

Working at heights in the broadcasting and entertainment industries

HSE information sheet

Entertainment Information Sheet No 6 (Revision 1)

Introduction

This information sheet is one of a series produced in consultation with the Joint Advisory Committee for Entertainments (JACE). Many activities in the entertainment industry involve working at height, including work in theatres, on stages, outside broadcasts or concerts and television studio lighting grids. This sheet has been revised to take account of the Work at Height Regulations 2005 (as amended).

Accidents

Current accident statistics show falls as a significant cause of injuries to workers in this industry. The situation may be worse as a significant part of workforce in the industry is casual, or freelance, which results in many accidents not being reported. It is felt by member organisations of JACE that working at heights is one of the greatest risks taken within the industry and therefore clear safety information is required.

Hazards

Falls from heights are a regular cause of fatal and serious injuries. There are three main hazards associated with work at height:

- a person falling;
- falling objects striking a person;
- falls from collapsing structures.

Risk assessment

A place is 'at height' if a person could be injured falling from it, even if it is at or below ground level. Carry out a risk assessment before working at height to find out what health and safety measures need to be adopted to avoid or reduce risk. The overriding principle is that you must do all that is reasonably practicable to prevent anyone falling.

Precautionary measures

The Work at Height Regulations 2005 (as amended) sets out a hierarchy for managing and selecting equipment for work at height:

- Avoid work at height where possible. Use work equipment or other measures to prevent falls where work at height cannot be avoided. Where the risk of a fall cannot be eliminated, use work equipment or other measures to minimise the distance and consequence of a fall should one occur.

Your responsibilities

- All work at height must be properly planned and organised. This will require cooperation and communication between all parties, eg producers, directors, crew and performers.
- Account must be taken of weather conditions that could endanger health and safety. This may be particularly relevant depending on the location of the work.
- All those working at height must be trained and competent. The requirements for training and competence will depend on the work being done, eg a lighting technician will require different training from a stunt performer.
- The place of work must be safe. Temporary platforms should be designed by a competent person and built by trained and competent people (or under the supervision of a competent person). Existing places of work, eg lighting grids should be reviewed to see if any measures are needed to ensure compliance with the Work at Height Regulations. All equipment and temporary structures must comply with the detailed requirements of Schedules 2 to 6 of the Regulations as appropriate.
- The Work at Height Regulations require inspections of workplaces and equipment, including any fall prevention equipment.
- Particular attention must be paid to any fragile surfaces to prevent falls or to minimise the distance and effect of a fall.

- Where a falling object could cause injury, you must do all that is reasonably practicable to prevent anything falling. Where this is not possible, you must make sure that no one is injured by anything falling.

Falls

There are numerous ways of preventing falls. For example:

- edge protection;
- guardrails and toe boards;
- maintain a safe distance from an edge;
- safety netting/airbags;
- safety harnesses.

You must give consideration to collective safeguard (guardrails/netting) before individual protection (harnesses). See the Further reading section for further guidance on edge protection and safety harnesses.

Falling objects

To prevent objects falling onto people you need a proper management system which:

- provides barriers, eg toe boards or mesh guards to prevent items from slipping or being knocked off the edge of a structure;
- secures objects to the structure, eg lashing of scaffold boards;
- makes sure that there are no loose objects and that any tools are properly secured;
- creates an exclusion zone, where necessary, beneath areas where work is taking place.

When people have to work at heights above other work areas, it is advisable to provide safety helmets to protect the workers below against falling objects. Danger areas can be clearly marked with suitable safety signs indicating that access is restricted to essential personnel wearing hard hats while this work is in progress.

Falls from collapsing structures

This section applies equally to temporary stage sets or more permanent structures used for television and long running theatre productions. Structures need to be designed to be safe and to be built by competent people. The skills, knowledge and experience of the designer will depend upon the nature of the structure concerned and the use or uses to which it is put. It is advisable that a competent person inspects the structures after completion and before they are put into use. Further detail concerning the requirements for inspections of places where work at height is

conducted can be found in INDG401 (see Further reading). Competency means a person with the appropriate qualifications, knowledge and experience to identify the risks arising from a situation and the measures needed to control these.

Temporary access equipment

Temporary access equipment would include scaffolding, tower scaffolds, ladders, mobile elevating work equipment and access equipment, such as tallescopes.

Some general points concerning safe use of temporary access equipment are:

- Equipment should be properly maintained and regularly inspected, particularly if used outside.
- Defective equipment needs to be clearly identified and not used.
- Those using access equipment should be properly trained and competent.
- The manufacturer's instructions should be followed and mobile equipment should not be moved when elevated and with persons on it, unless the manufacturer indicates it is designed and safe to be used in this way.

Scaffolding

The erection of scaffolding is a specialist activity requiring a high degree of competence. See Further reading for detailed guidance on Health and safety in construction.

Ladders, stepladders and trestles

No ladders should be used if there is the possibility of contact with overhead electric wires or unprotected electrical equipment. Further information on the safe use of ladders and on electrical safety is contained in the Further reading section.

Theatre and studio lighting grids

All suspended equipment should have an independent safety bond in addition to its primary means of suspension. Remember, make sure that no loose items are taken into the grid, eg by use of pocketless overalls, tie lines on tools and equipment etc, you may also need to create an exclusion zone below the working area, eg by erecting a barrier.

In order to enforce this system there may be a need for some form of warning system when the grid is occupied. Everybody working in the area should be clearly aware of the system being used.

Further reading

Management of health and safety at work. Management of Health and Safety at Work Regulations 1999. Approved Code of Practice and guidance L21 (Second edition) HSE Books 2000 ISBN 978 0 7176 2488 1 www.hse.gov.uk/pubns/books/l21.htm

Managing health and safety in construction. Construction (Design and Management) Regulations 2007. Approved Code of Practice L144 HSE Books 2007 ISBN 978 0 7176 6223 4 www.hse.gov.uk/pubns/books/l144.htm

Health and safety in roof work HSG33 (Third edition) HSE Books 2008 ISBN 978 0 7176 6250 0 www.hse.gov.uk/pubns/books/hsg33.htm

Health and safety in construction HSG150 (Third edition) HSE Books 2006 ISBN 978 0 7176 6182 4 www.hse.gov.uk/pubns/books/hsg150.htm

Tower scaffolds Construction Information Sheet CIS10(rev4) HSE Books 2005 www.hse.gov.uk/pubns/conindex.htm

The Work at Height Regulations 2005 (as amended): A brief guide Leaflet INDG401(rev1) HSE Books 2007 (priced packs of 10 ISBN 978 0 7176 6231 9) www.hse.gov.uk/pubns/indg401.pdf

Safe use of ladders and stepladders: An employers' guide Leaflet INDG402 HSE Books 2005 (priced packs of 5 ISBN 978 0 7176 6105 3) www.hse.gov.uk/pubns/indg402.pdf

Electrical safety at places of entertainment General Guidance Note GS50 (Second edition) HSE Books 1997 ISBN 978 0 7176 1387 8

A stability and ergonomic study of the use of tallescopes within a theatre environment HSE 2009 <http://www.hse.gov.uk/entertainment/pdf/tallescopes.pdf>

Useful website: www.hse.gov.uk/falls

Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hse.gov.uk/. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

This document contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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