# Unit 301: Understanding construction practice in Wales.

# Learning Outcomes 4: Know the changes in construction methods over time.

**Learner Task Criteria 4.2**

This section deals with the changes in construction methods over time and considers post 1919 to construction methods and techniques.

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.Explain the applications and techniques used to apply plaster and render materials post 1919 to internal and external walling including use of plasterboard and cement products.

2. List and explain how the types of tools used to apply plaster and render materials post-1919 to internal and external walling including the following:

stainless steel trowels, flex trowels, speedskims, laser levels and projection plaster/render machines.

3. Explain how materials and equipment used to plaster and render fixed ornamental fibrous components post-1919 were carried out including the following:

mechanical fixing, screws/nails, direct bond, standard and performance plasterboards, Glass Reinforced Gypsum (GRG), various dry lining systems and modern render systems.

4. Consider and explain how construction practices have developed over time within your own trade area and consider the following:

brick cavity methods of construction and later variations of cavity wall design

prefabricated floor, wall, roof and joinery components.

5. Explain the methods of applying internal and external surface finishes to the following: render, plaster, and plasterboards, fixing dry lining with galvanised nails (circa 1950s), mechanical methods and by direct bond (circa 1980s).

6. When did solvent-based preservatives, timber-based sheet materials, imported timber and regularised timber (CLS - Canadian Lumber Standard) became more commercially available to the UK?

7. What are the requirements for the economical use of timber and quality standards through the introduction of the Timber Research and Development Association (TRADA) type roof trusses and structural joist size and tables?

8. When did the introduction of portable power tools, proprietary building ironmongery and fixing systems become more available to the construction industry?

Suggested website links:

[Lath and Plaster Walls: What Are They and How to Repair? | Homebuilding](https://www.homebuilding.co.uk/advice/lath-and-plaster)

[The Origin of Mouldings | The Victorian Emporium](https://www.thevictorianemporium.com/publications/history/article/the_origin_of_mouldings)

Suspended ground floors [Evolution of Building Elements (uwe.ac.uk)](https://fet.uwe.ac.uk/conweb/house_ages/elements/section3.htm)

[Repair bressumer beams in buildings. Structural repair of wooden bressumer beams with least damage to the building (timber.org.uk)](https://www.timber.org.uk/bressumers.htm)

[Trussed Partitions (chestofbooks.com)](https://chestofbooks.com/architecture/Cyclopedia-Carpentry-Building-1-3/Trussed-Partitions.html)

[Traditional Cut Roof - Construction Studies Q1 (weebly.com)](http://constructionstudiesq1.weebly.com/traditional-cut-roof.html)

[15 Types of Wood Joints and Their Uses (With Pics) (finepowertools.com)](https://www.finepowertools.com/woodworking/wood-joint-types/)

[Tusk Tenons…How Strong Are They? | Wood And Shop](https://woodandshop.com/will-myers-tusk-tenonshow-strong-are-they/)