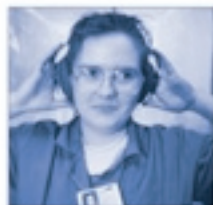


# Health and Safety



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ESSENTIALS



# INTRODUCTION



**T**he AEEU has a proud tradition of upholding policies and systems that are essential in maintaining safe and secure workplaces. Over the years we have published many leaflets and books on various aspects of health and safety. This latest publication is new in both format and approach in dealing with everyday and more complex safety problems.

In this booklet we have included major industries, while not ignoring smaller enterprises that have problems of equal gravity. As time has moved on, much of the older legislation has been repealed and replaced with new regulation. With this in mind, we have put an abbreviated version of the most relevant legislation into this publication. The law is constantly changing and updates are published in the Union News, the AEEU's quarterly journal. Health and Safety Essentials is available for downloading on the AEEU website at [www.aeeu.org.uk](http://www.aeeu.org.uk), or further copies are available from head office on: 020 8462 7755 ext 436.

As your interest broadens, so will your information sources need to expand. Therefore a network of people dedicated to health and safety issues is now in place. The network is responsible for all aspects of safety training, information dissemination, National representation on various official bodies and committees, and most importantly listening to what our safety representatives want, and responding to their wishes.

We hope that you find this book useful. If you need advice remember we are only a phone call, fax, e-mail, or letter away. Keep in touch, together we can make workplaces safer.

Best wishes,

A handwritten signature in black ink, appearing to read 'Ken Jackson', written in a cursive style.

Sir Ken Jackson  
General Secretary  
AEEU

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## 2 • The construction industry

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## CHAPTER TWO

# The construction industry

**U**p until now, the construction industry has had a variety of complex health and safety regulations which date back more than 30 years.

The Construction (Health, Safety and Welfare) Regulations 1996 (CHSW Regulations) consolidate, modernise and simplify the older requirements and introduce some important new provisions arising from the implementation of an EC Directive on construction. These Regulations complete the implementation of the Directive which was started by the introduction of the Construction (Design and Management) Regulations 1994.

The CHSW Regulations explain the detailed ways of working in construction activities, for example, using access equipment or support for excavations. Most of the Regulations, including those arising from the Directive, update already well known requirements. They cover most construction activities. The Regulations are aimed at protecting the health, safety and welfare of everyone who carries out construction work. The Regulations also give protection to other people who may be affected by the work.

## Who has duties under the Regulations?

The main duty-holders under these Regulations are employers, the self-employed and those who control the way in which construction work is carried out. Employees have a duty to carry out their own work in a safe way. Anyone doing construction work has a duty to cooperate with others on matters of health and safety and report any defects to those in control. These duties are as follows:

### Safe places of work (Regulation 5)

A general duty to ensure a safe place of work and safe means of access to and from that place of work. This Regulation sets out a general requirement applying to all construction work. It applies equally to places of work in the ground, at ground level and at height. In essence, it requires that 'reasonably practicable' steps should be taken to provide for safety and to ensure risks to health are minimised. This means that action to be taken should be proportionate to the risk involved.

### Precautions against falls (Regulations 6 and 7)

- (a) Prevent falls from height by physical precautions or, where this is not possible, provide equipment that will arrest falls
- (b) Ensure there are physical precautions to prevent falls through fragile materials
- (c) Erect scaffolding, access equipment, harnesses and nets under the supervision of a competent person
- (d) Ensure there are criteria for using ladders

## Work over two metres high

Falls account for more than half of the fatal accidents in construction.

The aim of the Regulations is to prevent falls from any height, but there are specific steps to be taken for work over two metres high.

- (a) Above this height, where work cannot be done safely from the ground, the first objective is to provide physical safeguards to prevent falls. Where possible, means of access and working places should be of sound construction and capable of safely supporting both people and the materials needed for the work. Guardrails and toe boards or an equivalent standard of protection should be provided at any edge from which people could fall.
- (b) Sometimes it is either not possible to provide the above safeguards or the work is of such short duration or difficulty that it would not be reasonably practicable to do so. In these circumstances, consider using properly installed personnel equipment such as rope access or boatswain's chairs.
- (c) If, for the same reasons these methods of work cannot be used, it will be necessary to consider equipment which will arrest falls, i.e. safety harnesses or nets with associated equipment. Scaffolds, personnel harnesses and net equipment have to be erected or installed under the supervision of a competent person.

## Falling objects (Regulation 8)

- (a) Where necessary to protect people at work and others, take steps to prevent materials or objects from falling

- (b) Where it is not reasonably practicable to prevent falling materials, take precautions to prevent people from being struck, e.g. covered walkways
- (c) Do not throw any materials or objects down from a height if they could strike someone
- (d) Store materials and equipment safely

The first objective is to prevent materials or objects from falling in circumstances where they could strike someone. Only where it is not reasonably practicable to do so, should other means, e.g. covered walkways, be used.

## Work on structures (Regulations 9-11)

Prevent accidental collapse of new or existing structures or those under construction.

Make sure any dismantling or demolition of any structure is planned and carried out in a safe manner under the supervision of a competent person

Only fire explosive charges after steps have been taken to ensure that no one is exposed to risk or injury from the explosion

Every year there are structural collapses that have the potential to cause serious accidents. The CHSW Regulations set a high standard to prevent collapses that involves taking into account the hazard during the planning stage. Demolition or dismantling are recognised as high-risk activities. In any cases where this work presents a risk of danger to anyone, it should be planned and carried out under the direct supervision of a competent person.

## Excavations, cofferdams and caissons (Regulations 12 and 13)

- (a) Prevent collapse of ground both in and above excavations
- (b) Identify and prevent risk from underground cables and other services
- (c) Ensure cofferdams and caissons are properly designed, constructed and maintained

From the outset, and as work progresses, any excavation that has the potential to collapse unless supported, should have suitable equipment available immediately to provide such support.

Underground cables and services can also be a source of danger. These should be identified before work starts and positive action taken to prevent injury.

## Prevention or avoidance of drowning (Regulation 14)

- (a) Take steps to prevent people from falling into water or other liquid so far as is reasonably practicable
- (b) Ensure that personal protective and rescue equipment is immediately available for use and maintained, in the event of a fall
- (c) Make sure safe transport by water is under the control of a competent person

## Traffic routes, vehicles, doors and gates (Regulations 15-17)

- (a) Ensure construction sites are organised so that pedestrians and vehicles can both move safely and without risks to health
- (b) Make sure routes are suitable and sufficient for the people or vehicles using them
- (c) Prevent or control the unintended movement of any vehicle
- (d) Make arrangements for giving a warning of any possible dangerous movement, e.g. reversing vehicles
- (e) Ensure safe operation of vehicles including prohibition of riding or remaining in unsafe positions
- (f) Make sure doors and gates which could present danger, e.g. trapping risk of powered doors and gates, are provided with suitable safeguards
- (g) Regulation 15 (traffic routes) derives largely from the European Directive. However, the principles are well understood and widely practised

## Prevention and control of emergencies (Regulations 18-21)

- (a) Prevent risk from fire, explosion, flooding and asphyxiation
- (b) Provide emergency routes and exits
- (c) Make arrangements for dealing with emergencies, including procedures for evacuating the site
- (d) Where necessary, provide fire-fighting equipment, fire detectors and alarm systems

These Regulations, which also come from the Directive, require the prevention of risk as far as it is reasonably practicable to achieve. However, there are times when emergencies do arise and planning is needed to ensure, for example, that emergency routes are provided and evacuation procedures are in place.

These particular Regulations (as well as those on traffic routes, welfare, cleanliness and signing of sites) apply to construction work that is carried out on construction sites. However, the rest of the Regulations apply to all construction work.

Health and safety in construction, referred to earlier, contains some helpful guidance.

HSE continues to be responsible for inspection of means of escape and fire-fighting for most sites. However, fire authorities have enforcement responsibility in many premises, which remain in normal use during construction work. This continues the sensible arrangement which ensures that the most appropriate advice is given.

## Welfare facilities (Regulation 22)

- (a) Provide sanitary and washing facilities and an adequate supply of drinking water
- (b) Provide rest facilities
- (c) Provide facilities to change and store clothing

There is an important additional duty in this Regulation. Anybody in control of a site has to ensure that there are reasonable welfare facilities available at readily accessible places. This does not necessarily mean, for

example, that the main contractor has to provide these facilities, but they should check that others who have duties are making this provision

### Site-wide issues (Regulations 23- 27)

- (a) Ensure sufficient fresh or purified air is available at every workplace, and associated plant is capable of giving visible or audible warning of failure
- (b) Make sure a reasonable working temperature is maintained at indoor work places during working hours
- (c) Provide facilities for protection against adverse weather conditions
- (d) Make sure suitable and sufficient emergency lighting is available
- (e) Make sure suitable and sufficient lighting is available, including providing secondary lighting where there would be a risk to health or safety if primary or artificial lighting failed
- (f) Keep construction sites in good order and in a reasonable state of cleanliness
- (g) Ensure the perimeter of a construction site to which people, other than those working on the site could gain access, is marked by suitable signs so that its extent can be easily identified
- (h) Make sure all plant and equipment used for construction work is safe, of sound construction and used and maintained so that it remains safe and without risks to health

All of these duties (with the exception of those for lighting) are governed by the term 'so far as is reasonably practicable'.

## Training, inspection and reports (Regulations 28-30)

- (a) Ensure construction activities where training, technical knowledge or experience is necessary to reduce risks of injury are only carried out by people who meet these requirements or, if not, are supervised by those with appropriate training, knowledge or experience
- (b) Before work at height, on excavations, cofferdams or caissons begins, make sure the place of work is inspected, (and at subsequent specified periods), by a competent person, who must be satisfied that the work can be done safely
- (c) Following inspection, ensure written reports are made by the competent person

Lack of training has been identified as one of the major contributory factors in accidents and ill health in construction. Many activities are made safe simply by ensuring that those doing the work have knowledge and understanding of the importance regarding safe practices.

The frequency of inspections depends on the nature and place of work. For example, following the initial inspection, work at places over two metres in height requires weekly inspections. In contrast, for work in excavations (including shafts and tunnels), inspections are necessary at the beginning of every shift. Inspections help to ensure that safety is monitored during changing site conditions.

Reports detailing inspections are generally required every time an inspection is carried out, but there are exceptions. For example, weekly reports only are needed for inspections of excavation work, and unless the tower scaffold remains erected in the same place for seven days or more, inspections of tower scaffolds do not have to be recorded.