

## Health and Safety Guidance - Designers Construction Design and Management Regulations 2015

Unless well managed construction sites are some of the most dangerous workplaces in the UK. The Construction, Design and Management Regulations 2015 have been written to improve health and safety on construction sites and apply to every construction site, including for temporary works. This means the Regulations apply to show builds and demolition, theatre set changes and get out and all other temporary builds regardless of scale, duration or location.

This is a long document, do not be put off by this, not everything will be immediately relevant to you. The first section, pages 3-10, provides a summary of the legislation, please read this section in full. The appendices provide information that is important but may not be directly relevant to you depending on your role during a construction project.

The Construction phase plan is available as an online form. The link is given in appendix 3 and on the H&S pages of the intranet.

The sections detailing each role have been written as standalone documents and can be downloaded individually from the H&S intranet to be passed on to people fulfilling these roles. As a result there is some repetition between these documents.

This document is based on information from the CITB series of industry guidance and information from the HSE.

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## Introduction

1. The Construction, Design and Management Regulations (CDM2015) set out the framework for the management of health and safety for all construction projects. CDM 2015 applies to both domestic and commercial construction, this H&S Standard is for commercial projects only and summarises the requirements of the Regulations and the standards to be met. These standards reflect the legal requirements of CDM2015, failure to implement these standards will result in the University not meeting its legal obligations. CDM2015 is based on risk assessment and the health and safety arrangements should always be proportional to the risk.
2. CDM 2015 includes the planning process and the subsequent use of the building or structure which means that when complying with the requirements of the Regulations consideration must be given to how health and safety will be managed during construction, use and demolition i.e. a show build, the period when the show is open and how structures will be dismantled and disposed of.
3. The CDM Regulations have been in place for several years, in the past they did not include temporary structures or most work involving IT or telecommunications. The new Regulations, which came into force on the 6th April 2015, do now include these activities. This means that much of the work carried out in preparation for shows and exhibitions and some other student work, structural IT and telecommunications projects will now have to be managed in accordance with the requirements of CDM2015.
4. The established process of planning and risk assessment in the University is similar to that required by CDM 2015 and meets most of the requirements for managing health and safety found in CDM 2015. The regulations require the identification of specific roles; the Client, Principal Designer and Principal Contractor, and for the development of a construction phase plan and some other planning paperwork; all other arrangements required by the regulations should already be in place.
5. The key role in the management of construction work is the client. The client is responsible for ensuring the construction project is managed safely and competent people are appointed to assist with the delivery of the project. The client can be an individual or organisation; for UAL the client may be the University, a College or department, group of staff or students or an individual which may be a member of staff or a student.
6. CDM recognises two phases in a construction project, the pre-construction phase, managed by the principal designer, and the construction phase, managed by the principal contractor. Read on and all will be revealed.

## Definitions

### Construction

7. CDM 2015 defines construction very broadly, as a general rule of thumb if a project includes any structural work the installation of plant or services including electrical, IT or telecommunications, maintenance or demolition it will come under the regulations. This applies to permanent structures and temporary builds.
8. CDM 2015 categorises construction into five areas; maintenance, preparation, assembly, removal and installation.

### A structure

9. The definition of a structure is equally broad, CDM 2015 defines a structure as:
  - a) *Any building, timber, masonry, metal or reinforced concrete structure, railway line or siding, tramway line, dock, harbour, inland navigation, tunnel, shaft, bridge, viaduct, waterworks, reservoir, pipe or pipeline, cable, aqueduct, sewer, sewage works, gasholder, road, airfield, sea defence works, river works, drainage works, earthworks, lagoon, dam, wall, caisson, mast tower, pylon, underground tank, earth retaining wall structure or structure designed to preserve or alter any natural feature, fixed plant;*
  - b) *Any structure similar to anything specified in paragraph (a);*
  - c) *Any formwork, false work, scaffold or other structure designed or used to provide support or means of access during construction.*
10. This means that any preparation work, building, removal or demolition, including work for temporary structures such as walls for shows, catwalks, platforms and stages should be considered construction. This will also include work involving telecommunications and IT i.e. the fit out, removal and continued maintenance of machinery and systems.

### A design

11. A design includes everything prepared for the purpose of constructing, modifying or using a building or structure, including temporary structures, a product or system (such as an electrical or mechanical system) and is likely to include drawings, sketches, calculations of quantities and structural calculations, specifications and design details.

### Notifiable Projects

12. Large and complex projects have to be notified to a relevant authority, for the University this is almost certainly going to be the Health and Safety Executive<sup>1</sup>(HSE). If a project is notifiable the processes for managing it are the same as for a smaller project the only difference is that the details have to be registered with the relevant authority using form F10 which is available to complete online via the [HSE website](#). An up-to-date copy of the notice must be displayed in the construction site office so all those working on the project can see it, the notice must be easily understandable. The client or contractor/PC can do this. The information required when making a notification is given in [appendix 2](#).
13. A project will be notifiable if:
  - a) The project is scheduled to take longer than **30 days** and there will be more than **20 people** working on it at any one time; or
  - b) The project is going to exceed **500 person days**.

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<sup>1</sup> The other notifiable authorities are the Office of Rail Regulation and the Office of Nuclear Regulation. If you think either of these authorities are likely to be relevant to your project you must contact your local H&S Adviser before proceeding.

14. Every day that work is likely to take place contributes to the period of construction work. This includes bank holidays and weekends and includes work carried out by staff, students, student helpers and other volunteers.
15. If a project is not notifiable when it starts but exceeds the limits given above it must be notified as soon as it becomes clear the limits will be exceeded.
16. For a notifiable project the construction phase cannot start until the relevant authority has been notified. Notification should be made as soon as reasonably practicable. Any modifications or updates to the notification should be sent to the HSE making it clear they refer to an earlier notification and do not refer to a new project.

### Competency

17. Competency is more than having the training to carry out a task; the HSE define competency as the **combination of training, skills, experience and knowledge that a person has and their ability to apply them to perform a task safely**. Other factors, such as attitude and physical ability can also affect someone's competence. Being competent is not the same as simply being able to do a job.

### Duty Holders

18. The Regulations identify particular duty holder roles that need to be assigned when managing a project. The roles have specific responsibilities and an individual can take on more than one role but, however the roles are allocated, there needs to be very clear documentation to identify who is taking on which role and how they are competent to do so.
19. For any project using more than one contractor there must be a principal designer (PD) and a principal contractor (PC). If a project only uses a single contractor the duties and responsibilities of the PC and PD will be undertaken by an identified designer and the single contractor. For the purposes of this document the term PD and PC are used for projects with a single contractor and projects with more than one contractor.
20. There can be more than one PC or PD throughout a project but only one at a time, there should never be more than one PC or PD appointed at any one time. A summary of duties is given below; detail of each role is given in appendices 5-10

CDM2015 duty holders	Summary of role and main duties
<p><b>Client</b> An organisation or individual for whom a construction project is being carried out</p>	<p>Make suitable arrangements for managing a project, including making sure that:</p> <ul style="list-style-type: none"> <li>• Other duty holders are appointed.</li> <li>• Sufficient time and resources are allocated.</li> </ul> <p><b>Clients</b> must also make sure that:</p> <ul style="list-style-type: none"> <li>• Relevant information is prepared and provided to other duty holders.</li> <li>• The <b>PD</b> and <b>PC</b> carry out their duties.</li> <li>• Welfare facilities are provided.</li> </ul>
<p><b>PD</b> PDs are appointed by the <b>client</b> when a project is going to involve more than one contractor.</p>	<p>Plan, manage, monitor and co-ordinate health and safety in the pre-construction phase of a project. This includes;</p>

<p>The PD can be an organisation or an individual.</p> <p>The PD must have sufficient training, skills experience and knowledge to carry out their role effectively</p> <p>The <b>client</b> must make sure the PD is competent to carry out the role.</p>	<ul style="list-style-type: none"> <li>Identifying, eliminating or controlling foreseeable risks for both the construction phase and the maintenance and demolition of a structure.</li> <li>Ensuring other designers carry out their duties.</li> </ul> <p>Prepare and provide relevant information to other <b>duty holders</b>.</p> <p>Provide relevant information to the PC to help them plan, manage, monitor and coordinate health and safety in the construction phase.</p>
<p><b>PC</b></p> <p>PCs are appointed by the <b>client</b> when a project is going to involve more than one contractor.</p> <p>The PC coordinates the construction phase of a project.</p> <p>The PC must have sufficient training, skills experience and knowledge to carry out their role effectively</p> <p>PCs are also involved in the planning stage.</p>	<p>Plan, manage, monitor and coordinate health and safety in the construction phase of a project including:</p> <ul style="list-style-type: none"> <li>Liaising with the PD and client.</li> <li>Preparing the construction phase plan.</li> <li>Organising cooperation between contractors and coordinating their work.</li> </ul> <p>Ensure that:</p> <ul style="list-style-type: none"> <li>Suitable site inductions are provided.</li> <li>Reasonable adjustments are taken to prevent unauthorised access.</li> <li>Workers are consulted and engaged in securing their health and safety.</li> <li>Adequate welfare facilities are provided.</li> </ul>
<p><b>Designer</b></p> <p>Those who prepare or modify designs for a building or project, or prepare or modify designs to systems relating to construction work.</p>	<p>When preparing or modifying designs, eliminate, reduce or control foreseeable risks that may arise during construction, maintenance and use of a structure once it is built.</p> <p>Provide information to other members of the project team to help them fulfil their duties.</p>
<p><b>Contractor</b></p> <p>These are the people who do the actual construction work. They can be an individual, company, student, member of UAL staff, volunteer or student helper.</p> <p>Anyone who directly engages construction workers or manages construction work, including companies who use their own workforce to do construction work on their own premises.</p>	<p>Plan, manage and monitor construction work under their control to ensure it is carried out without risks to health and safety.</p> <p>If there is more than one contractor each contractor must coordinate their activities with others in the project team and comply with directions given to them by the <b>PD</b> and <b>PC</b>.</p> <p>If there is only one contractor they are required to prepare the construction phase plan.</p>
<p><b>Worker</b></p> <p>The requirements for this role apply to everybody involved in the project including all the people who work for, or under, the control of contractors on a construction site.</p> <p>Workers might include external contractors, UAL staff, students, volunteers or student helpers, Self employed or agency workers.</p>	<p>Workers must:</p> <ul style="list-style-type: none"> <li>Be consulted about matters that affect their health, safety and welfare.</li> <li>Take care of their own health and safety and the safety of others who might be affected by their actions.</li> <li>Report anything likely to endanger their own safety or the health and safety of other people.</li> <li>Cooperate with their employer, fellow workers, contractors and all other duty holders.</li> </ul>

## Assessing Competency

### What is competency?

21. Competency is described by the HSE as **the combination of training, skills, experience and knowledge that a person has and their ability to apply them to perform a task safely**. Other factors, such as attitude and physical ability can also affect someone's competence. Being competent is not the same as simply being able to do a job or completing a training course.
22. To deliver a project safely everyone involved needs to be competent to carry out their particular role or to be supervised closely by someone who is.
23. CDM 2015 requires every member of the project team from the principal designer and contractor through to each worker to be competent to carry out their particular activities or to be supervised appropriately. The Client must make sure the people they appoint are competent and they in turn must also make sure those they appoint are competent. The degree of competence required will depend on the actual work being carried out; consequently the amount of effort needed to assess competence should be determined by the level of risk and the complexity of the job.
24. Anyone responsible for putting people to work on a construction site must ensure they have obtained or are in the process of obtaining, the necessary skills, knowledge, training or experience to carry out the job or task in hand.

### Competency of contractors, including designers.

25. As described above there are many elements that make up competence, simply having the expected qualifications is not usually enough, although may still be a requirement. Below are some ways in which a contractor, either as an individual or a company/group, can be asked to prove their competence to carry out the task required of them.
  - Recent H&S performance – asking questions about number and type of recent accidents, any occurrences of work related illness.
  - Is there a written health and safety policy? (only required for companies with five or more employees)
  - Has the contractor done similar work, requiring similar skills and, if important, to a similar scale? Can the contractor provide risk assessments from a previous job? For complex or high risk jobs it is reasonable to ask for references.
  - What qualifications do they and their workers have? Some professions have nationally accredited qualifications that people must have to undertake work; for example, scaffold design, build and inspections, chain saw operators, electricians and gas safety work.
  - For contractors with employees - how do they arrange their work? how will work be supervised? what checks are made on equipment and materials? etc.
  - If subcontractors are going to be used, how will their competency be checked and their work and materials be supervised to ensure consistency?
  - If required ask for proof of Employers Liability insurance.
  - Always ask for, and keep, proof of Public Liability Insurance.

### **How can workers prove competency?**

26. There are several ways in which worker competency can be verified, below are some suggestions. Workers should only be asked to prove their skills, knowledge, experience etc. for the work they will be required to undertake on the project.

- Details of training, both in-house and national training schemes if relevant for example the University ladder training course or the PASMA certificate for use of tower platforms.
- Providing a portfolio of work for other, similar jobs.
- Providing references
- Showing time served elsewhere
- Taking an on-site assessment.

## Appendix 1: Information required for notification to the relevant authority.

The following information is required if a project is notifiable to the HSE or other authority. All this information is gather on the construction phase plan form available on the H&S pages of the intranet.

- The date the notification was sent.
- The address of the construction site or precise description of its location if there is no address.
- The name of the local authority where the construction site is located, see below for this information for UAL sites.
- A brief description of the project and the construction work it entails.
- The following contact details of the client, the PC and the PD: name, address, telephone number and (if available) email address.
- The date planned for the start of the construction phase.
- The time allocated by the client under regulation 4(1) for the construction work.
- The planned duration of the construction phase.
- The estimated maximum number of people at work on the construction site.
- The planned number of contractors on the construction site.
- The name and address of any contractor already appointed.
- The name and address of any designer already appointed.
- A declaration signed by or on behalf of the client that the client is aware of the client duties under these Regulations.

UAL campus	London Borough
Camberwell - Wilsons Road	Southwark
Camberwell – Peckham Road	Southwark
Central Saint Martins – Archway	Islington
Central St Martins – Kings Cross	Camden
Chelsea	Westminster
LCC	Southwark
LCF – JPS	Westminster
LCF – Lime Grove	Hammersmith and Fulham
LCF – Mare Street	Hackney
LCF – Curtain Road	Hackney
LCF - Golden Lane	Islington
Wimbledon	Merton
High Holborn	Camden
Richbel Place	Camden

## Appendix 2: Pre-construction information

27. Pre-construction information details the findings of the project risk assessments with some additional information. This information is provided by the client with the assistance of the PD who will collate the information to pass to on to the designers and contractors working on the project.
28. If the project is going to be tendered to identify designers and/or contractors the pre-construction information should be part of the tender process. If there isn't going to be a tender process, which is likely to be the case for small projects and student work, the pre-construction information will be needed to allow the designers and contractors to fulfil their roles and is fundamental to the preparation of the construction phase plan and the health and safety file.

### What should be covered by the pre-construction plan?

29. Pre-construction information documents the risk assessment phase of the project and must include information about the project that is already in the client's possession or which is reasonably obtainable by or on behalf of the client. The information must be:
  - Relevant to the particular project.
  - Have an appropriate level of detail.
  - Be proportionate to the level of risk involved.
30. The PD has a duty to help the client develop the pre-construction information.
31. The gathering of this information should start as soon as possible after the project has been thought of, even if the details of the finished project have not been agreed. The information gathered at this stage is likely to help decide exactly how the project takes shape. Information gathered at the start may not remain relevant or be sufficient as the design process progresses; pre-construction information should be added to throughout the design process to make sure all the health and safety issues are identified, assessed and managed.

### When complete the pre-construction plan must include the following:

- Details about the project including the client brief and any key dates in the construction phase.
  - How the project is to be planned and managed identifying the PD and PC. If these roles are being taken on by the client this should be made clear in the pre-construction information.
  - The resources and time allocated to each stage.
  - The arrangements in place to ensure cooperation between duty holders and how the work is to be coordinated.
  - All the health and safety hazards of the site including any design and construction hazards and how they are to be addressed. For example, the presence of asbestos, working at height, electrical work etc.
  - Any relevant information in an existing health and safety file. For UAL sites health and safety files are kept by the Estates department.
32. Pre-construction information should be available to all duty holders to allow them to carry out their duties. The information should be kept in a convenient format; paper based or electronic is fine as long as it is easily available. The information should be concise and easily understandable.

## Pre-construction client checklist

	Yes	No
Are you clear about your responsibilities as the client for this project?		
Does the project require a PD or PC?		
Have formal appointments for PD and/or PC been made in writing?		
Have checks been made to ensure that the PD or designer has the capability and necessary skills, knowledge, training and experience to fulfil their duties?		
Have checks been made to ensure that the PC or contractor has the capability and necessary skills, knowledge, training and experience to fulfil their duties?		
Have the resources required to complete the project been identified and are the resources provided?		
Has a project or client brief been issued to the project team?		
Has the project team been issued with all the necessary pre-construction information?		
Do you have access to project-specific health and safety advice?		
Are suitable arrangements in place to manage health and safety throughout the project including any dismantling or disassembly?		
Has a schedule for the key activities been agreed and produced?		
Is there sufficient time to complete all of the key activities?		
Does the project need to be notified to the HSE?		
If necessary, has the project been notified to the HSE using the F10 notification form available on the HSE website?		
Has the contractor/PC produced the construction phase plan?		
Have you checked that the construction phase plan has been adequately developed before work starts?		
Are you satisfied that suitable welfare facilities have been provided before work starts onsite?		
Is a health and safety file going to be needed?		
If required has the format and content of the health and safety file been agreed?		

## Appendix 3: Construction phase plan

33. The construction phase plan documents how health and safety will be managed during the construction phase of the project. The plan should only contain information directly related to managing the construction phase and should be:
- Relevant to the project – no generic risk assessments or standardised industry guidance.
  - Have sufficient detail to clearly set out the arrangements, site rules and special measures needed to manage the construction phase.
  - Proportionate to the scale and complexity of the projects and the risks involved.
34. The following topics should be considered when drawing up the plan
- A description of the project including key dates and details of the principal members of the project team.
  - The management of the work including:
    - Health and safety aims of the project.
    - The site rules.
    - Arrangement for cooperation and coordination between project team members such as frequency of meetings, decision making trees, communication arrangements.
    - Arrangements for involving workers in decisions.
    - Site induction.
    - Welfare facilities.
    - Emergency procedures including first aid and fire.
  - Control of any of the specific site risks relevant to the work involved i.e. management of asbestos, confined spaces, working at height.

### [Construction phase plan form](#)

## Appendix 4: Health and safety file

35. The health and safety file is only required for projects involving more than one contractor. The file provides all the information likely to be needed to ensure health and safety during any subsequent work such as maintenance, cleaning, refurbishment or demolition

### **The health and safety file must contain:**

- A brief description of the work being carried out.
  - Any hazards that have not been eliminated through the design and construction processes. The information must include how the remaining hazards (residual risks) have been addressed and will be managed safely.
  - Key structural principals (e.g. bracing, sources of substantial stored energy – including pre and post tension members) and the safe working loads of floors and roofs.
  - Hazardous materials used, for example; adhesives and special coatings.
  - Information regarding the removal or dismantling of installed plant and equipment (e.g. any special arrangements for lifting such equipment).
  - Health and safety information about equipment provided for cleaning or maintaining the structure, for example information about LEV systems.
  - The nature, location and markings of significant services including underground cables, gas supply equipment and fire-fighting services.
  - Information and as-built drawings of the building, the plant and equipment; for example, means of safe access to and from service voids, details of local exhaust ventilation systems, the position of fire doors, compartmentation, safe havens etc.
36. There should be sufficient detail to allow the likely risks to be identified and addressed by those carrying out the work and be proportionate to those risks. Information must be in a convenient form that is clear, concise and easily identifiable.

## Appendix 5: Duties of designers

### Who is a designer?

37. A designer can be an individual, an organisation or team which prepares or modifies a design for all or any part of a construction project including temporary structures. This will include students, technical staff and people organising events as well as the more traditional 'designer' roles of architect, interior designers and surveyors.
38. As an example of who might be a designer; manufacturers supplying standardised products for use in any construction project are not designers, the person specifying the use of these products is. If a product is purpose built, a bespoke item such as a plinth for a show, the person preparing the specification or drawings is a designer and so is the manufacturer if they refine the specification into a detailed design.

### Duties of a designer

39. Designers must minimise the H&S risks of their designs and identify control measures for any residual risk.
40. The decisions of a designer can affect the health and safety of people not only during the construction phase but also during the use of the building by influencing the working environment and how it is cleaned, ease of maintenance, repair, refurbishment and ultimately demolition. Even in a temporary build decisions made about design will affect safety in use and demolition.
41. Identifying and accounting for H&S risks at the design stage will have a positive effect on the project and make the management of health and safety easier during the construction phase and building use.
42. To ensure designers have a positive impact on health and safety they should:
  - Either have the skills, knowledge, understanding and experience to take into account the health and safety aspects of their design or, be supervised by someone who does have these competencies. If a designer is appointing others to work with them they must ensure these additional people are competent or supervised. An explanation of assessing competency can be found earlier in this document (click [here](#) to go directly to this section)
  - Consider risks to workers during the construction phase, the use of the building or structure and demolition.
  - Cooperate with others who have responsibilities, particularly the principal designers, and coordinate their work with others during the project to improve the way risks are managed and controlled. It may also be necessary to check the client is aware of their duties although this is principally the responsibility of the PD and PC.
  - Provide information about the specific risks of their design, particularly any risks that may be unusual, not obvious or high risk.
43. As with every other member of a project team, designers must be competent to carry out their duties, or be supervised closely by someone who is. .

### Eliminate reduce and control risks through design

#### Preparing and modifying designs

44. When preparing or modifying designs the first aim should be to eliminate risks to anyone affected by the design; those who are building the structure or building and those who will be working in, maintaining and, ultimately, those demolishing it. It is often not possible to completely eliminate risks and consideration will need to be given to how to reduce or control risks to a reasonable level.

45. H&S risks must be considered from the start of the project, by the standards of what is reasonable at the time the design is prepared taking into account the current industry standards, knowledge and practice. It is the designer's responsibility to address any changes that will impact of health and safety and communicate to the PD and PC. Changes made by others in the project that will have an effect on a particular designers work should be communicated by the PD in the first instance, or the PC.
46. The level of detail required in passing on information about risks should be proportionate; risks arising from routine construction activities can usually be ignored by the designer, they should be identified and managed by the PC. Insignificant risks can also usually be ignored, or, at the most mentioned but with no detail required. Designers should concentrate on significant and unusual risks and provide enough information for the PC, PD and others to make informed decisions about health and safety.
47. It would be helpful if designers made suggestions to add to the pre-construction information if they identify that elements of the final structure could be used to make the build easier, for example constructing internal staircases early in the project to reduce the need for scaffolding or other temporary access.
48. Designers should keep records of decisions made in case they are asked to justify these choices later. Any records should be proportionate to the risk and kept relatively simple, there is little point in keeping lots of information for a low risk decision. Examples of records that it would be a good idea for a designer to keep include notes and minutes from meetings and email correspondence, particularly reasons for, or changes, to design decisions.
49. Designers have a responsibility to ensure their designs are safe to build, use and demolish, therefore they must be familiar with the methods of construction, maintenance and demolition likely to be used. If designers aren't familiar with these methods they must seek advice from people who are.

#### **Co-operate and co-ordinate with others.**

50. All members of the project team must co-operate others on the team. For designers the key relationship is with the PD although it may be necessary to work with other project members who provide them with information.
51. Communication is also important and the key relationship for designers should be with the PD. Arrangements for communication should be agreed as part of the pre-construction phase and organised in such a way as to minimise the likelihood that things will be missed and assumptions made about who has been told what. It may be necessary to organise regular design reviews to keep an overview of the project and identify any health and safety risks requiring resolution.

#### **What information does a designer need?**

52. As discussed elsewhere making sure every member of the project team has the information they need, when they need it, is essential to the successful delivery of any construction project, whatever the scale.

##### **From the client and principal designer**

53. The main source of information for a designer is the PD. The scope and type of project will determine the detail of the information required but a designer should expect to receive the following.
  - Preconstruction information, [see appendix 2](#)
  - A client brief, including how the finished product will be used and any aspirations for the design.

- Information on the site and ground conditions, existing structures, services or other infrastructure; operational activities, restrictions on noise levels, working hours, control of dust etc.
- Details of any constraints imposed by the planning authority or building controls, heritage bodies or utility providers; ecological or environmental considerations. If there are any
- Details of the project team; client, PD, PC, other designers, suppliers, contractors, existing users etc.
- Arrangements for communication, for example; how information will be communicated, level of detail, design risks, escalating issues and the methods to be used.
- Updates from others with information that will affect design decisions.
- The format required for information that will be included in the health and safety file.

#### **From other designers**

54. Designers should provide information to others that will impact on their work. Information should be clear and concise, with significant health and safety issues clearly identified and be communicated in the way agreed with the PD. Information that should be provided is likely to include:
- Designers' drawings and reports with any significant information highlighted, this might include; temporary loadings, access and build requirements for installation and maintenance.
  - Sequences of construction affecting design.
  - Guidance on any elements that are unusual, high risk or require specialist knowledge.
  - Details of the residual risks and how they will be controlled; for example sequences of installation, stability requirements, particular maintenance and/or inspection schedules and other requirements.

#### **From contractors**

55. Contractors should provide designers with information that will affect their design. If there is more than one contractor this information is usually passed on by the Principal Contractor. Information may include:
- Details of construction plant and access, including specialist drawings, for example:
    - Access restrictions and routes around site, for example; fixed or difficult to move plant such as cranes; excavations, restricted routes because, for example, overhead cables, loading or quality of surfaces
    - Locations for unloading and loading, traffic management, pedestrian access and public protection measures.
  - Anything that might require additional protection or design; for example; deliveries that need to be made on the roadway, require cranes or hoists; additional traffic management or similar exceptional arrangements.
  - Any operational elements of the construction phase where input from designers might help to mitigate risk, for example; carrying out some tasks off site, e.g. painting or prefabrication of elements; sequence of elements of the construction to make best use of plant such as cranes and hoists, using best practice construction methods or materials to minimise residual risk.

#### **What information should Designers provide?**

56. Designers must provide relevant information to the right people at the right time to ensure health and safety is managed during a project. The way in which information is communicated should be agreed with the PD or the designer taking on this role.
57. Designers must pass on information about specific risks that may not be obvious, may be difficult to manage or unusual.

- Some risks may not be obvious and take time or research to become familiar with, for example the use of new materials or construction methods, designs that accommodate existing structures or specify fragile materials or surfaces. It is these risks that must be highlighted to others with information about the control measures required to manage the risks.
- Difficult to manage risks are those that are common but because of other factors such as location, may require additional or different control measures. For example, restricted space to erect and dismantle access equipment; proximity of services such as underground gas supplies or overhead electrical cables.
- Working in close proximity to the public, in an area with poor mobile phone or radio reception, working in a very noisy environment or one affected by environmental issues such as high or gusty wind conditions, low light levels etc. can all make usually easy to manage risks more complex.
- Other issues such as the presence of asbestos, contaminated land, lead paint, silica dusts etc. will also affect the risk of some designs and this information must be communicated.

#### **Information to the client**

58. Designers must provide the client with health and safety information relevant to the construction, continued use, maintenance and demolition of the structure. For all but the simplest projects this information is usually passed to the principal designer rather than directly to the client.

#### **Information for the principal designer**

59. The information passed on to the principal designer should be proportionate to the level of risk and include:
- Details of residual risks, particularly anything unusual or less obvious, see above.
  - Key assumptions that have been made in the design. This information will be important in the construction phase planning and passed on to the principal contractor.
  - Processes integral to maintaining safety, for example; sequencing of construction or demolition, maintenance requirements, phased handovers, temporary structures required to maintain safety during construction i.e. temporary support.
  - Anything that should go into the [health and safety file](#)

#### **Information for other designers**

60. Must include, as relevant:
- Key principles used in a design including loads, stability, principles used for avoiding disproportionate collapse, principles and precautions used to prevent fire, assumptions about ground condition.
  - Specification that will inform other designs.
  - Design drawings with significant risks marked i.e. existing services
  - Design parameters if they could affect other's designs for example the need for ventilation, pressure relief panels, access, power or data connections.

#### **Information for principal contactors and contractors.**

61. Must include, as relevant
- Any assumptions a designer has made about temporary work or sequencing that wouldn't be obvious to a competent contractor.
  - Any information that might be useful to others in the management of health and safety, for example; a ground survey or information about services.

## Appendix 6: Examples of the allocation of roles within projects.

### End of year show

- There is a single member of staff co-ordinating the end of year show liaising with course leaders about each courses part in the show, what they are planning, the resources they will need and the individual elements that will make up the show.
- Course leaders are working with students to determine what they are planning and what resources they would like to have to show their work.
- Students are designing their own work, deciding what they are going to show. They will also build their own show and assist with the building of the course area.
- Student volunteers will come on site during the show build and assist students.
- Technicians will take the lead on the build and will have some input in to the design of elements of the show build.
- The H&S Adviser also has an input into the layout of the show and can require or suggest modifications.
- Some elements of the structure will be pre-fabricated off- site, some in college workshops. The sets will be put together on-site and some of the structure will be built on-site.

### Distribution of roles.

	College	Show coordinator	Course Leader	Student	Technical Manager	Technician	H & S Adviser	Student volunteer
Client	X							
Principal Designer		X						
Principal Contractor		X						
Designer			X	X	X	X	X	
Contractor					X	X		
Worker				X		X		X

### Installing window blinds in an office

A department has decided to have window blinds fitted, they have engaged a company to measure, make and fit the blinds. The office manager will choose the fabric and type of blind.

#### Distribution of roles.

	Department	Office Manager	Blind Company	Fitter
Client	X			
Designer		X	X	
Contractor			X	
Worker				X

There is no PC or PD because there is only one contractor.

### Theatre build – in house production

- The production manager is coordinating the whole production liaising with the company director, a set designer and a technician who is managing the build.
- Set designer is working with a team of students who are designing the sets, lighting and special effects.
- The technician is working with other technicians and the students to build the sets and with designers to refine and modify designs as instructions come from the company director and production manager.
- The company director is working with the production manager, set designer and technician to finalise designs for set and lighting.

### Distribution of roles.

For this example there are at least two different ways the roles could be allocated; the production manager or the technical manager could be the principal contractor.

	Theatre	Production Manager	Set Designer	Technical Manager	Company Director	Technician	Student
Client	X						
Principal Designer		X					
Principal Contractor		X					
Designer			X	X	X	X	X
Contractor				X		X	
Worker						X	X

	Theatre	Production Manager	Set Designer	Technical Manager	Company Director	Technician	Student
Client	X						
Principal Designer		X					
Principal Contractor				X			
Designer			X	X	X	X	X
Contractor						X	
Worker						X	X

### 3rd party event – venue hire

- A local community festival organiser is using a college site to host part of their event.
- The festival organising team will be working with designers and contractors to bring off the whole event.
- The University Estates team and the college H&S Adviser will have some input into the layout of the design and site arrangements, particularly to do with site security, noise and emergency procedures.
- The festival organisers will hold the licence for the event.

### Distribution of roles.

	Festival	Festival organising team	Festival designers	Festival contractors	UAL Estates Team	H&S Adviser	Build staff
Client	X						
Principal Designer		X					
Principal Contractor		X					
Designer			X	X	X	X	
Contractor							
Worker							X

### Installing a large piece of machinery

- A large piece of workshop equipment is being delivered and installed into a workshop. The machine will be delivered on site and then hoisted into the second floor of the building using a crane, a window will have to be removed and a doorway widened and then repaired.
- A surveyor has been engaged to calculate loading when the equipment is in position and to make sure the wall and floor can bear the load when the machine is being moved.
- The machine will be moved into place by a company engaged by the supplier.
- The machine will be fixed in place and wired into the mains electricity.
- The lorry delivering the equipment and the crane will be in the loading bay which is also an emergency escape route for the building.
- The college is commissioning the work, which is being organised by the technical manager.
- The technical manager, facilities manager and the health and safety adviser will have input into the way the work is organised.
- The supplier is organising the crane and all other moving activities.
- The removal of the window and doorway and the electrical work is being managed by the college resources manager using University contractors, Bouygues.

### Distribution of roles.

Three options for allocating roles have been given for this example. The Technical Manager could represent the College only as the client with the supplier as both PD and PC; the College could be the client, the technical manager the PD and PC with the supplier being a contractor and designer; or, the client is the college, the technical manager the PD and the supplier the PC.

	College (represented by technical manager)	Supplier	Crane Company	Building Surveyor	Moving Company	Bouygues	H&S Adviser	Crane driver, movers, Bouygues employees	College Resources Manager	Facilities Manager
Client	X									
Principal Designer		X								
Principal Contractor		X								
Designer			X	X			X		X	X
Contractor			X		X	X				
Worker								X		

	College	Technical Manager	Supplier	Crane Company	Building Surveyor	Moving Company	Bouygues	H&S Adviser	Crane driver, movers, Bouygues employees	College Resources Manager	Facilities Manager
Client	X										
Principal Designer		X									
Principal Contractor		X									
Designer			X	X	X			X		X	X
Contractor			X	X		X	X				
Worker									X		

	Facilities Manager										
	College Resources Manager										
	Crane driver, movers, Bouygues employees										
	H&S Adviser										
	Bouygues										
	Moving Company										
	Building Surveyor										
	Crane Company										
	Supplier										
	Technical Manager		X								
	College	X									
Client											
Principal Designer											
Principal Contractor			X								
Designer			X	X	X			X		X	
Contractor			X	X			X	X			
Worker									X		