# Unit 302: Working in the construction sector in Wales.

# Learning Outcomes 1: Understand the built environment in Wales.

**Learner Task Criteria 1.3**

This worksheet looks at the advances in architectural design and material science with the focus on long term user safety.

Research and answer the following questions relating to this topic area. Use the links listed below to help you and any other relevant web links.

1. Describe how the advances in architectural design and material science has influenced modern construction, when creating and maintaining buildings including building materials, products, and services.
2. What is the role of The Construction (Design and Management) **(CDM)** Regulations 2015 and how will it benefit future maintenance, repairs, and cleaning of buildings?
3. Explain the need of the following quality assurance marking of products (such as the CE mark) and how the Construction Products Regulations apply including:

* the Building Regulations Approved Document 7: Materials and workmanship.
* the BSI Kitemark
* the Declaration of Conformity and trade specific requirements for products such as **BASEC** Approved Cables.
* What role do the Royal Society for the Prevention of Accidents **(RoSPA)** and Safer by Design assist the construction industry?
* Describe the role of the Provision and Use of Work Equipment **(PUWER)** Regulations 1998 and to know that work equipment, including installations, is so constructed, or adapted as to be suitable for the purpose for which it is provided.

1. What are the main requirements of Lifting Operations and Lifting Equipment **(LOLER**) Regulations 1998, and the Pressure Systems Safety Regulations **(PSSR)** 2000?
2. Research and consider the implications of a lack of regard to safety of users through examples such as asbestos and the Grenfell Tower disaster.
3. Outline the Welsh Government’s plan to reform regulations and fire safety in high rise buildings, and their actions with regards to the ‘Road Map to Safer Buildings in Wales’.
4. Research and outline the consequences of the Grenfell Tower disaster and the impact this has had nationwide on making high rise buildings safer places to live in.
5. What are the considerations and implications needed when making changes to buildings and the responsibilities of the client and the contractor have relating to the Building Regulations and relevant Approved Documents and technical guidance?
6. What are the requirements for automatic fire suppression in Wales?
7. Explain the need for consent/permissions for work to be carried out (which could be required for minor work on a listed building in Wales) and how to comply with Building Regulations (following Approved Documents).
8. Why it is necessary that the contractor carries out work safely and delivers safe projects for the client and what would be the consequences if they are not complied with.
9. What is the importance of using suitable materials, parts and products that are appropriate for the building task and that maintain the safety of buildings for building users for the long term?
10. Why should qualified colleagues be consulted, when and if necessary, to check or complete work to ensure that the safety of building/premises users is maintained.

Suggested website links:

[Construction (Design and Management) Regulations - CITB](https://www.citb.co.uk/about-citb/partnerships-and-initiatives/construction-design-and-management-regulations-2015/cdm-regulations/)

[Material and workmanship: Approved Document 7 - GOV.UK (www.gov.uk)](https://www.gov.uk/government/publications/material-and-workmanship-approved-document-7)

[BSI Kitemark for product testing - UK product and service quality certification mark | BSI (bsigroup.com)](https://www.bsigroup.com/en-GB/kitemark/product-testing/)

[BASEC Approved Cable | Eland Cables](https://www.elandcables.com/electrical-cable-and-accessories/cables-by-standard/basec-approved-cable)

[About Us - RoSPA](https://www.rospa.com/about-us)

[Safety of pressure systems - L122 (hse.gov.uk)](https://www.hse.gov.uk/pubns/books/l122.htm)

[Fire Safety Regulations Since Grenfell: The New Regime | Skills Platform Blog](https://www.skillsplatform.org/blog/fire-safety-regulations-since-grenfell-the-new-regime/)

[Welsh Roadmap to Safer Building in Wales - FIS (thefis.org)](https://www.thefis.org/2019/10/17/welsh-roadmap-to-safer-building-in-wales/)

[Mandatory Fire Suppression for Wales - A Technical Guide | LABC](https://www.labc.co.uk/professionals/building-regulations-guidance-documents/spotlight/mandatory-fire-suppression-wales-technical-guide)