

# NEBOSH International General Certificate


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# NEBOSH International General Certificate

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# Unit IGC2 Control of International workplace hazards

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# Element 8 Construction activities - hazards and control

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## Construction activities hazards and control

### Learning outcomes

- 8.1 Identify the main hazards of construction and demolition work and outline the general requirements necessary to control them
- 8.2 Identify the hazards of work at height, outline the general requirements necessary to control them and describe the safe working practices for common forms of access equipment
- 8.3 Identify the hazards of excavations and outline the general requirements necessary to control them
- 8.4 Identify the hazards to health commonly encountered in small construction activities and explain how risks might be reduced

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**Construction activities hazards and control**

**Contents of element**

- 8.1 General construction hazards and control
- 8.2 Working at height
- 8.3 Excavations
- 8.4 Health hazards commonly encountered in construction activities

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**Construction activities hazards and control**  
General construction hazards and control

**Scope of the term construction**  
Construction work

- Construction
- Alteration
- Conversion
- Fitting out
- Maintenance
- Demolition

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**Construction activities hazards and control**  
General construction hazards and control

**Scope of the term construction**  
Safe stacking and storage of materials and flammable substances

- A construction site is continually changing with a variety of activities being conducted at once as well as workers and materials being moved around
- It is critical that the site is kept tidy
- Safe stacking and storage of materials used in construction can help to keep the vehicle and pedestrian routes clear and keep the materials themselves from causing harm

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**Construction activities hazards and control**  
General construction hazards and control

**Scope of the term construction**  
Stacking

- Height
- Toppling
- Use of pallets
- Different package sizes, stored separately
- Safe position
- Personnel trained in safe stacking / removal

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**Construction activities hazards and control**  
General construction hazards and control

**Scope of the term construction**  
Storage

- Segregation of types
- Potential for leakage / spillage
- Safe access and egress
- Adequate ventilation
- Control of sources of ignition
- Signs

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**Construction activities hazards and control**  
 General construction hazards and control  
**Main hazards and controls relating to construction and demolition**

**Electricity**



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**Construction activities hazards and control**  
 General construction hazards and control  
**Main hazards and controls relating to construction and demolition**

**Working at a height**

**Falling objects**

- Poor housekeeping
- Absence of toe boards
- Incorrect hooking and slinging
- Incorrect assembly of pulley wheels
- Surplus materials
- Unprotected edges
- Deterioration

**Falls from height**

- Pitched roofs
- Failure to cover openings
- Roof unable to support person
- Wrong footwear
- Extreme weather conditions
- Insufficient or inappropriate edge protection

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**Construction activities hazards and control**  
 General construction hazards and control  
**Main hazards and controls relating to construction and demolition**

**Working at a height**

**Ladders**

- Slipping outwards at base
- Defective or rotten wooden ladders
- Overreaching when working at the top of a ladder
- Insecurely tied to structure
- Lack of handholds
- Too close or too far away from wall
- Overhead obstructions
- Unsound ground conditions

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**Construction activities hazards and control**  
 General construction hazards and control  
**Main hazards and controls relating to construction and demolition**

**Excavations**

- Adverse weather
- Gas accumulation
- Collapse
- Instability of adjacent buildings
- Underground services
- Falling objects
- Traffic

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**Construction activities hazards and control**  
 General construction hazards and control  
**Main hazards and controls relating to construction and demolition**

**Demolition**

**Hazards**

- Falls of workers, falls of materials
- Collapse of a building
- Overloading of floors
- Explosions
- Presence of live electric cable or gas mains
- Dusty, corrosive and poisonous materials
- Projecting nails in timber

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**Construction activities hazards and control**  
 General construction hazards and control  
**Main hazards and controls relating to construction and demolition**

**Demolition**

**Controls**

- Prior to demolition commencing
- During the demolition process

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**Construction activities hazards and control**  
 General construction hazards and control  
**Main hazards and controls relating to construction and demolition**

**Management controls for significant construction projects**

- General requirements
- Assessment, selection and control of contractors
- A control strategy for contractors
  - Assessment
  - Selection
  - Control

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**Construction activities hazards and control**

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- 8.2 Working at height
- 8.3 Excavations
- 8.4 Health hazards commonly encountered in construction activities


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**Construction activities hazards and control**  
 Working at height  
**Typical activities and injuries associated with falls from height**

- Steel erecting
- Fixing of cladding, roof work
- Painting and decorating
- Demolition and dismantling
- Bricklaying
- Scaffold erection
- Electrical installation and maintenance

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**Construction activities hazards and control**  
 Working at height  
**Typical activities and injuries associated with falls from height**

Some workers though, only rarely work at height, such as:

- Welders
- Inspectors
- Machinery maintenance personnel


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**Construction activities hazards and control**  
 Working at height  
**Basic hazards of work above ground level**

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

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**Construction activities hazards and control**  
 Working at height  
**Methods of avoiding working at height**

- Work at height should be avoided by conducting the work at ground level
- This could be achieved by using different equipment or method of work
- Good planning arrangements, considering how fixtures / fittings, plant and services can be designed or installed can be utilised
- To avoid the need to work at height both during construction and in ongoing cleaning or maintenance

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