the risks associated with any working at height activity;
- the appointment of competent persons to manage, oversee and perform any such work; and
- the documentation for use in the application of these procedures.

1.3 Policy

1.3.1 Compliance with these procedures is mandatory throughout all sites for which NHS Lothian Estates APs have the responsibility for managing the risk. These rules are therefore mandated on all persons working on the design, construction, operation, maintenance and de-commissioning of facilities containing restricted high places and other working at height activities.

1.3.2 Where there is a division of responsibilities between NHS Lothian Estates and others, the Authorised Person (AP) is, on relevant matters, to co-operate and co-ordinate with any other parties as necessary to prevent danger.

1.3.3 The AP (WaH) is to advise and agree the formal agreement of demarcation and liaison with the third party's responsible person.

1.3.4 If work has to be undertaken across a point of demarcation which involves equipment, systems or locations having significant risk, all parties are to liaise with the appropriate AP to plan the activity

prior to commencement of the work. There must be an agreed written procedure for the work which is to result in the issue of appropriate documentation.

1.3.5 The Authorising Engineer (AE) is to be approached for approval prior to making any deviations from this SSOW that might be considered for a specific site or task.

1.3.6 These procedures mandate the appointment of key individuals with specific responsibilities for the management and/or execution of work on restricted high places or other working at height activity. These are summarised as follows:

- the climbing/access team: a team of competent individuals who are permitted to gain access and work at height;
- the person in charge: leader of the climbing/access team or any other work at height activity;
- the AP: an appointed member of the maintenance staff who gives authority to the person in charge/climbing team to work. Only one AP may be on duty on site/part of site at any one time; and
- the AE: an engineer appointed to assesses the competency of the AP and is to implement, administer, audit and monitor the application of these procedures.

1.3.7 Further guidance on the roles and duties of these appointments is given in section 4.0.

1.3.8 Any person who has difficulty with the interpretation and/or application of these procedures shall refer the matter to the AP (WaH) who shall immediately stop the work, pending clarification of the situation and, where necessary, refer the matter to the AE (WaH) for clarification and resolution.

1.4 Limitations

1.4.1 This SSOW is designed for use where an NHS Lothian Estates AP has control of danger.

1.4.2 These Procedures do not apply to:

- Access or egress by a staircase in a permanent workplace.
- Confined space working or any work covered by the permit system of other disciplines, unless access is at height.
- The construction and use of fire escape stairs where the risk is controlled by the relevant Fire Officer.

1.4.3 The permit system described in these procedures applies to working at height on restricted high places and other high risk WaH activities.

1.4.4 Where work at height is covered by the permits of other disciplines the AP (WaH) shall liaise with and advise the AP of the other discipline as required.

2.0 GENERAL ARRANGEMENTS

2.1 Hierarchy of Control Measures for Work at Height

2.1.1 The Work at Height Regulations set out a control hierarchy for the avoidance of risks from work at height:

2.1.2 The hierarchy is:

(i) Avoid work at height.

Ensure that no work is carried out at height if it is safe and reasonably practicable to carry it out other than at height. All new works and, on an opportunity basis, all existing works shall, so far as is reasonably practicable by design, eliminate the need for personnel to work at height, e.g. by using lowerable columns or positioning equipment at ground level.

(ii) Prevent falls.

Use of an existing safe place of work for means of access is to be made, e.g. an existing place of work with permanent collective passive protection such as handrails. Where this is not reasonably practicable, sufficient work equipment is to be provided to prevent a fall occurring by using collective work equipment such as temporary guardrails or a mobile elevated working platform, or by the use of personal work equipment such as a work restraint system (WRS).

(iii) Minimise the distance and consequence of a fall.

Where measures taken to prevent a fall do not eliminate the risk of a fall occurring, sufficient work equipment is to be provided, as far as is reasonably practicable, to minimise the distance of a fall, or if this is not reasonably practicable, the consequence of a fall is to be minimised. Suitable collective work equipment to minimise distance and consequences include nets or airbags positioned close under the work surface or at a lower level. Suitable personal equipment includes fall arrest systems (FAS), and suitable personal work equipment includes personal injury systems, e.g. a life jacket whilst working next to unguarded water. Additional training and instruction is to be given to workers as necessary.

2.1.3 When selecting work equipment for use during work at height activities, collective protection measures are to take priority over personal protection measures, within either of sub-paragraphs (ii) or (iii) above.

2.2 Restricted High Places

2.2.1 A restricted high place (RHP) is a workplace with a fixed access that has been assessed and presents a significant risk of a fall liable to cause personal injury and/or exposure to other hazards within close range.

2.2.2 A Register of RHPs is to be prepared for each site. The AE is to review on an ongoing basis, and assisted as necessary by the AP, to identify high places with a fixed access. He is to conduct an assessment of the identified high places to determine if the facility with the fixed access is to be designated as an RHP. The AE is to ensure that each designated RHP has been entered on to the Register of Restricted High Places (Form H1) for each site.

2.2.3 The assessment of the identified high place is to consider the following as a minimum:

- the structure location, type, height and condition;
- the access system, type and condition;
- provision of edge and fall protection; and
- residual hazards.

2.2.4 Other hazards that may exist, for example, radiation hazard, electricity or moving objects.

2.2.5 The AP is to complete the following, where applicable, for each RHP identified:

- RHP datasheet (form H2);
- register of residual hazards (form H3); and
- serious fault notice (form H8).

2.2.6 All documentation related to the RHP is to be updated when there is any significant alteration to the RHP, e.g. damage or modifications to the structure, access system or installed equipment.

2.2.7 All RHPs are to be designed, inspected and maintained to current codes, standards, and in accordance with manufacturer's instructions, as applicable.

2.2.8 The location of any design, inspection or maintenance certification is to be included on the RHP datasheet (form H2). Where these are not available, the maintenance team shall arrange for the system and equipment to be inspected by a competent person so that the relevant certification can be produced.

2.2.9 Pre-use inspections of RHP access systems are to be carried out prior to each working at height activity but they are not to be deemed as a substitute for scheduled inspections.

2.2.10 When planning new or refurbished works notifiable under the Construction (Design and Management) Regulations (CDM) the Authorising Engineer is to be notified.

2.2.11 All planned new or refurbishment works that are likely to affect an existing RHP or to introduce a new RHP, are to be referred at planning stage to the AE for comment.

2.3 Signage

2.3.1 Appropriate permanent advisory and warning signs are to be placed on or in close proximity to the access point of each RHP or where access may be gained to a high risk area such as a roof with inadequate edge protection. Where an RHP is individually fenced, and the fence is in close proximity to the RHP, the signs may be fixed to the gate or fence. An example of a model sign is provided in Annex B.

2.3.2 The AP is to liaise with any other party that has control over residual hazards on or in the vicinity of each RHP or WaH location, and is to verify that full and sufficient signage is in place.

2.3.3 During a work at height activity, where there is a risk of falling objects, a site perimeter is to be established and temporary warning notices and signs are to be positioned as appropriate. A site perimeter is to be set at a radius equal to half the maximum working height up to a limiting radius of 25 metres.

2.4 Anti-Climb Devices, Locks and Keys

2.4.1 The AE is to advise the AP(WaH) to implement appropriate preventative control measures where deemed necessary, in order to inhibit unauthorised access to RHPs or other WaH locations. This may be achieved, for example, by fitting anti-climb devices (ACDs) such as plates with padlocks on fixed ladders or installing perimeter fencing or by key control to doors or windows that provide access to a high risk WaH location.

2.4.2 Details of all keys relating to restricted WaH locations are to be included in the document register. The AP(WaH) is to hold and issue keys for lockable ACDs installed on RHPs within their area of appointment and to record each issue and return.

2.4.3 The issuing of a permit-to-climb or access to a high risk area, may necessitate the isolation of equipment involving the permit of another discipline. Where this situation arises for a restricted place the AP(WaH), AP of the other discipline, or any other person authorised to issue a permit to work, are to co-operate and coordinate their actions accordingly.

3.0 MANAGEMENT ARRANGEMENTS

3.1 Introduction

3.1.1 The procedures set out in this chapter are to be followed when issuing a permit to climb or access a restricted place. These include the preparation of a task risk assessment, method statement and an emergency and rescue plan.

3.2 Working at Height Document Centre

3.2.1 For each site, a document centre is required for the documents that support the management arrangements for working at height. These documents will include the following:

- document register; and
- standard forms.

3.2.2 The document centre is to be in a lockable drawer or cabinet.

3.3 Document Register

3.3.1 This is the principal source of management information for WaH within a site. This file is to be compiled and updated as necessary by the AP.

3.3.2 The restricted high place documentation will contain the following information:

- a register (form H1);
- datasheets for each restricted high place on the register (form H2);
- register of residual hazards for each restricted high place (form H3);
- current permits (form H6);
- any serious fault notices (form H8);
- current standing instructions (form H10);
- copies of contractor risk assessments / method statements;
- written agreements defining the demarcation of responsibilities, indicating the boundaries, operation, protection and maintenance procedures for the equipment;
- copies of any relevant inspection/design certification;
- any relevant safety, technical and environmental documentation and any specific local procedures and instructions issued by the AE;
- lists and copies of certification for authorised climbers/access team resident on site or of contractors used;
- plans showing the locations of RHPs;
- register of permits and standing instructions issued (form H7); and
- completed permits (form H6) and standing instructions (form H10).

3.4 Audits

3.4.1 Application of these procedures will be subject to periodic assessment of personnel and audit and monitoring for compliance. For further information see section 8.

3.5 Management of Remote Sites

3.5.1 When a work at height activity is carried out at a remote site, it is essential that the climbing/access team has a suitable and sufficient emergency and rescue plan in place, taking into consideration the remote nature and location of the site. Plans are to include details of means of communication that are proven to be effective, and the appropriate rescue equipment made available appropriate to the location, height and type of work to be carried out.

3.6 Reporting of Dangerous Incidents, Dangerous Conditions, Dangerous Practices, Dangerous Occurrences, Injuries and Diseases

3.6.1 Reports should be made to HSE as required by the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013.

3.6.2 In all cases, whether or not a report is required under RIDDOR, a report must also be made on DATIX.

4.0 MANAGEMENT STRUCTURE FOR SAFE SYSTEMS OF WORK

4.1 General Principles

4.1.1 This section summarises the roles and duties of those who are involved in the management of the safe system of work, as identified in section 1.3.6.

4.2 Co-ordinating Authorising Engineer

4.2.1 The Co-ordinating Authorising Engineer (CAE) shall be an engineer employed by the Authorising Engineer's organisation, and shall be responsible for professional standards of the Authorising Engineer supplied to NHS Lothian.

4.3 Authorising Engineer

4.3.1 The appointment of the Authorising Engineer (AE) is made in writing and shall be under the direction of the CAE.

4.3.2 The AE is to be a suitably qualified, trained engineer with relevant experience in safe systems of working at height.

4.3.3 Duties of the AE include:

- to oversee the carrying out of assessments of all high places on site;
- to ensure that the register of restricted high places is prepared and maintained;
- to advise on the need and suitability of fixed access systems or other access methods;
- to ensure that the planned appraisals, inspections and maintenance documents are available for each restricted high place;
- to review and approve complex or unusual working at height activities;
- to provide advice with regard to the CDM Regulations and requirements for safety plans in respect of the restricted high places;
- to ensure that handover documentation, in respect of any new restricted high place, is satisfactory;
- identify the numbers of authorised persons (APs) necessary for the site or geographical areas, to allow the effective adoption and implementation of these procedures;
- ensure that a centrally maintained file of all APs within their area of responsibility is kept, detailing locations and areas of the AP's responsibility, appointment dates, qualifications, training certificates, refresher training, experience and general correspondence;
- ensuring that designate APs are suitably trained prior to appointment/re-appointment;
- interviewing designate APs and, where successful, making recommendations for appointment;
- reviewing the operational experience of APs to ensure that competency is maintained and, if necessary, withdrawing the certificate of appointment;
- where there is a contractual arrangement between NHS Lothian managed premises and those managed by another organisation, ensure that a written agreement is produced defining demarcation of responsibilities between the parties involved for management of working at height;
- conduct audits in line with Section 8.0 of these procedures to ensure compliance;
- report any deficiencies in the safe system of work to the estates manager;
- ensuring that any accident or dangerous occurrence connected with working at height is immediately notified to the estates manager;
- investigate any reported dangerous occurrences;
- ensure that safety, technical and environmental directives, alerts and bulletins relating to working at height are issued; and
- providing general advice to APs in the execution of their work.

4.4 Authorised Person

4.4.1 The appointment of an AP is made in writing after being assessed by the AE.

4.4.2 An AP is to display emotional maturity, be suitably qualified and trained, and is to have relevant experience in working at height and/or safe systems of work.

4.4.3 Prior to final assessment by the AE, the designate AP is required to have achieved the necessary standard of training set by the AE during an initial AP interview. Refresher training is required at periods not exceeding three years or as defined by a risk assessment undertaken by the AE.

4.4.4 When suitably trained and prior to final appointment, the AP is required to demonstrate the following to the satisfaction of the AE:

- knowledge and site familiarity of the restricted high places and other working at height activities incorporated within their area of responsibility;
- the location and layout of the restricted high places, keys and arrangements for obtaining access to them;
- the location and use of all appropriate working at height equipment and safety signs along with arrangements for obtaining access to them;
- a full and thorough understanding of these procedures and any local variations within their area of responsibility; and
- a general understanding of all relevant current legislation, in particular the Work at Height Regulations 2005.

4.4.5 On completion of training and assessment the designate AP will be appointed as AP for a period of up to three years.

4.4.6 The role of the AP is to oversee and authorise all working at height on restricted high places that takes place in accordance with these procedures, as well as other working at height activities at their site. The specific duties to be undertaken include:

- to review all requests for access to a restricted high place, to issue permits where appropriate and to cancel the permits on completion;
- to notify the AE of any complex or unusual work at height activities and to keep them informed of progress;
- to arrange safe access for the climbing team;
- to monitor that the climbing team comply with the requirements of the procedures and to withdraw a permit if this no longer becomes the case;
- to undertake random checks of the climbing team to establish that the provision and use of the PPE and the work carried out is in accordance with the method statement;
- to inform the AE of any serious fault notices (form H8) and other feedback as received from the climbing/access team;
- to prepare and maintain the register of restricted high places;
- to maintain and, where appropriate, update all restricted high place documentation;
- to determine and maintain the key storage arrangements for restricted access keys;
- to co-operate and co-ordinate with APs of other disciplines;
- to be familiar with each restricted place assigned to them and the site user requirements;
- to have an awareness of current climbing/access practice and equipment;
- to have, or ensure, processes in place for the use of access equipment and to ensure the equipment is inspected and/or has certification; and
- to ensure that staff or contractors using access equipment are suitably trained and competent.

4.5 All Other Persons

4.5.1 All other persons involved in WaH activities are to co-operate with the AP and to follow the conditions set out in any permits and standing instructions so issued.

4.5.2 Where there is doubt regarding the safety of WaH operations, work shall stop until the work arrangements have been remedied in line with the principles of this safe system.

5.0 OPERATING PROCEDURES

5.1 General

5.1.1 This section details the operating procedures to be adopted for managing the control of access to high places. It covers permits, standing instructions, task risk assessments and method statements.

5.1.2 Access to a high place requires the issue of a permit or a standing instruction. A permit to work at height may also require to be issued in conjunction with a permit of another discipline, e.g. confined spaces, electrical, pressure systems etc.

5.1.3 Access using temporary methods is covered in section 7 of these procedures.

5.2 Complex or Unusual Tasks

5.2.1 These tasks are to be referred to the AE.

5.2.2 As a guide, the following tasks are considered complex or unusual work:

- tasks which will modify the access structure and/or access system;
- installation, removal or replacement of access equipment that is not like-for-like;
- where live working is being considered, around electrical equipment and radiofrequency hazards;
- tasks where heavy or large area equipment/materials have to be moved, carried or lifted;
- tasks where lifting equipment is to be used or require permits of other disciplines;
- the use of rope access or steeplejack methods; and
- any task the AP (WaH) considers to be outside of expertise.

5.2.3 When it is not clear if the task falls into the complex or unusual category, the AP is to refer it to the AE for a decision.

5.3 Permits

5.3.1 There are two types of permit issued by the AP. The normal permit on form H6 is for short duration tasks and is described in this section. The other type of permit is called a standing instruction (form H10) which is issued to individuals for routine or repetitive tasks that may be carried out a number of times over a long period. This type is described in section 5.4.

5.3.2 A permit is to be issued by the AP to the person in charge in order to allow the WaH team access to a restricted high place or other high risk WaH activity. A permit (form H6) is included at Annex A. Each permit is to have a unique serial number.

5.3.3 The AP is to issue the permit only after application of the WaH hierarchy (see section 2.1)and when safe access methods have been considered and it is proven necessary to undertake the work at height activity. The WaH team proposing to undertake the work is to satisfy the AP that they have met the requirements as set out in these procedures.

5.3.4 The AP is to check the competence of each member of the team. The AP will not however check the competencies of personnel carrying out the tasks of other work disciplines as these will be carried out by the AP of the other discipline as appropriate, unless they have to be assessed for working at height activities.

5.3.5 The AP is to also check, if required, the medical examination evidence and fitness certification of each team member.

5.3.6 For the work, the AP is to ensure that a suitable and sufficient task risk assessment, method statement and emergency and rescue plan are in place prior to the issue of a permit.

5.3.7 A permit to work is to be issued to the person in charge of the team following assessment of the request for access to a restricted high place / other working at height activity. If the AP deems the task to be complex or unusual, the request for access is to be referred by the AP to the AE for approval.

5.3.8 For complex or unusual work, the AE is to ensure that a suitable and sufficient task risk assessment, method statement and emergency and rescue plan are in place. Sufficient time is to be allowed for the AE to appraise all documentation. A permit for complex or unusual work will only be issued to the person in charge of the team, by the AP, following approval by the AE.

5.3.9 A permit is to be issued at the location of the work at height activity as far as practicable. For each location there is to be only one valid permit open at any one time. The AP is to close the permit on completion of the task, and receive any feedback from the climbing/access team. Any standing instructions in place are to be temporarily suspended whilst a permit is open, as the permit takes precedence.

5.3.10 In most circumstances, a permit will be valid only for the date it is issued, however in the event that the duration of the work at height takes longer than one day, the AP may, subject to risk assessment, consider a request for the permit to remain open for a longer period up to a maximum of 5 days. This is dependent upon the specific work activity and upon the person in charge confirming on a daily basis that the fitness certification completed for each member is still valid and that the risk assessment remains suitable and sufficient.

5.3.11 A permit may be required to be issued in conjunction with a permit of another discipline. In this situation, the AP (WaH) and APs of other work disciplines are to co-operate and co-ordinate their actions accordingly, e.g. with respect to access keys.

5.4 Standing Instructions

5.4.1 Where a working at height task is of a frequent nature, a standing instruction may be issued to the person in charge by the AP instead of the normal short-term permit. The SI is to be issued on form H10 and approved by the AE.

5.4.2 The AP is to ensure that suitable and sufficient assessments of the risks are received prior to the issue of a standing instruction.

5.4.3 The AP is to provide the following documents to the person in charge upon receipt of a request for a standing instruction.

- form H2 – datasheet;
- form H3 - register of residual hazards;
- form H8 - serious fault notice (if applicable); and
- any condition inspection certificates available.

5.4.4 The person in charge is to submit the following documents to the AP:

- task risk assessment;
- method statement;
- emergency and rescue plan;
- documentation to show the competency of each team member; and
- medical certification, if required.

5.4.5 The documents may be of a generic nature for the type of work activity being undertaken. The generic documents are to be reviewed by the person in charge and updated to task specific ones, as applicable on each occasion that the standing instruction is invoked.

5.4.6 The person in charge (or their employer) is to provide details of the personnel in their team to the AP. Each member of the work team is to be competent as per the requirements of these procedures.

5.4.7 The H10 form along with relevant risk assessments, method statements, rescue plans and competencies are to be forwarded to the AE for review.

5.4.8 The person in charge is to confirm that the team members have undergone, if required, the relevant medical examination and that his team members are fit to carry out the work when the work is being undertaken. They should also check the weather forecast prior to each external work at height activity. The person in charge is to immediately inform the AP of any changes to the agreed plan of work, change of personnel or any other situation that would affect the safety of the WaH team members or increase the level of risk originally assessed.

5.4.9 A standing instruction is to be valid for a period not exceeding 12 months.

5.4.10 Keys for access to the restricted high place during the validity of the standing instruction are either returned to the key cabinet after each use or, if deemed suitable by the AP, a second key issued to the person in charge.

5.4.11 The standing instruction for a particular location is temporarily suspended if a work at height task requires a normal permit for that location. When suspension of a standing instruction occurs, the person in charge will return the H10 form and the keys to the AP. Once the H6 permit has been closed, the standing instruction form and the keys may be returned, subject to any further risk assessments being carried out as a result of the work that has just taken place.

5.4.12 A standing instruction will be cancelled by the AP under the following circumstances:

- change of named team members;
- change of work at height task; or
- new hazards are present and/or the risk rating has increased to unacceptable levels.

5.5 Risk Assessments and Method Statements

5.5.1 For all tasks to be undertaken on a restricted high place or involving a working at height activity, a task risk assessment is to be prepared by, or under the supervision of, the person in charge.

5.5.2 This risk assessment is to take into consideration details given on the RHP datasheet (form H2), residual hazards (form H3) and the serious fault notice if required (form H8) which are to be made available to the person in charge. Additional hazards present at the time of the work at height activity are also to be considered. Guidance on potential hazards in relation to working at height is provided in Section 6.8.

5.5.3 In preparing the task risk assessment, each risk is to be assessed, taking into consideration the mitigation and control measures to be applied so far as is reasonably practicable. Any residual risk is to be clearly identified and full details of how the work will proceed safely are to be provided in the method statement.

5.4.13 The method statement is to include details of the personal protective equipment to be worn and used by each member of the access team during the work at height activity.

5.4.14 The method statement is also to include details of site boundaries, methods of cordoning-off areas around the work at height activity and any temporary signage that may be required.

5.4.15 The person in charge and members of the access team are to remain vigilant and are to continually review the task risk assessment during the work at height activity. They are to take account of any changes, e.g. environmental conditions, and implement further control measures as necessary.

5.6 Emergency Plan and Rescue Plan

5.6.1 For any work at height on a restricted high place, the person in charge is to prepare a suitable and sufficient emergency plan for dealing with emergencies. The plan is to include names and telephone numbers of all emergency and support services that may need to be contacted.

5.6.2 A rescue plan is to be prepared by the person in charge for each work at height activity. The plan is to be effective, considering the task and location, in order for the rescue to be carried out promptly. The rescue method, equipment and location of equipment, is to be detailed in the plan. A rescue may be required to be carried out by personnel suitably trained in rescue from height. All members of the team must be able to communicate with each other including the rescue personnel, with all means of communication to be proven effective. A rescue plan should not necessarily rely on the emergency services as in some cases, such as when fall-arrest equipment is used, rescue cover is provided by the climbing team. In any case, the agreement of the emergency services shall be obtained beforehand where appropriate.

5.6.3 During a rescue from height, single rope working is only to be permitted where life is endangered and it is considered essential following a risk assessment.

5.7 Retention of Records

5.7.1 Completed permits are to be retained in the Working at Height Document Centre for a minimum period of three years after cancellation. Thereafter, the document is to be archived.

5.8 Action on Loss of Documentation

5.8.1 Should the original signed permit to work or standing instruction be lost, then the AP (WaH) is to stop the work as soon as the loss is noticed, until such time as new documentation is issued.

5.8.2 When the work has been stopped due to loss of documentation, the loss is to be recorded by the AP (WaH) on form H7 (register of permits). Any copies that may be held should be defaced with the words, “ORIGINAL COPY LOST” written in large print, diagonally across the face of the document. The copy is also to be signed by the Person in Charge and the AP (WaH) to acknowledge the loss.

6.0 WORK AT HEIGHT PROCEDURES – CLIMBING / ACCESS TEAMS

6.1 Introduction

6.1.1 This section provides details on the climbing/access team and the person in charge, and defines the required competencies of the two categories of climbers: occasional and skilled. It describes the composition of the team and the responsibilities of both the person in charge and the team members. The requirements for medical examination, fitness, climber skills, training and the keeping of logbooks are also given. Additionally, guidance is provided on potential hazards and personal protective equipment.

6.2 Working at Height Team

6.2.1 The team is to be composed of adequate numbers of competent personnel required to carry out the work at height activity on the restricted high place, in accordance with the requirements of these procedures.

6.2.2 Occasional climbers do not have formal work at height training and as such do not wear harnesses for the purpose of fall arrest. They may however wear a harness for the purpose of work restraint such as with a roof mansafe system which will act to prevent a fall or they will be working in a safe place where the fall protection is collective and passive such as that provided by fixed handrails. For occasional climbers, the only risk of falling occurs during the acts of access and egress and for this reason they are generally limited to climbing fixed access ladders with safety hoops and a maximum rise of 6m. A second successive ladder, again with a maximum rise of 6m, may then be climbed but only if it is separated from the first by an adequate intermediate platform and where safety hoops on the second ladder is fitted to prevent falls over the intermediate platform handrails. Any deviation from these constraints must be given to the AP in writing by the AE.

6.2.3 Should occasional climbers wear a harness in combination with fall-restraint equipment, then they shall be trained in its use.

6.2.4 Skilled climbers have formal training and are permitted to use fall-arrest systems. The maximum height climbed and the nature of the work carried out are generally limited according to the individual's abilities based on past experience and competence.

6.2.5 A climbing team is to comprise of a minimum of two climbers, so that one member of the team can assist the other in case of difficulty. The climbing team is to have effective and proven means of communication between members of the team at all times.

6.2.6 For skilled climbers using fall-arrest systems, where the task is such that only one climber is required on a structure, the second climber is to be fully equipped with a full body harness and other appropriate personal protective equipment ready to climb should there be an emergency, and in accordance with the emergency and rescue plan.

6.2.7 For occasional climbers not using fall-arrest systems, where the task is such that only one climber is required on a structure, the second climber should be equipped and ready to climb the structure to assist in the case of an emergency. Whether that second climber then carries out the rescue or whether this is then carried out by others should be written into the emergency and rescue plan.

6.2.8 The team is to have all appropriate equipment and PPE to undertake the work at height activity safely, and it is to be used in accordance with the method statement.

6.2.9 Where the access team is for a WaH activity that does not involve climbing, e.g. door access to an unprotected roof, each member of the team must be suitably trained for the task involved, which may include training in the use of and wearing of a harness.

6.3 Person in Charge

6.3.1 One member of the team will be appointed as the person in charge, normally by their employer. The person in charge will be experienced in the type of activity and will have overall responsibility with regard to safety and work at height matters.

6.3.2 Prior to accessing a restricted high place or commencing a working at height activity, the person in charge is to obtain a permit or standing instruction from the respective AP (WaH). The AP (WaH) will not issue a permit or standing instruction until all hazards have been considered and the associated risks have been assessed and recorded in the task risk assessment. It is the responsibility of the person in charge to ensure that the task risk assessment, method statement, emergency and rescue plan are prepared and that they are followed and reviewed as necessary.

6.3.3 The person in charge is to ensure that each member of the team operates in a safe manner and understands his individual responsibility. He is also to ensure that each member is operating within his own capability and is willing to undertake the task. Where a member of the team demonstrates a lack of confidence in carrying out a task, the person in charge is not to insist that it is carried out.

6.3.4 In the event of a situation that the person in charge considers to be unsafe, all operations are to immediately cease. A report on the occurrence is to be made immediately to the AP. No work at height activity is to be resumed until the AP and the person in charge have agreed in writing to do so.

6.3.5 The person in charge is to ensure, so far as is reasonably practicable, that a team member does not position themselves directly below another climber on the access system or structure.

6.3.6 When a serious fault is identified by any member of the team, the person in charge is to notify the AP as soon as practicable. The AP will then compile a serious fault notice (form H8), a copy of which will be forwarded to the AE for signature. The person in charge and the AP are to take appropriate and immediate action to make the activity and/or restricted high place secure and to prohibit further access.

6.3.7 On completion of the work at height activity, the person in charge is to provide feedback on the permit form and to confirm that the work has been completed, the structure and access system have been left in a safe condition and the site secured. The person in charge is to return the permit to the AP for closure.

6.4 Climbing / Access Policy

6.4.1 Only occasional or skilled climbers are permitted to access a restricted high place under a normal permit or a standing instruction unless the access is as defined in 6.2.9. See also Table 6.1 for climber's requirements.

6.4.2 The restrictions on climbers are outlined in section 6.2.

6.4.3 Prior to climbing, the person in charge is to undertake a visual inspection of the structure and access system from the ground. All climbers should ensure that visual inspections are maintained throughout the work at height activity in order to detect any unacceptable conditions or defects to the structure or the access equipment.

6.4.4 When using fall-arrest or work-restraint measures climbers are to select the strongest anchor point available. Normally these points will be structural elements, approved by a competent person or a load tested anchor point. Reference will have to be made to the latest inspection or appraisal report of the restricted high place. For vertical fall-arrest equipment, the selected anchor points should be as high as practically possible and preferably above head height.

6.4.5 Work at height PPE is manufactured and tested against standards that govern the overall weight of a person, including their clothes, equipment and tools that can safely use that equipment. Current standards detail tests at 100kg, although many manufacturers produce tested and certified equipment rated to 130kg and above. The person in charge is to ensure that all members of the climbing team are issued with the appropriate PPE and that the overall weight of a climber does not exceed the stated value for any items of PPE in use, unless it is a horizontal fall restraint which does not permit the wearer to be suspended in the harness.

6.4.6 The practice known as 'free climbing', i.e. where a climber is not protected by passive fall protection or any other fall arrest equipment is prohibited except for low risk, short duration ladder work/access.

Table 6.1 Climbers' Requirements

	Occasional Climber	**Skilled Climber**
Training	Awareness only	Formal
Experience at height	Employer assessed	Demonstrated in logbook
Additional Skills	As required	Rescue from height First aid training RF monitoring (if required)
Formal Medical Examination	Not required	Certified by Medical Practitioner
Fitness	Fitness self-certification	Fitness self-certification
Climbing Limits	RHPs incorporating hoops and platforms at 6m max spacing to a max height of 12m above ground level.	Limited by experience/risk assessment

6.5 Medical Examination and Fitness

6.5.1 Work at height activities can be physically and mentally demanding. Consequently, skilled climbers, who access RHPs, are to have periodic medical examinations in order to identify any condition that might affect that individual's ability to climb. These examinations must be carried out by competent medical practitioners. A sample letter for their guidance is located in Annex C.

6.5.2 The permits are signed by each member of the climbing team to confirm that they are fit to carry out their duties on the day. This is separate from any medical that may be required where strenuous activities are to be undertaken.

6.5.3 It is the responsibility of the person in charge of a climbing team to ensure that all advanced climbers have valid documentation.

6.5.4 The recommended frequencies for medical examination for skilled climbers are;

Age	**Frequency**
up to 45	every 5 years
45 to 55	every 2 years
over 55	annually

6.5.5 Minor illnesses may result in life threatening situations for those working at height and therefore individuals should not climb if they do not feel fit enough to do so.

6.5.6 Following any sickness absence of two weeks or more, or at the request of their supervisor, when there is any reason to suspect that an individual may have difficulty undertaking their work, the individual should seek clarification from a medical practitioner that they may continue to work at height.

6.6 Climber Training

6.6.1 Skilled climbers are to have formal training in order to work at height. This training is to include, as a minimum, relevant H&S legislation, climbing and access techniques, selection and inspection of work equipment and PPE, risk assessments, emergency planning, rescues, first-aid and record keeping. Training records to be available for inspection.

6.6.2 Occasional climbers/access personnel are to receive height awareness training including, as a minimum, ladder safety, ladder climbing techniques, relevant safety legislation, risk assessments and emergency planning. (See also Table 6.1 for climbers' requirements.)

6.6.3 Training for other WaH activities will be as required for that specific task.

6.6.4 Formal training should be carried out in accordance with the requirements of BS 8454.

6.6.5 For less strenuous activities but at the discretion of the AE/AP, a medical examination might not be required. The team members however will still need training for the actual WaH location/task and also be fit to work on the day.

6.7 Climbers' Logbooks

6.7.1 Skilled climbers are required to maintain a logbook to demonstrate their acquired levels of competence.

6.7.2 The following details should be included:

- climbing log (detailing type of structure, unusual weather, equipment used);
- training records; and
- evidence of medical examination.

6.8 Hazards at Height

6.8.1 Radio Frequency (RF) hazards may be encountered. Where the radiating properties of any antenna cannot be established, it should be deemed as hazardous.

6.8.2 All access within the vicinity of a hazardous antenna should be denied unless the antenna has been electrically isolated or RF monitoring has been carried out by a competent person and no significant risks were found in the proposed work location.

6.8.3 Falling objects, especially where deflected, can travel large distances. An exclusion zone with a radius of half the maximum working height should be put in place, up to a maximum of 25m.

6.8.4 Environmental and weather conditions: WaH should not be undertaken when the environmental conditions are such that they would present an unreasonable risk to the personnel involved. This will depend on many factors but the final decision must be made by the person in charge.

	Max mean wind speed (mph)	**Wind Description**	**Visual description**
Occasional Climber	10	Gentle breeze	Leaves and small twigs in constant motion Flags extended
Skilled Climber	20	Fresh breeze	Small trees in leaf begin to sway Crested wavelets on inland waters.

Note that the maximum gust wind speed (measured by an anemometer) may be 1.5 to 2 times the mean value.

6.8.5 Lightning is one environmental condition of particular concern to climbers. Weather conditions should be continually monitored and advance warnings from reliable sources sought prior to works being carried out.

6.8.6 All residual hazards should be recorded on the residual hazard register (form H3) for each restricted work at height location.

6.9 Work Equipment and Personal Protective Equipment

6.9.1 Suitable work equipment and PPE for work at height is to be selected as determined by the task risk assessment and utilised as determined by the method statement and in accordance with the manufacturer's instructions.

6.9.2 Work and personal fall protection equipment to comply with BS 8437: and all equipment and PPE to comply with relevant British and European Standards.

6.9.3 Skilled climbers, and when trained in their use, occasional climbers, to wear full body harnesses on restricted high places where the task risk assessment and method statement require it.

6.9.4 All members of the team to wear climbing helmets/hard hats with chinstraps. All personnel on the ground (within the designated site perimeter or exclusion zone) are to wear head protection. Note: attention is drawn to the distinction between helmets complying to EN 397 (industrial) and EN 12492 (mountain climbing). Although the designs sometimes look identical, those complying with EN 397 are intended to provide better protection against falling objects and to reduce the risk of strangulation should the chinstrap become entangled. Those to EN 12492 will have features better suited to mountain climbers, such as improved ventilation. EN 397 industrial helmets should be selected unless there are good reasons to choose otherwise.

6.9.5 Eye protection is to be worn where the task risk assessment and method statement require it.

6.9.6 Protective clothing to be worn suitable for the work activity being undertaken and for the prevailing environmental conditions. Overalls are preferred as there is less chance of clothing becoming loose and flapping about. However it is important that all clothing is comfortable and does not restrict movement. A high visibility jacket may be worn on top if required.

6.9.7 Pockets should be closed with fasteners to prevent items falling and small tools should be kept in a bag or attached by means of a carabiner.

6.9.8 Footwear is to provide firm support to the foot and ankle. It is to have a well-defined instep and patterned sole to prevent slipping. Steel toe caps are always to be used and where long climbs are involved or if the work involves standing on a ladder rung or bracing, strengthened soles are recommended.

6.9.9 Protective gloves are to be available and worn, when appropriate, for the work activity being undertaken. In particular, they are to protect against heat, cold, sharp edges, protective coatings, splinters and bird droppings.

7.0 NOTES ON OTHER ASPECTS OF WORK AT HEIGHT

7.1 General

7.1.1 This section covers work at height activities using temporary access methods or those activities not covered in depth elsewhere in these procedures. APs (WaH) will oversee the potentially higher risk activities that occur on site whether in-house staff or contractors. The AP obviously has a responsibility to outline any site hazards that the work team may be exposed to, particularly for contractors who may be unfamiliar with the site. Unlike the RHP documentation, this information may not be in a readily available format but should be issued and recorded, possibly through a site induction process. Permits will be issued for many of the activities listed below as a method of communicating that the AP is satisfied with the planning and organisational documentation provided for the works, that the competencies of the work team have been reviewed and a record made, and that the work team understand their documentation and know exactly what they are going to do, where they are going to be working and how they will access the work area safely. The Person in Charge will sign the permit to state that their role and responsibilities are understood and that the work team will be supervised for the duration of the permit, as stated on the permit. The permit shall be given a unique number and this is recorded on the permit issue register prior to issue. Generally the H6 permit should be used unless the client dictates otherwise. It is important that any RAMS that have been reviewed prior to permit issue, are referenced in section 6 and that all members of the work team sign section 6 to confirm that they understand those RAMS and that they will work to them.

7.1.2 APs (WaH) will not generally write H6 permits for low risk WaH activities. This is because the AP permit is essentially a safety permit and as long as the low risk works are adequately covered by their RAMS and the work team are competent, then there are no further checks to make on each occasion.

7.1.3 AP (WaH) permits are issued to state that the issuer is satisfied with the planning and organisation of the work team, via a document review and discussions with the work team Following permit issue, the AP has a duty to ensure that the works are being carried out as described. This is known as monitoring and should be carried out based on risk assessment. This may only involve a few minutes of the APs time but it should be recorded by the AP with brief details given including the time of observation and should be initialled by the AP.

7.1.4 For the activities outlined in this section, AP (WaH) permits would be expected for scaffold erection and dismantling, the operation of MEWPs, working on unprotected roofs, all rope access activities, any use of suspended access equipment (SAE), any tree climbing works and for any use of steeplejack techniques. AP permits would not normally be expected for the use of portable ladders for low risk activities, working on protected roofs, (unless other hazards exist), working in excavations and the use of low level platforms that have a maximum height below 2.5m.

7.1.5 Where in-house staff are responsible for erecting and dismantling tower scaffolds or using MEWPs, AP permits may not be necessary as long as adequate RAMS are held for these activities and records of competencies held, subject to AE agreement. These activities along with the use of SAEs by staff where a robust safe system of work is in place may be carried out under an AE-approved standing instruction if they are expected to occur frequently (at least four times per year).

7.1.6 Permits are not generally required to access a pre-erected scaffold as this should be providing relatively safe access that can be considered as low risk.

7.2 Scaffolds

7.2.1 This section applies to both traditional tube-and-fitting scaffolds, as well as mobile tower scaffolds.

7.2.2 In terms of the WaH hierarchy (see section 2.1), the use of correctly erected scaffolds should provide collective fall prevention and in the case of tower scaffolds adequate fall protection during erection and dismantling. The use of fall arrest equipment on tower scaffolds is therefore not required and is discouraged by both PASMA and the HSE due to the risk of toppling of the scaffold tower. For tube and fitting scaffolds, the use of fall arrest equipment will be required during erection and dismantling and possibly during alterations as required by NASC SG4:22.

7.2.3 Scaffolds should be designed to protect the public. This includes preventing materials falling, ensuring they are strong enough to carry the loads required, ensuring that traffic and pedestrians are in safe areas especially during erection and dismantling, and preventing unauthorised access especially when unattended.

7.2.4 Scaffold design, erection and dismantling should be carried out by competent staff under competent supervision. Scaffolds should be adequately braced and securely tied or otherwise supported. Additional ties may be required if the scaffold is sheeted or used for hoisting or loading of materials. Uprights bearing directly on the ground should have base plates and timber sole plates, if required.

7.2.5 Scaffold work platforms should be fully boarded, with the boards arranged to avoid slips and trips, and stair or ladder access should be suitable and secure. Ladders should be angled at around 75° to the horizontal (i.e. one out for every four up) to minimise the chance of sliding. Where practicable, ladders should extend a minimum of 1m above work platforms to provide safer access. There should be double guardrails and toe boards fitted.

7.2.6 Scaffolds should be inspected by a competent person before first use, after any changes have been made and at regular intervals not exceeding 7 days when still in use or if there is any reason to suspect that an inspection is required. Ladders should also be checked regularly for defects, as set out in the method statement or safety management plan. No changes to the structure should be carried out except by a competent person and care should be taken that they are not loaded beyond design levels.

7.2.7 For mobile tower scaffolds, the maximum height is determined by the supplier's manual which will give information on the use of stabilisers and outriggers. The wheels must be locked when in use. People and materials should be removed and the height of the tower reduced to 4m (max) when being moved. Tower scaffolds should never be used to support ladders. Mobile tower scaffolds are to be made secure when not attended to prevent unauthorised access and use.

7.2.8 For the erection and certification of mobile tower scaffolds, the competent person is to have PASMA or equivalent training and certification, and for tube and fitting scaffolds CISRS or equivalent training and certification.

7.2.9 Mobile tower scaffolds should be erected in accordance with the manufacturer's instruction manual for that particular equipment. Access must always be internal with external ladders and external climbing never permitted. Smaller mobile towers are designed to be free standing but should be tied-in to the structure wherever possible: this is an essential feature for towers of 12m height. PASMA recommends that work on tower scaffolds should stop if windspeed exceeds 17 mph, that they should be secured to the structure if the wind is expected to reach 25mph and that they should be dismantled if the wind is expected to reach 40 mph. The use of sheeting can greatly increase the wind loadings and supplier advice should be sought. Sheeted towers must be tied to the adjacent structure at all times.

7.2.10 Scaffolds inspections as described in section 7.2.6 also apply to low level platforms, i.e. those below 2.5m. Mobile towers do not however require re-tagging each time they are moved on the same site, as long as they stay intact. The PASMA code of practice covering towers that most users are trained to (identified as 'U' and 'T' on their certificates) is specifically for towers from 2.5m to 8m (outdoors) and 2.5m to 12m (indoors).

7.2.11 Anyone who climbs a mobile tower scaffold must be fit enough to do so, be aware of the risks and have received toolbox talk training similar to that for portable ladders.

7.2.12 Tube and fitting scaffolder's competencies are held by CISRS. Scaffolds must be erected or overseen by a 'scaffolder' or an 'advanced scaffolder'. 'Trainee scaffolders' can only work under the supervision of a scaffolder or an advanced scaffolder and 'scaffolding labourers' cannot work on a scaffold until that section is complete and providing full fall prevention. Some scaffolders may have restrictions on the reverse of their cards, e.g. 'for Haki scaffold only'.

7.2.13 Tube and fittings scaffolders should state in their documentation that they will be working to the NASC 'Good Guidance Practice for Tube and Fitting Scaffolding', TG20:21 (along with SG4:22 as outlined in section 7.2.2). TG4:19 should referenced where scaffolds are anchored to masonry.

7.3 Mobile Elevated Work Platforms

7.3.1 This section covers all types of MEWPs including scissor lifts and end-of-boom platforms (more commonly known as “cherry pickers”). The booms may be telescopic or articulated and may be lorry mounted, trailer mounted or self-propelling.

7.3.2 In relation to the WaH hierarchy (see section 2.1) MEWPs can be classed as providing fall prevention when operated by a competent person, although in the case of boom type MEWPs, where there is a risk that users could be thrown out, then the additional use of harnesses and short restraint lanyards can prevent this. Harnesses and short restraint lanyards may also be required to prevent falls if there is a perceived risk that the user may try to lean out and overreach.

7.3.3 MEWPS can provide a quick and easy positioning solution for someone who needs to work at height. There are however many different types available and it is essential to use the right type for the job. When choosing a MEWP, consideration should be given to the height and reach of the work, the ground conditions, the type of fuel (if indoors), the nature of the work, the number of workers required and the safe working load of the machine.

7.3.4 The operators of any MEWP should be properly trained and hold current IPAF or equivalent certification. IPAF Class 3a covers mobile scissor lifts and vertical masts and Class 3b covers mobile booms, i.e. those without outriggers. Some smaller mobile scissor lifts that cannot be driven are known as push around verticals or PAVs. In addition the machinery itself should have a valid examination certificate, normally valid for 6 months. Daily checks should also be carried out prior to use and normally, weekly inspections are to be carried out.

7.3.5 MEWPs with booms and outriggers which act as stabilisers may give a greater reach. These are generally lorry or trailer mounted machines. Operators of these (static when in use) machines require additional training and this will be indicated on their IPAF certificates as Class 1b. Class 1a covers vertical masts with outriggers.

7.3.6 MEWPs should be fitted with double guard rails and toe boards, unless the carrier platform is of the “bucket” type.

7.3.7 A rescue plan will be required to be drawn up prior to the commencement of the work. In many cases this will simply involve the use of a safety person on the ground to lower the machine down. The safety person must have received adequate instruction in this prior to the work starting and this should be proved by a practice run.

7.3.8 Exclusion areas should be introduced below and around the MEWP to protect others from falling objects. Effective barriers and signs should also be in place to prevent collisions with other vehicles that could topple the machine. Keys should always be removed from an unattended MEWP.

7.3.9 Generally MEWPs are used for work positioning only. They are not to be used for gaining access to a fixed workplace, such as a roof, unless the carrier platform has been adapted to allow users to walk directly to a safe area of the roof or in the case of a boom type MEWP, the carrier platform can be positioned in a safe place well away from an edge or fragile surface and risk assessment shows that this is safer than alternative access methods. A MEWP must never be used as a crane.

7.3.10 Other dangers arise when the carrier platforms are moved or when the whole machine is moved such as increased crushing or contact risks with structures or overhead wires. If MEWPs are moved in the raised position, then a reversing assistant (“banksman”) should be in attendance on the ground with adequate communication in place. It is essential that the MEWP is kept on firm ground at all times, as any vertical movement, even in one wheel, will become amplified and could cause the machine to topple. Depressions as shallow as 75mm have been known to cause overturning and particular care is required where inspection covers are present. Adequate communication methods are also important for a machinery breakdown/rescue situation. Some machines will cut out should any part become wedged beneath a structure. In this case they can only be brought down by an operator on the ground.

7.3.11 Weather conditions must be considered prior to the commencement of work with a MEWP, even if the work is indoors, as doors and windows may be opened or the building may be partially clad. Forecast wind speeds are normally mean wind speeds, whereas the actual gust speed recorded with an anemometer could typically be twice the mean speed, or even higher if where a MEWP is positioned between two tall buildings due to the wind tunnel effect. Each machine will have a maximum design wind speed marked on it and all MEWPs for external use are normally designed to withstand a gust speed of 28mph. It should be borne in mind that the wind speed increases with

height and that, pieces of solid sheet material such as cladding and panels can act as a sail and seriously affect the stability of the machine. Generally users should outline a maximum wind speed for the task of around 17 mph or slightly higher if measured with an anemometer.

7.3.12 Lightning is a potential risk especially when the platform is a local high point. Forecasts for lightning prediction are to be obtained before using a MEWP outdoors as part of the weather check.

7.3.13 Users should assess other alternative work methods if the operations are required on soft ground or near steep slopes or excavations, when the weight of the machine can affect the ground and cause soil failures or slippages.

7.4 Portable Ladders

7.4.1 The HSE advise that ladders can be used but only if the risk is low or where there are existing workplace features that cannot be altered. The HSE also advise that to be a low risk activity, it must also be of short duration (max 30 mins) and be light work.

7.4.2 The user of any ladder must be competent and therefore will have received instruction on how to use the equipment safely. This instruction will cover the pre-use checks (which do not have to be recorded), the need for three points of contact (to keep the user on the ladder) and the need to have the ladder stable and secure (to prevent the ladder falling when the user is moving).

7.4.3 Three points of contact when moving up or down a ladder means having both hands free and therefore, any light tools or equipment should be attached to belts or within shoulder bags or zipped pockets. When in position however the three points of contact could be changed to two feet and a point on the body. For stability this third point should be around the belt buckle area and to ensure this, users should keep their feet no higher than three step spaces from the top of the ladder.

7.4.4 For stability, the ladder should be on a solid, level and stable surface and in the case of leaning ladders, also at the correct angle (around 75 degrees to the horizontal) with the upper resting point against a solid surface. Leaning ladders can be footed initially but this does not prevent them sliding at the top: stability can be improved by securing them within their upper third. Base stability devices can be used on step-ladders to prevent sideways overturning. On leaning ladders they can prevent sliding but are not as effective as securing the ladder in the upper third. On any ladder, avoid overreaching and keep the belt buckle area within the stiles.

7.4.5 Pre-use inspections should cover the ladder feet, stiles, rungs and any locking mechanisms or securing devices and in the case of step ladders, also the platform and treads.

7.4.6 The ladders should be strong enough for their intended use but not so long and heavy that users cannot easily manoeuvre them. All ladders used at work must comply with BS EN 131 (or the earlier BS ‘class 1’).

7.4.7 In addition to pre-use inspections, the employer should arrange for all ladders have recorded (formal) inspections carried out at intervals determined by risk assessment and departmental policy. These inspections are to be carried out to the manufacturer’s recommendations by a competent person. Each ladder should be listed on the ladder register for the site and have the same ID indelibly marked on the ladder, often this could be on the tag and on the tag holder. When inspecting ladders, if the tag states the ‘date of next inspection’ then this should be written in but left un-initialled.

7.4.8 Ladders are designed to be used with the users facing them. Step ladders are particularly vulnerable to side loadings and where working to the side could apply side loadings, then this should be avoided unless additional measures are taken to secure the ladder.

7.4.9 Make certain there is no better means of performing the task before using a ladder.

7.4.10 Where a leaning ladder is used to access a work platform, they should, where practicable, extend 1m beyond the platform in order that the user can safely side step on to the protected platform or roof. In the case of the roof space access via pull down loft ladders, there should adequate hand holds at the top to provide safe access.

7.4.11 Consideration should be given to the additional hazards that may be encountered, such as live electric cables, overhead wires, hot surfaces, RF radiation and moving machinery. For electrical work, ladders should be constructed from non-conducting materials, not aluminium.

7.4.12 Consider exclusion zones, barriers and signage to reduce the chance of impacts with vehicles or other moving objects.

7.4.13 Make certain there is no better means of performing the task before using a ladder.

7.5 Working on Roofs

7.5.1 Any fall from a roof inevitably results in at least a serious injury. The risks are substantial regardless how long or short the work. Many have been killed who only meant 'to have a quick look' or make a small repair. Falls occur from edges, through gaps or holes and through fragile roof materials or roof lights.

7.5.2 As with all work at height, the WaH hierarchy which should be followed when planning the work (see section 2.1.). Remember that fall prevention takes precedence over fall-arrest measures and within each category, collective measures take precedence over personal measures. This is because collective measures are passive in that they do not require the user to take any action. With personal protection, not only does the user have to remember to use the equipment, it must also be used correctly, with the user trained.

7.5.3 Guardrails or parapets, at least 0.95m high, can provide the best form of fall protection for a flat roof. For guardrails, if there is a risk of objects being kicked off, then a toe board should be in place. Edge protection should be subject to occasional formal inspections and always subject to pre-use checks by those approaching them.

7.5.4 Unprotected roofs or those with fragile areas or roof lights obviously pose the greatest risk and therefore work on these should be avoided if possible, e.g. by the use of reach pole equipment for cleaning gutters, carrying out the work from below or using binoculars from a safe place on a nearby building or cameras on poles in the case of inspection only, or possibly drones. If the work cannot be avoided, then MEWPs can be used to provide a safe working platform. For longer works on unprotected roofs, scaffolds can provide both a safe access method and fall protection.

7.5.5 For pitched roofs, MEWPs can often provide a safe working platform. Roof ladders (like all ladders) do not offer any fall protection but they can prevent sliding which one of the biggest hazards. The use of roof ladders along with staging can enable safe passage in addition to edge protection.

7.5.6 Getting on or off a roof with no fixed access can provide a major risk: a secure means of entry and exit is essential. Scaffolds can provide safe entry and edge protection, whereas tower scaffolds can provide safe entry but only limited edge protection. This may be adequate in certain cases such as entry to roof valleys or for connecting to a fixed wire system. Walking towards an unprotected edge is not acceptable practice.

7.5.7 Where adequate fall prevention measures cannot be provided, consider collective passive systems such as nets, airbags and bean bags to minimise the consequences of a fall.

7.5.8 Where the use of fixed roof wire systems could result in a fall over an edge or through a fragile surface then the use of shock absorbers is required along with a robust rescue plan in order that other members of the work team can recover the suspended casualty within 10 minutes. Note: delays to rescue could result in suspension harness trauma, which is dangerous and can be fatal. (Reliance on the emergency services to carry out the rescue is not to be the first option due to time factors.) All members of the work team will need to show that they are trained and competent to carry out the rescue and provide first aid.

7.5.9 Any use of fixed roof wire systems will require the users to be trained and competent or as a minimum, under the supervision of a trained and competent person. In the case of inspectors, they will need to show that they are trained and competent to inspect it. Fixed wire systems should be inspected annually, with certification raised outlining the section ID/location and the number of users that it is certified for. Any use of these fixed wire systems should be under AP control.

7.5.10 Nothing should be thrown from a roof or scaffold. Enclosed chutes should be used or the rubbish lowered to ground in a controlled manner within a container. Particular care should be taken to protect the public from falling objects either from the roof or from the means of access. If they cannot be kept at a safe distance, then additional protection measures are required, such as scaffold tunnels. Toe boards should be in place on scaffold platforms.

7.5.11 Unauthorised and public access should be prevented at all times. When considering signage, remember that this is ineffective with young children.

7.5.12 Weather conditions can affect the health and safety of those on roofs and limitations due to rain, ice, wind, snow etc should be outlined in the planning documentation for the works. Loose objects can get blown around and these should not be left at height when the roof is unattended, e.g. during the evening or at the weekend. Consideration should be given to a prohibition on the handling of larger objects, such as roof sheeting, in gusty conditions. One particular environmental hazard for those on roofs, particularly where they are the highest point locally, is lightning: work should be avoided if this is expected.

7.5.13 Short-duration roof work could include inspections, replacement of a few tiles or a minor adjustment of a TV aerial. The work should be carried out in minutes rather than hours and in these cases, the HSE advise that it may not be reasonably practicable to provide full edge protection. However, the following two minimum requirements always apply:

- a safe means of access and egress to and from roof level; and
- a safe means of working on a roof, e.g. a harness with a short lanyard attached to a mobile or other anchor point that prevents the wearer from reaching a position from where they could fall, or a properly constructed roof ladder.

It should be remembered however that MEWPs can be appropriate for short duration work.

7.5.14 Where work on a flat roof is at least 2m back from the roof perimeter and edge protection is not provided, the working area and access to it should be marked out with continuous physical barriers. This method of protection will require tight supervision.

7.5.15 Fragile roofs are those that cannot safely carry the weight of the people along with whatever they are carrying. Where they are known to exist, adequate warning signage should be fixed on the approaches and adequate precautions taken, such as locking off any fixed accesses, which should be added to the RHP register.

7.5.16 In assessing fragility, there are a number of factors to consider other than just the nature of the material itself:

- material thickness;
- span between supports;
- sheet profile and the type, number and quality of fixings;
- support design including purlins; and
- structure, age and condition (roofing materials and glazing can become fragile with time).

7.5.17 The fragility assessment of a roof should be carried out by a competent person. It may be that the whole roof is fragile or it may just be in small areas such as roof lights. Roofs can also be temporarily fragile, e.g. at certain stages of construction. If there is any doubt as to fragility, then it should be treated as fragile.

7.5.18 As with unprotected roofs, the same WaH hierarchy applies but where the whole roof or large areas are fragile, the emphasis should be on avoidance of WaH, e.g. by working from below. Where avoidance is not possible, MEWPs can be used to provide a carrier platform from which work can take place, particularly for pitched roofs.

7.5.19 Where the only fragile areas are roof lights, then these can be covered, surrounded by guardrails or placed in exclusion zones marked out with physical barriers and notices.

7.5.20 Where access onto the fragile roof cannot be avoided, then edge protection should be fitted around the perimeter and staging used to spread the load, subject to the AE's risk assessment. Where staging and platforms do not have adequate guard rails throughout, then air bags or safety nets should be installed under the roof or other fall-arrest measures taken with adequate anchor points in place. Any support platforms used should span across at least two purlins. Where nets are fitted, they should be installed by a competent person, securely attached and as close as possible beneath the roof surface or edge. Note: personnel must not walk on fragile materials even above the purlins, as the purlins below will not prevent breakage and in fact, where the roofing material has been drilled for bolts, this could be the point where the roofing material then breaks.

7.5.21 Where valley or parapet gutters are used for access, fixed covers should be provided over fragile roof areas. These should extend 2m up to prevent anyone falling on them from falling through the roof.

7.5.22 For short duration works or works where the proximity of the fragile area is only accessed irregularly, the HSE advise that it may not be reasonably practicable to provide cover to all fragile areas, or use bird cage scaffolds or install netting but the use of personal fall arrest systems should be used, usually in conjunction with fixed roof wire systems.

7.5.23 Whole roof non-fragility of profiled sheet roofing can be categorised according to the system devised by the Advisory Committee for Roofsafety, and is classed as A, B or C (with A being the strongest). These are non-fragile when installed but could deteriorate over time.

7.5.24 Skylight fragility is categorised according to the system produced by the Centre for Window and Cladding Technology, and is classed from 0 to 3, where 0 is designed to be walked on regularly and 3 is fragile. Most new skylights should be class 2, which are not designed to be walked on but are designed to take the weight of someone falling on them. These will generally have around 8mm thick toughened glass on the upper frame and must have a minimum 9.5mm thick annealed laminated glass on the lower frame. If the lower frame is toughened but not laminated, there may be a risk to the people below. Similarly with profiled sheets, these materials are at risk of degradation over time.

7.6 Working with Excavations

7.6.1 Anyone working near an excavation is working at height if there is a risk of a fall. Additionally, anyone in an excavation is at a risk of materials falling. Note: typical soil density is 1.5 g cm^{-3} therefore a cubic metre of soil will weigh 1.5 tonnes.

7.6.2 All excavations should be supervised and inspected at least daily by a competent person. If more than 2m deep then it should be inspected for every shift. A thorough formal inspection, with results recorded, should be carried out every 7 days, unless a risk assessment identifies the need for more frequent inspection.

7.6.3 Shoring must be available for all excavations and must be used if the depth exceeds 1.2m, or where otherwise specified following expert risk assessment.

7.6.4 Signs and barriers should be used for all excavations.

7.6.5 Keep spoil heaps, vehicles and other materials at a safe distance from the edge of the excavation. Ensure that stop blocks are used to guide tipper drivers. Remember that additional surcharges will increase the chance of soil failure, particularly during wet weather.

7.6.6 Some excavations can be classed as confined spaces and may require the use of a gas monitor and a permit provided by the authorised person for confined spaces. Where excavations are considered as confined spaces, the system of work shall conform to the Confined Spaces Regulations 1997.

7.7 Rope Access

7.7.1 This section describes rope access methods which are used to enable people to get to areas at height that would be difficult to access conventionally. These activities are only to be carried out by highly trained and competent people who will hold current qualifications by IRATA or similar associations.

7.7.2 In terms of the WaH hierarchy in section 2.1 Rope access lies between fall arrest and fall prevention. The system incorporates suspension from two anchored lines, i.e. a working line and a safety line and is known as 'work positioning'. Further details are given in paragraph 10.1.8.

7.7.3 There are three levels of IRATA technicians:

- Level 1: technician – able to perform a limited range of tasks under the supervision of a level 3.
- Level 2: lead technician – capable of rigging works and undertaking rescues under the supervision of a level 3. (Minimum of 500 hours logged.)
- Level 3: supervisor – capable of complete responsibility for works projects including advanced rescue techniques and holds a current first aid certificate. (Minimum of 1000 hours logged.)

7.7.4 Where users are in work positioning, they will generally use nylon or polyester low stretch ropes in combination with a sit harness (BS EN 813) as opposed to a fall arrest harness (BS EN 361). Work seats may be incorporated if work is to be carried out for extended periods in the same location. The

working line will have a descender attached and the safety line will have a back-up device on it attached to the harness via a cow's tail. Ascenders may be attached to the working line should the user need to climb up it.

7.7.5 Occasionally IRATA technicians may work in fall arrest and in this case, they require fall arrest harnesses and 6 kN shock absorbers as for skilled climbers, or the use of dynamic mountaineering type ropes with an appropriate belay device.

7.7.6 IRATA technicians should always wear mountaineering-type helmets with chinstraps (see commentary at section 6.9.4.). Pre-use checks will always be carried out and formal inspections carried out at intervals as determined by their risk assessment.

7.7.7 The two lines used in work positioning should have separate anchor points to prevent a single point of failure. The Level 3 Supervisor will check the anchor points and rope attachments prior to work commencing. Dead weight trolleys are sometimes used for rope access: these rely on surface friction which can reduce when wet and details of the loads they can withstand are outlined in the manufacturer's instructions. Special care must be taken to protect lines that may be abraded by sharp edges.

7.7.8 Users in work positioning will generally work in pairs, fairly close to each other, so that if one requires rescue the other can move over to them and then take them down (or up). Should there be only one person suspended, then the rescue person should be in attendance at the top at all times to carry out a rescue if required. (This person's technician level should be outlined in the planning documentation). The rescue plan should outline the equipment to be used, particularly when using dead weight anchor systems.

7.7.9 IRATA guidelines and the Code of Practice for the use of rope access methods, BS 7985:2013 should be worked to at all times and should be referenced in the planning documentation. Maximum wind speeds for these works are not specified and it is generally left to the Level 3 supervisor's discretion but a reference should be made in the documentation. Wind can make the task tiring and uncomfortable and therefore exposure time should be limited. BS 7985 recommends that in winds of 24 mph, the exposure limit should be 2 hours.

7.7.10 Should in extreme circumstances a rope access is required by an untrained person, e.g. an insurance inspector or an engineer, then this is permitted only under the strict supervision of a Level 3 Supervisor.

7.7.11 The principle of double protection for work positioning activities also applies to the harness so descenders and back-up devices should be fixed separately.

7.7.12 IRATA do require self-certification fitness declarations confirmed by a GP. If there is any concern about the fitness of the technicians, then confirmation should be sought from their employer that they are fit for the works to be undertaken.

7.7.13 The maximum permissible impact force on a user, in the event of a fall, should not exceed 6kN. BS 7985 and IRATA guidelines use a static strength safety factor of 2.5 and therefore anchor points when installed should provide a static strength of at least 15 kN. (This is greater than the 12 kN outlined in BS EN 795). Eye bolts used for lifting or lowering are covered under LOLER, and for rope access works should therefore be inspected 6 monthly (or at frequencies in a written scheme drawn up by a competent person). Anchor points used for fall protection are not covered. BS EN 795 recommends that eye bolts used for fall protection which includes fall arrest should be examined at least every 12 months by a competent person. Pre-use checks will be carried out by the rope access technician with pull-out tests to 6 kN.

7.8 Window Cleaning, including Suspended Access Equipment

7.8.1 This section gives advice on the options available for window cleaning activities.

7.8.2 To avoid working at height window cleaning should be carried out from the ground using reach poles or from inside the building, e.g. if the windows are designed to rotate.

7.8.3 If the risk cannot be avoided, then the choice of access equipment will be determined by the height to be negotiated, the site conditions, the duration and extent of work and the frequency of required access.

7.8.4 For powered access equipment such as MEWPs, refer to section 7.3.

7.8.5 For suspended access equipment (SAE) such as cradles and building maintenance units (BMUs) in terms of the WaH hierarchy in section 2.1, this can be classed as providing fall prevention when fully maintained and certified, and operated by competent persons who are prevented from being thrown out by the use of short restraint lanyards. In this case, therefore they are preferable to rope access techniques. The whole system should have current certification of thorough examination which may be on more than one certificate with each only covering certain elements. In addition to the six monthly thorough inspections of the LOLER elements, there should be an annual weight test certificate. Current maintenance records should also be available to view.

7.8.6 Manufacturer's operating manuals should be available for users, along with a risk assessment carried out for the site/building by those responsible for it. These may be combined into a written or even illustrated site/building specific safe system of work. The HSE also advise that whoever is controlling the building maintenance must ensure that contractors are provided with an emergency procedure and rescue plan, along with site specific instructions on accessing the equipment and details of the communication systems to be used, which should be tested/proven. The AP (WaH) will normally be responsible for providing these specific safe systems to users.

7.8.7 Operators of SAE should be fully trained in its use. This training should be relevant to the equipment being used and is often supplied by the installer. The operators should wear full body harnesses that can be connected to a designated anchorage, so that users are in fall restraint. They should ensure that the equipment is not overloaded, that tools are secured with lanyards, the area below the cradle cordoned off, signs posted if necessary and if the windows are capable of opening outwards, the building occupants are also informed of the activities. It may be advisable to carry out these activities at quieter times of the day such as evenings or weekends and the equipment should not be used during adverse weather such as high winds. The manufacturer should outline the maximum wind speeds for use, which will be gust speeds that are best measured with an anemometer. However, if no wind information is highlighted, then SAEMA advise a maximum mean wind speed of 15 mph. Work should not take place if there is a risk of lightning.

7.8.8 Before commencing work activities from SAE, checks should be carried out to ensure that it is safe and appears in good physical working condition, and test runs should show that it is running smoothly. Key points include: safety devices, control buttons, anchorage points, the electrical system, signs of physical damage, corrosion or wear and the condition of ropes, pulleys and drums.

7.8.9 Access to the SAE must be safe, preferably from the ground or from a safe area at height, as climbing over roof edges is unacceptable. A safe system of work is to be drawn up with special consideration given to communications and emergency rescue or breakdown procedures.

7.8.10 Once the work activity is complete, the SAE should be stored safely and securely, with the power disconnected to prevent unauthorised use.

7.8.11 Normally, workers are in pairs for safety but not all SAEs are designed to carry two people and if only one person can be carried on the SAE, then a second person must be up top at all times to monitor the works and instigate a rescue procedure. Where there are two people in the SAE then a third person should be available to monitor and initiate any rescue procedures.

7.8.12 Travelling ladders or gantries are sometimes found across large areas of glazed roofing and can be powered or manually operated. As with the suspended access equipment, the operators must be fully trained in its use and wear the correct PPE, including a full-body harness and lanyard. The HSE advise that fall arrest or inertia reel type lanyards are used in case persons happen to overreach. If lanyards can be used to keep the user in restraint then this is advantageous. Key aspects of concern for this particular type of equipment are: the method of access, the need to ensure that users don't overreach, that the equipment can be locked in place when being used and whether there is a possibility of unauthorised persons controlling it. The fall-arrest systems should be checked that they lock in the event of a fall, especially with vertical sliding systems. If there is a risk of a fall and the user being suspended, then a robust rescue plan is required to get the user out of arrest as quickly as possible and within 10 minutes.

7.8.13 Those in control of buildings must recognise that because of poor design or other factors it will not always be possible to ensure that all windows can be cleaned in relative safety. It should be borne in mind that not cleaning certain windows is preferable to exposing workers to unnecessary risks.

7.9 Tree Works

7.9.1 This section covers aspects of tree works which are either carried out from the ground or from a MEWP. If it has been determined that tree climbing is the most appropriate access method then in terms of the WaH hierarchy, this is generally carried out in work positioning using a sit harness with a pelvic attachment and leg loops. Occasionally climbers may be in fall arrest, e.g. in the unusual situation that they have to work above their anchor point.

7.9.2 Unlike rope access techniques that require two anchor lines at all times when suspended, when ascending using the branches only one anchor line is required. When moving around within the tree, the work positioning systems must be kept as taut as possible. Work positioning techniques may involve doubled or stationary ropes or boot spikes but in all cases will be configured to prevent falls or reduce any potential fall distance to less than 0.5m and also to enable users to regulate their speed of descent and brake reliably. Additional anchor lines may be used, attached to the sides of the pelvic attachment to prevent swinging.

7.9.3 Tree climbing will involve moving from one anchor line to another and this will always involve taking the weight and checking on the new line before releasing from the old system. In some situations, steel core lanyards may be additionally used, e.g. when using a chainsaw on an upright stem that is also their primary anchor.

7.9.4 A minimum of two people are required for any tree climbing operations, with one on the ground who is trained and equipped to carry out an immediate rescue.

7.9.5 Essential PPE for tree climbers would be protective boots with ankle supports, a mountaineering-type safety helmet and non-snag clothing with gloves if suitable for the task (see commentary in section 6.9.4 on helmet selection). Where chainsaws are used then additional leg and groin protection is required, along with eye and hearing protection.

7.9.6 Due to the physical nature of this work, frequent breaks may be required or the climbers should rotate their roles.

7.9.7 Any use of a chainsaw on the ground will require a rear handled saw but off the ground, top handled saws are used which have two handles, both of which should be gripped. Poor work positioning in a tree is not an acceptable reason to use the saw with one hand but occasionally, e.g. at the extremities of tree limbs one hand may be required to maintain a stable working position. Chainsaws may or may not be attached to the harness and are generally warmed up on the ground before being passed up.

7.9.8 There is no single overseeing body for the training of arborists but the minimum requirement should be a City and Guilds NPTC Level 2 Award for basic tree climbing and rescue. This course does not cover the use of chainsaws and additional qualifications will be required. For those working near power lines, then additional 'utility works' qualifications are required. These additional qualifications cover a myriad of disciplines but are generally denoted as level 3 qualifications. Tree climbers generally have first aid training, which is essential for any rescuer.

7.10 Steeplejack Techniques

7.10.1 Steeplejacks work on very tall structures such as hospital chimneys, carrying out a variety of repair and maintenance tasks. They will generally fix ladders to the structure, sequentially for the full height and use a belay rope fall arrest system to provide temporary access. They may also erect temporary work platforms at high level.

7.10.2 Lightning conductor engineers fit lightning protection systems to similar structures using the same basic techniques and have similar qualifications.

7.10.3 Competence cards are issued by CSCS based on a combination of practical experience and vocational qualifications. The cards issued vary in colour denoting the level of qualification achieved. Note: an industry decision was made to require recognised qualifications instead of employer recommendations prior to issue or renewal by CSCS, so cards issued via "industry accreditation" will cease to be valid at the end of 2024 and cannot be renewed.

- Red card: trainees who have yet to complete their NVQ and can only work under the supervision of a skilled worker.
- Blue Card: skilled workers have achieved NVQ Level 2 in Access Operations and Rigging (lightning conductor engineer or steeplejack).

- Gold Card: advanced craft or supervisory workers that have achieved NVQ Level 3 or above.
- Black card: manager who has achieved NVQ Level 3 in Access Operations and Rigging along with a Level 4 or Level 5 management qualification.

7.11 Low Level Platforms

7.11.1 This section covers the use of low level platforms where the maximum platform height is below 2.5m. They are safer than ladders or step ladders because of their increased stability and enable the user to work from a protected area for longer periods. This equipment generally falls into two categories: those derived from mobile towers and those derived from MEWPs.

7.11.2 In the case of those derived from towers they are generally known as podiums or podium steps. These small towers will have four vertical legs with supporting a platform with a lockable gate and inclined step access. They will usually have struts or supports of some form near the base to give a wider footing and additional stability and can be used outdoors. PASMA training is not a requirement to use them but users should still have had adequate instruction in their use (similar to ladder toolbox talk training) with a pre-use and formal inspection regime in place.

7.11.3 In the case of those derived from MEWPs, the basic operator-powered machine is known as a Pecolift. This is a vertical mast MEWP with a protected platform that can be entered at floor level and is then raised by turning a wheel. These are one person machines for use indoors only. They do not require an IPAF powered access licence but users should received instruction in their use. These machines will be covered by LOLER and require six monthly thorough examinations.

8.0 AUDITS & MONITORING

8.1 General

8.1.1 Auditing is the structured process of gaining independent information on the efficiency, effectiveness and reliability of the management system and drawing up plans for corrective action.

8.1.2 Monitoring is the observation process followed to ensure that procedures are being operated correctly.

8.1.3 The audit regime has two purposes:

- to ensure procedures and safe working systems are kept under review and changed to adapt to circumstances and developments; and
- to secure implementation and compliance.

8.1.4 HSE identifies the following five elements as critical: training, knowledge, qualifications, skills and experience.

8.2 Audit Requirements

8.2.1 The AE is to assess each AP under their control annually to confirm their continued suitability and identify any training requirements.

8.2.2 The AE is to generate a programme for their audits, a copy of which will be sent to the CAE. Upon completion of an audit, the AE is to complete a report of the findings, which will be submitted to the site within 28 days, with a copy forwarded to the CAE.

8.2.3 If necessary, an action plan to redress any identified weakness, is to be compiled by the AE and agreed by the APs. This will be submitted to site within 28 days of the audit report submission with a copy sent to the CAE.

8.2.4 AE to conduct interim audits at any site, within 6 months of the previous audit, when it is deemed necessary. This will usually but not always follow the issue of a corrective action plan. Interim audits are formal reviews but essentially part of the ongoing informal monitoring process.

8.2.5 Where an AP covers a number of sites, the AE is to ensure that his/her audits cover all sites within a three year period.

8.2.6 AE to carry out audits on site and to consider the following as a minimum:

- appointment records;
- risk assessments (submitted);
- method statements (submitted);
- maintenance records;
- documents register;
- any relevant construction drawings or certification;
- AP's log book;
- AP training, both on the procedures and also on site equipment and systems; and
- safety documents.

9.0 TRAINING

9.1 General

9.1.1 It is a pre-requisite for those individuals described in these procedures to have undertaken training relevant to their position and be familiar with the concept of risk assessment, method statements, safety programmes and other relevant safety documentation for their sites. The AEs, APs, advanced climbers and IPAF ticket holders should all be in possession of an up-to-date personal logbook.

9.1.2 Skilled climbers are, as a minimum, to have completed and passed a climbing course such as the 2 day 'Advanced Industrial Climber' course and be in possession of current certification. The climbing aspect of the course is valid for three years, whereas the rescue element of the course may only be valid for 1 year. Climbers with current IRATA certification are deemed to be of a higher standard than industrial climbers as they are generally working at height regularly and have been through much more rigorous training, rescue techniques and assessment.

9.1.3 For occasional climbers, initial training and relevant tool-box talks followed by an informal assessment of their competence for the task is often adequate. Refresher training is required at periods not exceeding 3 years or as defined by a risk assessment undertaken by the AE.

9.1.4 APs are to have completed and passed relevant 'Working at Height' training. This should cover the various aspects of work at height, including relevant legislation along with an introduction to the implementation of permit systems. This course does not include a physical climbing element, nor is this necessary. The course certification is generally valid for up to 3 years or as stated by the training authority.

9.1.5 Authorising Engineers are to have completed and passed the same relevant training as the Authorised Persons.

9.1.6 Training for aspects of work at height that does not include climbing towers or fixed ladders are identified within Section 7.

10.0 MISCELLANEOUS

10.1 Work at Height Regulations – Terminology

10.1.1 **Safe existing place of work:** a place, including the means of access, that although at height, is already safe as it has adequate permanent protection, usually in the form of parapet walls or guardrails. This situation is highly desirable in the hierarchy, as work at height has been avoided.

10.1.2 **Collective fall prevention:** if an existing place of work (i.e. a safe place) cannot be utilised then work equipment is to be utilised to prevent falls. This work equipment includes: temporary guardrails, scaffolds, tower scaffolds and MEWPs. This is the preferred situation when work equipment is required for three reasons:

- falls are prevented;
- all workers are protected; and
- when set up does not require any specific input from the user, (i.e. passive).

10.1.3 **Collective fall arrest:** if fall prevention measures are not reasonably practicable or do not eliminate the risk of a fall, then work equipment should be used to mitigate the effects of a fall. Work equipment includes nets and airbags or other equipment that provides a soft landing and does not require any specific input from the user.

10.1.4 **Personal fall protection systems:** a variety of safety systems including work restraint, personal fall prevention, work positioning, rope access, fall arrest and rescue systems.

10.1.5 **Work restraint:** a personal fall protection system that uses a body holding device connected to a reliable anchor to prevent a person from reaching an area where there is risk of a fall. The body holding device will usually consist of a lanyard and harness.

10.1.6 **Personal fall prevention:** a personal fall protection system that does not use a body holding device or anchor but prevents a person from reaching an area where there is risk of a fall. Example: a valley gutter frame walker, which the user picks up and carries, as this prevents a fall through an adjacent fragile surface.

10.1.7 **Work positioning system:** is a personal fall protection system that normally includes a harness and rope connected to a reliable anchor to support the user in a way that a fall is prevented. The rope typically moves through a pulley as in the case of a bosun's chair in order to position the user. Work positioning systems must also have a back-up system to prevent or arrest falls. The back-up system may involve the use of nets, edge protection or a second rope attached to the user.

10.1.8 **Rope access system:** is a personal fall protection system that uses a harness connected to two ropes, with each rope secured to a separate reliable anchor. One line is the working line with the other being the back up. The working line is equipped with a safe means of ascent and descent and has a self-locking system to prevent the user falling should they lose control of their movements. The safety line is equipped with a mobile fall protection system that is connected to and travels with the user. This system does not involve pulleys as the ropes are static and the users positions themselves by moving up or down the rope. Typical uses for this system are structural inspections and window cleaning. Single lines are never used unless the risk assessment indicates that the use of a second line could be riskier.

10.1.9 **Fall-arrest system:** is a personal fall protection system that uses a harness connected to a reliable anchor to arrest and restrict a fall, whilst limiting forces on the body. This is done by incorporating an energy-absorbing device into the system. In the worst case, a fall-arrest system may take up to 6 metres to deploy and therefore there must be adequate clearance available. The energy-absorbing device will often be built into the lanyard but could take the form of an inertia reel when the user is more or less directly below the anchor point. Waist belts are not acceptable as parts of fall-arrest systems.

10.1.10 **Rescue system:** is a personal fall protection system that facilitates a rescue. The rescue may be carried out by a rescuer or by the stranded person and may involve lowering, lifting, or ascent/descent by either party.

10.2 Selection, Use and Maintenance of Work Equipment

10.2.1 Collective fall prevention measures take priority in the work at height hierarchy over personal fall prevention measures just as collective fall arrest takes priority over personal fall arrest. Note: personal fall prevention measures take priority over collective fall arrest measures.

10.2.2 Collective measures take priority because they protect more than one person and are passive systems whereas personal systems protect an individual and are active systems in that they require the involvement of the user, whether this is donning a harness correctly, adjusting equipment or clipping on.

10.2.3 Personal fall protection systems are therefore far more onerous in terms of training, inspection and maintenance. Work restraint is a personal fall prevention method. A personal fall arrest system is a personal measure for mitigating the consequences of a fall. Both require the users to be properly trained in the use of the equipment and require safe systems to be implemented for its inspection (including pre-use), storage and maintenance.

10.2.4 Any personal fall arrest equipment that has been used to arrest a fall must be discarded.

10.2.5 Personal fall protection systems are a complex area as there are often only subtle differences between the various techniques and some system components are interchangeable, e.g. an energy absorbing lanyard can be used for work restraint as well as for fall arrest.

10.2.6 When selecting work equipment there are a number of principles to be taken into account including:

- ladders become less suitable with height, therefore provide stairs or tower scaffolds;
- nets and airbags become less reliable in preventing injury the higher the fall;
- fall arrest lanyards are unacceptable if the fall height is less than the deployment length required;
- if removal from a deployed fall arrest system is going to be difficult, choose other work equipment, e.g. a MEWP;
- the reach of a MEWP may be preferable to the placement of equipment where ground conditions are poor; and
- the additional risk of installation and removal of work equipment, for example, a scaffold, or tower scaffold erected and dismantled by 2 or 3 people for the use of 1 person to work safely may involve greater risk than 1 person at height using a MEWP.

10.2.7 Finally, if it is not reasonably practicable to prevent or mitigate the effects of a fall, duty holders should identify and provide additional training and instruction or take other additional and suitable measures to prevent a fall. We are now at the bottom of the work at height hierarchy. Portable ladders and stepladders do not prevent or mitigate the effects of a fall, however, if used by trained operators in appropriate circumstances, their use can be justified. The training will not only cover 'safe use' but also ensure that 'safe systems' are implemented whereby the ladders are correctly stored, maintained and inspected.

10.2.8 As well as selecting the correct work equipment, duty holders should ensure that it is well maintained and regularly inspected. Schedules 2 to 6 of the Work at Height Regulations set out the requirements for particular work equipment. For maintenance, refer to Regulation 5 of PUWER.

10.2.9 For non-construction work, there are no prescriptive dimensions for guardrail and toe board heights in the Work at Height Regulations 2005. They have to be of sufficient dimension for the purpose for which they are being used (but see also the next paragraph). For construction work, dimensions are set out in Schedule 2 of the Regulations.

10.2.10 At fixed/permanent workplaces including public buildings: the Building (Scotland) Regulations 2004 set out requirements for protective barriers. These are specified in the non-domestic technical handbook as being between 800mm and 1100mm in height, depending on location and circumstances, and at least 900mm in height on stairs. Where it is reasonable to anticipate the presence of small children on the premises, care should be given to ensuring that gaps between the floor and bottom edge of protective barriers, as well as any gaps between rails, is sufficient to prevent the passage of a 100mm sphere. (Members of the public, including patients and clinical/support staff not involved in WaH activities, must be excluded from access points.) Where children are ordinarily excluded, e.g. plantrooms, the requirements are less restrictive. Note: the design and construction of buildings etc is a detailed area of public policy. Dutyholders are advised to consult the requirements set out in the non-domestic building standards technical handbook.

10.2.11 Edge protection should be rigid enough to prevent a person or load falling. Chains are not rigid enough to provide adequate edge protection. Where work is done a safe distance from the edge, (usually > 3m), demarcation barriers (railings) may be used. Access will still have to be controlled and supervision is required to ensure that no one goes beyond the barriers.

10.3 Procurement and Control of Contractors

10.3.1 When choosing a contractor, the AP should select a contractor from the available list, in accordance with procurement policy. Risk assessments and method statements should be produced by the contractor to specify how work at height will be carried out safely.

10.3.2 Before contractors commence work, they will have been informed of the site rules and hazards in order that these can be integrated into the contractors safe working systems. Individual staff should be inducted on site rules prior to working. Further information is set out in NHS Lothian policies and procedures on the control of contractors.

10.3.3 The AP should check that the contractor's work is proceeding as planned in the method statement.

APPENDIX A

Model Forms

H1 **Restricted High Places Register**

H2 **Restricted High Places Datasheet**

H3 **Register of Residual Hazards**

H6 **Permit to Climb**

H7 **Register of Permits to Climb/Standing Instructions**

H8 **Serious Fault Notice**

H10 **Standing Instruction**

H1

RESTRICTED HIGH PLACES REGISTER

Site	

AE (WaH) name	Organisation	Telephone no.

AP (WaH) names	Organisation	Telephone no.

RHP ref. no	Location	Description	Max. height (m)	Access type

Use continuation sheets as necessary

AP (WaH) name	Organisation	Signature	Date

Document distribution
Original: AP (WaH) Document Register

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H2

RESTRICTED HIGH PLACES DATASHEET

RHP reference no	
Location	
Description	

Access information

Details of access arrangements		
Provide details of fixed work restraint system, lifelines or fall arrest system etc (where applicable)		
Provide details of anti-climb device(s), locks and keys		
Date of last inspection		
Comment from access observation or inspection report		**Date:**

AP (WaH) name	**Organisation**	**Signature**	**Date**
Document distribution			
Original: AP (WaH) Document Register			

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H3

RESTRICTED HIGH PLACES REGISTER OF RESIDUAL HAZARDS	
RHP reference no	
Location	
Description	

Hazards	Possible consequence	Yes/No	Details
The structure; sharp edges, paint system, head impacts.	Cuts and other injuries. Falling.		
Unprotected roofs and fragile roof areas. Falling objects.	Falling.		
Electrical power supply and lighting equipment.	Electrocution.		
Fuel and flammable liquid (fire and fumes).	Burns, suffocation, slips.		
RF, transmitting antennae, cables and waveguides.	Burns, electrocution.		
Machinery, moving parts, pulleys and blocks.	Injury.		
Warning sirens, speakers and sudden noise.	Deafness, falling.		
Liquid tanks (fire, fumes and explosion).	Drowning, burns and suffocation.		
Air conditioning units.	Injury, disease.		

continued on page 2

H3

RESTRICTED HIGH PLACES

REGISTER OF RESIDUAL HAZARDS

RHP reference no	

Hazards	**Possible consequence**	**Yes/no**	**Details**
Chimneys, air vents (fumes) and atmospheric pollutants	Poisoning, suffocation		
Confined Spaces	Various		
Low friction surfaces and trip hazards.	Slips, trips and falls.		

AP (WaH) name	**Organisation**	**Signature**	**Date**

Document distribution
Original: AP (WaH) Document Register

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H6

WORK AT HEIGHT – PERMIT TO CLIMB	PERMIT NUMBER

Person in charge:	Company name:	Tel no:

PTW start date:	PTW start time:	PTW latest end date:	PTW latest end time:

1 Location, work activity and access method details

2. Documents provided by Authorised Person to Person in Charge (where applicable)

☐ Form H2 – Database ☐ Form H3 – Register of Hazards

☐ Form H8 – Serious Fault Notice ☐ Inspection Certificate (towers / fall protection wires)

3 Supporting Documents Attached

Risk assessment		Method statement		Rescue plan		Training records		Weather check		RF isolation	

4 Access equipment to be used

Fixed ladders / masts / towers		Scaffold: mobile tower or tube and fitting		MEWP: cherry picker / scissor lift / static boom	
Portable ladders		Wire systems: mansafe restraint / fall arrest		Others: e.g. rope access, BMUs, tree climbers	

5 Training certificates checked

Advanced climber / occasional climber/ IRATA / steeplejack		PASMA/CISRS training or equivalent		IPAF: class 3 mobile / class 1 static or equivalent	
TBT ladder training		Fixed wire training		Others: e.g. IRATA, cradle training , arborists	

6 Confirmation signatures

Risk assessment ref:		Method statement ref:	

Acceptance by **ALL** Competent Persons involved in the works:

ALL PERSONS WHO ARE PART OF THE CLIMBING / ACCESS TEAM MUST SIGN ON TO THE PERMIT TO WORK

I understand the work that is to be carried out and the safety precautions that are necessary to complete the work safely as outlined in the risk assessment and method statement. I am medically fit to undertake these works today.

H6

Name of person carrying out works		**Role**		**Sign / date**	
Name of person carrying out works		**Role**		**Sign / date**	
Name of person carrying out works		**Role**		**Sign / date**	
Name of person carrying out works		**Role**		**Sign / date**	
Name of person carrying out works		**Role**		**Sign / date**	
Name of person carrying out works		**Role**		**Sign / date**	

H6

WORK AT HEIGHT – PERMIT TO CLIMB	PERMIT NUMBER

Issue by Authorised Person

I hereby authorise the works specified to be undertaken on the dates / times stated and I have checked the safety arrangements and confirm that they adhere to this permit and are adequate

Name of Authorised Person:		**Signature:**	
Date authorised:		**Telephone number:**	

Receipt by Person in Charge

I accept responsibility for carrying out / supervising the work identified in this permit, this is in accordance with the risk assessment and method statement provided.

Name of Person in Charge:		**Signature:**	
Date:		**Telephone number:**	

Permit completion by Person in Charge

I declare that the work described in this permit has been satisfactorily **completed* / stopped*** (*Delete as appropriate.)

Comments in box at bottom of page if required

Name of Person in Charge:		**Signature:**	
Date work completed:		**Time work completed:**	

Permit cancellation by Authorised Person

I declare that the work described in this permit has been satisfactorily **completed* / stopped*** (*Delete as appropriate.)

Comment in box at bottom of page if required

Acceptance of completion by Authorised Person:		**Signature:**	
Date permit cancelled:		**Time permit cancelled:**	

Additional Comments - PiC Feedback - Records of monitoring:

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H7

REGISTER OF WORK AT HEIGHT PERMITS AND STANDING INSTRUCTIONS

Location:	

AP (WaH) name	**Organisation**	**Signature**	**Date**

Permit/SI number	**Issue date**	**RHP ref or access method**	**Name of PiC**	**Name of PiC Organisation**	**AP (WaH) signature**

Use continuation sheets as necessary

Document distribution
Original: AP (WaH) Document Register

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H8

SERIOUS FAULT NOTICE

RHP Reference No	
Location	
Description	

When a serious fault is identified by any member of the climbing / access team, the PiC is to notify the AP (WaH) as soon as is practicable. The AP (WaH) is to, in turn, inform the AE (WaH). The PiC and the AP (WaH) are to take appropriate and immediate action to make the RHP secure and prohibit further climbing.

Date and time serious fault identified:	**Date:**	**Time:**
Person who identified serious fault:	**Name:**	
Description of fault:		

Action taken by PiC:	**Action taken by AP (WaH):**

Date and time AP (WaH) notified	**Date:**	**Time:**
PiC name		**Signature:**
AP (WaH) name		**Signature:**
Date and time AE (WaH) notified	**Date:**	**Time:**
AE (WaH) name		**Signature:**
Date serious fault rectified	**Date:**	
AE (WaH) name		**Signature:**

Document distribution
Original: AP (WaH) Document Register
Copy 1: AE (WaH)
Copy 2: Person in Charge

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H10

WORK AT HEIGHT – STANDING INSTRUCTION		Standing instruction no:
Person in Charge:	**Company name:**	**Tel no:**

SI start date:	SI start time:	SI end date:	SI end time:

1 Location, work activity and access method details

2. Documents provided by Authorised Person to Person in Charge (where applicable)

☐ Form H2 – Database ☐ Form H3 – Register of Hazards

☐ Form H8 – Serious Fault Notice ☐ Inspection Certificate (towers / fall protection wires)

3 Supporting documents attached

Risk assessment		Method statement		Rescue plan		Training certs		Logbooks – first aid certs	

4 Access equipment to be used

Fixed ladders / masts / towers		Scaffold: mobile tower or tube and fitting		MEWP: cherry picker / scissor lift / static boom	
Portable ladders		Wire systems: mansafe restraint / fall arrest		Others: e.g. rope access, BMUs, tree climbers	

5 Training certificates checked

Advanced climber / occasional climber/ IRATA / steeplejack		PASMA/CISRS training or equivalent		IPAF: class 3 mobile / class 1 static or equivalent	
TBT ladder training		Fixed wire training		Others: e.g. IRATA, cradle training, arborists	

6 Confirmation signatures

Risk assessment ref:		Method statement ref:	

Acceptance by **ALL** Competent Persons involved in the works:

ALL PERSONS WHO ARE PART OF THE CLIMBING / ACCESS TEAM MUST SIGN ON TO THE STANDING INSTRUCTION

I understand the work that is to be carried out and the safety precautions that are necessary to complete the work safely as outlined in the Risk Assessment and Method Statement. I am medically fit to undertake these works.

H10

Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	
Name of person carrying out works		PiC? (Y/N)		Sign / date	

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H10

WORK AT HEIGHT – STANDING INSTRUCTION	Standing instruction no.

Review by Authorising Engineer			
Name of Authorising Engineer:		**Signature and date:**	

Issue by Authorised Person			
I hereby authorise the works specified to be undertaken on the dates / times stated and I have checked the safety arrangements and confirm that they adhere to this standing instruction and are adequate			
Name of Authorised Person:		**Signature and date:**	

Receipt by Person in Charge			
I accept responsibility for carrying out / supervising the work identified in this standing instruction, this is in accordance with the risk assessment and method statement provided. I confirm the following: that the members of my team will be fit to undertake the task, trained and competent and not under duress to carry out the work. All persons will wear the appropriate work equipment and PPE for the activity, that valid RAMS and rescue plans shall be in date for the duration of this standing instruction and that the weather forecast shall be checked prior to each WaH activity.			
Name of Person in Charge:		**Signature:**	
Name of Person in Charge:		**Signature:**	
Name of Person in Charge:		**Signature:**	
Name of Person in Charge:		**Signature:**	

Standing Instruction Cancellation by Authorised Person			
I declare that the work described in this standing instruction has been closed			
Acceptance of completion by Authorised Person:		**Signature:**	
Date standing instruction cancelled:		**Time standing instruction cancelled:**	

H10

Additional comments – details of monitoring:

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APPENDIX B

Model Signs

1. All signs are to be in accordance with the Health and Safety (Safety Signs and Signals) Regulations 1996 and BS 5499.

2. The model sign below is for guidance only and is not shown to scale.

3. All signs are to be clearly displayed on, or in the vicinity of, each RHP and to be easily visible on the approach to the fixed access.

4. AP (WaH) contact details are to be added.

5. Additional hazard signs may be added where appropriate, e.g. “RF hazard” as shown below.

RF Hazard

APPENDIX C

Request for Medical Examination

(Sample letter to a Medical Practitioner/Occ Health)

Estates Dept.

Name and Address

Medical Practitioner

Address

Telephone:

Date:

Our Ref:

Your Ref:

REQUEST FOR MEDICAL EXAMINATION

CLIMBING AND WORKING AT HEIGHT

Name of Person requiring examination: _____

The above named member of our staff has been selected to undertake duties that will require him/her, to climb fixed ladders and work at height up to ***x metres***. This could involve working out of doors in exposed conditions, undertaking climbing activities that require suitable levels of strength, stamina and mobility. The individual is required to wear and use personal protective clothing, including a full body harness, and to carry equipment.

As part of our duty to satisfy ourselves that the above named is fully capable of undertaking these activities, I should be grateful if you would undertake a medical examination to determine the above named individual's suitability, and advise me of your findings.

The information you supply is to be received in strict confidence.

(Signed)

Estates Manager

APPENDIX D

REFERENCES AND ASSOCIATED DOCUMENTS

LEGISLATION
Building (Scotland) Regulations 2004
Construction (Design and Management) Regulations 2015 (CDM)
Control of Substances Hazardous to Health Regulations 2002 (COSHH)
Health and Safety (First Aid) Regulations 1981
Health and Safety (Safety Signs and Signals) Regulations 1996
Health and Safety at Work etc Act 1974
Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
Management of Health and Safety at Work Regulations 1999
Personal Protective Equipment at Work Regulations 1992
Provision and Use of Work Equipment Regulations 1998 (PUWER)
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)
Work at Height Regulations 2005
Workplace (Health and Safety and Welfare) Regulations 1992
STANDARDS
BS 5499-10:2014 Guidance for the selection and use of safety signs and fire safety notices.
BS 7985:2013 Code of practice for the use of rope access methods for industrial purposes. Recommendations and guidance supplementary to BS ISO 22846.
BS 8437:2022 Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace
BS 8454:2006 Code of practice for the delivery of training and education for work at height and rescue
BS EN 12492:2012 Mountaineering equipment. Helmets for mountaineers. Safety requirements and test methods.
BS EN 1263-1:2014 Temporary works equipment. Safety nets - Safety requirements, test methods.
BS EN 1263-2:2014 Temporary works equipment. Safety nets - Safety requirements for the positioning limits.

BS EN 13586:2020 Cranes. Access.
BS EN 355:2002 Personal protective equipment against falls from height. Energy absorbers.
BS EN 358:2018 Personal protective equipment for work positioning and prevention of falls from a height. Belts and lanyards for work positioning or restraint.
BS EN 361:2002 Personal protective equipment against falls from a height. Full body harnesses.
BS EN 363:2018 Personal fall protection equipment. Personal fall protection systems.
BS EN 397:2012 Industrial safety helmets.
BS EN 795:2012 Personal fall protection equipment. Anchor devices.
BS EN 813:2008 Personal fall protection equipment. Sit harnesses.
BS EN ISO 14122:2016 Safety of machinery. Permanent means of access to machinery.
BS ISO 22846-1:2003 and BS ISO 22846-2:2012 Personal equipment for protection against falls. Rope access systems.
GUIDANCE
Advisory Committee for Roofsafety (ACR): Test for non-fragility of large element roofing assemblies.
Centre for Window and Cladding Technology: Technical Note 66: Safety and fragility of overhead glazing: guidance on specification.
Centre for Window and Cladding Technology: Technical Note 67: Safety and fragility of overhead glazing: testing and assessment.
HSE, Workplace health, safety and welfare (L24:2013).
Ministry of Defence, Joint Services Publication, JSP 375: Working at Heights.
NASC SG4:22 Preventing Falls in Scaffolding Operations
NASC TG20:21 Good practice guidance for tube and fitting scaffolding
NASC TG4:19 Anchorage Systems for Scaffolding
POLICY
NHS Lothian Working at Height Policy (Health and Safety)
NHS Lothian Working at Height Procedure (Health and Safety)
DOCUMENT CENTRE
H1 Restricted High Places Register
H2 Restricted High Places Datasheet

H3 Register of Residual Hazards
H6 Permit to Climb
H7 Register of Permits / Standing Instructions
H8 Serious Fault Notice
H10 Standing Instructions