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## Overview

This standard is about working safely, knowing how to deal with hazards and taking appropriate action in the event of an emergency or site evacuation.

You will need to be able to work safely at all times, adhering to health, safety and environmental legislation, regulations and safe working practices. In particular, you must know about and be able to select the correct personal protective equipment, check for and identify potential hazards and follow related procedures to minimise risk to life of self and others.

In the context of this standard, your responsibility is limited to working within an overall risk control strategy which has been developed by safety specialists and which includes detailed criteria for identifying risks together with clearly defined procedures for action which must be followed. In some cases, you may be expected to refer to others for final authorisations, even though you remain responsible for identifying and implementing decisions.

### **Who this standard is for**

This standard is for those that work in technical and craft roles throughout engineering construction including maintenance technicians (mechanical, electrical, instrumentation and controls), installers (mechanical, electrical and pipe), platers, welders, steel erectors, riggers, those that move loads, NDT technicians, onsite machinists and those that monitor the condition of plant and systems.

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## Performance criteria

### *You must be able to:*

1. work safely at all times, complying with **statutory health, safety environmental legislation, regulations** and other relevant guidelines and procedures
2. select the correct personal protective equipment for the work to be undertaken and the **work location**
3. safely check and identify potential hazards in accordance with agreed and approved procedures
4. take the correct action to minimise the risk when a hazard or emergency has been identified by:
5. follow shutdown and evacuation procedures promptly and correctly

## Knowledge and understanding

### *You need to know and understand:*

1. statutory requirements of the main health, safety and environmental legislation and regulations relevant to the role being undertaken
2. the purpose and nature of risk assessments, **safe working practices** and safe systems of work and the relevance of local **procedures** and guidance notes
3. the consequences for employers and employees of not fulfilling their legal health and safety responsibilities
4. the importance of personal behaviour in maintaining workplace standards
5. the need for health and safety training for yourself and others in a workplace and the procedures for requesting training
6. where to get information relating to the safe use of equipment and how to ensure equipment is used safely
7. when personal protective equipment should be used and how to select and use the correct equipment for the work to be undertaken
8. the potential for different types of injury and how they can be prevented
9. what a safe system for plant process isolation is and why it is important
10. the checks which are needed to make sure that portable appliances are safe to use
11. the risks from manual handling, hoisting, lifting and overhead, underground and enclosed utilities and services and how to control them
12. first aid procedures which typically apply in a workplace and where information, competent assistance and local first aid facilities can be obtained
13. hazards and hazard spotting in the engineering construction workplace: common types of hazards; related safety assessment; effects of hazards; getting help with related warning systems; and associated procedures
14. managing hazards and the associated risk and your responsibility in relation to dealing with and reporting hazards including:

\* actions to minimise the risks from hazards

\* what risks there are in relation to health and safety

\* the consequences of poor management of these risks

1. emergency and evacuation procedures at your place of work and your responsibility as it applies to you and your role

## Scope/range

### **Statutory health and safety legislation, regulations and safe working practices and procedures**

This includes the following:

- Relevant sections of the Health and Safety at Work Act
- Other regulations that apply to the worksite
- Permits to work, method statements, first aid arrangements, fire and evacuation arrangements
- Risk assessments
- Local or site specific health and safety requirements
- Personal Protective Equipment (PPE) requirements

### **Typical work location for engineering construction**

This could include:

- engineering construction sites
- controlled operations
- offshore installations
- maintenance sites
- nuclear sites
- repair sites

Work locations and environments may be open or restricted spaces:

- at height
- confined spaces
- control rooms
- controlled operational and offshore installations
- designated work areas
- explosive atmospheres

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- existing plants and structures
  - fabrication workshops
  - in plant rooms
  - inside structures, system and plant
  - on access structures (scaffold)
  - on open structures
  - onshore and offshore installations
  - shafts
  - shipyards
  - tunnels

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**Relevant Occupations** Condition Monitoring Practitioner, Electrical Fitter, Electrical Maintenance Technician, Engineer, Installation Engineer, Instrument and Control Engineer, Instrument and Control Maintenance Technician, Instrumentation Installer/Engineer, Maintenance Engineer, Mechanical Fitter, Mechanical Maintenance Technician, NDT Technician, Onsite Machinist, Pipe Fitter, Pipefitter, Plater, Rigger, Slinger and Lifter, Small Bore Tubing Installation Technician, Steel Erector, Welder, Welding Engineer, Welding Operative, Welding Supervisor, Welding Technician, Maintenance Engineers

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**Suite** Common standards for the Engineering Construction Industry, Condition Monitoring, Constructing Capital Plant Steel Structures - Erecting, Fabricating Steel Structures (Plating), Installation, Testing and Commissioning of Electrical Systems and Equipment (Plant), Installing Plant and Systems - Mechanical, Installing Plant and Systems - Pipefitting, Installing Plant and Systems – Small bore tubing occupations, Maintaining Plant and Systems - Electrical, Maintaining Plant

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and Systems - Mechanical, Moving Loads, Non Destructive Testing, Onsite Machining, Small Bore Tubing Installation and Maintenance, Welding Plate and Pipework, Welding Supervision, Maintaining Plant and Systems - Instrumentation and controls

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**Keywords**

Health; safety, risk; contingency; emergency; first aid; communication; accident; injury; Electrical installation; Electrical maintenance; Onsite machining; NDT; Welding; Welding Supervision; Instrument and Controls plant maintenance; Supporting; Erecting

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