**Unit 202: Changing practices over time**

# Worksheet 4: Post-1919 construction methods (Tutor)

**Task 1**: Answer the following questions about methods of post-1919 construction.

1. Which elements were introduced post-1919 to the construction of houses to improve the method of construction and why?

Answer examples:

* Cavity wall – to reduce penetrative damp.
* Insulation – to improve thermal performance.
* Portland cement – to create a stronger and more waterproof binder.
* Concrete foundations – to provide a more stable platform.
* Modern roof trusses – to reduce time and cost.
* DPC and DPM – to prevent rising damp.

*Other answers at tutor’s discretion.*

1. List **two** modern types of nails and describe their characteristics and uses.

Answer examples:

* Annular ring shank – Rings on the shaft for a stronger fix. Used for studs, boards and structural elements that require a stronger fix.
* Lost head – Very small head to allow nail head to be sunk below the surface. Used to nail second-fix items.
* Oval – Oval-shaped head that is designed to be less likely to split timber and can be sunk below the surface easily. Used for second-fix items.
* Round wire – Large-headed nail for structural elements. Used for joists, roofs and studs.
* Clout nails – Similar to the round wire in appearance but smaller with a larger head. Used for plaster-boarding (previously) or roofing.

1. Using a TRADA span table, find the most suitable joist size to span 4.2m at 400, 450 and 600mm centres with no more than 0.25kN/m² for both C16 and C24 timbers.

<https://www.timberbeamcalculator.co.uk/en-gb/span-table/ceiling-joists?load=0.25&class=C16>

Answer: Refer to span table as there can be several answers based on what the learner has picked.

**Task 2**: Research standard sizes of CLS timber.

Answer:

* (Finished 38mm × 63mm)
* (Finished 38mm × 88mm)
* (Finished 38mm × 140mm)

**Task 3**: Research the moisture content threshold of timber for dry rot and wet rot to occur.

Answer:

* dry rot – 20%
* wet rot – 30–50%