National Construction Certificate

SAMPLE RESOURCES

This RMS sample resources pack contains a selection of powerpoint slides together with a supporting lesson plan and are representative of the full set of RMS trainer materials for the NEBOSH National Construction Certificate qualification.

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NEBOSH

Health and Safety Management for Construction

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7

Element 7
Working at Height

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Contents

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Contents

Working at height hazards and controls

- What affects risks from working at height
- Approach to working safely at height
- Main precautions necessary to prevent falls and falling material
- Emergency rescue
- Instruction, training and other measures

Working at height hazards and controls

What affects risks from working at height

- Vertical distance
- Roofs
- Deterioration of materials
- Unprotected edges
- Unstable/poorly maintained access equipment
- Weather
- Falling materials

Video

Working at height

Working at height hazards and controls

What affects the risks from working at height

Falls from a height

Working at unprotected edge

Working at height hazards and controls

What affects the risks from working at height

Working above ground level

Risk from falling materials

Working at height hazards and controls

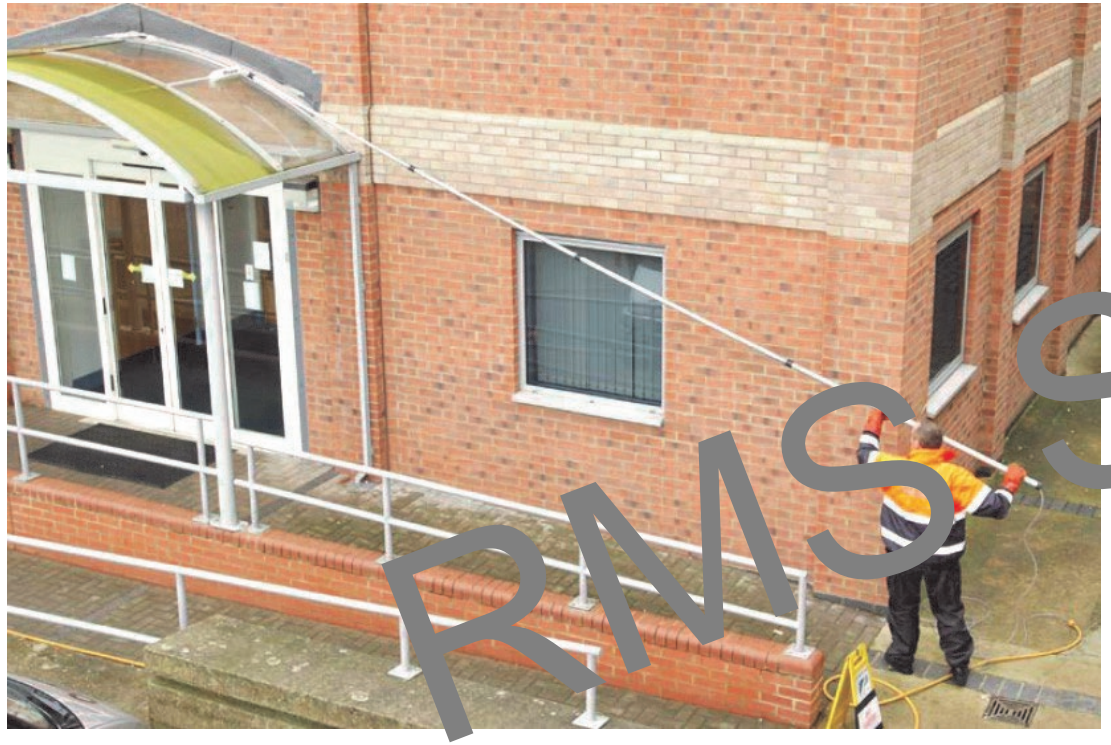
Approach to working safely at height

In summary, the approach to working safely at height is:

1. Avoid working at height, if this is not reasonably practical
2. Prevent a fall from occurring by using an existing workplace that is known to be safe or use suitable equipment, where reasonably practical measures taken to prevent a fall do not eliminate the risk of falling
3. Minimise the distance and/or consequence of a fall

Working at height hazards and controls

Approach to working safely at height



Using a pole to avoid work at height

Use of a work restraint system to prevent worker going near unprotected edge

Working at height hazards and controls

Approach to working safely at height

- Minimise the distance and/or consequence of a fall
  - Collective measures
  - Personal protective measures

Activity

Think about your own workplace – are there instances where working at height can be avoided?

Working at height hazards and controls

Approach to working safely at height

Soft landing system – safety net

Soft landing system – air bags

Working at height hazards and controls

Approach to working safely at height

Personal fall arrest system

Working at height hazards and controls

Main precautions necessary to prevent falls and falling material

- Proper planning
- Carried out safely

Working at height hazards and controls

Main precautions necessary to prevent falls and falling material

Proper planning

- Planning requirements
- Avoid, prevent, minimise
- Selection of equipment
- Fall of materials and objects
- Emergencies and rescue

Working at height hazards and controls

Main precautions necessary to prevent falls and falling material

Carried out safely

- Supervision
- Avoiding working in adverse weather conditions
- Inspection
- Competent

Working at height hazards and controls

Emergency rescue

- Regulation 7 of the WAHR 2005 requires the employer to consider the additional risks that may arise from emergencies and the need for evacuation of or rescue from the equipment
- Rescue procedure and equipment must be available and rescue practised

Working at height hazards and controls

Instruction, training and other measures

- Instruction and training
- Requirements for head protection

Activity

How do you decide if someone is ‘competent’ to work at height?

Contents

Study Question

Scaffolding that incorporates a powered hoist has been erected to the outside of an office block in order to undertake repairs to the external cladding of the building.

What could affect the stability of the scaffold?

Study Question

Answer

Scaffolding that incorporates a powered hoist has been erected to the outside of an office block in order to undertake repairs to the external cladding of the building.

What could affect the stability of the scaffold?

Stability can be affected by:

- *The design of the scaffold which could have an effect on its stability, for example, whether the scaffold extends round more than one side of the building or the arrangements made for ground floor access points into the office building.*
- *Erecting the scaffold on soft or inadequately consolidated ground or without sound foundations, for example, sole boards and base plates.*
- *Inadequate bracing.*
- *Insufficient ties or an inappropriate mix of ties.*
- *Erecting the scaffold using incompetent workmen, for example, building it with an inadequate number of standards and poorly fitted couplings.*

(continued)

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Element 7
Working at Height

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Lesson Plan - Day 1

TIME	ELEMENT/TOPIC	CONTENT	RESOURCE/TASK
08.45	Welcome		Complete attendance sheet
	Introduction	Name, job, background, experience	Name cards/flip chart/marker pens **Ice breaker:** Spilt the group into teams of three or four. Team members to interview each other and find out hobbies/ likes/dislikes etc and represent them pictorially. Team to give themselves a name and introduce their team to the wider group.
	Course plan	Admin arrangements toilets/meals/exist/smoking/mobile phones etc. Course content, course materials Syllabus and Scenario-based assessment (SBA) structure/arrangements Explain the use of AI to learners for during study and assessment Progression onto other qualifications	Complete paperwork if necessary
	Programme for the week	Topics to be covered	Slides
09.00	**Element 1: The foundations of construction health and safety management**	Assessment criteria • 1.1 Discuss the moral, financial and legal reasons for managing health and safety in the workplace • 1.2 Summarise the main health and safety duties under the Construction (Design and Management) Regulations 2015 and how contractors should be selected, monitored and managed; and identify how technology can be used to effectively plan and manage construction project lifecycles • 1.3 Summarise the types of construction work and range of activities • 1.4 Identify what to consider during a construction site assessment • 1.5 Identify how to keep a site secure and in good order • 1.6 Summarise how to manage temporary construction works • 1.7 Outline what welfare arrangements should be on site and other particular construction issues	Slides / Flipchart Introduction to element *Group discussion* Optional Activity - *What influences your organisation to manage health and safety? Consider internal and external influences*

CN1 - NEBOSH Health and Safety Management for Construction (UK) – January 2025 specification

TIME	ELEMENT/TOPIC	CONTENT	RESOURCE/TASK
	1.1 Morals and money	• Moral and societal expectations of good standards of health and safety	Slides Discuss case study – effects of a serious incident *Emphasise the size of the health problem – discuss HSE statistics* Optional activity – *is the law having the right effect* *Optional HSE video – Real people https://www.youtube.com/watch?v=p4BjC3sJ9w* *Download the most recent HSE statistics and other main points* *Ask learners if they have experienced an incident they can talk about – what was their personal experience?* *Optional video - Turning concern into action – HSE – tragedies in construction https://www.hse.gov.uk/construction/resources/turning-concern-into-action.htm* *[Also, possible video for other elements incl. WAH, Elec, Machinery, Asbestos, Excavation, Falls from height, etc.]*
		• The financial cost of incidents (insured and uninsured costs, direct and indirect costs) The financial impact of non-conformances and reworks • Powers of HSE inspectors (Enforcement notices: conditions for serving, rights and effects of appeal, penalties or failure to comply)	Optional activity – *what financial costs could a company incur?* *Optional DVD: The Secret Syphon available from 'outtakes film communications'* *Case study to get learners to identify financial effects of an incident. Record answers on a flip chart and ask learners to identify those that can be insured from other costs.* Optional activity – *review reasons for preventing incidents*

TIME	ELEMENT/TOPIC	CONTENT	RESOURCE/TASK
10.45	**Break**		

11.00	1.2 The Construction (Design and Management) Regulations 2015	• Roles, competence and duties of the following:
		  • Client
		  • Principal designer
		  • Designer
		  • Principal contractor
		  • Contractors
		  • Workers
		  • Domestic clients
		• When the HSE need to be notified
		• Pre-selection and management of contractors including third party auditing schemes
		• Effective planning and co-ordination of contracted work, including interaction with existing staff
		• Preparation of pre-construction information, construction phase plan, health and safety plan, health and safety file including the purpose, requirements and an example of a plan)
			Slides
			The CDM guidance current version is available from this link:
			http://www.hse.gov.uk/pubns/priced/l153.pdf
			
			Health and safety in construction HSG150
			http://www.hse.gov.uk/pubns/books/hsg150.htm
			
			Explains the essential tasks for achieving healthy and safe construction sites.
			
			The HSE also has a dedicated webpage: Health and safety in the construction industry
			https://www.hse.gov.uk/construction/index.htm
			It offers useful supporting information and advice in support of your study and potential role within your organisation
			
			View this optional video which highlights the importance of health and safety in the construction industry.
			https://www.youtube.com/watch?v=uSDnVptMwdU
			
			Think about the following:
			What is the human / economic / legal costs for this?
			What has actually gone wrong?
			Why don't people report near misses?

TIME	ELEMENT/TOPIC	CONTENT	RESOURCE/TASK
			Optional activity - *Ask learners to consider maintenance or construction projects at home or work.* *List the main duties under the CDM Regulations.*
12.30	**Lunch**		
13.15	1.2 The Construction (Design and Management) Regulations 2015 – cont'd	• Use of technology to effectively plan and manage construction project lifecycles, such as 3D modelling (eg. business information modelling) and associated structured data; and the benefits of this approach.	Slides *PAS 1192-6:2018* *https://knowledge.bsigroup.com/products/specification-for-collaborative-sharing-and-use-of-structured-health-and-safety-information-using-bim/standard*
	1.3 Type, range and issues relating to construction activities	• Types of construction work and range of activities: construction, alteration and maintenance of premises; demolition; dismantling; clearance; excavation; structural work; site movements; service maintenance • Why you need to maintain the stability of structures	Slides
15.00	**Break**		
15.15	1.4 Site assessment and control measures	• Initially assessing the site: historical and current use, likelihood of asbestos and contaminants • Area of site, topography and features of the surrounding area • Site control measures: site planning, preparation for specialist activities, security and client/occupier arrangements	Slides
17.00	**Close**	Check learners understanding of the learning so far. Ask 'open' questions on the material covered. • *Issue overnight work - Tutor Directed Study*	Verbal exchange learners/tutor