



University of Wales
Trinity Saint David

REPORT ***HEALTH, SAFETY AND*** ***WELFARE*** ***ACBA4023***

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Trainee Health and Safety Officer—Retrofit of Croft Street Block 2, Dyfatty, Swansea.

Objectives

1. To Interpret the application of Building Safety Act, Construction Design and Management (CDM) regulations and the wider Health and Safety legislation whilst working with clients, contractors and other professionals.
2. To Determine how Health, Safety and Welfare legislation influences working practices in the construction industry, how it is managed on site and the potential impacts that this might have.
3. To develop awareness of the health and safety challenges and risks of working within the construction and built environment sector.

Introduction



Figure 1. Residential Building, Croft Street Block 2, Dyfatty, Swansea. Source: Author's own photograph.

The construction and built environment sector presents a wide range of health and safety challenges, particularly when working on occupied residential buildings requiring extensive retrofit. Within this context, health, safety and welfare encompass two interconnected scenarios: firstly, the protection of construction workers during the building, refurbishment and installation stages; and secondly, the long-term safety and wellbeing of the residents and other users who will occupy the completed building. Both dimensions are essential, as poor safety management during construction can lead to immediate harm, while inadequate design, installation or regulatory compliance can create long-term risks for future occupants.

The proposed refurbishment of Croft Street Block 2 in Swansea involves the installation of new kitchens, bathrooms, fire-suppression sprinklers, and the addition of weather-proof external cladding to improve energy efficiency. These activities introduce significant risks

related to fire safety, structural integrity, working at height, material handling, and the management of residents who may remain in occupation during the works.

This report outlines how these legal requirements apply to the retrofit project and provides practical examples of compliance from a managerial perspective. The aim is to demonstrate how legislation

translates into safe systems of work, effective risk management, and improved welfare for both workers and residents.

Construction Industry Statistics

Wellbeing and safety in the UK construction sector remain critical due to persistently high fatality and ill-health rates. Construction continues to have the highest fatal injury rate of any industry, with 51 worker deaths recorded in 2023–2024, mainly from falls from height and incidents involving moving vehicles or falling objects. Beyond physical risks, the sector faces serious wellbeing challenges: construction workers are four times more likely to die by suicide than the national average, and around 19,000 new cases of work-related lung disease are diagnosed each year. Over the last three years, 131 workers have died in onsite accidents. Current priority areas include preparing for CDM 2015, improving respiratory protection, and strengthening mental health support across the industry.

1. Relevance and Impact of the Building Safety Act and Building Safety (Wales) Bill

1.1 Overview of the Building Safety Act 2022

The Building Safety Act (BSA) 2022 represents a fundamental reform of building safety regulation in the UK, introduced in response to the Grenfell Tower fire occurred in 2017. It focuses on higher-risk residential buildings over 18 metres or seven storeys, a category that includes Croft Street Block 2. The Act establishes a new regulatory framework centred on accountability, competence, and the management of building safety risks throughout the building's lifecycle (HM Government, 2022).

A key feature of the Act is the requirement for a Golden Thread of information, ensuring accurate, up-to-date digital records of the building's design, materials, and safety systems (HSE, 2023). The Act also introduces new dutyholder roles, aligned with CDM, requiring clear accountability for safety decisions and the production of Safety Case Reports demonstrating how fire and structural risks are controlled.

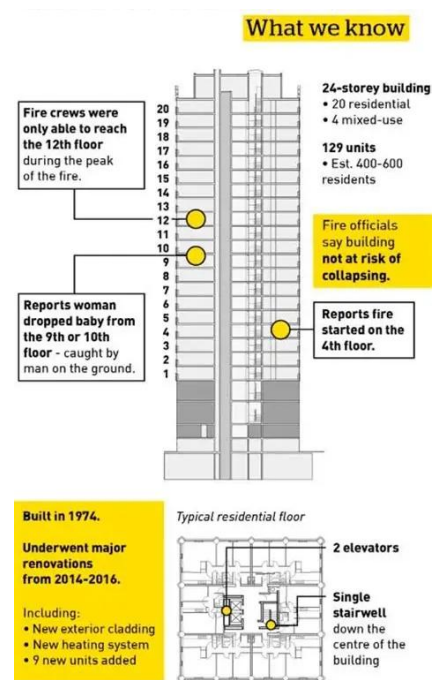


Figure 2. Grenfell Tower Fire. Source: CBS News

1.2 Impact on the Retrofit of Croft Street Block 2

1.2.1 Fire Safety and Sprinkler Installation

The installation of fire sprinklers is directly aligned with the BSA's emphasis on fire-risk mitigation. Post-Grenfell reforms highlight the importance of fire-suppression systems in high-rise buildings (Ministry of Housing, Communities and Local Government, 2020). Compliance requires:

- Competent design and installation by certified specialists.
- Integration of sprinkler systems into the building's Safety Case.
- Updated digital records showing pipe routes and maintenance requirements.

Practical example: When installing sprinkler pipework, hot-work permits will be issued for soldering activities, and temporary fire extinguishers will be placed at each work area. If existing fire alarms must be isolated, temporary alarms will be installed to maintain resident safety.

1.2.2 External Cladding and the Golden Thread

The addition of weather-proof cladding requires strict compliance with the BSA's material-safety requirements. The Grenfell Inquiry demonstrated the dangers of combustible cladding, leading to strict requirements for A1 or A2-s1, d0 materials (BSR, 2023). Managers must ensure:

- Full documentation of material specifications and fire-test certificates.
- Installation methods recorded in the Golden Thread.
- No deviation from approved materials without formal review.

Practical example: Cladding panels will be stored flat on level ground to prevent warping, and cutting will take place in a designated outdoor area with dust extraction to protect workers and residents.

1.2.3 Resident Engagement

The BSA requires a Resident Engagement Strategy for higher-risk buildings. This includes:

- Providing residents with clear information about the works.
- Establishing communication channels for concerns.
- Supporting vulnerable residents during disruptive activities (Welsh Government, 2023).

Practical example: Before bathroom replacements, residents will receive written notice explaining water shut-off times, noise levels, and temporary access arrangements.

1.2.4 Competence Requirements

Dutyholders must demonstrate competence. For example:

- Designers must be able to justify fire-safety decisions.
- Contractors installing cladding must hold recognised façade-installation qualifications.
- Site managers must complete relevant building-safety training ((HSE, 2023).

1.3 Building Safety (Wales) Bill

The Building Safety (Wales) Bill complements the BSA by introducing Wales-specific measures. Its relevance includes:

- A Welsh Building Safety Regime with oversight tailored to local authorities.
- Stronger requirements for fire-risk assessments in multi-occupied residential buildings.
- Mandatory registration of high-risk buildings in Wales (Welsh Government, 2023).
- A focus on ongoing maintenance and resident involvement.

For this project, the Bill reinforces the need for:

- Regular fire-risk reviews during the retrofit.
- Transparent communication with Swansea Council as the building owner.
- Long-term maintenance planning for sprinklers and cladding systems.

2. Applicable Health and Safety Legislation and Managerial Compliance

2.1 Health and Safety at Work etc. Act 1974 (HSWA)

The HSWA establishes the general duty to ensure, so far as reasonably practicable, the health, safety and welfare of employees and others affected by construction activities (HSE, 2021). Managerial compliance includes:

- Conducting suitable and sufficient risk assessments.
- Providing safe systems of work and competent personnel.
- Maintaining plant and equipment.
- Protecting residents and visitors from construction hazards.

Practical example: During kitchen replacement, electrical circuits will be isolated and locked off, and dust sheets will be used to protect residents' belongings.

2.2 Management of Health and Safety at Work Regulations 1999 (MHSWR)

These regulations require systematic risk management (HSE, 2019). For this project:

- A Construction Phase Plan must identify hazards such as asbestos, working at height, and manual handling.
- Workers must receive task-specific training.
- Emergency procedures must be adapted to an occupied building.

Practical example: Evacuation routes will be kept clear during cladding works, and temporary signage will direct residents safely around scaffold zones.

2.3 Working at Height Regulations 2005 (WAHR)

Cladding installation and façade inspections involve significant work at height. Compliance requires:

- Scaffolding erected by CISRS-qualified scaffolders (CISRS, 2022).
- Weekly scaffold inspections by a competent person (HSE, 2005).
- Edge protection, toe boards, and safe access routes.
- MEWP operators holding IPAF certification.

Practical example: A CISRS-qualified inspector will complete scaffold inspections every seven days and after adverse weather. Debris netting will be installed to prevent falling materials from striking residents.

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

Retrofit works may involve adhesives, sealants, insulation materials, and cleaning chemicals. Managers must:

- Provide COSHH assessments.
- Ensure safe storage in ventilated areas.
- Supply appropriate PPE.
- Train workers in spill response (HSE, 2020).

Practical example: Insulation boards will be cut outdoors using dust-extraction tools, and workers will wear FFP3 masks to prevent inhalation of fibres.

2.5 Manual Handling Operations Regulations 1992

Kitchen units, bathroom fixtures, and cladding panels can be heavy or awkward. Compliance includes:

- Mechanical aids such as trolleys or panel lifters.
- Team lifting for large items.
- Training workers to avoid twisting or overreaching (HSE, 2018).

Practical example: A mechanical panel lifter will be used to position cladding sheets, reducing strain and preventing musculoskeletal injuries.

2.6 Provision and Use of Work Equipment Regulations 1998 (PUWER)

Tools such as drills, saws, and MEWPs must be:

- Suitable for the task.
- Maintained and inspected.
- Used only by trained operatives (HSE, 2022).

Practical example: Before using MEWPs, the supervisor will check the daily inspection log and verify that the operator holds IPAF certification.

2.7 Control of Asbestos Regulations 2012

Given the age of Croft Street Block 2, asbestos-containing materials may be present. Compliance requires:

- Reviewing the asbestos register.
- Conducting surveys before intrusive works.
- Using licensed contractors for removal.
- Preventing resident exposure through enclosure and air monitoring (HSE, 2017).

Practical example: Before removing old bathroom tiles, an R&D survey will confirm whether asbestos is present. If so, residents will be temporarily relocated while licensed contractors remove the material under controlled conditions.

2.8 Welfare Requirements (CDM and Workplace Regulations)

Managers must provide:

- Toilets, washing facilities, and rest areas.
- Drinking water.
- Changing rooms for workers handling hazardous materials.

Practical example: A welfare cabin will be placed in the car park, providing toilets, a drying room, and a canteen area, preventing workers from using resident facilities.

2.9 Lifting Operations and Lifting Equipment Regulations (LOLER) 1998.

LOLER applies to any equipment used for lifting or lowering loads, including cranes, hoists, MEWPs, forklift trucks used for lifting, and all lifting accessories such as chains, slings, hooks and shackles.

Under LOLER, employers and dutyholders must ensure that lifting equipment is strong, stable, suitable for its intended purpose, and used only by competent and trained personnel. All lifting operations must be properly planned, supervised, and carried out in a safe manner to prevent injury.

3. CDM Regulations 2015: Compliance and Risk Reduction

The construction (Design and Management) Regulations 2015 (CDM 2015) came into force on 6 April 2015, replacing CDM 2007. It describes two main points: the law that applies to the whole construction process on all construction projects, from concept to completion, and what each dutyholder must or should do to comply with the law to ensure projects are carried out in a way that secures health and safety. *See Appendix A*

3.1 Dutyholder Roles

CDM 2015 places duties on clients, designers, and contractors to eliminate or reduce risks through planning and coordination (HSE, 2015). For this project:

- Client (Swansea Council) must provide pre-construction information.
- Principal Designer must plan to eliminate or reduce risks.
- Principal Contractor must manage site safety and coordinate subcontractors.

3.2 Pre-Construction Phase

3.2.1 Surveys and Information

The Principal Designer must gather:

- Asbestos surveys.
- Structural assessments.
- Fire-risk information.
- Resident profiles.

3.2.2 Design Risk Management

Examples include:

- Selecting lightweight cladding panels to reduce manual-handling risks (IOSH, 2021).
- Designing sprinkler routes to avoid structural penetrations.
- Planning bathroom layouts to minimise pipe rerouting.

3.3 Construction Phase

3.3.1 Site Set-Up

The Principal Contractor must:

- Establish segregated pedestrian and vehicle routes.
- Install secure scaffold access points.
- Provide signage and barriers to protect residents (CITB, 2020).

3.3.2 Risk-Specific Controls

Working at height:

- Full scaffold with debris netting.
- Daily pre-use checks.

Fire safety during works:

- Hot-work permits for soldering sprinkler pipes (NFCC, 2021).
- Fire extinguishers at each work area.
- Temporary alarms if systems are isolated.

Material storage:

- Cladding panels stored flat.
- Kitchens and bathrooms stored indoors.

Traffic management:

- Delivery schedules coordinated to avoid peak resident movement.
- Banksman used for reversing vehicles.

3.3.3 Resident Safety

Measures include:

- Temporary protection to corridors and lifts.
- Dust-control systems.
- Clear communication of daily work zones.

3.4 Post-Construction Phase

The Principal Designer and Principal Contractor must provide:

- Updated as-built drawings.
- Fire-strategy documentation.
- Maintenance manuals for sprinklers and cladding.
- Information added to the Golden Thread (BSR, 2023).

See Appendix B.

Conclusion

The retrofit of Croft Street Block 2 presents complex health and safety challenges due to the nature of the works and the building's status as a high-rise residential block. The Building Safety Act and the Building Safety (Wales) Bill impose stringent requirements for fire safety, resident engagement, competence, and the maintenance of accurate building information. Core health and safety legislation provides the framework for managing risks associated with working at height, hazardous substances, manual handling, and equipment use. CDM 2015 integrates these duties into a coordinated approach that ensures risks are eliminated or controlled through design, planning, and site management. By applying these regulations effectively, UWTS Construction can deliver a safer, compliant, and high-quality retrofit that enhances the long-term safety and welfare of residents and workers.

Word Count (main body): 2,000 words. *Excludes contents, glossary, references and appendices.*

Glossary of Terms, Acronyms and Abbreviations

BSA - Building Safety Act 2022

BSR -Building Safety Regulator

CDM -Construction (Design and Management) Regulations 2015

COSHH -Control of Substances Hazardous to Health

CISRS -Construction Industry Scaffolders Record Scheme

HSWA -Health and Safety at Work etc. Act 1974

IPAF -International Powered Access Federation

LOLER - Lifting Operations and Lifting Equipment Regulations

MEWP -Mobile Elevating Work Platform

WHAR- Working at Height Regulations

MHSWR -Management of Health and Safety at Work Regulations 1999

PPE -Personal Protective Equipment

PUWER -Provision and Use of Work Equipment Regulations 1998

References

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Appendices

Appendix A — Table 1: A Summary of Roles and Duties under CDM 2015

Health and Safety
Executive

Managing health and safety in construction

Table 1 A summary of roles and duties under CDM 2015

CDM dutyholders:* Who are they?	Summary of role/main duties
Clients are organisations or individuals for whom a construction project is carried out.	Make suitable arrangements for managing a project. This includes making sure: ■ other dutyholders are appointed; ■ sufficient time and resources are allocated. Make sure: ■ relevant information is prepared and provided to other dutyholders; ■ the principal designer and principal contractor carry out their duties; ■ welfare facilities are provided. See paragraphs 23–52 for more guidance.
Domestic clients are people who have construction work carried out on their own home, or the home of a family member that is not done as part of a business, whether for profit or not.	Domestic clients are in scope of CDM 2015, but their duties as a client are normally transferred to: ■ the contractor, on a single contractor project; or; ■ the principal contractor, on a project involving more than one contractor. However, the domestic client can choose to have a written agreement with the principal designer to carry out the client duties. See paragraphs 53–56 for more guidance.
Designers are those, who as part of a business, prepare or modify designs for a building, product or system relating to construction work.	When preparing or modifying designs, to eliminate, reduce or control foreseeable risks that may arise during: ■ construction; and ■ the 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. See paragraphs 72–93 for more guidance.
Principal designers** are designers appointed by the client in projects involving more than one contractor. They can be an organisation or an individual with sufficient knowledge, experience and ability to carry out the role.	Plan, manage, monitor and coordinate health and safety in the pre-construction phase of a project. This includes: ■ identifying, eliminating or controlling foreseeable risks; ■ ensuring designers carry out their duties. Prepare and provide relevant information to other dutyholders. Provide relevant information to the principal contractor to help them plan, manage, monitor and coordinate health and safety in the construction phase. See paragraphs 94–115 for more guidance.

Health and Safety Executive

Managing health and safety in construction

*Organisations or individuals can carry out the role of more than one dutyholder, provided they have the skills, knowledge, experience and (if an organisation) the organisational capability to carry out those roles in a way that secures health and safety.

** Principal designers are **not** a direct replacement for CDM co-ordinators. The range of duties they carry out is different to those undertaken by CDM co-ordinators under CDM 2007 (see paragraphs 181–186 for information about transitional arrangements).

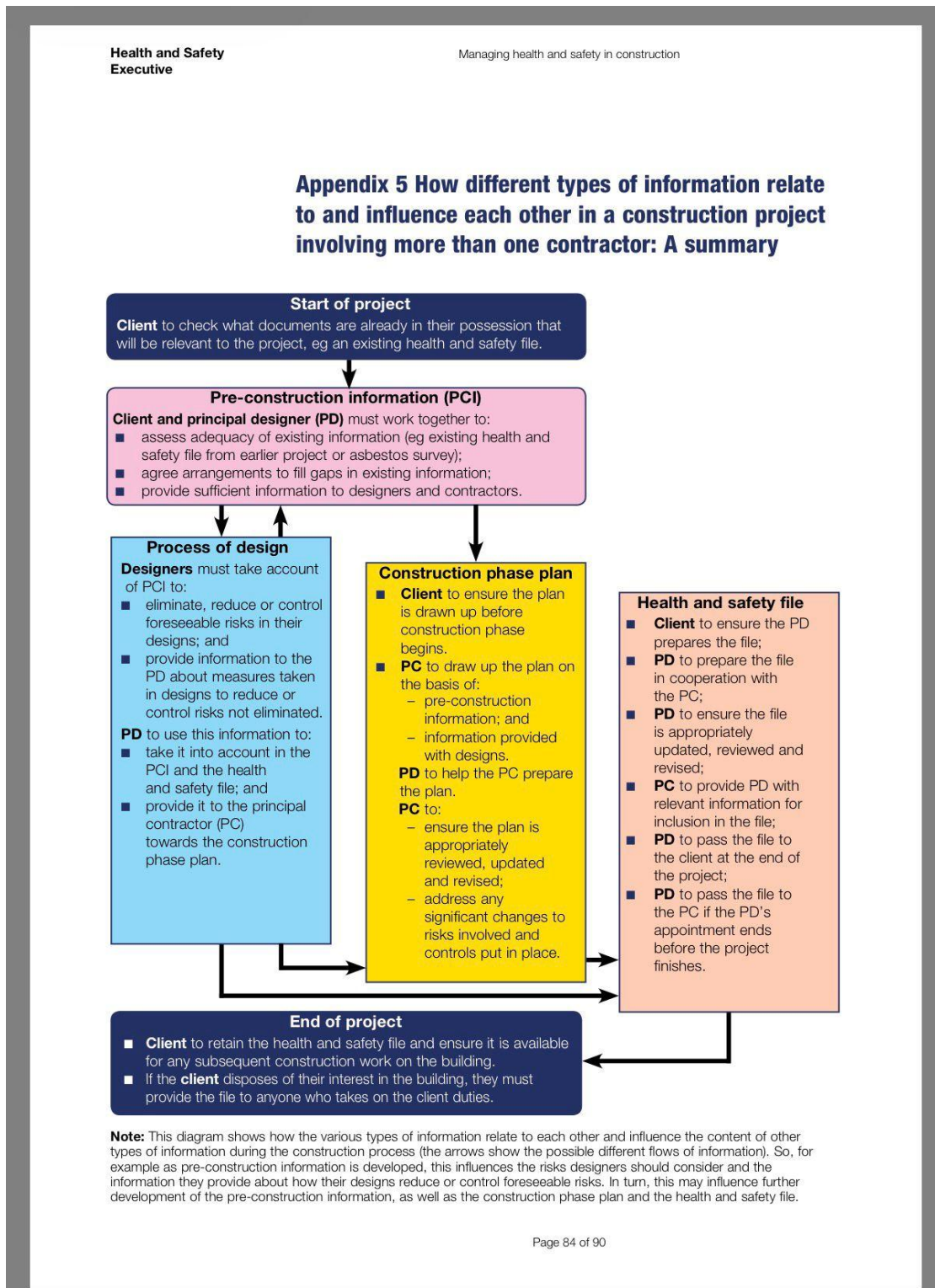
Principal contractors are contractors appointed by the client to coordinate the construction phase of a project where it involves more than one contractor.	Plan, manage, monitor and coordinate health and safety in the construction phase of a project. This includes: ■ liaising with the client and principal designer; ■ preparing the construction phase plan; ■ organising cooperation between contractors and coordinating their work. Ensure: ■ suitable site inductions are provided; ■ reasonable steps are taken to prevent unauthorised access; ■ workers are consulted and engaged in securing their health and safety; and ■ welfare facilities are provided. See paragraphs 110–146 for more guidance.
Contractors are those who do the actual construction work and can be either an individual or a company.	Plan, manage and monitor construction work under their control so that it is carried out without risks to health and safety. For projects involving more than one contractor, coordinate 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. See paragraphs 147–179 for more guidance.
Workers are the people who work for or under the control of contractors on a construction site.	They must: ■ be consulted about matters which affect their health, safety and welfare; ■ take care of their own health and safety and others who may be affected by their actions; ■ report anything they see which is likely to endanger either their own or others' health and safety; ■ cooperate with their employer, fellow workers, contractors and other dutyholders.

Key elements to securing construction health and safety

4 The key elements, include:

- managing the risks by applying the **general principles of prevention**;
- appointing** the right people and organisations at the right time;
- making sure everyone has the **information, instruction, training and supervision** they need to carry out their jobs in a way that secures health and safety;
- dutyholders **cooperating and communicating** with each other and **coordinating** their work; and
- consulting workers and engaging** with them to promote and develop effective measures to secure health, safety and welfare.

Appendix B — Extract from CDM 2015: Appendix 5 (Roles and Responsibilities)



Appendix C — Photographic Evidence Linked to Health and Safety Legislation

Description	Photograph	Source
Health and Safety at Work etc. Act 1974 (HSWA)		Google images
Management of Health and Safety at Work Regulations 1999 (MHSWR)		Google images
Working at Height Regulations 2005 (WAHR)		Author's own Photograph
Control of Substances Hazardous to Health (COSHH) Regulations 2002		Google images
Manual Handling Operations Regulations 1992		Google images

Provision and Use of Work Equipment Regulations 1998 (PUWER)		Google images
Control of Asbestos Regulations 2012		Google images
Welfare Requirements (CDM and Workplace Regulations)		Google images
Lifting Operations and Lifting Equipment Regulations (LOLER) 1998.		Lecturer Rhodri Thomas - Lecture slide (UWTSD)