Construction, design and management (CDM) – compliance code P637

Introduction

This compliance code is intended for use when construction projects are carried out for a school. If you are managing a construction project, or in a lead role in a larger project, you must ensure that you follow this document to comply with legal requirements.

Smaller, simple projects such as building a partition wall to divide an office or classroom, or repair of a small flat roof should follow the Construction - simple construction guide G637h here.

- Where a school has construction work carried out the school undertakes the role of the *Client* under CDM legislation
- As *Client*, the school has overall responsibility for the successful health and safety management of a project. This is achieved with the advice and support of competent parties at defined stages of the project. This includes the Client ensuring that competent duty holders are appointed and carry out their duties, as well as providing resources and information (see 2.2 below). The legal duty to do this **cannot** be transferred to any other duty holder.
- For **all** construction projects (including smaller projects), where there is more than one contractor carrying out the work, a *Principal Designer* and a *Principal Contractor* must be appointed by the *Client* - these can be an individual or an organisation. This document provides details of these roles and how they assist the *Client*.

All staff are expected to follow this document in order to discharge their duties and responsibilities as outlined in your school's Health and Safety Policy.

CDM must be applied using a sensible approach, giving consideration to the level of risk involved. In large projects such as the construction of a new building, both the risks associated with the construction project itself and future safety implications when the building is complete must be considered during design.

1 Scope (defining construction and duty holders)

1.1 Definition of Construction

If the task in hand looks like construction work, requires construction skills and uses construction materials, it is construction work. Where construction work falls into any of these three categories then CDM applies:

- Building work
- Civil engineering work or
- Engineering construction work

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Please note: *General maintenance of fixed plant which mainly involves mechanical adjustments, replacing parts or lubrication, is unlikely to be construction work, for example, fire detection maintenance.*

If a planned activity falls into one of the three categories above then the following information can assist in determining if the activity is a CDM project. There may be activities similar to those listed which may be considered to be construction, these should be seen in the context of the type of work activity involved, and not just 'made to fit'.

(a) *the construction, alteration, conversion, fitting out, commissioning, renovation, repair, upkeep, redecoration or other maintenance (including cleaning which involves the use of water or an abrasive at high pressure, or the use of corrosive or toxic substances), decommissioning, demolition or dismantling of a structure;*

(b) the preparation for an intended structure, including site clearance exploration, investigation and excavation, and the clearance or preparation of the site or structure for use or occupation at its conclusion

(c) the assembly on site of prefabricated elements to form a structure or the disassembly on site of the prefabricated elements which, immediately before such disassembly, formed a structure;

(d) the removal of a structure, or of any product or waste resulting from demolition or dismantling of a structure, or from disassembly of prefabricated elements which immediately before such disassembly formed such a structure;

(e) the installation, commissioning, maintenance, repair or removal of mechanical, electrical, gas, compressed air, hydraulic, telecommunications, computer or similar services which are normally fixed within or to a structure;

Please note: CDM may also apply to some Events and Entertainment Activities such as trade fairs and exhibitions:

1.2 Duty Holders

The following is a list of various duty holders under CDM and their responsibilities. Organisations or individuals can carry out the role of more than one duty holder.

Duties of the school as Client:

Make suitable arrangements for managing a project. This includes making sure that:

- Competent duty holders listed below are appointed in writing
- Sufficient time and resources are allocated

Clients must also make sure that:

- Relevant safety information is prepared and provided to other duty holders ('Client Brief` 3.1.2 below)
- Suitable arrangements are made for managing, design and construction planning (as described in 3.1.4)

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- *The Principal Designer* and *Principal Contractor* carry out their duties
- Welfare facilities are provided for the Construction Phase
- That completion and handover arrangements are put in place, including arranging for fire plans to be updated to reflect changes, risk assessments are reviewed where relevant, future maintenance requirements are put in place and practical handover of premises are planned
- A Safety File is developed and provided to them at the end of the project

Principal designers: See 3.1.3

Designers:

- When preparing or modifying designs, eliminate, reduce or control foreseeable risks that may arise during construction or maintenance and use of a building once it is built.
- Provide information to other members of the project team to help them fulfil their duties.

Principal Contractors: See 3.1.3

Contractors:

- Plan, manage and monitor construction work under their control so that it is carried out so that risks are suitably managed'
- For projects involving more than one contractor, co-ordinate their activities with others in the project team – in particular, comply with directions given to them by the Principal Designer or Principal Contractor.
- For single-contractor projects, prepare a construction phase plan.

2 Implementing CDM requirements as Client

This section sets out the Client actions required at defined project stages.

2.1 Pre-construction

2.1.1 In-house Competency

School staff who act in a lead role as Client must attend the NCC Health and Safety for Construction Project Management half day course. This provides delegates with sufficient understanding to meet CDM requirements. Further details can be read in the Health and Safety Training Directory G502e.

2.1.2 Developing a client brief

The client brief details requirements and expectations and is essential to project success. This helps with design, construction and use of the finished product and shapes how other duty holders approach their work.

A *Principal Designer* can be appointed at this stage to assist in the development of the Client Brief (see section 3.1.3 for appointments of Duty Holders). The school lead for the project must develop a brief containing:

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- A description of the main functions and operational requirements of the finished project
- Information about existing premises and future requirements (why the project is required, what the project needs to achieve)
- Explanation of the design that you have in mind or any significant design assumptions
- Any known project constraints, e.g. where works will be carried out while a building remains operational
- An outline of your safety expectations during the project, including how health and safety risks should be managed, e.g: that all CDM duty holders will be competent; meet the requirements of their role, including advising the Client of required action; ensure that regular communications take place between all parties; that all construction risks will be suitably assessed and that the design of the build will consider the safety of users and ongoing maintenance
- Detail of the single point of contact at the school for queries and discussions during the project.
- Details about the timescale, ensuring it is realistic to allow adequate planning and safe construction and that the budget for the project will ensure safe construction takes place

2.1.3 Appointment of Duty Holders

Except where only one contractor will be working on a project, a Principal Designer and Principal Contractor must be appointed in writing; if the Client does not make this appointment, then the Client takes on these roles and duties. The following information outlines the scope of the two key duty holders' roles.

Principal Designer

The Principal Designer must outline the scope of their role and detail how they will fulfil it. Their role includes:

- Advising the Client about their duties
- Assisting with the development of the client brief where required by the Client Obtaining relevant health and safety information
- Overseeing the design, ensuring designers comply with their duties
- Reviewing all pre-construction information
- Ensuring coordination between all parties
- Providing information to the Principal Contractor
- Raising any significant concerns as soon as possible
- Considering how elements of final structures can be used during construction, e.g. installing stairs early in the build to reduce the need for scaffolding
- Ensuring any significant risks have been identified and addressed
- Encouraging safe designs
- Preparing the health and safety file containing information relating to the project
- Ensure that the Property design guide G637b requirements are incorporated in consultation with the Client

Principal Contractor

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The principal contractor is responsible for managing health and safety on the construction site. Key actions include:

- Planning: preparing a construction phase plan that ensures the risks associated with the work are adequately controlled.
- Managing: implementing the plan, including facilitating cooperation and coordination between contractors
- Monitoring: reviewing, revising and refining the plan and checking work is being carried out safely
- Securing the site: taking steps to prevent unauthorised access to the site by using fencing and other controls
- Making sure that welfare facilities are provided throughout the construction phase
- Providing site induction: giving workers, visitors and others information about risks and rules that are relevant to the site work and their work
- Liaising on design: discussing with the Principal Designer any design or change to a design.

2.1.4 Making suitable arrangements for managing, design and construction planning.

Please note: the Principal Designer will assist the Client to fulfil the requirements of this section.

Pre-construction information must be passed on at the earliest opportunity in order to help other duty holders, such as designers and contractors. The school should provide relevant information that is already available, or that can be obtained by making sensible enquiries on the following:

- Site boundaries and access, including temporary access - for example narrow streets, lack of parking, turning or storage space which may be relevant for construction vehicles
- Restrictions on deliveries or waste collection or storage, adjacent land uses - for example schools, railway lines or busy roads
- Location of existing services and those that are concealed - water, electricity, gas, etc
- Ground conditions, underground structures or water courses where this might affect the safe use of plant, for example cranes, or the safety of ground works
- Existing structures - stability, structural form, fragile or hazardous materials, anchorage points for fall arrest systems (particularly where demolition is involved)
- Previous structural modifications, including weakening or strengthening of the structure (particularly where demolition is involved), fire damage, ground shrinkage, movement or poor maintenance which may have adversely affected the structure
- Any difficulties relating to plant and equipment, such as overhead gantries whose height restricts access
- Health and safety information contained in earlier design, construction or 'as-built' drawings, such as details of pre-stressed or post-tensioned structures
- Health hazards, including:

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- Location of asbestos containing materials
- Existing storage of hazardous materials and/or structures containing hazardous materials
- Contaminated land, including results of surveys
- Existing structures containing hazardous materials
- Health risks arising from the Client's activities

The school lead (as the Client) must ensure that consideration is given to health and safety from the planning to the build stage. Arrangements should include:

- Key dates (such as available start and finish of the construction phase).
- Details of any appointments that have been made.
- Consideration of design risks found on the HSE Website. (The competence of the Principal Designer and Design team is key to ensuring that risks associated with the build and risks associated with how you will use your building in the future are assessed).
- Consideration of risks to members of the public and pupils
- Ensuring that sufficient time and resources are allocated to each stage of the project to execute the project safely
- Consideration of communication routes between the school and others
- Ensuring that responsibilities are clearly defined
- Ensuring that suitable welfare facilities are in place before the work starts, found on the HSE Website
- Arrangements for monitoring safety performance during the contract. As a minimum, this must include the immediate notification of major injuries which occur and confirmation of action taken as a result and a regular update meeting to share progress and review any changes. Other monitoring arrangements should take account of the size and complexity of the work, this may include:

  - Arranging for proactive monitoring to be carried out
  - Obtaining and reviewing accident information at suitable intervals
  - Obtaining and reviewing details of information in relation to any health and safety enforcement activities at the time the enforcement activity is known by the provider
  - Reviewing the health and safety file format and contents (see section 3.3.1)

Please note: where schools increase their existing capacity, it is important to ensure that the impact of increased occupancy numbers in other parts of the building such as school assembly, fire escape routes, lunchtimes are considered as part of the design and should be outlined in the client brief.

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2.1.5 Notifying the HSE

If the project is expected to last longer than 30 working days and have more than 20 workers on the project at any one time, or exceed 500 person days, the school lead (Client) will need to make sure the project is notified to the Health and Safety Executive using a F10 – Notification of construction project' form found on the HSE Website:

3.1.6 Pre-construction meetings

The school lead must ensure regular progress meetings take place, to ensure that health and safety arrangements are working successfully in the pre-construction phase and that the Principal Designer is complying with their duties.

2.1.6 Construction Phase Plan

The Principal Contractor must produce a plan of how health and safety will be managed during the construction phases. The school lead must check that this plan has been prepared, is relevant and meets with the requirements of the work. The plan should be specific to the project, take account of the pre-construction information provided and be proportionate to the site risks. Where changes are made (for example, the sequence of work is altered), then design assessments and safe working arrangements may need to be reviewed.

2.1.7 Welfare facilities

The school lead must ensure that suitable welfare facilities are in place for the contractors. This can be achieved during a site visit or by asking the principal contractor (or contractor for a single contractor project) what facilities they have provided.

2.2 Construction Phase

2.2.1 Working with the Principal Contractor

During construction the responsibility for the construction site rests with the Principal Contractor. However, joint arrangements may need to be put in place for specific circumstances, e.g. shared access routes in a building which remains operational while construction work is carried out. Other site users must comply with site rules.

2.2.2 Ensuring that arrangements are working

The Client is responsible for ensuring that the arrangements are working by taking reasonable steps to ensure that the Principal Contractor is complying with their duties. This can be achieved through regular progress meetings or written updates.

The Client is not required to monitor the construction phase (unless specific circumstances are identified, for example a large project is being undertaken at a partly operational site where the construction has the potential to impact on shared safety arrangements, for example, fire evacuation).

2.3 Completion and handover

Timing of completion and handover arrangements must be checked as the project progresses. This may include a partial handover with risk assessment review where other parties start to use the site, e.g. setting up computers in finished areas.

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2.3.1 The Health and Safety File

The Principal Designer is responsible for preparing and developing the Health and Safety File and ensuring it is handed over to the client. Where their appointment ends before the project is completed, the Principal Designer must hand over the file to the Principal Contractor who will continue to develop it and hand over the completed file to the Client.

The Health and Safety file must contain information needed to ensure the health and safety of anyone carrying out any future construction, demolition, cleaning and maintenance work in relation to the constructed areas, this may include:

- brief description of the work carried out;
- any hazards that have not been eliminated through the design and construction processes, and how they have been addressed (eg surveys or other information concerning asbestos)
- key structural principles (eg bracing, sources of substantial stored energy – including pre- or post-tensioned members) and safe working loads for floors and roofs;
- hazardous materials used in the construction;
- information regarding the removal or dismantling of installed plant and equipment (eg any special arrangements for lifting such equipment);
- health and safety information about equipment provided for cleaning or maintaining the structure;
- the nature, location and markings of significant services, including underground cables; gas supply equipment; fire-fighting services etc;
- information and as-built drawings of the building, its plant and equipment (eg the means of safe access to and from service voids and fire doors).

The file can be kept in any format and should be kept separate from building maintenance manuals.

The file should be reviewed and updated where required.

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