

Occupational Health and Safety in Construction Industry (Continued)

What do the CDM Regulations require?

The client

The principal duties that are placed upon the client are to:

- appoint a planning supervisor and principal contractor for each project;
- take reasonable steps to satisfy themselves that the planning supervisor, principal contractor, project designers and any contractors they appoint directly are competent and adequately resourced to deal with health and safety problems associated with the project;
- obtain and pass on relevant information available to them about health and safety matters which relate to the project to those who are planning the project. If there is a health and safety file already available, relevant sections of this should be provided;
- ensure that construction work does not start unless a suitable health and safety plan has been prepared.

Clients may appoint agents to act on their behalf, but before doing so they should make reasonable enquiries to satisfy themselves that the agent is competent to fulfil the client's duties.

The designer

The term 'designer' includes everyone preparing drawings and specifications for the project. Designers include architects, structural engineers and surveyors. Before preparing any design, the designer should ensure that the client has been made aware of their own duties.

Designers should ensure that when they design for construction work, they consider foreseeable health and safety risks during construction and eventual maintenance and cleaning of the structure in the balance with other design considerations, such as aesthetics and cost. They should apply the hierarchy of risk control. This means designers need to identify the hazards inherent in carrying out the construction work and where possible alter the design to avoid them. If the hazards cannot be removed by design changes, the designer should minimize the risks and provide information about the risks that remain.

The design should describe any matters that require particular attention by a contractor. Enough information should be provided to alert contractors and others to matters which they could not be reasonably expected to know about.

The designer should also consider in the same way how the structure can be maintained and repaired safely once built. Designers should do this when they develop almost any design, including design work for projects where the appointment of a planning supervisor or principal contractor is not required by the CDM Regulations.

Examples of what designers can do to improve health and safety might include:

- designing for non-fragile roofing assemblies instead of fragile ones (falls through fragile surfaces are a major cause of fatal and serious injuries);
- avoiding the need for chasing for cable runs (a job which inevitably exposes workers to high dust and noise levels) by embedding conduit within the wall finish;
- when designing foundations in contaminated land, specifying a driven-pile foundation (which does not bring contaminated material to the surface) instead of bored piles;
- avoiding concrete blocks weighing more than 20 kg (these are difficult to lift and are likely to lead to long-term back injury to block layers).

Designers should co-operate with the planning supervisor and other designers on health and safety matters and supply relevant information. Where CDM applies, information can be passed via the planning supervisor; where CDM does not apply, it should be supplied as part of the design information provided to the contractors. The information should include:

- the principles of the design relevant to the health and safety of those working on the project (eg erection sequences which must be followed to ensure stability);
- descriptions of special requirements for safe working (eg temporary propping of unstable structures);
- any special assumptions the designer has made about working practices (eg the site will have been levelled before structural erection begins to allow the safe use of MEWPs for access for erectors).

The planning supervisor

The planning supervisor is appointed by the client. The role of planning supervisor may be taken on by a company or an individual. The function can be discharged within the client's organization, within the design or construction team. Alternatively, it can be done by some other independent person, partnership or organization. The role is to:

- co-ordinate health and safety during the design and planning phase of the project;
- ensure that the pre-construction-stage health and safety plan for the project is produced in time for it to be provided to bidding contractors as part of the selection process;
- give advice about health and safety competence and resources needed for the project;
- collect information for inclusion in the health and safety file, which they ensure is prepared before passing it to the client on completion of the contract.

CDM does not require planning supervisors to visit the site or to assess the

performance of the principal contractor once construction work has begun.

The principal contractor

The principal contractor is appointed by the client to plan, manage and control health and safety during the construction phase of the project.

Site work should not start until the principal contractor has developed a construction-phase health and safety plan based upon information provided in the pre-construction health and safety plan. The plan may need to be developed during the construction phase to take account of changing conditions on site as work progresses or the design changes.

When planning the job, the principal contractor will need to identify the hazards and assess the risks of the job. To do this properly, information (including method statements and risk assessments) may be needed from other contractors who will be working at the site.

When risks arise because of potential interactions between contractors (e.g. site transport matters) or a number of contractors are exposed to a common risk (e.g. from the site electrical distribution system), the principal contractor should take a positive role in ensuring the general principles of risk prevention and control are applied.

The principal contractor's health and safety plan should take account of the general issues, the specific hazards and risk control measures and the general principles of risk assessment as stated above..

Contractors

These are the firms or self-employed people working at the site. They should help the principal contractor to achieve safe and healthy site conditions by following their instructions. They should co-operate with other contractors working on the site and provide health and safety information (including risk assessments) to the principal contractor.

For those contractors who work on larger sites where CDM applies, asking about the project health and safety plan before starting work will be valuable. Employees need to be told what it says that affects them. Proposed working methods should fit in with the plan and with site rules. If they do not, tell the principal contractor.

Health and safety competence

Everyone letting or subletting contracts is expected to take steps to satisfy themselves that the people who will do the work are competent. This can be done by asking questions such as:

- whether the contractor employs a safety advisor or uses the services of a safety consultant, and how often the safety advisor will visit the job;
- whether the contractor has done this type of work previously;
- what the contractor's safety statistics are in respect of injuries, near misses and dangerous occurrences;

- whether they have been issued with any improvement or prohibition notices or been prosecuted; and
- whether it is their intention to use subcontractors and if so, for what elements of the job and how will the subcontractor be selected and managed.

CDM requires that anyone letting or subletting contracts must also satisfy themselves that those who are to do the work are:

- competent in relevant health and safety issues; and
- intend to allocate adequate resources, including time, equipment and properly trained workers to do the job safely and without risks to health.

Ask the planning supervisor for their advice and input during the selection process.

The pre-construction-stage health and safety plan should act as a guide to the significant health and safety issues associated with the project. When tendering for work, being able to answer questions on these subjects will help designers and contractors to demonstrate competence and their suitability for the job.

If a client is letting work, or a builder or contractor is subletting work, considering the issues in this article will help them to decide on relevant questions to ask when assessing competence. Decide in advance what competences will be needed to do the work safely and without risk to health and how these can be demonstrated.

The Construction (Health, Safety and Welfare) Regulations 1996 of United Kingdom

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 also have duties to carry out their own work in a safe way. Also, anyone doing construction work has a duty to report any health or safety defects to those in control and to co-operate with others on matters of health and safety.

What do the Regulations cover?

The Regulations cover a wide range of health and safety issues, including:

- welfare requirements such as toilets, washing facilities and rest areas;
- the support and inspection of excavations;
- transport routes and pedestrian segregation;
- provisions for higher-risk trades such as demolition; and
- emergency and fire procedures.

The Work at Height Regulations 2005 of United Kingdom

These Regulations place duties on employers, the self-employed, employees and those who control the way in which work at height is carried out. They cover all

circumstances where a person is working at height (both above and below ground) or gaining access to/egress from a place of work and could fall any distance liable to cause personal injury.

The key provisions of the Regulations are that duty holders should:

- **avoid** work at height where they can;
- use work equipment to **prevent** falls where work at height cannot be avoided;
- where the risk of a fall cannot be eliminated, use work equipment to **minimize** the distance and consequences of a fall should one occur;
- always use measures which afford protection to everyone at risk (eg nets) before using personal protective measures (eg harnesses);
- ensure that the work is risk-assessment based and that the most suitable item of work equipment is selected and used;
- ensure those involved in work at height, including its planning and organisation, are competent to the level required to carry out their duties safely;
- inspect working platforms and work equipment at defined intervals and record the results;
- control risks from work involving fragile surfaces.

The Construction (Head Protection) Regulations 1989 of United Kingdom

These Regulations specify when head protection should be worn.

The Lifting Operations and Lifting Equipment Regulations 1998 of United Kingdom

These Regulations cover the operation of all lifting equipment including those that lift people. General advice on compliance can be found in the section entitled *Moving, lifting and handling loads*. Information on the Regulations can be found in *Safe use of lifting equipment. Lifting Operations and Lifting Equipment Regulations 1998: Approved code of practice and guidance*.¹²

The Provision and Use of Work Equipment Regulations 1998 of United Kingdom

These Regulations cover all types of work equipment and deal with such issues as dangerous parts of machinery, roll over protections, visibility, and inspection. For further information read *Safe use of work equipment. Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and guidance*.⁴⁷

The Control of Substances Hazardous to Health Regulations 2002 (COSHH)

COSHH requires employers to control exposure to hazardous substances to prevent ill health. They must protect both employees and others who may be affected. COSHH is a useful tool of good management that sets eight basic measures (listed below) that employers and sometimes employees must take. It requires a step-by-step approach during which you are required to assess risks and implement any

measures needed to control exposure and establish good working practices.

What COSHH requires:

- Step 1: **Assess the risks** to health arising from hazardous substances used or created by your workplace activities.
- Step 2: **Decide what precautions are needed.** You must not carry out work which could expose your employees to hazardous substances without first considering the risks and the necessary precautions and what else you need to do to comply with COSHH.
- Step 3: **Prevent or adequately control exposure.** You must prevent your employees being exposed to hazardous substances. Where preventing exposure is not reasonably practicable, then you must adequately control it.
- Step 4: **Ensure that control measures are used and maintained** properly and that safety procedures are followed.
- Step 5: **Monitor the exposure** of employees to hazardous substances if necessary.
- Step 6: **Carry out appropriate health surveillance** where your assessment has shown this is necessary or where COSHH sets specific requirements.
- Step 7: **Prepare plans and procedures** to deal with accidents, incidents and emergencies involving hazardous substances where necessary.
- Step 8: **Ensure employees are properly informed, trained and supervised.**

Further information can be found in the COSHH *Approved Code of Practice and guidance*.¹⁹

The Manual Handling Operations Regulations 1992 of United Kingdom

These Regulations apply to a wide range of manual handling activities involving the transporting or supporting of a load. This includes lifting, lowering, pushing, pulling, carrying or moving. They require employers to avoid the need for hazardous manual handling but where this need cannot be avoided, employers must assess the risk of injury and take measures to reduce it. Employees also have duties to follow appropriate systems of work, make proper use of the equipment provided for their safety and to inform their employer if they identify any hazardous handling activities.

For further information read *Manual handling. Manual Handling Operations Regulations 1992 (as amended). Guidance on Regulations*.⁴⁸

The Control of Noise at Work Regulations 2005 of United Kingdom

The Noise Regulations require employers to assess the risks to employees from noise at work and take action to prevent or reduce the noise exposure that produces those risks. If the noise exposure cannot be reduced sufficiently using other methods, hearing protection must be provided. Employers must provide employees with information, instruction and training and carry out health surveillance where necessary.

These Regulations require employers to take specific action at certain action values. The action values relate to:

- the levels of your employees' exposure to noise averaged over a working day or week (lower action value 80 dB, upper action value 85 dB); and
- the maximum noise (peak sound pressure) to which employees are exposed in a working day (lower action value 135 dB, upper action value 137 dB).

The actions you are required to take and further guidance can be found in Controlling noise at work. *The Control of Noise at Work Regulations 2005. Guidance on Regulations.*⁴⁹

The Control of Vibration at Work Regulations 2005 of United Kingdom

The Control of Vibration at Work Regulations require employers to:

- assess the vibration risk to their employees;
- decide if they are likely to be exposed above the daily exposure action value (EAV) and if they are, introduce a programme of controls to eliminate risk or reduce exposure to as low a level as is reasonably practicable;
- decide if they are likely to be exposed above the daily exposure limit value (ELV) and take immediate action to reduce their exposure below it;
- provide information and training to employees on health risks and the actions you are taking to control those risks;
- keep a record of the risk assessment and update it regularly;
- keep health records for employees under health surveillance.

The actions you are required to take and further guidance can be found in *Hand-arm vibration. The Control of Vibration at Work Regulations 2005. Guidance on Regulations.*³³

Employees' duties

Employees also have health and safety duties. They should:

- follow instructions given to them by their supervisors;
- co-operate with their employer on health and safety matters;
- follow the health and safety rules that apply to their particular job and to the site in general;
- use the health and safety equipment provided;
- report defects in equipment to their supervisor;
- take care of their own health and safety as well as that of their workmates and others who might be affected by their work.

Employees should be trained to know what to do and the work should be supervised and monitored to make sure that information provided as training is relevant to the work situation and is applied effectively.

Deciding whether somebody is an employee or is self-employed can be complex in the construction industry. It may be important to be sure of the employment status of people working on a site. It may affect who has responsibility for some aspects of health and safety and the provision of safety equipment such as boots and hats.

Remember, just because someone pays their own tax and insurance it does not necessarily mean that they are self-employed under health and safety law. Deciding who is an employee depends on a range of issues. A person is more likely to be an employee when the following apply:

- they work continuously or regularly for the same person or company;
- they are paid an hourly rate;
- they are not allowed to subcontract work;
- they can be told by another (their employer) when, how and where they are to work;
- tools and materials are provided for them;
- the person has not entered into a contract for a fixed sum for a package of work.

However, these tests are not always certain and legal advice may be needed to be sure of the situation. The current certificate should also be displayed by the employer.

Reporting accidents and work-related diseases

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 of United Kingdom (RIDDOR) require that certain types of accidents, specific cases of occupational ill health and some dangerous occurrences have to be reported.

Employers must report accidents to their employees. Whoever is in control of the site must also report accidents involving a self-employed worker or member of the public. Any of the following types of accident which happen on site have to be reported:

- serious and fatal accidents must be notified without delay normally by telephone;
- this must be followed up with a completed accident report within ten days;
- for less serious injuries, where the injured person is unfit (or unable) to do their normal job for more than three consecutive days, a completed accident report must be sent within ten days;
- if a dangerous occurrence happens on site, e.g. a building, scaffold or false work collapse, failure of a crane or lifting device or contact with overhead lines, it must be reported immediately, normally by telephone, to the nearest office. The details must be confirmed within ten days on a completed accident report form;

- if a worker suffers from a specified disease associated with their current job, e.g. hand-arm vibration syndrome and some forms of dermatitis, it must be reported on a completed disease report form.

If a principal contractor has been appointed, contractors should promptly provide them with details of accidents, diseases or dangerous occurrences that are reportable or notifiable under RIDDOR.

Keeping records

A record must be kept of any reportable injury, disease or dangerous occurrence. This must include the date and method of reporting, the date, time and place of the event, personal details of those involved and a brief description of the nature of the event or disease. The record can be kept in any form preferred, e.g. keep copies of completed report forms in a file.

Inspectors and the law

Health and safety laws that apply to construction companies are usually enforced by an inspector from the authorities. However, some smaller jobs inside offices, shops and similar premises are the responsibility of inspectors from the local authority.

One of the jobs of health and safety inspectors is to see how well site hazards are being dealt with, especially the more serious ones that could lead to injuries or ill health. They may wish to investigate an accident or a complaint.

Inspectors do visit workplaces without notice but everyone is entitled to see their identification before letting them look around. Don't forget that they are there to give help and advice, particularly to smaller firms that may not have a lot of knowledge. When they do find problems they will try to deal with the firm in a reasonable and fair way. If anyone is not satisfied with the way they have been treated, they can take the matter up with the inspector's manager. Any complaint about the inspectors will be investigated, and firms will be told what is to be done to put things right if a fault is found.

Inspectors do have wide powers, which include the right of entry to premises, the right to talk to employees and safety representatives and to take photographs and samples. They are entitled to workers' co-operation and answers to questions. They have the right to take written statements from anyone who can help them with their investigation.

If there is a problem, they have the right to issue a notice requiring improvements to be made or (where a risk of serious personal injury exists) one which stops a process or the use of dangerous equipment. If a business receives an improvement or prohibition notice, it has the right to appeal to an industrial tribunal. If the business appeals against an improvement notice, the action required by the notice is suspended until the appeal is finished. The action required by a prohibition notice is not suspended pending an appeal because that could allow a serious risk to persist.

Inspectors do have the power to prosecute a business or an individual for breaking health and safety law, but they will take their attitude and safety record into account.

If an inspector:

- tells you to do something, you have a right, if you ask, to be given a letter explaining what needs to be done, when and why;

- intends to take immediate action (eg by issuing a prohibition notice), you have a right to a written explanation as soon as practicable of why this is necessary. Prohibition notices include such explanation;
- intends to issue an improvement notice, you have a right to a written explanation of what is wrong, an outline of what needs to be done, and by when.

When a notice is issued, you will be told about your right of appeal to an industrial tribunal. A form will be sent to you which explains:

- how to appeal;
- where and within what period an appeal may be brought;
- that an appeal may be brought on any grounds; and
- that action required by an improvement notice is suspended while an appeal is pending.

This article is now concluded.

Readers may please note that D. L. Shah Trust brings out two e-journals on a fortnightly basis. These are mailed to those persons or institutions who are desirous of receiving them: These two e-journals are:

1. Safety Info

2. Quality Info

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